

The Financial Demand of Owning a Pet

Establishing a Healthcare Account for Companion Animals

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Summary

Pet owners often choose not to provide medical treatment for their animals because of their inability to pay for the rising costs of animal healthcare. For this reason, our project has two focuses. First and foremost, the difference between mandatory and voluntary treatments, the costs of such treatments, and the current options available to finance them will be discussed. It is important that those who are looking to bring an animal into their home are thoroughly informed of the financial responsibility of owning a pet. The second focus of this project will be to provide pet owners with alternative suggested finance options with the hope of promoting a more visionary plan for the animal's future healthcare needs. Combining current methods and a few new methods, not yet applied to veterinary healthcare, are explored. Payment via a veterinary healthcare account, various investment bonds, or an annuity-like investment pool is investigated. The ultimate goal would be to influence a large-scale community action in the proposed animal healthcare plans, which would provide pet owners with the finances to provide their animals with the treatment(s) they need.

Video Link: <https://www.youtube.com/watch?v=MgDC7FBdCzY>

The Financial Obligation of Necessary and Elective Procedures and Medications Background Information (ER)

Many new pet owners tend to underestimate how expensive it is to take care of an animal. In efforts to cut costs, they only choose to pay for the products or services pertaining to their animal's healthcare that they find of highest priority. Unfortunately, this most often times leads to the animal(s) not receiving basic medical attention necessary to maintain their general health. Eventually, this leads to a gradual decline in their overall health, likely resulting in a health problem requiring immediate treatment, and subsequently an additional cost (that could have been easily avoided). In conclusion, when new pet owners blindly create a list of services that they deem either necessary or superfluous for their animal's wellbeing, they not only jeopardize the health of the pet, but also render themselves ill-prepared for any future veterinary costs. To aid the owner in making an accurate financial estimate there must be a discussion, guided by the list below, about the difference between mandatory and voluntary treatments and the costs of said treatments.

Understanding Medically Necessary Procedures (ER)

A common misconception of pet ownership is that healthcare is only needed to maintain the general health of the animal. To most people, this means only seeking medical attention when a problem arises. An additional, and just as invalid, misconception leading to this one is that young dogs and cats are born healthy and do not require any immediate healthcare unless there is an obvious problem presented at birth. In fact, one of the easiest ways to keep your animals healthy and protect them from any future disease or disorder is to take a more preventative,

proactive approach. The procedures highly recommended when taking this approach would be considered medically necessary because an animal not undergoing these procedures can be undoubtedly expected to experience a multitude of preventable complications later on in life.

Vaccines (ER)

Vaccines are necessary to an animal's health in order to prepare the body for a proper immune response to pathogens. Vaccines work by tricking the body into generating an immune response to an antigen, which biologically looks like a disease-causing pathogen but is not. This is important because then, when the animal is infected by the actual pathogen for which it received the vaccine, a proper immune response will be generated and the animal will be able to effectively fight off the disease, or at a minimum lessen the symptoms. Of the many vaccines that are available there are a set of core vaccines that are considered vital to all dogs/cats based on the risk of exposure to the disease, the potential severity of disease if infected, or the disease's transmissibility to humans [1].

Rabies (ER)

First and foremost, the rabies vaccination for dogs is mandatory in all states. There are multiple valid reasons for this. Though one of most well known zoonotic viruses, it does not have to be one of the most prevalent because it is one of the most preventable through vaccination. The virus is transmitted through the bite of an infected animal (usually a wild animal such as a skunk, raccoon, fox, coyote or bat) since it is shed at high levels in saliva. For this reason, animals that come into contact with wildlife, dead or alive, and are not vaccinated are at a higher risk of being infected with the virus (i.e. if you live near the woods or your dog is a hunting dog). Upon infection, rabies virus enters blood, travels to brain through the nerves, moves to salivary glands where it can be spread through bite. There is *no* treatment for this virus once infected, usually resulting in unpleasant, painful death. It is suggested that cats and dogs be vaccinated at three or four months of age and then again at one year of age. A year later, a three-year rabies vaccination is recommended as a booster [1].

The following vaccines are still strongly recommended by most veterinarians, but are not considered core vaccines.

Distemper (ER)

Canine Distemper is a paramyxovirus, very similar to the one that causes measles in humans. This virus can affect a variety of organs including the skin, brain, eyes, teeth, and intestinal and respiratory tracts. This virus can spread rapidly through an environment like a kennel as it is transmitted through the air (coughing by infected animals) and through body secretions (urine), affecting mostly puppies and unvaccinated individuals. Those who are affected but recover from distemper may have permanent vision and nervous system damage, with puppies also left with poorly developed tooth enamel. Fortunately, this vaccine is available for puppies and dogs of every age with minimal side effects. This vaccine should be boosted for the life of the animal [1].

Canine Adenovirus-2 (Hepatitis and Respiratory Disease) (ER)

Canine Adenovirus-2 is caused by canine adenovirus type 1 (CAV-1). This virus affects the liver and other organ systems. It is spread by direct contact with the body fluids (nasal discharge

and urine) of an infected dog or the urine of a recovered patient for up to nine months. This is why contaminated runs, cages, dishes, hands, and boots can also serve as a source of transmission. The virus first affects the tonsils and larynx and eventually bringing about a sore throat, coughing, and symptoms of pneumonia. The virus then enters the bloodstream, affecting the eyes, liver, and kidneys. Since the disease presents itself mostly in dogs younger than a year old and death can ensue within hours after infection, it is crucial that young dogs receive this vaccine. The vaccine administered may contain adenovirus type 1 or type 2. Adenovirus type 2 (CAV-2) causes the characteristic cough. Modern vaccines contain either CAV-1 or CAV-2, but not both, since the viruses are similar enough that the vaccine for one can protect against both [1].

Canine Parvovirus-2 (ER)

This virus is the most common infectious disorder of dogs in the United States which, in itself, should be enough reason to vaccinate against it. The virus spreads mainly through contact with feces containing the virus, but the contact does not have to be direct since the virus can survive on inanimate objects for as long as 5 months in addition to insects and rodents serving as vectors. Though dogs of certain breeds are more susceptible, mainly puppies of less than six months of age are at the greatest risk. Once infected, usually with the most common form of the virus known as enteritis, the patient is highly contagious and often first displays this infection by experiencing diarrhea that is sometimes bloody. Vomiting (often severe), continued diarrhea and subsequent dehydration, more dark or bloody feces, fever and lowered white blood cell counts (severe) can follow, with death occurring soon after if not properly treated. Fortunately, the current vaccines protect against all strains of the canine parvovirus, including the relatively new parvovirus-2c strain [1].

