RCVS

Veterinary Nurse Prescribing Study Results

June 2026

Contents

Background

This study aimed to provide more information about the suitability of a vet nurse prescriber role in first-opinion practice, and the potential risks for animal health and welfare. The RCVS wanted to understand the risks of a health check being conducted by a vet nurse prescriber. Vaccination consultations were chosen as an example of an occasion on which a health check might be provided by a vet nurse provider.

As well as preventing disease, vaccination is often the first interaction between an owner and a vet practice. It provides an annual opportunity for pet owners to ask questions and for the practice to conduct a health check and provide advice. The aim of this research was first to understand what is happening, and what conditions may be uncovered or discussed, in vaccine consultations. The second stage of the research was designed to understand where there could be missed opportunities for diagnosis or treatment if a vet nurse conducted the appointment.

The introduction of any potential vet nurse prescriber role will require extensive additional study and consultation, including identification of the contexts in which the role would function, and the development of structured training relevant to those contexts. For this preliminary research we asked for views on whether, currently, a typical vet nurse with five years' experience would be able to recognise the conditions presented as requiring the attention of a vet surgeon.

The initial research on SAVSNET data

We first commissioned some research[1] which described the most common clinical conditions presenting in vaccine consultations for dogs, cats and rabbits (both juvenile and senior adult).

Using the University of Liverpool's Small Animal Veterinary Surveillance Network (SAVSNET) data, a stratified random sample of 1,100 juvenile dog, 1,100 senior adult dog, 800 juvenile cat, 800 senior adult cat, 300 juvenile rabbit and 300 senior adult rabbit vaccine consultations was made for inclusion. For each of these 4,400 consultations, vaccination was given as the main reason for the animal's presentation. University of Liverpool researchers read through the clinical narratives for each of the events and classified the clinical subcategories described in the notes. Classification was possible for 3,756 consultations.

Of these vaccine consultations, 72% recorded additional problems in the clinical notes. These were categorised into "body systems", such as dental, integument, digestive and cardiopulmonary, and each body system was then further sub-classified. For example, most dental disease was related to calculus, and most digestive concerns to anal glad expression.

There were marked differences between the conditions discussed for juvenile and senior adult animals. Common conditions for older animals were related to dental, weight and integumental body systems. The most common non-vaccine discussions for juvenile animals were related to parasites, reproduction and microchipping.

SAVSNET identified 539 relevant conditions. These were reduced[2] using the following criteria:

- Repetitious categories and categories that could be grouped;
- Conditions likely to be identified by the owner (for example, behavioural issues or diarrhoea);
- Conditions recorded only once or twice in the 4,400 consultations sampled;
- Discussions between owner and vet (for example about spaying or neutering), or with no observation of the condition;
- A procedure or treatment (for example, anal glad expression);
- Where the clinical sub-category was too difficult to identify from the clinical notes.

From the initial long list, 43 conditions were identified.

1 Richardson, Davies, Salgueiro-Fins, Noble, Singleton, Brant, Pinchbeck and Radford (February 2020). Identified complaints in cat, dog and rabbit vaccine consultations as recorded in free text narratives. A report by SAVSNET for the RCVS.
2 With thanks to Professor Stephen May.

Method

We asked a panel of experienced vet nurses and vet surgeons to give their expert opinions. The panel was selected by choosing vets and vet nurses at random from the RCVS Registers. All of those invited to join the panel had been qualified for between 10 and 20 years. They were recorded by the RCVS as working for a Practice Standards Scheme general or hospital practice which was also a vet nurse training practice with at least five vets employed. The sample was not chosen to be perfectly representative of the professions, but to assemble a group of experienced mid-career professionals with plenty of exposure to vet nursing in clinical practice.

Invitations to join the expert panel were sent to 240 registered veterinary professionals; half vets and half vet nurses. Of these, 56 agreed to take part: these were 31 vets and 25 vet nurses. Each was sent a survey for round one and 32 responded: these were 21 vets and 11 vet nurses. Following this strong response, the participants were divided randomly into two panels to reduce the reading time required of panel members at round two.

This project used a two-round modified Delphi methodology. Both rounds consisted of an online questionnaire of around 15–30 minutes. The aim of a Delphi methodology is to establish a consensus.

In the first-round survey, we asked whether a vet nurse could recognise each of the 43 conditions identified from SAVSNET vaccine consultation data at a consultation with a new client.

The nurse in question was described as:

"... currently working in small-animal practice, with five years' clinical experience after registration, [and] used to seeing and discussing common conditions."

The question asked was:

"In your opinion, what is the likelihood that this veterinary nurse would be able to recognise that there was a problem that required the attention of a veterinary surgeon?"

The scenario was described in the following words:

"Imagine that this vet nurse is undertaking a 'health check' on a small animal with a new client. The client has not reported anything amiss, and the veterinary nurse does not have access to any prior clinical records."

Panel members were asked to rate ability to recognise conditions on a scale of 0 to 10. For the purposes of establishing consensus, the numbers 7 to 10 were treated as agreement that an experienced vet nurse would be able to recognise that there was a problem that required the attention of a vet. The numbers zero to three were treated as disagreement. The numbers four to six (inclusive) were treated as neutral. If every panel member either agreed or disagreed that an experienced vet nurse would recognise that the named condition required the attention of a vet, it is clear that a complete consensus was reached. Where 80% were in agreement, this has also been treated as consensus for the purposes of this research.

Panel members were then asked to assess the risks if a condition was not recognised. This question was asked using a scale from "no additional risk" to "a great deal of additional risk," alongside the option "varies too much to say".

In the second round, we presented the results from the round one survey. Each panel member received a summary of their panel's responses, as well as a record of their own ratings.

Conditions where there was a panel consensus on vet nurse recognition were removed. Panel members were then asked to respond again, using their own expertise and the information from round one.

In the round two questionnaire, the example vet nurse was described as having:

"additional RCVS-accredited vet nurse training in [named condition]."

Panel members were once again asked to mark how likely the vet nurse would be to identify each named condition as requiring the attention of a vet surgeon. In round two, they were also asked to suggest what training might be appropriate to help a vet nurse recognise whether these conditions required the attention of a vet surgeon.

The panels

Panel 1 had 16 members, all of whom were in clinical practice. Fifteen members worked with small animals; five worked with zoo animals or wildlife; and three worked with farm animals. All worked in first-opinion practice. Twelve members of Panel 1 were vets and four were vet nurses. At round two, the response rate was 50%: eight panel members responded. The eight were four vets and four vet nurses.

Panel 2 had 16 members, all of whom were active in small animal clinical practice. Two members also worked with zoo animals or wildlife. One member worked with farm animals. The majority (14 out of 16) were active in first-opinion practice. Four members were active in referral practice. Two members also worked for an out-of-hours service provider. Eleven members of Panel 2 were vets and five were vet nurses. At round two, the response rate was 81%: 13 panel members responded, though one did not respond to all questions. These were eight vets and five vet nurses.

Results

Consensus was achieved in round one for the majority of conditions. At least 80% of Panel 1 members thought the vet nurse would recognise that the attention of a vet was required for 27 out of 43 conditions. Panel 2 reached consensus on 30 out of 43 conditions. A full list of the consensus conditions is available in Appendix 1 and more details are provided below.

In total, a round one consensus was not reached in at least one of the panels on 19 out of the 43 conditions. Panel members were also asked the level of harm if a vet were not consulted.

Table 1 shows the conditions on which a round one consensus was not reached. Neither panel reached a consensus on whether an experienced vet nurse would recognise hearing loss, a heart murmur, abnormal lung sounds, reduced intestinal sounds or stasis, enlarged thyroid or lymph nodes, back pain, patellar luxation or retinal damage, change, haemorrhage or detachment.

Table 1: Non-consensus conditions after round one, with risks of additional harm

	Condition	Panel not achieving consensus	Additional harm from missing the condition
1	Hearing loss	Both	Low
2	Irregularity of heart rhythm	Panel 1 only	Variable but may be high
3	Heart murmur	Both	Variable but may be high
4	Breed pre-disposed to respiratory problems	Panel 2 only	Variable
5	Noisy breathing	Panel 2 only	Variable but may be high
6	Abnormal lung sounds	Both	High
7	Pot belly / distended abdomen	Panel 1 only	Variable but may be high
8	Intestinal sounds - reduced / stasis	Both	Species dependent
9	Constipation / straining to defecate	Panel 2 only	Some
10	Enlarged thyroid	Both	Some
11	Enlarged lymph node	Both	Variable but may be high
12	Back pain	Both	Some
13	Musculoskeletal pain, lameness	Panel 2 only	Variable
14	Patella - luxation	Both	Some
15	Eyelid abnormality	Panel 1 only	Some
16	Corneal ulcer (+/-fluorescein)	Panel 1 only	High
17	Other external eye abnormality	Panel 1 only	Variable
18	Retinal damage / change / haemorrhage / detachment	Both	High
19	Third eyelid abnormality	Panel 1 only	Variable

In addition, Panel 1 did not reach consensus on irregularity of heart rhythm, pot belly or distended abdomen, and four different types of eye condition. Panel 2 reached consensus on those, but not on a breed pre-disposed to respiratory problems, noisy breathing, constipation, or musculoskeletal pain or lameness.

The risks to animal health and welfare if these conditions are missed differ by condition. Panel members anticipated higher risks from a failure to refer heart or lung conditions, pot belly or distended abdomen, enlarged lymph node and retinal damage.

Summary findings from round one are reported in this paper, and the full results, written for each of the two panels after round one, are available in Appendix 2.

In the second round of a Delphi study, it is customary to modify the conditions of the question to help expert panels reach a consensus. In the models of vet nurse prescribing which have been considered by the RCVS and the wider profession, a vet nurse prescriber would require an additional qualification. We therefore ascribed to the vet nurse in the question additional RCVS-accredited vet nurse training in the named condition.

We also provided a free text box and asked panel members if they had an opinion on the kind of training they thought would be appropriate to prepare a nurse to recognise this condition.

Separately, we dropped 'hearing' from the list of conditions for the second round, since the risk of harm is low and both panels mentioned that a hearing investigation would generally be based on owner reports. We also removed the wording "(+/-fluorescein)" from the condition 'corneal ulcer' following comments at round one.

Panel members said:

"Wouldn't expect a nurse to administer fluorescein before consulting a vet..."

"While corneal ulcers may be suspected based on clinical signs... confirmation often relies on fluorescein staining"

The inclusion of fluorescein in the condition wording put panel members in mind of diagnosis of the condition, rather than recognition and onward referral to a vet surgeon.

Consensus was reached on more than half of the conditions remaining from round one. (A complete list is available in Appendix 1.)

Consensus conditions

The SAVSNET research divided the 43 conditions into 18 body systems, 13 of which were included in this research. These were auditory[1], cardiopulmonary, dental, digestive, endocrine, immunological, integument, musculoskeletal, neurology, ocular, parasites, reproduction and weight.

For six of these body systems, consensus was reached for all listed conditions, shown in Table 2.

Table 2: Body systems in which consensus was reached for all conditions

Body system	Consensus conditions
Dental	Visible tooth and/or gum disease Jaw - undershot / overshot
Integument	Alopecia or hair loss Dermatitis Infected discharge or abscess External ear conditions (for example otitis externa, mites) Skin redness / inflammation of the skin Foot soreness or infection Fur needing cleaning / dematting Overgrooming Wound - bite Wound - cut Wound - surgical Lick granuloma Visible / external masses or lumps Hernia - umbilical
Neurology	Head tilt
Parasites	Endoparasites suspected / confirmed Ectoparasites
Reproduction	Genital check / confirm sex
Weight	Overweight Underweight

1 This body system, including only the single condition 'hearing', was dropped for round two, leaving 12 body systems.

Table 3 shows the body systems for which the panels achieved consensus for only some conditions.

Table 3: Body systems in which consensus was reached for some conditions

Body system	Consensus conditions	Non-consensus conditions for the same body system
Cardiopulmonary	Irregularity of heart rhythm Heart Murmur Breed pre-disposed to respiratory problems Noisy breathing Coughing	Abnormal lung sounds
Digestive	Pot belly / distended abdomen	Intestinal sounds reduced / stasis Constipation / straining to defecate
Endocrine		Enlarged thyroid
Immunological		Enlarged lymph node
Musculoskeletal	Musculoskeletal pain, lameness Tail - corkscrew or deformed or kink	Back pain Patella (luxation)
Ocular	Eyelid abnormality Corneal ulcer Third eyelid abnormality Other external eye abnormality	Retinal damage / change / haemorrhage / detachment

While many of these consensus conditions could be observed by eye, or with simple equipment such as weighing scales, consensus was also reached on a number of heart conditions which would require auscultation.

Non-consensus conditions

Consensus was reached in neither panel on five of the original 47 conditions: abnormal lung sounds, reduced intestinal sounds or stasis, enlarged thyroid, patellar luxation and retinal damage. In addition, Panel 2 did not reach consensus on constipation, enlarged lymph nodes or back pain. These results, along with the additional harm assessments from round one, are summarised in Table 4.

Table 4: Non-consensus conditions by panel and additional harm from missing the condition

Condition	Panel not achieving consensus at round two	Additional harm from missing the condition
Abnormal lung sounds	Both	High
Intestinal sounds - reduced / stasis	Both	Species dependent
Constipation / straining to defecate	Panel 2 only	Some
Enlarged thyroid	Both	Some
Enlarged lymph node	Panel 2 only	Variable but may be high
Back pain	Panel 2 only	Some
Patella - luxation	Both	Some
Retinal damage / change / haemorrhage / detachment	Both	High

The following sections of this report present the ratings given by members of each panel, as well as the comments made by panel members about additional training which might be required to prepare a vet nurse correctly to refer these conditions to a vet. The comments from round one, about the likelihood of a vet nurse recognising that the conditions should be referred to a vet surgeon are also presented here.

Panel ratings and comments for the non-consensus conditions

The five conditions on which both panels failed to reach consensus are presented first, followed by the three additional conditions on which Panel 2 did not agree. For every condition, even though a consensus was not reached, the most common response was that the condition would probably be identified.

This paper includes summary findings from round one of the Delphi study and the full findings from round two. The full findings from round one are reported in Appendix 2.

1. Abnormal lung sounds

Of the eight members of Panel 1, six thought abnormal lung sounds would probably be recognised after some training, and two were neutral. From Panel 2, eight out of twelve members said that abnormal lung sounds would probably be identified, three were neutral and one thought they would probably not be identified.

	Panel 1	Panel 2
Would probably not identify	0	1
Neutral	2	3
Would probably identify	6	8
Number of panel members responding	8	12

In round one, panel members said that experience would be required to recognise subtle abnormalities.

"The subtleties of abnormal lung sounds can take a good number of years listening to abnormal patients before I would be confident that a young vet or experienced nurse would be able to easily pick this up."

At round two, eight panel members explicitly mentioned the importance of experience in picking up abnormal lung sounds when commenting on training requirements:

"... exposure to cases – perhaps clinical mentoring"

"I would encourage them to listen to any patient with abnormal lung sounds to get used to what's not normal"

“Experience auscultating large numbers of animals both normal and abnormal”

Additional training in auscultation techniques or location was also mentioned by eight panel members.

“Extra training on how to auscultate… many vets (myself included at times) struggle to auscultate abnormal lung sounds.”

Some members offered further details of the training they would suggest:

- comparison of abnormal lung sounds to relevant imaging, such as x-ray and ultrasound
- provision of recordings of abnormal lung sounds alongside discussion of which might represent an emergenc
- a focus on
    - differentiating referred noise, crackles, wheezes, stertor and stridor, and upper versus lower airway noise
    - case-based learning around normal, inflammatory, infectious and cardiac-related respiratory changes
    - reg flags such as tachypnoea, dyspnoea, cyanosis, orthopnoea
- a practical exam following the training.

Three panel members were satisfied that CPD on respiratory issues would be sufficient.

2. Reduced intestinal sounds or statis

Of the eight members of Panel 1, six thought reduced intestinal sounds or stasis would probably be recognised after some training, and two were neutral. From Panel 2, seven members out of twelve said that reduced intestinal sounds would probably be identified, two were neutral and three thought they would probably not be identified.

	Panel 1	Panel 2
Would probably not identify	0	1
Neutral	2	2
Would probably identify	6	7
Number of panel members responding	8	12

At round one, panel members said that recognition of reduced intestinal sounds is outside the experience of many vet nurses.

"... not something veterinary nurses would routinely check for. However, if they had further training in this, this could be something which they can be taught to identify, the same as veterinary students are."

"This wouldn't even be on the radar of our RVNs except specifically our exotics RVN, or the students she is teaching when we have rabbits hospitalised."

At round two, six panel members mentioned additional training or experience in auscultation. Comments included:

"Abdominal auscultation practice"

"How to auscultate for gut sounds, how frequently they should be heard, and what to do if they are reduced or completely absent."

Six panel members said that their responses were species dependent, and several mentioned rabbits, guinea pigs and exotics:

"I feel that a nurse would be more likely to pick this up in an animal such as a rabbit or guinea pig than a cat or dog."

"... the exotic advanced practitioner I spoke with had grave concerns about this, and also advised me that listening for gut sounds is extremely unreliable in the first place."

"Is this related to rabbits/guinea pigs? If so, then additional exotics training would be useful covering causes and issues with GI stasis."

"Not even sure this is a day-one skill for new vets unless it's a horse or exotic."

Some members offered further details of the training they would suggest, including:

- audio recordings and videos
- recognising different bowel sounds
- correlation with pain, vomiting, distension and appetite changes
- recognising red flags for obstruction, ileus and statis.

Three panel members were satisfied that CPD would be sufficient.

