Presentations

Update on the Committee to Assess the Current and Future Workforce Needs in Veterinary Medicine

National Research Council, Division on Earth and Life Sciences, Policy and Global Affairs Division
National Academy of Sciences
Dr. Bonnie Buntain, University of Calgary College of Veterinary Medicine.

2007 Abbreviated Statement of Task

The National Research Council convened an expert committee to study the broad scope of issues related to the veterinary workforce in the United States. The study explores historical changes in the size and characteristics of the veterinary workforce and adequacy of the current supply of veterinarians in different occupational categories and employment sectors and the factors that are likely to affect the numbers of veterinarians seeking jobs in different sectors in the future. The study examined the current and future capacity of universities and colleges to provide sufficient numbers of adequately trained veterinarians and identify training needs relative to the demand for specific expertise. A report will present the findings of the study, and identify options for meeting requirements for a veterinary workforce.

Actions of the Committee

The Committee divided into study groups: Public Practice, Industry, Academic Veterinary Medicine, Wildlife and Ecosystem Health, Food Animal Practice, and Companion Animal Private Practice. Some of the obstacles delaying the completion of the Committee's report included the economic crisis beginning in 2009 that impacted workforce forecasting and the lack of reliable data resulting in the need to conduct surveys and utilize newly published veterinary workforce reports.

In the area of public practice, we focused mostly on the federal sector that had the most data with the GAO reports in 2008 and 2009, and complemented by the OPM's Talent Management Task Force's August 2010 VMO Report. Therefore, more and more relevant current data was being used, furthering the delay.

It is critical that government improve veterinary workforce planning to achieve full veterinary staffing levels, offer competitive salaries, provide various incentives, and effectively work across government agencies. This is especially important in addressing prevention, response and recovery from catastrophic events as well as carrying-out routine mission critical duties. Additionally, academia needs to work closely with government strategic workforce planning in order to produce the competencies valued by government and also explore potential partnerships in veterinary and continuing education.
Survey Results of the State-Employed Veterinary Workforce
Dr. Michael Gilsdorf, National Association of Federal Veterinarians.

The USAHA and AAVLD Co-Chairs of the Diagnostic Laboratory and Veterinary Workforce Committee conducted a survey of all State employed veterinarians during 2011. Out of the 50 States and Washington DC, we received responses from:

- Regulatory- 25 States
- Diagnostic & Public Health- 23 States each

A summary of the data collected is as follows:

### STATE EMPLOYED FTE

#### REGULATORY VETERINARIANS

- Total number of Regulatory Veterinarians employed in 26 States = 159 (312/50)
- Average number of State Regulatory Veterinarians per State = 5.1/26 States

#### DIAGNOSTIC VETERINARIANS

- Total number of Diagnostic Veterinarians employed in 23 States = 94 (204/50)
- Average number of State Diagnostic Veterinarians per State = 4/23 States
STATE EMPLOYED FTE PUBLIC HEALTH VETERINARIANS

(Includes academic PHV’s)

Total number of Public Health Veterinarians employed in 50 States = 90
Average number of State Public Health Veterinarians per State = 1.4/50 States

AVERAGE STATE REGULATORY VETERINARIAN SALARY

Entry Level Average- $72,034: Range - $50,000 to $90,000
Mid Level Average- $77,754: Range - $50,000 to $100,000
Senior Level Average- $84,662: Range - $69,000 to $110,000

Overall Average Salary- $78,137

N = 25
Bovine Practitioners Workforce Situation Overview*+.
Dr. Gatz Riddell, American Association of Bovine Practitioners.

