Council Meeting

Remote meeting to be held on Wednesday, 6 July 2022 at 4:00 pm by Zoom

Agenda	Classification[1]	Rationale[2]
1. **President's introduction**	Oral report Unclassified	n/a
2. **Apologies for absence**	Oral report Unclassified	n/a
3. **Declaration of interests**	Oral report Unclassified	n/a
4. **Matter for decision by Council (unclassified items)**		
a. Under Care / Out of Hours Review	Unclassified	n/a
5. **Notices of motion**	Oral report Unclassified	n/a
6. **Questions**	Oral report Unclassified	n/a
7. **Any other College business (unclassified items)**	Oral report Unclassified	n/a
8. **Risk Register, equality and diversity (unclassified items)**	Oral report Unclassified	n/a
9. **Dates of next meetings** Friday, 8 July 2022 (AGM) Thursday, 8 September 2022 at 10:00 am (reconvening in the afternoon) in person at Glasgow University Veterinary School.	Oral report Unclassified	n/a
Dawn Wiggins Secretary, RCVS Council 020 7202 0737 / d.wiggins@rcvs.org.uk		

[1]Classifications explained	
Unclassified	Papers will be published on the internet and recipients may share them and discuss them freely with anyone. This may include papers marked 'Draft'.
Confidential	Temporarily available only to Council Members, non-Council members of the relevant committee, sub-committee, working party or Board and not for dissemination outside that group unless and until the relevant committee or Council has given approval for public discussion, consultation or publication.
Private	The paper includes personal data which should not be disclosed at any time or for any reason, unless the data subject has agreed otherwise. The Chair may, however, indicate after discussion that there are general issues which can be disclosed, for example in reports to committees and Council.

[2]Classification rationales	
Confidential	1. To allow the Committee or Council to come to a view itself, before presenting to and/or consulting with others 2. To maintain the confidence of another organisation 3. To protect commercially sensitive information 4. To maintain public confidence in and/or uphold the reputation of the veterinary professions and/or the RCVS
Private	5. To protect information which may contain personal data, special category data, and/or criminal offence data, as listed under the General Data Protection Regulation

Terms of Reference (derived from the Royal Charter)

RCVS Council

1. RCVS Council exists to enable the College to fulfil its objects, as laid down in the Supplemental Charter granted on 17 February 2015 to the Royal Charter of 1844, ie:

   a) To set, uphold and advance veterinary standards, and to promote, encourage and advance the study and practice of the art and science of veterinary surgery and medicine, in the interests of the health and welfare of animals and in the wider public interest.

   b) The Charter also recognises those functions provided for in the Veterinary Surgeons Act 1966, in terms of the regulation of the profession, and also recognises other activities not conferred upon the College by the Veterinary Surgeons Act or any other Act, which may be carried out in order to meet its objects, including but not limited to:

      i. Accrediting veterinary education, training and qualifications, other than as provided for in the Act in relation to veterinary surgeons;
      ii. Working with others to develop, update and ensure co-ordination of international standards of veterinary education;
      iii. Administering examinations for the purpose of registration, awarding qualifications and recognising expertise other than as provided for in the Act;
      iv. Promulgating guidance on post-registration veterinary education and training for those admitted as members and associates of the College;
      v. Encouraging the continued development and evaluation of new knowledge and skills;
      vi. Awarding fellowships, honorary fellowships, honorary associateships or other designations to suitable individuals;
      vii. Keeping lists or registers of veterinary nurses and other classes of associate;
      viii. Promulgating guidance on professional conduct;
      ix. Setting standards for and accrediting veterinary practices and other suppliers of veterinary services;
      x. Facilitating the resolution of disputes between registered persons and their clients;
      xi. Providing information services and information about the historical development of the veterinary professions;
      xii. Monitoring developments in the veterinary professions and in the provision of veterinary services;
      xiii. Providing information about, and promoting fair access to, careers in the veterinary professions.

2. It is laid down in the Charter that the affairs of the College shall be managed by the Council as constituted under the Act. The Council shall have the entire management of and superintendence over the affairs, concerns and property of the College (save those powers of directing removal from, suspension from or restoration to the register of veterinary surgeons and supplementary veterinary register reserved to the disciplinary committee established under the Act) and shall have power to act by committees, subcommittees or boards and to delegate such functions as it thinks fit from time to time to such committees, subcommittees or boards and to any of its own

number and to the employees and agents of the College. The Council is also responsible for the appointment of the CEO and Registrar, and the ratification of the Assistant Registrars. Appointment of all other staff members is the responsibility of the CEO and relevant members of the Senior Team.

3. A strategic plan is normally developed and agreed by Council to facilitate the delivery of these activities and to ensure ongoing development and quality improvement.

4. This scheme outlines how Council's functions are currently delegated.

Summary	
Meeting	Council
Date	6 July 2022
Title	Review of under care and 24-hour emergency cover
Summary	This paper builds on the Council's previous discussion in April and attaches a draft consultation paper for consideration.
Decisions required	Council is asked to: a. Confirm that there should be separate consultations for the public and the professions; b. Confirm that the terms of the public consultation are circulated to Standards Committee for its approval prior to launch; c. Approve the draft consultation to the professions attached at **Annex A**; d. Agree the timeline set out.
Attachments	Annex A – Draft consultation paper Annex B – Draft guidance Annex C – Survey analysis report from RAND Europe Annex D – SAVSnet research report Annex E – VetCompass research executive summary and presentation Annex F – Legal Advice from Fenella Morris QC
Author	Eleanor Ferguson Registrar/Director of Legal Services e.ferguson@rcvs.org.uk Gemma Kingswell Head of Legal Services (Standards) g.kingswell@rcvs.org.uk / 020 7965 1100

Classifications

Document	Classification[1]	Rationales[2]
Paper	Unclassified	n/a
Annexes A – F	Unclassified	n/a

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Introduction

1. Although the College's review of 'under care' and 24-hour emergency cover has been exercising the minds of Standards Committee and Council for some time, this paper and, in particular, its annexes, represents the first real opportunity for veterinary surgeons, veterinary nurses and all our stakeholders to explore and understand for themselves the complex issues in question, and the detail of what now is being proposed for full public consultation.

2. As such, although the main purpose of this paper is to seek Council's approval for a draft consultation paper (as agreed at its meeting in April 2022), we recognise that many will be reading this with a view to understanding how the RCVS has reached the position that is has. The draft consultation paper (attached at **Annex A**) therefore sets out the current position, the multi-stage review process and timeline, the animal health and welfare implications and rationale for consulting, the legal advice and independent research considered, the recommendations and the proposed guidance itself.

Background

3. At its meeting in April 2022, Council was presented with recommendations from the Standards Committee flowing from the review of 'under care' and 24-hour emergency cover and decided that a consultation paper be drafted for consideration. Following further consideration (discussed more below), the Standards Committee recommends that there should a separate consultation with the public and as such, the draft consultation attached to this paper at **Annex A** is aimed at the professions.

4. At the same meeting of Council, there was a great deal of discussion around the recommendations themselves. Standards Committee considered all matters discussed and the draft guidance can be found separately at **Annex B** for ease of reference.

Public consultation

5. Due to the clinical and complex nature of the subject matter, some of the questions the Standards Committee wish to ask about the proposed guidance are very technical and unlikely to be appropriate for members of the public. As such, the Committee recommends that a separate consultation be devised for members of the public.

6. The Standards Committee is keen to ensure that public-facing questions are aimed at all kinds of animal owners/keepers, including farmers and relevant organisations such as those representing owners and keepers (for example the National Farmers Union), and that relevant groups have the opportunity to respond.

7. The Standards Committee agreed that for the consultation with the public to have adequate reach and engagement (e.g. remote areas/those with disabilities), it would be appropriate to use the services of an external agency such as YouGov for delivery. As regards questions to ask, the Committee was keen to understand how the proposed changes might affect animal owners' access to veterinary care, in respect of both benefits and risks, as well as seeking views on specific topics such as limited-service providers. In terms of timing, the intention is for the public consultation to run in parallel with that for the professions. Once Council has agreed the terms of

the consultation to the professions it is suggested that the terms of the public consultation are finalised and circulated to Standards Committee for its approval prior to launch.

Consultation with the professions

8. The intention is that the consultation with the professions (see **Annex A**) will comprise a consultation document setting out the background, context and recommendations, followed by an online survey asking questions about the proposals. The consultation document will also signpost to a number of supplementary materials including:

    a. Survey analysis report from RAND Europe (**Annex C**)

    b. SAVSnet research report (**Annex D**)

    c. VetCompass research executive summary and presentation (**Annex E**)

    d. Legal Advice from Fenella Morris QC (**Annex F**)

9. It should be noted that the RAND survey analysis report attached at **Annex C** is an interim report that was not originally intended for publication. It is currently being copy edited/quality assured. It is not anticipated that there will be any significant changes to the findings, conclusions or recommendations of the interim report in the final version that will accompany the consultation.

Timeline

10. The proposed timeframe for the consultation phase of the review is set out below:

    - 6 July – Council to consider proposed consultation document
    - by end of w/c 11 July – open consultation to the professions
    - by w/c 12 September – close consultation to the professions (allowing extra time because consultation will be open over August)
    - by w/c 24 October – produce report on consultation responses (allowing 6 weeks from closing consultation for analysis and report writing) and Standards Committee to consider
    - 10 November – Council to consider recommendations from Standards Committee following the consultation

11. This timeline could enable the updated guidance to come into effect before the end of the year, although additional Standards Committee meeting(s) may be required. However, if the consultation results in substantive changes to the proposed guidance, it could take longer.

Decisions required

12. Council is asked to:

    a. Confirm that there should be separate consultations for the public and the professions;

    b. Confirm that the terms of the public consultation are circulated to Standards Committee for its approval prior to launch;

c. Approve the draft consultation attached at **Annex A**;

d. Agree the timeline set out above.

Review of ‘under care’ and 24/7 emergency cover

A consultation

[XXX Date 2022]

Contents

A. Foreword

A long journey

The journey of reviewing 'under care' and provision of 24-hour emergency first-aid and pain relief has been a long one, its origins dating back to the Vet Futures initiative in 2016.

Relating as it does to a fundamental aspect of veterinary practice, this review has generated considerable discussion and debate in recent years, with strongly held views presented on all sides during all stages, including evidence-gathering, analysis and feedback.

As ever, it is the College's responsibility, through the work of our Standards Committee and Council, to consider in detail the views and experience of all our stakeholders along with, in this case, formal legal advice and commissioned independent research, and to propose a way forward.

"The proposed guidance seeks to protect animal health and welfare and maintain public trust by ensuring that decision-making remains firmly in the hands of individual veterinary surgeons"

The pandemic effect

A significant contributor to the length of this journey, of course, has been the Covid-19 pandemic, which has delayed the review's progress by around two years. Nevertheless, numerous lockdowns have afforded us the chance to explore our long-held understanding of what 'under care' means in principle, and to learn how new guidance could best work in practice, across all species types.

Along with many things, the past two years have demonstrated that the veterinary professions are highly capable of adapting to changing societal needs. As veterinary professionals, we cannot, and should not, expect established ways of practice to go unchallenged and remain unchanged, particularly in the face of shifting public expectations and advancements in technology. However, it is our collective responsibility to ensure that any changes continue to allow us to provide safe and effective care for our patients, and meet the appropriate expectations of our clients.

The need for change

Whilst therefore recognising and reflecting this need for change, the proposed guidance seeks to protect animal health and welfare and maintain public trust by ensuring that decision-making remains firmly in the hands of individual veterinary surgeons, as to what they, in their professional judgement, consider appropriate in a specific situation.

This consultation, then, whilst not a referendum on whether RCVS guidance on 'under care' and 24-hour emergency first-aid and pain relief should change – that decision having been made by Standards Committee and approved by Council based on the evidence gathered, including the views of the profession and objective evidence, and legal advice – is a crucial opportunity for you to tell us whether we have got the draft guidance right, or if there is anything we might have missed.

Animal health and welfare

In the online survey you can provide feedback on each individual element of the proposed guidance. We are particularly keen to know if there are any factors we may have overlooked that could impact on animal health and welfare, and/or public trust.

Before answering the questions, however, I would urge you to read the background and detail of the proposal set out on the following pages. This will help to explain the journey to this point and the challenges we have met along the way.

Full details on how to respond are set out below, together with a timeline of what will happen next, but please make sure to send us your feedback by [deadline].

Thank you in advance for your time and consideration

Dr Melissa Donald BVMS MRCVS
Chair, RCVS Standards Committee

B. Background

1) The Royal College of Veterinary Surgeons (RCVS) is both the Royal College and regulatory body for veterinary surgeons and veterinary nurses in the UK. As a regulator, we set, uphold and advance veterinary standards and, as a Royal College, we promote, encourage and advance the study and practice of the art and science of veterinary surgery and medicine. We do all these things in the interests of animal health and welfare, and in the wider public interest.

"As this review hinges on the legal interpretation of the terms 'clinical assessment' and 'under care', we sought legal advice to ensure that the basis of the guidance that governs the profession is correct and reliable."

2) Our review of telemedicine, 'under care' and 24/7 first-aid and pain relief began in 2016 with the Vet Futures initiative. This then led to the ambition in the RCVS Strategic Plan 2017-2019 to 'review the regulatory framework for veterinary businesses to ensure a level playing field, enable a range of business models to coexist, ensure professionalism in commercial settings, and explore the implications for regulation of new technologies (eg telemedicine)'. This led to consideration of 'telemedicine' in its narrowest sense, ie in relation to remote prescribing, including the possibility of 'trialling' remote prescribing.

3) A key theme that emerged through these discussions was that remote prescribing and out-of-hours care were closely linked. The reason being that if a medicine is prescribed without a physical examination, consideration needs to be given to where owners go to seek help for their animals in the event of an adverse reaction or deterioration.

4) All the of the above ultimately resulted in the current, broad-ranging review of under care and out-of-hours guidance that began in 2019, conducted by the RCVS Standards Committee. As this review hinges on the legal interpretation of the terms 'clinical assessment' and 'under care', we sought legal advice to ensure that the basis of the guidance that governs the profession is correct and reliable. That legal advice is discussed further below and underpins the recommendations made.

5) The Standards Committee presented its findings to Council in spring 2022, and we now wish to consult on the changes proposed as a result.

C. The current position

Under care

6) Before a veterinary surgeon can prescribe prescription-only veterinary medicines (POM-Vs), according to the Veterinary Medicines Regulations 2013 (VMRs) they must first carry out a 'clinical assessment' and have the animal 'under their care'. These terms are not defined by the VMRs and so it is left to the RCVS to interpret what they mean.

"The terms 'under care' and 'clinical assessment' are not defined by legislation, so it is left to the RCVS to interpret what they mean."

7) It is important to note that, under the VMRs, the requirements to carry out a clinical assessment and have the animal under one's care only apply to the prescription of POM-Vs. This means that when prescribing other classes of medicines or treatment not involving the prescription of POM-Vs, veterinary surgeons do not need to satisfy these requirements (although there are more general obligations relating to the provision of veterinary care, 24-hour emergency first-aid and pain relief, and responsible prescribing that must be met).

8) Our current guidance on prescribing POM-Vs effectively requires a physical examination to be carried out before **a** veterinary surgeon can establish that **an** animal is under their care. The guidance states that animals should be 'seen' immediately prior to prescribing or 'recently or often enough for the veterinary surgeon to have personal knowledge' of the animal or herd. It goes on to say that a veterinary surgeon cannot usually have an animal under their care if there has been no physical examination and that they should not prescribe POM-Vs via the internet alone. Remote prescribing is therefore allowed under our current guidance, but only where the animal is already under the veterinary surgeon's care. The detail of the current legislation and guidance is set out [XXX signpost XXX].

9) We recognise, however, that there are some situations where the precise requirements of the VMRs are not practical, for example, when prescribing for herds, shoals and flocks, or issuing repeat prescriptions as a locum. In addition, the current guidance was written at a time before good quality video calls were widely accessible and physiological data could, in some cases, be gathered at a distance.

24-hour emergency first aid and pain relief

10) The *RCVS Code of Professional Conduct* requires all veterinary surgeons in practice to 'take steps to provide 24-hour emergency first aid and pain relief to all animals according to their skills and the specific situation'. Veterinary surgeons are not obliged to provide the service personally or expected to remain constantly on duty. They are, however, required to ensure clients are directed to another appropriate service when they are off duty or otherwise unable to provide the service. The current guidance is set out in full in Chapter 3: 24-hour emergency first aid and pain relief.

11) The out-of-hours obligations for veterinary surgeons working for limited service providers (LSPs), or based in referral practices, are slightly different to the general position described above and this is discussed more below.

D. The review

12) The current review began in 2019 to find out whether the current rules are fit for purpose, or whether change is required. As with all RCVS guidance, the aim is to protect animal health and welfare, maintain and uphold veterinary standards and ensure public confidence in the profession.

13) To assist with data gathering, the Standards Committee engaged the services of RAND Europe (an independent consultancy). The review comprised focus group discussions with members of the professions, the outcomes of which informed a survey which went out in May 2021 and had 5,544 responses. RAND analysed the survey responses and produced a report, which can be found [XXX signpost XXX].

"The issue of whether a physical examination is necessary [in order to make a clinical assessment] should be a matter of judgement for the veterinary surgeon in each individual case."

14) As a result of the difficulties arising from the Covid-19 pandemic, it was necessary to suspend the normal guidance and introduce temporary guidance allowing veterinary surgeons to establish 'under care' remotely in certain situations. The purpose of this was to ensure that veterinary surgeons could continue to care for animals without breaching government guidelines and restrictions, and in a way that was safe for them, their teams and their clients.