3. Enlarged thyroid

Of the eight members of Panel 1, six thought an enlarged thyroid would probably be recognised after some training, and two were neutral. From Panel 2, eight members out of thirteen said that an enlarged thyroid would probably be identified, three were neutral and two thought it would probably not be identified.

	Panel 1	Panel 2
Would probably not identify	0	1
Neutral	2	2
Would probably identify	6	8
Number of panel members responding	8	13

In round one, panel members said that recognition of an enlarged thyroid is not part of a routine vet nurse health check so vet nurses would lack experience in this area. However, they would recognise other relevant clinical signs as a reason for referral to a vet surgeon.

"...I doubt many nurses would palpate thyroids regularly and as such would be unlikely to recognise normal vs abnormal."

"More likely to suspect thyroid issues through history taking / weight / heart / behaviour changes."

"Not a general thing for nurses to check. Many less experienced vets would also struggle."

At round two, twelve panel members mentioned additional training in palpation. Comments included:

"Hands-on training of feeling as many large thyroids as possible."

"I feel practical sessions would be best. A lot of new graduate vets struggle in palpation of thyroids, and often bloods etc are required alongside a physical examination anyway."

"Practice in thyroid palpation."

Eight panel members mentioned clinical suspicion, history taking and other signs or tests:

"... often asking the right questions is as much of a useful tool."

"as a vet of 13 years this is rarely the way I diagnose hyperthyroidism in cats as I think history taking is much more clinically relevant."

"recognising the clinical signs that lead to enlarged thyroid or building it into a senior cat clinic ... as they are more likely to have a goitre."

Some members offered further details of the training they would suggest, including:

- an anatomy module
- differentiation from mandibular salivary glands, lymph nodes and fat deposits
- correlation of palpation findings with weight loss,

Four panel members were satisfied that no additional training would be required or that standard CPD would be sufficient.

4. Patellar luxation

Of the eight members of Panel 1, six thought patellar luxation would probably be recognised after some training, and two were neutral. From Panel 2, eight members out of thirteen said that it would probably be identified, four were neutral and one thought it would probably not be identified.

	Panel 1	Panel 2
Would probably not identify	0	1
Neutral	2	4
Would probably identify	6	8
Number of panel members responding	8	13

At round one, panel members said that vet nurses may not have the training and experience to recognise a patellar luxation.

"Sometimes very obvious and sometimes not. Generally not a thing nurses currently look for or have much experience of in my clinic."

> **"Whilst I would imagine a nurse would be able to pick up on the lameness associated with a patella luxation, palpation of the patella itself, I suspect, may require veterinary involvement."**

"I think this can be difficult to diagnose by veterinary surgeons in a conscious animal at times."

"Something that is not normally carried out by nurses in consult, but is trainable and achievable."

Four panel members focussed their training comments on the questions a vet nurse should ask:

"Discussion of questions to ask, skipping gaits etc"

"Training in the questions to ask an owner that may give cause for concern about the patella"

Six panel members mentioned training in palpation or in identifying lameness.

Two were concerned that patellar luxation is a diagnosis and that a vet nurse's training focus should be elsewhere:

"Focussing on a lameness requiring a vet's attention is fine, diagnosing it as a patella luxation is too much."

Five panel members were satisfied that standard CPD or in-house training would enable the vet nurse to decide whether to refer to a vet surgeon.

5. Retinal damage or change or haemorrhage or detachment

Of the eight members of Panel 1, five thought retinal damage would probably be recognised after some training, and three were neutral. From Panel 2, six members out of thirteen said that it would probably be identified, four were neutral and three thought it would probably not be identified.

	Panel 1	Panel 2
Would probably not identify	0	3
Neutral	3	4
Would probably identify	5	6
Number of panel members responding	8	13

At round one, panel members said that ophthalmoscopy would be required for these conditions, and this is not something vet nurses are used to doing.

"Retinal exam is very challenging, even for experienced vets, and would not generally form part of a health check unless for a specific risk group (for example elderly cats)."

"I would doubt many nurses have experience of carrying out a proper ophthalmic examination with a scope."

At round two, eleven panel members mentioned training in ophthalmology or the use of an ophthalmoscope and three added that experience would be important.

- "Practical courses on ophthalmology would be needed."
- "This is a skill requiring use of special equipment, medication to dilate pupils in some cases and experience. I think this would take a lot of training and experience for a veterinary nurse to obtain unless they were working in a specialised ophthalmology setting."
- "Specific training in using ophthalmoscope, how to do ophthalmic exams and assessing for subtle changes. With ophthalmology, it is about repeatedly doing retinal exams and getting confident in normal so that abnormal can be spotted."
- "Pattern recognition training and ophthalmoscope skills – but I feel that this starts to stray into the area of diagnosis."

One panel member offered additional detail on suggested training for recognising these eye problems, including:

- identifying retinal haemorrhage and detachment, tapetal hyperreflectivity, and vascular changes;
- correlating retinal changes with hypertension, systemic disease and acute blindness.

Only one panel member mentioned standard CPD, and that person suggested a day of training.

6. Constipation/straining to defecate

Of the thirteen members of Panel 2, nine said that constipation or straining to defecate would probably be identified, three were neutral and one thought it would probably not be identified.

	Panel 2
Would probably not identify	1
Neutral	3
Would probably identify	9
Number of panel members responding	13

At round one, one panel member said that this would be difficult to recognise without an owner report. At round two, seven panel members mentioned history taking or asking questions to the client.

"Difficult to assess without any information from the client unless the patient is actively straining to defecate in practice."

"I feel often a good open conversation with an owner, asking the right questions, would help..."

"if there are no reported problems from the owner, in a clinical exam it would be difficult to pick up unless palpating the abdomen. This information would come from good history taking unless the patient specifically started straining in consult."

Six members of Panel 2 mentioned abdominal palpation and four mentioned rectal palpation or exams.

"Complete deep palpation of the abdomen, how to rule out that this isn't a cystitis/blocked cat, normal rectal palpation findings."

"Hands on training of being able to feel constipation in different shaped animals would help."

One panel member said that straining to defecate would easily be recognised and that no additional training would be required.

7. Enlarged lymph nodes

Of the 13 members of Panel 2, nine said that enlarged lymph nodes would probably be identified, and four were neutral.

	Panel 2
Would probably not identify	0
Neutral	4
Would probably identify	9
Number of panel members responding	13

At round one, panel members said an enlarged lymph node would usually be recognised, and it is something for which vet nurses could be trained.

"... I have never had a nurse pick this up on a nurse clinic, only when trying to take bloods. Therefore, if trained to look for it, I suspect they would, but would not expect it currently."

At round two, five members of Panel 2 mentioned palpation of lymph nodes.

"Training in the location and palpation on of all the peripheral lymph nodes and normal vs abnormal."

"How to carry out a complete physical examination, including palpation of lymph nodes (submandibular, prescapular, popliteal)..."

Two panel members mentioned an anatomy review while one thought no additional training would be required. One member said:

"I feel that any enlargement of lymph node should be referred to a vet, as deciding on significance strays into diagnosis..."

Enlarged lymph nodes are a sign or symptom rather than a diagnosis. However, the significance of the sign varies, as evidenced by the variable levels of risk to animal health and welfare which were expressed by panel members in Round 1.

8. Back pain

Of the 13 members of Panel 2, nine said that back pain would probably be identified, and four were neutral.

	Panel 2
Would probably not identify	0
Neutral	4
Would probably identify	9
Number of panel members responding	13

At round one, panel members said that back pain can be challenging to recognise but most vet nurses would recognise it in most animals.

"As an RVN I wouldn't necessarily do a full spinal check unless the owner mentioned concerns."

"Can be mistaken for abdominal pain and vice versa."

"Spinal palpation isn't usually carried out by a relatively newly qualified nurse, but again with training I think this is achievable. A more experienced nurse may notice signs of back pain and be able to examine."

At round two, five members of Panel 2 mentioned experience of spinal palpation.

"The nurse needs to be trained in how to palpate the spine and particular areas to be mindful of, as well as breeds that are more prone to problems..."

Two panel members mentioned history taking. Two also mentioned pain scoring.

"The ability to complete a pain score and teach the owner how to do this at home to provide a picture of how the pain progresses in a relaxed home environment as well."

"I think RVNs mostly have this skill as they use pain assessment / pain scoring in hospital [with in-patients] - but are less likely to use this in a consultation so training would need to be more focussed on a more comprehensive
clinical exam."

Summary of panel comments

Of the eight conditions, there were four which attracted comments about history taking, two which panel members said would require experience, and six for which they recommended training in auscultation or palpation. The ocular condition was unusual: it was the only one which panel members believed would require training in specialist equipment. Three of the conditions attracted comments about straying into diagnosis.

Table 5: Summary of panel comments on the non-consensus conditions

Condition	Experience required	History required	Strays into diagnosis	Palpation / auscultation training required
Abnormal lung sounds	x			x
Intestinal sounds - reduced / stasis	x			
Constipation / straining to defecate		x		x
Enlarged thyroid		x		x
Enlarged lymph node			x	x
Back pain		x		x
Patella - luxation		x	x	x
Retinal damage or change or haemorrhage or detachment			x	

Discussion

The conditions on which our panels reached consensus were mostly those which could be observed by eye, or with simple equipment like weighing scales. They were principally conditions of the integument, dental or parasitic conditions, weight, and sex identification. However, the panels also reached consensus on several conditions which could be defined as part of the cardiopulmonary system. For these conditions, some skill in auscultation would be required to identify whether a vet surgeon should be consulted. For example, the panels reached consensus on heart murmur (which is sometimes discussed as a reason to delay vaccination), irregular heart rate, and on noisy breathing. While the bulk of this paper is dedicated to the conditions on which the panels did not reach consensus, it is important to note that those were the minority.

This study suggests a broad professional consensus that, for most conditions brought up through the SAVSNET research, a vet nurse would be able correctly to refer to a vet surgeon.
Eight conditions remain for which no consensus was reached (by at least one panel). For each of these, even though a consensus was not reached, the most common response was that the condition would probably be identified as requiring a referral. These conditions were much more likely to have been raised during consultations with older animals than with juvenile ones.

The eight conditions were much more commonly raised at vaccine consultations for older patients.

The table below uses data from the initial SAVSET research, and shows the number of times these conditions were mentioned at vaccine consultations with juvenile and senior adult animals

Table 6: Number of times each condition was mentioned (out of 4,400 consultations selected), split by age of patient

Condition	Number of times mentioned – juvenile animals	Number of times mentioned – senior adult animals
Abnormal lung sounds	2	8
Intestinal sounds - reduced / stasis	1	6
Constipation / straining to defecate	2	4
Enlarged thyroid	0	6
Enlarged lymph node	2	6
Back pain	0	7
Patella - luxation	0	3
Retinal damage / change / haemorrhage / detachment	0	3

The consultations with older animals will certainly have involved a number of patients previously known to the examining vet professional, with pre-existing conditions which had already been diagnosed. The approach taken here, whilst systematic, has resulted in some conditions being presented to the panels which might be less relevant in a vet nurse health check with a new patient. For example, some panel members told us that patellar luxation is a veterinary diagnosis, rather than a condition which a vet nurse should recognise, like lameness. A vet nurse conducting a health check might observe lameness, or ask an owner questions which would reveal a musculoskeletal concern, and refer those concerns to a vet, but would not diagnose a luxation.

Vet surgeons and vet nurses have different roles, authority and scope of practice. Vet nurses provide nursing care to animals (including carrying out procedures under the direction of a vet surgeon) as well as providing support to owners. Vet surgeons' responsibilities include diagnosing disease, prescribing treatment, and performing surgery. For each non-consensus condition, at least one panel member mentioned the importance of good documentation, governance support, clear communication and escalation processes. Both vet surgeons and vet nurses have professional responsibilities for record keeping and communication, but a vet nurse works with animals who are under the care of a vet surgeon (and not the other way around). **If vet nurses are to be able to prescribe, the nature of the relationship between vet nurses and vet surgeons will need to be carefully re-stated to encompass and describe the new role and any newly shared responsibilities.**

During the design of this research, history taking was excluded from the nursing skills being assessed. Conditions or symptoms which were likely to be revealed only by owner report were dropped from the long list. This included signs like diarrhoea, or behavioural issues. Panel members were given a scenario in which there was no available clinical history, and the client was not reporting anything amiss. It is clear from the comments provided by the expert panels, however, that some conditions of this type remained on the short list of 43 conditions.

Even though history taking was sidelined by design, panel members mentioned its importance of for four of the conditions on which a consensus was not reached: enlarged thyroid, patellar luxation, constipation and back pain. **A lack of clinical history, alongside an absence of owner-provided information, may have contributed to the lack of consensus.** Panel members also mentioned other clinical tests or techniques. These might not be carried out at a vet nurse health check, but after referral to a vet surgeon. This could apply to use of an ophthalmoscope for identifying eye conditions, for example. The lack of consensus does not necessarily, therefore, represent a lack of faith in vet nurse clinical skills.

Nevertheless, panel members had some concerns, expressed in Round 1, about the risks presented to animal health and welfare if conditions were not referred to a vet surgeon. For the non-consensus conditions, these concerns were greatest for abnormal lung sounds, reduced intestinal sounds in rabbits, enlarged lymph nodes and retinal damage.

Additional training would help mitigate these risks. **Panel members suggested training which would help vet nurses to recognise the non-consensus conditions.** Their recommendations included a focus on practice-relevant species and scenarios: for example, the risks of missing reduced intestinal sounds or stasis were seen to be highest in rabbits and additional training and experience in auscultation would be a mitigation. For some conditions, training in the use of relevant specialist equipment was recommended: that includes ophthalmoscopy for identifying eye problems. Finally, training should be combined with practical experience, particularly for physical skills like palpation or auscultation.

The points raised about practical experience were also applied to vet surgeons. These quotes come from round one of the Delphi study and illustrate the importance of experience for both vets and vet nurses.

"The subtleties of abnormal lung sounds can take a good number of years listening to abnormal patients before I would be confident that a young vet or experienced nurse would be able to easily pick this up." (Abnormal lung
sounds, Panel 1)

"Not a general thing for nurses to check. Many less experienced vets would also struggle." (Enlarged thyroid, Panel 2)

"I think this can be difficult to diagnose by veterinary surgeons in a conscious animal at times." (Patellar luxation, Panel 2)

"This is often undiagnosed for years, depending on severity, unless specifically checked for. Many vets wouldn't check for it either." (Patellar luxation, Panel 2)

"Retinal exam is very challenging, even for experienced vets, and would not generally form part of a health check unless for a specific risk group (e.g. elderly cats)." (Retinal damage / change / haemorrhage / detachment, Panel 2)

This research project made no attempt to examine the skill and experience level of vets performing health checks. It is not possible to assess from the results discussed here whether vets are currently missing opportunities to diagnose and treat conditions which present at vaccine consultations. By the design of this study, all the conditions mentioned here were discussed by a vet professional at a vaccine consultation. There is no evidence for conditions that were missed, and no information about how many of the conditions discussed had been diagnosed at a previous consultation. The list was based on empirical evidence from clinical consultations and reflects observations made at SAVSNET practices. It relies on the practitioner's record in the clinical narrative. While it highlights the wide range of additional conversations that are recorded as part of vaccine consultation, it is possible that some relevant conditions, particularly rarer ones, could have been missed from the list. It does not compare the health checks performed by nurses to the ones performed by vets.

Conclusion and next steps

Delphi studies are used to collect data from people from within their realm of expertise, to help them reach consensus, and to reveal diverging opinions. A professional consensus was reached on the ability of an experienced vet nurse to refer 34 conditions which presented at small animal vaccination appointments. There were practical and methodological explanations which might account for the eight conditions remaining outside the professional consensus. **For each of the eight non-consensus conditions, the most common response from panel members was nevertheless that it would be recognised by an experienced vet nurse.**

We are very grateful to our anonymous expert panel members, who were selected at random from the Registers and freely gave their time to improve our understanding of vet nurse skills and knowledge in veterinary practice.

This study will now be passed to the RCVS Standards Committee and Veterinary Nurse (VN) Council. They will discuss possible models of vet nurse prescribing, using the evidence from this research to inform their work.

Appendix 1: Conditions presented by category and consensus

		Consensus at round 1		Consensus at round 2		
Category	**Clinical sub-category**	**Panel 1**	**Panel 2**	**Panel 1**	**Panel 2**	**No consensus reached**
Auditory	Hearing loss			n/a	n/a	n/a
Cardiac	Irregularity of heart rhythm		x	x		
Cardiac	Heart Murmur			x	x	
Cardiac	Breed pre-disposed to respiratory problems	x			x	
Cardiac	Noisy breathing	x			x	
Cardiac	Coughing	x	x	n/a	n/a	
Cardiac	Abnormal lung sounds					Panels 1 and 2
Dental	Visible tooth and/or gum disease	x	x	n/a	n/a	
Dental	Jaw - undershot / overshot	x	x	n/a	n/a	
Digestive	Pot belly / distended abdomen		x	x		
Digestive	Intestinal sounds - reduced / stasis					Panels 1 and 2
Digestive	Constipation / straining to defecate	x				Panel 2 only
Endocrine	Enlarged thyroid					Panels 1 and 2
Immunological	Enlarged lymph node			x		Panel 2 only
Integument	Alopecia or hair loss	x	x	n/a	n/a	
Integument	Dermatitis	x	x	n/a	n/a	

Integument	Infected discharge or abscess	x	x	n/a	n/a	
Integument	External ear conditions (e.g. otitis externa, mites)	x	x	n/a	n/a	
Integument	Skin redness / inflammation of the skin	x	x	n/a	n/a	
Integument	Foot soreness or infection	x	x	n/a	n/a	
Integument	Fur needing cleaning / dematting	x	x	n/a	n/a	
Integument	Overgrooming	x	x	n/a	n/a	
Integument	Wound - bite	x	x	n/a	n/a	
Integument	Wound - cut	x	x	n/a	n/a	
Integument	Wound - surgical	x	x	n/a	n/a	
Integument	Lick granuloma	x	x	n/a	n/a	
Integument	Visible / external masses or lumps	x	x	n/a	n/a	
Integument	Hernia - umbilical	x	x	n/a	n/a	
Musculoskeletal	Muskuloskeletal pain, lameness	x			x	
Musculoskeletal	Back pain			x		Panel 2 only
Musculoskeletal	Patella - luxation					Panels 1 and 2
Musculoskeletal	Tail - corkscrew or deformed or kink	x	x	n/a	n/a	
Neurology	Head tilt	x	x	n/a	n/a	
Ocular	Eyelid abnormality		x	x		
Ocular	Corneal ulcer recognition (+/- fluorescein)		x	x		
Ocular	Retinal damage or change or haemorrhage or detachment					Panels 1 and 2
Ocular	Third eyelid abnormality		x	x		
Ocular	Other external eye abnormality		x	x		
Parasites	Endoparasites suspected / confirmed	x	x	n/a	n/a	
Parasites	Ectoparasites	x	x	n/a	n/a	
Reproduction	Genital check / confirm sex	x	x	n/a	n/a	
Weight	Overweight	x	x	n/a	n/a	
Weight	Underweight	x	x	n/a	n/a	

x marks the round and panel at which consensus was reached
n/a = not applicable

Appendix 2: Full results from round one as provided to Panels 1 and 2 separately

Veterinary nurse prescribing research summary – Panel 1

Thank you for taking part in this research. We're very grateful to all our expert panel members for their contributions.

