



Optimising the preventative healthcare consultation

An evidence-based approach

Incorporating the findings from a research project undertaken by the Centre for Evidence-based Veterinary Medicine at the University of Nottingham



University of
Nottingham
UK | CHINA | MALAYSIA



Acknowledgement

This document provides a summary of the findings from a research project undertaken by the Centre for Evidence-based Veterinary Medicine (CEVM) team at the University of Nottingham and sponsored by MSD Animal Health. It has resulted in a set of guidance for optimising the approach that veterinary professionals take towards preventative healthcare consultations.

It would not have been possible without the enthusiastic engagement of the whole team at the Centre. MSD Animal Health would like to thank all the individuals opposite, who have worked long hours to develop the resulting guidance, enabling us all to shed new light on this valued area of small animal practice.

John Helps BVetMed CertSAM MRCVS
Senior Technical Manager, Companion Animal Vaccines,
MSD Animal Health



Dr Natalie Robinson
BSc VetPath BVetMed
PhD MRCVS



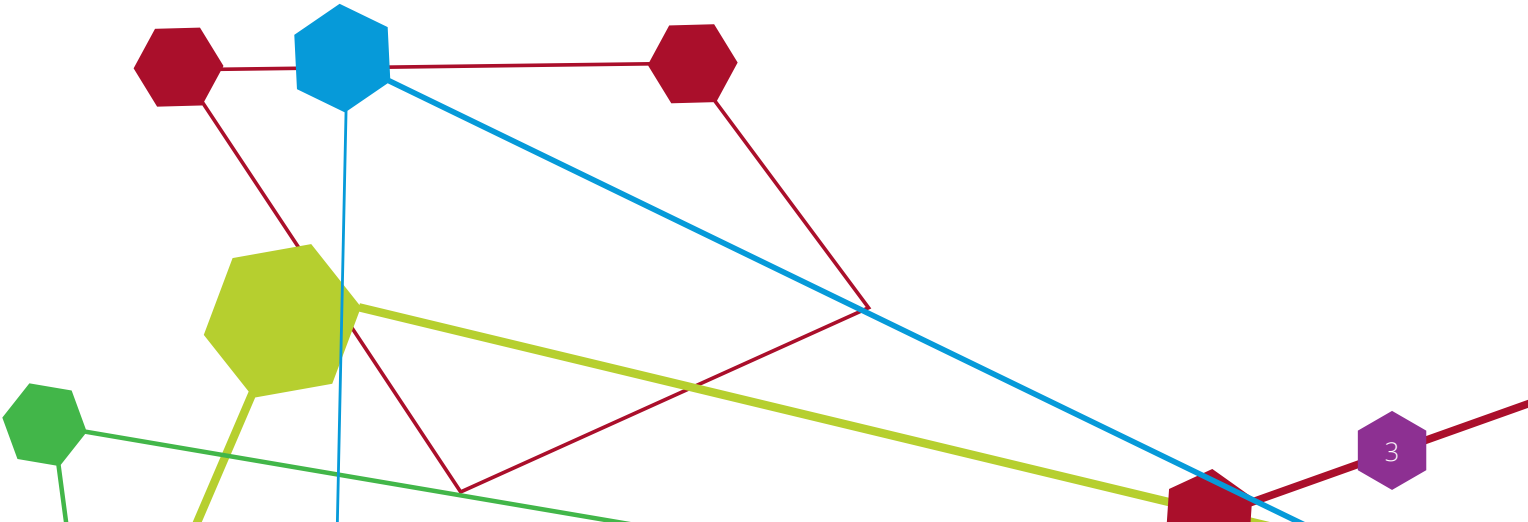
Dr Zoe Belshaw
MA Vet MB PhD CertSAM
DipECVIM-CA AFHEA MRCVS