Leptospirosis (ER)

This bacterial infection affects both animals and humans, so utilizing the vaccines that are available is crucial to keeping the owner and the animal safe. There are currently eight strains of this bacteria relevant to dogs and cats, but in this case, vaccination against one strain does not protect against the other strains. The current canine vaccines protect against the serovars *canicola* and *icterohaemorrhagiae* strains, for which dogs and rats are the primary hosts, respectively. These bacteria are transmitted between animals through a multitude of ways including direct contact with infected urine, venereal and placental transfer, bite wounds, or the ingestion of infected tissue. The bacteria can even be present in water sources (disease outbreaks during periods of flooding), food, or even bedding. Once the animal makes contact with the bacteria, the bacteria enters through the mucous membranes or skin and enters the blood system. Once in the bloodstream, it can spread to other tissues including the kidneys, liver, spleen, nervous system, eyes, and genital tract. Even if the infection is cleared, the kidneys can shed the bacteria for weeks or months in the urine, meaning a recovered animal can still spread the disease. Luckily, Leptospiral vaccines for dogs offer about 6 to 8 months of protection. The first vaccination against *Leptospira* should be at about 3-4 months of age. It is important to vaccinate dogs that are at high risk of contracting Leptospiral infections twice a year. If Leptospiral vaccines are used, the animal should start off receiving two or three doses of the vaccine spaced over several weeks to build immunity [1].

Canine Parainfluenza and Bordetella (ER)

Both of these diseases are highly contagious and are both causes of “kennel cough” (canine infectious tracheobronchitis). Kennel cough is often seen in – unsurprisingly – kennels and areas where dogs are kept in close proximity to one another. Most cases are seen in immunocompromised animals and young, unvaccinated dogs. When a dog is infected, the symptoms last for about a week and a half. Even after the animal has recovered, they can pass on the bacteria for another 6-14 weeks. There is an injectable vaccine available for this disease, for which two doses must be given 3-4 weeks apart, with protection not occurring until 1-2 weeks after the second injection. It is actually recommended that for the best protection, an intranasal vaccine containing both parainfluenza and Bordetella antigens be used. In general, the vaccine helps to generate localized immunity, which greatly reduces the incidence of clinical signs and illness. It is also very implementable, as it can be administered to puppies as young as 3 weeks of age, with only one dose necessary to provide immediate protection [1].

Lyme (ER)

Lyme disease (borreliosis) is an infectious disease originating in ticks. A dog or person usually gets Lyme disease through the bite of an infected nymph (young tick) or adult tick. The common deer tick is the primary carrier and transmitter of *B. burgdorferi* in the Northeast and upper Midwest, which is the area of highest risk for Lyme disease. The tick *Ixodes pacificus* is the primary carrier and transmitter of the disease in the western United States. In order for a nymph to transmit *B. burgdorferi*, it must be attached to the host for about two days. Fortunately, if a tick dies or is removed within two days, transmission of the bacteria will not occur. However, should transmission of the disease occur, clinical illness does not usually occur until 2 to 5 months after the bite from the infected tick. Common symptoms include a fever of between 103 and 105°F, lameness, swelling in the joints, swollen lymph nodes, lethargy, and loss of appetite. For most pets, this is a severe change in behavior and health. If not treated immediately or if already immunocompromised, some develop severe progressive kidney disease, heart problems or nervous system disease. The vaccine is helpful in this case, but proper methods of tick control via preventing tick attachment are really critical in preventing the transmission of this disease. Many tick preventatives are gels easily applicable to the back of the dog’s neck and only need to be applied once a month [1].

Sterilization (ER)

Spaying or neutering your dog may seem to be an unnecessary procedure - it is common for most people to feel that if their animal is going to be kept away from other animals, they are not at any risk of reproducing with another animal and that there is therefore no need to disrupt their reproductive organs. This is not necessarily true. Firstly, it is important to sterilize your animal in order to keep them from being able to have offspring, even if you think that they will never have the opportunity. Consider not just your animal's ability to make contact with other pets, but another pet's ability to make contact with your animal. Also, just like in the case of humans, an unplanned pregnancy is difficult to financially plan for (this applies mostly to female animal owners). Owners who are not thinking about breeding their animals, which in itself is an extremely costly process that involves a great amount of time and experience, should consider sterilizing their animals. Sterilizing your animals can prevent a multitude of unwanted behaviors throughout the animal's life and health problems in the future. Behavior wise, intact animals tend to be more aggressive and territorial, as well as more likely to engage in mounting/humping behaviors. The hormonal environment created by having reproductive organs but never actually

using them for reproduction may be more harmful to the animal in certain breeds than not having those hormones. In reference to their health, prolonged exposure to sex hormones increase the risk of gonadal cancers and breast cancer in females. In summary, the benefits of sterilizing your animal may strongly outweigh the risks of not doing so. In order to control the overpopulation of pets and promote the health of animals, sterilization is highly recommended by veterinarians even in the states where it is not already a law to do so [2].

Birth Defects and Congenital Disorder Corrective Surgery (ER)

Though not necessarily common in many newborns, birth defects and congenital disorders can present themselves in puppies and kittens almost immediately after birth. This would be considered a medically necessary procedure because not having your animal undergo surgery to correct the problem often results in death [3].

General Wellness (ER)

At a minimum, a pet owner needs to provide their animal with proper nutrition (food and clean water) and shelter indoors. There are also many other services and products needed to keep an animal's health optimal and prevent the need for corrective medical treatments. These include, but are not limited to: treats, flea and tick control, heartworm medication, vitamin supplements, grooming tools or visit to a groomer, daily dental care products (dental chewing bones or fluoride water additive), and a collar displaying an identification and rabies vaccination tag. Though not initially thought of as a product or service, providing your animal with the time and space for physical activity is absolutely necessary. If the home environment makes it difficult to provide exercise, then bringing your animal to a dog park or an animal swimming facility is essential in order to prevent obesity, heart disease and other disorders resulting in higher veterinary costs [4].

Elective Procedures (ER)

Some medical procedures, though not necessarily required by law or vital to an animal's life, are considered elective procedures. These procedures will certainly benefit the wellness of your pet, though they will be able to live comfortably without them. These procedures include getting a microchip for tracking, professional dental cleaning, removal of fatty abscesses.

Advances in Animal Medicines is Costly (JF)

We are in the age of advanced medicine, not only for humans, but for animals as well. Tests using sophisticated expensive medical devices come at significant cost borne by the pet owner. New medicines, now many of them "biologics" (typically a protein or peptide-based drug), are on the horizon for the treatment of a multitude of diseases/disorders, which add to extend the portfolio of healthcare treatments, are expected to be pricey. So, it is expected that healthcare costs for animals will not decline, but rise dramatically in the future.

Calculating Financial Responsibility (DH)

Many families choose to have a pet become part of the family because of their companionship, relationship with children and unconditional love. However, people often forget that owning a pet is not just a privilege but also an important responsibility. This responsibility includes shelter and food at the minimum. Thus ownership of a dog is not a cheap endeavor if you want the pet to have a good life. Initial costs of owning a dog for example can range from \$1000 to \$3900 for

the first year depending on what initial vaccines and other medical procedures are done. After that the annual maintenance for a dog ranges from \$500 to \$2900 [12].

Deriving the Costs (DH)

Even if pets are update on vaccines and they go most of their lives free of any ailments are problems there are still problems that will come naturally with age. While there are many health issues that come with aging pets, the most common are kidney and liver disease, frequent intestinal problems, prostate disease, cancer, diabetes, arthritis and cognitive problems. Routine activities that pets may have been used to while in their golden years may not be adequate for their health in later years. Aging animals undergo metabolic and body composition changes many of which are unavoidable. Other changes can be managed with proper diets. Senior food diets in dogs for example are lower in fat but still have an adequate amount of protein so that the dogs still have energy for daily activities. In felines on the other hand since they are “true carnivores” their protein requirement still stays the same as compared to other animals. An inadequate amount of protein in the diet can impair proper immune function; therefore, older cats should not be placed on restricted protein diets unless other health conditions are prevailing. In older pets it is recommended to have wellness visits every six months since their aging may become more noticeable over time. These average wellness visits including costs of office calls, vaccine boosters, and common procedures such as heartworm and fecal tests may cost up to \$200 depending on the animal hospital.