Background

The RCVS wanted to understand the risks of a health check being conducted by a veterinary nurse prescriber. We first commissioned some research which described the most common clinical conditions presenting in vaccine consultations for dogs, cats and rabbits (both juvenile and senior adult).

Using SAVSNET data, a stratified random sample of 1,100 young dog, 1,100 old dog, 800 young cat, 800 old cat, 300 young rabbit and 300 old rabbit vaccine consultations was made for inclusion. A SAVSNET researcher read through the clinical narratives for each of the events. Of these vaccine consultations, 72% recorded additional problems in the clinical notes.

SAVSNET identified 539 relevant conditions. These were reduced using the following criteria:

- Repetitious categories and categories that could be grouped
- Conditions likely to be identified by owner (for example, behavioural, diarrhoea)
- Conditions recorded only once or twice
- Discussions between owner and vet or with no observation of the condition
- Procedure or treatment
- Clinical sub-category too vague

From the initial long list, 43 common conditions were identified. These were presented to you in the first questionnaire.

Method

This project uses a two-round modified Delphi methodology. Both rounds consist of an online questionnaire of around 20 to 30 minutes. The aim of a Delphi methodology is to establish a consensus. Questionnaires go to an expert panel.

In the first round of the research, we initially asked you whether a veterinary nurse could recognise each of 43 conditions at a consultation with a new client. The nurse in question was described as "currently working in small-animal practice, with five years' clinical experience after registration, [and] used to seeing and discussing common conditions." The question asked was: "In your opinion, what is the likelihood that this veterinary nurse would be able to recognise that there was a problem that required the attention of a veterinary surgeon?" You were also asked to assess the risks if a condition was not recognised.

In this second round we will feedback the results from the first round survey and collect further opinions. Conditions where there was a consensus on vet nurse recognition will be removed. Each panel member will receive a summary of scores and qualitative feedback from round one, as well as a copy of their own responses. Panel members will then be asked to respond again (to a shortened questionnaire including only those questions on which no consensus was reached) using their own expertise and the information from round one.

The panel

The response to our initial invitation was high, so we have brought together two separate expert panels. Invitations were sent to a random sample of vet and vet nurse professionals who have been qualified for between 10 and 20 years and work for a PSS accredited VN training practice.

You were randomly assigned to Panel 1.

Panel 1 has 16 members, all of whom are in clinical practice. Fifteen members work with small animals; five work with zoo animals or wildlife; and three work with farm animals. All work in first opinion practice. Twelve members of Panel 1 are vets and four are nurses.

Results

Panel members were asked to rate ability to recognise conditions on a scale of 0 to 10. For the purposes of establishing consensus, the numbers 7 to 10 have been treated as agreement that an experienced vet nurse would be able to recognise that there was a problem that required the attention of a vet. The numbers zero to three have been treated as disagreement. The numbers four to six (inclusive) have been treated as neutral. If every panel member either agrees or disagrees that an experienced vet nurse would recognise the named condition, it is clear that a complete consensus has been reached. Where 80% (or 13 out of 16 panellists) were in agreement, this has also been treated as consensus for the purposes of this research.

Complete consensus	80% of panellists (13 out of 16) in agreement
1. Coughing	1. Breed pre-disposed to respiratory problems
2. Alopecia or hair loss	2. Visible tooth and/or gum disease
3. Dermatitis	3. Jaw - undershot or overshot
4. Infected discharge or abscess	4. Constipation / straining to defecate
5. Skin redness / inflammation of the skin	5. External ear (e.g. otitis externa, mites)
6. Fur needing cleaning or dematting	6. Foot soreness or infection
7. Wound - surgical	7. Musculoskeletal pain, lameness
8. Visible/external masses or lumps	8. Overgrooming
9. Head tilt	9. Wound - bite
10. Ectoparasites	10. Wound - cut
	11. Lick granuloma
	12. Hernia - umbilical
	13. Tail - corkscrew or deformed or kink
	14. Endoparasites suspected or confirmed
	15. Genital check / confirm sex
	16. Overweight
	17. Underweight

For all of these conditions, there was a panel consensus that a vet nurse would recognise whether the attention of a vet is required. For one other condition, hearing, panel comments suggested the condition was difficult to assess in a consultation, and that it would only be investigated after owner report. Furthermore, the risk of harm was considered low. It has therefore been dropped from round two of this study.

This leaves 14 conditions for your further consideration:

1. Irregularity of heart rhythm
2. Heart murmur
3. Abnormal lung sounds
4. Pot belly / distended abdomen
5. Intestinal sounds - reduced / stasis
6. Enlarged thyroid
7. Enlarged lymph node
8. Back pain
9. Patella - luxation
10. Eyelid abnormality
11. Corneal ulcer (+/-fluorescein)
12. Other external eye abnormality
13. Retinal damage/change/haemorrhage/detachment
14. Third eyelid abnormality

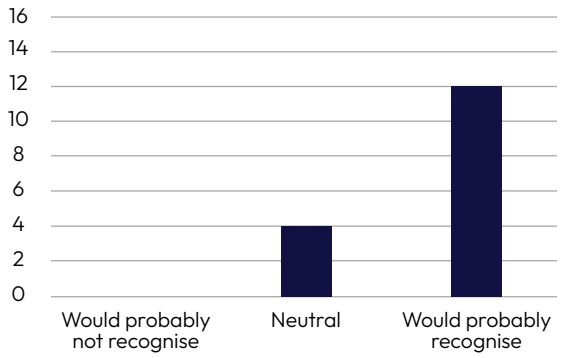
In the following pages, you will find a detailed report showing panel responses on these 14 conditions, alongside your original ratings. Responses include:

- Likelihood of a vet nurse recognising that the attention of a vet surgeon is required.
- Level of harm if a vet surgeon is not consulted.
- A summary of comments from panellists, including illustrative quotes. On likelihood, panellists were only asked to comment if they thought it less likely that a vet nurse would recognise that the condition required the attention of a vet. The comments have been edited for spelling and grammar, and illustrative quotes have been chosen for this report.
- Your own rankings from the round one questionnaire.

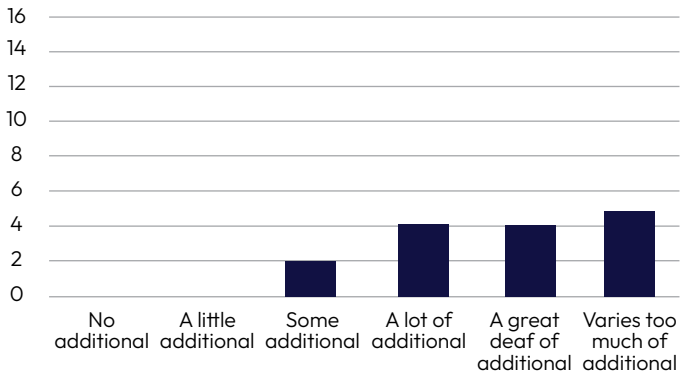
Please read through this report carefully before responding to the round two online questionnaire. If you need a printed copy of this report to be posted to you this can be arranged: please email research@rcvs.org.uk with your preferred address.

Irregularity of heart rhythm

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Recognition is experience dependent, but this would probably be recognised.

- "Nurses don't routinely check hearts in [a] consult, [but] I believe we can pick up on these if we do more regularly."
- "I think heart murmurs are well detected but irregularities in heart rhythm can be subtle and easily missed depending on the length of time auscultation takes place for."

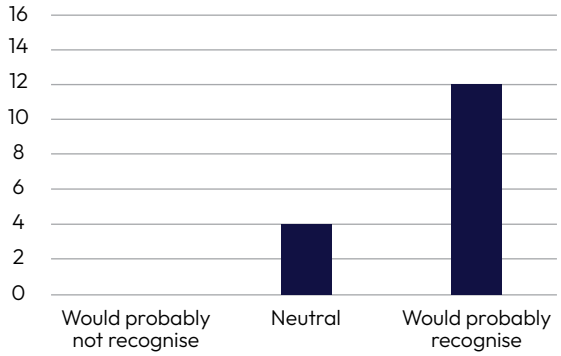
Risk of additional harm from a missed diagnosis is variable but may be high.

- "... if an acute heart defect is not treated this could cause further issues."
- "Could be clinically relevant or irrelevant."
- "Depends on the severity."
- "Some heart rhythm disturbances can lead to sudden death."

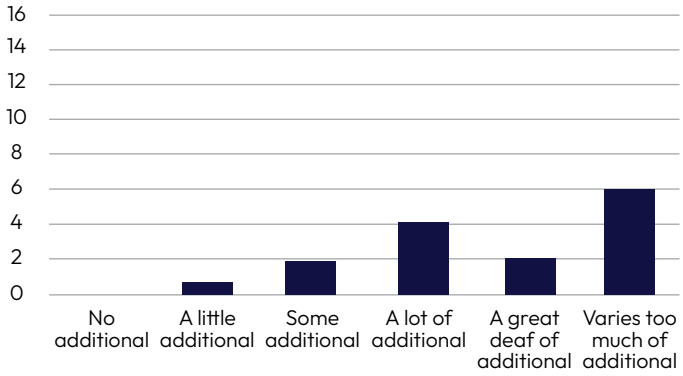
You rated this:

Heart murmur

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

This would probably be recognised but it depends on the grade of murmur and the experience of the vet nurse.

- "I have found that nurses when monitoring anaesthesia are very good at picking up irregularities in rhythm and murmurs but not very able to classify them so I think they would generally notice there was an issue but would still need a vet to examine the patient as well to say what type of irregularity or murmur was present.

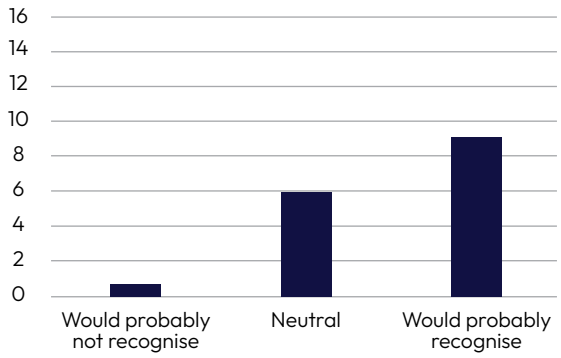
Risk of additional harm is variable but may be high.

- "Sometimes animals have heart conditions that they have lived with and these are only noticed by vets later in life."
- "Risk of missing fatal underlying disease."
- "This can vary from utterly benign to significant."
- "Delay in treatment for CHF can shorten life expectancy."

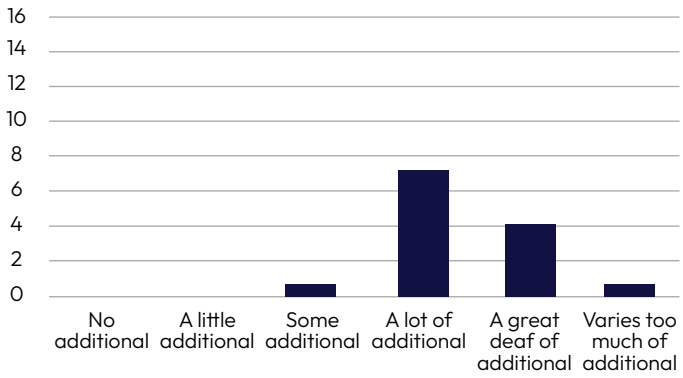
You rated this:

Abnormal lung sounds

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Vet nurses require experience to recognise subtle abnormalities.

- "Assessment of lung sounds can be challenging, particularly when abnormalities are subtle or intermittent. Even with experience, confidence and accuracy depend heavily on exposure, quality of training, and opportunity to regularly auscultate a wide range of cases."
- "I don't see many nurses listening to the lungs."
- "The subtleties of abnormal lung sounds can take a good number of years listening to abnormal patients before I would be confident that a young vet or experienced nurse would be able to easily pick this up."

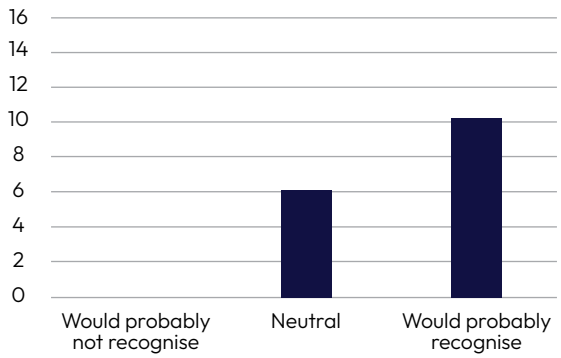
Risk of additional harm is high.

- "This could lead to serious health issues."
- "Indication of underlying disease likely to escalate if missed."
- "Abnormal lung sounds may indicate significant lower respiratory or cardiac disease."

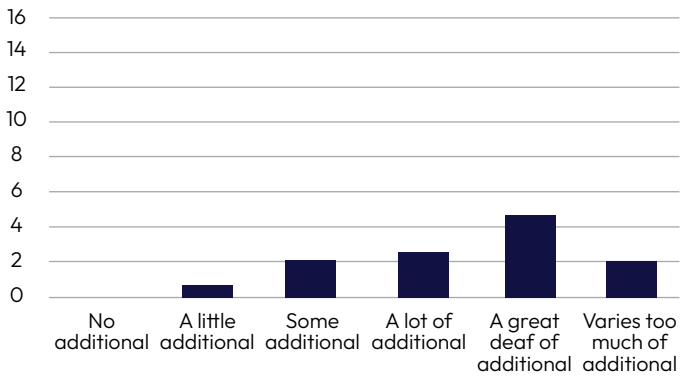
You rated this:

Pot belly / distended abdomen

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

This would probably be recognised, but it can be difficult to tell the difference between a fat dog and one with fluid accumulation.

- "... confidence can vary significantly depending on caseload, mentoring, and whether they are routinely involved in physical examinations..."
- "Might be missed as being fat."
- Risk of additional harm from a missed diagnosis is variable but may be high.
- "Causes of abdominal distension can be extremely serious so missing this does have fairly serious potential outcomes."

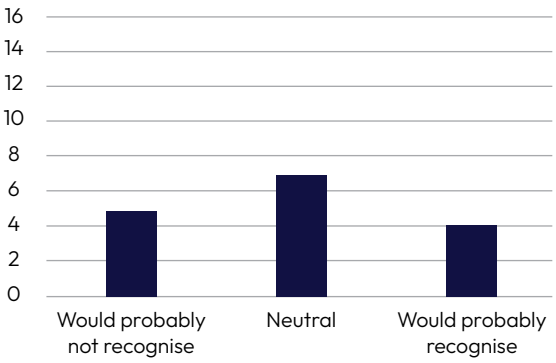
The risk of additional harm is variable but may be high.

- "Failure to recognise this could delay diagnosis of potentially life-threatening conditions, resulting in significant additional harm."

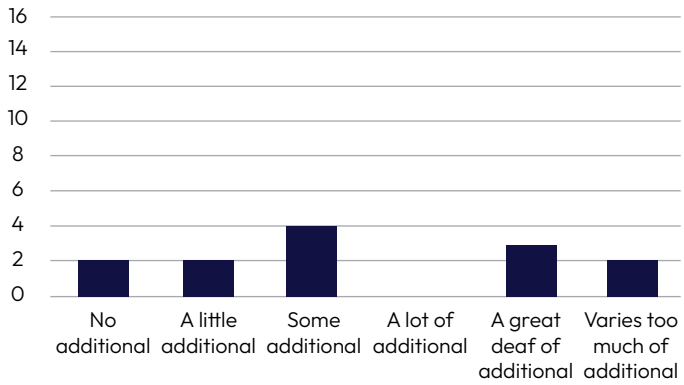
You rated this:

Intestinal sounds – reduced / stasis

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Recognition of reduced intestinal sounds is outside the experience of many vet nurses. Many vets would not check for this unless the owner expressed concern.

- "I don't think many nurses regularly listen to gut sounds and as such recognising normal vs abnormal may be difficult."
- "Not part of a routine health check if no issues are reported by owner."
- "Sometimes it's hard to hear gut sounds especially in rabbits. However, you would take into consideration other assessments and owner history."

