

Do pet healthcare insurances have a future in the Netherlands?

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Summary

In the Netherlands, only 4% of pets are insured. To determine why these numbers are so low, what the benefits of pet insurance are and whether there is a future for pet healthcare insurance in the Netherlands, three target groups were questioned during this research: insurance companies, pet owners and veterinarians. Combining the insights gained from questioning these groups, gives different perspectives and insights into the possibilities of pet insurance.

First of all, insurance companies have negative experiences when it comes to lack of transparency in the veterinary sector, but in return, their own market research leaves much to be desired. Better market research might help them gain more insight and they need to keep in touch with the veterinarians in the field much more actively, in order to know what is going on in the workplace. Secondly, the attitude towards pets is shifting. Pet owners do not see pets as a property any more, but as a member of the family, which might explain why pet owners are spending more and more on their pets and why they are willing to pay a lot of money on medical care. However, they have yet to see the need of taking out an insurance for their pets. Their main concerns are that they think it is too expensive, or because they set aside money for pet/household emergencies themselves. What a lot of pet owners not realise, is how expensive a veterinarian procedure can be and what the benefits of an insurance can be in such instances. Also, the awareness that medical costs can overcome every pet at every moment, is important in the conviction that there are benefits in having pet healthcare insurance. To inform pet owners on insurances, insurance companies can benefit from the role that veterinarians play in the lives of pets and their owners, since they are more likely to take out an insurance if it has been advised by their veterinarian. This is a triple win, as the veterinarians will not only help the insurance companies, but also themselves and the pets their treat. Financially seen, an insured pet brings in more money, and visits a clinic more often. But practically, it also means that pet owners seem to be more willing to start a treatment instead of refrain from it due to financial considerations. The downside of more insured pets is that insurance companies could gain too much influence in the veterinarian work field and will have a say in which treatments will be offered in clinics and which will not. However this seems to be unfounded, because Swedish veterinarians stated that they did not have the feeling that they are limited in their work, even though the insurance companies in Sweden are much larger than in the Netherlands. This is where the KNMvD (Royal Dutch Society for Veterinary Medicine) steps in: they have to keep the veterinarians' interests in mind, by keeping a close eye on the developments and play an active role in them, so the veterinarians can keep exercising good medical care without being side-tracked by other factors. As said before, the first steps in the reshaping of the pet insurance field in the Netherlands will have to come from the insurance companies themselves. They have to convince the veterinary sector of the benefits of pet healthcare insurances and as soon as they have accomplished that, they can commonly inform the pet owners on insurances. To do this, a concrete plan will have to be made, in which communication and cooperation should be focus points. Only then will pet healthcare insurances have a future in the Netherlands.

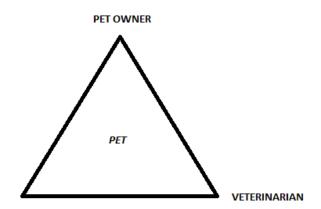
1. Introduction and definition of the problem

We find it ordinary to do so, and some of the things we insure are even obligatory² with no-one arguing against it. However, a subject we hardly think to insure are our beloved pets. Pet owners in the Netherlands rarely speak of pet insurances and some do not even seem to know they exist. Every now and then, the subject comes to mind, but mostly one will dismiss this subject without giving it a serious thought. With the upcoming pet-parentship, where pet owners see their pets more as their children or part of the family rather than a possession, one would expect that pet owners would insure their animals, just as they insure the rest of their (human) family. Thereafter, pet healthcare insurance would resemble human health care insurances, unlike any other insurance we know.

The Netherlands is a wealthy country, which gives us the luxury to think about the health and wellbeing of our pets as a primary or secondary need. Dogs and cats are seen more and more as a part of the family³. Owners want to give their pets the best care there is and that includes the best healthcare. Only, sometimes veterinary treatment can entail high costs, which can cause unpleasant situations for both pet owner as well as their veterinarian. People might have to choose to not give their pet the surgery it needs, because they cannot cover the bill or don't have the money to pay for the medicine for their pet. Even if their pet could live on healthily for years, they are forced to put their beloved animal down because they can simply not afford otherwise and do not want to see it suffer on for any longer in their condition⁴. This is not only a sad situation for the pet owner, but also for veterinarians, whose job it is to take animal welfare into consideration. Veterinarians find these situations dreadful to come across. We should ask ourselves: how can we justify putting an animal down on the basis of their owners not being able to cover the medical costs? When it comes to giving animals the best possible care and treatment, we look for veterinarians to provide their services and step to the plate. But in the end it is still the owner that makes the financial decisions for their pet, not the veterinarian. As a veterinarian you can advise, but not force owners. However, what can be done is making their decision less complicated, by ruling out the financial obstacles.

The question remains: Why don't more pet owners choose to insure their pets? Only 4% of the cats and dogs in the Netherlands have pet healthcare insurance⁴, while healthcare insurance is a mandatory insurance among human beings². Hardly any research is done on pet healthcare insurances in the Netherlands. This is odd, since this is a subject that is potentially interesting for several target groups. For insurance companies it is important to know their market, pet owners need to know the insurance possibilities and veterinarians might benefit from more insured clients and the amount of times they visit their clinic. Because of the fact that there is no previous research data available, clarification is needed desperately. However, covering all these different disciplines and areas within one research is impossible. Therefore, this research focuses on the following aspects:

- The three target groups that are involved in pet healthcare insurance: the insurance company, the pet owners and the veterinarians,
- The position these groups have when it comes to pet healthcare insurance,
- The interests and needs of these three groups when it comes to insurance.



PET HEALTH CARE INSURER

Since no one has done any research on this subject in the Netherlands, it is unknown what effect more insured pets will have on both pet owners as well as veterinarians. So, the question is not only why people do not insure their pets, but also what the effects would be if they would insure and what role insurance companies play in this matter. Would veterinarians benefit from more insured animals and will pets have a better or longer life? All in all, the question that has to be answered is: Does pet healthcare insurance have a viable future in the Netherlands?

To help answering this question, there are examples from abroad that can be used as a model for our industry, but since no one has done any research on this topic in the Netherlands, we need to find out if we can reflect these models on our own society, what differences there might be, how countries such as Sweden have managed to reach a 80% coverage among pets⁴ and weather it is desirable for us to follow the lead of other researched countries. This will be shortly discussed in chapter 5.

2. Method

2.1 study setup and study area

As mentioned before, there are no known studies about this subject (at least, not in the Netherlands). So, aiming for a result that is based on and can be reflected up on in our own economy and culture, this research has to be done from the very start in order to create a base line. As in other countries, pet healthcare insurance companies offer insurances for all kinds of pets, but cats and dogs are by far the pets that are most insured. In order to define this study, we will limit ourselves to these two animals and the three target groups: insurance companies that would like to insure pets, pet owners and the vets that treat them.

The first thing that needs determination is how insurance companies that offer pet healthcare insurances are putting together the insurance policies. For example: What the costs are for both insurer and pet owners and what makes it appealing for insurers to insure pets? How can the work carried out for pet insurances be compared to how human healthcare insurances work and could data from existing studies and literature reviews be useful in this matter? Also, knowing what general complications insurance companies face and where they think improvement is necessary within their own sector, is an interesting fact that can be looked into during this study. An opportunity to obtain answers to these questions is an in-depth interviews with insurers. The three biggest companies that offer pet health insurance were approached. Their names are OHRA, PetPlan and Proteq. When obtaining data from the answers of the aforementioned questions as well as their company vision and how they ideally see the future of pet healthcare insurances a theory or advice can be determined. The combination of the literature review and the information derived from the

interviews with the insurance companies, will create an image of the current landscape of pet health care insurance.

Secondly, we look into the opinion and vision of pet owners. The main reason to do so was to find out what motivates them to insure their cats and dogs, and if they decide not to insure their pet, what would be the reason not to do so. Reasons might be various and may also depend on factors such as income, education, type/breed of pet, etc. All these factors should be taken in consideration to answer the question why people do or do not insure their pets. To learn which factors are a determining factor in the choices owners make, a survey was set-up and distributed. Because of privacy reasons, not all factors mentioned could be determined. For example: the survey did not ask people where they live, so little to nothing can be said about the geographic spread of people that may or may not insure their pets. However, in order to access a fitting sample group, online dissemination of the survey was chosen. First through Facebook; by asking friends and relatives to fill in the survey. Furthermore the members several groups with interests in cats and dogs were asked to contribute to this survey. Secondly, the survey was shared by an online platform for pet owners. This platform, with around 2000 participants, brought in the major part of the response to the survey. Which also means that the people who filled out the survey had already joined an online platform for pet owners, so they probably already have an (above average) interest in their pets' well-being. This has to be taken into consideration.