15) The operation of this temporary guidance presented us with a unique opportunity to carry out research and gather evidence based on real experiences. We therefore commissioned two independent pieces of research from SAVSnet and VetCompass to find out how veterinary surgeons applied the temporary guidance, and to compare treatment before and after the pandemic to see whether there were any negative implications for animal health and welfare. The findings showed that veterinary surgeons behaved responsibly and, where issues were identified, these have been factored into the proposals (see section B of the online survey). In the words of VetCompass: *'Throughout the pandemic, veterinary professionals have acted in a manner that not only protected human health but ensured animal health or welfare were not compromised'*. The research report from SAVSnet and executive summary with presentation from VetCompass can be found [XXX signpost XXX].

16) As explained above, this review hinges on the interpretation of legislation and, in particular, the terms 'clinical assessment' and 'under care'. Therefore, we sought legal advice to ensure the basis of the guidance that governs the profession is correct and reliable. Interpreting legislation requires an assessment of intention at the time it was enacted, as well as applying the context of today's world.

17) In the case of 'clinical assessment', we have been advised that this should be interpreted as including both in-person and remote clinical assessments. The issue of whether a physical examination is necessary should be a matter of judgement for the veterinary surgeon in each, individual case. We were further advised that 'under care' does not change the interpretation of 'clinical assessment' and involves consideration of whether the veterinary surgeon has taken professional responsibility for the animal. This legal advice can be found here [XXXsignpostXXX].

18) The proposals in this consultation therefore reflect the findings of the review, the results of the independent research projects, and legal advice we have received.

Why are we consulting?

19) With all the above in mind, we would like your views on our proposed guidance on ‘under care’, in particular, on whether there are adequate safeguards built in to protect animal health and welfare and to maintain public confidence in the veterinary profession. As regards out-of-hours care, we would like to know whether you agree with the approach taken, together with some specific questions about what level of 24-hour emergency cover is appropriate for limited service providers and referral practices.

20) We believe that the proposed guidance set out in Section E will continue to protect animal health and welfare and ensure veterinary surgeons prescribe POM-Vs safely. The proposed guidance is intended to uphold public trust in the profession and give clarity, as well as providing a degree of future proofing so that the profession is prepared for the inevitable development of technology.

21) We also intend to consult with members of the public to better understand their views and how the proposals might affect access to veterinary care

E. Proposed ‘under care’ guidance

22) We propose that the current guidance on ‘under care’ be removed and replaced with the following.

Prescribing POM-Vs

1. *According to the Veterinary Medicines Regulations 2013 (VMRs), to prescribe prescription-only veterinary medicines (POM-Vs), a veterinary surgeon must carry out a clinical assessment of the animal and the animal must be under their care. The terms ‘clinical assessment’ and ‘under…care’ are not defined by the VMRs, however the RCVS has interpreted them in the following way.*

2. *An animal is under a veterinary surgeon’s care when the veterinary surgeon is given, and accepts, responsibility for the health of an animal (or a herd, flock or group of animals) whether generally, or by undertaking a specific procedure or test, or prescribing a course of treatment. Responsibility for an animal may be given by the owner/client, statute or other authority.*

3. *A clinical assessment is any assessment which provides the veterinary surgeon with enough information to diagnose and prescribe safely and effectively. A clinical assessment may include a physical examination, however, this may not be necessary in every case.*

4. *Whether or not a physical examination is necessary is a matter for the veterinary surgeon’s judgement. The following factors are relevant in this respect, however veterinary surgeons should note this list is not exhaustive:*

    a. *The health condition, or potential health conditions, being treated and any associated risks (see further guidance below at paragraph 5 and 6)*

    b. *The nature of the medication being prescribed, including any possible side effects (see further guidance below at paragraphs 7 and 8)*

    c. *When the animal (or premises in the case of agricultural animals) was last physically examined by a veterinary surgeon*

    d. *Whether there is access to the animal’s previous clinical history*

    e. *The experience and reliability of the animal owner*

    f. *Whether the animal is known to the veterinary surgeon and/or whether there is an existing relationship with the client or animal owner*

    g. *The practicality of a physical examination for individual animals, particularly when dealing with herds, flocks or groups of animals*

    h. *The health status of the herd, flock or group of animals*

    i. *The overall state of the animal’s health*

    j. *The impact of any prescription made without physical examination on the ability to gather subsequent diagnostic information*

5. *The more complex or unusual the health needs of the animal, or where a differential diagnosis includes serious conditions not yet ruled out, the more likely a physical examination will be necessary.*

6. *In respect of paragraph 4(a) above, a physical examination is required where a notifiable disease is suspected or part of a differential diagnosis.*

7. *In respect of paragraph 4(b) above, and given the importance of minimising the development of antimicrobial resistance:*

    a. *A physical examination is required in all but exceptional circumstances where a veterinary surgeon prescribes antimicrobials for an individual animal or group of animals that are not agricultural animals. Veterinary surgeons should be prepared to justify their decision in cases where antimicrobials are prescribed without a physical examination and record this justification in the clinical notes.*

    b. *When prescribing antimicrobials for agricultural animals, veterinary surgeons should ensure they have an in-depth knowledge of the premises, including its production systems, the environment, disease challenges and the general health status of the herd or flock. Veterinary surgeons should have attended the premises and physically examined at least one animal immediately prior to prescribing or, where this is not possible, recently enough to ensure they have adequate information and knowledge to prescribe responsibly. Veterinary surgeons should be prepared to justify their decision in cases where antimicrobials are prescribed without conducting a physical examination and record this justification in the clinical notes.*

***Note**: For more information about responsible prescribing to minimise antimicrobial resistance, please see Chapter 4: Medicines, paragraphs 4.23 and 4.24.*

8. *In respect of 4(b) above, when prescribing controlled drugs to an animal in the first instance, veterinary surgeons should carry out a physical examination in all but exceptional circumstances and be prepared to justify their decision where no physical examination has taken place. This justification should be recorded in the clinical notes. It is acceptable to issue a repeat prescription for controlled drugs without a physical examination, however, veterinary surgeons should carry out a further clinical assessment to ensure they have enough information to do so safely and effectively.*

9. *Where a physical examination is not carried out immediately prior to prescribing POM-Vs, veterinary surgeons should ensure that a 24/7 follow-up service involving physical examination and any other necessary investigation if required is immediately available in the event that the animal does not improve, suffers an adverse reaction or deteriorates. Where a veterinary surgeon is not able to provide this service themselves, they should arrange for another veterinary service provider to do so. This arrangement should be made before veterinary services are offered and confirmed in writing as part of the conditions of service agreed by the client.*

10. *Veterinary surgeons must maintain clinical records of animals, herds, flocks or other groups of animals under their care.*

F. Recommendations regarding 24-hour emergency cover

23) We do not propose any substantive change to our current guidance on 24-hour emergency first aid and pain relief, except for the proposed guidance for limited service providers (LSPs) set out below. We believe that, in the absence of an animal equivalent to a local accident and emergency department, animal welfare is best served by the current requirement that veterinary surgeons in practice take steps to provide 24-hour emergency first-aid and pain relief.

24) Our current supporting guidance only recognises two kinds of LSP, namely, vaccination clinics and neutering clinics. Veterinary surgeons who work in vaccinations clinics are required to make provision for 24-hour emergency cover for the period in which adverse reactions may arise. Those working in neutering clinics must make provision for the entire post-operative period during which complications arising from the surgery may develop.

"Animal welfare is best served by the current requirement that veterinary surgeons in practice take steps to provide 24-hour emergency first-aid and pain relief."

25) We recognise that there are many other types of LSP not currently provided for, and that fairness requires that providers should be treated the same unless there is good reason not to. We therefore propose that the current guidance on LSPs (see paragraphs 3.49-3.41 of Chapter 3: 24-hour emergency first aid and pain relief) be removed and replaced with that set out below, which provides a broader definition of the type of practice that can be considered an LSP and imposes a general obligation to provide out-of-hours emergency care that is proportionate to the service offered.

26) We believe that the proposed guidance will protect animal health and welfare whilst providing clarity and ensuring fairness.

Limited service providers

1. *A limited service provider is a practice that offers no more than **one** service to its clients and includes, but is not limited to, vaccination clinics, equine reproductive clinics and neutering clinics. For these purposes, a 'practice' is a Registered Veterinary Practice Premises (RVPP) as entered into the register held by the RCVS.*

2. *Limited service providers should provide 24-hour emergency cover that is proportionate to the service they offer. This means that veterinary surgeons working for limited service providers should ensure that the 24-hour emergency cover provision covers any adverse reaction or complication that could be related to procedures or examinations carried out, or medicines prescribed or used.*

G. How to respond

27) This consultation is for veterinary professionals and those working alongside them, vet and vet nurse students, and representatives of stakeholder organisations.

28) Details of a separate consultation exercise for the animal-owning/-keeping public are available at: [XXX LINK XXX].

29) Before you respond to this consultation, we would urge you to read the explanatory information set out at www.rcvs.org.uk/undercare, along with the additional reports, research papers and legal advice information provided.

30) This is your opportunity to tell us whether our proposed new guidance on 'under care' and 24-hour emergency first-aid and pain relief contains adequate safeguards to protect animal health and welfare, and to maintain public confidence in the veterinary professions.

"This is your opportunity to tell us whether the proposed guidance contains adequate safeguards to protect animal health and welfare, and maintain public confidence in the veterinary professions."

31) We would like to know how much you either agree or disagree with each element of the guidance, and whether you have any specific comments or suggestions to make in each case.

32) To submit your views, please visit our online survey at [XXX survey link XXX]. You will first be prompted to answer a few demographic questions, for example, whether you are responding as an individual or on behalf of an organisation, before answering questions on the guidance itself.

33) The deadline for responses is [XXX deadline date XXX].

34) Thank you for taking the time to send us your views. Responses from individuals will be treated as confidential. We may use extracts from any comments in any report produced following this consultation however, these comments will be reported anonymously. Where comments from organisations are used as part of any report, the organisation will be identified.

[Content for online survey]

Before responding to these questions, we would urge you to read the explanatory information set out at www.rcvs.org.uk/undercare, along with the additional reports, research papers and legal advice provided.

1. Questions on 'under care'

A. Factors that might determine whether a physical examination is required

Under the proposed guidance, whether or not to carry out a physical examination is a matter of for the veterinary surgeon's judgement (save for some notable exceptions - see Section E of the consultation document, paragraphs 6-8 of the proposed guidance).

In order to assist veterinary surgeons, paragraph 4 and 5 of the proposed guidance set out a number of factors that might be relevant in deciding whether a physical examination is required as part of a clinical assessment in a particular case:

4. *Whether or not a physical examination is necessary is a matter for the veterinary surgeon's judgement. The following factors are relevant in this respect, however veterinary surgeons should note this list is not exhaustive:*

    a. *The health condition, or potential health conditions, being treated and any associated risks (see further guidance below at paragraph 5 and 6)*

Q1 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

    b. *The nature of the medication being prescribed, including any possible side effects (see further guidance below at paragraphs 7 and 8)*

Q2 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

    c. *When the animal (or premises in the case of agricultural animals) was last physically examined by a veterinary surgeon*

Q3 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

    d. *Whether there is access to the animal's previous clinical history*

Q4 To what extent do you agree that this should be included in the list?

[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

e. The experience and reliability of the animal owner

Q5 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

f. Whether the animal is known to the veterinary surgeon and/or whether there is an existing relationship with the client or animal owner

Q6 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

g. The practicality of a physical examination for individual animals, particularly when dealing with herds, flocks or groups of animals

Q7 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

h. The health status of the herd, flock or group of animals

Q8 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

i. The overall state of the animal's health

Q9 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

j. The impact of any prescription made without physical exam on the ability to gather subsequent diagnostic information

Q10 To what extent do you agree that this should be included in the list?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

Q11 Are there any additional factors that should be added to the list?

[Yes/No/Don't know]

If yes, please tell us what they are

[Free text]

5. *The more complex or unusual the health needs of the animal, or where a differential diagnosis includes serious conditions not yet ruled out, the more likely a physical examination will be necessary.*

Q12 To what extent do you agree with this?

[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer

[Free text box]

B. Exceptions to the rule

The proposed guidance does not require veterinary surgeons to carry out a physical examination in every case. However, we believe that there are some situations where a physical examination is required in all but exceptional circumstances to protect animal health and welfare and public health, including to prevent drug misuse in the case of controlled drugs.

The exceptions relating to antimicrobials are intended to encourage responsible prescribing due to the growing threat of antimicrobial resistance, as well as addressing the fact that the SAVSnet study saw an increase in the prescription of antimicrobials during the operation of the temporary guidance in the pandemic.

The guidance addresses these exceptions to the rule in the following way:

6. *In respect of paragraph 4(a) above, a physical examination is required where a notifiable disease is suspected or part of a differential diagnosis.*

Q13 To what extent do you agree with this?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

7. *In respect of paragraph 4(b) above, and given the importance of minimising the development of antimicrobial resistance:*

   a. *physical examination is required in all but exceptional circumstances where a veterinary surgeon prescribes antimicrobials for an individual animal or group of animals that are not agricultural animals. Veterinary surgeons should be prepared to justify their decision in cases where antimicrobials are prescribed without a physical examination and record this justification in the clinical notes.*

Q14 To what extent do you agree with this?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

   b. *When prescribing antimicrobials for agricultural animals, veterinary surgeons should ensure they have an in-depth knowledge of the farm, including its production systems, the environment, disease challenges and the general health status of the herd or flock. Veterinary surgeons should have attended the premises and physically examined at least one animal immediately prior to prescribing or, where this is not possible, recently enough to ensure they have adequate information and knowledge to prescribe responsibly. Veterinary surgeons should be prepared to justify their decision in cases where antimicrobials are prescribed without conducting a physical examination and record this justification in the clinical notes.*

Q15 To what extent do you agree with this?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

8. *In respect of 4(b) above, when prescribing controlled drugs to an animal in the first instance, veterinary surgeons should carry out a physical examination in all but exceptional circumstances and be prepared to justify their decision where no physical examination has taken place. This justification should be recorded in the clinical notes. It is acceptable to issue a repeat prescription for controlled drugs without a physical examination, however veterinary surgeons should carry out a further clinical assessment to ensure they have enough information to do so safely.*

Q16 To what extent do you agree with this?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

Q17 Are there any other situations where a physical examination should be required?
[Yes/No/Don't know]

If yes, please tell us what they are
[Free text]

C. 24/7 follow-up service

In order to protect animal health and welfare, the proposed guidance requires veterinary surgeons to ensure that, where POM-Vs are prescribed without a physical examination, a 24/7 follow-up service is available:

9. *Where a physical examination is not carried out immediately prior to prescribing POM-Vs, veterinary surgeons should ensure that a 24/7 follow-up service involving physical examination and any other necessary investigation if required is immediately available in the event the animal does not improve, suffers an adverse reaction or deteriorates. Where a veterinary surgeon is not able to provide this service themselves, they should arrange for another veterinary service provider to do so. This arrangement should be made before veterinary services are offered and confirmed in writing as part of the conditions of service agreed by the client.*

Q18 To what extent do you agree with this?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

2. Questions on 24-hour emergency first-aid and pain relief

D. General obligations

We do not propose any substantive change to our current guidance on 24-hour emergency first aid and pain relief, except for the proposed guidance for limited service providers (LSPs) (see Section F of the consultation document). We believe that, in the absence of an animal equivalent to a local accident and emergency department, animal welfare is best served by the current requirement that veterinary surgeons in practice take steps to provide 24-hour emergency first aid and pain relief.

Please note that this section of the survey relates to a veterinary surgeon's general obligations in respect of 24-hour emergency care, as distinct from the proposal that a 24/7 follow-up service should be provided where a POM-V is prescribed without a physical examination.

Q19 To what extent do you agree with this approach?

[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

E. Limited Service Providers

Our current supporting guidance only recognises two kinds of Limited Service Provider (LSP), namely vaccination clinics and neutering clinics. Veterinary surgeons who work in vaccinations clinics are required to make provision for 24-hour emergency cover for the period in which adverse reactions may arise. Those working in neutering clinics must make provision for the entire post-operative period during which complications arising from the surgery may develop.

We recognise that there are many other types of LSP not currently provided for and that fairness requires that providers should be treated the same unless there is good reason not to.

We therefore propose that the current guidance on LSPs (see paragraphs 3.49-3.41 of Chapter 3: 24-hour emergency first aid and pain relief) be removed and replaced with the following, which provides a broader definition of the type of practice that can be considered LSPs and imposes a general obligation to provide out-of-hours emergency care that is proportionate to the service offered.

We believe that the proposed guidance will protect animal health and welfare whilst providing clarity and ensuring fairness.

Limited service providers

1. *A limited service provider is a practice that offers no more than **one** service to its clients and includes, but is not limited to, vaccination clinics, equine reproductive clinics and neutering clinics. For these purposes, a 'practice' is a Registered Veterinary Practice Premises (RVPP) as entered into the register held by the RCVS.*

Q20 To what extent do you agree with definition of LSPs?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

2. *Limited service providers should provide 24-hour emergency cover that is proportionate to the service they offer. This means that veterinary surgeons working for limited service providers should ensure that the 24-hour emergency cover provision covers any adverse reaction or complication that could be related to procedures or examinations carried out, or medicines prescribed or used.*

Q21 To what extent do you agree with the proposed 24-hour emergency obligations for LSPs?
[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

F. Advice-only services

At present, veterinary surgeons offering advice-only services are not obliged to provide 24-hour emergency first aid and pain relief.

We believe this approach is proportionate and do not propose any changes to this position.

Q22 To what extent do you agree with this approach?

[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

G. Referral practices

The current out-of-hours obligation for veterinary surgeons working in referral practices is that they '*should provide 24-hour availability in all their disciplines, or they should, by prior arrangement, direct referring veterinary surgeons to an alternative source of appropriate assistance'*.

The guidance also requires referral practices to make arrangements to provide advice to the referring veterinary surgeon on a 24-hour basis and that appropriate post-operative or in-patient care should be provided by the veterinary surgeon to whom the case is referred, or by another veterinary surgeon with appropriate expertise and at a practice with appropriate facilities.