Dr Marnie Brennan
BSc(VB) BVMS PhD PGCHE
DipECVPH(PM) MRCVS FHEA



Dr Rachel Dean
BVMS DSAM(fel) MSc PhD



Introduction

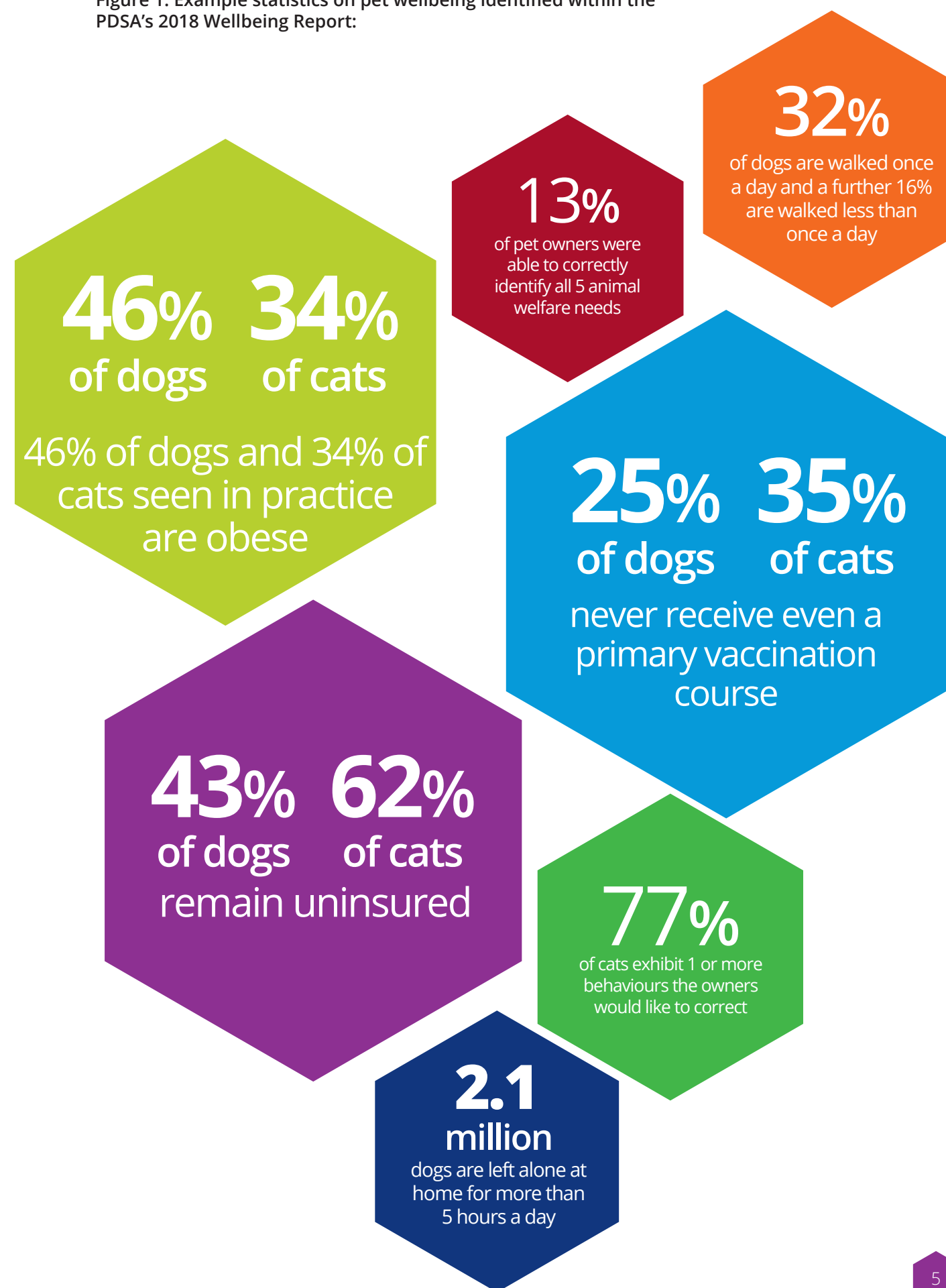
Keeping pets healthy is a core activity for modern first-opinion small animal veterinary practice, with research suggesting that around one-third of consultation workload relates to preventative healthcare¹.

The value that modern vaccines and parasiticides have in keeping our pets and ourselves free of serious disease is undeniable. But preventative medicines are only effective when they are administered at the correct times and frequency and in an appropriate way.

The effectiveness of reminder protocols, loyalty schemes and health plans varies significantly, so achieving compliance to what is considered best practice to optimise pet health and welfare remains a key focus.

Although we are told the UK is a nation of pet lovers, a review of the PDSA's 2018 PAW report demonstrates (see Figure 1 opposite) demonstrates that a big gap remains in public understanding of the health and welfare needs of pets.

Figure 1. Example statistics on pet wellbeing identified within the PDSA's 2018 Wellbeing Report:



Introduction cont.