Finally, the last group of people to be interviewed and questioned are veterinarians from diverse practices. They were approached to join this study on order to help understand how veterinarians see pet health care insurance and to also include their professional opinion as to why there are few pets insured in the Netherlands. To form a representative group, the information for this research was gathered from veterinarians working in practices spread all over the country and within different neighbourhoods and social classes. Carefully chosen questions were asked and processed in the form of a survey. This survey was based upon the information gained from the interviews with pet insurers. Just over a hundred veterinary practices filled out the survey (n = 102). With an estimated count of 760 veterinary practices for companion animals⁴, this means that approximately 14% of the practises are represented in this research. Independently of their personal opinion about pet healthcare insurances, it is interesting to know if veterinarians would benefit from pet health care insurance. From a financial stand-point it seemed best to split the question in two: 1) Will the pet owner take his cat or dog more often to a veterinarian if their pet is insured? 2) Will a pet owner spend more money on a treatment/at the vet if their pet is insured? To answer these questions, both information from patient-data out of veterinarian practices as well as the personal experience of the veterinarians is needed. The data from the faculty practice could be used for this purpose, but using only these data would not be representative, and would therefore not comply. Thus, data from various practices was used to obtain an answer in this research. One of the difficulties here was the patients' privacy. A lot of veterinary practises had reservations when it came to sharing patient/company data. Fortunately, some allowed us to gather information when the privacy of both the patient and practice was guaranteed. However, financial part isn't the only thing that plays a role in the benefits of pet healthcare insurances for veterinarians. The professional profit or disadvantages play a role too, and so they were looked into and questioned in the survey as well.

Having all this information gathered, combined and compared, created a representative representation of the current situation on pet healthcare insurance in the Netherlands. The final step was to compare this situation to the situation in other countries where more owners insure their pets, in order to discover the common ground and differences. To do so, we reached out to several veterinary practices in England and Sweden. This is useful to determine whether it is desirable to commit ourselves to obtain a larger percentage of insured pets, or whether the need is not there.

2.2 Data analysis surveys

Some of the questions in the survey gave absolute answers to a portion of the research questions, while others needed to be seen in a context of various factors to give an appropriate representation of the current situation. In order to do so, the required data was first entered in Excel, before being exported to SPSS Statistics 24 software. In Excel, all the answers were coded, in order to analyse them further in SPSS.

Associations between variables and the choice to insure were tested in two stages: first, the variables were screened for significance, using a Chi-square test. The variables with a p-value <0.25 (not <0.05 because the co-linearity might adumbrate an distorted image of the p-value) were tested for co-linearity. Six variables remained, and were processed in the multiple logistic regression model. Because the outcome of the model is uninsured/insured (0/1), binary logistic regression is used, with uninsured/insured as the dependent. The six variables were entered as categorical covariates. A Backward model selection approach was used to decide for inclusion or exclusion of a variable in the model by identifying potential confounders by the changes in the coefficients (B) (i.e., when inclusion of a variable to the baseline model changed the coefficient of the model by >10%, one of the variables, depending on its importance, was dropped). The variable 'education owner' was highly related to 'income per household' and therefore excluded from the model.

All the outcomes were combined in a table (table 1, can be found in the appendix) shows both the variables that made it to the first uni-variable analysis ("animal", "pedigree", "relationship with animal", "willing to pay for treatment", "education owner", and "income per household"), as the final model, which includes the variables "animal", "pedigree", "relationship with animal", "willing to pay for treatment" and "income per household". Five variables retained in the final model as a potential influence on the owners choice to insure their pets.

Note: not all numbers and tables are included in this thesis, but are of course available for those who are interested.

3. Background information

3.1 What is insurance?

Art. 7:925 BW in the Netherlands describes an insurance as: 5

Verzekering is een overeenkomst waarbij de ene partij, de verzekeraar, zich tegen genot van premie jegens haar wederpartij, de verzekeringnemer, verbindt tot het doen van een of meer uitkeringen, en bij het sluiten der overeenkomst voor partijen geen zekerheid bestaat, dat, wanneer of tot welk bedrag enige uitkering moet worden gedaan, of ook hoelang de overeengekomen premiebetaling zal duren.

So, in short, an insurance is a contract in which one party agrees to indemnify another against a predefined category of risks in exchange for a premium. This means that:

- There are two parties involved (insurer and policyholder),
- These two parties enter into an agreement,
- The insurer binds himself to one or more payments, as a return for the premium he collects from the policyholder,
- By entering the agreement, there is no insurance *if, when, how often,* or *up to which* amount a payment will have to be paid out,
- There is also no insurance as to how long the policyholder will pay the agreed premium.

The oldest form of insurance (especially oversees) is the transport insurance, which has existed for several millennia. The social element of insurance has its roots even further in history, where smaller societies were assigned to each other and where one found it normal to help the other if it was in their power to do so, if they were affected in any way. In the second half of the seventeenth century the term *chance* got shape and the possibilities of a chance contract were explored. This approach and development turned out to be of crucial importance for nowadays insurances. ^{6 7}

Modern insurances stretch out over many participants and over longer periods of time. It is a form of financial service with a specific distribution formula. This distribution formula is linked to the existence and probability of risk(s). Risks are uncertain, yet well described events, that can strike one or more policyholders. Because of this, the insurance transaction distinguishes it selves from any other form of financial services. It is an contract based on chance. The liability of the insurer to pay any dividend, relies on the occurrence of specific events and the moment these events take place. On the other hand, the policyholder has an obligation to pay the agreed premium, even if these insured event(s) never take place. ⁶

To pay for healthcare, there are three basic financing strategies:

- Out-of-pocket, which relies on ordinary inflows such as salary and available household assets.
- Savings, which means withdrawing from a fund to meet expenses,
- Insurance, in which case a (partial) transfer is arranged for the financial consequences of health-related risks.

Table 1.2 shows the strategies for financing health-related costs ⁸. By using the out-of-pocket, an individual cannot rely on any distribution of health expenses (neither spreading over time, nor sharing among individuals). However, this strategy can be appropriate for health-related events which imply routine expenses. These are usually high-probability, but low-cost events. A strategy based on savings, allows the costs to be spread over time. This can be used for events of medium-probability and medium-cost. The insurance strategy implies risk pooling and hence sharing of health-related costs among all policyholders of the pool. This strategy is appropriate in particular for low-probability events which imply high-costs ⁸.

Table 1.2 Strategies for financing health-related costs

Health-relate	ed event	Appropriate financing strategy
Probability	Cost	
High	Low	Out-of-pocket
Medium	Medium	Savings
Low	High	Insurance

So, especially for that last group with a low probability, but high costs, insurance could be an interesting consideration.

What an insurance company offers to insure, relies on: 6

- Law: what is allowed and what has the government arranged separately?
- Insurance-technical data: what is possible?
- Activities of others: who does what?
- History: that is how it is grown into a culture, sometimes under influence of foreign law and/or international agreements.
- Practical consideration: is it sensible?
- Policy: what is it someone wants and what does someone definitely not want?
- Market: if most people decide not to insure themselves, even at a certain risk, it is unappealing or even impossible to offer such an insurance.

The goal of insurance is to distribute the money that is collected from all policyholders, following the predefined criteria. It is possible that an insurer has a profitable objective, but this is not necessary. Continuity, however, is essential, since policyholders pay premiums in advance, which obliges the insurer to pay for any insured event that might occur. Insurance exists through the *chance concept*. This concept is based on the *law of large numbers*: the insurer takes over a financial risk, coherent to an uncertain event, from the policyholder. To insure, many policyholders with similar risks must be

brought together. The gamble principle disappears by bundling these people, but as goes for managing each business, a certain business risk will apply to any insurer. ⁶ Not only are these large numbers important so that the risk can be reduced, it also supplies the insurance company with policyholders who are, so to say, 'good risks'. These are the people that have insurance, but are not or will be less likely to experience a certain event (especially present in obligated insurances).

The *law of large numbers* is based on change experiments, as well as on mathematic models. In this model, all the policyholders carry the burden. Those who buy insurance have to take in account that there are different risks between all the policyholders. Those with smaller risks are usually not willing to pay a premium higher than is necessary for themselves. In other words: asking the same premium of those with lower risks is seen as an unwanted form of subsidising solidarity of those with lower risks for those with higher risks. Therefore, every insurer should systematically approach, measure, limit and subdivide the risks, to avoid that the aforementioned group leaves, to join an insurer that offers a lower premium for subgroups with lower risks. ⁹ This requires information gathering of the concerned market and target audience. In order to make a fair system to distribute the burden, grouping of similar risks is essential. ⁶

With these risk classes, it's easier to estimate a chance of a certain event occurring. The premium to insure yourself or your property against a certain event is predefined by a chance system. The height of a premium is partly determined by: $^{6 9}$

- The frequency of the chances,
- Type of chance distribution,
- Size of the possible pay-out,
- The effect of the existence of the insurance on the risk to insure,
- The verification of legitimacy of every submitted claim .

Read more about how prices and premiums come about in appendix 1.

