

# Benchmarking Danish Pig and Cattle Veterinarians on Antimicrobial Prescriptions – a Pilot Study

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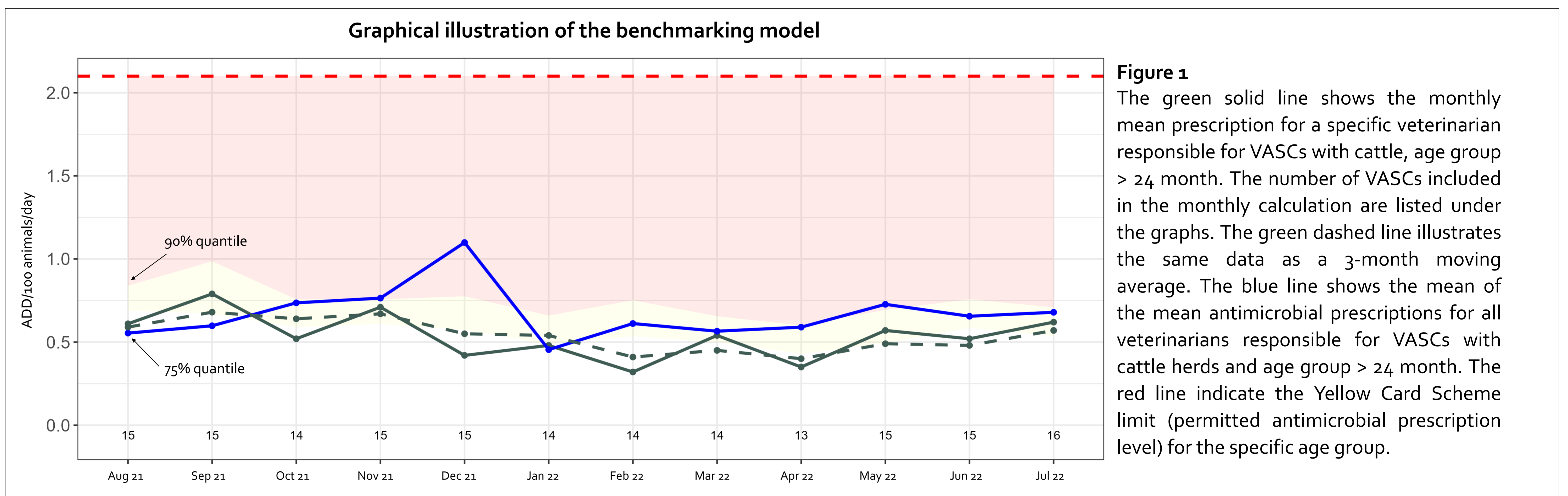
## Background

Benchmarking veterinarians on antimicrobial prescriptions is listed as a new initiative in the national action plan for antimicrobial resistance in livestock from 2021. A research project was requested by the Danish Veterinary and Food Administration (DVFA) as a part of the veterinary public service agreement between DVFA and the University of Copenhagen. In this project, a benchmarking model was developed with input from a group of relevant stakeholders.

## The proposed benchmarking model

Antimicrobial prescription data from Danish pig and cattle herds with a Veterinary Advisory Service Contract (VASC) was extracted from **VetStat**. Data were grouped according to the VASC-responsible veterinarian at the time of each prescription. Veterinarians were compared based on mean percent treated animals per day (ADD/100 animals/day) for each species and predefined age groups.

**VetStat:** Official database with recordings of sales and prescription of veterinary medicine in Denmark. Data are used when monitoring antimicrobial prescription in pig and cattle herds as a part of the Yellow Card Scheme.



## Pilot study: Veterinary practitioner feedback survey of the proposed benchmarking model

**Aim:** To evaluate the Danish pig and cattle veterinarians' perception of the benchmarking model.

**Method:** Semi-structured online questionnaire including illustration of individual benchmarking graphs.

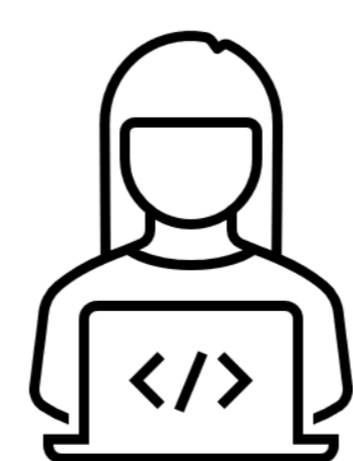
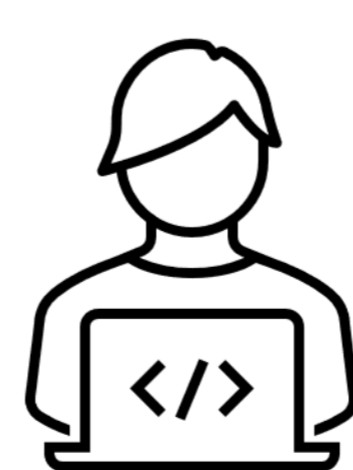
### Results:

- 51 veterinarian participated (46 complete responses)
- Age; min: 26, Q<sub>1</sub>: 36, median: 42, Q<sub>3</sub>:53, max:77
- The participant represented 608 VASC with pig herds and 253 VASC with cattle herds
- Relevant elements missing; **Herd size, herd type, herd health status, antimicrobial classes, veterinary practices.**

**Conclusion:** The results illustrate the schism between keeping a model simple and ensuring adequate descriptive value. **A relevant basis of comparison** is highly needed to ensure a perceived relevance by the veterinarians.

**Table 1: Distribution of answers related to benchmarking of veterinarians in general**

	Not at all	To some extent	To a great extent	Don't know
Benchmarking of veterinarians' antimicrobial prescriptions is a good idea	7	26	9	9
Benchmarking of veterinarians' antimicrobial prescriptions might contribute to a reduction in antimicrobial use in pigs	7	12	4	28
Benchmarking of veterinarians' antimicrobial prescriptions might contribute to a reduction in antimicrobial use in cattle	13	21	1	16
Benchmarking of veterinarians' antimicrobial prescriptions might enhance the exchange of experience between veterinary practitioners	14	22	4	11



**Table 2: Distribution of answers related to the individual graphs**

	Not at all	To some extent	To a great extent	Don't know
The benchmarking graphs are intuitive and understandable	1	18	26	2
The graphs contain relevant elements	4	25	15	3
The graphs reflect a relevant basis of comparison	6	21	11	9
The graphs reflect your own antimicrobial prescriptions within the specific age groups	3	15	19	10
Based on the graph you feel motivated to reconsider how/when/why you prescribe	28	12	2	5