

Special Report

Impact of the owner-pet and client-veterinarian bond on the care that pets receive

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In 2006, a task force representing a dozen companion-animal health industry suppliers, medical providers, and associations gathered to discuss how companion-animal practices would maintain growth amidst ongoing struggles with static service growth and poor compliance results. The group questioned the level of consumer willingness to undertake veterinarian care for sick or injured pets as well as to maintain wellness programs involving ongoing examinations, vaccinations, preventive dental care, and other products and services.

Until now, virtually no national comprehensive research had been conducted on the perceptions and attitudes of consumers toward veterinary care and their willingness to purchase related products and services. The task force commissioned BNResearch of Portland, Ore, to conduct a national study of pet owners to research their perceptions and attitudes. The Industry Task Force includes the AVMA; Banfield, The Pet Hospital; Bayer HealthCare LLC; Fort Dodge Animal Health; Hill's Pet Nutrition Inc; IDEXX Laboratories Inc; Mars Symbioscience; Merial Ltd; National Commission on Veterinary Economic Issues; Novartis Animal Health; Pfizer Animal Health; and VCA Animal Hospitals.

The primary objective of the study reported here was to uncover detailed information about the relationships between owners and their pets and the impact those relationships have on the veterinary care pets receive. Also studied were perceptions and attitudes pet owners have toward veterinarians and the price awareness and sensitivity of owners toward purchasing veterinary products and services.

Methods

Research phases—BNResearch designed and conducted this study in 4 phases. Phase I (May 2006) consisted of 135 in-depth phone interviews with pet owners and was used to help design an effective questionnaire for the next 2 phases of the study. In phase II (June 2006), phone surveys were completed by a randomly selected sample of 600 dog and cat owners across the United States to provide a representative view of the household composition of pets and up-to-date demo-

graphic estimates. The maximum SE for a sample size of 600 is $\pm 4.0\%$ at the 95% confidence level. The survey consisted of series of topics for assessment as follows:

- Client-veterinarian relationship (ie, client-veterinarian bond).
- Price sensitivity of owner.
- Human-animal bond between owner and pet (ie, owner-pet bond).
- Pet household profile.
- Respondent and household demographics.

In phase III (June 2006 through July 2006), BNResearch conducted phone interviews with an additional 1,400 pet owners, asking the same questions as in phase II. For this phase, targeted households with dogs and cats were included to provide sufficient numbers of respondents to permit analysis of a variety of subpopulations determined by age, income, number and type of pets, and so on. Data from this phase were also combined with data from phase II and weighted to provide a total study sample size of 2,000. The maximum SE for the total sample is $\pm 2.2\%$ at the 95% confidence level.

In phase IV (June 2006 through July 2006), 755 of the 2,000 phone respondents completed an online survey regarding their likelihood to purchase various veterinary products and services. By use of conjoint analysis, data from this phase were used to develop demand curves for the following services and products:

- Heartworm medication.
- Flea-tick prevention.
- Preventive dental care.
- Combinations of common vaccinations.
- Routine physical examinations, including various combinations of services and diagnostic tests.
- Spaying or neutering.

Statistical analysis—Various statistical methods were used to analyze the survey results. For testing for differences between means and between percentages, *t* tests and *Z* tests were used, respectively. For examining relationships between variables measured with scales or numeric values, multiple regression analyses were used. Relationships between variables measured with nominal values as the independent variable (eg, male or female; dog or cat) were examined by use of an ANOVA. Relationships between variables measured with nominal values as both the independent and dependent variable (eg, male or fe-

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male; dog or cat) were examined by use of the χ^2 test and proportional reduction in error (eg, τ and λ). For finding underlying common dimensions in groups of variables measured with scales or numeric values and constructing the indices, factor analysis was used. For all comparisons, a value of $P < 0.05$ was considered significant.

Major Study Findings

Strong owner-pet bond relates to a higher level of veterinary care—Owners who exhibit strong bonds with their pets seek higher levels of veterinary care, compared with owners who exhibit weaker bonds. A strong bond is defined by specific behaviors of owners related to their feelings about their pets, the amount of time they spend with the pet, activities they do with their pets, and other factors explained in this report. Study findings reveal that owners with the strongest bonds with their pets are more likely to follow veterinarian recommendations regardless of cost, compared with other owners. Owners who are strongly bonded with their pet also visit a veterinarian more frequently and are more likely to seek preventive care.

Opportunities for growth in veterinary care of cats—Owners generally have stronger bonds with their dogs than their cats and are likely to be more attached to dogs and more attentive to their needs. The greater strength of the owner-pet bond and attachment with dogs is indicated by dog owners seeking higher levels of veterinary care than cat owners. Overall, cat owners have a higher level of education than dog owners and therefore are excellent prospects for understanding the need for increased veterinary care. Also, although cats are seen by veterinarians significantly less often than dogs, three fourths of cat owners state they have considered obtaining regular physical examinations. This offers a potential opportunity for veterinarians to do a better job of communicating to cat owners the need for more frequent veterinary visits, potentially increasing the care cats receive.

Study findings also reveal that in households with dogs and cats (≥ 1 of each), cats are seen by veterinarians significantly less often than dogs. While seeing a family dog, veterinary teams should make it part of standard procedures to inquire about other pets in the household and educate owners about their specific needs.