3.2 Differences between human and pet healthcare insurance

Although pet healthcare insurance in the Netherlands is covered under 'property insurances', it mostly resembles human healthcare insurance. Besides the fact that the pet healthcare insurance market is less common, the biggest contrast between human and pet health insurance is government interference. In the Netherlands, the right to (human) healthcare is part of the constitution as a social right. Art. 22 (WB) says that the government has to take steps to improve public health and everybody that lives or works in the Netherlands is required to have health care insurance 10. However, unlike human healthcare, the Dutch government does not engage itself in pet healthcare insurance but leaves this entirely to market forces. This also means that there is no subsidy of any form that pet healthcare insurance companies can count on. Where human insurance companies have to realize 45-50% of the total healthcare costs through premiums, pet healthcare insurance companies have to pay the full 100%. There is no social welfare system when it comes to pet insurances, so households with a minimum income do not receive any contribution to pay their pet healthcare insurance ¹¹ ¹². Accessibility of (human) healthcare through the development of healthcare insurance was only possible because of the close cooperation between doctors and other occupational groups ¹³. It is questionable if one can find such a cooperation between veterinarians and insurance companies, but that question will be further discussed in chapter 4.3. Because pet healthcare insurance is not influenced by any government, it is influenced more by market forces than by human healthcare. Competition between insurance providers will cause a certain price competition on the market that will lead to more expedient prices. A dynamic market force ensures providers will meet the expectations of the policyholders and will take into account new developments and requirements within society. 13

Another difference is that, unlike human healthcare coverage, pet owners usually have to pay the vet bills in full and wait for reimbursement from their insurer. There are tests to implement a similar service in the Netherlands that is offered in other countries, but this has not been a success so far ¹⁴. Merging the abovementioned information into a figure, we find the following:

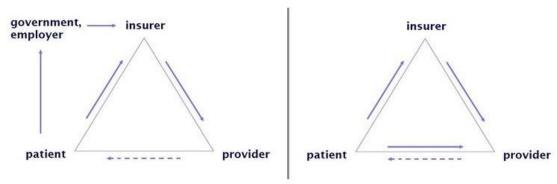


Figure 1: The Medical Care Triad Solid ¹² (lines represent money flows; the dashed line represents service flows.)

Both figures show where the cash and service is coming from and to whom it's going. As one can see, the government is only involved in the Human Medical Care Triad and not in the Pet Medical Care Triad. The patient (pet owner) pays directly to the provider, whereas a human patients pay their insurers and hardly ever pays their provider directly.

However, there are also a lot of similarities between these two models. It is those similarities that can help us understand the phenomenon *pet healthcare insurance* a little bit better, seeing as human healthcare insurances are far older and already endured all the 'teething troubles'). Some common areas between the two insurance models are: ¹⁵ ¹⁶

- There is a strong growth in spending over the last two decades.
- Both services are provided by experts doctors and veterinarians who have undergone lengthy and expensive training and occupational licensing.
- This expertise leads to insurmountably high salaries and also gives these experts the authority to recommend treatments and/or tests, which most consumers cannot independently judge or contest.
- Both human as well as pet healthcare is accompanied by strong emotions, making it hard to rationally weigh the value of different healthcare options.
- Customers trust their vet as one would trust their doctor to do what is best, especially when an emotional decision has to be made.
- The need for care is difficult to predict and mostly needed urgently again threatening our ability to shop for the best deals.
- Both groups show a similar propensity for high spending at the end of life.
- New pharmaceuticals and high-tech developments drive both human and pet healthcare spending, increasing their costs.
- What one is spending, strongly depends on one's income.

But another question is: Do pet healthcare insurance companies want to go down the same path as human healthcare insurances and what does that mean for both pet owners and veterinarians? The less pleasant aspects of human healthcare often leaves a nasty aftertaste in the mouths of veterinarians. Some common human health insurance problems are: ¹⁷

- Compensation through capitation,
- Reduced fee schedules to fit predetermined rates,
- Nonmedical personnel deciding what procedures are covered,
- Preauthorization battles and paperwork overload.

More of this will be discussed in chapter 4.3

3.3 Pet Healthcare insurance in the Netherlands

Insurance companies have offered pet healthcare insurance for decades now. In that period, various entrepreneurs tried to create a firm base for their companies. Some of these companies made it, but not all of them. As described in chapter 3.1, one of the things that is essential when it comes to insurances, is continuity. The policyholders of these insurance companies paid premiums in advance, for which in return they expect the insurer to pay for any insured event that might occur. However, when an insurer goes bankrupt, there is no money to pay for any events and the policyholder is left out of pocket, with no insurance.

But, after 15 years of uncertainties and changes, the pet healthcare insurance market seems to have reached a stable phase. There are four big providers: Reaal Dier & Zorg (Proteq before 2018), PetPlan, OHRA and Inshared/HEMA. Reaal is the market leader, and together with PetPlan, OHRA and Inshared/HEMA, they insure around 170.000 cats and dogs in het Netherlands ¹⁸. All these pet healthcare insurances are part/partner of bigger companies, such as *Unigarant Verzekeringen*, *REAAL schadeverzekeringen N.V.* and *Delta Lloyd N.V.*

4. Results and discussion

4.1 Insurers

Things are changing within pet ownership and medical treatment for pets. As in human healthcare, more and more is possible nowadays when it comes to pet healthcare⁴. But with these new, advanced techniques, medical treatment also increases in price^{17,19}. Moreover, pets are seen as part of the family³, as can be seen in the results of this research (see chapter 4.2), and within the media there is more attention for pet healthcare. All these factors play a role in the existence of pet healthcare insurance companies.

Insurers decide what they offer to be insures by analysing their own data, by consulting specialists from veterinary practises (for example, about certain breeds that are known to have a high risks at a certain disease), and by looking at and testing costumers experience. However, there are no reliable data, key figures, or statistics available from practices, any other kind of care institution, or the KNMvD where they can base their premiums or policies on. So, determining what they insure and the height of the premium, is fully based on trial and error. At the end of the year, they draw up the balance sheet and when they gain no profit, there are two options: alter the insurance policy, or alter the premium. Because of this lack of contact between insurance companies and other involved parties, the insurance companies had little idea what was common in the veterinary world and had to alter the policies and/or premiums year after year. As one could read in chapter 3, it is important to know the market you focus on to know what kind of insurance one can offer. Insurances should be a certainty that policyholders can count on, so it is not surprising that this research found that changing policies and rising premiums are one of the most heard arguments to stop ones pet healthcare insurance²⁰. But, there is also good news; the lack of trust among pet owners towards insurance companies, seems to be part of the past. Or, at least, it is no longer a reason for pet owners not to insure their pets, since this research shows that only 10% of the uninsured pet owners choose so, because of a lack of trust in the insurance companies (see full figure of reasons why pet owners do not insure their pets in chapter 4.2)

So, all the information that is needed to determine policy and premium comes from insurance companies' own data. Indirectly there is a covenant between insurers, where they can discuss matters with other insurers. They also have contact with the KNMvD, but these meetings are rather informal and low in frequency. There is no concrete co-operation between veterinarians. Most insurance companies do not even have a vet employed to advise them. For insurance companies, the latter could be worth considering, since a veterinarian knows how things work in a veterinary

practice, but can also to help with the struggle that all insurance companies encounter when it comes to uniformity in veterinary practices and the fact that practices don't work via protocols. This means that the structure of the declaration can fundamentally differ per vet or per practice. Comparable treatments have big price variations, which is confusing and complicated for both insurer as well as client. For example: one of the reasons that insurance companies find it difficult to make a cost estimation for their premiums, is that veterinarians do not maintain fixed prices for their procedures. Insurance companies miss transparency within the veterinary sector; another reason to employ a veterinarian within the insurance sector. Finally, veterinarians could be of great help when it comes to expanding the amount of insured pets in the Netherlands. NAPHIA research indicated that 50% more pet owners would purchase insurance if their vet actively would recommend it²¹. From our own data, we can conclude that almost half of the veterinarians that recommend pet healthcare insurance, would recommend one or two insurance companies in particular. These are insurances they have good experiences with, which is greatly based upon the communication between the two parties; reason for insurance companies to keep in touch with the veterinary sector, so they stand out and will become the veterinarians insurance of choice and recommendation.

