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VetPartners Antibiotic Stewardship Report 2024







Welcome to the VetPartners Antimicrobial Stewardship Report 2024!

In celebration of the World Health Organisation's Antimicrobial Resistance Awareness Week this November, the Clinical Board are delighted to be able to share the highlights of our Quality Improvement (QI) work focusing on antibiotic stewardship in the UK over the past year.

This year's focus for Antimicrobial Awareness Week across the world is **'Educate. Advocate. Act Now'.** We are passionate about promoting good antibiotic stewardship among our teams and this aligns with our mission to continuously monitor our antibiotic usage, to identify areas where we might be able to improve. This, in combination with targeting set conditions and molecules, means we can really measure the impact we are making and ensure we are not harming patient outcomes.

We recognise that good antimicrobial stewardship is a team effort and that we all have a responsibility to combat antimicrobial resistance, not just the vets who prescribe these critical medicines. So, we aim to utilise a whole team approach, including our clients, to promote the responsible use of antibiotics. Anyone in our practices who works with animals and clients including our nurses, yard and farm technician teams, laboratory and client care teams, as well as vets, are involved in our antibiotic stewardship work. We want to ensure our work is as relevant and meaningful to our clinical teams as possible and so we are guided by our species clinical boards and iterate our work based on feedback and requests from those working directly with animals under our care.

For the last two years, during Antimicrobial Awareness Week, we have launched an annual Antibiotic Stewardship Report and both times have been amazed at the resulting impact. We have been contacted by people throughout the UK and beyond who want to discuss our work and open important conversations about how we can partner with others to make a difference. We want to keep this progress up!

This report includes some highlights of our ongoing work, as well as links to existing and new resources that we have created to support our teams. This is just the 'tip of the iceberg' and our work extends through many species, conditions and types of antibiotics.



I am so proud of the way teams come together to

make change that can have a positive impact on the health of our patients, people and planet. The consistent reduction in our use of antibiotics and focussed work to ensure key medicines are efficacious when we need them is hugely important to us.

I hope you enjoy reading this report and I would encourage you to get in touch, tell us what you think, share ideas or suggest partnerships moving forward.



Please contact us by emailing **clinical.board@vetpartners.co.uk**. Thank you for your help,

Rach

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Antibiotic usage and monitoring

Working alongside our teams, a key QI measure for our group has been the absolute quantity of antibiotics we regularly prescribe and use. Using the data collected, a key objective of our work is to safely enable a reduction in our antibiotic use without harming patient outcomes.

Over the last few years, we have developed a method of monitoring this antibiotic purchasing over time relative to the number of prescribers (full time equivalent vets – FTE[Vet]) in our organisation. This is not quite the same as usage, but it is really exciting as it gives us a large-scale view of our antibiotic use over time and we can look at changes.

Across the VetPartners UK team between January and August 2024 together we bought 3 tonnes of antibiotics. The actual figure was 3,164kg (compared to 3,829kg in 2023, 3,899kg in 2022 and 4,672kg in 2021). On average we bought a little under 2kg of antibiotics per vet in the first eight months of this year. The actual figure was 1.73kg/FTE[vet] (compared to 2.20kg/FTE[vet] in 2023, 2.41kg/FTE[vet] in 2022 and 3.09kg/FTE[vet] in 2021).

This means we have reduced our antibiotic purchasing by 44.0% since 2021.

It's incredible to see this continuous decline in the amount of antibiotics we use. QI programmes should progress care and make a difference – we are! This is testament to our amazing teams and their ongoing commitment to progressing practice and safeguarding antibiotic use.



Graph 1: Antibiotic purchasing per month for years 2021- 2024 measured in grams per full-time equivalent (FTE) vet.



Since 2021 we have seen a 44.0% reduction in the amount of antibiotics purchased per full time equivalent vet!





Enrofloxacin in small animal practice

Enrofloxacin is a fluoroquinolone antibiotic which is categorised by the European Medicines Agency (EMA) as Category B: Restrict, and as a 'highest priority critically important antimicrobial' for human health by the World Health Organisation (WHO). Use of fluoroquinolones should be reserved for clinical conditions which have responded poorly, or are expected to respond poorly, to other classes of antimicrobials and their use ideally based on susceptibility testing.



How much enrofloxacin are we purchasing in our small animal patients?

Within our small animal practices, we have been looking at the total purchasing of enrofloxacin since 2021 – this can be seen on the graph below. **Enrofloxacin use was down 65.8% in 2024** compared with 2021 (from 8.56g/FTE small animal vet between January and August 2021, to 2.93g/FTE small animal vet between January and August 2024. This is great news in terms of reducing our use of critically important antibiotics. It is important that we continue to explore our enrofloxacin use to ensure it is reserved for when we need it most.



Graph 2 – Enrofloxacin purchasing per month for years 2021- 2024 measured in grams per full-time equivalent (FTE) small animal vet.



What about rabbits?

Although enrofloxacin is considered safe, available, and is licensed in rabbits, that does not mean it is always an appropriate first-line antibiotic choice for many common clinical conditions we encounter in practice. Our Exotics Clinical Interest Group (CIG), with the support of the Small Animal Clinical Board and Clinical Board Support Team, have developed key resources on snuffles, dental abscesses and ileus in rabbits to further explore this. To find out more, VetPartners colleagues can access our course **'Enrofloxacin – Does Licensed Have to Mean First-line?'** on VetPartners Learning.

