Veterinary Medical Education in Texas: An Update

July 2016
Questions Regarding Veterinary Education in Texas

Does Texas need another veterinary school?

Is there a state need for additional large animal veterinarians?

What is the most efficient way to address the need for large animal veterinarians?
27 States have Veterinary Schools

- 30 institutions offer the DVM degree in the US
- Two of these are new private schools and have not graduated students
Applications to U.S. DVM Programs Remain Relatively Flat

![Bar Chart]

- 6,208 (2009)
- 6,143 (2010)
- 6,265 (2011)
- 6,305 (2012)
- 6,769 (2013)
- 6,744 (2014)
- 6,600 (2015)
- 6,667 (2016)
Total Enrollments in U.S. DVM Programs Are Increasing

- 2006: 9,983
- 2007: 10,218
- 2008: 10,330
- 2009: 10,534
- 2010: 11,046
- 2011: 10,996
- 2012: 11,255
- 2013: 11,474
- 2014: 11,693
- 2015: 12,395
U.S. Programs Increasing DVM Graduates
Applications and First-Year Enrollments in TAMU DVM Program

Number of Applicants vs Enrollments for the years 2006 to 2015:
- Number of Applicants: 453, 461, 393, 441, 428, 417, 472, 523, 522, 580
- Enrollments: 131, 132, 132, 132, 133, 135, 134, 133, 134, 133
Total Enrollment at TAMU DVM is Relatively Constant

![Bar Chart]

- 2006: 509
- 2007: 505
- 2008: 503
- 2009: 509
- 2010: 516
- 2011: 521
- 2012: 527
- 2013: 527
- 2014: 526
- 2015: 528
Production of Graduates at TAMU Has Not Increased
Nationally Median Tuition and Fees are Increasing
Median Debt Among U.S. DVM Graduates has Risen Steadily

![Bar chart showing median debt among U.S. DVM graduates from 2006 to 2015. The median debt has increased steadily from $106,063 in 2006 to $156,583 in 2015.](chart.png)
Who are Veterinary Graduates?

Majority of DVM graduates are women
  • 79% of US CVM graduates in U.S. (2014)
  • 73% of TAMU CVM graduates (2014)

Majority of DVM graduates are white
  • 79% of US DVM graduates in U.S. (2014)
  • 89% of TAMU CVM graduates (2014)
Employment Projections for Veterinarians

National Workforce Projections – Bureau of Labor Statistics

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Employment</th>
<th>Change 2014-24</th>
<th>Average</th>
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<td>Base 2014</td>
<td>Proj 2024</td>
<td>Number</td>
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<td>Percent</td>
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<td></td>
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<td>Annual Openings</td>
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<td>Veterinarians</td>
<td>78,300</td>
<td>85,200</td>
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<td>8.9%</td>
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<td>1,900</td>
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<td>DVM Degrees Awarded (U.S.) -- 2014</td>
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Texas Workforce Projections – Texas Workforce Commission

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<th>Occupation</th>
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<th>Change 2012-22</th>
<th>Average</th>
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<td>Base 2012</td>
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<td>Annual Openings</td>
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<td>195</td>
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<td>DVM Degrees Awarded by TAMU -- 2014</td>
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<td>133</td>
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</table>
Educational Background of Licensed Veterinarians Practicing in Texas

Veterinarians educated at TAMU: 4,017 (60%)
Veterinarians educated Out-of-State: 2,643 (40%)
Texas Veterinarians by Practice Specialty

- Small Animal: 3,918
- Mixed Practice: 1,577
- Government/Research: 377
- Unknown: 313
- Equine: 265
- Large Animal: 180
- Specialty: 30
Estimated Livestock Veterinarians
Estimated Companion Animal Veterinarians
Estimated Food Animal Veterinarians per 100,000

- **High Plains**: 1.91
- **Northwest**: 4.64
- **Metroplex**: 18.64
- **Upper East**: 7.24
- **Southwest**: 9.66
- **Central Texas**: 10.15
- **Gulf Coast**: 19.24
- **South Texas**: 7.77

*Veterinarians per 100k Food animals*
Excess Capacity in the Veterinary Sector

Increase in the production of DVM graduates during the past decade;

Average earnings for veterinarians engaged in clinical practice are stagnant;

Increasing proportion of DVM program seniors report not having an offer for either a job or an advanced training opportunity.
Major Shifts in Practice and Aging Veterinarians

• Once most veterinarians practiced on food animals; now most veterinarians practice mostly or solely on companion animals.
• Economic factors driving this include:
  - high levels of student debt,
  - differences in working conditions,
  - salaries differences in rural and urban areas.
• In Texas, 24 percent of all veterinarians are older than 60, and 49 percent of food animal veterinarians are over the age of 60.
• Nationally, food animal veterinarians are aging faster than their peers, and the proportion of new graduates entering this field is dwindling.
Veterinary Technicians

• Licensed by the Texas Board of Veterinary Medical Examiners.

• Must work under the direct supervision of a licensed veterinarian.

• Can assist the veterinarian in a wide variety of tasks, but cannot diagnose conditions, prescribe medications, or perform surgery.

• Could be utilized to ease the demand for veterinarians in rural areas, but this would require statutory changes to allow licensed veterinary technicians to work under the remote supervision (e.g. Skype) of a veterinarian.
Texas A&M Expansion Plans

- In 2009, TAMU began making plans to build new facilities in order to expand class sizes in accordance with accreditation requirements and increase enrollment by 20 to 30 students.

- In June 2016, TAMU will open its new $120 million facility, the Veterinary and Biomedical Education Complex, financed from the Permanent University Fund.

- TAMU is developing partnerships with A&M System institutions to attract and retain students who may be more likely to practice in rural areas.
A Traditional Veterinary School would be Costly

- The traditional model of veterinary education requires several expensive facilities costing between $200 and $500 million.

- The “distributed” model was developed by the University of Calgary, and avoids costly facilities by using regional veterinary practices to provide clinical experiences.

- Both models require substantial personnel costs, about $13 million annually, plus additional costs that are difficult to estimate.
Conclusions

• No new veterinary school that produces primarily small animal veterinarians is recommended at this time.

• The high cost of establishing a new traditional model veterinary school would outweigh the potential benefits to the state, given the small to moderate workforce demand.

• Due to the economic forces that drive graduates’ decision making, building a new veterinary school would not guarantee that any of the graduates would practice on livestock, which is the state’s principal area of need.

• There are less expensive and more cost-effective ways to address the need for food animal/livestock veterinarians in Texas.
Recommendation 1

• Texas should fund the existing veterinary loan repayment program, the Rural Veterinarian Incentive Program (RVIP), as a cost-effective means of persuading additional veterinarians to engage in large or mixed animal practice in rural areas of the state.

• The state should provide approximately $1 million in funding per year.

• Rural regions would be matched with a veterinarian seeking loan repayment. Each awardee would receive a year’s worth of tuition and fees for each year of rural service.

• Texas would be able to fund 45 veterinarians annually with a program fund of $1 million.
Recommendation 2

• Expand the scope of practice allowed for veterinary technicians in rural practice.

• Modify statute to allow veterinarians to supervise veterinary technicians remotely, using options available with modern telecommunications such as cell phones or Skype.

• Enhancing the role of veterinary technicians could allow a veterinarian in a rural region to expand the availability of veterinary care significantly with relatively low cost compared to the cost of a veterinarian making a house call to a farm or ranch.
Recommendation 3

• The Coordinating Board may consider a proposal designed to specifically produce large animal veterinarians in an innovative, cost efficient manner that does not duplicate existing efforts.