

Facts & Figures

Impact of internship on veterinarian salaries, 2009

In 2010, the AVMA Biennial Economic Survey of US veterinarians was distributed to a random sample of US veterinarians in private practice and the public and corporate sectors. The purpose of the survey was to obtain information on incomes of veterinarians employed in private practice or in public or corporate positions. Among data gathered was information regarding advanced education and completion of internships and residencies. Simple means analysis of data in the survey indicated that veterinarians who had completed residencies earned significantly more than those who had not, whereas on average, veterinarians who had com-

pleted an internship earned no more than those who had not.

The information collected permitted a further analysis of the effect of an internship on veterinarian gross annual income. Specifically, relationships between veterinarian gross annual income and type of internship completed (private practice, academic, or other) or species focus of the internship (companion animal, exotic or zoo animal, food animal, equine, mixed animal, or other) were tested in an ordinary least squares regression model. Linear regression analysis of veterinarian gross annual income was performed against independent variables representing advanced degree earned, type of internship, species focus of internship, number of years since internship completion, practice type, practice ownership status, type of employment (practitioner, relief, or consultant), number of years

From Jasper Fanning, PhD, Ag Business Specialists; and the AVMA Communications Division, Allison J. Shepherd, MBA, Senior Manager, Market Research.
Address correspondence to Dr. Fanning (jasperfanning@urnrd.org).

Table 1—Results of regression analysis to evaluate the effects of internship on salaries of US veterinarians, 2009.

Variable	Gross annual income (\$)	SE	Pr > t *
Intercept	50,833.00	7,032.020	< 0.001
Advanced degree earned			
PhD	-10,575.00	12,742.000	0.407
MS	-72.23	6,809.438	0.992
Type of internship			
Private practice	-8,971.94	18,668.000	0.631
Academic	-26,905.00	24,449.000	0.271
Other	-72,482.00	80,906.000	0.370
Species focus of internship			
Companion animal	12,148.00	29,854.000	0.684
Equine	18,101.00	21,769.000	0.406
Exotic or zoo animal	51,706.00	91,859.000	0.574
Food animal	-9,594.87	41,828.000	0.819
Mixed animal	23,505.00	35,360.000	0.506
Other	-66,620.00	80,096.000	0.406
Years since internship	-3.37	9.116	0.711
Practice ownership status	28,056.00	4,835.293	< 0.001
Practice type			
Food animal exclusive	20,026.00	7,794.517	0.010
Food animal predominant	-10,983.00	6,901.384	0.112
Companion animal predominant	9,155.55	6,598.563	0.166
Companion animal exclusive	33,312.00	5,715.446	< 0.001
Equine	28,467.00	6,076.253	< 0.001
Type of employment			
Relief	9,299.89	17,754.000	0.601
Consultant	7,162.19	31,337.000	0.819
Years of practice experience	646.85	203.518	0.002
No. of h/wk - 40	101.27	176.750	0.567
Personal gross revenue†	0.09	0.005	< 0.001
Female	-29,366.00	4,658.595	< 0.001

For interpretation purposes, the intercept represents a male, mixed animal veterinarian, working 40 h/wk, with 0 years of experience. Income values for variables other than the intercept represent the amount of change in annual salary attributed to each.

*Pr > |t| = Significance test value for comparisons; values < 0.05 were considered significant. †Personal gross revenue was defined as the annual gross revenue of the practice generated by the individual veterinarian.

of practice experience, number of hours > 40 worked per week, personal gross revenue (ie, the annual gross revenue of the practice generated by the individual veterinarian), and gender. The 2011 edition of the *AVMA Report on Veterinary Compensation*¹ provides a more detailed analysis of the compensation portion of the survey.

Results

The analysis included data from 1,645 respondents who provided all required information regarding veterinarian gross annual income, advanced degree earned, type of internship, species focus of internship, number of years since internship completion, practice ownership status, practice type, type of employment, number of years of practice experience, number of hours worked per week, personal gross revenue, and gender.

Results of linear regression analysis of veterinarian gross annual income indicated that completion of an internship, regardless of the type of internship, species focus of the internship, and type of practice, did not have a significant ($P > |t| > 0.05$) effect on veterinarian income (Table 1). The coefficients reported for internship type and species focus were the best estimates of influence on veterinarian income for those particular variables; however, they were not statistically significant. The effect of number of years since internship completion was also not significant; thus, the rate at

which income changed with experience of veterinarians who had completed an internship was not different from that of private practitioners who had not completed an internship (an annual increase of \$646).

Conclusion

The analysis of 2010 Biennial Economic Survey data for relationships between veterinarian income and completion of an internship for private practitioners indicated that completion of an internship alone did not lead to significantly higher or lower salaries. Thus, completion of an internship, unless it culminates in a residency, is not likely to have an economic benefit. Results from a 2010 survey² of US veterinary medical college graduates indicated that economic gain was not among the top reasons for seeking an internship position; 41.7% of graduates completed an internship in order to apply for a residency program, 31.1% wanted to practice better-quality veterinary medicine, and 16.9% believed they needed more training before entering veterinary practice.

References

1. AVMA. *AVMA report on veterinary compensation*. 2011 ed. Schaumburg, Ill: AVMA, 2011.
2. Shepherd AJ. Employment, starting salaries, and educational indebtedness of year-2010 graduates of US veterinary medical colleges. *J Am Vet Med Assoc* 2010;237:795–798.