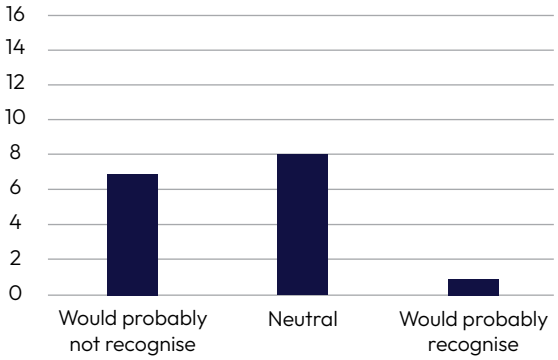
Risk of additional harm is very species dependent.

- "May be life threatening e.g. for a rabbit."
- "This would be dependent on species. More serious in small herbivores than in cats/dogs for instance."

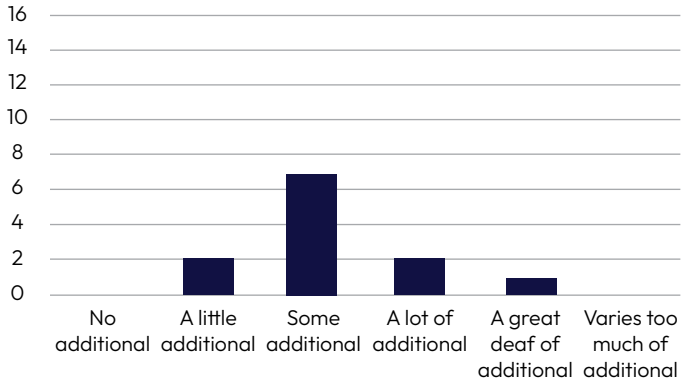
You rated this:

Enlarged thyroid

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Recognition of enlarged thyroid is not part of a routine vet nurse health check so vet nurses would lack experience in this area. However, they would recognise other relevant clinical signs as a reason for referral to a vet surgeon.

- "...I doubt many nurses would palpate thyroids regularly and as such would be unlikely to recognise normal vs abnormal."
- "More likely to suspect thyroid issues through history taking / weight / heart / behaviour changes."
- "Nurses may identify obvious abnormalities but may be less confident recognising subtler changes..."

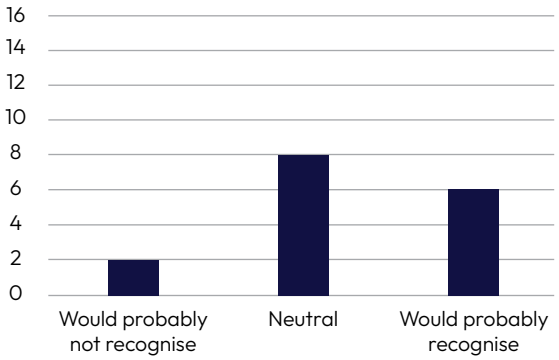
There is a risk of additional harm, but the underlying condition is likely to be picked up from other clinical signs.

- "This could cause further issues if not treated."
- "An animal with an enlarged thyroid which may be difficult to pick up on exam is likely to display other clinical signs which would likely flag this animal for further investigation."
- "An enlarged thyroid may reflect clinically significant endocrine disease with systemic effects"
- "Likely to be other symptoms in a hyperthyroid animal but still an important part of justifying thyroid blood tests."

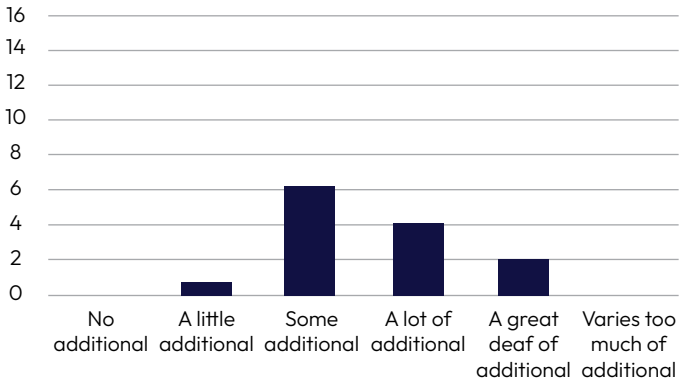
You rated this:

Enlarged lymph node

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Recognition of an enlarged lymph node would depend on the vet nurse's experience.

- "...vet nurses would lack experience in this area."
- "With lymphoma cases it can be very obvious but a lot of the time it is subtle and you need the knowledge of anatomy to say it is a lymph node, not a salivary gland or lipoma."
- "Depends on the lymph node – can be challenging for vets too."

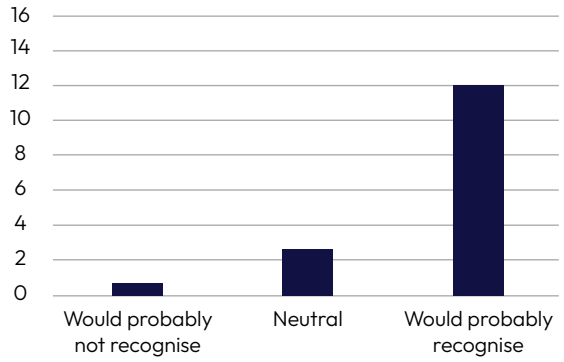
There is a risk of additional harm, particularly if the underlying condition is lymphoma.

- "Underlying differentials may be severely debilitating or early phase of serious illness."
- "Missing this finding could result in delayed investigation of serious underlying conditions, with potential for disease progression and significant harm."
- "This would be dependent on whether a single lymph node or multiple are affected and whether other clinical signs were evident e.g. swelling/PUPD etc."

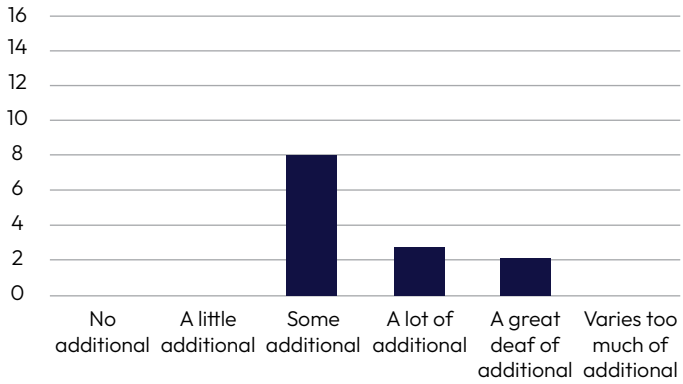
You rated this:

Back pain

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Back pain can be challenging to recognise but most RVNs would recognise it in most animals.

- "[A] five-year qualified nurse may not have checked for back pain. It would usually be presented for a vet appointment."
- "These are tricky as they look very similar to abdominal pain. I imagine the nurse would notice there was a problem but would need a vet's input to further categorise it."
- "They might miss some of the subtle gait or postural changes associated with low grade back pain."

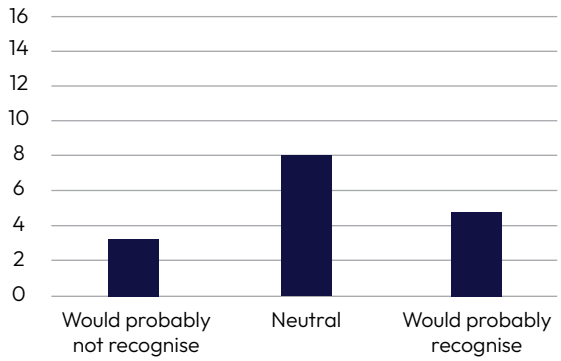
There is a risk of additional harm, and that an animal will remain untreated and in pain.

- "Risk of delayed management of spinal disease which can affect outcome."
- "Although most cases will be mild/self-resolving does have potential to be extremely serious."
- "Depends a lot on severity but animal will be left in pain until condition is addressed."

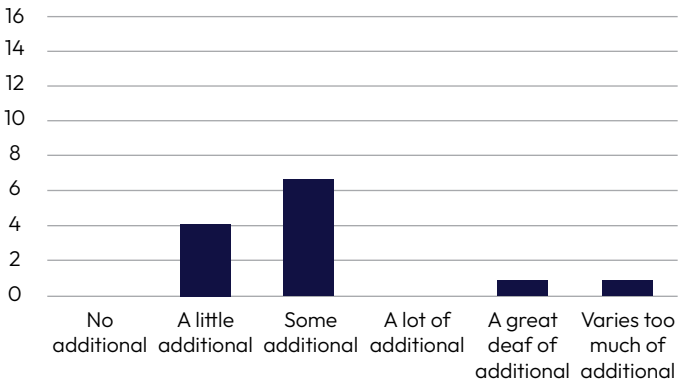
You rated this:

Patella – luxation

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Vet nurses may not have the training and experience to recognise a patellar luxation.

- "I don't think nurses regularly luxate patellae, so would need to learn this skill."
- "Sometimes very obvious and sometimes not. Generally not a thing nurses currently look for or have much experience of in my clinic."
- "Whilst I would imagine a nurse would be able to pick up on the lameness associated with a patella luxation, palpation of the patella itself, I suspect, may require veterinary involvement."

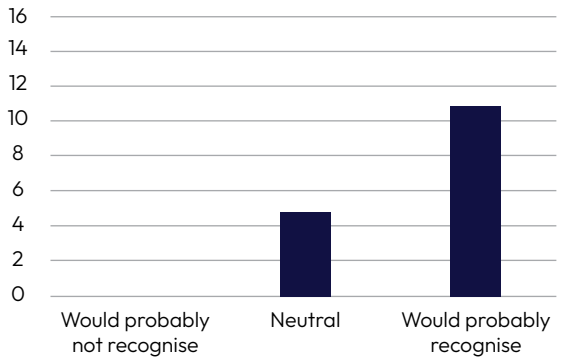
There is some risk of additional harm, but not all patellar luxation requires treatment.

- "In most cases this is non painful and a congenital issue. If a traumatic location then may be painful and left untreated will cause prolonged lameness and pain."

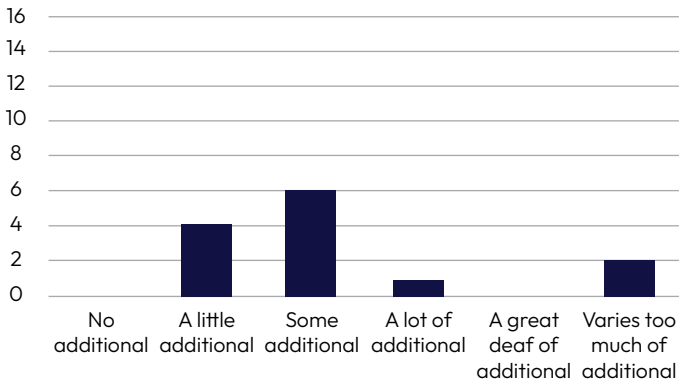
You rated this:

Eyelid abnormality

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Most would be recognised by most vet nurses, but some might be missed.

- "Depends on the abnormality..."
- "...deciding if intervention is required can be difficult."

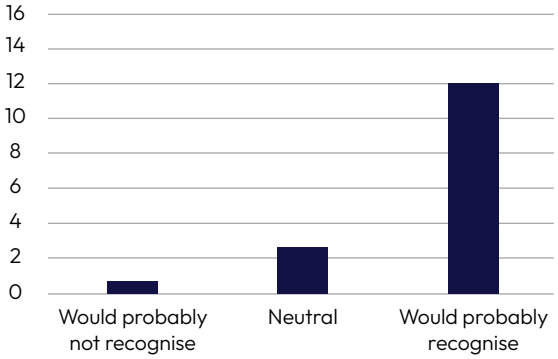
There is a risk of additional harm from some abnormalities.

- "Depending on what the abnormality is this could cause discomfort/pain."
- "If entropion this can be very painful and lead to ulceration."

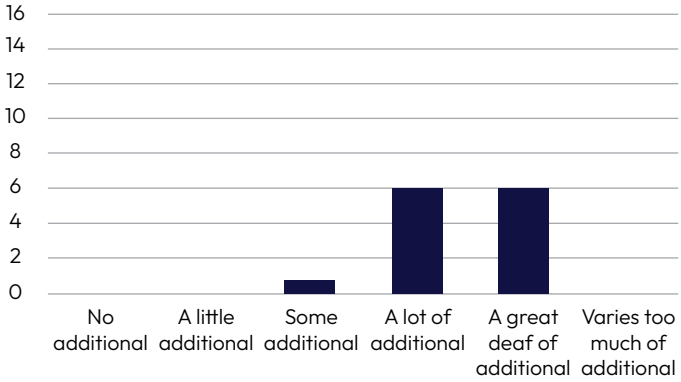
You rated this:

Corneal ulcer (+/-fluorescein)

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Most would be referred to a vet by most vet nurses. Diagnosis would then often require the use of fluorescein.

- Wouldn't expect a nurse to administer fluorescein before consulting a vet..."
- "While corneal ulcers may be suspected based on clinical signs... confirmation often relies on fluorescein staining"

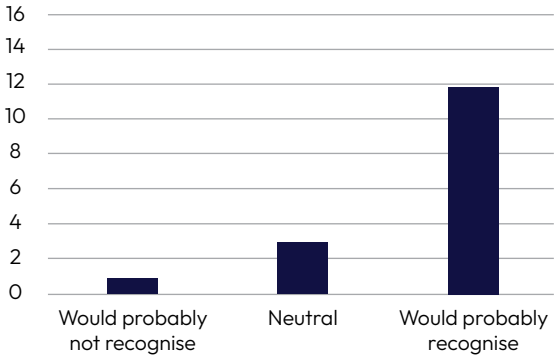
Risk of additional harm is high if the condition is not recognised.

- This could get worse in time and cause further issues with the eye if not treated."
- "Could lose the eye and experience significant pain if treatment is delayed."

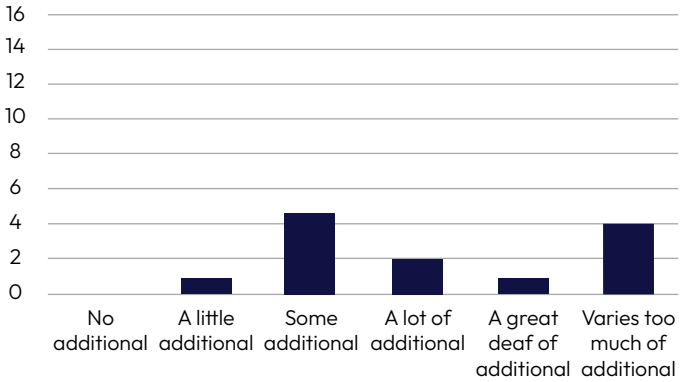
You rated this:

Other external eye abnormality

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Most would be recognised by most vet nurses, but it would depend on the abnormality.

- "External ocular abnormalities can vary widely in appearance and significance, and some changes may be subtle or non-specific..."
- "This category stems a bit vague making it hard to say if they would recognise it or not but they would likely spot any masses."

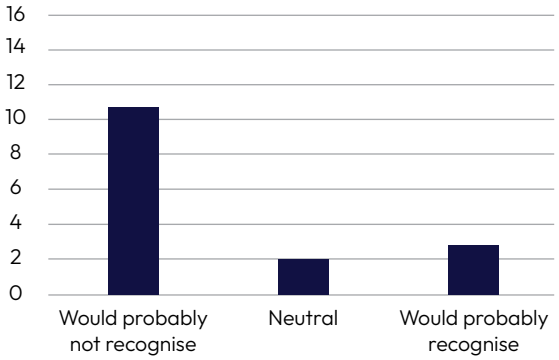
There is a variable risk of harm.

- "Depending on the abnormality eyes are usually fragile and need treatment. However, lumps on the eyelid possibly not so much needing treatment unless owner wants it removing, if not causing any issues with eye."
- "Adenomas aren't too serious but can also get melanomas in this location and removal when small improves outcomes."

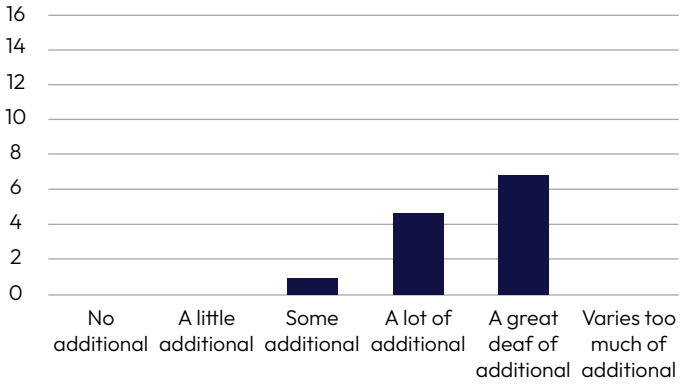
You rated this:

Retinal damage / change / haemorrhage / detachment

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Ophthalmoscopy would be required for these conditions, and this is not something vet nurses are used to doing.

- "Depends on how involved they have been with vets doing ocular exams in the past e.g, geriatric cat clinics."
- "Eye abnormalities are not something that most nurses are experienced with - but would likely know when vet referral is required."
- "I would doubt many nurses have experience of carrying out a proper ophthalmic examination with a scope."

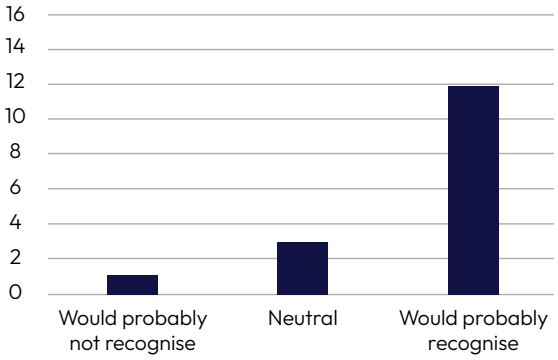
Risk of additional harm is high if the condition is not recognised.