Level of pet care received linked to communication skills—Communication by the veterinarian plays a significant role in the strength of the bond between a veterinarian and pet owner. The strength of this bond, or relationship, has a direct impact on the loyalty of a pet owner to a veterinarian and the care pets ultimately receive. Top indicators of a strong client-veterinarian bond are detailed in this report and include communication skills of veterinarians, interaction with pets, and the perception of owners that veterinarians only sell them things their pets need.

How well veterinarians explain the reasons for their recommendations drives the clients' perceptions of the value and quality of care. Survey results reveal the strong, positive impact that communication and

pet interaction have toward clients following the recommendations of a veterinarian. In fact, a main reason cited by pet owners for not following recommendations was that they felt the recommended treatment was not necessary. Many could not cite any reason for not following the treatment plan.

Veterinary care decisions made on factors other than price—Owners who exhibit behaviors indicative of a strong owner-pet bond are more likely to seek high levels of care, are less sensitive to the price of care, and are more willing to follow the recommendations of a veterinarian, compared with other owners. Although most pet owners are conscious of the cost of veterinary care, the vast extent of owners indicate it does not prevent them from undertaking recommended treatment. A small segment of price-sensitive pet owners exists whose decisions are impacted by price, and these owners sometimes have foregone recommended care. Demand for products and services included in this study reveals a consistent pattern of the indifference of many owners to the price for needed pet-care products and services.

Pet-owning Households

General pet owner demographics—In this report, survey respondents are also referred to as "owners." Approximately two thirds (68%) of respondents were female and one third (32%) were male. Median age was 43.4 years old. Most respondents had some education beyond high school (college or advanced degree [38%] or vocational training or some college [28%]). Compared with the overall US population, pet-owning households were more likely to have children under the age of 18. Pet owners were slightly more affluent than the overall US population, earning a median household income of \$55,100. The typical pet-owning household included approximately 3 people (2.9).

Approximately 6 of 10 (59%) US pet-owning households had > 1 pet. Households with dogs, cats, or both averaged 2.48 pets (1.346 dogs and 1.134 cats/household). Approximately three quarters (77%) of all households with a dog, cat, or both had ≥ 1 dog, whereas just greater than half (53%) had ≥ 1 cat. Dog owners were more likely than cat owners (86% vs 77%, respectively) to live in a house, whereas cat owners were more likely than dog owners (19% vs 12%, respectively) to live in a multifamily dwelling. Households with dogs had higher median incomes than households with cats (\$57,000 vs \$52,100, respectively). The typical cat was approximately half a year older than the typical dog (5.9 years old vs 5.5 years old, respectively).

For 13% of respondents, their current pet was their first, meaning approximately 1 in 8 owners had little or no experience caring for a dog or cat. Results of this study indicated that males were more likely to be first-time owners. Most cat owners obtained their cat from a "free source," taking them in as strays or from family and friends, whereas dog owners were more likely to purchase their dogs from breeders and adoption agencies (Table 1). Study findings reveal that 79% of cat owners paid nothing for their cats, compared with 43%

of dog owners. Of those who did pay for their pets, they spent \$105 and \$320 on average for their cat and dog, respectively.

Seven in 10 respondents said they shared responsibility for the care of their pet with someone else in their household; of all respondents, 51% shared the responsibility equally with someone whereas 19% were the primary caregiver. Shared responsibility was more common for dogs, whereas sole responsibility was more common for cats. This finding points to a common issue that could adversely impact pet care when only 1 of the decision makers is present at a veterinary visit. To potentially increase positive outcomes, veterinarians should ensure that all parties responsible for the care of the pet, including those not present at the veterinary visit, clearly understand the reasons and instructions for the recommended treatment plan.

Dog and cat owner profiles—In this study, differences between dog and cat owners in their perceptions and attitudes regarding care for their pets were examined. The results highlight a major gap in veterinary care received by cats. Compared with dog owners, cat owners were more likely to have the following characteristics:

- Female.
- Live alone in multifamily unit.
- Likely to take in a stray.
- Some college education.
- Took cats to veterinarian ≤ 1 time/y.

Compared with cat owners, dog owners were more likely to have the following characteristics:

- Male.
- Shared responsibility for care of dogs.
- Paid for dogs.
- Less formal education.
- Took dog to veterinarian ≥ 2 times/y.

Table 1—Pet owners who acquired dogs or cats from various sources. Values based on 2,000 respondents.

Sources	Dog		Cat	
	%	\pm SE (%)	%	\pm SE (%)
Family or friend	33	2.1	35	2.1
Breeder	27*	1.9	6	1.0
Adoption	20	1.8	19	1.7
Stray	7*	1.1	25	1.9

*Significant ($P < 0.05$) difference between dogs and cats.
SE = Standard error of sample size at the 95% confidence level.

Table 2—Indicators of the owner-pet bond on the basis of statements that owners strongly agreed with.

Strongly agree	All owners		Dog owners		Cat owners	
	%	n	%	n	%	n
Would spend any amount necessary to keep pet healthy	48	1,951	52*	1,190	42	761
Considers pet a child	40	1,985	43*	1,205	36	781
Often buys gifts for pet	42	1,990	48*	1,209	34	780
Misses pet when owner is away from home	54	1,949	58*	1,185	47	720

*Significantly ($P > 0.05$) higher value for dog owners, compared with cat owners.
n = Number of respondents on which percentages for each reason are based.