We believe this approach protects animal health and welfare and as such, we do not propose any changes to this position.

Q23 To what extent do you agree with this approach?

[Strongly agree/agree/neutral/disagree/strongly disagree]

If you would like to, please give reasons for your answer
[Free text box]

The views of the professions are important in helping us to shape the guidance on prescribing POM-Vs and out-of-hours care. Thank you for taking the time to let us know what you think.

Under care

Prescribing POM-Vs

1. According to the Veterinary Medicines Regulations 2013 (VMRs), to prescribe prescription-only veterinary medicines (POM-Vs), a veterinary surgeon must carry out a clinical assessment of the animal and the animal must be under their care. The terms 'clinical assessment' and 'under…care' are not defined by the VMRs, however the RCVS has interpreted them in the following way.

2. An animal is under a veterinary surgeon's care when the veterinary surgeon is given, and accepts, responsibility for the health of an animal (or a herd, flock or group of animals) whether generally, or by undertaking a specific procedure or test, or prescribing a course of treatment. Responsibility for an animal may be given by the owner/client, statute or other authority.

3. A clinical assessment is any assessment which provides the veterinary surgeon with enough information to diagnose and prescribe safely and effectively. A clinical assessment may include a physical examination, however, this may not be necessary in every case.

4. Whether or not a physical examination is necessary is a matter for the veterinary surgeon's judgement. The following factors are relevant in this respect, however veterinary surgeons should note this list is not exhaustive:

    a. The health condition, or potential health conditions, being treated and any associated risks (see further guidance below at paragraph 5 and 6)

    b. The nature of the medication being prescribed, including any possible side effects (see further guidance below at paragraphs 7 and 8)

    c. When the animal (or premises in the case of agricultural animals) was last physically examined by a veterinary surgeon

    d. Whether there is access to the animal's previous clinical history

    e. The experience and reliability of the animal owner

    f. Whether the animal is known to the veterinary surgeon and/or whether there is an existing relationship with the client or animal owner

    g. The practicality of a physical examination for individual animals, particularly when dealing with herds, flocks or groups of animals

    h. The health status of the herd, flock or group of animals

    i. The overall state of the animal's health

    j. The impact of any prescription made without physical examination on the ability to gather subsequent diagnostic information

5. The more complex or unusual the health needs of the animal, or where a differential diagnosis includes serious conditions not yet ruled out, the more likely a physical examination will be necessary.

6. In respect of paragraph 4(a) above, a physical examination is required where a notifiable disease is suspected or part of a differential diagnosis.

7. In respect of paragraph 4(b) above, and given the importance of minimising the development of antimicrobial resistance:

    a. A physical examination is required in all but exceptional circumstances where a veterinary surgeon prescribes antimicrobials for an individual animal or group of animals that are not agricultural animals. Veterinary surgeons should be prepared to justify their decision in cases where antimicrobials are prescribed without a physical examination and record this justification in the clinical notes.

    b. When prescribing antimicrobials for agricultural animals, veterinary surgeons should ensure they have an in-depth knowledge of the premises, including its production systems, the environment, disease challenges and the general health status of the herd or flock. Veterinary surgeons should have attended the premises and physically examined at least one animal immediately prior to prescribing or, where this is not possible, recently enough to ensure they have adequate information and knowledge to prescribe responsibly. Veterinary surgeons should be prepared to justify their decision in cases where antimicrobials are prescribed without conducting a physical examination and record this justification in the clinical notes.

Note: For more information about responsible prescribing to minimise antimicrobial resistance, please see Chapter 4: Medicines, paragraphs 4.23 and 4.24.

8. In respect of 4(b) above, when prescribing controlled drugs to an animal in the first instance, veterinary surgeons should carry out a physical examination in all but exceptional circumstances and be prepared to justify their decision where no physical examination has taken place. This justification should be recorded in the clinical notes. It is acceptable to issue a repeat prescription for controlled drugs without a physical examination, however, veterinary surgeons should carry out a further clinical assessment to ensure they have enough information to do so safely and effectively.

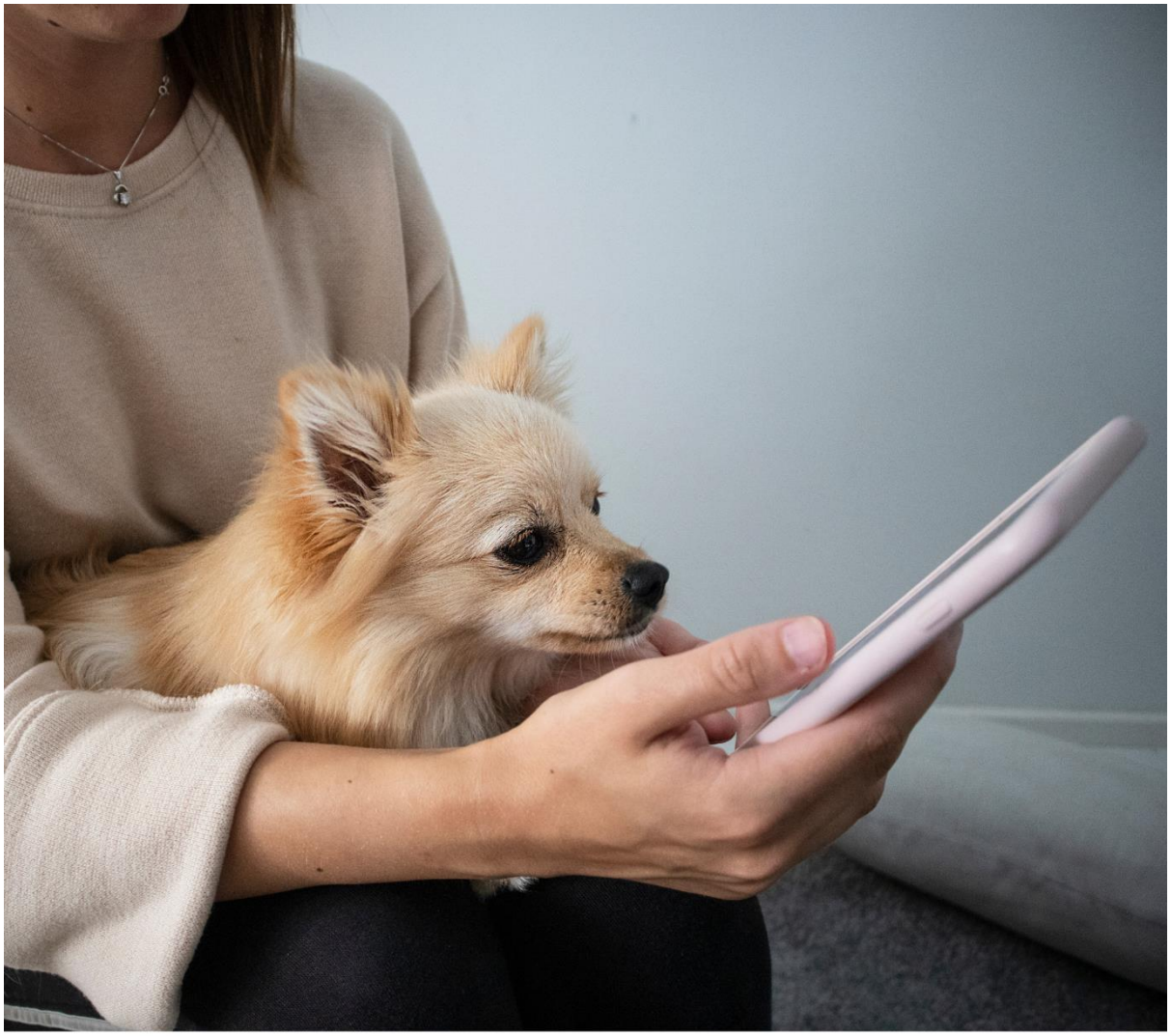
9. Where a physical examination is not carried out immediately prior to prescribing POM-Vs, veterinary surgeons should ensure that a 24/7 follow-up service involving physical examination and any other necessary investigation if required is immediately available in the event that the animal does not improve, suffers an adverse reaction or deteriorates. Where a veterinary surgeon is not able to provide this service themselves, they should arrange for another veterinary service provider to do so. This arrangement should be made before veterinary services are offered and confirmed in writing as part of the conditions of service agreed by the client.

10. Veterinary surgeons must maintain clinical records of animals, herds, flocks or other groups of animals under their care.

Limited Service Providers

11. A limited service provider is a practice that offers no more than one service to its clients and includes, but is not limited to, vaccination clinics, equine reproductive clinics and neutering clinics. For these purposes, a ‘practice’ is a Registered Veterinary Practice Premises (RVPP) as entered into the register held by the RCVS.

12. Limited service providers should provide 24-hour emergency cover that is proportionate to the service they offer. This means that veterinary surgeons working for limited service providers should ensure that the 24-hour emergency cover provision covers any adverse reaction or complication that could be related to procedures or examinations carried out, or medicines prescribed or used.



Exploring telemedicine / remote consultations using electronic health data

A report by the Small Animal Veterinary Surveillance Network for the Royal College of Veterinary Surgeons
October 2021

Beth Brant, Marisol Collins, Ivo Finns, PJ Noble and Alan Radford

Contents

Summary.

Based on reading some 1000 telemedicine consultations and 1000 controls face-to-face consultations (study part 1).

- Consultations with dogs were twice as frequent in this dataset as those with cats. Rabbits made up less than 2% of the final dataset (table 3).
- The age distribution of cats appeared broadly similar between cat cases and controls. However, for dogs, there was a trend towards dogs in older life making up a greater proportion of telemedicine cases (figure 3).
- In both dogs and cats, there was an increased tendency in telemedicine cases to either recommend a follow up teleconsultation or to see in practice if no improvement compared with face-to-face consultations, where "no further action" was the most common immediate outcome (figure 5).
- Considering teleconsultations with dogs, behaviour, digestive and musculoskeletal categories were somewhat over-represented compared to control consultations; whereas dental, integument and weight appeared to be under-recorded. For cats, behaviour and urinary categories appeared highest in teleconsultations, whereas dental disease and weight were clearly under-reported (figure 8).
- At the subcategory level, several conditions were less reported in telemedicine consultations including dental disease (gingivitis, plaque, stomatitis, fractured teeth), internal disease (otitis, tumours, murmurs, retained testicles), weight issues, corneal ulcers and deafness (table 4).
- In contrast, enteric signs (diarrhoea and vomiting), lameness including osteoarthritis, skin disease (pruritus, abscess, dermatitis), external masses, epilepsy, anxiety, cystitis, and urinary incontinence were recorded more frequently. Some of these may represent owner's increased time spent observing their pets during lockdown (table 4).
- With regard to prescriptions, there appeared to be an increased use of antimicrobials and anti-inflammatories in both cats and dogs during teleconsultations. In both species, changes in anti-inflammatory prescription were associated with the increased use of NSAIDs. Antimicrobial changes in cats were associated with a switch from cefovecin (n=13 face-to-face controls, n=2 telemedicine cases) to potentiated amoxycillin (n=5 controls, n=34 cases). An increase in neurological prescriptions in teleconsultations was associated in dogs with prescription of diazepam (n=0 controls, n=3 cases), anti-convulsants (n=0 controls, n=6 cases), and analgesics (n=17 controls, n=33) cases including gabapentin, paracetamol, tramadol and codeine.

Based on reading follow-on health records recorded in SAVSNET for 50 telemedicine consultations and 50 control face-to-face consultations for each of five conditions (upper respiratory, vomiting and/or diarrhoea, pruritus, lameness and ocular; study part 2).

- there appeared to be a slight tendency for telemedicine cases to have no related additional follow-up consultations over the subsequent six months (lameness, ocular, respiratory and vomiting and/or diarrhoea) (figure 12).
- In ~60% of the cases for these five selected conditions, it was unclear from subsequent records whether an individual case was resolved or not; this seemed consistent across the

five clinical categories (figure 13). Less frequently, a range of outcomes were explicitly recorded in the six-month follow-up period including ongoing disease, euthanasia and resolution. The pattern of these also appeared to be broadly similar between telemedicine cases and their controls.

Outline

During the COVID-19 pandemic, RCVS issued guidance on how veterinary practices should respond to UK government enhanced social distancing measures (commonly referred to as 'lockdown') to allow ongoing service provision at the national and devolved nation level.

Among guidance measures has been a temporary dispensation permitting the use of telemedicine and remote prescribing regulations to safeguard animal health and welfare and public health. At the time of writing, The RCVS standards committee has decided to end this dispensation on Sunday 21st November 2021, with scope to review in response to future changes in Government advice and policy[1].

In a series of six SAVSNET reports detailing the impact of the COVID-19 pandemic on companion animal practice in the UK in 2020, summary quantitative data from consultations between March 2020 and November 2020 showed an expected rise in remote consulting during the early national lockdown phase, with a gradual reduction in the latter phases of this timeframe, in line with the Government's COVID-19 recovery strategy and allied RCVS guidance[2].

While reported trends may have been affected by significant changes in practice workflow, and much has happened since, these changes may also reflect the gradual return to face-to-face consultations as the profession responded to regulations guiding the phased return towards near-normal operations.

This project was designed to better understand quantitatively and qualitatively how telemedicine consultations were carried out during periods of COVID-19 lockdown, and to explore in a descriptive way, how these might be different to consultations undertaken face-to-face. It made use of electronic health records collected by SAVSNET (the Small Animal Veterinary Surveillance Network), that collects consultation data in real time from a network of over 200 practices across the UK. Each consultation records includes information on the animals age, sex, species, breed, neuter status, treatments, and any free text written during the consultation. Each record is supplemented with a practitioner-derived syndrome label – we call this the Main Presenting Complaint (MPC), which identifies both sick animals (gastrointestinal, respiratory, tumour, trauma, other unwell), and vaccine consultations. In addition, a unique animal ID allows us to track individual animal consultations over time.

These data were used to support two modules of analysis. This report complements the Module 1 and Module 2 spreadsheet databases in Excel created as project outputs for further analysis. The approach to data-gathering through SAVSNET and salient descriptive findings are summarised.

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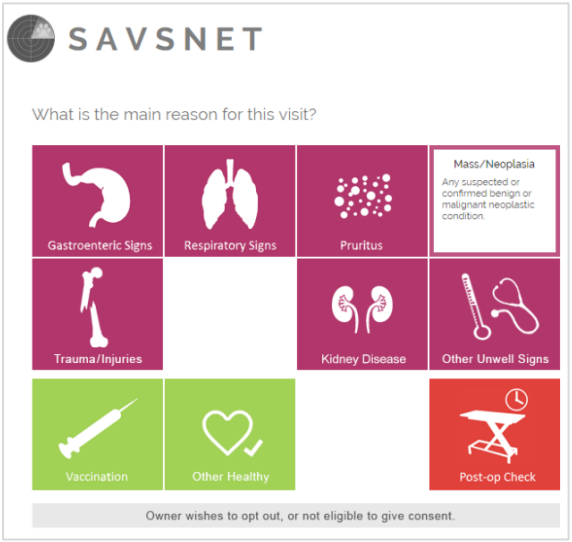
[1] *https://www.rcvs.org.uk/news-and-views/news/standards-committee-agrees-to-end-remote-prescribing/*

[2] *https://www.liverpool.ac.uk/savsnet/covid-19-veterinary-practice-uk/*

Module 1: a descriptive study of remote consultations (performed during lockdown) as compared with conventional face-to-face consultations (pre-lockdown)

SAVSNET consultations were first screened by text mining to identify those consultations where words like 'telemedicine' were mentioned. These were then read by a vet or vet nurse to identify a random sample that were true telemedicine consultations (this was necessary to avoid those consultations that, for example, talk about remote consultations happening in the past or the future). One thousand of these consultations, and 1000 random "control" consultations that were performed in 2019 before COVID-19 were read by a vet or vet nurse and categorised as follows

- Date of the consultation
- Patient signalment (age, sex, breed, neuter, microchip and insurance status)
- The SAVSNET MPC as chosen by the veterinary practitioner (as shown below).



- Treatments prescribed will be described at the level of pharmaceutical family such as antimicrobial (systemic and topical) and anti-inflammatory, and the classification of these treatments (POM-V, POM-VPS, CD).

Each consultation was additionally coded by the domain expert based on the clinical free text, to identify the main **categories** of conditions present. The categories used were adapted from those of the World Health Organisation ICD10[3], and based on a similar approach to that used for the RCVS vaccine project as follows: Euthanased, Auditory, Behaviour, Cardiopulmonary, Dental, Digestive, Endocrine, Immunological, Integumentary, Microchip, Musculoskeletal, Neoplasia, Neurological, Ocular, Parasites, Reproductive, Travel, Urinary, Weight, No Features Found, Other.

Table 1: World health organisation (WHO) category and adapted SAVSNET Category used to classify consultations.

