The development of Entrustable professional activities in competency-based Farm Animal Health education

Background
The goal of veterinary education is to train students to competently practice the core tasks of the profession at the time of graduation. Entrustable Professional Activities (EPAs) could increase transparency in the workplace regarding students' abilities and competencies, and help to ensure safe and quality patient care.

Methods
At first, four veterinary education experts compiled a list of EPAs relevant for Farm Animal Health. Secondly, a Delphi procedure was used to validate a framework of EPAs amongst (educational) veterinarians in the Netherlands and in Hungary. To be included in the framework the EPAs were rated as relevant by at least 80% of the panel members.

Results
The Delphi procedure resulted in a list of 35 EPAs for assessing students' expertise development (see Figure 1). Examples of these EPAs are:
- Integrate information from the interview, the general expression and the physical examination to construct a reasoned and prioritized differential diagnosis,
- Manage and facilitate pain relief,
- Managing a patient or herd with a respiratory problem.

Discussion
The 35 EPAs describe the core activities for the Farm Animal Health track at SIU and FVMU. They clarify the core activities that students need to develop in order to allow high-quality patient care.

Conclusion
The EPAs can be employed in the (undergraduate) training programs, and provide insight in students' performance on the clinical workplace.

Further research should focus on how EPAs should optimally be implemented to enhance competency development and making entrustment decisions.

References:

Figure 1: Find the EPA’s for veterinary medicine "Managing a..."
Entrustable professional activities in competency-based veterinary education

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Introduction: The goal of medical education for the students is to be able to competently practice the core tasks by the end of their study. Direct assessment and demonstration of students’ skill during clerkships are therefore important targets. Obtaining a correct impression of students’ readiness for clinical practice is important for medical supervisors. Entrustable Professional Activities (EPAs) could increase transparency, for supervisors and students themselves, in the workplace regarding students’ abilities and competencies, and help to ensure safe and quality patient care. Therefore, training programs based on EPAs are being explored and developed, across the world and across specialties.

While EPAs have primarily been applied to medical education, we have argued for their applicability to veterinary medical education. The aim of this study is to develop EPAs for veterinary medicine and explore their feasibility in veterinary clerkships. We therefore conducted a Delphi study, to explore expert opinion on the draft versions of the veterinary EPAs. The use of EPAs may bridge a potential gap between the theory of competency-based education and clinical practice.

Methods: For this study, a group of four veterinarians, all working at the Faculty of Veterinary Medicine (Utrecht University), compiled a list of EPAs with a clear description. The EPAs were based on the professional activities which a farm animal veterinarian has to deal with during practice work.

Delphi procedures were conducted to validate a framework of EPAs amongst veterinary (education) experts in the Netherlands and in Hungary. The EPAs were rated as relevant or very relevant (4-5) by at least 80% of the panel members to be included in the framework.

Results: The Delphi procedure resulted in a list of 35 EPAs for assessing students’ competency development. Examples of these EPAs are: ‘History taking, general impression and general examination’ and ‘Pain relief’ and ‘Managing a respiration problem’.

Discussion: We described the methodology we used to identify and develop detailed descriptions of 35 EPAs that are core for veterinary medicine. These EPAs clarify the developmentally appropriate activities that students can perform to allow their engagement in the clinical workplace. The participants of the Delphi procedure readily
accepted the constructs and content of the EPAs.

**Conclusions:** The EPAs will be employed in the undergraduate training program, with the focus on the practicability to give insight in students’ performance on the clinical workplace. Further research should focus on how EPAs could be implemented for enhancing competency development and making entrustment decisions.