Compared with pet owners in general, owners with both dogs and cats (≥ 1 of each) were more likely to have the following characteristics:

- Female.
- Household with children.
- Some college education.
- Shared responsibility for care of pets.

Compared with cat owners, dog owners took their dogs to veterinarians more frequently and were more apt to follow recommendations. Cat owners may be less willing to pay for the care recommended unless they clearly understand the need and benefit.

Owners took their dogs to veterinarians > 2 times as often as cats, averaging 2.3 times/y, compared with 1.1 times/y for cats. Significantly more cats (72%) than dogs (42%) were seen by a veterinarian ≤ 1 time/y. Dog owners were significantly more likely than cat owners to seek vaccinations (73% vs 55%, respectively), regular physical examinations (67% vs 49%, respectively), and preventive dental care (22% vs 9%, respectively).

Dogs from multi-pet households also were seen by veterinarians significantly more often than were cats in the same household. A third of cats from these households (33%) did not visit a veterinarian annually, compared with only 13% of dogs. Because 30% of households with pets had ≥ 1 dog and cat, this represents an important opportunity to provide increased care to a sizable population of cats.

The study results suggested several potential strategies that might improve compliance with recommendations for veterinary care. When seeing a family dog, support staff should be encouraged also to schedule an appointment for any cats in the household. Success will be dependent on veterinary teams consistently interviewing owners about all pets in the family, documenting the household composition of pets, and making notes for veterinarians for further discussion with owners.

Owner-pet bond

Indicators—The strength of the bond between owners and their pets has a significant influence on the care pets receive. BNResearch used a series of questions to identify the indicators most closely associated with a strong or weak owner-pet bond. Respondents were asked to rate their level of agreement with a series of statements. Other questions solicited open-ended responses regarding pet-related activities. Top indicators of the owner-pet bond were identified (Table 2).

Time spent with pet—The strength of the owner-pet bond relates, in part, to the amount of time a pet spends indoors and in which rooms the pet is allowed. Owners with the strongest pet bonds kept their pets indoors, allowed them in all rooms of the house, and/or allowed them to sleep in the bedroom.

Many pets (55%) spent most of their time indoors. Most (70%) were allowed in all rooms. A little over half (52%) slept in the bedroom. This was more prominent among dogs (56%) than cats (46%). Not surprisingly, results indicated that nearly a third of cats (31%) slept “wherever they wanted.” Owners who spend more time with their pet than the average have stronger pet bonds, are more apt to have a dog, be female, or live in a household without children.

Dog owners spent a mean of 45.3 h/wk with their dogs, compared with cat owners, who spent a mean of only 32 h/wk. Beyond the mean values, it is important to mention that 40% of dog owners spent > 30 h/wk with their dogs, whereas the equivalent proportion of cat owners spent < 10 h/wk with their cats. Not only does this relate to the strength of the owner-pet bond, but this difference could result in delayed detection of health problems in cats, especially because cats often mask illnesses and injuries.

Differences in pet bond between owners of dogs and cats—Owners in households with ≥ 1 dog and cat were more attached to their dogs than their cats by a 3 to 1 margin (57% vs 19%, respectively). In general, dogs were seen as more affectionate and more fun to be around. Children were more attached to their dogs than their cats. Dogs were seen more as part of the family and a better fit (Table 3). Males and owners in 1-person households were significantly more likely than females and owners in households with 2 or more people to prefer dogs over cats (66% vs 52% and 75% vs 52%, respectively). The top 2 reasons owners mentioned for being more attached to their dog or cat related to the interaction the pet has with the people in the household and the length of time the pet has been with the owner (Table 4).

Greater attachment of owners to dogs may account for a third (33%) of respondents agreeing that it is more important to take a dog versus a cat to a veterinarian for routine wellness examination. This agreement was more common among males than females (47% vs 27%, respectively) and for those with children versus no children (37% vs 26%, respectively).

Moreover, the deeper attachment owners have with dogs likely contributed to dogs being seen by veterinarians > 2 times as often as cats. The fact that > 4 times as many pet owners felt it is easier to take care of a cat, compared with a dog (54% vs 12%, respectively), may have also contributed to the belief that dogs need to be seen by veterinarians more frequently. Cats get shortchanged medically for several reasons. Owners thought dogs were in need of more routine examinations because they are outside more (36%) and are more problematic (31%) than cats. Owners were also under the misperception that cats do not get sick (11%) and that cats can take care of themselves (7%).

Owners who fed pets specialty foods—Approximately half of dog owners (55%) and cat owners (45%) fed their pets specialty or premium foods. This includes prescription, life stage, and premium diets. There was a correlation between owners with strong owner-pet bonds and those that fed specialty foods. Dogs (34%) were significantly more likely than cats (24%) to eat premium foods.

Impact of owner-pet bond on veterinary care—Owners who exhibited behaviors indicative of a strong owner-pet bond were more likely to seek higher levels of veterinary care for their pets, were less sensitive to the price of veterinary care, and were more willing to follow the recommendations of veterinarians, compared with other owners. Owners with strong owner-pet bonds took their pets to veterinarians 40% more often than owners with weak owner-pet bonds (mean of 2.1 visits/y vs 1.5 visits/y, respectively).