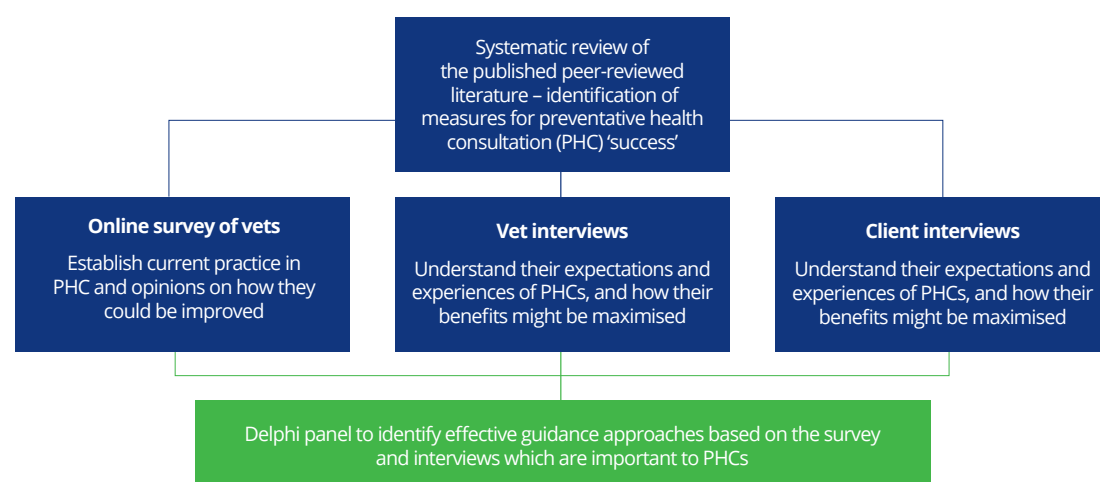
In the 21st century we also live at a time of widespread industry change in veterinary demographics, work patterns, workforce shortages and practice ownership. We also see radical evolution in the ways new generations of clients access information online, much of which is of variable quality and difficult for them to assess.

Market research demonstrates that the most significant opportunity for effective veterinary input, advice and influence comes at preventative health consultations. These are when pet owners have face-to-face contact with veterinary professionals during vaccine consultations and other sessions where animals are presented for assessment for reasons other than specific health issues.

The benefits of such consultations can easily be forgotten, particularly when the phrase 'he's only in for his vaccination' is frequently heard in waiting rooms up and down the land! However, now a scientific and evidence-based approach to understanding what made these often complex veterinary consultations successful in the delivery of better pet and health and welfare was absent.

Therefore MSD and the CEVM team at the University of Nottingham decided to form a partnership to develop a deeper understanding. This booklet describes some key themes from the project and summarises the evidence-based guidance developed as a result. The full papers are referenced on page 13.

Figure 2. An overview of the research project undertaken by the CEVM that underpins this monograph.



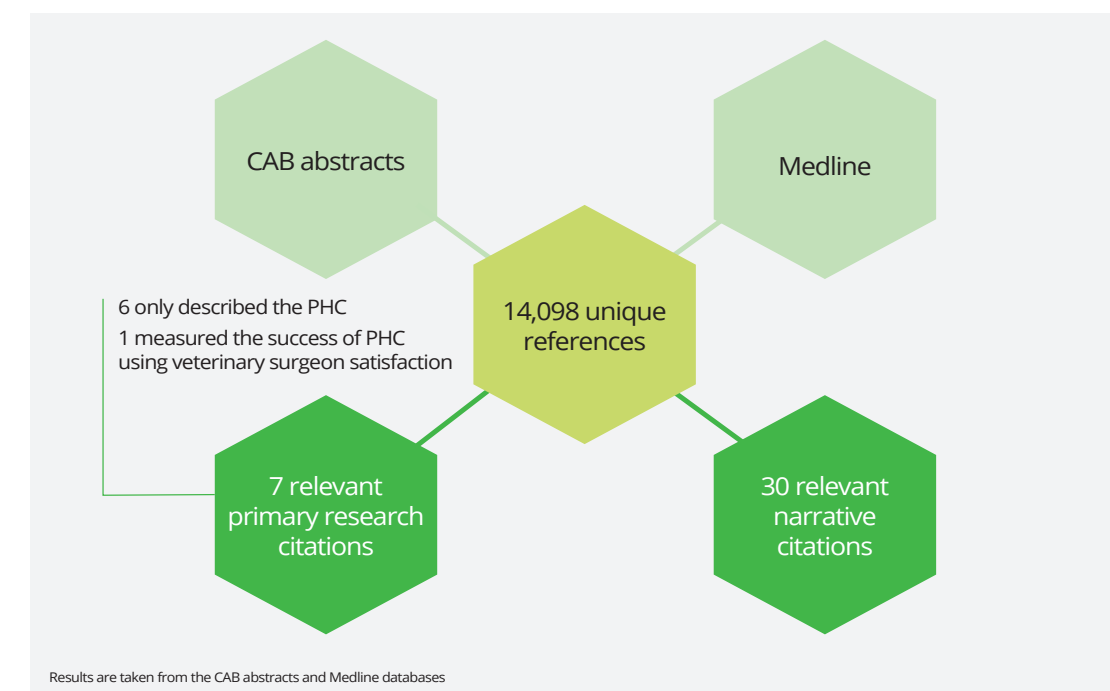
SECTION 1

A systematic literature review – what evidence already exists? ²

Before commencing the project a systematic review of the literature available was undertaken. The search criteria included:

Papers about any consultation where the main reason for presentation relates to the prevention of health problems, and where a clinical examination and/or assessment of the patient's general health would usually be expected to take place.