General care of pets includes food and other miscellaneous items such as food, toys, accessories and grooming. For cats there are added costs such as kitty litter, which is important especially if the cat is an indoor cat. When first getting a cat, owners should be wary of particular expenditures such as \$25 for a litter box, \$10 for a collar, and \$30 for a carrier. Plus, food is roughly \$170 a year, \$50 annually for toys and treats, \$175 annually for litter on top of the average \$150 for veterinary care every year. Dogs on the other hand can vary in the prices for general care depending on the size and breed. On average small dogs –including the costs of food, toys, license and basic veterinary care- is \$420. For medium sized dogs it is \$620 and for larger dogs it can go up to about \$780 [11].

Unforeseeable Costs (DH, ER)

However vigilant a pet owner may be, on unfortunate occasions accidents can occur which will place pets and their owners in regrettable situations. Accidents such as bloat, foreign body ingestions, hit by car, torn cruciate ligament, poisonings and lacerations are some common accidents that pet insurances include in their accident plan coverage’s. Bloat or gastric volvulus is a life- threatening emergency affects dogs in the prime of life. The mortality rate is a frightening 50 percent. The anatomy of bloat is first the gastric dilation where the stomach fills up with gas and fluid. The second part is the volvulus where the blown up stomach begins to rotate on its long axis so that the stomach is in such a way that it is out of position and pinched off from the duodenum. When this happens the air and fluid are incapable of emerging from the stomach and simultaneously the gastro-esophageal junction is blocked so that the dog is unable to belch or vomit. With the fluid fermenting in the stomach and rotting away the stomach wall the circulation of blood is interfered with and thus acute and sudden symptoms may occur leading to death. This illness coupled with the unpredictability of car accidents and other events can rack up high vet bills because emergency animal clinics must use expensive fluids and

difficult surgical procedures in order to combat these circumstances. Bloat alone requires surgery, anesthesia, supportive care, and post-operative management which will cost upwards of \$2500-\$5,000.

The following table details a list of common breeds of certain size dogs, their average lifespans, the disorders they are most commonly affected by, they cost of treating those disorders [9].

Size	Breed	Average Life Span (years)	Disorder(s)	Vet Price (via. Treatment Table)
LARGE	Great Dane	7-10	Cardiomyopathy	\$12,607.49 - \$18,647.49
			Cervical vertebral instability (Wobbler syndrome)	
			Gastric dilatation-volvulus	
			Hip dysplasia	
	Doberman Pinscher	10-12	Cardiomyopathy	\$11,150 - \$11,190
			Cervical vertebral instability (Wobbler syndrome)	
			Intervertebral disk disease	
			von Willebrand's disease	
	Bernese Mountain Dog	6-9	Aseptic meningitis	\$5,569.98 - \$11,869.98
			Elbow dysplasia	
			Hip dysplasia	
	Weimaraners	10-13	Hip dysplasia	\$2,017.49 - \$8,017.49
	Labrador retrievers	10-12	Elbow dysplasia	\$ 5,569.98 - \$ 11,869.98
			Hip dysplasia	
Retinal dysplasia				
German Shepherd	10-12	Degenerative myelopathy	\$4,669.48 - \$10,669.48	
		Exocrine pancreatic insufficiency		

			Hemophilia	
			Hip dysplasia	
			Nodular dermatofibrosis	
			Pannus	
			Panosteitis	
			Perianal fistula	
Rottweiler	8-11	Aortic stenosis	\$ 9,629.98 - \$15,929.98	
		Elbow dysplasia		
		Hip dysplasia		
Mastiff	9-11	Hip dysplasia	\$6,034.98 - \$12,034.98	
		Pulmonic stenosis		
American Bull Dogs	12-14	Brachycephalic syndrome	\$8,657.49 - \$14,647.49	
		Hip dysplasia		
		Keratoconjunctivitis sicca		
		Pulmonic stenosis		
		Ventricular septal defect		
Siberian Husky	11-13	Degenerative myelopathy	\$2,129.49	
		Epilepsy		
		Lupus erythematosus		
		Ventricular septal defect		
		Von Willebrand's disease		
		These can be inherited but occur sporadically in the breed; there are no disorders that are relatively common within this breed that breeders need to be careful about		
German	12-14	Hip dysplasia	\$2,017.49 -	

	Shorthair Pointer			\$8,017.49
	Boxer	8-10	Aortic stenosis	\$4,120 - \$4,160
			Cardiomyopathy	
			Corneal dystrophy	
	Poodle	12-15	Gastric dilatation-volvulus	\$4,517.49
			Sebaceous adenitis	
MEDIUM	Collie	8-12	Collie eye anomaly	\$40
			Dermatomyositis	
	Beagle	12-14	Pulmonic stenosis	\$4,017.49
	French Bulldog	9-11	Cataract Distichiasis	\$2,500 - \$3,600
			Hemophilia A (factor VIII)	
			these can be inherited but occur sporadically in the breed; there are no disorders that are relatively common within this breed that breeders need to be careful about	
			relatively healthy	
	English Springer Spaniel	10-14	Hip dysplasia	\$3,535.48 - \$9,535.48
			Phosphofructokinase (PFK) deficiency	
Retinal dysplasia				
Seborrhea				
Brittany	12-13	Retinal dysplasia	\$0	
		Ventricular septal defect		
Shetland	12-14	Collie eye anomaly	\$4,585 - \$5,095	

	Sheepdog		Deafness	
			Dermatomyositis	
			Patent Ductus arteriosus	
			Von Willebrand's disease	
	Australian Shepherd	12-15	Deafness	\$2,062.49 - \$8,072.49
			Hip dysplasia	
SMALL	Cavalier King Charles Spaniel	9-14	Mitral valve disease	\$60- \$100
	Yorkshire Terrier	14-16	Patellar luxation	\$7,047.49 - \$7,547.49
			Portosystemic shunt	
			Retinal dysplasia	
			Tracheal collapse	
	Cocker Spaniel	12-15	Retinal dysplasia	\$17.99
			Seborrhea	
	Miniature Schnauzer	12-14	Extrahepatic portosystemic shunt	\$9,557.49
			Sick sinus syndrome	
	Boston Terrier	14	Brachycephalic syndrome	\$2,530
Pembroke Welsh Corgi	11-13	Cystine Urolithiasis	\$1,950	
		Dermatomyositis		
		Epilepsy		
		Progressive retinal atrophy		
		***these can be inherited but occur sporadically in the breed; there are no disorders that are relatively common within this breed that breeders		

			need to be careful about***	
	Maltese	12-14	Patent Ductus arteriosus	\$4,500 - \$5,000
	West Highland White Terrier	12-14	Craniomandibular osteopathy (Westie jaw)	\$2,177.99
			Keratoconjunctivitis sicca	
			Seborrhea	
	Pug	12-15	Keratoconjunctivitis sicca	\$110
	Dachshund	12-14	Acanthosis nigricans	\$5,077.99
			Intervertebral disk disease	
	Shih Tzu	11-14	Exposure Keratopathy syndrome	\$1,580 - \$2,080
	Havanese	12-14	Progressive retinal atrophy	\$0
			Retinal dysplasia	
	Chihuahua	14-18	Patellar luxation	\$3,000
	Pomeranian	12-16	Patent Ductus arteriosus	\$4,500- \$5,000

[14, 21].