Contrary to the perception of many veterinarians regarding the sensitivity to cost by pet owners, 76% said

Table 4—Reasons given by owners for greater attachment to dogs versus cats within households with both animals.

Reasons	Greater attachment with dog (%)	Greater attachment with cat (%)
Interacts more with people	30	24
Had for the longest time	22	31
Like personality	13	9
More of a companion	14	6
“My pet”*	4	14
I am a dog person	16	NA
I am a cat person	NA	10
Total No. of respondents	287	97

*Respondent was more attached to the dog or cat because it belonged to them.
NA = Not applicable.

Table 3—Pet owners with attachments to dogs versus cats on the basis of stated reasons.

Reasons	Dog			Cat		
	n	%	± SE (%)	n	%	± SE (%)
More part of family	242	30	5.8	237	3	2.2
Better fit with family	226	26	5.7	242	8	3.4
Other household adult more attached	207	39	6.6	221	16	4.8
Children more attached	150	42	7.9	146	12	5.3
Spend more time with	261	50	6.1	237	10	3.8
Enjoy time with	249	34	5.9	235	7	3.3
More affectionate	245	43	6.2	238	9	3.6
More fun to be with	219	42	6.5	272	6	2.8

See Tables 1 and 2 for key.

they would “spend any amount necessary to keep their pets healthy.” The proportion of dog owners (80%) who agreed with this statement was significantly greater than the proportion of cat owners (69%). Having no children resulted in more positive responses than having children (81% vs 71%, respectively). Interestingly, the level of agreement to spend any amount necessary decreased as education and income increased.

About half of pet owners (52%) said they “always do exactly what their veterinarian recommends even if the treatment is inconvenient and time consuming.” Surprisingly, a significant difference in this regard did not exist between dog and cat owners. Pet owners with children at home were less apt to indicate this level of compliance. In addition, the propensity to follow recommendations decreased as the education level of owners increased. Again, the demographics of the owners most likely to follow recommendations of a veterinarian corresponded with the profiles of those with a strong owner-pet bond. Most owners with strong pet bonds (74% of cat owners and 79% of dog owners) were willing to do what their veterinarian recommends, regardless of cost.

Characteristics of owners with a strong or weak owner-pet bond—The study was used to look at indicators, characteristics, and profiles of owners with the strongest and weakest owner-pet bonds. Although the profiles are important to help better serve clients and pets, it is not intended to stereotype owners. There were owners in every demographic group who exhibited strong bonds with their pets.

Dog owners with stronger bonds exhibited the following characteristics:

- Female.
- Paid for dog.
- Lower household income (\leq \$40,000).
- Solely responsible for care of dog.
- Less education (high school education or less).
- No children under the age of 18 in the household.

Cat owners with stronger bonds exhibited the following characteristics:

- Female.
- Lower household income (\leq \$40,000).
- Live in an apartment or townhouse.
- College degree.

Dog owners with weaker bonds exhibited the following characteristics:

- Male.
- Acquired dog from family or friends (paid little or nothing).
- Higher annual household income (\geq \$60,000).
- More educated (some college education or higher).
- Live in a single-family house.
- Live in a household with \geq 3 people.

Cat owners with weaker bonds exhibited the following characteristics:

- Male.
- Paid little ($<$ \$100) or nothing for cat.

- Higher annual household income (\geq \$80,000).
- Children under the age of 18 in the household.
- Live in a single-family house.
- Live in a household with \geq 3 people.

Attitudes Regarding Veterinary Care

Veterinary visits—When owners were asked the main purpose for their most recent veterinary visit, vaccination was the leading reason given for dogs (42%) and cats (39%). Routine examinations were a distant second reason and accounted for 21% of visits. Dogs were brought to a veterinarian for injury-related reasons significantly more often than cats, whereas the reverse is true for spaying or neutering (Table 5).

Vaccination was the top item cited by owners when asked whether any additional products and services were received during veterinary visits. Even though an examination was most likely performed when pets were vaccinated, spayed or neutered, or treated for sickness or injury, $<$ 1 in 10 respondents mentioned their pet receiving an examination (Table 6). This oversight may be the result of pet owners not viewing the examination as a separate service or the veterinarian not making them aware that an examination was performed. The finding represents an opportunity for veterinary teams to fully explain all services provided and to emphasize the value of physical examinations.

Loyalty of pet owner to veterinarian—Typical pet owners have used their current veterinarian for 5.6 years. Almost 3 in 10 (28%) have been with their veterinarian for \geq 10 years. Nearly two thirds (63%) of respondents said they would likely stay with their current veterinarian even if they moved 45 minutes away. These pet owners were more apt to be less educated

Table 5—Pet owners with dogs or cats who visited a veterinarian on the basis of stated reasons. Values based on 1,837 respondents.

Reasons	Dog		Cat	
	%	\pm SE (%)	%	\pm SE (%)
Vaccination	42	2.3	39	2.2
Routine examination	20	1.8	22	1.9
Illness	14	1.6	12	1.5
Injury	9	1.3	6	1.1
Spay or neuter	4	0.9	10	1.4
Dental care	1	0.5	2	0.6
Other	9	1.3	6	1.1

See Table 1 for key.

Table 6—Additional products and services received for dogs and cats during an appointment with a veterinarian.

