

Facts & Figures

Contribution of veterinary technicians to veterinary business revenue, 2007

- Results of regression analysis suggested that the typical veterinarian's gross income increased by \$93,311 for each additional credentialed veterinary technician per veterinarian in the practice.

In early April 2008, the 2008 AVMA Biennial Economic Survey of US veterinarians was distributed to a random sample of veterinarians in all work categories in the United States. Veterinarians who owned private practices were asked to complete the section of the survey regarding business income and operations. Among data gathered was information regarding the number of employees and positions within the practice in 2007, including veterinarians (owners and associates), veterinary technicians (credentialed [licensed, registered, or certified] and noncredentialed), veterinary assistants, and all other staff.

Collected data were analyzed to determine whether a relationship existed between veterinary practice revenue and characteristics of veterinary technicians, including education level and qualifications. Specifically, an ordinary least squares regression model was used to evaluate the relationship between gross revenue of private veterinary practices and the number of veterinary technicians employed per veterinarian. Only data from respondents that provided information on gross practice revenue, number of full-time-equivalent veterinarians, and number of full-time-equivalent credentialed technicians and noncredentialed technicians were included in the analysis. In addition, only data from practices that had been in business for > 1 year and that were considered full-time practices were included. The 2009 edition of the *AVMA Report on Veterinary Practice Business Measures*¹ provides a more detailed analysis of the financial portion of the survey.

Results

Three hundred twenty-eight veterinarians responded fully to the questions on gross practice revenue and staff; their responses were included in the analysis. Results indicated that in 2007, the number of credentialed veterinary technicians per veterinarian in a practice had a significant ($P = 0.02$) impact on gross practice revenue, such that the average veterinary practice generated \$161,493 more gross revenue for each unit increase in the number of credentialed veterinary technicians per veterinarian (Table 1). On the other hand, the number of noncredentialed veterinary technicians per veterinarian was not significantly associated with gross practice revenue.

The mean number of full-time-equivalent veterinarians per practice in the sample was 1.73. To evaluate the economics of the relationship between the number

Table 1—Results of an ordinary least squares regression model to evaluate the effects of staffing on gross revenue in private veterinary practices in the United States, 2007.

Variable	Gross revenue (\$)	SE	P value*
Intercept	38,445	51,248	0.454
No. of full-time-equivalent veterinarians	318,545	14,555	< 0.001
Ratio of credentialed veterinary technicians to veterinarians	161,493	69,568	0.021
Ratio of noncredentialed veterinary technicians to veterinarians	10,567	11,021	0.338

*A value of $P < 0.05$ was considered significant.
Credentialed veterinary technicians include those that were credentialed through an accredited veterinary technician program.

of credentialed veterinary technicians per veterinarian and gross practice revenue, results were normalized to a nominal practice size of 1 veterinarian. These normalized results indicated the average veterinarian's gross revenue would be increased by \$93,311 (\$161,493/1.73) for each additional credentialed veterinary technician per veterinarian. Additionally, normalized results suggested each additional veterinarian within a practice generated \$318,545 of gross revenue. The adjusted coefficient of determination (R^2) for this regression analysis was 0.60, indicating that the number of credentialed veterinary technicians and the number of veterinarians explained approximately 60% of the variation in gross revenue in the model.

Conclusion

The analysis of Biennial Economic Survey data for relationships between gross practice revenue and the use of credentialed veterinary technicians revealed a positive relationship between the number of credentialed technicians employed and gross practice revenue. There are obvious reasons such a relationship would exist in terms of efficiencies within the realm of practice management. For instance, employing technicians with greater skill sets would allow technicians to do work that otherwise might be performed by veterinarians, freeing veterinarians to perform work requiring a different degree of expertise or skill. It follows that the more work veterinary technicians are qualified to do, the more veterinarians can leverage their time within the practice, generating additional revenue; however, the survey data did not include information that would allow an investigation of practice efficiency.

