



Economic assessment of use of antibiotics in the veal calf industry in Switzerland

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Presentation of project

- 2 years project (ends April 2019) led by the Swiss Bovine Health Service (Vetsuisse-Faculty, Zürich)

- Funding provided by the Swiss Federal Food Safety and Veterinary Office



- Objectives

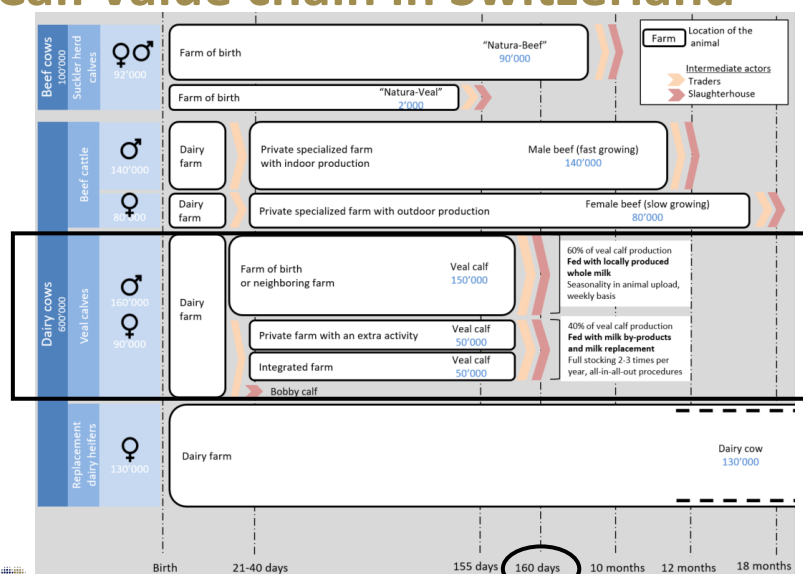
- Characterization of the value chain of the veal calf industry in Switzerland
- Organization of a workshop with European experts
- Data collection: questionnaire survey to assess the income of large animal practices in Switzerland based on disposal of antibiotics



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Calf value chain in Switzerland



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Economic data collection

- Income of veterinary practices due to sales of antibiotics
 - Data collected from 29 practices
 - Survey conducted in January-February 2018
- Invoices for veal calf operations over 1 year (2017)
 - 6'232 positions on bills collected

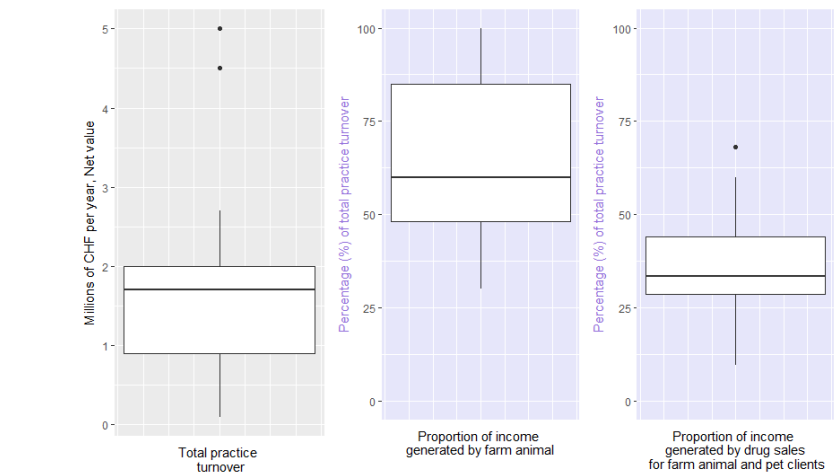
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Preliminary results: Drug sales

(29 veterinary practices)



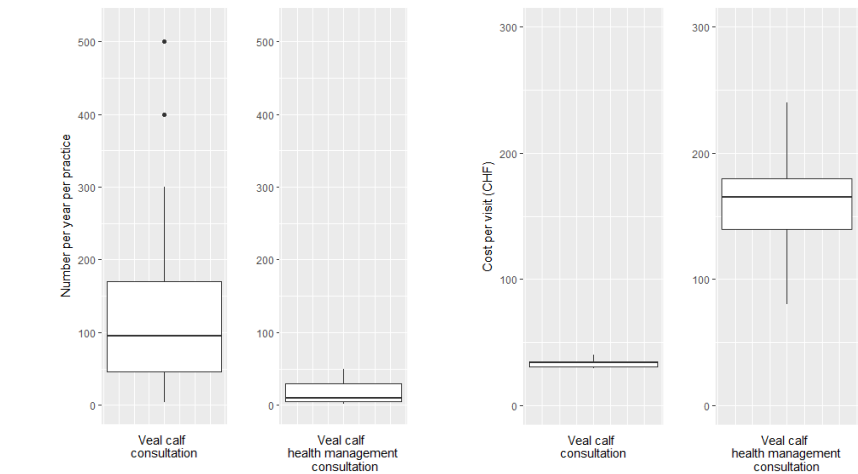
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Preliminary results: Practice activities

(29 veterinary practices)



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Discussions

- Huge variability between practices
- Further analysis ongoing
- Provides basis for discussing reduction policy options
- According to the literature: possible reduction of AM use at national level for livestock
 - 10% in Denmark of AM consumption for pigs (per kg, 2010-2013) (*Danish Veterinary and Food Administration, 2014*)
 - 50% in the Netherlands for farm animals in 2013 (*Speksnijder, 2015*)
 - Translation at veterinarian level?

Next steps

- Detailed economic analysis to establish net income (benefit) per practice
- Quantification of income loss
- Estimation of alternative business models for veal calf veterinarians to compensate

Veterinarian					
Positive Impacts			Competing Impacts		
Added Income	CHF	per	Added costs	CHF	per
Advisory work	0	consultation	Phone calls for reminders	0	call
Vaccines	0	cow	Time spent for administration	0	
Support for AM reduction	0	consultation	Continuous education about AMU	0	
Voucher from farmers	0	farm	Additional training (nutrition...)	0	
Training for farmers	0	training		0	
Phone consultations	0	call		0	
	0			0	
Total increase Income	0		Total increased Costs	0	
Reduced Costs	CHF	per	Reduced Incomes	CHF	per
Training for vets (paid by government)	0		Antimicrobials	0	year
	0		Consultations for prescription	0	consultation
	0			0	
Total reduced Costs	0		Total reduced Incomes	0	
Total positive Impacts	0		Total competing Impacts	0	



References

- Speksnijder, D. C., Mevius, D. J., Bruschke, C. J. and Wagenaar, J. A. (2015), *Reduction of Veterinary Antimicrobial Use in the Netherlands. The Dutch Success Model*. Zoonoses Public Health, 62: 79-87
- Danish Veterinary and Food Administration (2014) *Special provisions for the reduction of the consumption of antibiotics in pig holdings (the yellow card initiative)*