Additional products and services	For dogs (%)	For cats (%)
Vaccines	14	16
Routine physical examination	8	7
Flea and tick control	13*	10
Heartworm prevention	14*	1
Pet food	2*	4
Total No. of respondents	1,149	688

See Table 1 for key.

(high school education or less), have no children under the age of 18 in the household, exhibit a strong owner-pet bond, and be less price sensitive.

Although most clients appear to be quite loyal, nearly 4 in 10 (38%) said they could easily switch veterinarians. Approximately a third (32%) of owners have used another veterinarian in addition to the one they use most often. Twenty percent of cat owners who have just 1 cat go to > 1 practice. Those with multiple pets, females, and college-educated owners were also more inclined to use multiple practices. Findings of the study underscore the lack of loyalty among some clients and the need to not take any client for granted.

Importance of the bond between a client and veterinarian—Findings of the study reveal that communication skills of a veterinarian are a key driver of a strong relationship between pet owners and their veterinarians. The bond between a client and veterinarian is defined as the tangible relationship between a pet owner and veterinarian as a result of the experience the pet owner has had with the veterinarian on the basis of the veterinarian's communication skills, interaction with pets, and ability to educate the owner about his or her pets' needs. The top indicators of a strong or weak relationship between pet owners and their veterinarian include the following:

- Amount of information a veterinarian provides about how to take care of pets.
- Communications with clients.
- Perception that veterinarian only sells clients things their pets need.
- Interaction with patients.

Clients who have favorable opinions about their veterinarians in these key areas have a strong relationship and are more loyal. They are also more likely to keep the same veterinarian even if they move 45 minutes away. And, they are less inclined to change veterinarians to get less expensive care. Most importantly, they are significantly more likely to do what their veterinarian recommends, regardless of cost.

By far, the most crucial component of a strong client-veterinarian bond is communication, which has a tremendous impact on the care pets receive. Clients who believe their veterinarian does a good job communicating and feel they receive enough pet-care information are more likely to have a strong bond with their veterinarian. Nearly 7 in 10 (69%) owners with a strong relationship with their veterinarian said they always follow recommendations of their veterinarian. Dog owners with a strong relationship with their veterinarian were significantly more likely to always follow the recommendations (84%) of their veterinarian, compared with those with a weak relationship (48%).

Importance of veterinarian communication on the care pets receive—Nearly all owners (98%) agreed that their veterinarian does an excellent job of interacting with their pets. However, this study included several questions to determine what role, if any, other forms of communication with the client might play in the quality of care pets receive.

Findings of the study revealed a direct link between how well the client perceived that a veterinarian communicated with their propensity to follow recommendations. Study results indicated that the cost of care was not a major obstacle in preventing most owners from following the advice of veterinarians. Instead, confusion, uncertainty, and misunderstanding played far greater roles in noncompliance.

A main reason (30%) owners cited for not following recommendations of their veterinarians was that they felt the recommended treatment was not necessary. With cat owners, almost half (47%) did not see the need to follow the orders of a veterinarian. Approximately 2 in 10 (19%) owners could not give a reason for not following the plan. Many clients may not have enough information to make the best decisions for their pet. It may be that pet owners do not grasp the importance or the value of the treatment. This uncertainty and lack of perceived value far outweighed concerns about cost.

Approximately 7 in 10 (71%) pet owners who believed their veterinarian did a good job communicating followed the orders of their veterinarians. That number decreased significantly (51%) for clients of veterinarians who were not good at communicating. This demonstrates that good communication can produce a 40% increase in clients who follow recommendations. The difference in compliance was even greater between clients who did not believe their veterinarians were trying to sell them unnecessary products or services versus those who did (Table 7).

Potential to improve the care pets receive—During the online portion of the study, respondents answered questions regarding the potential to purchase or receive various veterinary products and services. The results indicated that when prompted, approximately 90% of pet owners would seek 4 of the 5 items tested. These rates substantially surpass the current level at which these products and services are used or received.

When asked about receiving regular physical examinations for their pets, almost 9 in 10 (86%) dog owners and 8 in 10 (76%) cat owners had previously considered annual examinations. This finding demonstrates the substantial gap between pet owners who consider and those who actually receive examinations, especially among cat owners.

To assess the potential for owners to purchase or receive these products or services, respondents were

Table 7—Pet owners who said that they follow or do not follow veterinary recommendations in relationship to stated perceptions concerning their veterinarian. Values based on 1,836 respondents.

Perceptions	Do not strongly agree and do not follow		Strongly agree and follow	
	%	± SE (%)	%	± SE (%)
Excellent interaction with pet	49	2.3	71	2.1
Very good communicator	51	2.3	71	2.1
Does not sell unneeded products	47	2.3	76	2.0

See Table 1 for key.

initially asked if they had ever thought about getting any of the following:

- Heartworm medication.
- Flea and tick prevention.
- Preventive dental care.
- Vaccinations for various diseases.
- Regular physical examinations.

Pet owners who would seek preventive dental care increased 64% over those who had previously considered it. These results imply that if veterinarians introduce, recommend, and clearly explain the services, more owners would seriously consider and purchase them (Table 8).