Moving forwards, we will look at antibiotic use in more exotic species encountered in our small animal practices.



Cefovecin purchasing in small animal practices

Over the last two years one molecule we have focused on is cefovecin, a high priority-critically important antibiotic, used in small animal practice. It is important we use this molecule responsibly to preserve it for cases when it is needed, so we worked with our teams to reduce and refine its use in many clinical settings.

Since 2021 we have been looking at the total purchasing of cefovecin which is demonstrated in the graph below. **Purchasing of cefovecin fell by 38.2%** during this time (from 1.57g/FTE small animal vet between January and August 2021, to 0.97g/FTE small animal vet between January and August 2024).





Graph 3 – Cefovecin purchasing per month for years 2021-2024 measured in grams per full-time equivalent (FTE) small animal vet.



Finding alternatives to cefovecin

As part of our QI work, we collaborate with our teams to find out when they use this drug and use this understanding of prescribing behaviours to change the way we approach some cases whilst still achieving great clinical outcomes. As well as looking at the diagnosis and treatment of certain conditions such as cat 'flu', cat bite abscess and cystitis, we also developed resources to support practices to undertake audits and provided information about the availability of '**first line' antibiotic choices**.





Use of High Priority-CIAs in equine practice

Third and fourth generation cephalosporins (e.g. ceftiofur) are classified as Highest Priority Critically Important Antibiotics (HP-CIAs). Therefore, the use of these drugs must be justified and indicated by culture and sensitivity, when no other antibiotic options exist, to ensure we safeguard them for when they are needed most.

Ceftiofur



Graph 4 - Ceftiofur purchased for years 2021-2024 measured in grams per full-time equivalent (FTE) equine vet. Data points shown are a 3-month rolling average.



Ceftiofur is a HP-CIA and so the Equine Clinical Board and Clinical Board Support Team have undertaken an audit of purchasing data relative to full-time equivalent (FTE) vets across our equine practices, which we update annually.

The great news is that **ceftiofur** purchasing was down 51.3% in 2024, compared with 2021 (from 12.07g/FTE equine vet between January and August 2021, to 7.62g/FTE equine vet between January and August 2024).



Trimethoprim/sulfadiazine (TMPS)

The Equine Clinical Board also wanted to

if our clinical teams change their prescribing

of TMPS is down 48.3% in 2024, compared

vet between January and August 2021, to 3659.25g/FTE equine vet between January

with 2021 (from 7076.60g/FTE equine

and August 2024).

behaviours. The good news is that **purchasing**

monitor TMPS usage, as use of first-line broad spectrum antimicrobials may increase

We have also looked at the variation in use of HP-CIAs across our equine practices and can see that some practices still occasionally use them and are selecting appropriately on a case-by-case basis, and some have stopped using them entirely - this demonstrates the diversity of our practices. This highlights the power of QI activities and that they can instigate change without negatively influencing clinical outcomes.

You can read the Equine Clinical Board's resource on the responsible use of ceftiofur here.



Graph 5 - Trimethoprim/sulfadiazine purchased for years 2021-2024 measured in grams per full-time equivalent (FTE) equine vet. Data points shown are a 3-month rolling average.











Antibiotic use in farm practice

Building on previous years, the Farm Animal Clinical Board have undertaken an audit of antibiotic purchasing data relative to full-time equivalent (FTE) vets across our farm practices, which is updated annually. We have also focussed on the role of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) in safeguarding animal health and welfare alongside the responsible reduction of antibiotic use, as these drugs can be used to replace antibiotics in a number of situations. Our **antibiotic use in 2024 (January-August) was 4182.56g/FTE vet, down 26.7%** from 5704.74g/FTE between January and August 2023. Conversely, **NSAID use in the same period increased by 11.1%.**



Graph 6 - Antibiotic purchasing per month for years 2023- 2024 measured in grams per full-time equivalent (FTE) vet. Data points shown are a 3-month rolling average



Graph 8 – Antibiotic and NSAID purchasing in 2023 measured in grams per full-time equivalent (FTE) vet.

We have continued to develop new clinical decision-making resources around NSAID use to support our teams and these can be accessed by VetPartners colleagues on our **learning platform.**

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Graph 7 – NSAID purchasing per month for years 2023- 2024 measured in grams per full-time equivalent (FTE) vet. Data points shown are a 3-month rolling average.

We then looked at variability between practices. There are many reasons why this may be seen, for example variation in caseload, species seen, products used and geographical location. Our next step is to look at the relationship between the use of these two medications. We are also looking at these data in different ways e.g. looking at the number of doses used.



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As part of our antibiotic stewardship activities, we are pleased to be collaborating with other groups across the veterinary profession and beyond to share our work and the work of others.

Whether you are part of the VetPartners team or not, if you are working in this area, interested in our data or are looking for partners passionate about this subject, please get in touch using the contact details shown below.

We are extremely grateful to all those involved in the production of this report and we are proud to have such incredible people working within VetPartners.

We couldn't achieve all that we do without you - thank you all!

#Wearefamily





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My VetPartners Clinical Board

