Application of Admissions Criteria to Applicants with Practice versus Non- Practice Career Goals in North American Schools/Colleges of Veterinary Medicine

John F. Van Vleet

ABSTRACT

Purpose – The study was intended to determine whether North American veterinary schools/colleges apply admissions criteria differently to applicants with practice versus non-practice career goals.

Methodology – A written questionnaire with seven queries on admissions criteria was sent to the associate deans for academic affairs at each of the 31 North American veterinary schools/colleges.

Results – Questionnaires were completed and returned by 25 of the 31 institutions. The responses were summarized and individual comments were compiled. For veterinary and animal experience, similar amounts but different types of experiences were expected to be different for the two groups of applicants. The backgrounds of mentors providing written evaluations were often allowed to be different for the two groups of applicants. The responses expected in applicant interviews were different for the two groups for queries related to veterinary and career experiences and knowledge of specific career areas but were similar for various basic qualities and skills expected of all applicants.

Conclusion – Although institutions vary, North American veterinary schools/colleges tend to apply admissions criteria differently to applicants with practice versus non-practice goals, except for pre-veterinary course requirements.

INTRODUCTION

Various recent reports on the economic future of veterinary medicine have cast negative views on the economic health of the private practice sector of the profession for the next 10 to 15 years. These reports, directly or indirectly, have encouraged the profession to steer more veterinarians to careers in the non-practice sector. This group currently comprises 18.5% of total US veterinarians employed by universities; federal, state, and local governments; uniformed services; industry; and other public and corporate activities. Growth in employment opportunities for veterinarians over the past 15 years has been strong in industry and modest in universities. These recent national reports have reinforced prior recommendations by the 1989 Pew Report on Future Directions in Veterinary Medicine and other reports in the 1990s that called for increased emphasis on non-practice careers and simple admissions processes to ensure full consideration of applicants with different credentials from those seeking practice careers.

In general, the following approaches could be used to foster interest in non-practice careers for veterinarians: (1) education and recruiting of interested pre-college and pre-veterinary students; (2) selection of entering students with an interest and aptitude toward non-practice careers; (3) exposure of veterinary students to non-practice career opportunities through course work, extracurricular activities, and appropriate role models; and (4) counseling of veterinarians suffering practice “burnout” on the availability of non-practice careers.

Regarding selection of students for non-practice careers, AVMA data indicate that the proportion of graduates from each of the 27 US veterinary schools/colleges in non-practice employment ranges from 13 to 21%. Admissions practices may play a role in these differences, as we know that the weighting of the various admission criteria varies widely among veterinary schools/colleges. The present study was intended to determine whether the 31 North American veterinary schools/colleges use admissions selection processes that favor of applicants seeking practice careers over those interested in non-practice careers. Data were obtained through a written questionnaire to assess the expectations of applicants with interest in practice or non-practice careers regarding their veterinary experience, animal experience, pre-veterinary course work, written evaluations, interview responses, and other criteria.

METHODOLOGY

A questionnaire with seven inquiries was designed to address whether admissions criteria used at the 31 North American veterinary schools/colleges are applied differently for applicants committed to practice versus non-practice careers. Responses to the questionnaire were received in early summer 2000 from 25 of the 31 institutions through their associate deans for academic affairs. The results from the questionnaire were summarized and presented at the July 2000 AVMA meeting in Salt Lake City, Utah, during the AAVMC session for associate deans for academic affairs.

The seven individual questionnaire items are listed in the results section below, along with the institutional responses and individual comments. Trends were sought in the 25 responses received to the questionnaire. For items 1–6, the mean score was determined from the Likert scale of Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly disagree = 1.
RESULTS

The responses to the seven questionnaire items follow.

Item 1: “Our minimal requirement for veterinary experience is the same for applicants committed to practice vs. non-practice careers.”

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<th>Strongly agree</th>
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25 responses; mean score = 4.28

Selected individual comments:

The expected minimal amount of experience is the same but the type of experience may be different (non-practice career student may utilize experience with DVM’s in non-practice settings such as zoo animal, laboratory animal, industry).

We believe that experience should reflect interest; research = research experience. All apps should have “some” experience with a vet.

For applicants that profess to enter non-practice careers, we require knowledge of and experience with a veterinarian in a non-practice career. We try to take all experiences into account. Other experiences may offset the need to see large amounts of practice, but we still like to see at least some veterinary experience.

There is no defined minimum. We have an objective section that includes veterinary experience as a component. The committee includes experience in any area pertinent to potential veterinary careers, including research, food safety, public health, etc. Applicants interested in non-practice careers would be expected to have some experience in related areas, but could receive as many points for that as would other students with more traditional “veterinary experience.”