Impact of Cost on Veterinary Care

Price-aware and price-sensitive pet owners—On the basis of common responses and attitudes regarding a group of variables, cluster analysis was used to place owners into homogeneous “price sensitivity” groups as follows: price unconscious (38%), price conscious (43%), and price sensitive (19%). Whereas price-unconscious owners are willing to obtain veterinary care at any cost without thinking about the price, those who are price conscious take price into account in their decisions. The price-conscious group was split about evenly between those pet owners who do and who do not always follow the advice of their veterinarian. Price-sensitive owners are more concerned about price and are not always able to afford veterinary care. Because the price-unconscious and price-conscious groups were similar and owners in both were likely to spend whatever it took to keep their pet healthy, the 2 groups were combined and discussed as a single “price-aware” group in this report. Most owners (81%) were “price aware,” whereas the remainder (19%) were “price sensitive.”

Although both types of owners (ie, price aware and price sensitive) were informed about the cost of care, owners in the price-aware group were more willing to spend whatever it took to keep their pets healthy. Although price-sensitive owners had a heightened level of concern about cost, approximately 2 of 3 (68%) were still willing to spend whatever it takes to keep their pet healthy. Price-aware owners gave higher priority to the veterinary care needs of their pet and were > 4 times as likely as price-sensitive owners to always do what their veterinarian recommended regardless of cost (49% vs 11%, respectively). Price-aware owners more often had strong relationships with their veterinarians, compared

with price-sensitive owners (40% vs 18%, respectively). This may partially account for price-aware owners bringing their pets to veterinarians 31% more often than price-sensitive owners (mean of 2.1 visits/y vs 1.6 visits/y, respectively). Another important factor may be that price-aware owners had households with higher annual median incomes and fewer people to support on average than price-sensitive owners (\$58,900 vs \$48,000 and 2.9 vs 3.3 persons, respectively).

Compared with price-sensitive owners, price-aware owners were more likely to have the following characteristics:

- Shared responsibility for care of pet.
- Household without children.
- Annual household income > \$40,000.
- Live in house.
- Strong owner-pet bond.
- Took pet to veterinarian in past year.

Compared with price-aware owners, price-sensitive owners were more likely to have the following characteristics:

- Female.
- Multiple pets.
- More pets.
- Paid nothing for ≥ 1 pet(s).
- Household with children.
- Live in multifamily unit.
- Not taken any pet(s) to veterinarian in past year.

How much owners would spend to save life of pet—Nearly 2 in 10 (17%) owners would spend any amount necessary to save the life of a pet, assuming the pet would recover and have a productive life. Price-aware owners were 2.5 times as likely as price-sensitive owners to make this claim (20% vs 8%, respectively). The mean amount that owners would spend (excluding outlier responses) was significantly higher for dogs (\$2,021) than cats (\$970). These amounts increased with income, with frequency of veterinary visits, and among owners who purchased their pets. However, regardless of household income, owners with a strong owner-pet bond would spend 3 times as much as owners with a weak owner-pet bond (\$2,428 vs \$820, respectively).

Perception of affordability and impact on veterinary care—Many owners agreed with the statement that “veterinary services are very expensive” (62%). Those who agreed most strongly with this statement were typically female and had annual incomes of < \$40,000. Pet owners with a weak client-veterinarian bond were more

Table 8—Potential increases in the use of veterinary products and services on the basis of what owners had previously considered and what they would now seek.

Treatments	Had considered (%)	n	Would seek (%)	n
Vaccinations for various diseases	91	755	98	391
Regular physical examinations	82	755	95	351
Flea and tick prevention	81	755	93	470
Heartworm medication	64	755	89	397
Preventive dental care	45	755	74	480

n = Number of respondents that had considered or would seek each treatment, respectively, from which percentages are based.

likely than those with a strong bond to agree with the statement (73% vs 49%, respectively). Approximately 3 in 10 (29%) owners said they have been unable to afford veterinary services at one time or another. Because good communication drives clients' perceptions of value and their likelihood to follow recommendations, this finding reemphasizes the importance for veterinarians to clearly explain the reasons for various treatments. Pet owners who claimed a lack of affordability had the following characteristics:

- At least 1 dog and cat.
- Did not pay for pet.
- Household with children.
- Annual household income of < \$40,000.
- Weak client-veterinarian bond.
- Price sensitive.

Pet owners who get advance price quotes on veterinary care—The perceived cost of veterinary care probably plays a role in why approximately half (49%) of pet owners said they always get a price quote before deciding on veterinary care. Households with children and lower annual incomes (< \$40,000 vs ≥ \$80,000) were more inclined to get pricing information in advance. Dog owners with weak owner-pet bonds or weak client-veterinarian bonds more often asked about prices, compared with dog owners with strong owner-pet bonds or strong client-veterinarian bonds (52% vs 43% and 56% vs 39%, respectively). Price-sensitive owners inquired about cost at nearly 2 times the rate of owners who were price aware (79% vs 43%, respectively).

PRICE SHOP BY TELEPHONE

Fifteen percent of pet owners said they always or frequently call a veterinarian to find out how much products and services will cost. Owners who price shop by phone typically have the following characteristics:

- Multiple pets.
- Household with children.
- Annual household income of < \$40,000.
- Weak client-veterinarian bond.
- Price sensitive.