What did they find?



Despite the large amount of results found in the search, there were only seven that related to primary research involving consultations and only one of these measured success.



SECTION 2

The vet survey: what are vets currently doing? ⁷

A vital part of the project was to establish what current practice with respect to preventative health consultations is in the United Kingdom.

A survey of the veterinary profession yielded 662 usable responses from vets working in the UK. They were asked when in a preventative health consultation with an adult patient:

- What do they do and discuss?
- What strategies have been implemented to improve things?
- How effective and practical were each of the strategies?

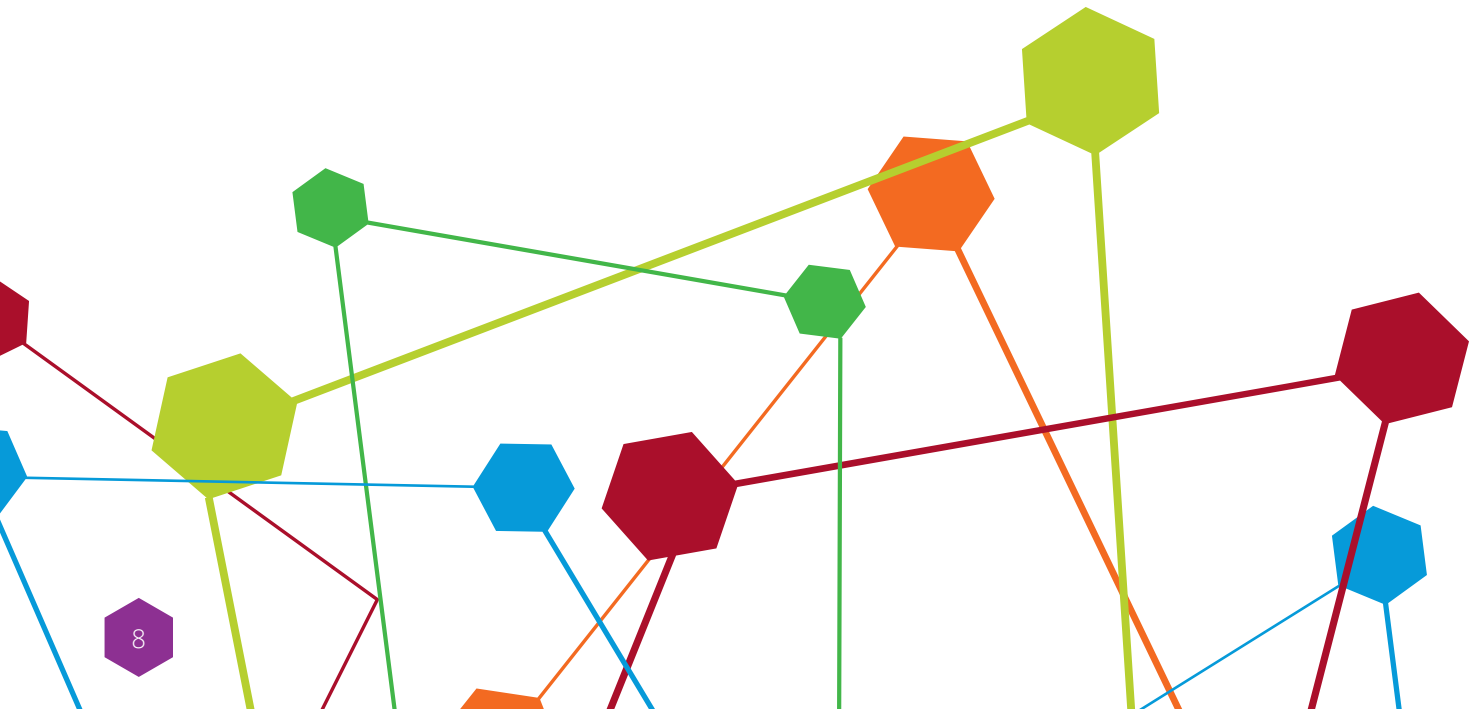
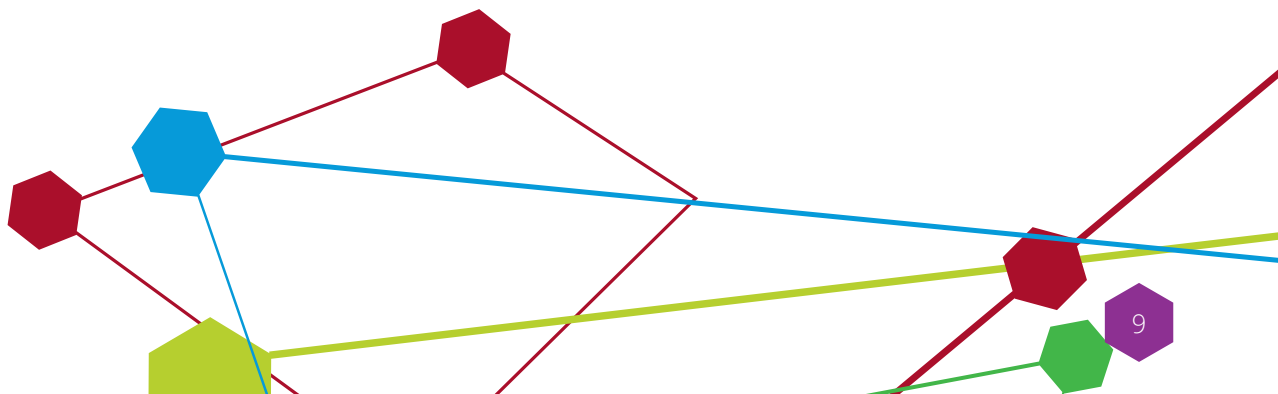