Responsible Ownership (DH)

As a responsible owner of a pet there is no limit to what people would be willing to do save their pets. However, at the end of the day there is the barrier of money that comes into fruition when all the medicine and technical jargon has been said. Putting a price on the life of a pet is not an easy task. According to a 2011 survey by Kroger Co., 61 percent of pet owners said that they were comfortable spending \$100 to \$1000 to save their pet. Fifteen percent said \$1000 to \$3000, while 10 percent would spend even more than that. But to be frank, the issue is less about money than it is about doing what is right for a pet [8].

Pet Insurance (DH)

The history of pet insurance began in the late 19th century when it was more focused on farm animals such as horses and livestock, which were important to the livelihood of farmers. Most people make the assumption that pet insurance mimics human health insurance, but the major difference is that pet insurance is a form of property insurance. Simply put pet insurance involves paying a monthly or annual premium, and thus receiving a reimbursement for an allocation of veterinary costs [10]. Below is a table that shows table that shows the costs of common accidents and illnesses for pets [17]:

Illness/Accident	Cost
Diabetes	\$10,496
Hip Dysplasia	\$7,815
Cancer Chemotherapy	\$5,351
Emergency Surgery for a Hit By Car on Fractured Pelvis	\$3,717
Ingestion of a Foreign Body	\$2,964

Ten companies are up and operating to sell pet insurance [18]:

- Embrace Pet Insurance (Beachwood, Ohio)
- Hartville Group (Canton, Ohio)
- Healthy Paws Pet Insurance (Seattle, Washington)
- PetFirst Healthcare (Jeffersonville, Indiana)
- PetHealth Inc. (Oakville, Canada)
- PetPartners (Raleigh, N. Carolina)
- Petplan USA (Philadelphia, Pennsylvania)
- Pets Best Insurance (Boise, Idaho)
- Veterinary Pet Insurance (Brea, California)
- Trupanion Pet Insurance (Seattle, Washington)

Pet insurance companies make money by collecting the premium over time from the plethora of subscribers. According to earning reports from Trupanion Incorporated [7], which is a direct-to-consumer, monthly subscription business that provides medical plans for primarily dogs and cats through its fully owned subsidiaries; the Total revenue for the 2014 year was \$115.9 million from 218,684 subscriptions [16]. All pet plans are of a similar fashion in covering accidents and injuries that may befall pets. Accident/ Injury only plans cover accidents and injuries such as being hit by a car or falling and breaking a leg, however these plans do not cover illness or wellness and preventative care. This plan has the most limited range of veterinary expenses but has the lowest premiums for owners. The next is the comprehensive accident/ injury and illness plan, which covers all accidents, injuries and illnesses. These plans may also cover genetic and breed related conditions but in return will charge a higher premium including a waiting period until the conditions will be covered a wait of 6-12 months. The one thing that all pet plans have in common is that they will not cover incurable pre-existing conditions. The cost of pet insurance premiums depends on a number of factors. These factors include the age of the pet and breed, gender, the geographic location, the size of the deductible, co-pay rate, breadth of conditions covered, annual/ lifetime reimbursement limits, and health history [6].

To encompass the numerous factors that come with pet medical care, insurance companies have begun to give more extensive insurance coverage's. This has led to different tiers of coverage for pet insurance plans. Like any other type of insurance, the most basic plans will obviously cost the least regarding to monthly premiums. The top tier coverage will offer the most extensive coverage choices, but will be more expensive. Levels usually start off with emergency coverage, which is the lowest and cheapest insurance plan. Emergency coverage covers vet bills,

hospitalization and necessary medical treatment after an accident, but it does not cover routine visits or standard procedure surgeries. The next type of tier is emergency and illness. This second tier covers both accidents and unexpected illnesses. At this level, the insurance company will cover office visits, necessary medical care, and x-rays. The third tier is emergency, illness, and routine coverage. This tier reimburses pet owners for accidental injuries and sudden illnesses, as well as more routine surgeries and treatments. The final tier is the full coverage tier, which will cover all of a pet’s medical expenses. The extensive coverage of this tier will cover accidents, illnesses, wellness exams, vaccinations, spaying and neutering, heartworm prevention, dental care, and chronic illnesses [20].

New Kid on the Block (DH)

A new pet insurance company “Figo” launched in April of 2015 that promises to be more sophisticated and tech-savvy than the more popular Trupanion, Pet Plan and VPI plans. Figo offers pet owners a multitude of coverage highlighting flexibility and broad coverage as an eye opener. The company sells three different plans, offering \$10,000 a year in benefits, \$14,000, or unlimited reimbursements. Customers can then choose among four different deductibles, ranging from \$50 to \$500, and four reimbursement amounts from 70% to 100% [22]. Their “Essential” plan is \$25.48 monthly, the “Preferred” plan (expected to be the most popular) is \$27.73 monthly and the “Ultimate” plan is \$30.36 monthly. Figo states that it covers veterinary exam fees, and like other companies, there is a waiting period for pre-existing conditions. However, what makes Figo different from other mainstream pet insurance companies is that other companies have per-condition deductibles, but Figo has only annual deductibles. A per-condition deductible means that if a pet owner spends the deductible on a certain condition in one week, but then the next week unfortunately the pet gets another condition, then the owner will have to pay another deductible on the ensuing treatment. This is an example of an unfortunate or unforeseen incident, but through the loopholes of certain pet insurance plans, owners end up paying more. Figo uses annual deductibles to keep exorbitant costs to a minimum. Unlike some of the other competitors which allows veterinarians to bill the company for allowable claims, Figo allows the pet owner to instantly file claims, store medical records, and keep track of appointments using a tech-savvy cloud-based, pet-health management system [22]. While the technological upgrade may pose problems to older pet owners who are unfamiliar with the ever-changing technology of today, Figo’s use of handheld devices to place the control of pet insurance into the owner’s hand literally will inevitably become the face of the future of pet insurance. The wide coverage of veterinary fees that Figo covers will ultimately entice customers from other pet insurance companies and will therefore force other companies to upgrade and conform to maintain competition in the market.

Tiers of Coverage –Premium Plans [19]

Insurer	Plan	Monthly rate	Features
Pet Plan	Gold	\$19.63+	Covers all accidents, injuries & illnesses inc. hereditary conditions for the life of the pet. \$200 deductible, 80% claims reimbursement (100% reimb available for additional premium).

