

Evidence-based nursing – how to write a knowledge summary

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The biennial *Veterinary Evidence Today* Evidence-based Veterinary Medicine Conference allows the international veterinary community to meet, share progress and overcome challenges in evidence-based practice.

An old friend messaged me the other month and asked: “You’ll know that product vets recommend for scared dogs – does it actually work?” I took a moment to register the product she was talking about, then realised, to my embarrassment, I actually didn’t know.

I knew what the manufacturer literature told me, and I had heard a few anecdotal reports from clients, but when it came down to whether it really worked, I didn't have a clue.

The more I thought about it, the more I started to think perhaps I really ought to know – especially considering I was recommending its use to clients. They were putting their faith in me to give them a product that worked and here I was breaking into a cold sweat at the realisation I didn't know.

I realised many situations occur where I share information with clients where I am actually not sure if what I am saying is backed by science. Suddenly, everywhere I went, I started asking the same question: "Where is the evidence?"

Answering a big old question



Knowledge summaries aim to answer clinical questions in an evidence-based manner.

The great news is, through collective action, we are only seven steps away to answering this in any of our nursing-related queries – from whether chicken and rice fed postoperatively reduces gastrointestinal disturbance and whether slowing down a great Dane's speed of eating reduces risk of gastric dilatation volvulus, to which handwashing technique is best preoperatively and whether prepubertal neutering increases the risk of orthopaedic disease in small dogs.

Part of the solution lies in us all developing the skills to critically appraise the evidence – this can be done by taking up the challenge of writing what are known as "knowledge summaries"– to share the benefits with our nursing colleagues.

In short, knowledge summaries are critically appraised topics where a specific question is asked and the scientific literature is consulted to develop a clinical bottom line to inform our nursing

practice, client advice and so on.

These are then published in the open access journal *Veterinary Evidence* (the official journal of RCVS Knowledge) so everyone can read the article in full and decide whether the information is high quality and relevant to them.

So, here are the seven golden rules to follow to write a knowledge summary...

Ask a question

Take a moment to think about a question and maybe ask colleagues what they would like to know.

Make it answerable



Adopting the PICO mnemonic makes questions answerable.

Once you have a question in mind, it's time to turn it into an answerable one (stay with me). To do this, we use the mnemonic **PICO**, which stands for:

- **P**atient/population
- **I**ntervention
- **C**omparison
- **O**utcome

For example, “Does chicken and rice as a postoperative meal work?” could become: “In dogs in the immediate postoperative phase (P), does feeding chicken and rice (I) – versus feeding its normal diet (C) – reduce the risk of vomiting? (O)”.

At this stage, you can approach RCVS Knowledge with your PICO idea and its staff can help you develop an answerable question, as well as ensuring you are not duplicating someone else's

PICO. RCVS Knowledge produces toolkits to assist with knowledge summaries, too, and Evidence-Based Veterinary Medicine (EBVM) Toolkit 1 will help here. Adopting the PICO mnemonic makes questions answerable.

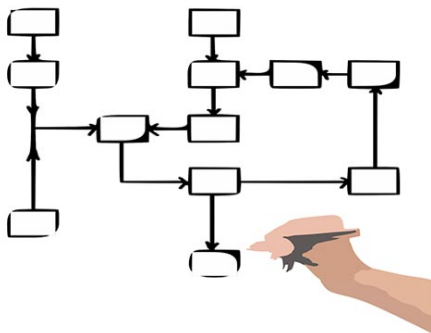
Conduct a literature search

Develop a systematic search strategy so you can logically search the scientific literature for suitable studies. For example, we might search the PubMed database for all publications that include the following information:

“Dog AND surgery AND diet AND vomit”

Staff at the RCVS Knowledge library will help you develop a comprehensive search strategy, and can perform the search for you if you do not have access to a database or are unconfident in carrying out your first search. Free temporary membership of the RCVS library helps here, though, as will EBVM Toolkit 2.

Appraise the evidence



Examining the quality of the studies is integral.

In this critical step, you examine the quality of the study (how good is it?), as well as how well it relates to the clinical situation you are interested in; so, are the findings relevant to your clinical setting or situation?