Figure 3. Frequency with which survey respondents reported they would include discussion of a variety of topics during a typical booster consultation involving adult dog and cat patients.

Topic	Species (Total n)	Always/Often (%)	Sometimes (%)	Rarely/Never (%)	Significant difference between species?
Parasite prevention	Dog (n=619)	94.8	4.8	0.4	No
	Cat (n=607)	97.4	2.0	0.6	
Microchipping (if applicable)	Dog (n=619)	85.8	11.4	2.8	Yes
	Cat (n=610)	60.8	29.5	9.7	
Neutering (if applicable)	Dog (n=619)	84.3	13.1	2.6	Yes
	Cat (n=613)	86.6	10.3	3.1	
Routine dental care	Dog (n=620)	80.6	16.8	2.6	Yes
	Cat (n=612)	65	24.8	10.1	
Grooming	Dog (n=615)	15.6	39.8	44.6	Yes
	Cat (n=610)	21	45.4	33.6	
Behaviour	Dog (n=615)	29.8	51.4	18.8	Yes
	Cat (n=608)	22.1	46.1	31.8	
Nutrition	Dog (n=619)	52.7	39.9	7.4	No
	Cat (n=611)	49.5	39.8	10.7	
Breed-specific health problems	Dog (n=616)	47.4	42.7	9.9	Yes
	Cat (n=608)	24.0	41.1	34.9	
Pet insurance (if applicable)	Dog (n=618)	35.0	43.9	21.1	No
	Cat (n=608)	32.6	42.4	25	



What strategies have they already tried for optimising PHCs?

Of the 597 vets who responded to the question about strategies, 54% had tried strategies to optimise vaccine consultations while 44% had not.

Strategies	% of vets who introduced
Increased time	19%
Owner questionnaire	8%
Checklists for vets	13%
Veterinary nurse involvement	13%
Separate VN consultations	6%
Reading material	34%

From the survey findings, it was clear that the structure of vaccine consultations varied widely in terms of the clinical examination performed, topics discussed and the strategies practices employed to optimise the consultation. There were a number of differences highlighted in the approach taken towards the different species (refer to Figure 3. on page 9).

■ The 20-minute appointment slots for boosters are very useful. Although not all boosters need 20 minutes (some are comfortably completed in 10 minutes if there are no issues), other animals come in with a range of things that aren't right, or that the owners want to discuss. ■ Vet (survey participant)

SECTION 3

The telephone interviews – why are preventative health consultations the way they are?

After gathering the quantitative data from the online survey, it was important to find out the 'why' behind the 'what'. Therefore a series of semi-structured in-depth interviews with owners (N=15) and vets (N=14) were undertaken to find out experiences, expectations and attitudes during a recent preventative healthcare consultation:

- What did they think would happen?
- What did happen?
- How did they feel about it?
- How do we make it better?

From the telephone interviews, four key themes emerged:

1 Motivators and barriers to the use of preventative medicines and vaccines

2 Perceptions and expectations around what preventative healthcare consultations should include

3 The impact of preventative healthcare consultation length and pace on vet and owner satisfaction

4 The role of receptionists and vet nurses in preventative healthcare

1 Motivators and barriers to the use of preventative medicines and vaccines ⁶

Contrasting views in terms of what owners and vets thought were key motivators for use of preventative medicines and vaccines are illustrated below.