Pets Best	BestBenefit Level 2	\$19.60	Annual deductible of \$0 - \$1,000. Reimbursement level of 70% -100%. Some hereditary, acupuncture and chiropractic coverage. Add routine care coverage for an additional fee.
VPI	Superior	\$21+	\$50 deductible. Pays 90% of approved claim per Superior benefit schedule. Additional cancer protection available.
Pets Best	BestBenefit Level 3	\$22.54	Annual deductible of \$0 - \$1,000. Reimbursement level of 70% -100%. Some hereditary, acupuncture and chiropractic coverage. Add routine care coverage for an additional fee.
Pethealth	Preferred	\$34.95	\$100 deductible. Pays 70% on approved claims. Covers all accidents and illnesses; death to \$500; kennel fees to \$250; advertising and reward to \$150; euthanasia to \$100
Trupanion	Premium	\$42.62+	\$200 deductible. Pays 90% of approved claims. Alternative therapies, hip dysplasia, boarding fees to \$500, trip cancel fees to \$1000, advertising and reward to \$500 and cremation/burial to \$100
Embrace	Creme de la Creme	\$43.75+	\$200 annual deductible, 20% coinsurance, \$10,000 annual maximum, no per incidence limits. Covers accidents & illnesses, genetic & chronic conditions, prescription drugs and wellness. Does not cover dental illness.
PetFirst	Comprehensive Preferred Plus	\$49.95	\$50 deductible for accidents and illnesses. Covers accidents and illnesses to \$15,000; wellness and preventative care to \$220; advertising & reward to \$400; Kennel fees to \$500; loss of pet to \$500; trip cancellation due to surgery to \$500; burial or cremation to \$100
AKC	Wellness Plus	\$62.25	\$125 deductible annually; 20% copay. Includes wellness coverage, annual checkup, vaccinations, heartworm testing and prevention; parasite control, annual dental cleaning and spay/neuter.
ASPCA	Best	\$76.79	\$100 deductible. Covers accidents and illnesses to 80%; spaying and neutering; essential preventive care, rabies vaccination, free lost pet recovery tag; annual physical exam and dental cleaning; continual coverage for some chronic and long-term conditions

			that may have arisen in the previous policy year.
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*(Only premium plans sorted by monthly premium)

(ER)

Annual Cost of Premium Pet Insurance Plan	
Premium Plan	Annual Cost
VPI	\$302.00
PetPlan	\$435.50
Pethealth	\$519.40
Petsfirst	\$649.40
Trupanion	\$711.44
Embrace	\$725.00
AKC	\$872.00
ASPCA	\$1021.48
Pet's Best Level 2	\$1235.20
Pet's Best Level 3	\$1270.48

Tiers of Coverage –Basic Plans [19]

Insurer	Plan	Monthly rate	Features
Pets Best	Accident Only	\$2.98	Accident only - no illness coverage. Deductible of \$0 - \$1,000. Reimbursement level of 70% - 100%.
Pets Best	BestBenefit Budget	\$4.85	Annual deductible of \$0 - \$1,000. Reimbursement level of 70% -100%. Some hereditary coverage. Add routine care coverage for an additional fee.
ASPCA	Accident Only	\$8.99	\$100 deductible. Covers accidents to 80%. No illness coverage. All breeds eligible!
Pets Best	BestBenefit Level 1	\$7.47	Annual deductible of \$0 - \$1,000. Reimbursement level of 70% -100%. Some hereditary, acupuncture and chiropractic coverage. Add routine care coverage for an additional fee.
Pethealth	Accident Only	\$9.95	\$50 deductible; Up to \$2000 for selected accidents. No illness coverage
Pet Assure	Single	\$9.95	Not insurance, but a membership plan where participating veterinarians & animal hospitals offer 25% discount to members
VPI	Standard	\$13+	\$50 deductible. Pays 90% of approved claim per

Embrace	Budget Conscious	\$13.69+	Standard benefit schedule. \$500 annual deductible, 20% coinsurance, \$5,000 annual maximum, no per incidence limits. Covers accidents & illnesses, genetic & chronic conditions. Does not cover take home prescription drugs, dental illness, or wellness.
Pet Assure	Family Plan	\$13.95	Not insurance, but a membership plan where participating veterinarians & animal hospitals offer 25%. Family plan covers up to 4 pets.
Trupanion	Standard	\$16.77+	All policies pay 90% of your actual veterinary bill for any accident or illness, including hereditary and congenital conditions. Deductibles and premiums are adjustable to meet the pet owner's needs and affordability.
ASPCA	Basic	\$16.61	Covers accidents and illnesses; spaying and neutering; free lost pet recovery tag.
Pet Plan	Bronze	\$17.70+	Covers all accidents, injuries & illnesses inc. hereditary conditions for the life of the pet. \$200 deductible, 80% claims reimbursement (100% reimb available for additional premium).
Pet Plan	Silver	\$18.62+	Covers all accidents, injuries & illnesses inc. hereditary conditions for the life of the pet. \$200 deductible, 80% claims reimbursement (100% reimb available for additional premium).
Healthy Paws	Dogs & Puppies	18.89+	Pays up to 90% of veterinary bill for any accident or illness, including hereditary and congenital conditions. Customizable.
Pethealth	Gold	\$22.95	\$50 - \$75 deductible. Pays 70% - 100% of approved claim depending on monthly rate. Boarding Fees to \$250. Finder's Reward to \$150. Double illness coverage available.
AKC	Essential	\$24.75	\$125 deductible per incident; 10% copay
PetFirst	Core Basic	\$24.95	\$50 deductible for accidents and illnesses. Covers accidents and illnesses to \$7,500; advertising & reward to \$250; Kennel fees to \$250;
Embrace	Most Popular	\$24.77+	\$300 annual deductible, 20% coinsurance, \$10,000 annual maximum, no per incident limits. Covers

			accidents & illnesses, genetic & chronic conditions, prescription drugs. Does not cover dental illness or wellness.
PetFirst	Comprehensive Basic	\$29.95	\$50 deductible for accidents and illnesses. Covers accidents and illnesses to \$7,500; wellness and preventative care to \$100; advertising & reward to \$250; Kennel fees to \$250;

(ER)

Annual Cost of Basic Pet Insurance Plan	
Basic Plan	Annual Cost
Pet Assure Single	\$119.40
Pet Assure Family Plan	\$167.40
Pethealth Accident Only	\$169.40
ASPCA Basic	\$199.32
Trupanion	\$201.24
VPI Standard	\$206.00
ASPCA Accident Only	\$207.88
Healthy Paws	\$226.68
Petsfirst	\$349.40
Pethealth Gold	\$350.40
Petsfirst	\$409.40
Pet Plan Bronze	\$412.40
AKC	\$422.00
Pet Plan Silver	\$423.44
Embrace Budget Conscious	\$664.28
Embrace	\$797.24
Pets Best Accident Only	\$1035.76
Pets Best Best Benefit Budget	\$1058.20
Pets Best Best Benefit Level 1	\$1089.64

Personal Financial Planning (CM)

When it comes to taking on a new expense, whether it be leasing a car, paying for a house, or purchasing a new pet, it is very important to set up a plan to manage your money. Compared to material items, it can be said that being ready to financially handle a pet is even more important than a car, house, or other object, because you are taking the responsibility of an animal's life and health into your hands. Your house will stay standing without that new couch you want, but your pet may require surgery to survive. This is why planning ahead financially, as well as knowing your financial options, can be the difference between life and death in your animal's future. The simplest way to ensure you have money dedicated to taking care of your pet is to open a separate savings account for it. However, because pet's health tends to decline towards the end of their lives, there may be better financial options for you [13,15].