- Could lose the eye and experience significant pain if treatment is delayed."
- "May lead to loss of eye function and in many cases often represents a condition that can affect the other eye and systemic health."
- "If acute retinal detachment there is potential for some reattachment if underlying issue promptly addressed."

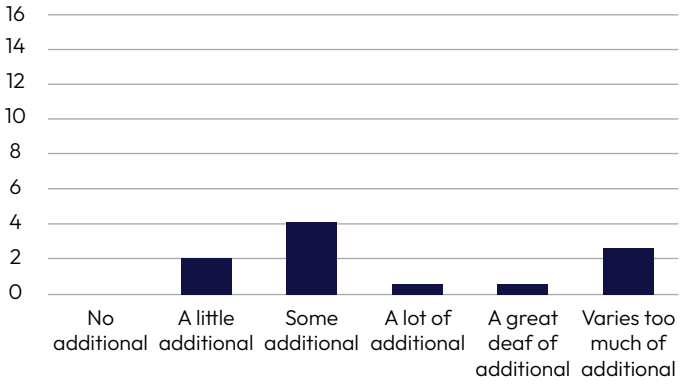
You rated this:

Third eyelid abnormality

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Most vet nurses would recognise most abnormalities, but it would be linked to severity.

- "Abnormalities of the third eyelid can be subtle [or] intermittent..."
- "Nurse dependent."

There is a variable risk of harm.

- Depending on what caused issues (such as conjunctivitis) it can rectify on own. However, trauma or foreign body would need treatment."
- "Likely to be causing ongoing inflammation and discomfort."

You rated this:

Glossary of terms used in panel responses

CHF	Congestive heart failure
PUPD	Polyuria/polydipsia

Round two

The purpose of this research is to establish the edges of the professional consensus on the conditions a vet nurse might refer on to a vet surgeon when carrying out a health check. The findings will be used as a basis for future consultation with the professions, and to shape policy around vet nurse training and advanced vet nurse qualifications.

The survey for round two will therefore contain more detail, including detail about what experience or training a vet nurse should have before carrying out a health check.

The results of round two, along with the rest of the research, will be published in the summer. You will be sent a copy before publication.

Veterinary nurse prescribing research summary – Panel 2

Thank you for taking part in this research. We're very grateful to our expert panel members for their contributions.

Background

The RCVS wanted to understand the risks of a health check being conducted by a veterinary nurse prescriber. We first commissioned some research which described the most common clinical conditions presenting in vaccine consultations for dogs, cats and rabbits (both juvenile and senior adult).

Using SAVSNET data, a stratified random sample of 1,100 young dog, 1,100 old dog, 800 young cat, 800 old cat, 300 young rabbit and 300 old rabbit vaccine consultations was made for inclusion. A SAVSNET researcher read through the clinical narratives for each of the events. Of these vaccine consultations, 72% recorded additional problems in the clinical notes.

SAVSNET identified 539 relevant conditions. These were reduced using the following criteria:

- Repetitious categories and categories that could be grouped
- Conditions likely to be identified by owner (for example, behavioural, diarrhoea)
- Conditions recorded only once or twice
- Discussions between owner and vet or with no observation of the condition
- Procedure or treatment
- Clinical sub-category too vague

From the initial long list, 43 common conditions were identified. These were presented to you in the first questionnaire.

Method

This project uses a two-round modified Delphi methodology. Both rounds consist of an online questionnaire of around 20 to30 minutes. The aim of a Delphi methodology is to establish a consensus. Questionnaires go to an expert panel.

In the first round of the research, we initially asked you whether a veterinary nurse could recognise each of 43 conditions at a consultation with a new client. The nurse in question was described as "currently working in small-animal practice, with five years' clinical experience after registration, [and] used to seeing and discussing common conditions." The question asked was: "In your opinion, what is the likelihood that this veterinary nurse would be able to recognise that there was a problem that required the attention of a veterinary surgeon?" You were also asked to assess the risks if a condition was not recognised.

In this second round we will feedback the results from the first round survey, and collect further opinions. Conditions where there was a consensus on vet nurse recognition will be removed. Each panel member will receive a summary of scores and qualitative feedback from round one, as well as a copy of their own responses. Panel members will then be asked to respond again (to a shortened questionnaire including only those questions on which no consensus was reached) using their own expertise and the information from round one.

The panel

The response to our initial invitation was high, so we have brought together two separate expert panels. Invitations were sent to vet and vet nurse professionals who have been qualified for between 10 and 20 years and work for a PSS accredited VN training practice.

You were randomly assigned to Panel 2.

Panel 2 has 16 members, all of whom are active in small animal clinical practice. Two members work with zoo animals or wildlife. One member works with farm animals. The majority (14 out of 16) are active in first opinion practice. Four members are active in referral practice. Two members also work for an out-of-hours service provider. Eleven members of Panel 2 are vets and five are nurses.

Results

Panel members were asked to rate ability to recognise conditions on a scale of 0 to 10. For the purposes of establishing consensus, the numbers 7 to 10 have been treated as agreement that an experienced vet nurse would be able to recognise that there was a problem that required the attention of a vet. The numbers zero to three have been treated as disagreement. The numbers four to six (inclusive) have been treated as neutral. If every panel member either agrees or disagrees that an experienced vet nurse would recognise the named condition, it is clear that a complete consensus has been reached. Where 80% (or 13 out of 16 panellists) were in agreement, this has also been treated as consensus for the purposes of this research.

Complete consensus	80% of panellists (13 out of 16) in agreement
11. Coughing	1. Irregularity of heart rhythm
12. Visible tooth and/or gum disease	2. Jaw - undershot or overshot
13. Alopecia or hair loss	3. Pot belly / distended abdomen
14. Dermatitis	4. Lick granuloma
15. Infected discharge or abscess	5. Tail - corkscrew or deformed or kink
16. External ear (e.g. otitis externa, mites)	6. Head tilt
17. Skin redness / inflammation of the skin	7. Eyelid abnormality
18. Foot soreness or infection	8. Corneal ulcer (+/-fluorescein)
19. Fur needing cleaning or dematting	9. Other external eye abnormality
20. Overgrooming	10. Third eyelid abnormality
21. Wound - bite	11. Genital check / confirm sex
22. Wound - cut	
23. Wound - surgical	
24. Visible/external masses or lumps	
25. Hernia - umbilical	
26. Endoparasites suspected or confirmed	
27. Ectoparasites	
28. Overweight	
29. Underweight	

For all of these conditions, there was a panel consensus that a vet nurse would recognise whether the attention of a vet is required. For one other condition, hearing, panel comments suggested the condition was difficult to assess in a consultation, and that it would only be investigated after owner report. Furthermore, the risk of harm was considered low. It has therefore been dropped from round two of this study.

This leaves 12 conditions for your further consideration:

1. Heart murmur
2. Breed pre-disposed to respiratory problems
3. Noisy breathing
4. Abnormal lung sounds
5. Intestinal sounds - reduced / stasis
6. Constipation / straining to defecate
7. Enlarged thyroid
8. Enlarged lymph node
9. Musculoskeletal pain, lameness
10. Back pain
11. Patella - luxation
12. Retinal damage / change / haemorrhage / detachment

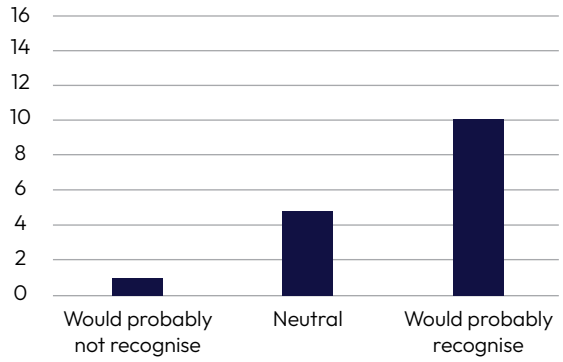
In the following pages, you will find a detailed report showing panel responses on these 12 conditions, alongside your original ratings. Responses include:

- Likelihood of a vet nurse recognising that the attention of a vet surgeon is required.
- Level of harm if a vet surgeon is not consulted.
- Comments from panellists. Please note, on likelihood, panellists were only asked to comment if they thought it less likely that a vet nurse would recognise that the condition required the attention of a vet. The comments have been lightly edited for spelling and grammar, and sorted into alphabetical order.
- Your own rankings from the round one questionnaire.

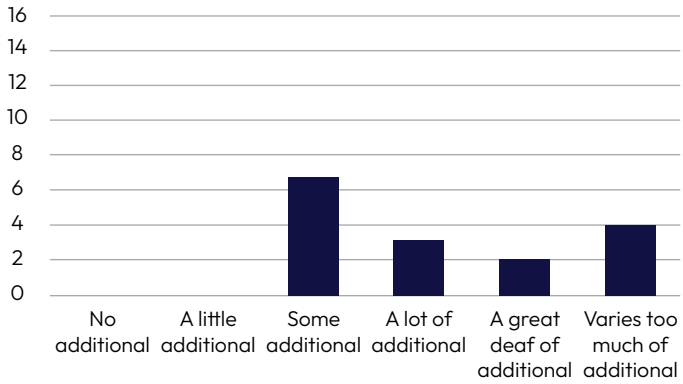
Please read through this report carefully before responding to the round two online questionnaire. If you need a printed copy of this report to be posted to you this can be arranged: please email research@rcvs.org.uk with your preferred address.

Heart murmur

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

This would probably be recognised but it depends on the grade of murmur and the experience of the vet nurse.

- "Low grade murmurs might be harder to pick up. I think they would be likely to pick up many murmurs however."
- "Not all nurses or inexperienced vets are confident with auscultation and often want a second opinion from an experienced vet."
- "Thinking about the five-year qualified RVNs I work with, I feel the majority would struggle to be the first to hear, or admit they hear a grade 2 or lower heart murmur. As the question was unclear about the grade and given the client had no preexisting concerns, I feel this would be difficult based on GP experience."

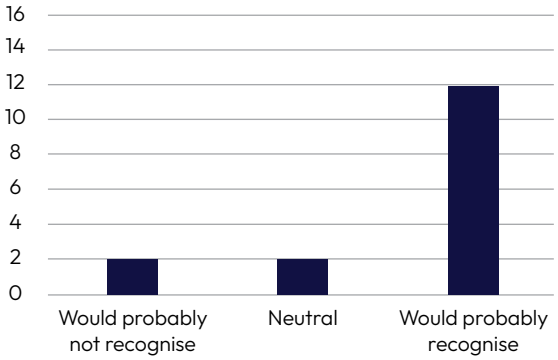
Risk of additional harm is variable but may be high. However, the likelihood of recognising clinically significant murmurs is greater than the likelihood of recognising harmless ones.

- "Undetected this could lead to manageable heart conditions being missed."
- "... there is too much variation in clinical significance to say how much harm could be done. An innocent murmur on a puppy vaccination is very different to a grade 6 murmur in a predisposed breed for cardiac disease."
- "I would expect them to be able to determine a loud heart murmur which is more likely to be detrimental to the overall health of the patient as it is more likely to be an indicator of heart failure..."

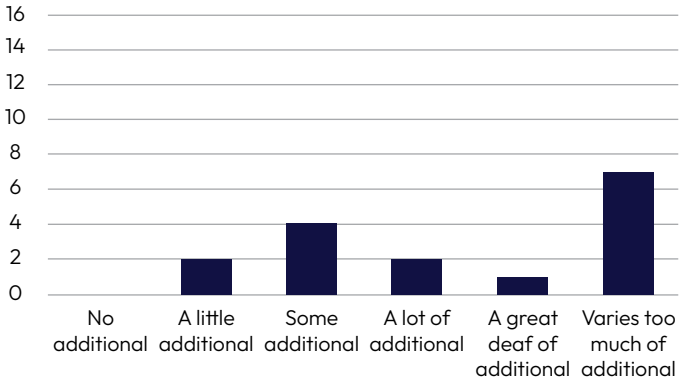
You rated this:

Breed pre-disposed to respiratory problems

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Common issues are easy to identify, but conversations with pet owners about these conditions can be difficult.

- "Difficult to know all different breed issues. The common ones would be easier to identify but again would need to refer to vet for diagnosis if any concerns."
- "I find that nurses may be less confident to go against client impressions of 'this is normal for the breed' and have discussions about breed associated BOAS etc."
- "My Head RVN and surgical team would easily recognise this as we regularly perform BOAS surgeries and so they are looking for it. The RVN course does not adequately prepare the RVNs in training to recognise this. Our puppy courses and socialisation classes are nurse led, and this topic is rarely, if ever discussed. It is more likely picked up and discussed at the first annual vaccinations that take place with a vet."

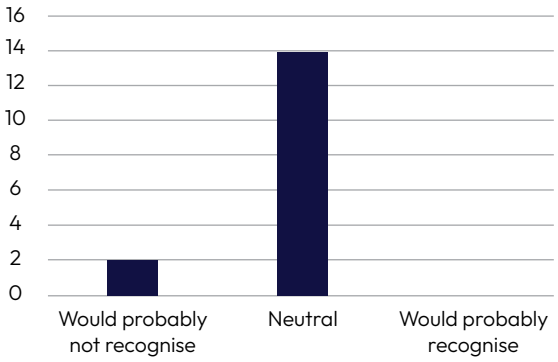
There is a variable risk of additional harm from missing this condition.

- "Warm weather could lead to dyspnoea if owner is not warned of potential problems."
- "No real urgency in detecting."
- "BOAS is life saving and often missed."

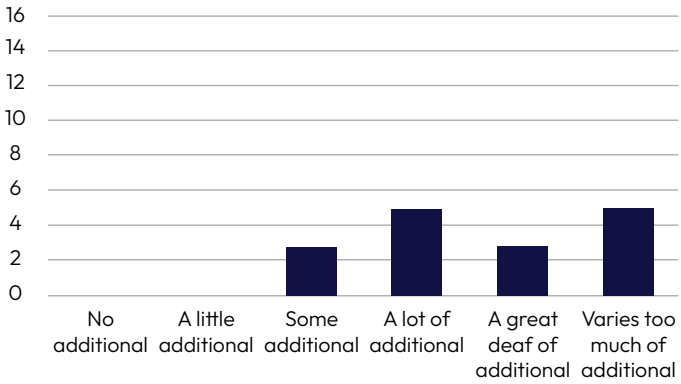
You rated this:

Noisy breathing

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

There was no agreement on the likelihood of a vet nurse recognising noisy breathing as a condition to refer to a vet.

- "A number of my nurses would ask me to listen as 'something didn't sound right' during a TPR, but these are all the more experienced nurses that have worked a long time in practice with more training / extra qualifications. I don't think an RVN with only five years and general CPD would necessarily pick this up."
- "I think stertor would be easy for many nurses to pick up (i.e. BOAS, or laryngeal paralysis) but more subtle lung sounds (or defining the absence of normal lung sounds) often takes a lot of practice. I think that most nurses are very practiced at taking respiratory and heart rates, but do not often thoroughly auscultate a chest with a view to finding abnormal lung sounds (as this is more aimed at diagnosis and therefore the remit of a VS at present)."

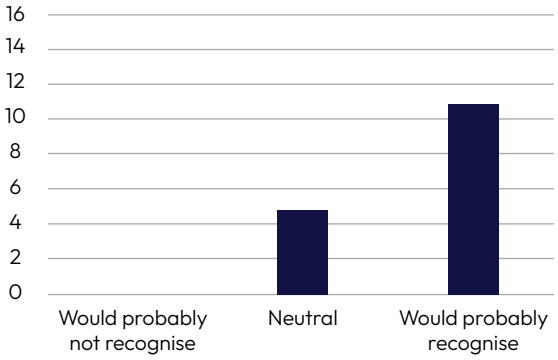
The risk of additional harm is variable but may be high.

- "... could be mildly affected to severe and life limiting."
- "Missing this could result in ... significant issues being missed - cardiac disease, laryngeal paralysis, BOAS, pneumonia, IPF, etc"
- "Could be anything from asthma or pneumonia to panting"
- "If breathing is noisy this should be investigated to avoid any harm to the patient."

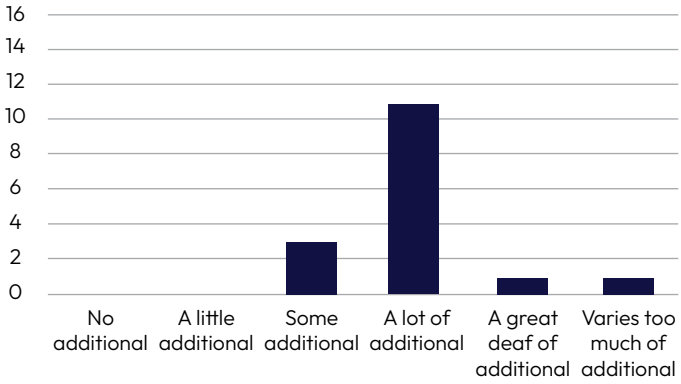
You rated this:

Abnormal lung sounds

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Vet nurses require experience to recognise subtle abnormalities.

- "I would personally find this difficult as it's not an area I'm confident in."
- "This is not something that nurses are typically trained to assess as normal/abnormal - changes can be quite subtle and often [a case like this] is passed to a vet to assess."
- "Very vague term, especially if client has not reported anything amiss…"

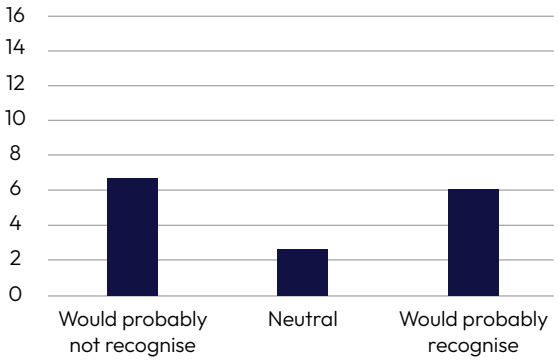
Risk of additional harm is high.