But, not only the lack of interaction between insurance companies and the veterinary sector is a problem, it is also the image that pet healthcare insurances have among the pet owners that is an issue. Pet healthcare insurances are not mandatory, which means that usually only the people who expect to experience a certain event/medical costs, insure their pets. As a result, the insurers miss the compensations of the 'good risks'. The pet owners that expect a certain event to happen and insure for that reason, see an insurance as some kind of investment. They expect to get more out of it than it will cost them, but that is not the idea of an insurance and so that makes it hard for insurance companies to 'work'. However, this might be a valid reason that makes an insurance company work harder. This very research shows that only 8% of the pet owners have insurance for their pets because it is cheaper to have an insurance than paying the veterinary bill themselves. It slips the attention of pet owners what the opportunities of insurance are, and the benefits that come with it, when one takes the high costs of the new medical technologies in mind. So, first of all, it is important to create awareness, for both the opportunity to insure, as for the risk that even your pet can be struck down with something (and that it is impossible to say when that will happen). On the other hand, it is important that, now that the market is stable and the insurance companies are sustainable, the insurers live up to their promises. Mutual trust between insurer, client and veterinarian is the base of this requirement; nowadays insurance companies are suspicious towards veterinarians because of their lack of transparency, while the bill of the vet should be leading without any doubt. For the insurance companies, it would help if veterinary practises would work with protocols, so it is clear to the insurance companies what they should and should not cover for a certain treatment. The KNMvD (Royal Dutch Society for Veterinary Medicine) could help retain more standardisation in the sector, which will lead to more transparency. In a statement of the GGG (Group of Medicine for Companion animals – part of the Royal Dutch Society for Veterinary Medicine), they say that standardisation (as we know from the human healthcare sector) is a good endeavour, but can only be reached on voluntary base²². Mail contact with the organisation proved that there are negotiations going on between them and the insurance companies, but that the GGG did not agree on anything, since the plans are not concrete enough to pass judgement upon. It is important to keep in mind that, no matter which direction the veterinary sector is heading towards, communication and consultations with all parties remains necessary.

Another interesting component are the veterinary chains that come from abroad and that are currently making their entrance in the Netherlands. These chains come mainly from countries where more pets are insured (UK, Sweden) and they expect to see efficiency. This is only possible when people go to the vet and pay their bills. A part of these bills will be paid by insurance companies, so it is not unthinkable that these chains and pet healthcare insurance companies will work together in the future. This competition and the steering of veterinary activities by insurance companies should

never arise from a defensive model, but a model, such as the human *natura policy* where pet owners do not have free choice of practice, is imaginable in cooperation with a veterinary chain. At the moment this research was written, one of the Veterinary chains is testing this in a pilot to see how it works out. Working with a natura-policy, however, requires to go to health authorities established by the insurance company. From this research' data, only 24% of the pet owners would go to a vet established by their insurance company, 16% does not know if they would change vets, and 60% would not want to go to a different vet, if obligated by their insurance.

Summary

- Because of a lack of contact between insurance companies and other involved parties, the insurers had little idea what was common in the veterinary world. Therefore they have to rely on their own data and alter the policies and/or premiums year after year.
- Most insurance companies do not have a vet employed to advise them, even though they
 could be of great help when it comes to the transparency within the veterinary sector;
 something that insurance companies miss
- It is important that insurance companies keep in touch with the veterinary sector, since veterinarians could be of great help when it comes to enlarge the amount of insured pets in the Netherlands
- When it comes to pet owners, it is important to create awareness, for both the opportunity to insure, as for the risk that even *their* pet can overcome something
- For both clients as veterinarians applies: they want that the insurance companies live up to their promises

4.2 Pet owners

This survey shows that 98,8% (n=2299) of the pet owners see their pets as a part of their family, of which 22% even see their pet as their best friend. Similar numbers are found in the U.S. (where only 1,5% of the pet owners saw their cat of dog as property, the rest saw their pets as pet/companion or as a family member)³. So, pets are no longer kept as functional property and so called "Pet-parent ship" seems to be upcoming. New opportunities for high-tech treatments give pet owners the chance to provide their pets with the best possible care. With the development of these technologies, however, corresponding costs are associated ¹7,19- costs that could be paid by an insurance company. Although the relative annual spending per household on pets still rises¹6, pet owners reckon that insurances are too expensive (for what you get in return). Almost half of the pet owners that filled out the survey said that this was one of the reasons not to insure their pet(s). Interestingly, however, is that among the pet owners that answered that pet healthcare insurance is too expensive, still 24,6% is willing to pay € 11,- to € 40,- a month on premium (which is a regular price of pet healthcare insurances).

And, when the same group of respondents was asked how much they were willing to pay on treatment, the majority of the pet owners answered that they are willing to pay as much as necessary (56,6%), while not even 1% is willing to pay over €30,- per month on insurance premium. Somehow, pet owners do not seem to associate the premium they pay for insurance with (health)care for their pets. What has to be kept in mind is, that the question in the survey asked how much pet owners would be willing to pay for treatment, if their pet would become completely healthy again. This is something you cannot guarantee in real life. Nevertheless, it seems that pet healthcare insurance is not seen as money that is put into medical care, but as money put in an investment, and as Dr. James Nave, past president of the American Veterinary Medical Associations states: "We need to get away from the mentality that insurance is a financial investment and clients

can get money back from it. Insurance is protection against disaster, nothing more"17. So, there is a great difference between what one is willing to pay on their pets treatment, and what one is willing to pay on insurance. This is confirmed by the second reason people gave not to insure in this research. Namely, more than 35% of the owners said to save money themselves, in case their pet needs to visit a vet. Another question in this research revealed that indeed almost half the pet owners would not have financial problems with paying a €400,- bill. So, it seems that pet owners indeed save money to pay for their pet's treatment, but for people who have not saved any money yet, medical costs can come unexpectedly, since accidents and illness can occur at every stage of life¹⁹. So, this might never happen, but it might also happen next week, when one has not saved enough money to pay for the damage or medical care¹⁴. Without any money saved, a significant group of the owners would have trouble paying veterinary medical costs. This research shows that people with an income of less than € 33.000,- per year are the biggest group that would have trouble paying these medical costs. Especially these people are perfectly suitable for an insurance, because it allows regular budgeting. According to our results, this is already happening: pet owners that cannot pay a medical bill of € 400,- (or less) are more often insured than pets owners that have no problem paying a € 400,- bill (chance of taking out insurance is 38,8% for people that would have a problem paying this bill, versus 26,1% for people that would not have a problem). 28% of the participants state that they did insure their pets, because they will not be able to pay a high medical bill without insurance. In this group, by far most people (well over two-third), have an income of less than € 33.000,- per household per year (which substantiates the assumption above, that insurance is particularly useful for those that do not have the opportunity to save money to go to the vet).

On the contrary, for those people that have enough money to pay for veterinary services, it seems less interesting to take out an insurance (since they do not have the uncertainty whether they have saved enough money to cover an unpredictable event). This is a recurring theme in our data; people with a higher income are on one hand willing to pay more on insurance premiums (they have more to spend on their pets anyway³), but on the other hand they are less or not at all interested in insurances. For these people, pet healthcare insurance could indeed be a less interesting deal, since, according to an analysis by Ms. Finkelstein and her Stanford colleagues, most policyholders will not get back what they pay in the first place¹⁵. But then again, the fundament of insurance is distribution of (health) expenses among policyholders, so for those who want to spread the risk, it remains interesting. Figure 2 shows other reasons for pet owners to *not* insure their pets.

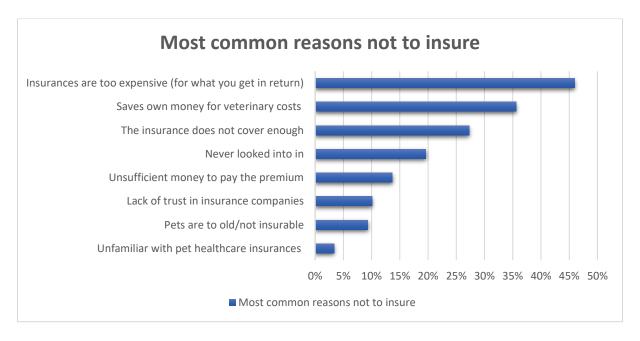


Figure 2: most common reasons why pet owners do not insure their pets

Among pet owners that *have* insured their pet(s), covering unexpected veterinarian costs is the most common reason (almost 85% of the participants in this study gives this as one of the reasons to insure). In order to make this consideration, pet owners have to be aware of the price that comes with medical treatments for their pets. People that are aware that even a simple thing such as a broken leg (which can overcome any and every pet), can involve high costs, are almost twice as often insured as pet owners who do not realise this (the chance that people insure that do not seem to realise how high medical costs can be is 20,9%, versus 39,3% of the people that do seem to realise this). Also, with almost 42%, the feeling of having their pet(s) insured, seems to be an important reason to choose to insure. So, not only the financial part plays a part in the choice to insure a pet or not. People are willing to spend a great deal of money on treatment and the idea that one's pet is insured, gives their owners a safe feeling. Another emotional value that continuously enters the equation, is the relationship one has with ones pet. There was expected that owners that see their pet as their best friend, would be more likely to take out insurance then people that see their pets 'only' as a family member, but the data from this research showed hardly any difference between people that see their pet as their best friend, or as a part of the family.