(ER)

Further Calculations to Guide Choosing the Most Suitable Financial Plan

Size	Breed	Average Lifespan (years)	Average Lifelong Cost of Medical Treatment (USD)	Average Amount to Save Yearly (USD)	Estimated Cost Per Year in Dog's Fourth Quarter of Life* (USD)
LARGE	Great Dane	8.5	\$15,627.49	\$1,838.00	\$7,813.00
	Doberman Pinscher	11	\$11,170	\$1,015.00	\$5,585.00
	Bernese Mountain Dog	7.5	\$8,719.98	\$1,162.00	\$8,719.00
	Weimaraners	11.5	\$5,017.49	\$436.00	\$2,508.00
	Labrador retrievers	11.00	\$8,719.98	\$792.00	\$4,359.00
	German Shepherd	11	\$7,669.48	\$697.00	\$3,834.00
	Rottweiler	9.5	\$12,779.98	\$1,345.00	\$6,389.00
	Mastiff	10	\$9,034.98	\$903.00	\$4,517.00
	American Bull Dogs	13	\$11,652.49	\$896.00	\$3,884.00
	Siberian Husky	12	\$2,129.49	\$177.00	\$709.00
	German Shorthair Pointer	13	\$5,017.49	\$385.00	\$1,672.00
	Boxer	9	\$4,140	\$460.00	\$2,070.00
Poodle	13.5	\$4,517.49	\$334.00	\$1,505.00	
MEDIUM	English Springer Spaniel	12	\$6,535.48	\$544.00	\$2,178.00

	Australian Shepherd	13.5	\$5,067.49	\$375.00	\$1,689.00
	Shetland Sheepdog	13	\$5,035	\$387.00	\$1,678.00
	Beagle	13	\$4,017.49	\$309.00	\$1,339.00
	French Bulldog	10	\$2,950	\$295.00	\$1,475.00
	Collie	10	\$40	\$4.00	\$20.00
	Brittany	12.5	\$0	\$0.00	\$0.00
SMALL	Miniature Schnauzer	13	\$9,557.49	\$735.00	\$3,185.00
	Yorkshire Terrier	15	\$7,297.49	\$486.00	\$2,432.00
	Dachshund	13	\$5,077.99	\$390.00	\$1,692.00
	Maltese	13	\$4,750	\$365.00	\$1,583.00
	Pomeranian	14	\$4,750	\$339.00	\$1,583.00
	Chihuahua	16	\$3,000	\$187.00	\$750.00
	Boston Terrier	14	\$2,530	\$180.00	\$843.00
	West Highland White Terrier	13	\$2,177.99	\$167.00	\$725.00
	Pembroke Welsh Corgi	12	\$1,950	\$162.00	\$650.00
	Shih Tzu	12.5	\$1,830	\$146.00	\$610.00
	Pug	13.5	\$110	\$8.00	\$36.00
	Cavalier King Charles Spaniel	11.5	\$80	\$6.00	\$40.00
	Cocker Spaniel	13.5	\$17.99	\$1.00	\$5.00

*Most of the costly treatments are for illnesses/complications that occur in the last quarter of the animal's life. If the owner does not financially plan and waits until the issues present themselves to begin paying for treatment, this is an estimation of the yearly cost for treatment.

The above chart gives a detailed cost analysis for specific dog breeds and the average costs of medical treatments and costs of health coverages in the later years of life. This chart is to be used as a reminder of how it is important to save money in case of unforeseen incidents.

Bonds (CM)

The first type of investment we will go over are bonds. When you purchase a bond, you are making a debt investment in another party. This party could be both corporate or government. Put simply, this means that you are loaning your own money to that party to use, and you are guaranteed that money back plus whatever extra is accrued by a fixed interest rate. The pros of this type of investment are that they are clean cut, simple, and give a guaranteed increase to your investment. The downsides are that typically, to get a decent return, you will have to invest in a bond that will not mature for anywhere from five to ten years or more. Also, during this time, if you had an emergency and needed to cash the bonds, they would not be worth nearly the amount they would be if they had matured [5].

Mutual Funds (CM)

A second investment we can look at are mutual funds. When you invest your money into a mutual fund, your money along with many other investors' is taken and invested smartly in different stocks, bonds, and similar assets. The benefits of doing this is that your money is being handled by professional money managers, so you don't need to personally try to choose smart stocks or investment times. Also, it is being spread out over a number of different assets, so that if one does not do well it is not a huge issue. The problem with this kind of investment is that while there is the possibility of profiting greatly, there is no guarantee that your money will increase in the short term: mutual funds can rise and fall for a number of years before you start to see a significant return [5].

Certificates of Deposit (CM)

The final investment we'll explore are certificates of deposit. These certificates are an option banks give you, allowing you to gain a fixed interest on the money you invest. This savings agreement typically last from one month to five years in time. This investment method has a

similar benefit to savings bonds, in that they are clean cut and guarantee a return. These also don't have the downside of the long-term maturity period. However, during the agreed upon period of your certificate of deposit, you are expected not to close the CD early and will incur a penalty upon doing so. This means you should be prepared not to use that money for the time it is locked up in the asset [5].

Community Action: Helping Pet Owners Decide on How To Manage the Financial Demands of Their Pet's Healthcare

Choosing the Appropriate Investment Option (CM, JF)

When trying to choose an investment option for the sake of your pet, a few things need to be considered. One of these things is the lifespan of the pet you have, or plan on getting. Due to the different maturity times of investment options, your pet's lifespan matters greatly. Another thing to take into consideration is the average costs of health care for the pet you have, and how they change over the course of its life. Figuring that health care costs will increase as the pet ages, a certificate of deposit may be a way to save for their pet's healthcare with limiting returns that have low risk. With certificates of deposit, the pet owner can choose a maturity time that works best based on their pet's anticipated healthcare needs. Other than pets that have abnormally long lifespans, such as some species of birds, most pets have a life expectancy of less than fifteen years. This does not rule out the mutual fund option as a potential investment vehicle (with much higher returns) given that their pet may have a long life expectancy of upwards of 15 years. Another option would be exchange traded funds with low management fees with returns comparable to mutual funds.

(JF) Thinking outside the box, another possible investment option would be to put the pet owners monthly (or bi-annual or annual) fee in an investment pool and have those funds invested smartly by a team of low-fee financial planners. Pet owners would receive a return on their investment by receiving interest (or a dividend) and be able to draw from their account to pay for their pet's health care when needed. Kind of like a Roth IRA where "investors" money compounds over years while being able to withdraw funds to pay they put in without penalty.

(JF, CM) This novel investment plan/business would be tremendously financially beneficial for all pet owners, but especially in situations where pet owners have very little need for money to pay for their pet's healthcare, where their pets live and die without ever having major health complications. If a person in this situation had paid for the typical pet health insurance plan for the duration of their pet's life, they would have lost most all the money they paid in.

In this business plan, members would be eligible for a sizable return on their investment based on how much care his or her pet had required. In the case where the pet lived its life without needing to draw from their account for their pet's healthcare, that member would be eligible for the highest cash return. The more financial help they required for their pet, the more they would draw from their account, leaving little money in investments. However, they would not likely lose money as they would in the typical pet insurance plan.

The reason this plan would be beneficial for animals is that many people may fear that paying for pet insurance could be a waste of their money. With this plan, people may be more comfortable

with the idea that if their pet needs the help, they are covered, but if their pet does not end up needing much or any health care, they would get money they put in, back. The “investors” (pet owners wanting pet healthcare coverage) money would likely grow as the pool of investments would be earning money in the investments. Of course, a portion of investors’ money could be lost if the market dives however, history has shown that the financial market shows gains over time, not losses. All of these benefits come back to the main focus, which is making sure pet’s health care needs are not limited due to bad financial planning by their owners.