Motivators

- ✓ Most owners described trusting the vet’s advice as the reason why they used preventative medicines.
- ✓ Some owners said they used preventative medicines because of advice from breeders, adverts on TV or having seen disease first-hand.
- ✓ Vets agreed a key reason that owners followed their preventative health advice was because of the trusting relationship they had with their clients.
- ✓ Vets said that protecting pets from disease was a strong personal motivator.

Barriers

- ✗ Some owners expressed concern about the safety of, and necessity for, routine preventative medicines.
- ✗ Few owners discussed cost as a barrier to using preventative medicines, although this could have been because they felt uncomfortable doing so in the study.
- ✗ Owners described confusion from reading conflicting information online.
- ✗ Vets expressed concerns about being seen to be ‘selling’ products.
- ✗ Owner understanding of why preventative medicines were needed was generally poor. However, vets did not often routinely discuss the necessity of preventative medicines in PHCs. Many reflected that this was due to time pressure and the assumption that owners would remember.

These lists show the extent to which dog and cat owners are motivated by trust in their vet’s advice in using preventative medicines. They also indicate a level of risk aversion among owners – as well as vets’ fear of being seen to be profit-driven – both of which could be barriers to these medicines’ uptake. This has significant implications for all involved. It is clear that vets should discuss the importance, safety and efficacy of preventative medicines with each client in a way they understand whenever such treatments are recommended.

2 Perceptions and expectations around what preventative health consultations include³

A major theme that arose from the research related to the expectations of owner and vet about what should happen during the preventative health consultation.

■ *More than half the time, in fact over half the time, I'll be discussing dentition and dental disease. Generally in cats I'll be discussing obesity or weight loss – it's usually one or the other. There are certain things that you have almost a prepared speech on...* ■ Vet (interview participant)

Key insights were:	Pet owner considerations		Vet considerations	
Expectation of structure of consult	Owners appeared to base their expectations about what would happen during a preventative health consultation on what had happened during previous preventative health consultations that they had attended. Information from veterinary practices about what to expect was not recalled to have been provided.		Expected to be highly variable with the need to modify the consultation based on owner factors and clinical examination findings.	
Consistency of content	Primary vaccination consultations were typically recalled to have been allocated more time and to have included useful educational messaging. In contrast, booster consultations were recalled to be highly variable in nature, with different vets in the same practice doing different things. Some owners thought a checklist for vets might improve consistency.		Primary vaccination consultations were described to have a relatively consistent structure. In contrast, vets were aware that they each had their own way of performing a booster consultation, but did not consider how this might impact the owner experience. Almost all vets considered checklists unnecessary or unworkable although there was a feeling that perhaps they were a consideration for new vets.	
Focus	Primary vaccination – a clinical examination was expected by all, and valued by new or inexperienced owners to provide reassurance of the pet's health. Booster vaccination – while a complete clinical examination during the booster consultation was expected and valued by all owners, some experienced owners did not anticipate that additional abnormalities would be found that they had not identified themselves. Owners expected all abnormalities detected on clinical examination to be discussed and a lack of discussion led to the assumption that if an issue wasn't mentioned then it was unlikely to be abnormal or concerning.		Primary vaccination – vets typically focused on educating owners about preventative healthcare and general pet management including feeding and neutering. Booster vaccination – vets typically focused on conducting a thorough health check and discussing abnormal findings plus getting updates on ongoing conditions. Preventative healthcare discussion largely limited to asking whether the owner was up to date for flea, tick and worm control.	
Conducted by	Many owners appeared unaware that they could choose the vet they wanted to see; some described a preference for continuity of care.		Giving owners the option of seeing their choice of vet was not always seen as practical.	
Education around preventative healthcare	Some owners felt that during booster consultations there was insufficient focus on pet health education and inadequate discussion about preventative healthcare strategies.		Vets' attitude towards preventative healthcare education varied. Some felt this was an important aspect of their role, while others expressed a preference that education was done by veterinary nurses. Time was an important barrier for many to longer discussions about preventative healthcare during booster consultations.	

■ *I went in with the expectation that because my appointment was for the vaccination, that was possibly all we were going to be able to talk about.* ■ Owner (interview participant)

This research suggests that owners and vets may not share expectations about what will happen in a dog or cat vaccination consultation. The interviews provided evidence for the potential value of providing information for owners about the likely content of their forthcoming vaccination consultation, encouraging continuity of care, and improving owner education about common preventable conditions.

3 The impact of preventative healthcare consultation length and pace on vet and owner satisfaction⁴

Time was a consistent theme across both vet and pet owner interviews. Many vets perceived extra time in a consult to be a reasonable strategy for improving consultations but it was interesting to find out why.

