# Bridging the Gap between Undergraduate Veterinary Training and Veterinary Practice with Entrustable Professional Activities

Robert P. Favier ■ Olle ten Cate ■ Chantal Duijn ■ Harold G.J. Bok

## **ABSTRACT**

The transition from being a veterinary student to becoming a member of the veterinary profession is known to be challenging. Despite being licensed directly after graduation, many veterinarians do not feel fully equipped to practice unsupervised when they graduate. The increasing rate of attrition from veterinary practice, and a relatively high percentage of burnout during the first years in practice, has been suggested to be related to a lack of early career support. Over the past decade, medical education has adopted the concept of entrustable professional activities (EPAs). Recently, EPAs have been proposed to restructure veterinary education to help support the transition from veterinary student to practicing veterinarian. Implementing an EPA-based approach could help to bridge the gap between school and clinical practice, potentially preventing veterinary graduates from dropping out early on from what could have been a promising and exciting professional career.

Key words: entrustable professional activity, EPA, competency-based veterinary education

The transition from being a veterinary student to becoming a member of the veterinary profession is known to be challenging.<sup>1,2</sup> In most countries around the world, veterinary graduates are licensed to practice veterinary medicine in all its facets without additional training. However, it is commonly known that directly after graduation many veterinarians do not feel fully equipped to practice unsupervised.<sup>3</sup> They require support during this first phase in private practice, for example, through apprenticeships with an experienced veterinarian as a mentor. Unfortunately, in most cases such a support system is lacking. As is known from medical training, there is a potential gap between what graduates are prepared to do unsupervised and what the broader professional world expects. This likely also holds for veterinarians.<sup>4</sup> The increasing rate of attrition from practice<sup>5</sup>, and a relatively high percentage of burnout<sup>6–8</sup> during the first years in practice, has been suggested to be related to a lack of early career support.

Some initiatives support the transition from veterinary school to private practice.9-11 There is some evidence that graduates tend to stay in a job longer if employers support their development.9 In 2007, the Royal College of Veterinary Surgeons in the United Kingdom implemented Day One and Year One competencies and the Postgraduate Development Phase (PDP) program. 10,11 The PDP, a voluntary program that should provide a link between undergraduate and post-graduate development, is also intended to be the first step in the graduate's continuing professional development. In 2010, the Royal Netherlands Veterinary Association introduced a voluntary program for recent graduates with the aim of enhancing work engagement by broadening and increasing participants' personal resources, such as optimism, perceived self-competence, and self-confidence. Self-reported ratings of reflective behavior, proactive behavior, and self-efficacy significantly increased after this program. In addition, participants also developed important psychological resources, including self-acceptance, self-esteem, and awareness of their own influence and responsibility.9 These encouraging initiatives may be a first step in establishing more systematic longitudinal guidance for recent graduates to become successful veterinarians. $^{9-11}$ 

# Entrustable Professional Activities to Enhance the Transition to Practice

Veterinary medical education is moving toward a competency-based approach. Competency-based education (CBE) aims to ensure that only students who meet preset standards of competence graduate. This requires a clear description of these expected competencies. To reach this goal, learners must be provided with insight into their own strengths and weaknesses to improve professional performance over time. Veterinarians, in contrast with most physicians, are licensed to practice unsupervised directly after graduation. Veterinary education programs need to ensure, therefore, that professional and societal demands are met before, or ultimately at, graduation.

Medical education, in its movement toward CBE, has recently adopted the concept of entrustable professional activities (EPAs).14 EPAs are units of professional practice, requiring multiple integrated competencies, that can be entrusted to sufficiently competent learners, during both undergraduate and post-graduate development.<sup>15</sup> Entrustment with critical tasks in health care is expressed in the level of supervision the learner needs for a specific EPA. As soon as learners have demonstrated the necessary competence to execute these activities autonomously, they should be trusted to work unsupervised. EPAs can vary in size and complexity and should be specific, observable, and measurable in process and outcome; have a designated time frame; and be suitable for an entrustment decision. 15,16 Competencies and EPAs should be seen as two perspectives on workplace learning (descriptors of the individual and units of work) that form a matrix that can provide specifications for longitudinal assessment and feedback and individual development and to ground entrustment decisions. 15-17

In a recent article, Duijn et al. proposed restructuring veterinary education with EPAs. This could help to support the transition from veterinary student to practicing veterinarian.<sup>18</sup> EPAs describe the most relevant activities a veterinarian carries out in private veterinary practice. Together, EPAs define the profession and integrate technical and non-technical competencies.<sup>15,16</sup> The experienced-based learning opportunities provided by EPAs can narrow the gap between expectations developed in the classroom and the reality of employment.<sup>19</sup> Applying EPAs in education and lifelong learning activities situate competencies in a workplace context, allowing increasing levels of participation and responsibility based on justified trust.<sup>20,21</sup> By creating a continuum of outcome-based support with EPAs for the veterinary profession, students and recent graduates will experience systematic longitudinal guidance.

A university foundation is needed, but most professionals learn by doing.<sup>22</sup> This should start in school. During training, veterinary students need to gain experience in authentic workplaces, such as veterinary teaching hospitals and private practices, because only this experience provides insight into relevant authentic activities of veterinary practice. The adoption of EPAs in the veterinary curriculum can help to bridge the gap between the learners' expectations and performance and employers' expectations. 18,20,21 EPAs can provide specific insight into what newly graduated veterinarians are able to do and how much supervision they require for various EPAs when they start professional practice. On the basis of this information, employers and new employees together can shape continuing professional development plans. Monitoring and entrustment with responsibilities and autonomy can then be tailored to employees' level of competence in this first important phase in veterinary practice.<sup>18</sup>

Learning management systems (LMSs) may play an essential role in EPA-structured competency-based education. An LMS (e.g., an e-portfolio) can be used to systematically document feedback and self-reflection, serves as a dynamic repository that can provide a visualization of learner development over time, and provides insight into strengths and weaknesses.<sup>23,24</sup> Consequently, it can support and stimulate recent graduates' reflective behavior and steer self-directed learning strategies.<sup>25</sup> In a supportive learning environment, employees should be able to gradually gain experience in relevant EPAs with employers and other members of the clinical team focused on supervision and guidance.

Implementing an EPA-based support system in the critical phase of transition to veterinary clinical practice can help to bridge the gap between school and practice and has the potential to prevent veterinary graduates from dropping out early on from what could have been a promising and exciting professional career.

# **ACKNOWLEDGMENTS**

We thank Anneke van Enk, Centre for Health Education Scholarship, Faculty of Medicine, University of British Columbia, for her linguistic advice.

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