WHO ICD10 CATEGORY		SAVSNET 19 ** CATEGORY	Definition
I	Certain infectious and parasitic diseases	PARASITES	Parasites seen or discussed
II	Neoplasms	TUMOUR / NEOPLASIA	n/a
III	blood and blood-forming organs and certain disorders involving the immune mechanism	IMMUNOLOGICAL	n/a
IV	Endocrine, nutritional and metabolic diseases	ENDOCRINE	eg diabetes, cushings, hyperT et
V	Mental and behavioural disorders	BEHAVIOUR	n/a
VI	nervous system	NERVOUS SYSTEM	Including knuckling
VII	eye and adnexa	OCULAR	Includes periocular skin eg entropion
VIII	ear and mastoid process	AUDITORY	Middle or inner
IX	circulatory system	CARSIORESPIRATORY	Coughing, sneezing, murmur, oedema
X	respiratory system		
XI	digestive system	DIGESTIVE	Excluding teeth and anal glands including from lips and tongue to anus
XII	skin and subcutaneous tissue	INTEGUMENT	Including otitis externa, nails and anal glands
XIII	musculoskeletal system and connective tissue	MUSCULOSKELETAL	eg OA, lameness
XIV	genitourinary system	URINARY	Infection, PU, incontinence
XV	Pregnancy, childbirth and the puerperium	REPRODUCTIVE	include discussions about neutering
XVI	Certain conditions originating in the perinatal period	OTHER	n/a
XVII	Congenital malformations, deformations and chromosomal abnormalities		
XVIII	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified		
XIX	Injury, poisoning and certain other consequences of external causes		
XX	External causes of morbidity and mortality		
XXI	Factors influencing health status and contact with health services		
XXII	Codes for special purposes		
		WEIGHT	discussed
		TRAVEL	n/a
		MICROCHIP	checked or given
		DENTAL	n/a

[3] https://en.wikipedia.org/wiki/ICD-10

- The main subcategories of conditions present; these were built iteratively, and rather than basing them on pre-defined lists, were informed by the language of the practitioners recorded in the health narrative. This method ensures these subcategories best fit the data (see example in table 2).
- Whether the client was new or existing based on their visit history and clinical narrative
- Immediate outcomes based on what was written in the consultation, to include medication prescribed, advised to be seen in practice or no further action

Table 2; Clinician's text fragment and assigned subcategories for those consultations in the neurological category (**please note:** the text is as written in the health record and therefore includes abbreviations and spelling mistakes).

Text from clinical narrative	Case *	Subcategory
anisocoria	0	Anisocoria
noticed L pupil was more dilated than R this morning. Been fine in herself, a bit noiser than usual but has been like that since other cat passed away in March.	0	Anisocoria
Also worried may have had a (unwitnessed) seizure this morning as seemed wobbly	0	Ataxia / wobbly
still slightly wobbly/lower hindlimbs but otherwise fine	0	Ataxia / wobbly
Marked ataxia on back legs in consult, knuckling and obcious	0	Ataxia / wobbly
could be senile dementia type changes	1	Cognitive disfunction
canine dementia	1	Cognitive disfunction
hen collapsed on her side, seemed a bit stiff and ''kicked'' a bit her back legs.	1	Collapse
highly suspicous of CDRM givne breed and presentaiton	1	Degenerative myelopathy
epiphen	1	Epilepsy (monitor)
medication health check for epilepsy.	1	Epilepsy (monitor)
telecon to confirm zonisamide is within range,	1	Epilepsy (monitor)
Telephone consult to discuss Epilepsy meds.	1	Epilepsy (monitor)
telecon to explain epilepsy,	1	Epilepsy / seizures
fitting	1	Epilepsy / seizures
had a seizure this morning. legs thrashing. chomping on blanket. lasted about a minute	1	Epilepsy / seizures
SEIZURES	1	Epilepsy / seizures
seizures. 5 fits in last 36hours.	1	Epilepsy / seizures
all episodes last 30secs-1mins. adv not full tonic clonic seizure, ?partial seizure.	1	Epilepsy / seizures
Came back, vomited then showed involuntary neuro signs as before believed to be seizures.	1	Epilepsy / seizures
no seizure since Jul 2018, good QoL	1	Epilepsy / seizures
couple of minor seizures	1	Epilepsy / seizures
telecon with owner. no seizures overnight, <<identifier>> is brigth an dhappy this mroning.	1	Epilepsy / seizures
having daily partial seizures and monthly tonic clonic seizures.	1	Epilepsy / seizures
Possible seizure.	1	Epilepsy / seizures
Not had a cluster seizure since October	1	Epilepsy / seizures

owner reports fitting occasionally either once every 4-5 months	1	Epilepsy / seizures
Seizure	0	Epilepsy / seizures
had 2 seizures this am but nothing else since started meds reiterate possible brain lesion	0	Epilepsy / seizures
seizures appear under control but is due for another blood test but has not been fasted today as	0	Epilepsy / seizures (controlled)
face dropping	0	Facial paralysis
funny episodes	1	Funny episodes
Very weak in consult, head tilt to LHS, not holding weight well, doesn't correct limbs from abnormal placement.	0	Head tilt; knuckling
Head tilted to right - also dribbling from the right hand side.	1	Head tilt; ptyalism
flare-ups of presumed IVDD.	1	Intervertebral Disc Disease
This morning O also noticed him standing with L HL knuckled under him and he was just swaying w/o placing leg properly for abt 5 min-	0	Knuckling
lumbosacral dsicomfrot on palp. tail nad. ddx: msuculoskeletal discomfort, neurological.	0	Lumbosacral pain
Tremor.	1	Tremor / twitch
hard to completely Ddx recurrent mild ear prob from a neuro condition with twitching	1	Tremor / twitch
Will need physical exam to determine if issues is orthopaedic or neurological,	1	UNCLEAR
meds check - telephone consult	1	UNCLEAR
rpt presc phone consult	1	UNCLEAR
Re-check. He is better but this morning he had another episode of VS.	0	Vestibular syndrome
suspect Idiopathic old dog vestibular syndrome. Horizontal nystagmus.	0	Vestibular syndrome
loosing his balance -when jumps not as steady.	1	Ataxia / wobbly

** Case 1 = telemedicine consultation. Case 0 = telemedicine control.*

Identified remote consultations were partitioned into two time periods based on the date when RCVS remote prescribing guidance changed to look for changing patterns in remote consultations over time as follows. Time period 1 (1st April 2020 – 28th September 2020) Emergency work only - remote prescribe in the first instance. Time period 2 (29th September 2020 – 22nd March 2021); Wales lockdown easing starts. Essential work for public health and animal health and welfare; see animal under your care in the first instance.

Module 2: a focus on diseases to assess clinical outcome

Based on the findings of Module 1, and following discussion with the RCVS, five subcategories were identified to explore in more detail. Using the consultation records received by SAVSNET, for each of these five subcategories, 50 random cases (remote consultation) and 50 random controls (face-to-face consultation) were read and annotated by domain experts to identify, based on the six-month period following the selected consultation, the

- Number of visits in the six-month period
- Treatments prescribed
- Clinical outcome as recorded in the six-month period

- Time to resolution if resolution occurred in the six-month period

Descriptive data analysis

Descriptive data analyses were carried out using functions in EXCEL and are presented here. In addition, anonymised excel spreadsheets were supplied to RCVS to allow for additional further in-house analyses. Due to the low number of consults relating to other species, descriptive results here focus primarily on cats and dogs.

Results part 1.

On reading the selected 2000 consultations, a small number were removed from the final study data set that did not fit the inclusion criteria; for example, some of the 2019 control consultations were shown to be phone consultations, or the 2020 case consultations took place face-to-face: Accordingly, a final data set of 983 telemedicine cases and 904 controls were available for further analyses.

Consultation date.

All control consultations were selected randomly from 2019, before any COVID-19 restrictions, and case consultations selected randomly within the RCVS-stipulated time periods (figure 1). Case consultations were split into Time Period 1 (1st April 2020 – 28th September 2020) and Time Period 2 (29th September 2020 – 22nd March 2021) (figure 2).

Figure 1; Distribution of cases and controls over time.

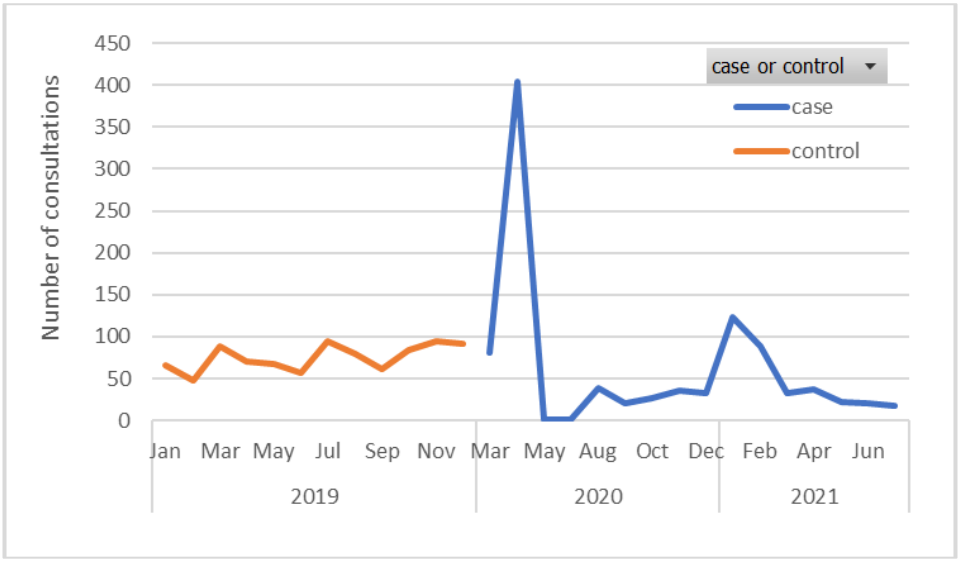
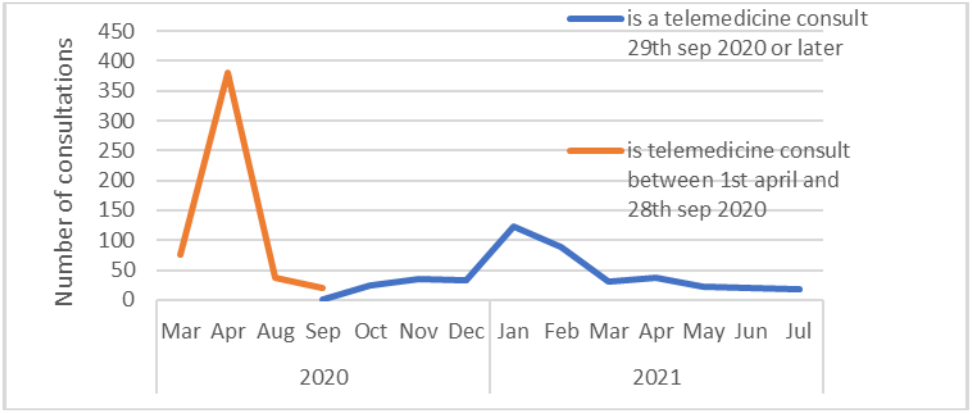


Figure 2; Distribution of cases into two time periods



Species.

As is typical of SAVSNET data, most data were from dogs, and cats, with a smaller number from other species (Table 3).

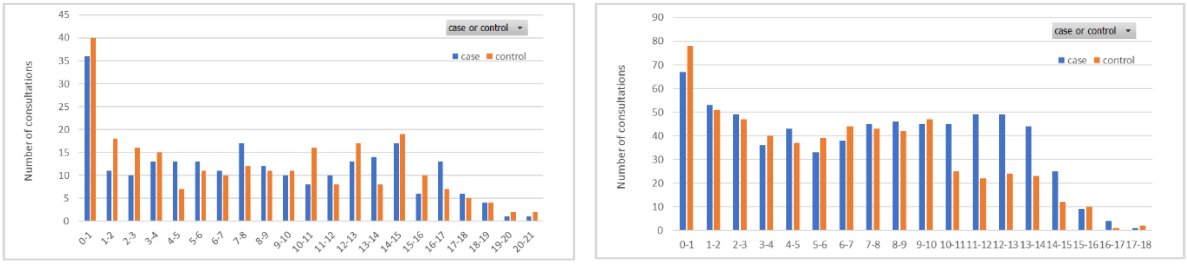
Table 3; species breakdown of telemedicine cases and face-to-face controls.

Species	**Telemedicine *cases***	**Face-to-face *controls***
dog	*681*	*587*
cat	*239*	*249*
Other species		
unknown	*42*	*40*
rabbit	*10*	*17*
hamster	*3*	*1*
guinea pig	*3*	*6*
rat	*2*	*2*
budgerigar	*1*	*1*
mouse	*1*	
duck	*1*	
bearded dragon		*1*
Grand Total	***983***	***904***

Age of consultations.

The age distribution of cats appeared broadly similar between cat cases and controls. However, for dogs, there was a trend towards dogs in older life making up a greater proportion of telemedicine cases (Fig.3)

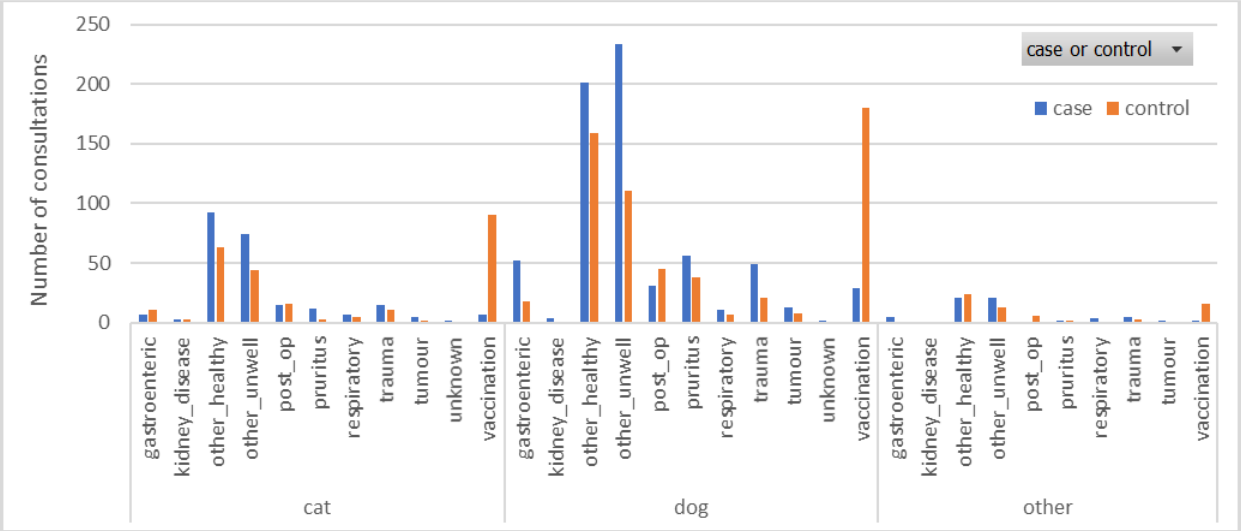
Figure 3; age distribution of cases and controls for cats (left) and dogs (right).



Main presenting complaint

Perhaps not surprisingly there appeared to be some difference between the practitioner recorded main presenting complaint (MPC) for cases (1) and controls (0). Vaccinations were more common in control consultations for both cats and dogs. NOTE: these vaccine consultations would be expected to reduce the proportion of the other MPCs in control consultation (Fig.4).

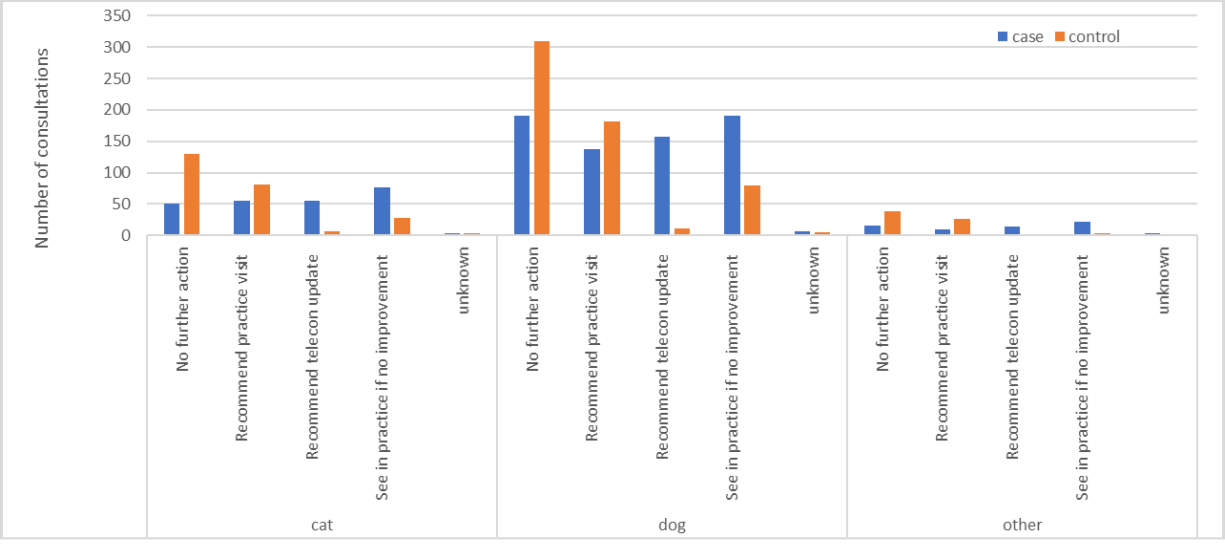
Figure 4; practitioner derived main presenting complaint (MPC) for cats, dogs and other species. Note – "other unwell" are consultations with those animals that don't fit into the specific sick animal categories (gastroenteric, kidney, pruritus, respiratory, trauma, tumour). "other healthy" consultations are those consultations with well animals apart from those involving vaccines.



Immediate outcome

Across all species there was an increased tendency in telemedicine cases (1) to either recommend a follow up teleconsultation or to see in practice if no improvement. For controls (0), "no further action" was the most common immediate outcome (Fig.5).

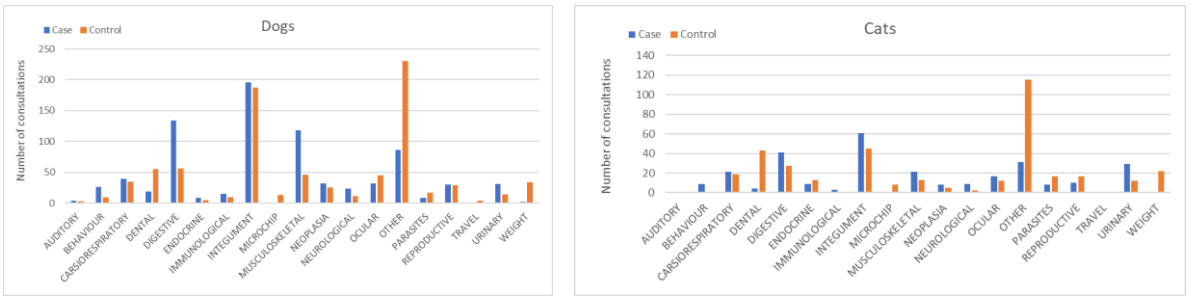
Figure 5; Number of consultations associated with immediate outcome categories on all species.