Our requirements for veterinary experience, animal experience, and pre-veterinary coursework are the same for all candidates, regardless of their career goals.

There is no set “minimal requirement.” Veterinary/animal experience is part of our non-academic section and students get “points” based on experience. Vet experience can include biomedical research, industry, etc., as well as clinical practice.

All students must complete at least one 40-hour experience with a veterinarian in any facet of private practice.

We would expect an applicant’s background to demonstrate a reasonable exposure to their stated field of interest. In that respect, expectations for someone interested in private practice would differ from those for someone interested in research, industry work, etc.

These responses and individual comments indicate that the general expectation for the amount of veterinary experience is similar for applicants interested in practice versus non-practice careers. However, the expected type of experience may be considerably different (research, zoological medicine, laboratory animal medicine, industry) for non-practice-interested applicants from the private practice exposure expected of applicants interested in practice.

Item 2: “Our minimal requirement for animal experience is the same for applicants committed to practice vs. non-practice careers.”

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25 responses; mean score = 4.36

Selected individual comments:

The expected minimal amount of experience is the same but the type of experience may be different (non-practice career students may utilize experience with laboratory animals, research animals, zoo animals, wildlife).

We require less experience for students that profess to enter non-practice careers. Experience with laboratory animals can replace experience with companion animal and large animal species.

… what we call “non-veterinary animal experience” generally is not as important as veterinary experience. In some cases, large amounts of animal experience can offset lack of or minimal vet experience.

There is no absolute minimum. Animal experience is considered as one of the criteria in our objective category. All experience is considered. However, students without any animal experience at all, regardless of their stated career goals, would have a harder time getting high scores in the category.

As is the case with the responses and individual comments regarding veterinary experiences, non-practice-interested applicants are generally expected to have similar amounts of animal experience to those interested in practice careers, but different types of experiences (research animal, zoo animal, wildlife, and laboratory animal) are acceptable for those with non-practice career interest.

Item 3: “Our required pre-veterinary coursework is the same for applicants committed to practice vs. non-practice careers.”

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25 responses; mean score = 4.96
Selected individual comment:

We have minimized our requirements for all applicants to encourage diversity of backgrounds.

The results indicated that pre-veterinary course work requirements are the same for applicants with practice versus non-practice career goals.

**Item 4:** "Our required applicant evaluations must be completed by individuals with the same background (e.g., private practitioner, faculty member) for applicants committed to practice vs. non-practice careers."

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24 responses; mean score = 3.42

Selected individual comments:

We require one letter from a veterinarian but he/she could be in either the practice or non-practice area.

Applicants are permitted to select anyone to write a letter of recommendation on their behalf. It is wise for them to select individuals who match well with their desired long-term career goals in veterinary medicine.

Private practitioner evaluations are not required—those applicants with lab/research experience can submit evaluations from their mentor/supervisor.

We require three letters of evaluation, of which one has to be by a veterinarian (not specified if practicing or non-practicing veterinarian).

Individuals must be capable of evaluating student—one must be a DVM—can be in practice/research/public health. Any field—but must know candidate.

We require a letter from a veterinarian. It does not have to be a private practitioner.

Our applicant evaluations may be completed by any DVM who supervised an applicant—whether in private practice, industry, government, academic institution.

We do not require the applicants to submit evaluations from specific evaluators. We recommend that at least one evaluation should be from a veterinarian.

The requirement is the same for all, however, it is a rather non-prescriptive requirement. Applicants can exercise a great deal of variability.

We do not have any requirements for letters of evaluation. We would expect to see a letter from an individual who could comment on the qualifications of the applicant regarding the non-practice area in question.

Letters of evaluation are written by the same group of individuals for all candidates (e.g., practitioners, former employers, faculty advisors, etc.).

We require one and suggest two of the three letters of recommendation be written by veterinarians with whom the applicant has worked. The background of these veterinarians may differ (clinical practice, research) between applicants.

They must have at least one letter from a veterinarian. Most are private practitioners, but it is not a requirement.

The individual comments indicate that the backgrounds of the evaluators offering letters of reference may be related to the type of veterinary experience of the applicants and could be from either the private practice or non-practice sectors of the profession.

**Item 5:** "Our expected applicant responses in an admissions interview are the same for applicants committed to practice vs. non-practice careers."