Most important reasons to insure

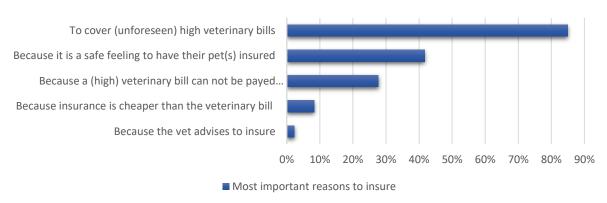


Figure 3: most common reasons why pet owners insure their pets

Visible in figure 2 is that a great deal of pet owners (35%) save their own money to go to the vet. From another question, where was asked how people pay the bill if they are not insured, turns out that most pet owners indeed pay the bill from their own money (83%). 12% agree on a payment arrangement with their veterinarian to pay the bill, but still 5% state that they would have a problem if the bill turns out higher than expected. Especially for these people, an insurance would come in handy. The 5% (82 respondents) that would have a problem paying a high bill, have various reasons not to insure. See figure 4 for the five most answered reasons. More than half of the pet owners that would have a problem paying the bill without an insurance does not have enough money to insure their pets or finds the insurance too expensive. For this group, both veterinary costs as insurance premiums are ruled out. One could wonder, however, what would happen to their pets if medical treatment is necessary. In the U.S. a foundation found that over one quarter of rehoming instances resulted from a pet owner's inability to pay for their pet's veterinary care¹⁹ and also in the Netherlands, financial problems are not an uncommon reason to get rid of a pet.

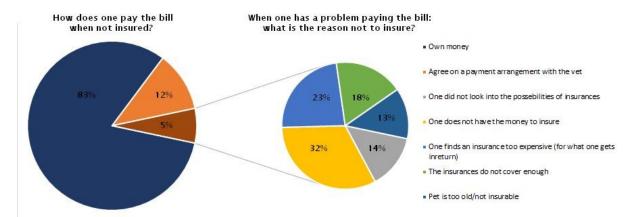


Figure 4: reasons why people that would have a problem paying the veterinary bill are not insured

There are many reasons that motivate pet owners to make the decision to insure their pets. But besides their own (financial)motivations, there are other variables that play a role and might intervene with one other. The results of both the univariable as the multivariable regression can be found in table 1 in appendix 3. The most important variables that influence the decision to insure pets, are summarized in figure 5.

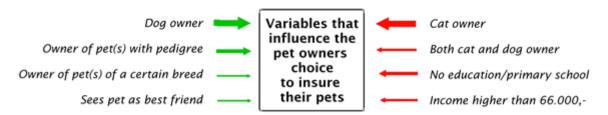


Figure 5: Influences on the pet owners' choice to insure their pets. In green the variables that positively influence this decision, in red the variables that negatively influence this decision. The bigger the arrow, the bigger the influence of the variable.

Summary

- 98,8% (n=2299) of the pet owners see their pets as a part of their family, of which 22% even see their pet as their *best friend*
- The most common reason to insure a pet is to cover (unforeseen) high veterinary bills
- The most common reason not to insure a pet is because insurances are too expensive (for what one gets in return)
- Pet owners do not seem to associate the premium they pay for insurance with care for their pets, but as money put in an investment
- Medical costs can come unexpectedly and without any money saved, a significant group
 of the owners would have trouble paying veterinary medical
- Pet owners that would have trouble paying a high medical bill are more often insured compared to pet owners that have saved money for medical care
- Pet owners that are aware that even a simple thing, such as a broken leg (which can happen to any pet), can involve high costs, are almost twice as often insured compared to pet owners who do not realise this.

4.3 Veterinarians

Two-thirds of the veterinary practises in this research claim that they advise their customers to insure their pets and a quarter of these practises even say that they do this 'very actively'. Advising pet owners on pet healthcare insurance requires time and effort from the veterinarians and therefore, they have to be aware of the benefits of insured clients. The result of a univariable analysis shows that offering a care plan (which gives clients access to usual consults and medical care for a certain amount of time per month) is significantly associated with advising pet owners to insure their pets (p - 0.036). Veterinary practises that offer a care plan were more likely to advise their customers to insure their pets (OR - 3.5) then veterinary practises that do not offer a care plan. This suggests that a certain way of thinking or awareness of the benefits of financial help, contributes to the amount of insured animals in a veterinary practise. Just as the results of a NAPHIA research show²¹, the majority of the veterinarians that filled out the survey would like to have more customers that have pet healthcare insurance in their clientele. Knowing this, combined with the earlier mentioned two-thirds of veterinary practises that claim that they advise their customers to insure their pets, it might come as a surprise that only 3% of the participated pet owners have pet healthcare insurance because their veterinarian advised them to do so. Knowing this, it could be suggested that there is a difference in what veterinarians think they do, and what actually comes through. A NAPHIA research among pet owners indicated that 50% more pet owners would choose pet healthcare insurance if their veterinary practice actively recommended it²¹. This study also showed that a stack of brochures in the waiting area is not enough to convince or inform them and that 67% of the pets were insured within the first 6 months of 'new ownership'²³. Some field experience in the Netherlands tells us that it is indeed possible to raise your percentage of insured clients: a veterinary practice that was interviewed, stated that they offer every new client pet healthcare insurance. It is still the clients choice if they actually want to conclude policies, but by actively offering it, their percentage of insured pets is steady over 10%. Foregoing gives veterinarian practices a slight indication of what they could do to effectively gain more insured customers. As we can see in this research' results, the majority of veterinarians would advertise insurances during a consult. Combined with the abovementioned information, advising pet owners about pet healthcare insurance would be especially effective during (one of) the first consults of a new pet. The posters and/or flyers in the practise building, however, that were mentioned as one of the possibilities of informing clients, would not be sufficient. Figure 6 shows how veterinary practises would contribute to a higher percentage of insured pets.

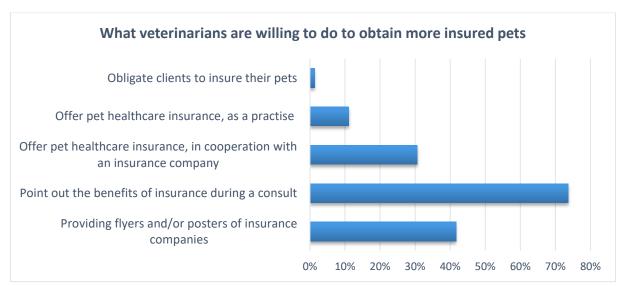


Figure 6: what are veterinarians willing to do to obtain more insured pets

The veterinary practises that do not advise their customers to insure, do not see this as a priority or as their place/job. One-third of the veterinarians gave this as (one of) the reason not to advise their customers on insurance. They also found it difficult to advise their clients properly, because insurance policies chance too often to keep up-to-date.

That most veterinarians would like to have more insured customers does not come out of the blue, since there are quite some benefits that come with insured customers, that could make veterinarians' work a bit easier. Almost two-third of the veterinary practises in this research reckon that insured pet owners hesitate less to initiate a therapy when their pet is sick, more than half of the practises see that pet owners no longer postpone to go to the vet and one quarter reckon that pet owners would choose less often for 'economic euthanasia' when insured (which, according to Louise Dunn, roughly one-third of the owners would do if medical expenses fall in the \$500 to \$1000 range¹⁷). To confirm this, the average number of consults of a sample insured pets (35 animals) was compared to the average found by HAS Hogeschool¹⁸. Among insured pets, an average of 4,6 visits per year were registered, while the average amount of visits (which includes both insured as well as uninsured – there was no difference made) was set on 3,3 visits per year. That is an increase of 1,3 visits per year per pet. Although this was just a small sample, it does substantiate the veterinarians thoughts. This also is in line with the results from the survey among pet owners, where 26% of the pet owners stated that they would have less hesitation to go to the vet if they had insurance. Even more astonishing is the difference in the money that insured pet owners pay. Because half of the veterinarians that were interviewed reckoned that pet owners of insured pets would spend more on treatment. The average amount of medical spending of a group of 990 animals was researched. In this group 919 pets were uninsured, with an average spending of €213,- per year, while €383,- was spent on medical care of insured pets per year. That is almost 80% more spending on insured pets compared to uninsured pets! This matches the numbers that PetPlan have found in the UK (where insured clients spent 42% more on veterinary services)¹⁷, a study from NAPHIA (that showed a raise from annual health care expenses from \$251 per dog and \$146 per cat to \$342 and \$264 respectively)²⁴, and the results of the analytic team from pet insurer Trupanion (whose data show increased annual clinic income from \$437 per uninsured pet to \$837 per insured pet)^{23,24}. According to a calculation of one of the Dutch insurance companies, around 225,5 million euro extra money could come into the market if all owners would insure their pets (see calculation in appendix 2). One of the mentioned requirements according to the insurance companies is that veterinarians start working with protocols. By doing so, the insurers expect that they can make more profit (up to 150%). Although, this 150% profit would be the limit for insurance companies (they do not intend to pay for experimental medical treatments), it is probably still more than what will be reached without pet healthcare insurances.