SAVSNET category

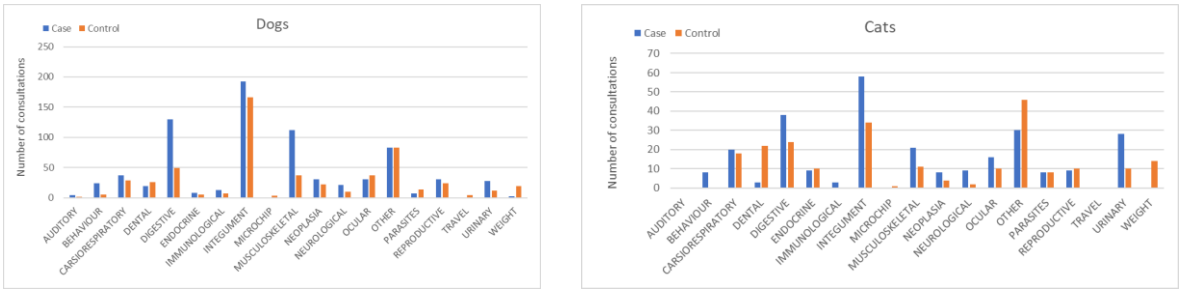
When considering all consultations, the largest SAVSNET category in both species was 'Other', largely because of those subcategories associated with vaccines (Fig.6). These included a wide range of sub-categories including euthanasia, post-op check and general health checks.

Figure 6; Number of SAVSNET categories for teleconsultation cases and face-to-face controls in cats and dogs ***(including the vaccine MPC).***



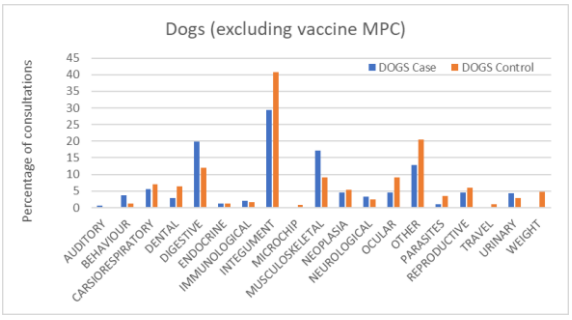
If those consultations categorised as the vaccine MPC are excluded, then for teleconsultations with dogs, behaviour, digestive, musculoskeletal and to a lesser extent urinary subcategories seem somewhat over-represented, whereas weight is under-recorded. For cats, behaviour, digestive, integument, musculoskeletal, urinary are somewhat over-represented in cases, whereas dental disease and weight are largely under-recorded (Fig.7).

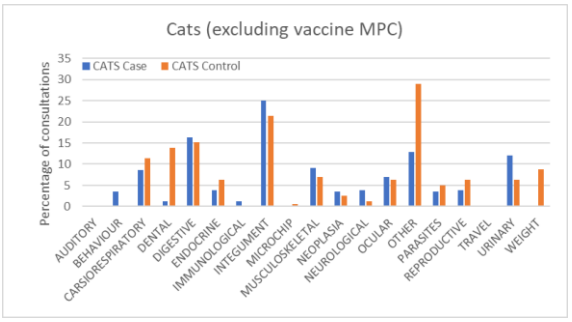
Figure 7; Number of SAVSNET categories for teleconsultation cases and face-to-face controls in cats and dogs ***(excluding the vaccine MPC).***



These differences in categories for each species are perhaps clearest when the vaccine MPC is excluded, and they are expressed as percentages of consultations (figure 8). For dogs, behaviour, digestive and musculoskeletal categories are still high in cases, whereas dental, ocular, integument and weight are under-recorded compared to controls. For cats, behaviour and urinary categories are higher in cases, whereas dental disease and weight issues are clearly under-reported compared to controls. One might speculate that these behavioural and urinary categories (as a proxy for FLUTD) seen more in cat cases than controls, may reflect a lockdown-linked rise in stress responses from a change in routine as has been reported in the media.

Figure 8; Percentage of SAVSNET categories for teleconsultation cases and face-to-face controls in cats and dogs ***(excluding the vaccine MPC).***





SAVSNET subcategories

The subcategories making up each category can be seen in the accompanying Excel spreadsheet by navigating through the relevant red worksheet tabs seen at the bottom of the workbook.

In summary at the subcategory level, several conditions were less reported in telemedicine consultations including dental disease (gingivitis, plaque, stomatitis, fractured teeth), internal disease (otitis, tumours, murmurs, retained testicles), weight issues, corneal ulcers and deafness (table 4). In contrast, enteric signs (diarrhoea and vomiting), lameness (including osteoarthritis), skin disease (pruritus, abscess, dermatitis), external masses, epilepsy, anxiety, cystitis and urinary incontinence were recorded more frequently. Some of these may result from owners increased time spent observing their pets during lockdown (table 4).

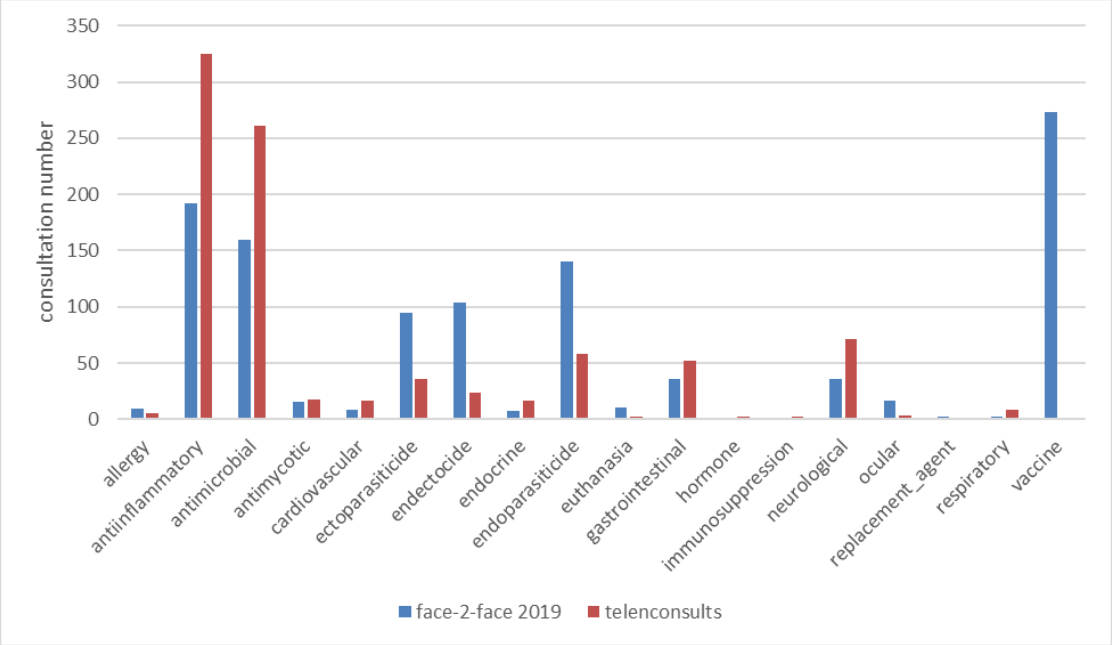
Table 4; A summary of some subcategories with apparent imbalances between teleconsultations and controls are shown below. NOTE- these are not meant to be all inclusive. All analysis is descriptive; inclusion here should not be taken to indicate statistical significance.

Sub-category	category	Tele-consult-ations	controls	bias
tartar / calculus	dental	1	32	decreased in teleconsultations
gingivitis and tartar / calculus	dental	0	11	decreased in teleconsultations
gingivitis	dental	4	15	decreased in teleconsultations
dental disease	dental	3	13	decreased in teleconsultations
tooth; fractured / chipped	dental	0	4	decreased in teleconsultations
Overweight	weight	0	19	decreased in teleconsultations
Anal gland (express)	integument	0	17	decreased in teleconsultations
Anal gland disease	integument	1	9	decreased in teleconsultations
Murmur	cardiopulmonary	0	15	decreased in teleconsultations
Nail (clipped)	integument	0	15	decreased in teleconsultations
Microchip placed	microchip	0	5	decreased in teleconsultations
Checked	microchip	0	15	decreased in teleconsultations
Fleas	parasites	2	12	decreased in teleconsultations
Corneal ulcer	ocular	0	7	decreased in teleconsultations
Epiphora	ocular	0	6	decreased in teleconsultations
Ears dirty	integument	0	6	decreased in teleconsultations
Mass (internal)	neoplasia	0	6	decreased in teleconsultations
Testicle(s) retained	reproductive	0	5	decreased in teleconsultations
Deaf (going)	auditory	0	2	decreased in teleconsultations
Patella luxation	musculoskeletal	0	4	decreased in teleconsultations
Cough	cardiopulmonary	24	15	increased in teleconsultations
diarrhoea	digestive	35	14	increased in teleconsultations
vomit and diarrhoea	digestive	15	6	increased in teleconsultations
diarrhoea (hematochezia)	digestive	14	0	increased in teleconsultations
Mass (external)	neoplasia	24	7	increased in teleconsultations
Osteoarthritis	musculoskeletal	17	7	increased in teleconsultations
Lameness	musculoskeletal	52	6	increased in teleconsultations
Urinary incontinence	urinary	10	4	increased in teleconsultations
Cystitis	urinary	8	2	increased in teleconsultations
Pruritus (ears)	integument	24	4	increased in teleconsultations
Skin disease	integument	13	3	increased in teleconsultations
Dermatitis (trunk)	integument	12	0	increased in teleconsultations
Pruritus (skin)	integument	18	0	increased in teleconsultations
Immune mediated skin disease	immunological	5	0	increased in teleconsultations
Abscess	integument	5	1	increased in teleconsultations
Abscess (cat bite)	integument	6	1	increased in teleconsultations
Epilepsy / seizures	neurological	13	2	increased in teleconsultations
Anxiety	behaviour	8	1	increased in teleconsultations
Lethargy	behaviour	5	0	increased in teleconsultations
Pseudopregnancy; suspect	reproductive	3	0	increased in teleconsultations

Prescription products sold in teleconsultations (Tele) and face to face (F2F) controls at the level of *item family.*

Clearly a large proportion of the face-to-face consultations analysed were associated with vaccines (figure 9). Parasiticide treatment was prescribed more commonly in face-to-face consultations. There appeared to be an increased use of antimicrobials and anti-inflammatories in both cats and dogs during teleconsultations. Note however, some of this effect is likely to be associated with the reduction in sick animals in face-to-face consultations because of the large number of vaccine consultations.

Figure 9; Number (y-axis) of prescriptions for each prescription family (x-axis) – all species.

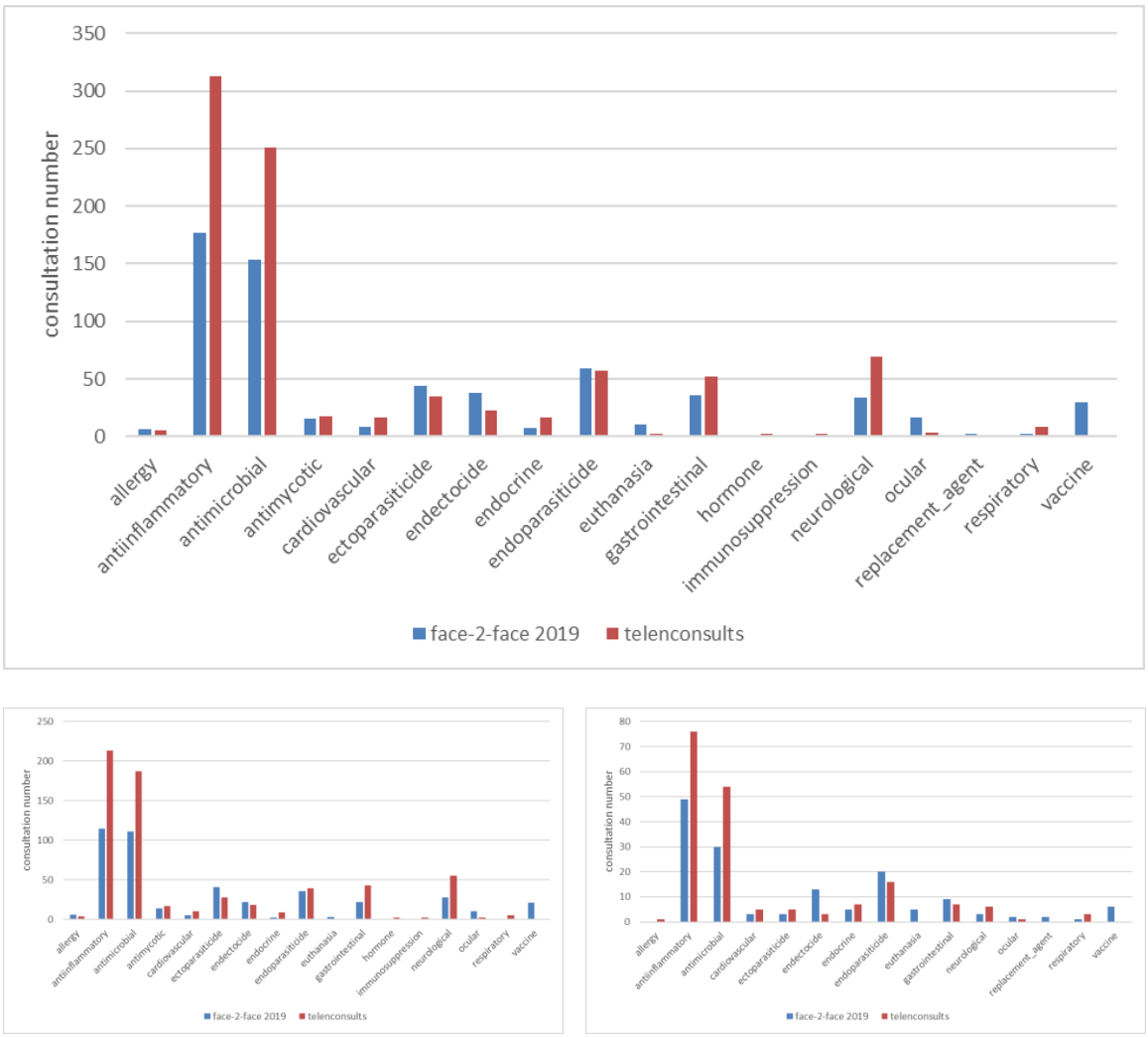


We therefore explored whether these observed differences in therapeutic use remained when vaccine consultations were excluded (figure 10).

The increase of parasiticides previously observed in face-2-face consultations was removed, suggesting their use was primarily associated with vaccine consultations.

However, there still appears to be an increased use of antimicrobials and anti-inflammatories in both cats and dogs during teleconsultations. In both species, anti-inflammatory changes were associated with the increased use of NSAIDs. Notable differences in the use of antimicrobials in cats were with cefovecin (n=13 controls, n=2 teleconsults) and potentiated amoxycillin (n=5 controls, n=34 teleconsults).

Figure 10; Number (y-axis) of prescriptions for each prescription family (x-axis). The charts below ***exclude vaccine MPC consultations****. Top – all species, Bottom left dog only, bottom right cat only.*



Differences noted in the prescription of products for neurological conditions between cases and controls relate to diazepam (n=0 controls, n=3 teleconsults), anti-convulsants (n=0 controls, n=6 teleconsults) and analgesics (n=17 controls, n=33 teleconsults), the latter including gabapentin, paracetamol, tramadol and codeine.

Table 5; Prescription products sold in teleconsultations (Tele) and face to face (F2F) controls at the level of item family. All species. Column 2 and 3 includes all consultation regardless of main presenting complaint (MPC). Columns 3 and 4 excludes vaccine MPC consultations.

Prescription Family and Class	All main presenting complaints (MPC)		Excluding vaccine main presenting complaint	
	F2F	Tele	F2F	Tele
allergy	9	5	6	5
antihistamine	6	5	4	5
immunotherapy	3		2	
antiinflammatory	192	325	177	313
disease_modifying_osteoarthritis_drug	4		3	
glucocorticoid	67	92	64	92
janus1_selective_inhibitor	9	38	8	37
nsaid	107	195	97	184
ocular	5		5	
antimicrobial	160	261	154	251
aminoglycoside	9	8	9	8
amphenicol	19	5	17	5
antim_other	22	33	22	32
beta_lactam	70	127	66	122
fluoroquinolone	6	6	6	6
fusidic_acid	20	45	20	42
lincosamide	5	9	5	8
nitroimidazole	8	20	8	20
nitroimidazole_macrolide		2		2
sulphonamide		1		1
tetracycline	1	5	1	5
antimycotic	15	18	15	18
azole	13	18	13	18
polyene	2		2	
cardiovascular	8	16	8	16
anti_coagulant		1		1
anti_hypertensive	4	6	4	6
cardiovascular		2		2
diuretic	2	4	2	4
positive_inotrope	2	3	2	3
ectoparasiticide	95	36	44	35
ecto_other		1		1
insect_growth_regulator	1	2	1	2
isoxazoline	32	10	19	10
neonicotinoid	61	21	23	20
phenylpyrazole	1	2	1	2
endectocide	104	24	38	23
macrocyclic_lactone	104	24	38	23
endocrine	7	17	7	17
adrenal	1		1	
diabetes_melitus	1		1	
pituitary_adrenal		3		3
thyroid	5	14	5	14
endoparasiticide	140	58	59	57
anthelmintic	16	11	8	11
antiplatyhelminthic	122	43	49	42
antiprotozoal	2	4	2	4

euthanasia	10	2	10	2
euthanasia	10	2	10	2
gastrointestinal	36	52	36	52
anti_emetic	36	50	36	50
poison		1		1
pro_kinetic		1		1
hormone	1	2	1	2
urinary_incontinence	1	2	1	2
immunosuppression	1	2		2
intracellular	1	2		2
neurological	36	71	34	69
anaesthesia	4	3	4	3
analgesic	22	47	20	46
anti_convulsant		7		6
anti_spasmodic	2	2	2	2
anxiolytic	1		1	
behavioural	1	2	1	2
local_anaesthetic	3	1	3	1
muscle_relaxant		4		4
reversal_agent	1		1	
sedative	2		2	
urinary_incontinence		5		5
ocular	17	3	16	3
fluorescein	16	3	15	3
lubricant	1		1	
replacement_agent	2		2	
vitamin_b	2		2	
respiratory	2	8	2	8
bronchodilator		1		1
methylxanthine	1	2	1	2
mucolytic	1	5	1	5
vaccine	273	1	30	
Grand Total	1108	901	639	873

Results part 2.