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24 responses; mean score = 3.29

Selected individual comments:

Knowledge of animal industry and veterinary profession would generally be expected only in prior areas of experience such as practice or non-practice arenas. Expected basic qualities (communication skills, problem-solving skills, motivation toward profession, team skills, etc.) would be the same for applicants with practice or non-practice career goals.

If an applicant wishes to pursue a non-practice career choice, she/he would be expected to have different responses to "open-ended" interview questions.

The interview addresses the student with questions relative to their background, i.e., if animal experiences are in small and large animal practices, they should be able to answer questions relative to that type of veterinary medicine. If they worked in a research lab, the questions will be different.

Questions may address area of focus but "answers" (problem solving, ethics, etc.) are evaluated the same.

Must reflect knowledge of profession appropriate to career expectations.

We give a standardized interview. If an applicant has expressed a strong interest in non-practice career, that aspect of veterinary medicine would be emphasized in the interview process.

Applicants interested in non-practice career fields are encouraged to discuss their plans while it is also determined that they understand and
are accepting of the clinical requirements to achieve a degree.

We would expect all interviewees to be able to present a coherent view of their likely career choice, regardless of whether it is practice related or not.

They will depend on the individual’s intended career.

There are no “correct answers.” Students must demonstrate maturity, professionalism, an understanding of the profession (both practice and non-practice careers).

The individual comments suggest that the expected responses by applicants in an interview could be both similar and different for those with practice and non-practice goals. For example, many basic qualities and skills sought in applicants would be expected to be the same regardless of career goals. However, the expected responses to other specific questions would be related to the veterinary and animal experience background and the anticipated career goals of the interviewee.

**Item 6: “There are other selection criteria for which our school/college would have different expectations for applicants committed to practice vs. non-practice careers.”**

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24 responses; mean score = 2.46

Selected individual comments:

At the present time, the principal alternative career option in our curriculum is the Research Scholars program. Students who wish to be enrolled in this program must provide evidence of previous research experience or demonstrate a genuine interest in exploring research as a career choice. We do offer non-traditional career options as one of our areas of emphasis in the fourth year of our curriculum. Students interested in pursuing international careers, zoo medicine, aquaculture, marine species positions, etc., typically select this option. No additional selection criteria exist for these individuals.

In evaluating applicants, extra consideration can be given to applicants that profess interest in underserved areas of veterinary medicine. This includes non-practice careers.

As a subjective process, our admissions process allows us to look at an individual applicant in a unique fashion—we value diversity in all its forms, including non-traditional career selection or background.

Students are able to emphasize the ways they have prepared themselves for a veterinary career in their essay—this can be quite variable. However, there are not criteria based on practice vs. non-practice careers.

This remains to be seen. Right now, all applicants are selected according to the same criteria. I can’t speculate about whether we’d look for different characteristics or abilities if we differentiated between applicants aiming for practice vs. non-practice careers.

Several of the individual comments indicate that other selection criteria are considered but that they tend not to be related to practice versus non-practice career interests, except for one institution that has a curricular option in research with an entry requirement of previous research experience or, at least, a genuine interest in a research career.

**Item 7: “Please share any other comments/opinions you have on this topic of selection of students with practice vs. non-practice career goals.”**

Selected individual comments:

Only a few applicants will indicate interest in non-practice careers. Do we select away from this cohort of students in our selection process?

At this time, there is no separation of applicants into those two categories. Since many students do not know where they want to be or even if they do, they frequently change course several times, we don’t have any separate requirements.

Our Admissions Committee is committed to selecting a diverse class which includes various professional goals. Special consideration is given to applicants whose professional goals contribute to the diversity of the class and the profession. We do not at this point select students based on their stated areas of interest. We are more interested in their preparation for potential careers. We do survey the students after they are admitted and before they arrive to determine how to create our mentor groups.

We have found that the use of a Career Diversity Form allows applicants to provide documentation and commentary on their choice of career path. We use the form for both special practice areas (e.g., food animal medicine) and for non-practice areas (e.g., wildlife health or academic medicine).

We’ve considered screening applicants differently based upon their stated career goals, but have dismissed the idea. Too many students change their plans over the course of the four years—not to mention directional changes in career trajectories after graduation. It’s also quite common for our students who are clear in their intent not to make a career of practice to express an interest in practice post-graduation, just for the additional experience. So, we remain committed to educating generalist veterinarians, regardless of whether they intend to practice when they graduate.

We have discussed the possibility of having different selection criteria, but it seems many of our students change career goals while enrolled. We
do have three tracked admissions processes (swine, poultry, and lab animal) that differ from our general admissions processes.

