Commentary

Veterinary school accreditation: on a slippery slope?

Robert R. Marshak, DVM, DACVIM

nothing will stunt our reach more than the corruption of our ideas of quality.

Leon Wieseltier

Historical Perspective

During the early part of the 20th century, inspired by a growing belief that the key to curing disease lay in scientific research, medical schools in North America, by integrating science, medicine, and technology and promoting laboratory-based research, began a remarkable transformation that would set the standard for the rest of the world. By the 1940s, many medical schools had successfully integrated teaching, research, and patient care.

In sharp contrast and despite the availability of a vast biomedical literature of relevance to diseases in animals, veterinary clinical departments in the 1940s can best be described as an embarrassment. Few clinicians were trained or interested in the basic sciences, serious research in clinical departments was rare or discouraged, American textbooks of medicine and surgery rarely emphasized the pathophysiology of disease, aseptic surgery and radiology were yet to be introduced, and clinical specialists and veterinarian-scientists (clinicians responsible for patient care and equipped through basic science training to engage in high-impact biomedical research) were essentially nonexistent.

This deplorable situation began to change in the United States in the aftermath of World War II owing to a huge infusion of federal dollars for biomedical research, research training, and research facilities and equipment. Led by veterinary schools whose faculties were integrated within leading research universities that also contained leading medical schools, a new generation of well-trained basic science and clinical faculty gradually emerged to bring about a revolutionary change in the quality of veterinary medical education. Clinical research, particularly research that emphasized the comparative aspects of human and veterinary medicine, was encouraged and funded, and clinical specialties, residency training programs, and research training programs for veterinarians proliferated. These advances were appreciated and absorbed readily by many practitioners in concert with increased public expectations about the scope and quality of veterinary care. To a large extent, veterinary medical education in North America had caught up with its sister profession.

During these transformative years, the AVMA Council on Education (COE), the body that accredits American and Canadian veterinary schools, neither fostered, encouraged, nor opposed these progressive initiatives. During some accreditation visits, however, I recall that there were undercurrents of skepticism and antipathy among council members, a concern that veterinary schools were trying to turn veterinarians into physicians and that research commitments would inevitably weaken the faculty commitment to teaching. Fortunately, such views were short-lived as the relationship between teaching and research was seen to strengthen, enrich, and invigorate veterinary faculties and curriculums.

Having come so far in the 20th century, it is worrisome to contemplate the possibility that veterinary schools, suffering drastic cuts in funding, will be hard-pressed to maintain program quality and the momentum needed to meet the 21st century's formidable challenges. I find it equally troubling to witness the recent full accreditation of veterinary schools that, in my opinion, appear to fall short in meeting AVMA COE accreditation standards in terms of substance, quality, and resources. This judgment is not meant to question the integrity of the COE members who voted for accreditation. Having served on the COE, I do not doubt that, in casting their votes, COE members were persuaded that the accreditation standards were fully met. Moreover, the director of the AVMA's Education and Research Division, which provides staff support to the COE, has stated that "program quality, as measured by the standards, is non-negotiable." Nonetheless, on the basis of my knowledge and interpretation of the COE standards, I am not convinced that full accreditation was warranted at this time.

Interpreting the Standards

To be eligible for accreditation by the AVMA COE, a school of veterinary medicine must meet 11 standards. It is my understanding that in these standards, the word must signifies an absolute requirement, whereas the words should and shall signify requirements that must be met unless there is a compelling reason for waiving compliance. Obviously, the COE should allow some degree of flexibility in how individual schools go about meeting each standard. However, I believe that the COE's recent interpretation of the standards has been excessively lenient and that such a permissive trend, if continued, threatens the future quality of veterinary education.

Dr. Marshak is Professor Emeritus of Medicine and Dean Emeritus, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, PA 19104.

Views expressed are those of the author and do not reflect the official policy of the AVMA.

Address correspondence to Dr. Marshak (rmashak@caltech.edu).
By way of illustration, consider standard 1, which states that “[a]n accredited college of veterinary medicine must be a part of an institution of higher learning.….” It is generally accepted that an institution of higher learning is a community of scholars with many branches of advanced learning, including the foundational sciences (mathematics, physics, chemistry, and biology), the humanities, and the arts. Institutions of higher learning foster professional school quality through a structure and milieu that safeguard academic freedom; encourage free expression and a spirit of inquiry; set high standards for appointment, promotion, and tenure decisions; oversee the performance of deans and department chairs; and promote a collegial rather than an authoritarian mode of school governance.