Vets who wanted longer consultation times thought this would enable them:

- To discuss any identified health issues in greater depth
- To have longer to educate pet owners. They felt they could encourage better adherence by explaining things fully and building rapport.

■ *... for those people that want more information than you know, if you are trying to fit it into 10 minutes, you will just overrun. It's impossible to fit everything in.* ■ Vet (interview participant)

Owners' feedback indicated:

- The pace was as important as the length of the consultation.
- If they were rushed they would not ask the questions that they'd wanted to.
- Owners would sometimes favour a vet that took more time with them.

■ *It was really quick this one, you know. Erm, he didn't do anything... considering he was a 10-week old puppy. I was really disappointed... disappointed and annoyed with myself when I came out that I hadn't said, hadn't said to him, whoa, hang on. Can you please listen to his heart? Can you please check him over?* ■ Owner (interview participant)

The potential consequences of rushed consultations are that owners may feel unable to ask questions during the consultation and that they may be more likely to seek other sources of information, such as the internet which may be unreliable. Importantly animal welfare concerns can arise from missed diagnosis, inadequate explanation or poor discussion of a pet's health issues.

4 The role of receptionists and vet nurses in preventative healthcare⁵

Receptionist and veterinary nurse roles were often discussed in interviews. There is no requirement for receptionists to be formally trained, and they are not regulated. Nevertheless, their role is vital to a practice, being 'gatekeepers' and the hub of communication. From the customer's point of view, their role is central: they provide essential information and guide the pet owner through the whole practice experience. Receptionist and nurse responsibilities are expanding too, and may now include giving advice on preventative medicines.



Receptionists

- Reception team members are often seen as a trusted source of information.
- Owners asked the front desk team questions that they had forgotten to ask or that they felt uncomfortable asking the vet.
- Receptionists sharing their own experiences of healthcare may be particularly helpful in reducing anxiety for some owners.
- The importance of reception staff being friendly, unhurried and empathic was evident, making the reception role pivotal to the perception of the practice.

Vet nurses

- Owners and vets appreciated advice being available from a vet nurse in the waiting room without the need to book an appointment.
- A few owners appeared confident that vet nurses could provide them with reliable pet health advice on a wide range of topics. Some had accessed vet nurse-led clinics following advice from a vet and were positive about the experience.
- Several owners were unsure what vet nurses were qualified to do, or how their role fitted with that of a vet. The risk that the vet nurse might not be able to solve a problem, and a subsequent consultation with a vet would be needed, was the most common barrier to attending vet nurse-led clinics.

The complexity and importance of the vet receptionist role should be recognised by vets and employers. Reliance of both owners and vets on the reception as a source of pet health advice makes evident the urgent need for all reception staff to be offered training.

There was no universal agreement among owners or vets on which services vet nurses should provide, so clearly more clarity on this subject is needed. This lack of definition must be resolved before vet nurses in a consulting role can have their potential fully realised.

SECTION 4

The recommendations⁸

A key aim of the project was to use an evidence-based approach to identify a practical set of recommendations that could be used by practices to optimise consultations.

The **Delphi technique** is an approach used to explore and achieve consensus on real-world topics using the knowledge and views of a carefully selected panel of ‘experts’ within the specific field of interest. In relation to those in the field of preventative healthcare consultations, the individuals selected were those who have the most experience of involvement, namely first-option veterinary surgeons as well as pet owners that have also experienced a number of such consultations. For this study an online approach was taken which was valuable in minimising the chance of bias. In the human medical field such panels often include groups of patients for which the guidelines are being created.

Summary of Delphi

- Anonymised experienced panel of 26 first-opinion veterinary surgeons and 8 pet owners
- Each panel member was sent 18 recommendations that address the key findings of the earlier research
- The panellists were asked to ‘agree’ or ‘disagree’ if they thought each recommendation would improve the preventative health consultation outcomes. The options were: ‘Agree’, ‘Disagree’, ‘Re-word’ or ‘Need more information’
- Consensus level was set at minimum of 80% agreement
- Three rounds of review were allowed for refinement of the guidance
- Recommendations were identified from the research undertaken by the team at the CEVM

This evidence-based study has resulted in the 18 recommendations opposite, not all of which reached the 80% consensus level. The additional guidance points that didn’t reach this high consensus level were included because they were still strategies that were thought to be effective by a significant proportion of the panel. We are now at an exciting part of the process where the guidance needs to be implemented in practice and we can then assess its success and whether these recommendations do indeed improve preventative health consultations.

Change is hard so MSD Animal Health will be rolling out support throughout the year to help you implement changes in your practice so that you can optimise your preventative health consultations, resulting in better relationships with your clients, with the ultimate aim of improving client communication and patient health and welfare outcomes – helping you to Keep Britain’s Pets Healthy!