(ER) The chart below is a cost analysis of the size, breed, suggested financial plan and reasoning for the suggested plans. First, the pet insurance plans were split into premium, basic and accident only plans. Next, the premium and basic/accident only coverage were split into categories based on quality of their comprehensive coverage. Next, the yearly cost of each insurance plan was calculated. Finally, the table was created and we were able to suggest plans that made the most sense for the breeds based on certain disorders.

Size	Breed	Suggested Financial Plan	Reasoning (if necessary)
LARGE	Great Dane	Comprehensive Preferred Plus, Trupanion Premium, or VPI Superior	Great Danes are known for their health problems, being prone to neoplasia, hip dysplasia and bloat. Plans covering Great Danes are commonly quite high.
	Doberman Pinscher	Comprehensive Preferred Plus, Trupanion Premium	Doberman Pinschers are known for health and temperament problems, common problems such as cardiomyopathy, wobbler’s syndrome and bloat call for more extensive pet insurance premiums.
	Bernese Mountain Dog	Comprehensive Preferred Plus	Bernese Mountain Dogs are outdoor dogs a working breed and are prone to hip dysplasia, eye diseases and heart diseases, wellness and preventative care coverage is necessary.
	Weimaraners	Pets Best Level 3	Not as common to illnesses such as hip dysplasia, bloat and eye problems, therefore routine care coverage and hereditary conditions should be covered.
	Labrador retrievers	Trupanion Premium, Pet	The most popular breed,

		Plan Gold	these dogs are easy to train, but they are prone to problems like malformation on the hips and elbows and also neoplasia. Pet Insurance plans with full coverage including hereditary problems is necessary.
	German Shepherd	Trupanion Premium, Embrace Crème de la Crème, Pet Plan Gold, VPI Superior	The most popular breed, these dogs are easy to train, but they are prone to problems like malformation on the hips and elbows and also neoplasia. Pet Insurance plans with full coverage including hereditary problems is necessary.
	Rottweiler	Embrace Crème de la Crème, Trupanion Premium	These dogs are strong and intelligent known for protection, however they are at high risk for hip dysplasia, eye and heart problems. Insurance coverage with extensive coverage recommended.
	Mastiff	Embrace Crème de la Crème, Trupanion Premium	A large dog breed, one of the heaviest, some common problems is hip dysplasia, bloat, cardiomyopathy, and urinary conditions. Plans with extensive coverage are recommended.
	American Bull Dogs	Pets Best Level 3, Trupanion Premium, Crème de la Crème	A tenacious and a victim of dog fighting, this breed is fairly healthy but is affected by genetic health problems. Plans covering genetic problems and other conditions are recommended.
	Siberian Husky	Pet Plan Gold, ASPCA Best, Pets Best Level 2	One of the healthiest purebred dogs, low risk of hip dysplasia but prone to eye problems. Plans covering regular wellness and other conditions are recommended.
	German Shorthair Pointer	Embrace Crème de la Crème	Relatively healthy breed but suffers from some health

			problems mostly genetic. Cancer is the number one cause of death therefore coverage with cancer coverage is recommended
	Boxer	AKC Companion Plus Wellness, Pet Plan Gold	Boxers are a truly loyal breed but are prone to genetic diseases. Bloat, cardiomyopathy, and other gastrointestinal diseases are common. Plans with extensive coverage are recommended
	Poodle	Pet Plan Gold, Pets Best Level 3	An intelligent and working breed, the poodle breed is prone to Addison's disease and other hormonal problems. Plans with wellness coverage and extensive coverage are recommended.
MEDIUM	English Springer Spaniel	Basic Insurance (Trupanion Premium, Pets First Comprehensive Preferred Plus), 10 year bond, 6 month CDs	A common working and show dog, this breed is prone to hereditary conditions such as dysplasia and PFK deficiency. Coverage including hereditary coverage are recommended.
	Australian Shepherd	Basic Insurance (Trupanion Premium), 10 year bond, 6 month CDs	An active breed, they are generally very healthy dogs, but can suffer from hereditary, genetic disorders and eye problems. Hip dysplasia, Cushing's disease, and optic nerve colobomas are seen. Extensive coverage may be used but is not necessary.
	Shetland Sheepdog	Basic Insurance (ASPCA Best, Trupanion Premium, Embrace Crème de la Crème), 10 year bond, 6 month CDs	A common working breed, this dog suffers from genetic conditions, hip dysplasia, Von Willebrand's syndrome a bleeding disorder and deafness. Coverage with wellness care and possible

			extensive coverage is recommended.
	Beagle	Basic Insurance (AKC Companion Plus Wellness), 10 year bond, 6 month CDs	Used as scent detection dogs, the beagle is mostly healthy, however they can suffer from spinal problems, hip dysplasia and ear infections due to their floppy ears. Extensive premiums may be used.
	French Bulldog	Insurance (Embrace Crème de la Crème, Trupanion Premium), 5 year CD, 6 month CDs	A common apartment dog, the French bulldog is prone to some serious health problems such as genetic diseases, spine malformations, breathing difficulties and heat intolerance. Extensive coverage plans are recommended but are not necessary. Basic plans can also be used.
	Collie	Insurance (Embrace Most Popular, Pets First Core Basic), 5 year CD, 6 month CDs	Common service dogs, the collies are a mostly healthy breed but are sometimes prone to genetic health problems and eye problems. Extensive premiums are recommended but not necessary, basic plans will suffice.
	Brittany	Insurance (Pet Plan Gold, Pets Best Level 2), 10 year bond, 6 month CDs	An energetic breed, it is a very healthy breed but suffers for some genetic disorders. Hip and elbow dysplasia are common ailments. Extensive coverage is not necessary and basic coverage with wellness care will suffice.
SMALL	Miniature Schnauzer	Embrace Crème de la Crème, ASPCA Best	Once a farm dog, the mini schnauzer can suffer from allergies, epilepsy, diabetes, pancreatitis and other genetic problems. Coverage that covers hereditary and pre-existing conditions is recommended.
	Yorkshire Terrier	Pets First Comprehensive	A common toy breed, this