Five broad clinical categories were selected by the RCVS based on the results of part 1 of this study (upper respiratory; vomiting and/or diarrhoea; pruritus; lameness and ocular) to take forward into an outcome analysis, to explore to what extent outcomes based on SAVSNET measures varied between telemedicine cases and face-to-face controls.

For each of the five broad clinical categories, 50 cases and 50 controls were selected on the basis of matching a subset of relevant subcategories (table 6). Where numbers were sufficient, these were obtained from a random selection of those consultations classified in part 1 of this study. For those conditions that were more common in telemedicine cases, where there were insufficient controls in part 1 of the study (pruritus and lameness), these were supplemented from the same time period (2019). These additional controls were identified by a simple regular expression, and verified by a domain expert (table 6, bottom row).

Table 6; Origin of consultations (50 cases and 50 controls), for use in part 2 of this study.

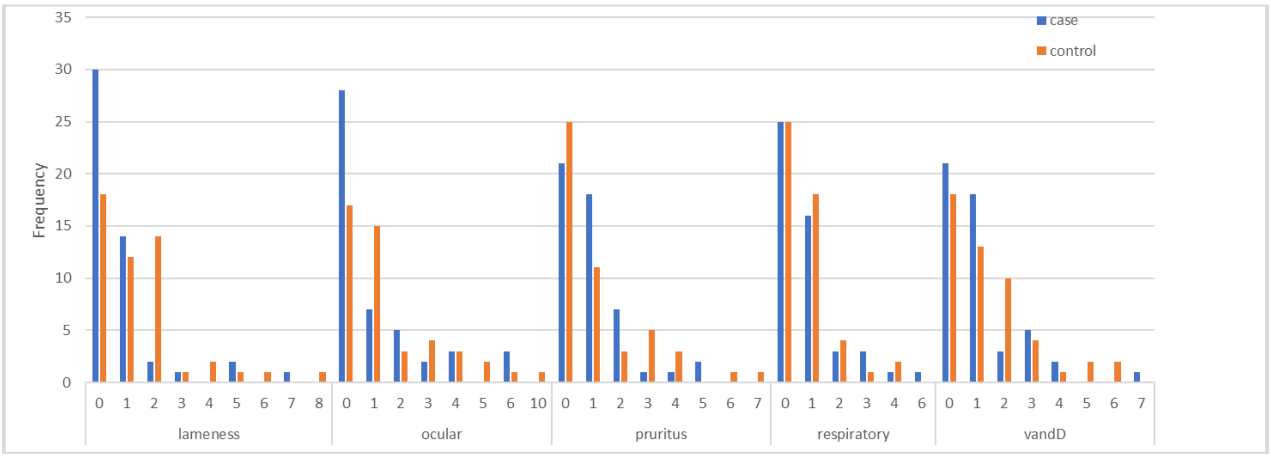
	Upper respiratory	Vomiting and / or diarrhoea	Pruritus	Lameness	Ocular
Subset of existing sub-categories used for part 2 of the study	• Bronchitis • Cough • Cough; collapsing trachea • Cough; nasal discharge • Cough; panting • Cough; sneezing • Feline Respiratory Disease Complex • Nasal discharge • Respiratory crackles • Respiratory disease (non-specific) • Respiratory infection • Sneezing • Sneezing; nasal discharge • Snuffles	• diarrhoea • diarrhoea (?giardia) • diarrhoea (hematochezia) • diarrhoea (iatrogenic) • diarrhoea (improved) • diarrhoea (intermittent) • diarrhoea with blood • diarrhoea; hyporexia • diarrhoea; rectal bleed • hematochezia • vomit • vomit (hematemesis) • vomit (improved) • vomit and diarrhoea • vomit and diarrhoea (hematochezia) • vomit; lethargy • vomit; melaena (suspected) • vomit; retching • vomit; tenesmus • vomiting (improved) • vomiting; anorexia	• Pruritus • Pruritus (anal sac; pedal) • Pruritus (controlled) • Pruritus (ears) • Pruritus (head) • Pruritus (imroved) • Pruritus (leg) • Pruritus (limb) • Pruritus (pedal) • Pruritus (perianal) • Pruritus (skin) • Pruritus (skin/ears) • Pruritus (skin;pedal) • Pruritus (trunk) • Pruritus (trunk;ears)	• Lameness • Lameness (improved) • Lameness (resolved) • Lameness, soft tissue injury • Lameness, stiffness	Random set of all cases and controls from part 1
Regex used to supplement controls	Not necessary – sufficient controls available from part 1	Not necessary – sufficient controls available from part 1	(?<!not\s)(?<!non\s)(?<!non-)(?<!aren't\s)(?<!no longer\s)pruritic	(?<!no\s)(?<!not\s)(?<!inf)(?<!c)(?<!was\s)lame	Not necessary – sufficient controls available from part 1

For each case and control, patients were followed through the SAVSNET database to determine the number of follow up visits in a 6-month period, the number of visits relating to the condition, the outcome as recorded over six months, the time to resolution (where specified in the narrative), and treatments prescribed. It should be noted that SAVSNET only collects data from booked consultations where owners do not opt out – it is therefore likely that for some patients, the number of visits may be an underestimate of the actual total number of visits. That said, a comparison between cases and controls still seems valid.

Number of follow up visits in a 6-month period

There seemed to be a slight skew for lameness and ocular telemedicine cases to have no further consultations compared to controls (figure 11).

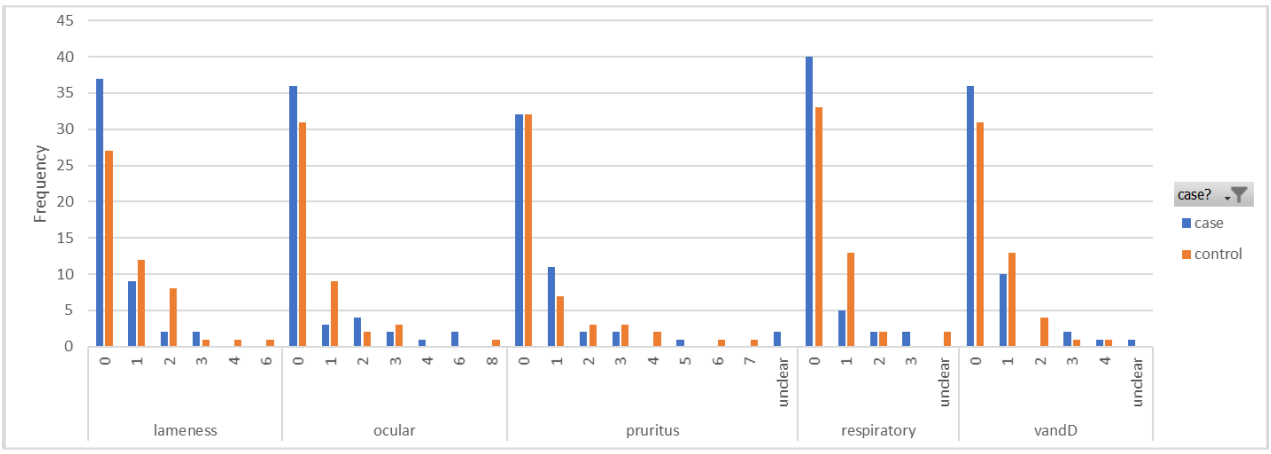
Figure 11; number of consultations occurring over the following six months for teleconference consultations and face-to-face controls.



Number of follow up visits in a 6-month period relating to the condition.

When only consultations relating to the selected case were counted in the proceeding six months, there remained a similar albeit less obvious tendency for telemedicine cases to have no additional follow up (lameness, ocular, respiratory and vomiting and / or diarrhoea) (figure 12).

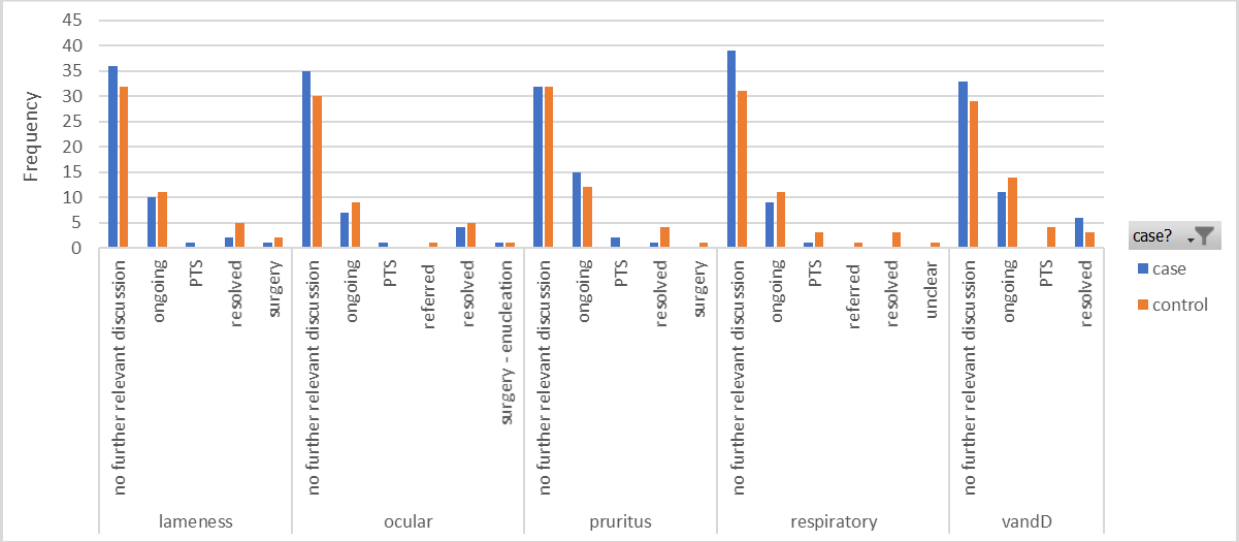
Figure 12; number of related consultations occurring over the following six months.



Outcome as recorded over six months

In the majority of cases (~60% of those read), it was not clear over the proceeding records whether the an individual case was resolved or not (based on no further relevant discussion of the condition of interest); this seemed consistent across the five clinical categories (figure 13). Less frequently, a range of outcomes were explicitly recorded in the six-month follow-up period including ongoing disease, PTS, resolution. The pattern of these also appeared to be broadly similar between telemedicine cases and their controls.

Figure 13; Frequency of outcomes recorded in the following six-month narratives.



Treatments in the following six months.

Treatments most commonly prescribed in the six months following the initial consultation of interest are described in table 6 for species and clinical categories.

It is important to note that not all the treatments prescribed to an animal during consultations in this period may relate to the condition central to the consultation of interest. For example, concurrent treatments for co-morbidities or for subsequent new and unrelated conditions. This is likely to be particular true where the initial presentation was for a more acute and self-limiting disease.

Still, it is interesting to note differences, such as the preference towards injectable treatments (methylprednisolone and cefovecin) in cats attending face-to-face control consultations for pruritus and upper respiratory complaints compared to telemedicine consults for the same conditions. The frequent use of meloxicam in the respiratory category in both species may subjectively suggest a suspicion of Kennel Cough / cat flu, where it might be used to reduce upper respiratory inflammation.

Table 7; most frequent treatments used in the following six months (n in brackets).

Condition	Case or control	Cat	Dog
lameness	case	meloxicam (5)	meloxicam (25)
	control	meloxicam (9)	meloxicam (25)
ocular	case	fusidic acid (7)	fusidic acid (15)
	control	selamectin / robenacoxib / meloxicam / vaccine / praziquantel / clindamycin (2 each)	fluorescein sodium (14)
pruritus	case	prednisolone (5)	oclacitinib (16)
	control	methylprednisolone (5)	prednisolone (19)
respiratory	case	meloxicam (11)	meloxicam (8)
	control	cefovecin (7)	meloxicam (16)
V and/or D	case	meloxicam (4)	omeprazole / praziquantel (10 each)
	control	praziquantel (7)	vaccine / maropitant (10 each)

This work would not have been possible without the data submitted by participating veterinary practices. We are grateful for their involvment in SAVSNET.

We hope this report is a useful aid to your discussions Should you have any questions, please contact us and we would be happy to help.

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RCVS VETCOMPASS EQUINE PANDEMIC PROJECT

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DEPARTMENT OF PATHOBIOLOGY AND POPULATION SCIENCES
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THIS DOCUMENT REPRESENTS A SUMMARY OF THE WORK UNDERTAKEN BY THE ABOVE AUTHORS. THE FULL PROJECT IS UNDER JOURNAL SUBMISSION AND THE FINAL JOURNAL PUBLICATION OF THE REPORT WILL BE AVAILABLE IN DUE COURSE.

JUNE 2022

RCVS VETCOMPASS EQUINE PANDEMIC PROJECT

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EXECUTIVE SUMMARY **June 2022**

The COVID-19 pandemic posed considerable challenges for the profession. Changes to normal working practices were needed to provide essential services, whilst safeguarding human health. This study explores the impact of the pandemic on equine veterinary care in the UK. The study describes equine veterinary activity in the 12-months immediately prior to and following the introduction of the first lockdown and reviews care in two periods during maximal COVID-19 restrictions and the same periods pre-pandemic. The specific objectives were to:

- Describe 12 months of equine veterinary activity during (23/03/2020–22/03/2021) and before (23/03/2019–22/03/2020) the pandemic for the entire study population.
- Review in detail, in a random sample, equine veterinary care for two two-month periods when maximum COVID-19 restrictions were enforced (23/03/2020–22/05/2020 and 05/11/20-04/01/2021) and the corresponding periods in the pre-pandemic year.

The study population included equids under the active care of 20 UK mixed and equine veterinary practices participating within VetCompass. The total number of equids and care episodes were reported per month. Proportional measures of activity and face-to-face activity were calculated. Wilcoxon signed rank tests were used to compare activity in the pre-pandemic and pandemic year. Details of all care episodes provided to random samples of 1,000 equids in four, two-month periods of interest were extracted. Nature of care (face-to-face or non-face-to-face), episode type (routine or problem) and clinical indications were described by number and expressed as a proportion of corresponding episodes or indications, with 95% confidence intervals.

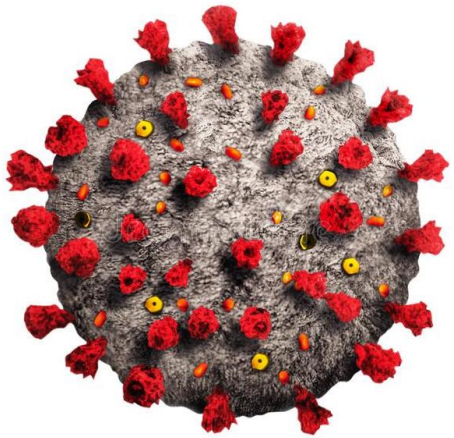
During the two-year study period, 236,997 care episodes were provided to 46,095 equids. The greatest disruption to veterinary activity was observed in the early pandemic. In the month following the introduction of the first national lockdown, compared to pre-pandemic, there was a 39% and 43% decrease in the numbers of equids under active care and episodes of care, respectively. In the first pandemic period, proportional activity fell by a median of 10.7% and proportional face-to-face activity by a median of 20.2% per practice compared to the corresponding pre-pandemic period. Consistent with professional guidance, there was a decrease in the proportion of care episodes attributable to vaccination and routine dental work. Whilst there was no difference in systemic antimicrobial prescription, there was an increase in the proportion of clinical care episodes where non-steroidal anti-inflammatory drugs were prescribed in the early pandemic compared to the early pre-pandemic period. By June 2020, absolute and proportional measures of veterinary activity had returned towards near normal levels. Subsequent tightening of COVID-19 restrictions had little effect on equine veterinary care.

Throughout the pandemic, veterinary professionals have acted in a manner that not only protected human health but ensured animal health or welfare were not compromised. In addition to the measures described above, within the EPRs there was evidence of veterinarians conducting COVID-19 risk assessments prior to attendance and recommending non-urgent work be delayed. In addition, the clinical narrative often stated that social distancing was maintained, and personal protective equipment worn during physical examinations.

Equine veterinary care was adversely affected in the early pandemic, however, disruption to services was short-lived. Throughout this challenging time, the profession demonstrated their ability to implement COVID-19 risk-mitigating working practices and maintain vital veterinary services.