Until the National Board requirements become different for graduates entering practice vs. non-practice careers, we will not change/vary our admissions requirements, experiences, etc. for incoming students.

The individual comments describe flexible institutional admissions processes that seek a diverse student body but currently, for the most part, do not place any weight on the career goals of applicants.

DISCUSSION
The present survey of North American veterinary schools/colleges shows that admission criteria for applicants with practice versus non-practice career goals would be identical for pre-veterinary course requirements and generally similar for the amount of veterinary and animal experience requirements. However, the types of veterinary and animal experiences, the expectations for interview responses, and the background of written evaluators would be quite flexible for applicants with practice versus non-practice career goals. The institutions offering the most flexibility would be in agreement with the recommendations of the 1989 Pew Report, which called for flexibility and simplicity in admissions processes to permit full consideration of applicants from a variety of backgrounds.

Currently, considerable differences (range 13–21%) exist among veterinary schools/colleges in the proportion of their alumni in non-practice careers. Closer evaluation of these non-practice career numbers further indicates 10- to 30-fold differences in the proportion of graduates from various US schools entering veterinary careers in industry (range 0.5–4.3%), military service (range 0.1–3.0%), or federal government positions (range 0.5–8.9%). This finding could suggest that certain institutions attract and admit more students with non-practice career goals and/or that they recruit students to these careers during veterinary school through exposure to appropriate curricular and extra-curricular experiences and from interactions with strong role models for non-practice careers. Certainly there are numerous applicants who are uncertain of their career focus upon entry, especially in the non-practice areas, to which they may have had no opportunities for exposure. Some students will also change their career focus during veterinary school, although, in general, veterinary students do not waver from their initial decision to become veterinarians. At Purdue University, career surveys of entering students over the past seven years have indicated the same amount of interest in non-practice careers at matriculation as seen in our alumni group (17%). It is interesting to note that the US college with a clear curricular focus on corporate and government practice has a proportion of graduates in non-practice careers comparable to the average for US schools/colleges.

A recent study of swine veterinarians indicated that a high proportion had considerable experience with swine prior to veterinary school. At Purdue, we have observed that students entering with strong food animal backgrounds, equine experience, or small animal practice experience have a high likelihood of establishing their veterinary careers in these same areas. Similarly, in human medicine, entering medical students with a declared interest in family practice often persist with their choice and enter careers in the area. At present, we have no information on the eventual veterinary careers of entering students who initially declare interest in non-practice careers.

Numerous reports have documented the reasons that physicians select various specialties. For example, those entering academic medicine had exceptional academic records, obtained research experience during medical school, and experienced the encouragement of a mentor or role model. Physicians choosing primary care practice had sought interactions with patients and diverse medical activities, and originated from small communities, in contrast to those who entered non-primary care specialties, who wanted intellectual challenge, high incomes, and prestige and research opportunities. Specialty selections of medical students were often aided by the impact of faculty role models, and the most influential role models were strong teachers, competent clinicians, and those with pleasant personalities. Wide variations are known to exist among US medical schools in the proportion of their graduates entering primary care practice. We need to make deliberate efforts in veterinary medicine to define the features that pre-veterinary students and veterinary students seek in various career options.

At the present time of rapid changes in veterinary medicine, there are other factors in play that may affect veterinary career choices. The rapid shift toward more women in the profession (30.5% in 1995 and projections for 50% by 2004) has led to many of these female veterinarians entering small animal practice and university employment. However, relatively small numbers of women are currently entering industry, government, and military careers. These non-practice career areas will need to be able to attract female veterinarians to fill open positions in the future. Also, the attractiveness of non-practice careers in academia and industry for veterinarians with specialty credentials has been lessened by the large number of lucrative and generally appealing positions available in private sector referral hospitals. Student interest in non-practice careers may also be negatively affected by the high number of available entry primary care positions in private practice.

As we reflect upon the results of the present survey of the selection of students with interest in practice versus non-practice careers by North American veterinary schools/colleges, it appears that considerable variability exists among the institutions in the flexibility of their admissions processes, especially in light of a number of the individual comments from responders. Those units that continue to define the entry requirements rigidly along private practice criteria may be excluding from their programs a cohort of students with a broader view of the profession who would eventually enter non-practice careers. Exclusion of such students is in opposition to the recommendations of both the 1989 Pew Study and the 1999 KPMG Study.

ACKNOWLEDGMENTS
Gratefulness is expressed to the 25 associate deans of academic affairs of North American schools/colleges of veterinary
nary medicine who invested their time to respond thoughtfully to the questionnaire.

REFERENCES


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