Given these numbers and the fact that almost half of veterinarians report that their clients complain about the cost of care²⁵, one would wonder how often pet owners do not choose the best treatment for their pet, because of financial reasons. NAPHIA research shows that the compliance on recommendations indeed increased among insured pet owners²¹ and the GGG states that the benefit of insurance is that veterinarians and pet owners of insured pets can choose the optimal healthcare, without costs interfering in their decision²². Veterinary practices should become aware of these (financial) benefits. This awareness could also help raising the total amount of insured pets in the Netherlands, since this research shows that practises that say that they indeed notice a difference on the average bill between insured and uninsured customers are more likely to advise on insurance than practises that have not noticed this (OR – 3.0 with p – 0.015). Figure 7 shows what benefits the veterinarians of this study see when pets are insured. However, since there is no way to compare what the same pet owner would do with or without pet healthcare insurance, there is also the possibility that pet owners that have insured their pets are more motivated owners anyway and act or answer the same way without insurance as well.

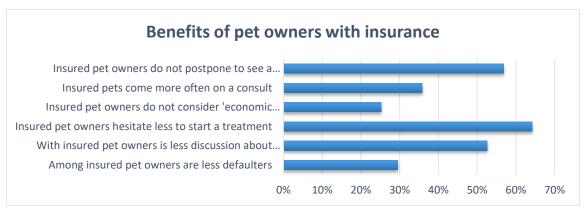


Figure 7: Benefits veterinarians experience among insured pet owners

As mentioned before, insured animals depend less on financial concerns when it comes to the choice of their treatment. Well over half of the veterinarians in this research share the opinion that pets are better off when insured. Mainly because their owners do not wait long before going to the vet or because a better (more expensive) treatment can be initiated, but also because the life expectancy of insured animals is higher (no 'economic euthanasia'). Of course, this also depends on the owner and has more factors to it then only the insurance, but it can make the difference in the end. On the contrary, however, there are also practises that witness more difficulties with insured pet owners. Customers worry about what the insurer will cover, or are unsatisfied if the bill is not (fully) covered. Extra work is generated when veterinarians have to call an insurance company to explain why a certain claim needs to be covered, etc. But, in the end, more than three-quarters of this research' veterinarians would like to see more customers with pet healthcare insurances...

One important thing that has to stay in mind however, is that that veterinarians stay independent, advise the pet owner as expertly as possible, without any conflict of interests.

Even though the majority of the interviewed veterinarians would like to see more insured pets, they also fear the impact of big insurance companies meddling in 'their business'. More than half of the veterinarians is afraid that if the insurance companies grow to big, they gain too much influence and will determine what will happen in the veterinary practises. They will then start to decide what will happen within the veterinary sector (some veterinarians even state that this already happens). In the human medical sector, this is already happening, and it is something the pet healthcare insurance companies do not deny, so the veterinarians suspicion does not come out of the blue. In the Netherlands, a (ongoing) research shows that 60% of the (human healthcare) physicians struggle with unnecessary administration and senseless rules that partly result from the contribution of insurance companies. Work has to be done by following imposed protocols, but they lose sight of the needs of an individual patient²⁶. It is important that it is transparent for the insurance company what they do (one of the major things pet healthcare insurance companies struggle with), but it is just as important that the physician (or, veterinarian) keeps the freedom to practise his profession²⁶. A spokesman of one of the Dutch pet healthcare insurance companies states that 'trust' is the most important word in this process and within communication. The subject 'claim controlling' only finds its way onto the agenda when there is a motive for it. So, as soon as they suspect that the professional group is tinkering and think that 'the insurance company will pay anyway', it will become a point of attention. In the opinion of a veterinarian who looked into the claims that pet healthcare insurance companies receive, it is understandable that insurers wonder about the urgency of some treatment that are claimed. Veterinarians should keep in mind what is best for the pet, and not perform experimental treatments, because 'the insurance company will pay for it'. To prevent this from happening, the involved parties have to keep in touch with each other, discuss the future of the veterinary discipline and how to keep it affordable. This is in line with the position of the GGG ²². They state that is important to keep the conversation going and, where possible, improve common interests, but they do this mainly to keep influence in the process and to guard the interests of the veterinarians²². The intention is to have an official meeting twice a year, but this was not realised in 2017. Both parties are willing, but the GGG has no mandate over their members. Therefore, all they can do, is discuss certain matters, but not decide on them. The initative has to come from the veterinarians themselves. Fortunately, a significant part of the veterinarians that are interviewed in this research are open to consultations with insurance companies. This could also contribute to the problem of claims that are not covered by the insurance company; an interviewed veterinary practice that has a high percentage of insured clients (double the average amount) was asked how they tackled this problem. Their answer was that they always found a way to explain why a certain treatment was used and therefore needs to be covered by the insurance company. This is possible because of their cooperation and contact with the insurance company. However, the general opinion among veterinarians is that this contact should come from the insurers and not from the veterinary sector. Which should not be a problem, if the insurers live up to what they claim; namely that they are willing to invest in this dialogue with the professional group²⁷.

Even though opinions of the relationship between the veterinarian sector an insurance companies are divided, almost half of the veterinarians would like to see more communication between the two groups. Suggested options for better communication involve:

- Representatives from the insurance companies that visit veterinary practises and can tell them about the latest changes in policies and explain the benefits of pet healthcare insurance;
- Clear policy conditions, so there is less miscommunication;
- Better knowledge of the insurers on what is involved with veterinary care;
- Agreements between veterinarians and insurance companies. That way the veterinarians will not make their procedures unnecessarily expensive, and the insurance companies will respect the vet's professional opinion and the choices that are made treatment-wise.

Summary

- More than three-quarters of the veterinarians would like to see more customers with pet healthcare insurances
- Awareness of the (financial) benefits of more insured clients among veterinarians, seem to contribute to the amount of insured animals in a veterinary practise
- Even though two-third of the veterinary practises claim that they advise their customers to insure, only 3% of the pet owners have pet healthcare insurance because their veterinarian advised them to do so
- Pet owners are more likely to take out pet healthcare insurance if their veterinarian advises it, especially during a first consult with a new pet
- Veterinary practises that do not advise their customers on insurance see this not as a priority/their job or find it difficult to advise their clients properly, because insurance policies chance too often to keep up-to-date
- Insured pet owners spent almost 80% more on medical care compared to uninsured pet owners and visit the vet 1,3 times more often (per year)
- Well over half of the veterinarians share the opinion that pets are better off when insured. Their owners do not wait going to the vet, better (more expensive) treatment scan be initiated, and they recon that the life expectancy of insured animals increases (no 'economic euthanasia')
- More than half of the veterinarians is afraid that if the insurance companies grow to big, they gain too much influence and will determine what will happen in the veterinary practises.
- Since the government has no influence on the veterinary market, the GGG (and the Royal Dutch Society for Veterinary Medicine) should keep a close eye on the developments in this field

5. Pet healthcare insurances abroad

Compared to other countries in Europe, the Dutch pet healthcare industry falls behind. If we take for example England (25% insured pets) or Sweden (80% insured pets)⁴, we wonder how it is possible that percentages in the Netherlands stagnate under 5%. All countries are prosperous, developments in veterinary medicine are comparable, but yet, the pet healthcare insurance industry seems to be at a complete other level.

Several experience experts, veterinarians and insurance companies in England and Sweden were interviewed (16 in total) and one subject, they all mentioned, was the price difference. Even though Dutch pet owners complain about the price of medical care, the prices in England and Sweden surpass these easily. To compare: in Sweden, a consult usually costs between 600 and 700 Swedish Kronar (about 60 to 70 euros) and although the average price in England, does not seem to differ too much from the Dutch prices (28 pounds on average, which is just under 32 euros), the prices vary tremendously depending on area, with prices in London city seemingly towering. And, even though the English insurance companies were not willing to make public any numbers, most pets in England seem to be insured in- and around London city, where the prices are the highest. So, to keep your pet's medical care affordable, you need to insure your pet. However, prices were not always this high in these countries, and one could speculate that it is thanks to the insurance companies that the prices rose to this level. It seems to be an up vicious circle: when more pets are insured, pet owners will go to the vet more often (as was found in this research' data). A natural response of the veterinary sector is raising their prices. As a result of these higher prices, the insurance companies have to either change their policy or raise their premium. This continues, until a (new) balance is found. But, what made the pet owners decide to keep insuring their pets, even when the premiums rose? An answer to that can be found in another theory, namely that the veterinarians started to raise their prices first. As a result of this, the pet owners took insurance to pay for medical care. Because they had insurance anyway, they went to the vet more often, which made the prices of the insurance premiums rise. Step by step this continued until the prices reached a point where it was almost impossible to own a pet without insuring it. So, according to this theory, the prices of veterinary care had to rise first.

The second answer people gave, is that the culture around pets and insurances is different in England and in Sweden. Funds and charities are way more installed in their daily lives, which might influence a person's thinking pattern. In Sweden it is possible to get an insurance for pretty much anything, so insuring everything you own (including your pet)became a natural habit. At a certain point, when everybody insures their pets, it becomes an ordinary thing to do.