- "Respiratory compromise can be for a variety of reasons and is unlikely to ever self-resolve."
- "Abnormal lung sounds are often present in severe disease so likely to have advanced disease."
- "Could be a pleural effusion, asthma or just referred URT noise."

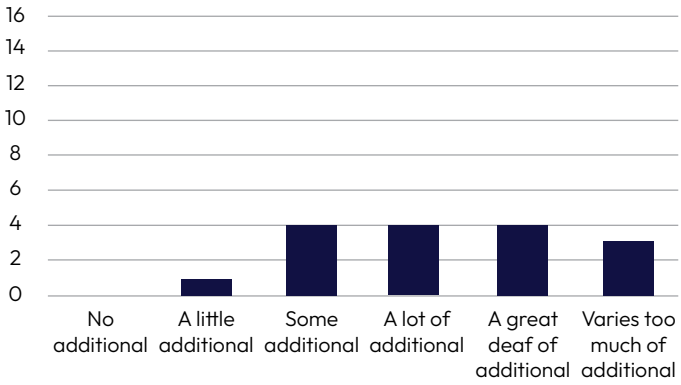
You rated this:

Intestinal sounds – reduced / stasis

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Recognition of reduced intestinal sounds is outside the experience of many vet nurses. Many vets would not check for this unless the owner expressed concern.

- "If a client had not reported concerns I would not expect to listen to intestinal sounds therefore would not expect a nurse to have any experience in this."
- "... not something veterinary nurses would routinely check for. However, if they had further training in this, this could be something which they can be taught to identify, the same as veterinary students are."
- "This wouldn't even be on the radar of our RVNs except specifically our exotics RVN, or the students she is teaching when we have rabbits hospitalised."

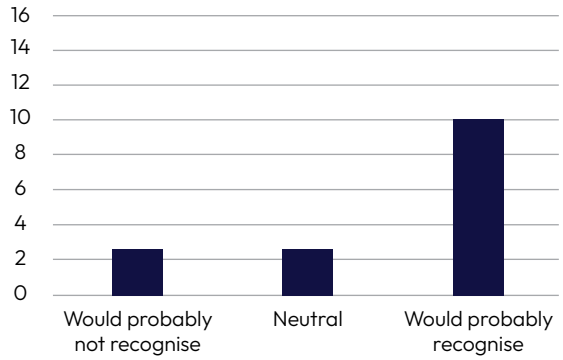
Risk of additional harm is very species dependent.

- "If stasis is present then it would have serious implications, but you would expect there to be other associated clinical signs..."
- "Could be a rabbit with stasis: that's surgical. Could be a GI foreign body in a dog. In a cat, it could be FAF. All of these require urgent ECC treatment."
- "This could lead to death in rabbits/guinea-pigs with reduced gut sounds/stasis."
- "If this is a rabbit this can be extremely serious but less serious in cat or dog but still needs to be investigated."

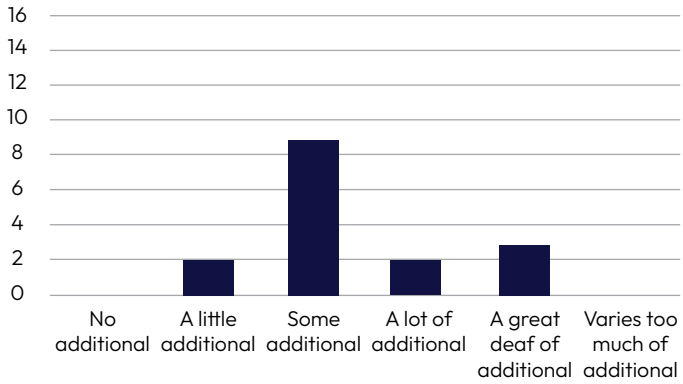
You rated this:

Constipation / straining to defecate

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

This would be more difficult to recognise without an owner report.

- "I think this is mainly a finding from the history rather than clinical examination."
- "My concern with this would be that this could be a symptom of a blocked bladder/urinary tract issue."
- "Without the owner mentioning constipation the nurse would be unlikely to perform a rectal exam or deep abdominal palpation."

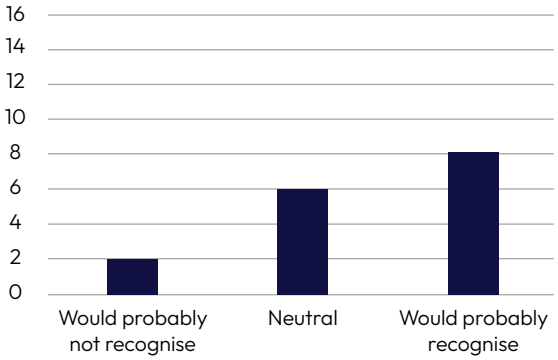
There is some risk of additional harm if the condition is not referred to a vet surgeon.

- "Short term unlikely to be serious if undiagnosed for 24-48hrs - longer term more serious."
- "Reasons for this need addressing urgently to prevent megacolon etc."
- "Likely to have been noticed by the client rather than in consult. Delayed treatment may make the severity worse."
- "Most owners would pick up on this and bring back."

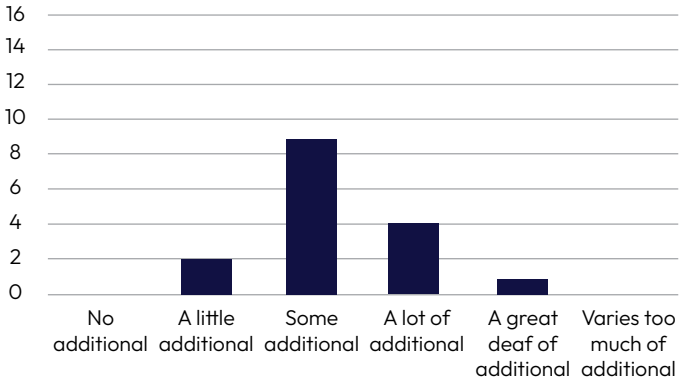
You rated this:

Enlarged thyroid

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Assessing for enlarged thyroid is not part of a typical vet nurse health check but it could be recognised alongside other signs.

- "Not a general thing for nurses to check. Many less experienced vets would also struggle."
- "This can be a subtle change, again, difficult for veterinary surgeons to palpate. However, I believe they would be able to identify the symptoms (e.g. increased appetite with weight loss) and recommend a veterinary surgeon consultation +/- blood testing."
- "This would depend on whether the nurse has suspicion for hyperthyroidism as to whether they would check for a goitre

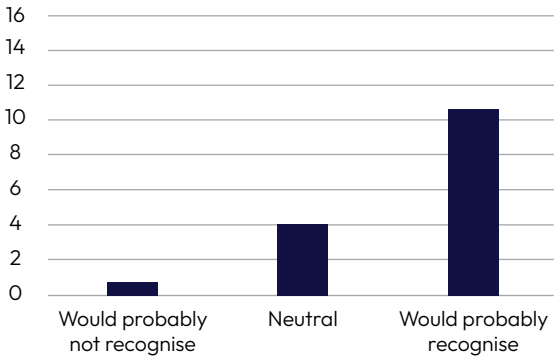
There is a risk of some additional harm if missed.

- "Left unrecognised as a chronic condition the patient would start to come to harm but not an emergency."
- "Not all enlarged thyroid glands are functionally overactive."
- "Being hyperthyroid leads to other conditions - prognosis of thyroid masses in dogs is also related to size so if missed and grows that would have a negative impact."

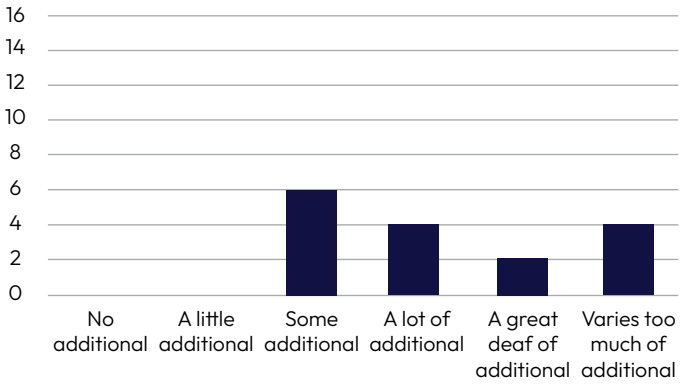
You rated this:

Enlarged lymph node

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

An enlarged lymph node would usually be recognised, and it is something for which RVNs could be trained.

- "... I have never had a nurse pick this up on a nurse clinic, only when trying to take bloods. Therefore, if trained to look for it, I suspect they would, but would not expect it currently."
- "Depending on the size and location, this would be a dead cert to notice a swelling. But some of the more subtle changes of some of the LNs would be missed, hence my score. I think RVNs would be easily educated on how to perform a thorough and complete clinical exam but the course would have to change its emphasis from its current state, where things such as filling a drip line only wasting three drips are a priority."
- "I think this would depend which node is affected. And again, this comes down to practice and experience."

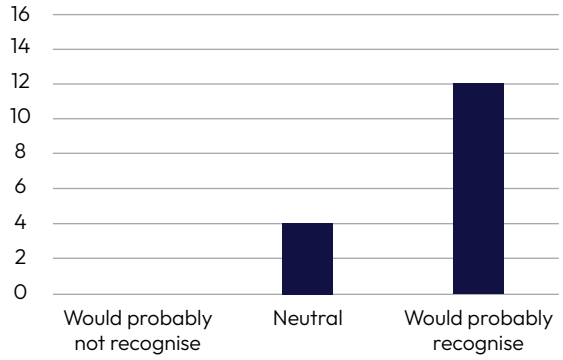
There is a variable risk of harm, and some misses would be significant.

- "Neoplasia, infection, inflammation are all likely to need urgent intervention by a veterinary surgeon."
- "Could be reactive or significant. So difficult to say if significant harm or not being missed."
- "Could be single, multiple, mild or moderate. Too many causes for lymphadenopathy to say."
- "Differentials range from totally benign change through to lymphoma."
- "Depends on cause but a delay in lymphoma diagnosis could seriously reduce life span if clients are wanting to treat due to the rapid nature of the disease."

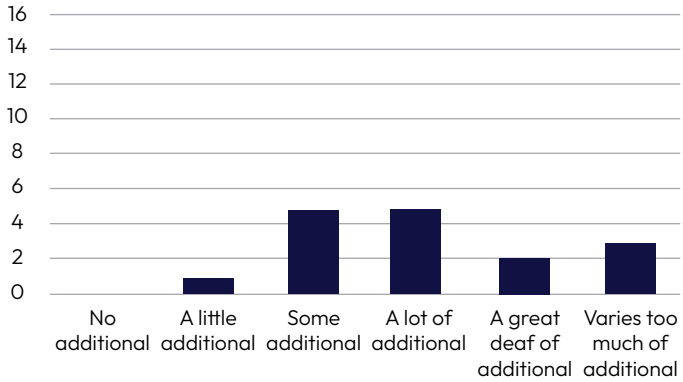
You rated this:

Musculoskeletal pain, lameness

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Most nurses would recognise this in most animals, though subtle lameness could be missed.

- "I suspect that significant pain would be no problem. More subtle lameness, bilateral lameness etc would be easily missed (to be fair by some vets as well)."
- "Nurses do not typically assess the musculoskeletal system for lameness."

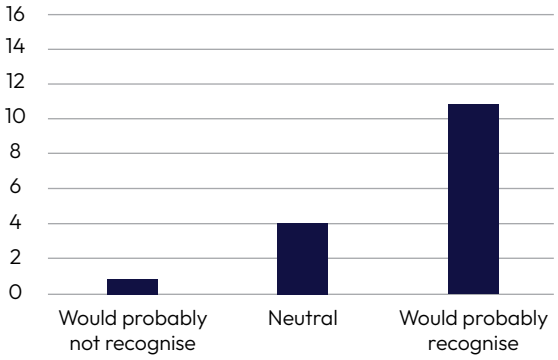
There is a variable risk of harm.

- "Could just be a sprain vs long term arthritis."
- "Animal in pain which could worsen and affect QOL."
- "If the animal is lame because it is arthritic then management can be tricky. Or is the lameness and pain because there is a fracture or tumour? Many variables."
- "Not uncommon for owners to accept it, being missed by a nurse prolongs discomfort but not life threatening."

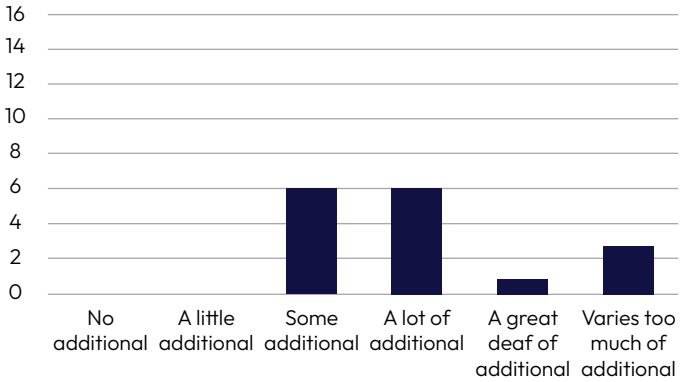
You rated this:

Back pain

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Back pain can be challenging to recognise but most RVNs would recognise it in most animals.

- "As an RVN I wouldn't necessarily do a full spinal check unless the owner mentioned concerns."
- "Can be mistaken for abdominal pain and vice versa."
- "Spinal palpation isn't usually carried out by a relatively newly qualified nurse, but again with training I think this is achievable. A more experienced nurse may notice signs of back pain and be able to examine."
- "This can be subtle and require specific methods of clinical examination, to differentiate from e.g. abdominal pain, orthopaedic pain."

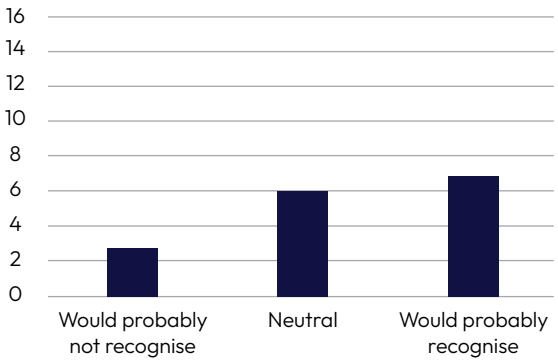
There is a risk of additional harm, particularly pain.

- "Painful so will affect quality of life, also back pain can be caused by long lasting life changing diseases."
- "If the animal is in pain the missing it could be harmful - if it is IVDD the treatment would be rest and continuing to exercise may be detrimental."
- "Animal will be left in pain for longer."

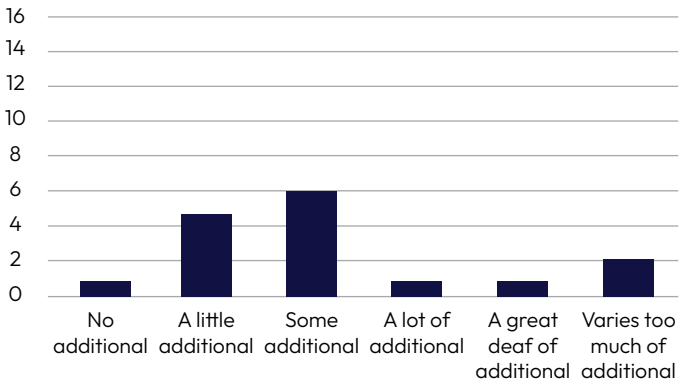
You rated this:

Patella - luxation

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Vet nurses may not have the training and experience to recognise a patella luxation.

- "I think they would notice the lameness, but not recognise that it is to do with the patella. I see as a referral surgeon (Advanced Practitioner in surgery) a number of cases of patellae that have been diagnosed with cruciate rupture for example. It is not safe to expect nurses to differentiate the cause of stifle lameness."
- "I think this can be difficult to diagnose by veterinary surgeons in a conscious animal at times."
- "Something that is not normally carried out by nurses in consult, but is trainable and achievable."
- "This requires a specific method of clinical examination - I find that many new graduate vets are not confident in assessing patella luxation, especially subtle cases / lower grades..."

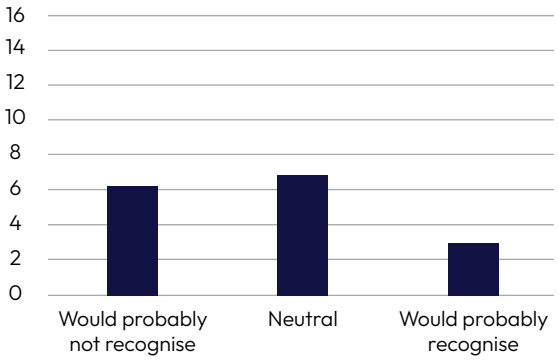
There is some risk of additional harm: some panel members were concerned about pain.

- "Animal may be in pain."
- "Pain and discomfort to patient."
- "Could cause harm if missed as it could cause problems on the other legs if not using this one properly."
- "Many patients are mechanically affected by a luxating patella but not acutely/chronically painful."
- "This is often undiagnosed for years, depending on severity, unless specifically checked for. Many vets wouldn't check for it either."

