Assessing the Small Animal Veterinary Needs of Rural Maine and Implementing an Effective Management Plan

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Abstract

In Maine, the need for veterinarians is at an all-time high; the large animal (NIFA, 2022) and equine veterinary shortage (Parker, 2021) has been documented and there are mechanisms in place to help alleviate this shortage. In January 2022, LD 1885 (An Act To Increase Maine’s Veterinary Workforce) was amended to propose the inclusion of critical and emergency veterinary service shortages (An Act To Increase Maine’s Veterinary Workforce, 2022). Maine has methods to evaluate the shortage of large animal service, but the shortage of companion animal services is not fully described. In order to evaluate Maine’s need for small animal services, a needs assessment will be conducted. With implementation of the Pats For Life Community Outreach Toolkit (Humane Society of the U.S., 2021), and by communicating with and surveying veterinary stakeholders in Maine, gaps in veterinary services will be identified. This information will help answer the question: How can the demand for companion animal veterinarians in underserved communities be meaningfully represented and how can those communities be managed appropriately? The long-term goal is to identify stakeholder priorities to address the veterinary shortage. With a better understanding and assessment of veterinary needs in the state, the issue can be organized in a way that is approachable for those outside of the veterinary community, like Maine policymakers, who, alongside the veterinary professionals, will serve a large role in solving the issue and improving veterinary services in rural communities.

Background & Methodology

In order to assess Maine’s current veterinary situation, data was derived from various databases and used to better describe potential shortage areas and look further into the known locations of veterinary need.

Census (as of 2020):
• Households per Maine county

AVMA (as of 2016):
• Average percentage of households with dogs (35.9%) or cats (43.8%)
• Average number of dogs (1.5) or cats (1.9) per owning household

Government of Maine (as of March 24, 2022):
• Number of active veterinary licenses in each county

Data Represented:
• Average number of pets (dogs and cats) that a veterinarian sees in each county
• Ranked on a color scale to depict the most severe small animal veterinary shortages as calculated under all factors

Calculations used to determine the number of pets per active practicing veterinarian:

\[
\text{Number of Pets} = \text{Number of Households with Dogs or Cats} \times \text{Average Number of Pets} \times \text{Percentage of Households with Pets}
\]

Table 1: A breakdown of the numbers and factors used to calculate small animal shortage areas in Maine and the formula used. Designated shortage areas are published by the USDA.

<table>
<thead>
<tr>
<th>County</th>
<th>Number of Households with Dogs or Cats</th>
<th>Average Number of Pets per Household</th>
<th>Percentage of Households with Pets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hancock</td>
<td>25000</td>
<td>1.5</td>
<td>35.9%</td>
</tr>
<tr>
<td>Knox</td>
<td>20000</td>
<td>1.9</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

Conclusions

• Shortage areas as designated by NIFA’s shortage map exclude the need for companion and small animal medicine
• Currently available resources do not adequately represent the needs of small animal medicine in the state
• Data depicts the critical need for small animal veterinary medicine in Aroostook and Franklin counties; no loan repayment is currently available in these counties
• There is no known set of requirements to designate an area as a companion animal veterinary shortage area; large animal designations require nomination through the Veterinary Medicine Loan Repayment Program (VMLRP)

Future Steps

September – October: Develop survey questions to determine causes of shortages (retention issues, potential incentives to combat this, etc.)
October – January: Conduct survey with veterinarians
January – April: Connect quantitative data (as pictured in heat map) to survey findings; determine need/location of pop-up wellness clinics
April: Present data to veterinary stakeholders, students within major, and policymakers
April – May: Publish findings

The long-term goal is to connect veterinary stakeholders with Maine policymakers to increase accessibility for companion animal veterinary services.

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References

(2021) USDA. USDA to identify veterinary shortage areas. (2021). Beef, Retrieved from https://storymaps.arcgis.com/stories/1c2f0b1e1aa741caa28e6eb24ed33b54