PRICE SHOP BY INTERNET

Slightly > 1 in 10 (12%) pet owners said they always or frequently use the Internet to inquire about veterinary-care-related pricing. Most (61%) pet owners have never used the Internet to inquire about veterinary-care-related pricing. Those most likely to price shop on the Internet for pet-care services and products often had the following characteristics:

- Multiple pets.
- Dog-only households.
- Paid for ≥ 1 pet(s).
- Dog owners with strong client-veterinarian bond.
- Price sensitive.
- College or advance degree.
- Annual household income of ≥ \$80,000.

PRICE SHOPPING BY PRODUCT AND SERVICE

The top 3 products and services for which owners sought advance price quotes by use of the phone and Internet are typically considered commodities (Table 9). How-

ever, not all pet owners viewed these strictly as commodities. In several instances, they perceived that veterinarians provide additional value to the products or services and they preferred to obtain them directly from veterinarians, even at a higher cost.

Medical decisions based on more than price—Less than half (48%) of pet owners agreed that, when possible, they would choose low-cost veterinary care. Cat owners were significantly more likely than dog owners to agree (53% vs 44%, respectively). The typical pet owner who would choose low-cost care had the following characteristics:

- Household with children.
- Annual household income of < \$40,000.
- Female.
- Weak owner-pet or client-veterinarian bonds.

The importance of a client-veterinarian bond is demonstrated by the fact that, overall, 70% of pet owners said they would stay with their veterinarian even if another practice had lower prices. This percentage increased to 89% for owners with a strong client-veterinarian bond. Owners who were more likely to stay with their veterinarian had the following characteristics:

- Dog owner.
- Male.
- Household without children.
- Annual household income of ≥ \$40,000.
- Price aware.
- Strong owner-pet bond.

Demand for Products and Services

Overview—Pet owners completed an online conjoint survey in which they were presented alternative configurations of 6 products and services (vaccines, heartworm medication, flea and tick treatment, preventive dental care, neutering, and routine physical examination). They were asked how likely they would be to purchase each alternative. Demand curves were derived that show the percentage of owners who would buy each configuration at various price points.

Demand curves of the percentage of owners who would buy each of the products and services versus various prices all had a similar shape. All had a steep slope at lower prices and flattened out near the mid-price range. This flattening or "long tail" is indicative of price indifference, suggesting that many pet owners would be willing to obtain necessary treatment regardless of price.

Table 9—Top 3 veterinary products and services that owners comparison price shopped for by telephone or the Internet.

Products and services	On phone (%)	On Internet (%)
Vaccines	35	NA
Spay and neuter	27	NA
Flea and tick control	16	39
Pet food	NA	19
Toys	NA	18
Total No. of respondents	1,112	773

NA = Not applicable because not 1 of top 3 products or services shopped for by telephone or the Internet.

Owners prefer buying directly from veterinary practices—Results of the conjoint analysis suggested that owners would rather take their pet to a full-service practice for vaccinations, heartworm medication, flea and tick treatment, and spaying or neutering than obtain products and services from a lower cost channel such as Internet sites, vaccination vans, or spay-neuter clinics. For each scenario, at every price point, the percentage of owners who would buy was highest for options purchased directly from veterinary practices. In addition, at every level of demand, the price owners would be willing to pay was highest when the products or services were provided by veterinarians.

Awareness and education can increase perceived value and demand—Some pet owners appeared confused when presented with a multitude of physical examination options that they may not have fully understood. When shown options that were not explained, some pet owners chose to stick to “the basics,” choosing to pay more for annual physical examinations that included fewer services. By doing a better job explaining the value of thorough examination procedures and tests, veterinarians should be able to increase the quality of care provided and their practice revenues.

Frequency of service—Over time, the pet-care industry has educated most owners that dogs and cats should get an examination at least once a year, if not twice (Figure 1). The success of this educational effort is reflected in the demand curve for examinations where demand was highest for annual examinations than for other options. Targeting pet owners who do not have a college degree or have an annual household income of < \$40,000 present the biggest opportunity for increasing visit frequency to twice yearly.

In contrast, many owners were not aware that their pets should receive regular dental care. In the study, pet owners often chose dental care options that had the lowest visit frequency (ie, evaluation once every 4 years; Figure 2). In reality, few owners bring their pets in at all for dental care. Therefore, getting more owners to bring their pets in even infrequently would be an improvement. Because lowering prices would likely have little impact on encouraging more frequent or additional preventive dental visits, the industry and veterinarians should continue to concentrate their efforts on educating pet owners about the benefits of annual dental cleanings and twice yearly physical examinations.

Evaluation of blood work before surgery—For preventive dental care and spaying or neutering, pet owners were more likely to choose an option that included hematologic and biochemical analyses before surgery, even at higher price points.

These findings suggest an opportunity to consistently include blood work-up before surgery, not just offer it as an option.

Pain management before, during, and after spaying or neutering—In the conjoint analysis, owners consistently chose spay or neuter configurations that included administration of pain medications before, during, and after the procedures over configurations that did not feature pain control. They were, however, less enthusiastic when it came to administering medications for pain at home following surgery. These findings emphasize the importance of always including pain medications before, during, and after surgery. It is critical to clearly communicate to pet owners to assure them that their pets will not feel pain while in the hospital.

Demand for products and services was higher for dogs than for cats—The conjoint analysis confirmed that pet owners were more likely to purchase veterinary products and services for dogs than cats. The biggest gaps for the products and services tested were for heartworm medication, examinations, and vaccines.