Reference

- AVMA. *AVMA report on veterinary practice business measures*. 2009 ed. Schaumburg, Ill: AVMA, 2009.

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Licensure in Veterinary Medicine

How it protects the public and our animals

Veterinarians and veterinary technicians care for the health and welfare of animals and work to improve public health. Veterinarians diagnose, determine prognosis, and prescribe treatment, while veterinary technicians carry out prescribed treatments and provide nursing care. The two professions work as a team in clinical practice, and while researching medical and behavioral conditions and diseases of pets, livestock, and other animals. The primary purpose of licensing veterinarians and veterinary technicians is to protect the health, safety, and wellbeing of the public and animal patients.

All U.S. states and territories have regulatory boards tasked with enforcing the licensure of veterinarians and regulating the practice of veterinary medicine in those jurisdictions. A large majority of states also require licensure for veterinary technicians. Most of the boards that regulate the veterinary professions are comprised of public members in addition to veterinary professionals.

Regulators ensure that those engaging in the practice of veterinary medicine or technology meet a minimum level of competence through recognized educational programs and successful completion of an examination. After initial licensure, veterinary professionals must continue to receive education and updated training throughout their careers. In addition, the boards have been delegated with enforcement authority to, for example, determine whether a licensed individual has practiced to a standard. Licensure also ensures that veterinarians and veterinary technicians are familiar with, and understand, the state's laws and regulations governing their professions.

Regulatory boards also promulgate rules and regulations governing the profession, including in many states the operation of veterinary clinics and hospitals. The boards investigate complaints against veterinarians, veterinary technicians, and in some cases clinics and hospitals. The licensure and disciplinary process is critical to professional accountability, and guards against unqualified individuals harming animal health and welfare and failing to protect public health.

Public protection through licensure is equally essential for fields where public health may be impacted. Veterinary professionals play a key role in disease prevention, identification and treatment of zoonotic diseases, ensuring the safety of food and feed, dog bite injury prevention, animal control, and ensuring the functional health of working animals, such as service dogs.

Veterinarians prescribe medications, and both veterinarians and veterinary technicians dispense and administer medications, including controlled substances and opioids. With respect to opioids, tremendous societal effort is currently being focused on preventing their diversion and abuse. Veterinary professionals take thoughtful actions that promote the responsible use of opioids, and aim to avoid misuse or unintended consequences. These include meticulous record-keeping and control of opioids, as well as a multi-modal approach to patient care that uses not only pharmaceuticals, but also other interventions to effectively manage pain.

Critics have argued that licensure is a barrier to competition and imposes unnecessary costs on those who wish to practice their profession of choice. In fact, some research indicates that licensure does not limit competition. Rather, licensure supports a greater supply of qualified workers and enhanced access for traditionally disadvantaged groups, specifically women and minorities.¹

The American Association of Veterinary State Boards (AAVSB) is studying ways to promote uniformity and standardization in licensure, and the National Association of Veterinary Technicians in America (NAVTA) is actively collaborating with state veterinary technician associations to standardize veterinary technician credentials to support mobility and license portability. Also, the AAVSB has developed the Veterinary Application for Uniform Licensure Transfer (VAULT), a service that provides a centralized, uniform process for veterinary regulatory boards to obtain a verified, primary-source record of a veterinarian or veterinary technician's credentials to make licensure decisions more efficient. These improvements and efficiencies are designed to minimize the costs and time involved in licensing veterinary professionals, while continuing to fulfill the boards' mission to safeguard the public.

The undersigned organizations believe that licensure of veterinarians and veterinary technicians is key to public protection and helps ensure that our pets, livestock, and other animals receive the high quality of health care they need and deserve.



This statement has been approved by American Veterinary Medical Association, American Association of Veterinary State Boards, Association of American Veterinary Medical Colleges and National Association of Veterinary Technicians in America. (April 2018)

¹ B Redbird, The New Closed Shop? The Economic and Structural Effects of Occupational Licensure, American Sociological Review 82 (3), 600-624 (2017).