In the late 1990’s rural veterinary practitioners from across the United States began to speak out about difficulties hiring associates in rural mixed animal veterinary practices. Many of these practices served the food animal industries. There were also increasing reports of USDA-FSIS having difficulty hiring veterinarians for food safety positions. In response to these complaints, the Food Supply
Veterinary Medicine Coalition (FSVMC) was formed in May 2004 to fund a marketing study to better quantify the demand for, and the availability of, food supply veterinarians. As a result of the FSVMC study, the AABP, for several years, operated under the premise that a shortage of food supply veterinarians existed. Numerous food animal programs at colleges and schools of veterinary medicine strengthened their student recruitment and training efforts. Based upon its mission statement, the AABP significantly increased funding, scholarship and externship opportunities for those interested in bovine medicine. During the past few years, however, AABP student members started to indicate that they could not obtain jobs in food supply veterinary medicine. The pool of interested students with skill sets suited ideally to food animal, specifically bovine practice, had been and continues to be significantly increased by the academic and organizational recruiting programs.

This trend concerned the leadership of AABP and lead to the formation of the AABP Ad Hoc Committee on Rural Veterinary Practice (RVP) in the fall of 2010. The members were mostly from private practice from different regions of the United States. The purpose of this committee was to re-evaluate the perceived food supply veterinarian shortage so that AABP could educate and prepare its members, including student members, to respond to changes in job markets while continuing to serve the veterinary needs of the beef and dairy industries. The focus was on rural mixed practice with a component of food animal service, although food animal exclusive practice was also to be considered.

It was the opinion of the RVP that there is not currently a shortage of veterinarians for rural food supply veterinary private practice. Efforts to increase interest in rural practice among graduating veterinary students have been successful, so lack of available veterinarians is no longer an issue for the US as a whole. However, there remain underserved rural areas across the country that may not be able to sustain a veterinary practice and absorb these new veterinarians entering the job market. In instances where rural jobs are still available, these jobs remain unfilled because the economics may be undesirable for an experienced practitioner and, in small clinics, there may be a lack of mentorship and support for graduating veterinary students.

Delivering veterinary services to underserved areas is a complex problem for which there will be no simple answer. Current programs such as the VMLRP and VSIA are well-directed and will prove beneficial, but the development of a business model that can prove sustainable in the face of current economic, generational and gender issues may be the long term answer.

Elephants in the Waiting Room+.
Dr. Rene’ Carlson, President of the AVMA

Dr. Carlson provided an overview of the AVMA outlook for economic and employment factors affecting the future of veterinary medicine. Specifically, she outlined the economic vision and strategy for addressing veterinary professional viability, such as:

1. Strengthen the economics of the veterinary medical profession
   - A. Strengthen Veterinary Practice Profitability and Financial Wellbeing
   - B. Enhance Veterinary Medical Workforce
     * Goal: Veterinary employment opportunities are identified and solutions developed to effectively balance the needs of society with the supply of veterinarians.

2. Catalyze a transformation of veterinary medical education.

Update on Workforce Issues in Veterinary Diagnostic Laboratories+.
Dr. David Zeman, South Dakota State University – Animal Disease Research and Diagnostic Laboratory

Who will train the next generation of diagnostic specialists that will work in our labs?
- Pathologist
- Bacteriologist
- Virologist
- Chemist / Toxicologist
- Parasitologist
- Immunologist
- Molecular Biologist
Epidemiologist
A sobering statistic regarding Vet Med education: "...40% of aging faculty eligible for retirement over the next 10 years and an absence of identifiable replacements..."

Roadmap for Veterinary Medical Education in the 21st Century. NAVMEC 2011
Growing areas of Specialization that may compete with basic scientist training at CVMs. New areas of specialization needed...
- Small Animal Medicine
- Dermatology
- Oncology
- Emergency Room Care
- Epidemiology
- Public Health Vet Med
- Surgery
- Molecular Biologist

Downsizing of Government sponsored animal health research...
Most basic scientists currently working in animal health diagnostic and research laboratories were trained on grants sponsored by federal or state research programs such as USDA or NIH...now is dwindling. The USDA research budget has continued to shrink, creating the need for researchers in animal health organizations to focus more on zoonotic and crossover diseases that may be of interest to NIH as well as USDA.