For all intents and purposes, the for-profit Ross University School of Veterinary Medicine (RU-SVM) is geographically and functionally a freestanding school that I do not believe meets this standard. Ross University consists of only two nonintegrated schools, the RU-SVM and the Ross University School of Medicine, the latter located on a separate and distant island. If any essentially freestanding veterinary school can qualify as an institution of higher learning, the standard’s precise stipulation becomes meaningless. Similarly, although the Western University of Health Sciences College of Veterinary Medicine (WUHS-CVM) shares a campus with other health profession schools, including schools of nursing, optometry, pharmacy, podiatry, osteopathy, and dentistry, the university as a whole lacks the core disciplines (ie, the foundational sciences, humanities, and arts) that I believe characterize institutions of higher learning.

Standard 3 of the COE accreditation standards states that “[a]n accredited college must maintain an on-campus veterinary teaching hospital(s), or have formal affiliation with one or more off-campus veterinary hospitals used for teaching….” and standard 4 states that “[n]ormal and diseased animals of various domestic and exotic species must be available for instructional purposes, either as clinical patients or provided by the institution. While precise numbers are not specified, in-hospital patients and outpatients including field service/ambulatory and herd health/production medicine programs are required to provide the necessary quantity and quality of clinical instruction. It is essential that a diverse and sufficient number of surgical and medical patients be available during an on-campus clinical activity for the students’ clinical educational experience.…”

Although veterinary schools share many characteristics and a multitude of common problems and challenges, consensus regarding the unconditional need for an on-campus full-service teaching hospital is lacking. Nevertheless, because teaching hospitals are a time-tested crucible where students are expected to acquire the conceptual and intellectual foundations as well as the basic skills for the practice of veterinary medicine, I believe that there are disadvantages to any arrangement for clinical training that is not firmly centered in a full-service teaching hospital where teaching, research, and patient care are integrated; where students, interns, and residents have day-to-day access to the broad spectrum of specialty disciplines; where world-class diagnostic imaging equipment, clinical laboratory instrumentation, a necropsy facility, clinical and pathology rounds and conferences, and a library and self-learning center facilitate learning; and where interaction with veterinarians engaged in high-impact research is encouraged. The latter is particularly germane owing to the increasing complexity of clinical practice in a quickening time of genomic and molecular medicine and a widening gulf in knowledge, language, and understanding between clinicians and basic scientists. Moreover, as a source of animal patients with a broad spectrum of spontaneously occurring diseases, including many that are homologs of diseases in humans, teaching hospitals provide unique opportunities for comparative investigation.

Regrettably, owing to inadequate funding sources, some veterinary schools find that operating a full-service veterinary teaching hospital poses an unsustainable financial burden. Such schools, and those without immediate access to adequate numbers of animal patients, are obliged to supplement their on-campus clinical programs by establishing satellite facilities at locations with a larger patient base or by seeking formal affiliations with high-quality specialty practices. Similarly, schools that have a full-service veterinary teaching hospital but lack patients in specific areas of student interest may benefit from elective rotations at other veterinary schools. For example, a University of Pennsylvania student interested in beef production medicine could benefit from an elective rotation at the University of Saskatchewan’s Western College of Veterinary Medicine. To the best of my knowledge, neither the RU-SVM nor the WUHS-CVM has an on-campus full-service veterinary teaching hospital with facilities and resources for the integration of teaching, research, and patient care. At the WUHS-CVM, on-campus clinical education is centered in the Banfield, the Pet Hospital of Western University, clinical facility, which uses Banfield’s computerized management system. There are no livestock, poultry, or equine patients on campus, no on-campus large animal field service program, and no formal affiliation with a university-based veterinary teaching hospital.

Students at the RU-SVM are required to complete a year of clinical training at 1 of 22 American veterinary teaching hospitals, but administrators and faculty at RU-SVM appear to have little control or precise knowledge of how student training at the 22 partnering schools complements RU-SVM’s on-campus clinical program. Rather than a true academic affiliation involving the coordination of courses and clinical rotations as well as research collaboration, partnering appears to be focused on a business arrangement involving tuition payments by the outsourced students. At the National Autonomous University of Mexico School of Veterinary Medicine and Animal Husbandry (UNAM-SVM), teaching farms serve in place of a teaching hospital for food animal species. Hospital facilities, recently built or improved by Banfield, the Pet Hospital, are available for small animals.

Standard 4 goes on to state that “[c]linical educational experience can include exposure to clinical education at off-campus sites, provided the college reviews these clinical experiences and educational outcomes.
Further, such clinical experiences should occur in a setting that provides access to subject matter experts, reference resources, modern and complete clinical laboratories, advanced diagnostic instrumentation and ready confirmation (including necropsy).... A supervised field service and/or ambulatory program must be maintained....

To provide clinical educational experience for its students, the WUHS-CVM uses a distributive model that depends heavily on off-campus clinical assignments or elective rotations, many in private practices. On the basis of my experience serving on the COE, which included accreditation site visits, I find it difficult to understand how the COE could conclude that there is adequate, sustainable oversight and control by WUHS-CVM faculty to ensure that all of these off-campus settings meet the standard's highly specific requirements and that all WUHS-CVM students graduate with adequate exposure to the broad spectrum of clinical disciplines. Further, the WUHS-CVM does not maintain its own on-campus, supervised large animal field service or ambulatory program or a herd health or food animal production program.