As mentioned above, raised veterinary prices might have been the key to a higher percentage of insured pets in England and Sweden. This might be difficult to understand if one does not see the whole picture, and therefore needs a different thinking strategy. That Swedish and English veterinarians have the ability to see insurances in another way, is also found in the contact that these veterinarians have with the insurance companies. All of the veterinarians in Sweden and England that were questioned, state that the communication between them and the insurance companies is good; quite different from what veterinarians in the Netherlands state (where more than half of the veterinarians would like to see closer contact between veterinarians and insurance companies). Also, all of the interviewed veterinarians would advocate pet healthcare insurances. As mentioned, veterinarians can make a big difference in the number of insured pets, so this might be an important condition. Interesting is that even in Sweden, where 80% of the pets are insured, the veterinarians claim that they do not feel limited by the insurance companies in their daily work. Finally, it also might have helped that in Sweden most puppies (and kittens, but on a lower frequency) already are insured by their breeder; one of the insurance companies in Sweden even works together with the Swedish Kennel Club (300.000 members = just over 3% of the Swedish population). This insurance is often taken over by the new owners upon purchase.

However, fact is that pet healthcare insurance in the Netherlands is still in its infancy, compared to those in Sweden and England. In Sweden, pet healthcare insurance was already available in 1890! England followed in 1947 and if we would make a time-line between these three countries, we can see the percentages of insured animals increase: Netherlands (just over 20 years of insurances): under 5% insured pets, England (70 years of insurances): 25% insured pets, Sweden (93 years of insurances): 80% insured pets. So, maybe it is just a matter of time before pet owners and veterinarians will understand the benefits of pet healthcare insurance and before the numbers in England and the Netherlands will reach the same levels as in Sweden. But, this will not happen without any investments.

7. Conclusion and future

There are many theories and many factors that play a role when it comes to pet insurance. First of all, pet healthcare insurances in the Netherlands had a bad start where they lost the trust of the customer. Now that this period of distrust is over and the market is stable, insurance companies have to convince pet owners of the importance of pet healthcare insurance. In order to establish this, they have to know what is going on in their market and they will need the help of the veterinary sector. But before they can count on their help, veterinarians have to change their attitude towards pet healthcare insurances. Veterinarians should not only change their attitude in favour of the insurance companies, but also because it can benefit them in many ways. These benefits are both financial as well as a possible improvement of their veterinary medicine practise. But, something that is at least as important is that it will most probably also benefit the health and life expectancy of the animals they treat. The veterinarians' fear that insurance companies will direct what they can and cannot do within their own practices seems to be unfounded if they look closely at their Swedish colleagues. However, to reach a well-working balance such as in Sweden, all involved parties have to communicate - something that both insurance companies as the veterinary sector in the Netherlands find inadequate at the moment. Agreements have to be made, to ensure that the insurance companies will gain more insight in the veterinary practise (transparency) and that they will not limit the veterinarians in carrying out their work (mutual trust). Only as soon as the veterinarians and insurance companies are on the same page and work together, they can create awareness among pet owners that insurance is not just an investment, but it is money spent on (future) medical care for their pets. Even though there seem to be various factors why a pet owner would or would not insure pets(that insurance companies take advantage of in their marketing), in general, it all seems to come down to the attitude pet owners have towards pet healthcare insurances and the need they feel to take out a policy. At this moment, most pet owners either save enough money privately to pay for their pets medical bill (which is possible, because the veterinary prices are still affordable), or are not aware of the costs medical treatment can involve, which can lead to sudden shock and financial 'weight' when their pet needs urgent medical attention. Besides that, they reckon that insurance policies are too expensive for what one gets in return. The latter is mainly a problem, because it is hard for insurance companies to offer a good premium because of the very low percentages of insured pets in the Netherlands. To expand this, pet owners either have to be indicated on the importance of pet healthcare insurance, or veterinarians have to raise their prices, so pet owners would have to insure their pets in order to pay the medical bill (as seems to have happened in Sweden and England). Actively raising prices is not something that veterinarians are very fond of, since 'sales and marketing' is not a common subject during their education and they might feel uncomfortable doing this. This lack in their education results in veterinarians that are not very good in selling themselves, no matter how good they are. So, education in marketing would be a good idea to give veterinarians more grip on the market. Of course, a combination of these two strategies is imaginable, but either would require close cooperation between all veterinarians and insurance companies.

The question of this research was, whether there is a future for pet healthcare insurances in the Netherlands. Based on this research there would definitely be a future for pet healthcare insurances

in the Netherlands, but basic condition is communication and cooperation between the three involved groups (insurance companies, pet owners and veterinarians). This starts with very clear (and nearly flawless) communication between insurance companies and veterinarians. Both parties seem to be interested in this cooperation, but there is one party that should take the lead in this conversation. According to the veterinarians that were interviewed, it is up to the insurance companies to take the first step, since it is mainly in their interest first. If they do so, the effects of more insured animals should positively affect all groups.

Recommendations

As was emphasized in the conclusion above, communication is the main factor where work has to be performed. The insurance companies should make long-term, concrete plans and decide how they want to tackle the 'problem' of the lack of insured pets in the Netherlands. Since there seems to be little or no growth in these numbers, this does not come spontaneously and something has to be done actively. Either people can be informed about the importance of pet healthcare insurances, or they can be 'forced' to take out insurance by driving up the prices of medical care. In either way, the insurance companies will need the veterinarians to help them. And not just some of them, but *all* veterinarians. The veterinary sector is a free market, so there is no institute that can force them to cooperate. Therefore, the veterinary sector has to be convinced of the benefits of pet healthcare insurances. This research might be a start, but it would be recommended that insurance companies do more research in the benefits of pet healthcare insurances with regard to animal welfare. In this research, most interviewed veterinarians think pets would be better off with insurance, but there are no numbers on this matter. Interesting would be to do research on:

- The reasons people would euthanize their pet and how often this is out of financial aspects;
- The percentage of insured pets in specialised and in second-line practises versus those in primary care (to see weather pet owners with insured pets are more willing to give their pets all it is worth);
- The difference in life expectancy between insured and uninsured pets

The next matter, however, would be how to reach all the veterinarians. As a start, it would be important that the KNMvD takes a clear position on this matter. Even though they do not have a mandate over their members, veterinarians know that they serve the interests of their sector. So, if they are convinced by the benefits of pet healthcare insurances, they can take a strong stand in favour of the insurances. Another profit of their interference in the developments, is that they can keep a close eye on the insurance companies to make sure that they do not gain to much influence. Besides that, the insurance companies could consider organizing a group of representatives that visit veterinary practises and can tell them about the latest changes in policies and explain the benefits of pet healthcare insurance. This will lead to a more level discussion and communication which will make both parties feel more heard. One could compare this to the human medicine lobby. These representatives can not only inform or convince veterinarians about the benefits of insurance, they can also be of great value when it comes to gauge the needs of the veterinarians, by talking to them during a visit. Furthermore, it is not only important that insurance companies know what is going on in a veterinary practice, it is also important that the practises are transparent towards the insurers. What would be of great help, is working according to set protocols. This way, insurers know what is a normal treatment in a certain situation is, without having to consult a veterinarian every time. However, to put together these protocols, a group of experienced veterinarians is badly needed. This alone would be a reason for insurance companies to employ veterinarians.

In the end, when veterinarians and insurance companies are on the same page, they have to decide how they are going to persuade the pet owners to follow their lead. Most important is to make them see the importance of pet healthcare insurances (which is mainly marketing and awareness). Second of all, veterinarians might consider raising their prices. This might sound a bit unethical, but taking in mind that a lot of veterinarians 'under-sell' themselves, it is worth considering it.

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Appendixes

Appendix 1:

There are many different insurances, but for the importance of this research we will focus on healthcare insurances and how their premiums are established.

Because of their randomness, healthcare costs form a risk for each individual. To lower the (financial) risk, the problem can be transferred to another party, the insurance company, so the costs will be shared among all the policyholders ⁸. The height of the premium is based on the expected costs, plus an safety loading charged by the insurer (natural premium is expected costs + safety loading). As we can see in fig. 1.4, health-related expected costs increase as individuals get older.

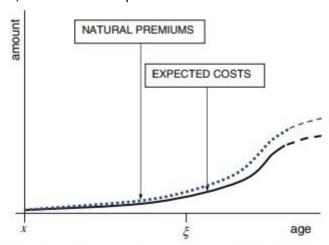


Fig. 1.4 Health-related expected costs and natural premiums (including safety loading)

To avoid big amounts of premiums at very old ages, premiums can be resorted by arrangements based on some *levelling principles*. Any premium levelling can only be implemented in the presence of a long-term duration of the insurance cover ⁸. If one prefers a temporary cover, this can be financed, either via natural premiums, or via level premiums, payed for the whole period of the cover. Figure 1.5 shows one such arrangement ⁸.