VETERINARY PATHOLOGIST TRAINING PROGRAM DEMOGRAPHIC SURVEY: FINAL REPORT
Prepared by Linda Owens, Kelly Marzano, and Evelyn Yang. for the American College of Veterinary Pathologists, the Society of Toxicologic Pathology, and the American Society for Veterinary Clinical Pathology was prepared This detailed report offers insight into specialization training that likely applies to several other basic science disciplines.
I will highlight a few areas from this report to exemplify the training issues that many disciplines face.
- Factors limiting the number of positions
  - As shown in Exhibit 11, almost all (88.2%) anatomic pathology program respondents indicated that funding for residency limits the number of anatomic pathology trainee positions, while 35.3% named funding for Ph.D. training as a factor. Nearly two thirds (61.8%) cited number of available faculty as a limitation, and 14.7% suggested that the number of applicants is an issue. Finally, 29.4% of anatomic pathology respondents wrote in "other" limitations, which included limited case loads, space constraints, and funding limits.

Pathologists
Anatomic Pathology
- Approximately 40% of anatomic pathologists took jobs in academia after graduating.
- Pharmaceutical companies hired about 20%.
- Private labs, government labs, and contract labs each hired about 10%.
- Just over 8% fell into one of the other response categories.

Pathologist Data
Known, estimated, and average deficit of veterinary pathologists was explored. Survey results and results from the calculations described above allow us to ascertain, by comparing supply and demand figures, if there is or will be a deficit of veterinary pathologists and, if so, the potential size of that deficit. As Exhibit 20 shows, it appears that the number of new veterinary pathologists being produced will be insufficient to fill the number of expected open positions. For anatomic pathology:
- The known deficit (Column C) ranges from -10 (a surplus of 10) to 18 (10 in 2010, 18 in 2013).
- The estimated total deficit (Column F) ranges from 10 in 2010 to 52 in 2009.
- The estimated average deficit (Column H) ranges from 0 (2010) to 32.5 (2009) anatomic pathologists.

What does this mean for staffing our AALVD and NAHLN lab? There may be rocky times ahead for staffing our labs due to public funding cuts relative to basic science training programs. In addition, 40% of academicians are retiring within the next decade... a major drain on experience and the passing of the education and specialty training baton.
Committee Business
The Committee then reviewed their resolutions.

The following resolutions were modified:
- #14 SUPPORT FOR SECTION 1433 FORMULA FUNDS FOR ANIMAL HEALTH AND RESEARCH
- #18 SUPPORT FOR FOOD ANIMAL RESIDUE AVOIDANCE DATABANK
- #15 VETERINARY PUBLIC HEALTH WORKFORCE AND EDUCATION ACT
- #13 VETERINARY SERVICES INVESTMENT ACT

The following resolutions were unchanged, but still pertinent:
- #5 & #20 NATIONAL ANIMAL HEALTH LABORATORY NETWORK INFORMATION TECHNOLOGY DEVELOPMENT SUPPORT
- #10 INCREASED FUNDING FOR RESEARCH AND EDUCATION ON CAUSES OF ZOONOTIC DISEASES
- #11 PREPARATION OF THE VETERINARY WORKFORCE TO BETTER PERFORM ACCREDITED TASKS, INCLUDING DETECTION OF AND RESPONSE TO ANIMAL DISEASE
- #12 & #25 CONTROLLED SUBSTANCE ACT REGULATIONS FOR AMBULATORY DOCTORS OF VETERINARY MEDICINE THAT PRACTICE IN MULTIPLE STATES
- #16 VETERINARY MEDICINE LOAN REPAYMENT PROGRAM
- #17 REVIEW OF COMPENSATION FOR RESEARCH AND DIAGNOSTIC VETERINARIANS
- #19 SUPPORT FOR REGIONAL CENTERS OF EXCELLENCE IN FOOD SYSTEMS VETERINARY MEDICINE

The Committee approved two new resolutions, which were forwarded to the Committee on Nominations and Resolutions.
- NAHLN Funding (From the Committee on Animal Emergency Management)
- Maintaining a Well-Trained Federal Veterinary Field Workforce and Developing a System for Continually Improving Animal Health Programs at the Field Level