Standard 6 of the COE standards states that "[t]he number of professional degree students, DVM or equivalent, must be consistent with the resources and the mission of the college." On the basis of my nearly four decades as a veterinary school educator, I find it hard to accept that the RU-SVM9 or any veterinary school has the totality of resources needed to deliver an educational program of high quality when admitting more than one class per year and maintaining an enrollment of 1,000 or more students. I find it still more implausible to accept that the UNAM-SVM, which admits, on average, 500 students each year (of which only approximately half graduate) and maintains an enrollment of approximately 2,800 students,6 has sufficient resources to provide a high-quality veterinary medical education to so many students.

Standard 6 goes on to state that "[c]olleges should establish post-DVM/VMD programs such as internships, residencies and advanced degrees (e.g., MS, PhD), that complement and strengthen the professional program."7 So far as I am aware, neither the WUHS-CVM nor the RU-SVM has established internship, residency, or advanced degree programs. Although the UNAM-SVM offers graduate degree programs in certain fields (e.g., microbiology and animal reproduction), I do not believe that its postgraduate clinical training programs are comparable to the broad spectrum of residency training programs available at most veterinary schools in the United States and Canada.

Standard 8 of the COE standards states that "[p]articipation in scholarly activities is an important criterion in evaluating the faculty and the college," and standard 10 states that "[t]he college shall demonstrate substantial research activities of high quality that integrate with and strengthen the professional program." In my opinion, the newly accredited schools do not meet this standard, which, I believe, means the presence of a substantial advanced basic science, clinical, and translational research enterprise. Owing to the current tempo of discovery, faculty members not engaged in research find it difficult to stay current. Also, absent an advanced research enterprise and opportunities for student participation in such research, it is doubtful that a veterinary school can adequately prepare its students for graduate biomedical education.

Standard 9 states that the curriculum shall provide "scientific, discipline-based instruction in an orderly and concise manner so that students gain an understanding of normal function, homeostasis, pathophysiology, mechanisms of health/disease, and the natural history and manifestations of important animal diseases, both domestic and foreign."10 When used prudently at schools with large and scholarly faculties and with sufficient time for tutorials and carefully prepared lectures and laboratory exercises, I agree that problem-based learning methods provide an effective instrument for scientific, discipline-based instruction. As used extensively in the first-year and second-year curriculums at WUHS-CVM, a school that lacks faculty depth in essential disciplines and appears to be overly dependent on each student's ability to acquire, assimilate, and integrate contemporary biomedical knowledge and concepts, I question that such heavy emphasis on the problem-based learning method can provide, in a discipline-based, orderly, and concise manner, the solid foundation that students need when they enter clinical training.

Further, the RU-SVM's decision to rearrange its basic science courses so that "students are taught in a much more applied manner with an eye toward touching on specific competencies and interacting with community clinicians in the first semester"11 would appear to suggest a curricular de-emphasis of these foundational disciplines.

**Contentious Issues**

In granting full accreditation to the WUHS-CVM, RU-SVM, and UNAM-SVM, the COE determined that the 3 veterinary schools had substantially met all 11 accreditation standards. This has puzzled and disturbed colleagues in many sectors of the profession and has led to calls for greater transparency and to unsubstantiated allegations of manipulation or interference by outside parties in the COE's deliberative process. To restore confidence in the COE accreditation process and forestall finger-pointing, the differing viewpoints on these contentious issues deserve airing and examination. For example, concerns have been raised as to whether the COE should, or is equipped to, accredit for-profit schools or schools outside the United States and Canada. Notably, the Liaison Committee on Medical Education, the body responsible for accrediting medical schools, refuses to accredit for-profit medical schools and medical schools located outside the United States and Canada,9 a policy the COE should consider adopting. Even with a skilled interpreter at site visits, the ability of COE members to evaluate a school's curriculum when presented in a foreign language is questionable. Even for those foreign veterinary schools where the curriculum is in English, COE members may have difficulties grasping and understanding the unfamiliar curricular models, cultures, and value systems during the time allotted for an accreditation site visit. Moreover, I believe that some foreign...
schools seek accreditation to compete for tuition-paying American students. I would argue that the accreditation of foreign schools is an unnecessary expenditure of COE time and energy that could be better used in improving and strengthening the accreditation process for schools in the United States and Canada.

It is my firm belief that granting full accreditation to a school before it meets the strictest interpretation of the official standards is a disservice to both the school and the profession. Indeed, it may encourage the proliferation of freestanding and for-profit schools and persuade financially pressed states that spending millions on quality veterinary medical education is unnecessary.