Royal Veterinary College
University of London

Impact of COVID-19 on Equine Veterinary Care in the UK



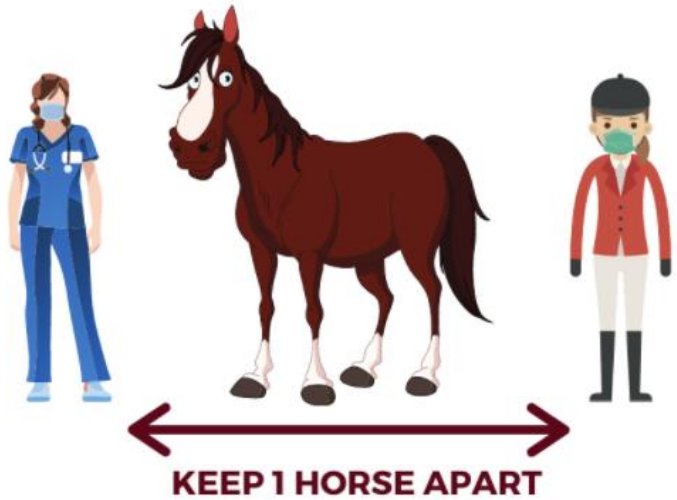
Sarah Allen, Dan O'Neill, Jackie Cardwell, Kristien Verheyen & Dave Brodbelt

Project Summary June 2022

Project Summary

Background

- COVID-19 pandemic poses an unprecedented challenge
- Changes to normal working practices
  - Social distancing, illness, self-isolation, furlough
- Potential for negative impact on animal health
  - Reduced health-seeking behaviour
  - Delays in diagnosis and treatment



Objectives

- Describe the nature of equine veterinary activity before (23 March 2019 to 22 March 2020) and during the pandemic (23 March 2020 to 22 March 2021)
  - Equid and care episode numbers
  - Estimation of face-to-face activity
- Detailed review of equine veterinary activity in periods of interest

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Materials and Methods: Objective 1

- **Study Population**
  - All equids under the active care of 20 UK mixed and equine veterinary practice, participating in VetCompass, during the two-year study period
- **Care Episodes**
  - Uniquely dated entries identified
  - Semi-automated classification of nature of care
- **Descriptive Statistics**
  - Number of equids and care episodes per month
  - Monthly and period
    - Activity
    - Proportional face-to-face activity
  - Wilcoxon signed rank tests

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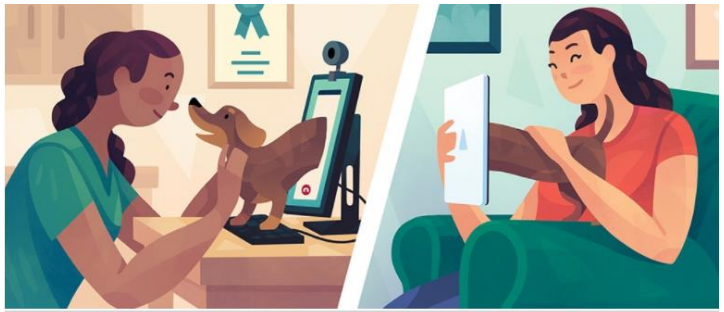
Materials and Methods: Objective 2

- **Sample populations**
  - Simple random sample of 1,000 equids under active care
    - Early and late pre-pandemic (23 Mar to 22 May 2019, 5 Nov 2019 to 4 Jan 2020)
    - Early and late pandemic (23 Mar to 22 May 2020, 5 Nov 2020 to 4 Jan 2021)

- **Description**
  - Demography
  - Care episodes
    - Nature (face-to-face v non-face-to-face) and type (routine or problem)
  - Immediate management and treatments
  - Nature of subsequent care episodes
  - Indications
    - Nature and type
    - Problem by indications by top-level disorder group and diagnosis



Illustration/Jarom Vogel

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Collaborating Practices

Practice Type

Equine only = 5
Mixed with dedicated equine department = 5
Mixed without dedicated equine department = 10

RCVS Accreditation Status

Equine hospital = 4
General equine practice = 5
Core standards = 5
None = 6

Practice Size (Equid Numbers)

Median = 1,794
IQR: 512-3,744, range 202-8,203

Location

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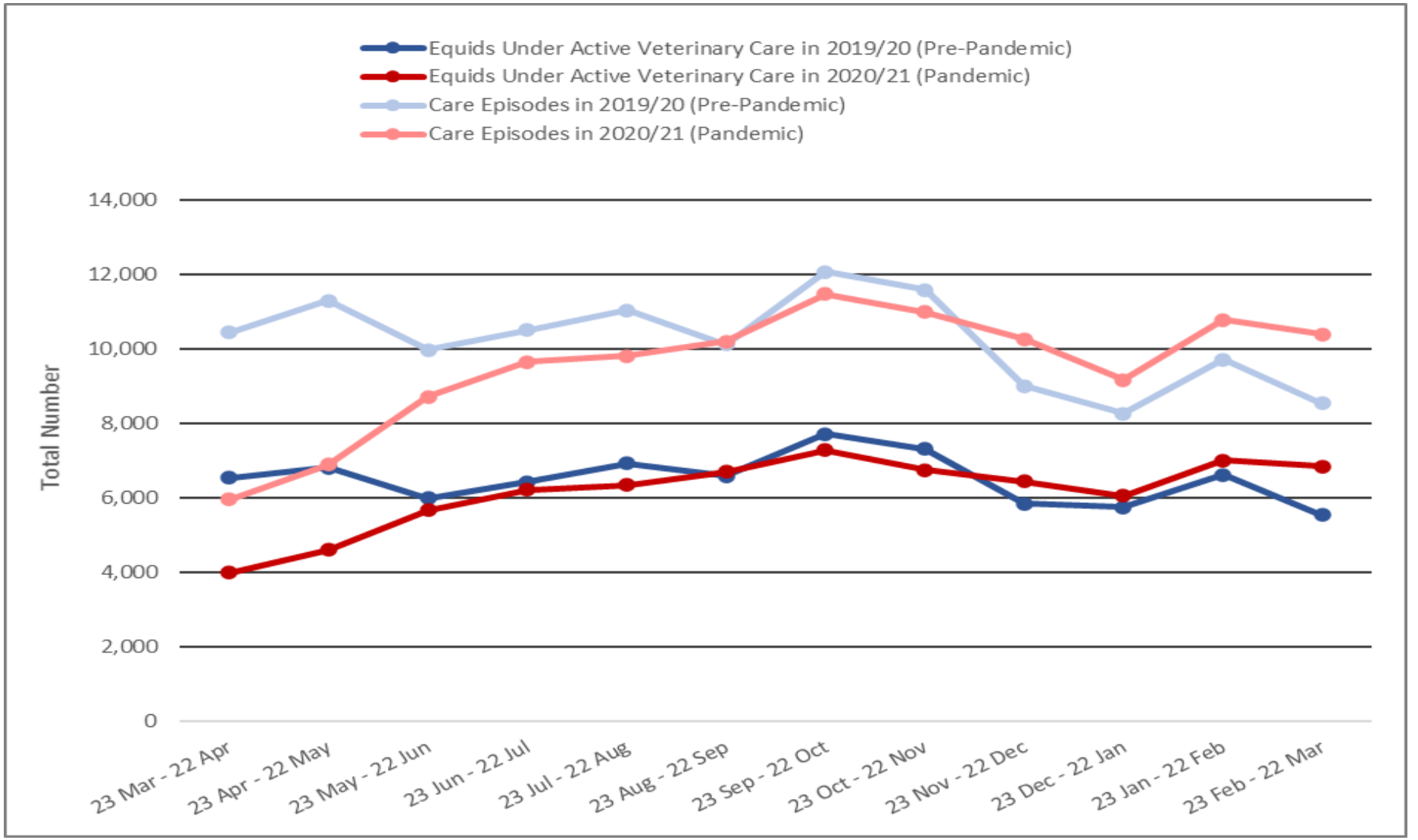
Equid and Care Episode Numbers



Study Population
46,095

Total Care Episodes
236,997

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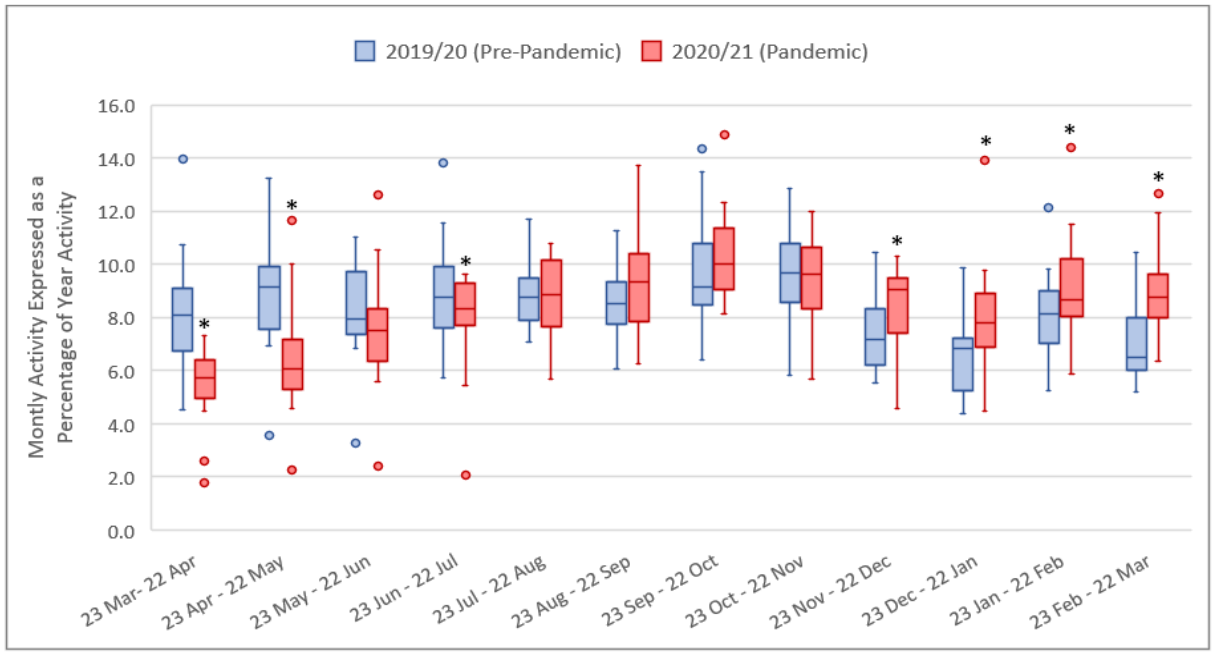
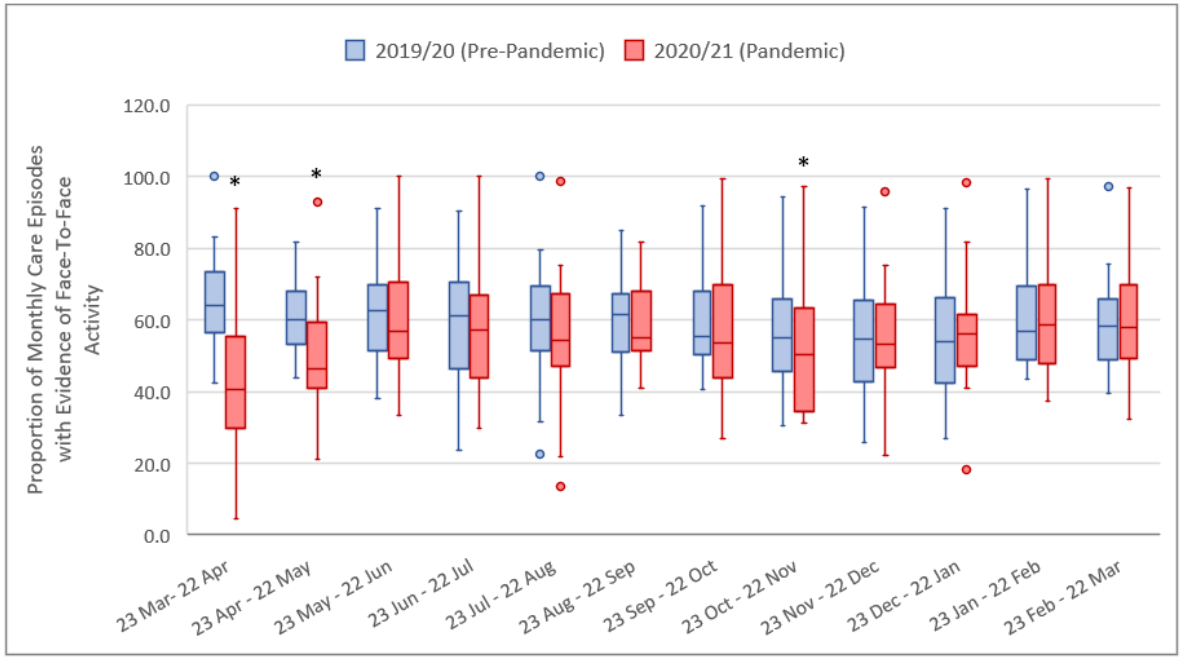
Monthly Activity





Decreased activity

- 23 Mar to 22 Apr
- 23 Apr to 22 May
- 23 Jun to 22 Jul

Increased activity

- 23 Nov to 22 Mar

Decreased face-to-face activity

- 23 Mar to 22 Apr
- 23 Apr to 22 May
- 23 Oct to 22 Nov

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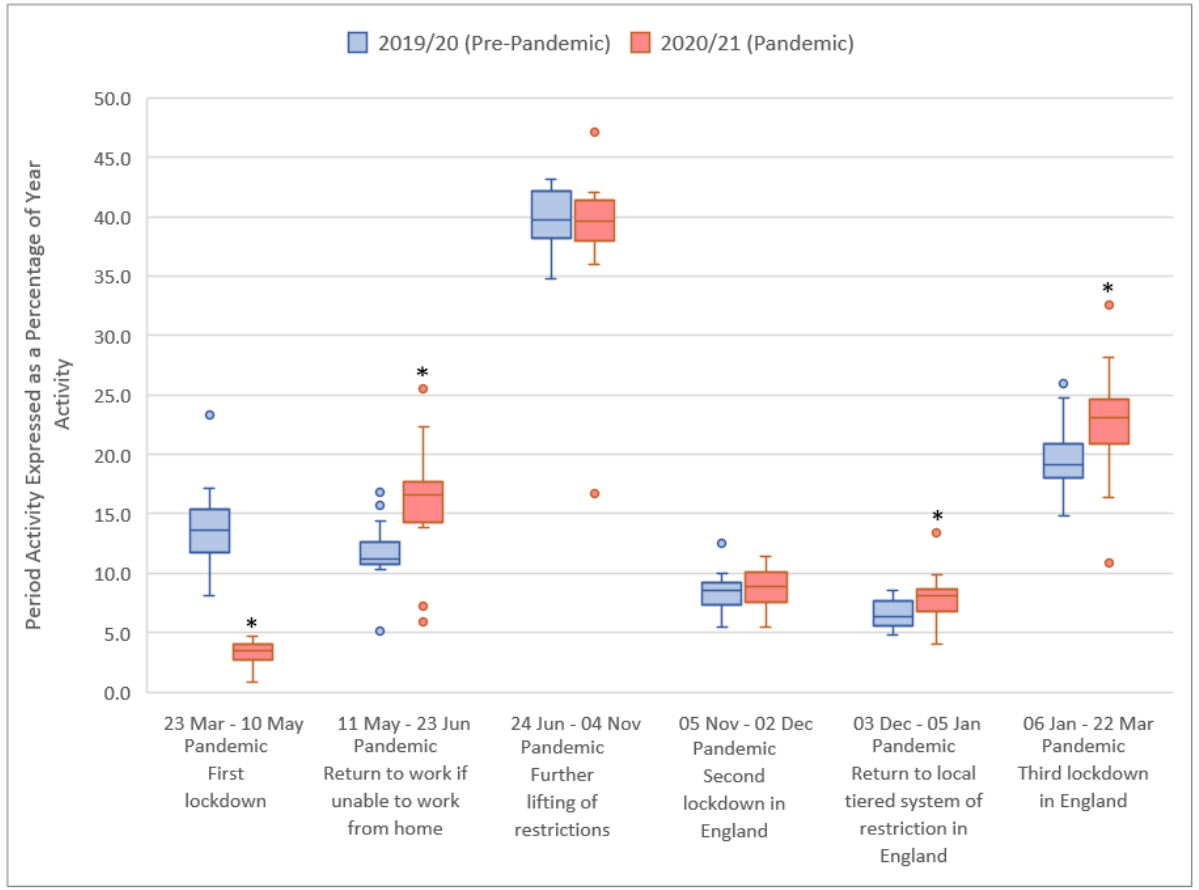
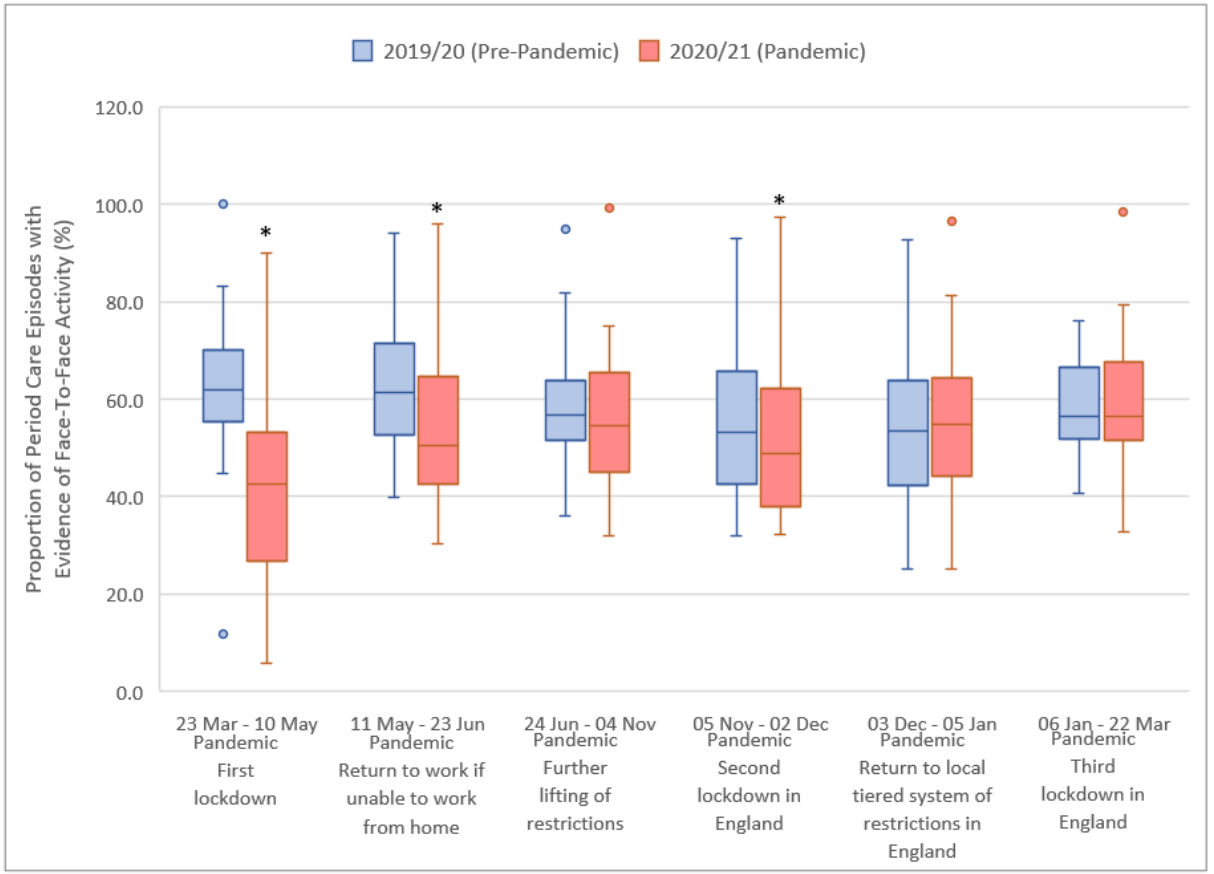
Period Activity