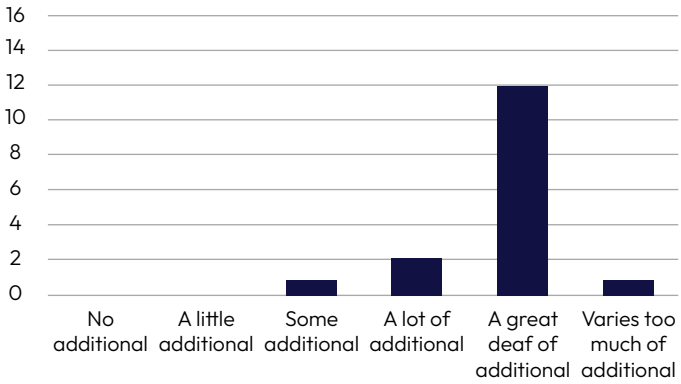
You rated this:

Retinal damage / change / haemorrhage / detachment

Panel answers – recognition that a vet surgeon is required



Panel answers – harm if a vet surgeon is not consulted



Comments from panel members at round one

Ophthalmoscopy would be required for these conditions, and this is not something vet nurses are used to doing.

- "I don't think any of the RVNs here would be comfortable using the ophthalmoscope and be confident of what they were seeing."
- "I have not met many nurses in first opinion practice who are using an ophthalmoscope during examination. A frank haemorrhage in the eye is likely to be noticed but subtle changes to the retina need a thorough exam with an ophthalmoscope."
- "Retinal exam is very challenging, even for experienced vets, and would not generally form part of a health check unless for a specific risk group (e.g. elderly cats)."
- "This requires significant pattern recognition and is not really something that most nurses have experience of."

There is a risk of a great deal of additional harm if missed.

- "These would be emergencies."
- "Affects QOL, painful, may require surgery, may have a metabolic cause."
- "Most fundic changes relate to moderate to severe disease."
- "Potential to miss signs of hypertension, renal disease etc. which could progress to life threatening."
- "Depends on the problem."

You rated this:

Glossary of terms used in panel responses

BOAS	Brachycephalic Obstructive Airway Syndrome
CHF	Congestive heart failure
CPD	Continuing professional development
ECC	Emergency and critical care
FAF	Free abdominal fluid
IPF	Idiopathic pulmonary fibrosis
IVDD	Intervertebral Disc Disease
PUPD	Polyuria/polydipsia
QOL	Quality of life
RVN	Registered veterinary nurse
TPR	Temperature, pulse, respiration
URT	Upper respiratory tract
VS	Veterinary surgeon

Round two

The purpose of this research is to establish the edges of the professional consensus on the conditions a vet nurse might refer on to a vet surgeon when carrying out a health check. The findings will be used as a basis for future consultation and policy about vet nurse training and advanced vet nurse qualifications.

The survey for round two will therefore contain more detail, including detail about what experience or training a vet nurse should have before carrying out such a health check.

Appendix 3: Comments on training in the non-consensus conditions

This appendix contains verbatim comments on training in the non-consensus conditions from round one. Some light-touch corrections have been made to spelling and grammar. These detailed comments may be of use to those planning additional training for vet nurses in these conditions.

Each top-line bullet point represents a new comment, but one panel member has also included bullet points in their comments, and these are also shown here.

Irregularity of heart rhythm

- Nursing cardiology course
- Short (half day) CPD refresher
- For a general practitioner vet nurse stepping into a more autonomous role, the following training would be appropriate:
    - **Core Skills Training**
        - Refresher in cardiac auscultation techniques
        - Understanding normal vs abnormal rhythm patterns in dogs/cats
        - Differentiating sinus arrhythmia from pathological arrhythmias
        - Recognising pulse deficits
    - **Intermediate Training**
        - Basic ECG interpretation (rate, rhythm, recognising common arrhythmias)
        - CPD in small animal cardiology
        - Case-based learning using recorded heart sounds
    - **Advanced / Ideal for Greater Autonomy**
        - Practical ECG workshops
        - Mentored case review with a veterinary surgeon
        - Clear internal protocols on:
            - When to escalate findings
            - When to recommend ECG
            - Documentation standards
            - Support Systems
            - Structured SOPs for health checks
            - Defined escalation pathways
            - Periodic peer review of nurse-led consult findings
- Vet nurses do a lot of auscultation during anaesthesia but less so in a clinic setting. They are generally good at knowing something is wrong but not so good at describing what the abnormality is. Training in descriptive terms of different types of rhythm disturbance and their seriousness would be helpful.
- CPD on heart conditions or experience in practice listening to heart sounds.
- A vet nurse is very used to listening to a normal heart rhythm, I would expect a vet nurse to perhaps pick up on an obvious/severe irregularity of heart rhythm but less so a subtle one. extra cardiology-based training would be of benefit focusing on auscultation and reading of an ECG.
- Practical training using recordings of different arrhythmias.

Heart murmur

- Further cardiology CPD
- Short CPD refresher
- For a nurse taking on greater autonomy in health checks, appropriate training could include:
    - **Core Training**
        - Structured refresher in cardiac auscultation
        - Understanding murmur grading (I–VI)
        - Identifying point of maximal intensity (PMI)
        - Differentiating systolic vs diastolic murmurs
    - **Applied/Practical Training**
        - Supervised auscultation sessions with a vet
        - Exposure to recorded heart sounds
        - Case-based learning comparing benign vs pathological murmur
    - **Advanced CPD**
        - Small animal cardiology CPD
        - Understanding when murmurs require:
            - Immediate vet review
            - Monitoring
            - Referral for echocardiography
        - Clinical governance support with clear SOPs outlining:
            - Documentation standards
            - Escalation criteria
            - Communication to clients

- Given the statement I would say an experienced vet nurse used to auscultation hearts who has done some additional training in how to grade and describe murmurs would be sufficient.
- CPD on heart conditions. Listening to hearts in practice.
- Again, depending on how severe the murmur was for example, a grade 4-5 would be easier to pick up compared to a grade 1-2, extra training from an auscultation perspective would be beneficial.
- Listening to multiple different murmurs with explanations of the murmur type, duration etc.
- I feel it would be beneficial for this nurse to shadow a vet for a given period of time and listen to different grades of heart murmurs. Working out on her own if there is indeed a heart murmur and having this confirmed by a vet.
- Grading, correct auscultation technique & location, audio files of heart murmurs
- Cardiac medical nursing training would be specific enough in order to help nurses identify heart murmur. However I feel a practical course and attendance would be vital to ensure nurses are competent.
- Listening to recordings of murmurs of varying grades to establish “normals” for each type of murmur and so they can determine normal from abnormal on auscultation.
- This is generally mostly just a case of being exposed to patients in practice and hearing a range of murmurs. Additional training on grading should be given to allow some context to be given, if this is not already provided
- How to identify heart murmurs; recordings of different stages of heart murmurs
- Practice in listening to the hearts of a variety of patients and learning what is normal vs abnormal
- Veterinary surgeons have, in addition to vet school, 26 weeks of EMS to practice listening to these cases. I would expect as well as practical training, there needs to be some sort of exam to pass, even if this is online.
- With new grads vets heart murmur detection improves with the number auscultated. Exposure to auscultating hearts as much as possible will help the most. As to specific training, a course looking specifically at types of murmur, intensity and discussing best locations to auscultate for different murmurs would be helpful.
- Cardiac CPD, listening to any patients with heart murmurs in practice
- Lengthy experience in auscultation of normal hearts and hearts of varying murmurs until they themselves are comfortable hearing changes. CPD or further qualifications if they feel this is an area that requires more knowledge or experience
- Lots of auscultation practice to both normal and abnormal sounds in a range of breeds and sizes
- Training/experience in listening to ‘normal’ (most RVNs do a lot of anaesthesia so are quite good at this) and examples of the common murmurs audible in our species.

Breed pre-disposed to respiratory problems

- This nurse would be highly likely to be able to recognise these breeds of she has undertaken her own research of the breeds most likely to be predisposed. I would say they she should even make a handy guide to have in her consultation room to be able to review if she is in any doubt about the patient she has with her.
- Breeds aside from brachycephalic dogs, felines.
- Breeds predisposed to breathing difficulties are very common in first opinion. With soaring popularity in brachycephalic breeds it is more common to encounter these breeds daily. I think an online course would be sufficient to fully explain breeds predisposed and what conditions they may have.
- With adequate training a nurse would recognise breeds that are predisposed to problems but this is not necessarily the same as recognising whether a problem exists. Nevertheless, with adequate exposure to patients in practice, they would be likely to hear if there was a problem
- Brachycephalic breeds and the changes these can have i.e. elongated soft palates, stenotic nares; symptoms of respiratory problems i.e. snoring at night, open mouth breathing/panting, exercise intolerance; treatment options available to these breeds to improve their quality of life
- Learning which breeds may have respiratory issues and how to spot what risk level they are
- Our nurses are trained already to note this. They can also conduct the breed scores for BOAS. A simple online certified course would be fine for recognising this.
- A course discussing how to assess severity of BOAS changes and assess when these need to be referred to a vet as well as the questions to ask in consultation: snoring at night, using toys to prop mouth open, periods of syncope/collapse, overheating in hot weather. Discussion about specific breeds and what options are available regarding BOAS surgery etc.
- The experience of recognising what breed pre-disposed conditions need to be seen as a matter of urgency or monitored for progression and accompanying clinical signs. external or internal CPD can educate on this, or have a secondment to referral practice to experience these types of conditions. the experience to be able to educate the owners of the breed pre-dispositions even if they are currently clinically well, and possibly a handout guide of warning signs etc.
- Experience. Recognising different anatomy or conformations and brachycephalics.
- I think RVNs are able to recognise these breeds, but would struggle with identifying more severe cases where surgery would be required and in discussing this with owners as it is a difficult conversation in some cases.

Noisy breathing

- I feel that this could be a less immediately obvious observation as it can be difficult in dogs who vocalise in the consult, or are sniffing or panting. For cardiac and respiratory conditions, it would be useful for this nurse to ensure she is listening to the of chests of many different breeds and life stages to become more familiar with what to expect, so that she is more likely to notice if something is not right.
- I think, like with cardiac training, practical training would be warranted. This is to ensure the nurse practitioner would be proficient in recognising the differences in 'noise' for example upper respiratory, 'crackles' wheeze, reduced lung sounds etc.
- Hearing recordings of different types of abnormal breathing sounds, from lungs and upper airways.
- Some training in the types of respiratory sounds and the significance of them.
- How to auscultate the chest thoroughly. Recordings of what is abnormal and what these abnormalities could mean i.e whether they should be treated as an emergency, and how to treat them.
- Practice auscultating the chest and differentiating between lower and upper respiratory disease.
- I don't think this should be included in their remit. There are too many variables, vs recognising breed characteristics and BOAS scoring.
- This is still a very vague term. There are so many causes of "noisy breathing". Is it URT inflammation/ referred noise/increased effort/stertor? I feel that an experienced RVN would be able to assess when it is significant and when it isn't. As it is so vague I do not feel there is specific training that could used to cover this. It is more based on experience.
- If the owner has questioned the breathing of the animal then extremely likely. If the owner has not and it is a brachy breed then extremely likely as they know the potential breed related problems. Further CPD and qualifications, or shadowing a vet or nurse who is carrying out the health checks to gain experience.
- Practice and experience, opportunity to listen to a lot of chests. This is pretty much how vets get experience too to recognise
- Discussion of the difference of stertorous/stridorous breathing and the anatomical basis of these.

Abnormal lung sounds

- More CPD
- Short CPD refresher
- Should include:
    - **Core Training**
        - Structured refresher in respiratory auscultation
        - Understanding normal vs abnormal lung sounds
        - Differentiating:
            - Crackles
            - Wheezes
            - Stertor vs stridor
            - Upper vs lower airway noise
    - **Practical Skill Development**
        - Supervised auscultation sessions
        - Exposure to recorded respiratory sounds
        - Case-based learning comparing normal, inflammatory, infectious, and cardiac-related respiratory changes
    - **Clinical Interpretation**
        - Recognising when abnormal sounds require:
            - Immediate vet assessment
            - Same-day review
            - Monitoring
        - Understanding red flags (tachypnoea, dyspnoea, cyanosis, orthopnoea)
    - **Governance Support**
        - Clear escalation SOPs
        - Documentation standards
        - Defined communication pathways to the veterinary surgeon

- Abnormal lung sounds are more challenging due to referred upper airway noises and sounds associated with brachycephalic breeds often being much louder than more serious findings such as fluid crackles. Training in differentiating different lung sounds would bee important but also loud of experience of listening to different patients is required
- CPD on respiratory issues.
- Would depend on the severity, training from a auscultation point of view would be of benefit.
- Audio recordings and practical experiences.
- I feel like being trained by listening to the chest and seeing what you can hear (via X-ray and ultrasound), would benefit this nurse and increase her knowledge, which would increase the amount of problems she could pick up in the consult room.
- Auscultation technique & location, normal Vs abnormal sounds, referred noise
- Similar to noisy breathing in a practical session.
- Training in types of lung sounds and potential significance, along with exposure to cases- perhaps clinical mentoring
- How to auscultate the chest thoroughly. Recordings of what is abnormal and what these abnormalities could mean i.e. whether they should be treated as an emergency, and how to treat them.
- This would likely require a lot of practice in chest auscultation.
- Like with the cardiac question, lots of training required, and some sort of exam, and it must contain a practical element, not just listening to you tube videos, as how and where to listen are also very important.
- Extra training on how to auscultate and different noises that may be heard or when we cannot hear air movement noises. This is a difficult one to assess and many vets (myself included at times) struggle to auscultate abnormal lung sounds.
- Most patients a nurse will see in practise will have normal lung sounds, so I would encouraged them to listen to any patient with abnormal lung sounds to get used to what's 'not' normal
- if it is a routine auscultation of the chest then it would be massively based on nursing experience that can be gained from doing this frequently and often to gain the skills and expertise. in my experience this is not something that nurses are doing routinely, however with experience and training in this, they would be more comfortable and confident in doing so.
- Experience and listening to a lot of chests with a variety of sounds.
- Experience auscultating large numbers of animals both normal and abnormal.

Pot belly / distended abdomen

- None.
- Could include:
    - **Core Clinical Skills**
        - Structured abdominal palpation training
        - Understanding normal vs abnormal abdominal contours
        - Recognising pain responses
        - Differentiating:
            - Obesity
            - Ascites
            - Organomegaly
            - Gas distension
    - **Clinical Interpretation**
    - **Awareness of emergency presentations (e.g. GDV signs)**
    - **Recognising red flags:**
            - Acute distension
            - Lethargy
            - Pale mucous membranes
            - Pain
    - **Understanding when findings require:**
        - Immediate vet review
        - Same-day assessment
        - Routine follow-up
    - **Case-Based Learning**
            - Review of common causes of pot belly presentations
            - Correlation with imaging findings (radiographs/ultrasound)
            - Mentored examination sessions with a vet
    - **Governance & Protocol**
            - Clear escalation SOPs
            - Documentation standards
            - Defined communication pathways
- Some training on differentiating an ascitic abdomen from a fat animal its important but most vet nurses would be capable of this.
- CPD on abdominal issues.
- Extra training with an ultrasound machine may be of benefit to help with diagnosis.
- All of my nurses can do this already.

Intestinal sounds - reduced / stasis

- Short CPD refresher.
- For a nurse working with greater clinical independence, training could include:
    - **Core Skills**
        - Structured abdominal auscultation technique
        - Understanding normal frequency and variability of intestinal sounds
        - Recognising:
            - Reduced sounds
            - Absent sounds
            - Hypermotility
            - Borborygmi
            - Clinical Context Integration
            - Correlating gut sounds with:
                - Pain
                - Vomiting
                - Distension
                - Appetite changes
            - Recognising red flags for obstruction or ileus
    - **Case-Based Learning**
        - Exposure to recorded gut sounds
        - Review of obstruction, ileus, and stasis cases
        - Mentored abdominal examinations
    - **Clinical Governance**
        - Clear escalation criteria
        - Defined documentation standards
        - Structured nurse-led health check protocols

- In a large animal setting or someone seeing lots of rabbits this would be a skill they could develop but rarely used in dogs and cats so potentially not very relevant in most small animal clinics.
- CPD
- Training from an auscultation perspective would be of benefit, perhaps alongside ultrasound training.
- Audio recordings with explanations plus practical experience.
- I feel that a nurse would be more likely to pick this up in an animal such as a rabbit or guinea pig than a cat or dog. Training that would benefit the nurse would be increasing the number of abdomens she listens to, whether is this hands-on or via videos.
- Most small animal online courses would be sufficient, in explaining where to listen and what to expect in terms of noise. I do not feel this goes above and beyond something a nurse can do with training.
- Training to include when is appropriate to check for reduced intestinal sounds, and the significance of this issue.
- How to auscultate for gut sounds, how frequently they should be heard, and what to do if they are reduced or completely absent.
- Abdominal auscultation practice.
- I discussed this [with colleagues] after the last round. The exotic advanced practitioner I spoke with had grave concerns about this, and also advised me that listening for gut sounds is extremely unreliable in the first place. Therefore I think this is high risk of false positives and negatives, and requires a full clinical exam and assessment – i.e. a vet
- Is this related to rabbits/guinea pigs? If so then additional exotics training would be useful covering causes and issues with GI stasis. Training about what sounds to be listening for and what these mean. Not typically part of Cat and dog assessments. Part of exotic assessments
- Practice in specific sounds, it can vary so much. Not even sure this is a day 1 skill for new vets unless it's a horse or exotic
- Study of what is 'normal' in different species; locations to auscultate; listening to both normal and abnormal (although there is a huge variation in normal and I feel that any auscultation needs to be performed in conjunction with a good interpretation of the rest of the clinical exam and a history because some animals will have almost absent gut sounds in the consult due to stress).