The resulting recommendations of the research are below. We have created an exercise so you can start to think about what things you might like to implement in your practice.

Recommendations

Rate each on a 1-5 scale (i.e. 1 = high/excellent rating)

Practice teams should agree on...

		Consensus level	How well do we do this?	Practice feasibility	Priority
1	...the purpose of their preventative healthcare consultations and what they should include (to improve consistency across the practice).	92%			
2	...the role of each member of the team (vet, vet nurse, receptionist, etc.) in the practice preventative healthcare strategy.	81%			
3	...the details of the costs of preventative healthcare will be communicated to owners.	88%			
4	...how potential risks associated with preventative medicines will be communicated to owners.	96%			

Practices should....

5	...make clear to owners the benefits of preventative healthcare and medicines to the individual animal, to the pet population and to public health.	92%			
6	...allocate time for each preventative healthcare consultation tailored to the individual patient and adjusted for patient age, species and known pre-existing conditions.	85%			
7	...allocate each patient at least 15 minutes for a preventative healthcare consultation. (Did not reach 80% consensus)	71%			

Prior to or at the start of the consultation...

8	...the practice should explain to owners what may happen and what topics may be discussed.	86%			
9	...the practice should encourage owners to consider any questions they have about their pet’s health or preventative healthcare.	88%			
10	...the practice should make it clear to owners that the content of the consultation may vary dependent on species, breed, age and health of the patient. (Did not reach 80% consensus)	71%			
11	...the practice should make it clear to owners that they can choose which veterinary surgeon they would like to see. (Did not reach 80% consensus)	79%			
12	...owners should be asked how much they understand about preventative healthcare and medicines. (Did not reach 80% consensus)	67%			

During each preventative healthcare consultation...

13	...owners should be encouraged to ask any questions they have about their pet’s health or preventative healthcare.	96%			
14	...patients should be weighed and have their body condition score assessed using a scale agreed by the practice team.	88%			
15	...a full clinical examination should be undertaken by a veterinary surgeon or veterinary nurse.	96%			
16	...owners should be made aware of both normal and abnormal findings from a clinical examination.	96%			
17	...it must be ensured that owners understand the rationale behind any recommendations made and alternatives discussed where appropriate.	96%			
18	...at the end, a written summary of the findings and a plan for managing the patient’s healthcare needs should be offered to owners. (Did not reach 80% consensus)	75%			

This summary piece provides an overview of key findings from the research project that provide an evidence base for guiding better practice in preventative healthcare. For further detailed information the references to the full papers are provided below.

References

1. Investigating preventive-medicine consultations in first opinion small-animal practice in the United Kingdom using direct observation. NJ Robinson, ML Brennan, M Cobb, RS Dean. *Preventive Veterinary Medicine* 124 (2016) 69-77
2. Measuring the success of canine and feline preventative healthcare consultations: A systematic review. NJ Robinson, Z Belshaw, ML Brennan, RS Dean. *Preventive Veterinary Medicine* 158 (2018) 18-24
3. Topics discussed, examinations performed and strategies implemented during canine and feline booster vaccination consultations. Natalie Robinson, Zoe Belshaw, Marnie Brennan, Rachel Dean. *Vet Record* (2019) 10.1136/vr.104835 (in press)
4. Motivators and barriers for dog and cat owners and veterinary surgeons in the United Kingdom to using preventative medicines. Zoe Belshaw, Natalie J Robinson, Rachel S Dean, Marnie L Brennan. *Preventive Veterinary Medicine* 154 (2018) 95-101
5. Owners and Veterinary Surgeons in the United Kingdom Disagree about What Should Happen during a Small Animal Vaccination Consultation. Zoe Belshaw, Natalie J Robinson, Rachel S Dean, Marnie L Brennan. *Veterinary Sciences* (2018), 5, 7
6. "I Always Feel Like I Have to Rush..." Pet Owner and Small Animal Veterinary Surgeons' Reflections on Time during Preventative Healthcare Consultations in the United Kingdom. Zoe Belshaw, Natalie J Robinson, Rachel S Dean, Marnie L Brennan. *Veterinary Sciences* (2018), 5, 20
7. Owner and veterinary surgeon perspectives on the roles of veterinary nurses and receptionists in relation to small animal preventive healthcare consultations in the United Kingdom. Zoe Belshaw, Natalie J Robinson, Rachel S Dean, Marnie L Brennan. *Veterinary Record* (2018) 10.1136/vr.104773 (in press)
8. Developing practical recommendations for preventative healthcare consultations involving dogs and cats using a Delphi technique. Natalie Robinson, Zoe Belshaw, Marnie Brennan, Rachel Dean. *Vet Record* (2019) 10.1136/vr.104970 (in press)