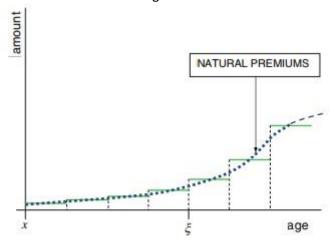


Fig. 1.5 Temporary covers: natural premiums and level premiums

As one can see in figure 1.5, level premiums are, in each temporary cover, initially higher and then lower than the corresponding premiums. Therefore, the premium will stay the same over the period of the cover, so one can spread the costs over time⁸.

To establish the premium for all the policyholders, the *equivalence principle* is used. The *equivalence principle* is given by the expected value of the total annual payment to the generic insured. But before we can go there, we have to determine what this expected value is. The following notation is used: ⁸

$$S = \Phi(N; Y_1, Y_2, ..., Y_N).$$

S = random total annual payment to the generic insured

Yj = insurer's random payment for the claim

N = random number of claims of the generic insured (within the cover period)

If no policy conditions apply to the total amount of benefit during the period of cover, there is:

$$S = \begin{cases} 0 & \text{if } N = 0, \\ Y_1 + Y_2 + \dots + Y_N & \text{if } N > 0. \end{cases}$$

Now the total payment during the period of cover is known, the premium can me calculated:

$$\Pi = \mathbb{E}[S]$$

Or, if the timing of payments is taken into account:

$$\Pi = \mathbb{E}[S] (1+i)^{-\frac{1}{2}},$$

In which *i* is the interest rate. So, if insurance companies get a high interest rate over the money that is collected by all the policyholders, the premium decreases.

Above formula gives the impression that the random profit from the generic policy, has an expected value equal to zero:

$$\mathbb{E}[\Pi - S] = \Pi - \mathbb{E}[S] = 0.$$

be payed by the insurance company: 8

This would mean that there is no profit target. Also, expenses pertaining to the policy, as well as general expenses, are not accounted for. S refers only to the payment of benefits. In the real situation, premiums paid by policyholders are *gross premiums* (or: office premiums), not *equivalence premiums*. These gross premiums are calculated with the equivalence premiums, added with a few extra's: ⁸

- Profit/safety loading and contingency margins to face the risk that claims are higher than expected
- Expense loading, meeting various insurer's expenses

As described in chapter ***, there are various strategies to pay for healthcare. Especially for rare occasions with high medical costs, is insurance an appropriate choice. However, most insurance companies will still ask for some contribution out-of-pocket for each year/treatment. The following formula describes what will be payed out-of-pocket by the policyholder and what will

x = generic expense amount;

D =flat deductible;

 α = proportional deductible;

SL = stop-loss;

M = amount which depends on D, α , SL (see Eq. (3.4.3));

u = out-of-pocket payment;

y = reimbursement benefit paid by the insurer.

Of course u + y = x. We have, for $0 < \alpha \le 1$:

$$u = \begin{cases} x & \text{if } x < D, \\ \alpha(x - D) + D & \text{if } D \le x < M, \\ SL & \text{if } x \ge M, \end{cases}$$
 (3.4.1)

$$y = \begin{cases} 0 & \text{if } x < D, \\ (1 - \alpha)(x - D) & \text{if } D \le x < M, \\ x - SL & \text{if } x \ge M, \end{cases}$$
 (3.4.2)

where

$$M = \frac{1}{\alpha} \left(SL - (1 - \alpha) D \right). \tag{3.4.3}$$

So, if the healthcare expenses are less than the flat deductible, the individual has to pay his debt out-of-pocket. If this is higher than the deductible, but lower then M (which depends on the agreed amount of the flat/proportional deducible and the stop-loss), the individual pays the flat deductible, plus the proportional deductible (which is an predefined percentage of the expenses minus the flat deductible). If the expenses are higher than M, the individual pays the stop-loss, which is the maximum amount the insured will have to pay out-of-pocket.

To illustrate what this would financially mean for both policyholder as insurance company, the following figures are made: ⁸

(figure 3.5 shows the expenses for policyholders and figure 3.6 shows the expenses for the insurance companies)

Fig. 3.5 The out-of-pocket payment

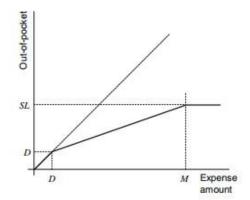
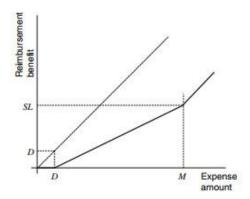


Fig. 3.6 The reimbursement benefit



Appendix 2:

In the Netherlands there are approximately 1,5 million dogs and 2,6 million cats¹⁸.

Average medical costs per animal are estimated on € 120,-4

The average premium is € 210,- per year.

Of this premium, around two-third will be payed back to customers in the form of claims (this includes an contribution of 25%)

So, the pet owner spends each year:

€ 210,- x 2/3 = € 140,- plus 25% (€ 35,-) = € 175,- per year

So, insured pets bring in:

€ 175,- minus € 120,- = € 55,- extra turnover per animal

There are 4,1 million cats and dogs in the Netherlands:

The total turnover of the pets (of which 3-5% is insured) is € 492 million a year.

If all pets would be insured, this would grow to 717,5 million a year.

So, the yearly extra turnover is estimated on € 225,5 million euros.

Appendix 3:

Dog owners insure their dogs most often, followed by owners of both cats and dogs (OR - 0.7) and cat owners (OR - 0.4). Also, having a pure-bred pet increases the odds of having an insurance (OR - 1.4) compared to non-breed pets. Besides these pet characteristics, the relationship between the owner and their pet(s) was significantly associated with the choice to insure. The relationship with their pets was originally divided in 'best friend', 'part of the family', 'as a possession', 'for functional purposes' and 'as a source of income'. However, because the latter three groups had very little respondents, the groups were split in two: 'Best friend' and 'other'. Pets that were seen as their owners best friend, were more often insured (OR - 1.2) than pets that had another relationship to their owner. People that are willing to pay more for their pet's treatment are more often insured (up to OP - 1.9) compared to pet owners that are not willing to pay that much. The education of the owners was strongly coherent to their income and therefore not offered to the multivariable regression. Interestingly, however, is that with the height of a household's income, the odds on insurance decrease.

Logistic Regression:		Singular variables			Multiple variables			
Variables	Categories	Insured	Uninsured	OR	95% CI	P-value		

<u>Variables</u>	Categories	Insured % (n)	Uninsured % (n)	OR	95% CI	P-value	OR	95% CI	P-value
Animal	Dog	52.2 (375)	34.7 (561)	1.0	Ref.	0.000	1.0	Ref.	0.000
	Cat	24.8 (178)	41.9 (677)	0.4	0.3-0.5		0.4	0.4-0.6	
	Both	23.0 (165)	23.4 (379)	0.7	0.5-0.8		0.7	0.5-0.8	
Pedigree	Non-breed	38.6 (277)	51.2 (828)	1.0	Ref.	0.000	1.0	Ref.	0.003
	Breed, without pedigree	22.1 (159)	19.4 (314)	1.5	1.3-1.9		1.2	0.9-1.5	
	Breed, with pedigree	39.3 (282)	29.4 (475)	1.8	1.5-2.2		1.4	1.2-1.8	
Relationship	Other	74.2 (533)	79.6 (1287)	1.0	Ref.	0.004	1.0	Ref.	0.049
to animal	Best friend	25.8 (185)	20.4 (330)	1.4	1.1-1.7		1.2	1.0-1.5	
Willing to pay	€0 to €500	17.1(123)	27.6 (447)	1.0	Ref.	0.000	1.0	Ref.	0.000
for treatment	€501 to €1000	8.8 (63)	12.2 (197)	1.1	0.8-1.6		1.1	0.7-1.5	
	More then €1000	10.4 (75)	7.2 (117)	2.3	1.6-3.3		1.9	1.3-2.7	
	As much as necessary	63.7 (457)	52.9 (856)	1.9	1.5-2.4		1.7	1.3-2.1	
Education	None/primary	2.6 (19)	4.2 (68)	1.0	Ref.	0.220	-	-	-
owner	LBO/VMBO/MAVO	17.7 (127)	17.1 (276)	1.6	1.0-2.9				
	MBO	38.3 (275)	35.1 (568)	1.7	1.0-2.9				
	HAVO/VWO	9.2 (66)	10.8 (174)	1.4	0.8-2.4				
	НВО	24.4 (175)	23.7 (384)	1.6	1.0-2.8				
	WO	7.8 (56)	9.15 (148)	1.4	0.7-2.5				
Income per	Less than €33.000	35.9 (258)	37.4 (605)	1.0	Ref.	0.010	1.0	Ref.	0.004
household	Less than €66.000	35.8 (257)	29.6 (479)	1.3	1.0-1.6		1.1	0.9-1.4	
	€66.000 or more	10.9 (78)	10.9 (177)	1.0	0.8-1.4		0.8	0.6-1.2	
	Unknown	17.4 (125)	22.0 (356)	0.8	0.6-1.1		0.7	0.5-0.9	

Table 1: variables that influence a pet owners' choice to insure their pet(s)

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