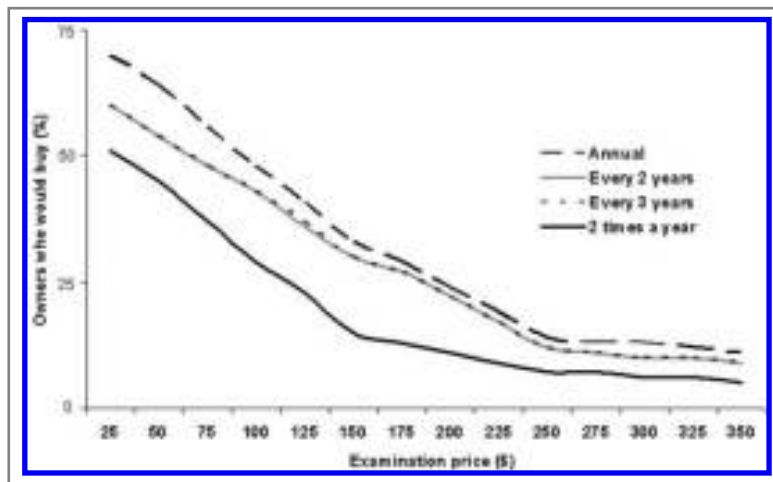


Figure 1—Demand curves of the percentage of owners who would pay for routine examinations annually, every 2 years, every 3 years, and 2 times a year at various price points.

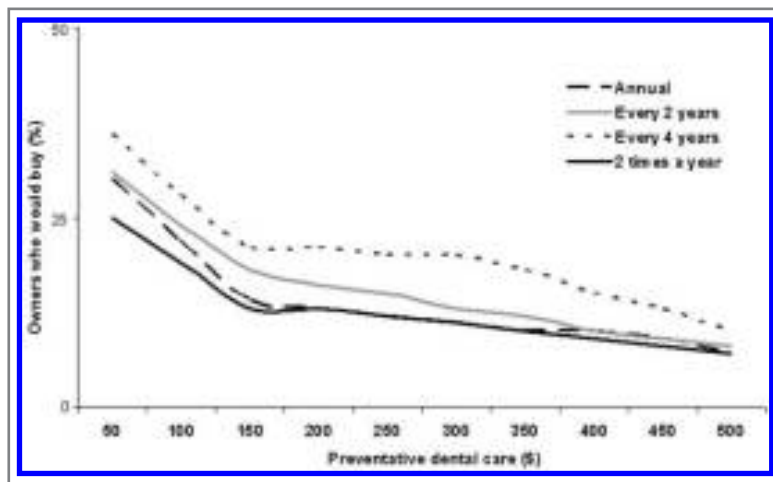


Figure 2—Demand curves of the percentage of owners who would pay for preventative dental care annually, every 2 years, every 4 years, and 2 times a year at various price points.

Increasing pet-owner awareness and understanding of the value of veterinary services for all pets would help towards closing the gap in care, especially for cats.

Conclusions and Recommendations

- Owners with the strongest bond with pets took their pets to veterinarians more often, were more likely to follow veterinarian recommendations regardless of cost, and were more likely to seek preventive care for their pets. Care decisions were not necessarily made on the basis of the income of clients but rather on their attachment to their pets and their understanding of the importance and value of the recommendations of their veterinarians. A veterinarian should recognize owner behaviors or feedback that indicate a weak or strong owner-pet bond to better understand the unique situation of each client and how it impacts the care pets receive.
- Cats were substantially underserved, compared with dogs. This was likely the result of the lack of owner attachment and understanding of the care cats should receive. However, cat owners often were more educated than dog owners and with the proper communication from a veterinarian may be more likely to seek increased services, including regular physical examinations, parasite prevention, and preventive dental care. This highlights the opportunity for veterinarians to substantially increase overall care for cats by making more thorough explanations and recommendations to owners regarding the benefits to pets.
- Findings of the study also revealed that cats from households with dogs and cats were seen by veterinarians significantly less often than dogs from these same households. Veterinarians can increase the care all pets in a household receive by acquiring more knowledge about the total pet makeup of the household and recommending a plan for each pet.
- Pet owners with the strongest client-veterinarian bond were the most loyal and more likely to follow recommendations. However, nearly 40% of pet owners said they could easily switch veterinarians, which points to a high level of vulnerability for many practices. The key factor for maintaining a strong client-veterinarian bond was communication, including thorough explanations and recommendations, which increased the perception that veterinarians only sell to clients the things their pets need.
- Findings from this study uncovered the preferences of pet owners to obtain products and services from full-service practices versus alternative channels such as Internet sites, mail, or low-cost clinics. Furthermore, they were willing to pay more if the product or service was provided by veterinarians.
- It was not the price of care that prevented most clients from undertaking recommended treatments. Only 2 in 10 clients said they were apt to decline care because they could not afford it. The real problem with owner compliance was confusion, uncertainty, and misunderstanding. A main reason cited by owners for not following recommendations was that they did not feel the recommended treatment was necessary, underscoring the need for better explanations regarding treatment benefits.
- Overall, these study findings revealed that clear and thorough veterinarian communication with the client could ultimately increase compliance by as much as 40%.