Constipation / straining to defecate

- Hands-on training of being able to feel constipation in different shaped animals would help. But I feel often a good open conversation with an owner, asking the right questions, would help here.
- Rectal exam, correct history taking.
- I believe nutrition courses would be of huge benefit, along with additional training in gastrointestinal issues and common causes. I feel online courses would suffice.
- Response to this is highly clinical history based and would need ability to differentiate between urinary and faecal issues, as well as confidence in abdominal palpation.
- Complete deep palpation of the abdomen, how to rule out that this isn't a cystitis/blocked cat, normal rectal palpation findings.
- The nurse would need to question the client carefully on defecation specifically to find out if the patient was showing signs of constipation.
- Training in proper abdominal palpation and potentially rectal palpation. I can't see how this could be taught remotely.
- A review of abdominal palpation. A review of rectal exams and when to use them.
- Difficult to assess without any information from the client unless the patient is actively straining to defecate in practice.
- If there are no reported problems from the owner, in a clinical exam it would be difficult to pick up unless palpating the abdomen. This information would come from good history taking unless the patient specifically started straining in consult.
- If there were no concerns from the client, why would there be any concern about constipation? If there were, then I'm sure nurses could identify this and act appropriately.
- If this behaviour was demonstrated in the consult, I think an RVN would recognise it easily.

Enlarged thyroid

- None
- For a nurse taking on greater independence in health checks, training could include:
  - **Core Clinical Skills**
    - Structured cervical palpation technique
    - Identification of normal vs enlarged thyroid tissue
    - Differentiation from:
      - Mandibular salivary glands
      - Lymph nodes
      - Fat deposits
  - **Clinical Context**
    - Understanding common presentations of hyperthyroidism
    - Knowing when to recommend further diagnostics (e.g. T4 testing)
    - Correlating palpation findings with:
      - Weight loss
      - Tachycardia
      - Behaviour changes
  - **Practical Experience**
    - Supervised palpation sessions
    - Case-based review of confirmed hyperthyroid patients
    - Mentorship with feedback on examination findings
  - **Governance Support**
    - Clear escalation criteria
    - Defined documentation standards
    - SOPs for nurse-led health checks

- These are difficult to feel sometimes and usually only detected when you're really looking for it due to other clinical signs.
- CPD in thyroid issues.
- Unless there is an obvious goitre I feel this is an unreliable way to recognise an enlarged thyroid gland, even veterinary surgeons would use other diagnostic tools to recognise an enlarged thyroid.
- Practical experience with support from veterinary colleagues initially.
- Hands on training of feeling as many large thyroids as possible, but as previous question, often asking the right questions is as much of a useful tool.
- Palpation technique.
- I feel practical sessions would be best. A lot of new graduate vets struggle in palpation of thyroids, and often bloods etc are required alongside a physical examination anyway. I think it would benefit experienced nurses and new graduate vets to partake in a practical course in order to further knowledge in this area.
- Any noted enlargement of thyroid/lump in neck should be referred to vet. Training to recognise the issue would focus on technique for palpation.
- The symptoms which would indicate an enlarged thyroid gland which was functionally overactive - this includes typical and atypical symptoms. How to palpate for a goitre.
- Practice in thyroid palpation and clinical signs to ask about.
- There are other, more important, clinical signs than just a goitre. But you can easily train the nurses with where to feel and what to expect, could be remote. But I feel this rather misses the point.
- An anatomy module reviewing location and normal feel of thyroid.
- CPD on thyroid conditions.
- Recognising the clinical signs that lead to enlarged thyroid or building it into a senior cat clinic or any adult or geriatric cat in for consult as they are more likely to have a goitre. if slightly enlarged could be hard to detect but if clinical signs pointed toward thyroid issues I'm sure they would obtain a blood sample.
- Lots of palpation but also would need a clinical suspicion to check.
- Practice and guidance in how to palpate a thyroid, and that this should form part of the clinical exam. However, I would say as a vet of 13 years this is rarely the way I diagnose hyperthyroidism in cats as I think history taking is much more clinically relevant.

Enlarged lymph node

- None
- For a nurse undertaking greater clinical autonomy, appropriate preparation could include:
    - **Core Clinical Skills**
        - Systematic lymph node palpation technique
        - Understanding normal size and texture variations
        - Differentiating lymph nodes from:
            - Salivary glands
            - Fat pads
            - Cutaneous masses
    - **Recognising characteristics of concern:**
        - Firmness
        - Fixation
        - Pain
        - Rapid enlargement
    - **Understanding when findings require:**
        - Immediate review
        - Same-day vet assessment
        - Routine follow-up
    - **Case-Based Exposure**
        - Supervised examinations of patients with confirmed lymphadenopathy
        - Review of inflammatory vs neoplastic causes
        - Correlation with cytology results
    - **Governance Support**
        - Clear escalation SOPs
        - Defined documentation standards
        - Structured nurse-led health check framework

- Really depends how enlarged. In lymphoma they can be massive but a lot of the time they are more subtle. Need a gif knowledge of anatomy to differentiate from other lumps
- CPD
- Further training on the lymphatic system from a examination perspective.
- Practical experience of real cases with support from veterinary colleagues.
- I think this depends on the body condition score of the animal and the position of the lymph node. But I would expect a nurse of this experience would be able to feel enlarged lymph nodes
- Practical course again, so physical examination practice can happen, I believe learning the position of lymph nodes alone would not be sufficient without practice.
- I feel that any enlargement of lymph node should be referred to a vet, as deciding on significance strays in to diagnosis of the issue. Training to recognise enlargement would focus on locations to palpate and practical exposure
- How to carry out a complete physical examination, including palpation of lymph nodes (submandibular, prescapular, popliteal), and for this to be carried out at every examination they undertake. The possible causes of the enlarged lymph nodes also, particularly if single vs generalised lymphadenopathy, in order for them to guide the clients in what to do next.
- Practice palpating lymph nodes
- The more of these questions I am answering, the more I think I am repeating myself. But it has dawned on me, I see this training something like the BSAVA certificate course I did to gain my RCVS AP status. Perhaps a hybrid structure with online components with practical elements interspersed and some form of examination at the end to become certified. Then perhaps a register with maintenance CPD requirements for these 'more advanced' RVNs
- An anatomy review of locations of palpable lymph nodes and typical sizes
- Practice and experience palpating lymph nodes in healthy and enlarged cases, possibly seeing practice in an oncology clinic
- No training additionally needed as part of a clinical exam
- Training in the location and palpation on of all the peripheral lymph nodes and normal vs abnormal.

Back pain

- None
- For a nurse taking on greater independence in health checks, appropriate training could include:
    - **Core Examination Skills**
        - Systematic spinal palpation technique
        - Identifying pain responses vs behavioural resistance
        - Recognising postural abnormalities
    - **Clinical Awareness**
        - Understanding common causes of back pain
        - IVDD Musculoskeletal strain
        - Osteoarthritis
    - **Recognising neurological red flags:**
        - Ataxia
        - Proprioceptive deficits
        - Paresis
        - Loss of bladder control
    - **Practical Skill Development**
        - Supervised spinal examinations
        - Case-based review of confirmed spinal cases
        - Basic neurological screening awareness
    - **Governance Support**
        - Clear escalation criteria
        - Defined documentation standards
        - SOPs outlining when immediate veterinary review is required

- To specifically recognise back pain would be a challenge. Can be difficult to differentiate from abdominal pain.
- CPD
- Further training on pain scoring and assessing pain from an examination.
- My nursing colleagues can do this already.
- The nurse needs to be trained in how to palpate the spine and particular areas to be mindful of. As well as breeds that are more prone to problems (i.e. French bulldogs are prone to IVDD)
- Palpation of back vs abdomen
- I feel this links to experience in physiotherapy as before.
- Clinical skills training.
- How to carry out neck manipulation and spinal palpation; symptoms which could indicate back pain e.g. abdominal pain, not using the litter tray.
- Spinal palpation and more subtle clues e.g. abdominal tension
- Training about differentiating back pain vs abdominal pain. Training in questions to ask to help point towards back pain-jumping up as normal? Struggling to settle.
- The ability to complete a pain score and teach the owner how to do this at home to provide a picture of how the pain progresses in a relaxed home environment as well.
- Clinical history and lots of palpation.
- Training in spinal palpation - I think RVNs mostly have this skill as they use pain assessment / pain scoring in hospital - but are less likely to use this in a consultation so training would need to be more focussed on a more comprehensive clinical exam.

Musculoskeletal pain, lameness

- Understanding of the gait of different breeds here is important. Training would include how to examine the limbs correctly and questions to ask - such as how do they rise and sit, is there a particular time of day they are more lame, how are they after a run, do they gnaw or chew at any of their joints.
- Gait analysis, proprioception
- Nurses with experience in physiotherapy are already qualified in this area and therefore a similar course would be sufficient.
- Training on elements of clinical history indicating issues, and signs to look for in consult
- The different levels of lameness, how to carry out a complete ortho exam, including neck manipulation, spinal palpation, patella luxation and cranial drawer/tibial thrust.
- Training in determining the severity of lameness
- Training in LOAD scoring Training in OA management and assessment
- With the additional training mentioned they should have robust knowledge of these conditions and how they present themselves and how to complete a through exam of the patient
- Experience for subtle issues
- Training - ideally practical, using live animals - in gait analysis and orthopaedic examination

Patella – luxation

- CPD in how to recognise patella luxation
- Short refresher CPD
- For a nurse taking on greater autonomy in musculoskeletal screening:
    - **Core Practical Skills**
        - Refresher in stifle anatomy
        - Structured patellar palpation technique
        - Understanding grading system (I–IV)
        - Differentiating luxation from:
            - Cruciate disease
            - Hip pathology
            - Generalised lameness
    - **Clinical Context**
        - Recognising gait patterns suggestive of luxation
        - Understanding breed predispositions
        - Appreciating surgical vs conservative management pathways
    - **Supervised Skill Development**
        - Mentored palpation sessions
        - Case-based review of confirmed luxation cases
        - Correlation with radiographic findings
    - **Governance & Scope**
        - Clear SOPs outlining:
            - When suspicion should be raised
            - When formal grading must be done by a vet
            - Documentation standards

- If the client has no concerns about lameness and it wasn't being specifically looked for I'm not sure it would be found in an exam
- CPD
- Training on the mechanisms of the knee and when to and not to try to deliberately luxate the patellar.
- Practical experience with cases whilst supported by veterinary colleagues.
- The nurse needs to be trained in how to feel if the patella luxates, and understand what questions to ask. I feel this is something that they should be able to pick up.
- Some experienced vets struggle to distinguish this, and therefore orthopaedic training would need to be implemented to ensure correct knowledge for examination. I feel this would also have to be a practical course.
- I don't feel that this is an appropriate area for nurse involvement, as significance of a luxation depends on grading and picking up subtle malposition of patella in some cases. It may be useful to give some training on clinical signs, however these are variable, depending on significance. Significance also depends on diagnosing other orthopaedic problems which may actually be the underlying cause of a problem.
- How to assess for patella luxation; what questions to ask clients; how to determine the degree of patella luxation.
- Training in the questions to ask an owner that may give cause for concern about the patella
- This is often missed and confused with other conditions by vets. Focusing on lameness requiring a vet's attention is fine. Diagnosing it as a patella luxation is too much.
- A module looking into patella luxation and how to manipulate to assess this. Discussion of questions to ask, skipping gaits etc. Information about when intervention is required and consequences of patella luxation long term - OA etc.
- If not clinically apparent, can easily be picked up when behind the animal checking the femoral pulses if significant, again experience in palpation.
- Practical training (which could easily be in house / workplace based) in orthopaedic examination.

Eyelid abnormality

- CPD day
- For a nurse undertaking more independent health checks:
    - **Core Skills**
        - Structured periocular examination technique
        - Recognising normal eyelid anatomy
        - Identifying:
            - Entropion / ectropion
            - Distichiasis
            - Eyelid masses
            - Blepharitis
    - **Clinical Awareness**
        - Recognising ocular red flags:
            - Pain (blepharospasm)
            - Corneal cloudiness
            - Acute swelling
            - Purulent discharge
        - Understanding urgency of ophthalmic conditions
    - **Practical Development**
        - Supervised ocular examinations
        - Case-based review of common eyelid disorders
        - Correlation with fluorescein staining and vet findings
    - **Governance & Scope**
        - Clear escalation criteria
        - Defined documentation standards
        - SOP outlining when immediate veterinary review is required
- Most of these are easily visualised and if an animal is showing signs of blepharospasm then it easy to say there is pain there and that it requires the attention of a vet
- CPD
- training on various conditions that can cause eyelid abnormalities such as entropion.
- Practical experience with cases whilst supported by veterinary colleagues.

Corneal ulcer

- CPD day
- For a nurse working with greater independence in health checks: Core Skills Structured ocular examination technique Recognising signs of ocular pain Identifying corneal opacity, irregularity, or surface defects Clinical Awareness Understanding urgency of suspected ulcers Recognising red flags: Acute onset pain Marked blepharospasm Blue/white corneal appearance Purulent discharge Practical Development Supervised ocular examinations Case-based review of confirmed corneal ulcer cases Understanding (not necessarily performing independently, depending on scope) fluorescein staining principles Governance & Scope Clear escalation protocols for painful eyes Documentation standards SOP outlining urgent same-day veterinary assessment
- If they are trained to always use fluorescein if there is any indication of an ocular issue then I believe they would easily identify an ulcer
- CPD
- Ophthalmology training concentrating on corneal ulceration.
- My nursing colleagues can do this already.

Other external eye abnormality

- CPD day
- For a nurse working more independently in health checks:
    - **Core Examination Skills**
        - Structured ocular inspection technique
        - Recognition of normal vs abnormal conjunctiva
        - Identification of discharge types and significance
        - Assessment of third eyelid position
    - **Clinical Awareness**
        - Differentiating external abnormalities from deeper ocular pathology
        - Recognising urgent red flags:
            - Pain
            - Acute swelling
            - Sudden asymmetry
            - Suspected proptosis
    - **Practical Development**
            - Supervised ocular examinations
            - Case-based learning of common external eye conditions
            - Correlation with veterinary diagnoses
    - **Governance & Scope**
            - Clear escalation criteria
            - Defined documentation standards
            - SOP outlining when urgent same-day veterinary review is required
- This is too broad a category. Anything painful they would likely see signs of, but loss of other eye conditions may be difficult to identify. Ophthalmology is a very specialist area.
- CPD
- Ophthalmology training.
- Practical experience of existing cases whilst supported by veterinary colleagues.

Retinal damage / change / haemorrhage / detachment

- CPD day
- For a nurse taking on greater ophthalmic responsibility:
    - **Core Technical Skills**
        - Direct and indirect ophthalmoscopy training
        - Systematic fundic examination technique
        - Recognising normal retinal anatomy
    - **Pathology Recognition**
        - Identifying:
            - Retinal haemorrhage
            - Retinal detachment
            - Tapetal hyperreflectivity
            - Vascular changes
            - Differentiating artefact from pathology
    - **Clinical Context Integration**
        - Recognising when urgent same-day veterinary assessment is required
        - Correlating retinal changes with:
            - Hypertension
            - Systemic disease
            - Acute blindness
    - **Supervised Development**
        - Mentored fundic examinations
        - Case-based review of confirmed retinal pathology
        - Correlation with imaging and specialist findings
    - **Governance & Scope**
        - Clear limits of independent assessment
        - Defined escalation protocols
        - Documentation standards

- This is a skill requiring use of special equipment, medication to dilate pupils in some cases and experience. I think this would take a lot of training and experience for a veterinary nurse to obtain unless they were working in a specialised ophthalmology setting
- Ophthalmology training.
- Practical experience of existing cases supported by veterinary colleagues.
- This nurse would need an intense course with an ophthalmologist to confidentiality identify all of these. I don't think this is something that could be recognised commonly by a nurse.
- Use of otoscope as currently outside of RVN remit.
- Practical courses on ophthalmology would be needed.
- Being shown images of normal variation, and abnormal fundic exams to enable determination of what looks abnormal.
- Pattern recognition training and ophthalmoscope skills - but I feel that this starts to stray into the area of diagnosis.
- How to carry out a complete ophthalmoscopic examination; the types of changes which can be seen on ophthalmoscopic examination and the possible causes of these.
- Training in indirect opthalmoscopy.
- These are difficult to examine and look at, this section could be taught as part of a course, and practical training on using an ophthalmoscope correctly.
- Specific training in using ophthalmoscope, how to do ophthalmic exams and assessing for subtle changes. With ophthalmology it is about repeatedly doing retinal exams and getting confident in normal so that abnormal can be spotted. This would mean assessing as many animals as possible which would mean more time for each clinical exam.
- Experience looking in patients eyes and using ophthalmoscopes, secondment to ophthalmic clinic.
- Would need a lot of experience in retinal exam, difficult for most GP vets unless done routinely.
- Examination of the eyes, use of the ophthalmoscope.

Third eyelid abnormality

- Short refresher
- For a nurse undertaking more independent health checks:
    - **Core Examination Skills**
        - Systematic ocular and periocular inspection
        - Understanding normal third eyelid anatomy
        - Differentiating:
            - Normal visibility
            - Prolapse (cherry eye)
            - Inflammatory swelling
            - Passive elevation secondary to pain
    - **Clinical Context**
        - Understanding urgency in acute presentations
        - Recognising when third eyelid protrusion may indicate:
            - Ocular pain
            - Systemic illness
            - Neurological involvement (e.g. Horner's syndrome)
    - **Practical Development**
        - Supervised case review of common third eyelid conditions
        - Correlation with veterinary diagnoses
        - Exposure to red-flag cases requiring urgent review
    - **Governance & Scope**
        - Clear escalation criteria
        - Defined documentation standards
        - SOP outlining when immediate veterinary assessment is required
- These are usually fairly obvious and require no special equipment.
- CPD
- Ophthalmology training.