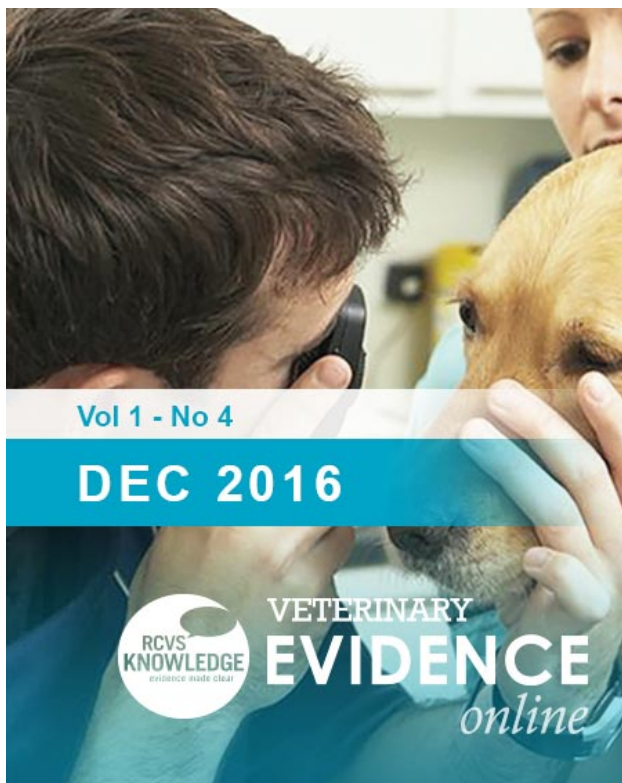
For example, if the only study available to answer your question uses dogs with a megaesophagus, are the findings relevant to the general population of pet dogs? To help, EBVM Toolkits 6 to 11 provide useful points to consider for each type of study design.

They even have flow charts to help you work out what kind of study you are looking at, which can be found in EBVM Toolkits 3 and 4.

Download a template

Write your knowledge summary using a downloadable template from the Veterinary Evidence website. You will provide a clinical bottom line (the bit that quickly tells veterinary professionals what you have concluded from the evidence available to answer your PICO and what it means for future clinical practice). You should also outline the key points from each study and provide a detailed appraisal, reflection and discussion of what these findings mean for clinical practice. Get someone to read your knowledge summary for clarity and coherence.

Submit your summary



A couple of *Veterinary Evidence* reviewers will look at your summary.

After submitting your knowledge summary to *Veterinary Evidence*, it will be sent to a couple of reviewers, who will provide you with feedback. The journal has a policy of open reviewing, so you will know who reviewed your work and the reviewers, while they may be critical, will be fair and helpful in their comments.

Expect to be asked to make changes, as most authors are asked to make revisions. It is very rare for any article submitted to any scientific journal to be accepted without revisions, and it ultimately

makes for a better quality summary.

Relax

Sit back and enjoy a well-earned cup of tea – you have just contributed to the evidence base that will help veterinary professionals undertake evidence-based practice. Not only that, you have just completed several hours of quality CPD, too, and it has cost you nothing but your time. Fill in your RCVS CPD record, share your publication on Facebook, tweet it on Twitter and be proud of your efforts.

Conclusion

Hopefully, this article has whetted your appetite to have a go at writing a knowledge summary. The support at RCVS Knowledge really is amazing, but EBVM is a collective movement that needs grass roots action – and that means you.

If you want to contribute, but don't want to go it alone, you don't have to. Join us, the Veterinary Nursing Knowledge Group, and help to write some group knowledge summaries. Now we are developing a themed set of summaries based around neutering to help us answer the questions clients may ask during nurse consultations and developmental checks, but we are open to investigating anything veterinary professionals think would be useful in informing our practice.

We would love you to contribute, whether you have a question you want us to investigate or want to investigate a question yourself and would like the moral support a group provides.

For more information, contact RCVS Knowledge (info@rcvsknowledge.org) or, to be added to the Veterinary Nursing Knowledge Group, you can email me (co-chairman) at lbuckley@harper-adams.ac.uk

At the time of writing, members of this group had written summaries on topics as diverse as:

- fluid therapy (hanging time of fluids)
- preoperative handwashing/scrubbing (both published)
- rate of eating and bowl height as risk factors for gastric dilatation volvulus (in press)
- alpha-casozepine as an anxiolytic in dogs (under review)

We have many more ideas under discussion, so join us – you know you want to.