		Preferred Plus, Embrace Crème de la Crème	dog can suffer from conditions like collapsing trachea, dental problems, and liver problems. Extensive coverage recommended.
	Dachshund	Trupanion Premium, Pets First Comprehensive Preferred Plus	Commonly known as the “hot dog” this breed is prone to back problems due to their short stature, ear infections and knee and elbow problems. Coverage with wellness care and accident care is recommended.
	Maltese	Embrace Crème de la Crème	A personable dog, this breed can suffer from problems relating to their small size. Problems with blood sugar and liver problems have been seen. Coverage with wellness and accident coverage are recommended.
	Pomeranian	Pet Plan Gold	A common purse dog, this breed suffers from problems common to small dogs like hip dysplasia. Also eye problems and thyroid issues have been seen. Extensive coverage is recommended including wellness and preventative care.
	Chihuahua	Insurance (Pet Plan Gold), 10 year bond, 2 year CD, 6 month CDs	The common toy dog, this breed is prone to problems common to small dogs, neurological issues, and knee problems. Extensive coverage with wellness care is recommended.
	Boston Terrier	Insurance (AKC Companion Plus Wellness), 10 year bond, 6 month CDs	A good family dog, this breed can suffer from breathing problems, eye problems and spinal problems. Coverage with wellness coverage is recommended.
	West Highland White Terrier	Insurance (AKC Companion Plus Wellness, Trupanion Premium), 10 year bond	A people-oriented dog, this breed is not a healthy breed. Genetic diseases and hereditary diseases are often seen. Extensive premiums

			with wellness coverage and also covering genetic and hereditary issues are recommended.
	Pembroke Welsh Corgi	Insurance (Embrace Crème de la Crème, Pet Plan Gold, Pets Best Level 3 or 2), 10 year bond OR 5 year CD, 6 month CDs	A smart and active dog, this breed is mostly healthy but can suffer from degenerative myelopathy and hip dysplasia. Extensive coverage is recommended but not necessary.
	Shih Tzu	Insurance (Embrace Crème de la Crème), 10 year bond	A popular dog, this breed suffers from breeds common to small dogs, including dental problems, knee issues, and dysplasia. Extensive coverage can be used but is not necessary.
	Pug	Insurance (Embrace Crème de la Crème), 10 year bond, 6 month CDs	A lovable dog, this breed suffers from hip problems, breathing issues and eye problems. Extensive coverage with wellness care into elderly years is recommended.
	Cavalier King Charles Spaniel	Insurance (Pets First Core Basic), 5 year bond, 6 months CDs	A toy breed, this is a generally very healthy breed that commonly lives long. However genetic health problems can be seen. Extensive premiums not necessary and basic coverage will be sufficient.
	Cocker Spaniel	Insurance (Trupanion Standard, Pets First Comprehensive Basic), 10 year bond, 6 month CDs	Good family dogs, the cocker spaniel is prone to genetic health problems, eye problems and ear infections. Coverage with wellness and preventative care is recommended.

This comprehensive list will help new pet owners finance the ownership of their pet. Pet insurance is an important choice to make in a pet's life, but it is important to be a responsible owner. This list should be more of a wary reminder of what could happen rather than what will happen. The best solution is to keep pets healthy, safe with the use of preventative measures. Everybody finds himself or herself in different financial situations, and we all have our own preferences on what types of animals we want as pets. Knowing whether or not pet insurance or personal saving is the right way to go, as well as being aware of the possible future treatment

costs are important factors when choosing a pet. This method of planning ahead will help pet owners not only figure out what kind of pet they can reasonably afford, but also guide them to making responsible decisions that will ensure their pet has the healthiest life possible.

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Letters to the Editor

Curtis' letter to the editor - sent to The Star Ledger 3/25/15

Please consider publishing my letter to the editor – see submission below and attached. This is not only important for the sake of the health and well-being of animals, but concerns individual's financial standings as well. Sharing this letter will help people consider these issues before deciding on acquiring a pet.

To the Editor of the Star Ledger:

In this day and age, many people choose to undertake owning a pet. However, the financial demand of owning a pet is not always taken into consideration. There are a number of options people should consider when deciding to own a pet, and not jump into a commitment that could lead to the animal's misfortune down the line due to a lack of funds.

The first step people should take is to educate themselves in the different annual costs the pet they are considering will cost them. After this, they should consider financial planning to make sure they can provide their pet with the necessities to keep it healthy, especially towards the end of its life when health declines. This can include purchasing a proper animal health care insurance plan to make sure their pet's needs are covered, and/or using saving methods such as Certificates of Deposit to ensure they have sufficient funds for their pet's needs.

Utilizing these steps can not only ensure the pet is healthy throughout its life, but that pet owner's are prepared for serious health issues later in the pet's lives.

Curtis McLeer
Rutgers University

ELENA'S LETTER TO THE EDITOR - Sent to the NJ Herald of NJ.com 3/25/15

Please consider publishing my letter to the editor – see submission below and attached. I believe it is important that families think about how to finance the ownership of a pet before they take an animal into their home. Sharing my letter will prompt this discussion amongst families thereby encouraging proactive financial planning and improving the life of the new pet.

Dear Editor:

Before welcoming a new pet into the family, it is important to consider the finances of such a responsibility. Just as one would consider making a financial payment plan for a car or a home, it is just as crucial to identify the various costs of owning an animal and make a plan that addresses how to pay for those costs.

In order to improve the length and quality of your future pet's life and maintain financial stability during the time of pet ownership, one needs to take potential pet's breed/size, average life expectancy and estimated value of general cost per year into consideration. The costs of owning a new pet include those of general care, vaccinations, sterilization procedures, fixing birth/congenital defects, suggested elective procedures, and possible emergency/live-saving procedures. With a general knowledge of this cost, and the known annual family income, one can then explore a multitude of financial plans.

Families should first look into the annual cost of pet insurance and, if this cost falls below the out-of-pocket estimated annual medical costs, identify a plan that matches the level of comprehensiveness needed to cover the potential pet's expected medical procedures. If pet insurance is costlier than financing medical costs out-of-pocket, one should consider creating bonds, mutual funds, or certificates of deposit, which would allow for the means to pay for future medical costs but also the advantage of keeping any of this money not spent.

The objective of this proactive approach to financing pet ownership is to ensure that pets are properly taken care of throughout their life and any unexpected, yet necessary, medical procedures are prepared for. I hope this outline will guide future pet owners to create a personalized financial plan that best suits their family and new pet.

Elena Reitmeyer
Rutgers University New Brunswick

Derek Hu's Letter to the Editor- Sent to the South Jersey Times 3/25/15

Please consider publishing my letter to the editor – see submission below and attached. I think that it is important that families with pets consider the financial responsibility it is to own pets and whether or not they can afford it. A way to aid the situation is the use of pet insurance, which can lessen the burden of veterinary bills. Sharing this letter will hopefully prompt families to discuss this and will encourage taking a dedicated approach to financial planning for a pet.

To the Editor:

As an animal lover I am fond of looking at pictures of people and their pets playing together. This particular winter has been gracious to those who enjoy snow and all things snow related. I came across Jamie E. Marine's post, "South Jersey Pets for Adoption: Help these animals find their forever homes," which prompted me into what must have been at least a 15 minute daydream of looking at potential dogs that I could own myself. I have been fortunate to have been working as a veterinary assistant/ technician all through my college career at Rutgers University and am still working at the same practice, the Raritan Animal Hospital in Edison, NJ. Through this job I have been able to witness the pure emotion that a pet can instill in an owner. However, I have also seen the more heartbreaking moments like when old dogs way past their prime or dogs with noticeable illnesses are left outside the hospital tied to street signs. The reason for this is purely simple and daunting as well, the owners have no money. The objective of this article is to advocate the use of pet insurance. Pet insurance differs from human health insurance because the law claims that pet insurance is a form of property insurance since our furry companions are not recognized as individuals. Even the most basic plans may cover just accidents and general wellness care, while the more expensive premium packages will have more extensive coverage. Pet Insurance may not be for every pet owner, but what it should instill is a reminder that pets can experience sickness and illnesses just like humans do. Therefore, it is important to save up for those sudden occasions when life takes an unexpected turn.

Derek Hu
Rutgers University New Brunswick