Further, I am concerned that high pass rates on the North American Veterinary Licensing Examination (NAVLE) are being promoted by some schools as a measure of programmatic excellence. Given that, nationally, the mean pass rate is 95% or higher, there is good reason to question the examination’s quality and value. One way to engender confidence that students have acquired a solid foundation in the basic sciences would be for NAVLE to adopt a two-step examination process, with step 1 to be mandatory at the end of the second year, as is customary in the licensing of physicians. At present, it is misleading to cite NAVLE pass rates as a valid measure of veterinary school quality.

Particularly troubling to me and to many of my academic colleagues is the seemingly obvious conflicts of interest that may arise when there is an inappropriate blending of veterinary school and corporate interests, including the interests of corporations involved in the delivery of veterinary services. These concerns are focused on safeguarding academic freedom and maintaining the integrity and quality of the educational process.

Suggestions for Change

Whether justified or not, the COE’s reputation as an unbiased and effective guardian of quality in veterinary medical education recently has been called into question. To remedy this situation and in the interest of safeguarding the quality of veterinary medical education in the United States and Canada, I believe the AVMA should consider undertaking a comprehensive review of COE policies, standards, procedures, and composition with the help of a task force of educators and stakeholders drawn from organizations such as the US Department of Education, the Liaison Committee on Medical Education, the National Academies’ Institute of Medicine (I am an Institute of Medicine member), the National Institutes of Health, the CDC, appropriate branches of the US and Canadian departments of health and agriculture, the World Health Organization, the Food and Agriculture Organization, veterinary specialty colleges, and the American Animal Hospital Association.

To avoid conflicts of interest in the appointment of COE members, I recommend that a new, transparent process for selecting COE members be adopted, ending the AVMA House of Delegates’ role in selecting COE members. Further, I recommend that individuals connected with corporate veterinary practices or with animal food or drug manufacturers be prohibited from serving on the COE.

I also recommend that steps be taken to insulate the COE from political and special interest pressures and that AVMA officers, Executive Board members, and House of Delegates members be prohibited from having direct or indirect contact with the COE in carrying out its functions. Further, I recommend that the COE adopt a policy prohibiting current members from visiting veterinary schools prior to official accreditation site visits and that it monitor the growing involvement in, and influence on, veterinary schools by commercial interests. In addition, I recommend that in the preparation of the mandatory five-year report to the US Department of Education, COE members be required to agree unanimously on the report’s content and sign off on the report prior to its submission.

With regard to academic teaching standards, I recommend that the COE adopt a standard that guarantees the academic freedom of faculty in the operation of veterinary teaching hospitals and clinics. I suggest that the COE more closely evaluate new experimental methods in veterinary education for soundness and quality, and I advocate that the COE adopt a standard that requires schools to assess and monitor the teaching and clinical skills of residents who instruct students.

Finally, I recommend, absent compelling reasons, that the COE end further accreditation of all veterinary schools, including for-profit, freestanding, and foreign veterinary schools, that do not clearly meet the strictest interpretation of the COE standards.

Conclusions

It is my belief that it is impossible in the course of a four-year curriculum to turn out fully fledged veterinary practitioners with an inclusive knowledge of the basic sciences. Rather, I believe that the primary purpose of veterinary medical education is to train students’ minds and powers of observation so that they learn to gather and assess data accurately while developing a critical capacity and the ability to form sound and balanced judgments. These qualities are necessary for those who aspire to doctor animals as for those who would seek academic or other career options, and are essential for professional and personal growth and for coping successfully with the unpredictable future challenges and opportunities they will encounter in a century of dazzling scientific discovery and social upheaval. As the late Harvard Medical School Dean Sydney Burwell cautioned, “Half of what you are taught as medical students will in ten years have been shown to be wrong. And the trouble is none of your teachers know which half.”

Although it is unrealistic to claim that there is a single best way to design and offer a veterinary medical curriculum, it is my firm belief that the primary purpose of veterinary medical education, however configured, is most successfully achieved in a learning environment focused on high-quality contemporary science in teaching and research. Current trends toward minimal-standards models, the excessive use of distributive and tracking models, and the growing push for outcome assessments, when uncritically applied, are distractions that risk downgrading quality. To me, the recent proposal to establish veterinary schools with fully distributed community-based clinical education programs is a dangerously regressive idea, harkening to...
back to the days when veterinary education amounted to an apprenticeship with a practitioner. The decline during recent decades in the number of applicants for doctoral-level biomedical research training programs bodes ill for the profession’s ability to meet future demands for veterinary scientists and faculty and, in an insecure and hungry world without borders, to satisfy society’s needs and expectations. I believe that the recent trend toward more lenient interpretation of the COE standards is a destabilizing influence, a slippery slope, derailing decades of momentum and devaluing the mean. The profession and society are poorly served whenever COE standards are relaxed.

References