Decreased activity

- 23 Mar to 10 May

Increased activity

- 11 May to 23 Jun
- 03 Dec to 05 Jan
- 06 Jan to 22 Mar

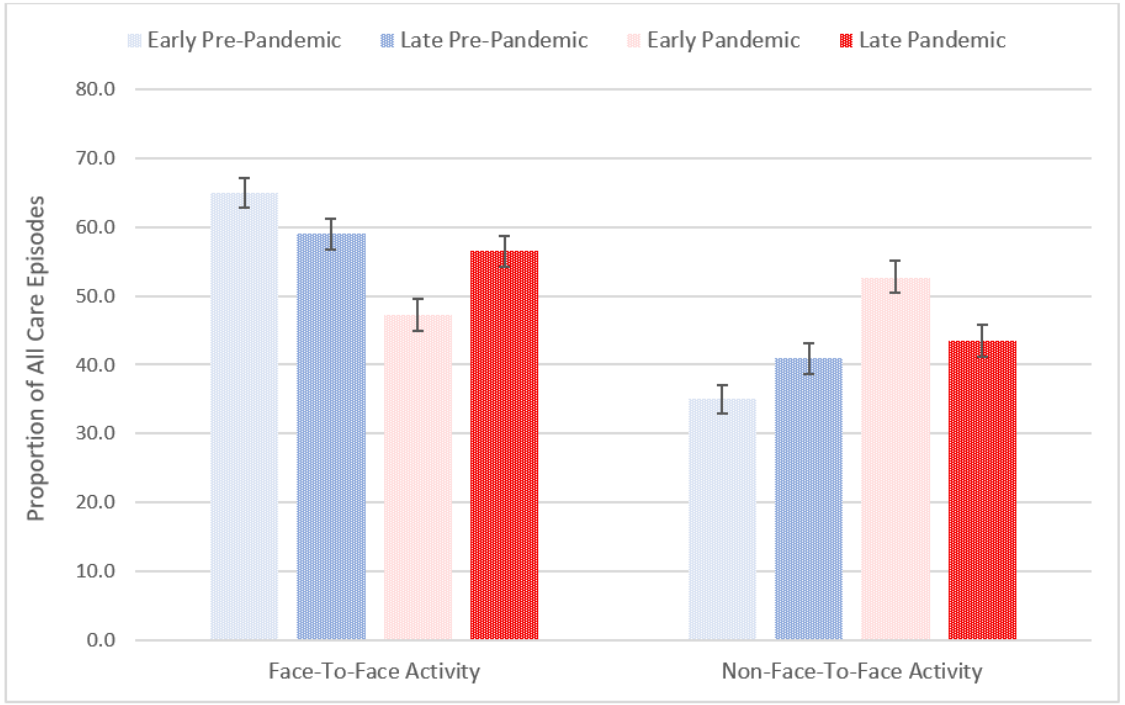
Decreased face-to-face activity

- 23 Mar to 10 May
- 11 May to 23 Jun
- 05 Nov to 02 Dec

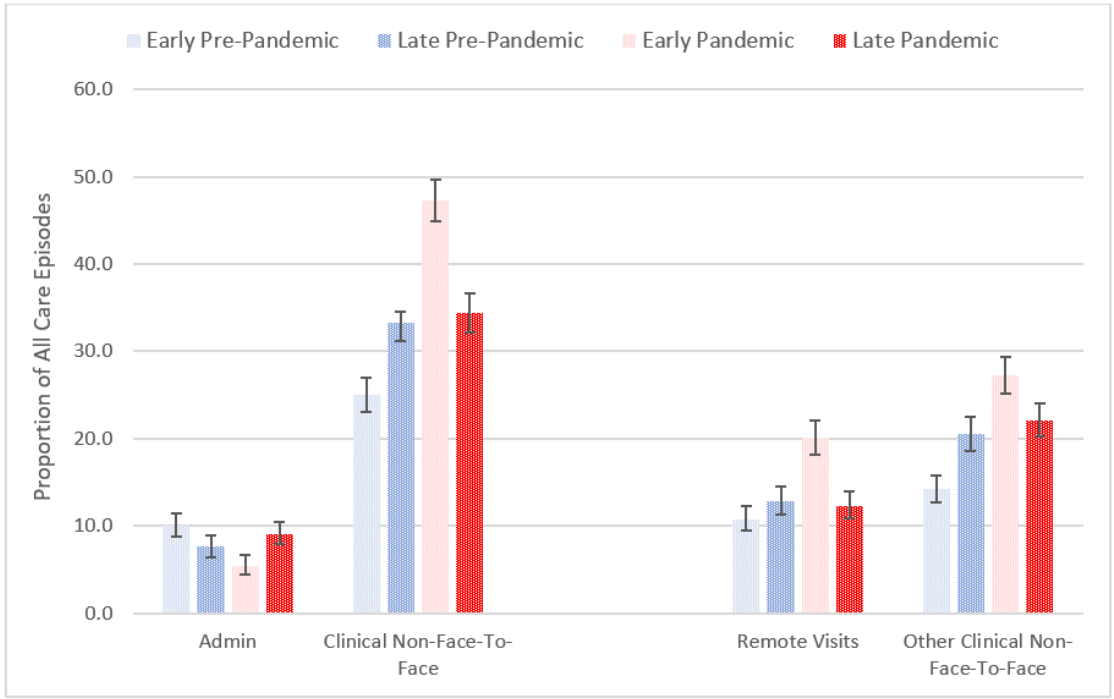
Nature of All Care Episodes

Total number of care episodes

Early pre-pandemic =1,979
Late pre-pandemic =1,837
Early pandemic =1,779
Late pandemic =1,869



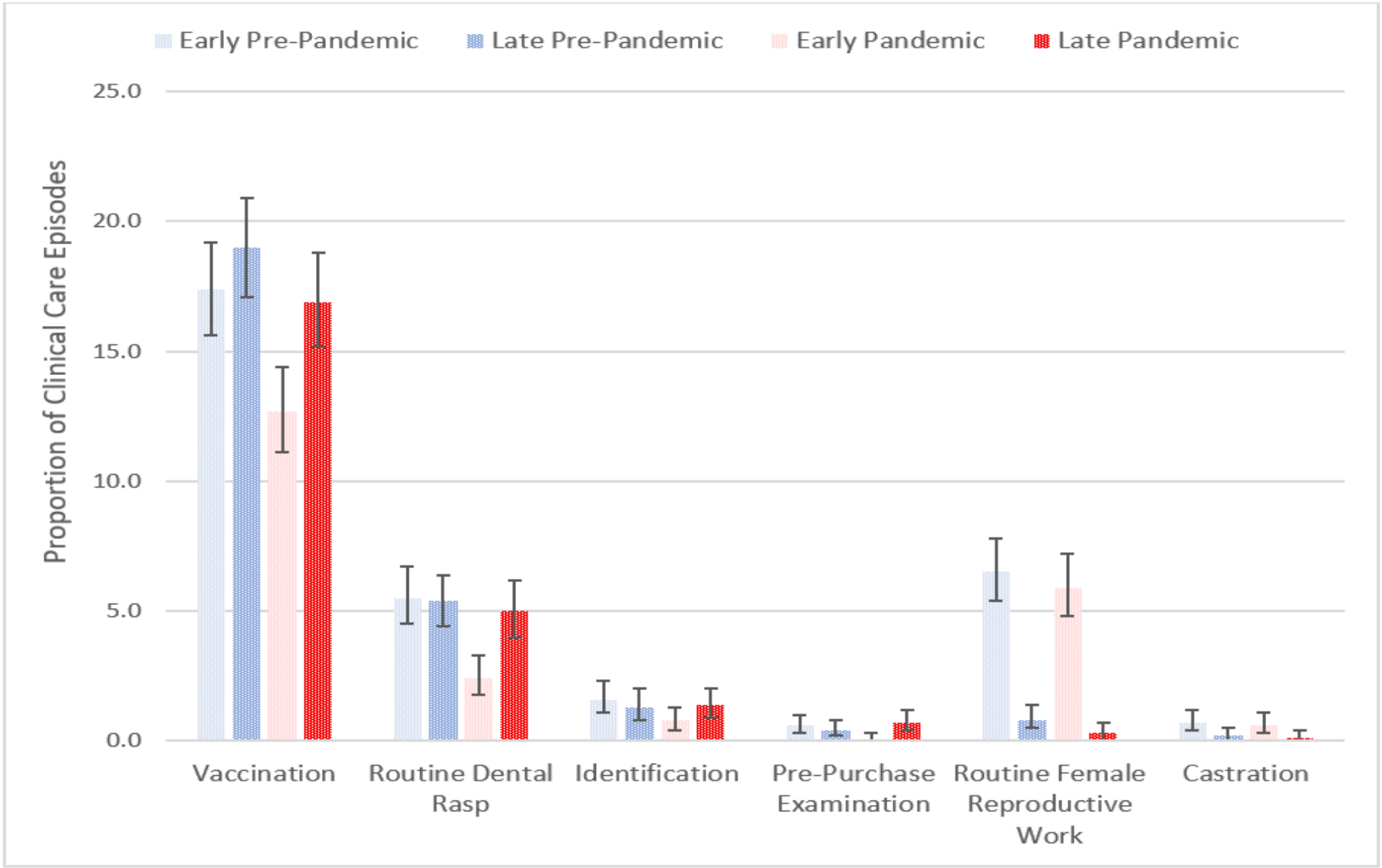
Decreased face-to-face activity in early pandemic period



Decreased admin in early pandemic compared to early pre-pandemic

Increased remote visits + other clinical non-face-to-face activity

Routine Procedures



Decrease in the proportion of clinical care episodes attributable to **vaccination** & **routine dental treatment**

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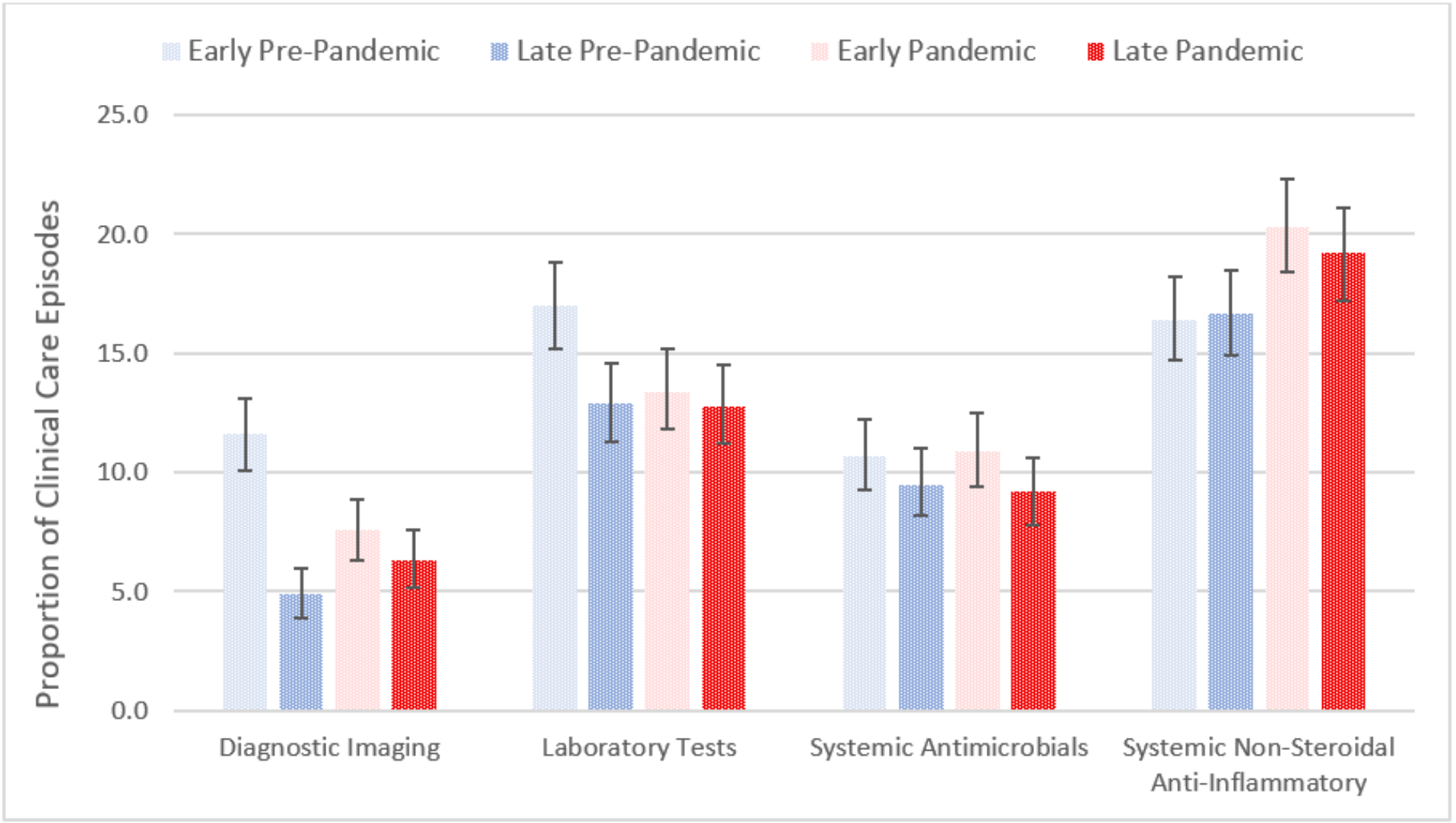
Common Procedures & Prescriptions



Decreased proportion for **diagnostic imaging** in early pandemic compared to early pre-pandemic

Increased proportion for prescription of **systemic NSAIDs** in early pandemic compared to early pre-pandemic

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Limitations

- **Semi-automated classification** reliant on appropriate invoicing
- **Lockdown phases** correspond to England and may not accurately reflect restrictions in a practice's local area
- **Quality** of clinical recording variable
  - Demography & clinical indications
- **Convenience sample** of veterinary practices

Conclusions

- **Greatest disruption in early pandemic period**
- Working practices **adapted** to maintain veterinary services
  - COVID-19 risk assessment forms
  - Social distancing + personal protective equipment
  - Extra staff taken on visits
  - Non-urgent care delayed during tightest restrictions
  - Increased use of remote visits + prescribing
  - Non-certified vaccination

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RCVS SETTING VETERINARY STANDARDS

Legal Advice

Legal advice was obtained from Fenella Morris QC – which she summarised on 30 March 2022 as follows:

1. I have been asked to advise on the interpretation of sub-paragraph 4(1) of Schedule 3 of the Veterinary Medicines Regulations 2013. The paragraph provides as follows:

   A veterinary surgeon who prescribes a veterinary medicinal product classified as POM-V must first carry out a clinical assessment of the animal, and the animal must be under that veterinary surgeon's care.

2. Having considered the language of the provision and of the surrounding legislation, and the purpose of the legislation, it is my view that the words *"clinical assessment"* should be interpreted so as to include both in-person and remote clinical assessment.

3. The question of what *"clinical assessment"* must be carried out before the prescription of a POM-V depends upon the circumstances of the case i.e. it is the clinical assessment which is necessary for a veterinary surgeon to be satisfied that the prescription he makes is appropriate. This will be a matter of clinical judgment in each case. Some cases will require an in-person physical examination by the veterinary surgeon of the animal for the necessary clinical assessment to have been carried out, but not all.

4. Furthermore, it is my view that the words *"under that veterinary surgeon's care"* do not change the interpretation of the words *"clinical assessment"*. An animal may be under a veterinary surgeon's care within the meaning of the Regulations in circumstances that include both in-person and remote care. The question of whether the veterinary surgeon's contact with the animal is sufficient to render it under his care within the meaning of the Regulations will depend upon the circumstances of each case. Answering the question will involve consideration of whether the veterinary surgeon is taking professional responsibility for the animal to which he is prescribing the POM-V in relation to its prescription.