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## Community Determinates of Rural Veterinary Longevity

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# Community Determinants of Rural Veterinary Longevity

## Courtney Bir and Andrew Van Leuven

### Motivation

- Veterinarians are in high demand- 94% of the 2020 graduating class had opportunities lined up 2 weeks before graduation
- Veterinarians make several choices
  - What kind of practice-small animal, food animal/equine (large animal), mixed species
  - Location of practice- rural vs urban
- Although there are shortages of both rural and food animal veterinarians, we are focusing on the rural component
- Rural veterinarians are of national importance
  - 2003 National Veterinary Medical Service Act provides loan relief for veterinarians in shortage areas
- Between 2008 and 2013 the number of rural veterinarians decreased by 15%, and decreased an additional 17% between 2013 and 2018

### Previous Literature

- Previous studies -surveys of veterinarians to determine why they are choosing rural veterinary medicine, or why they left
- Reasons to choose rural: preferences for rural lifestyles, having a rural background, and quality of schools
- Reasons to leave rural: emergency duty, time off, salary, and lifestyle preferences
- Although retaining a veterinarian is important to remaining open as a clinic, personal preferences are only one component of veterinary clinic closure

### Objectives

- Differentiate between rural communities that retain their veterinary practice(s) and those that experience a closure
- Determine the locational attributes that are significantly associated with veterinary clinics remaining in their community

### Data

- **Amenity measures:**
  - Number of childcare establishments within a 5-mile radius of vet clinic
  - Number of grocery and variety (e.g., Walmart) stores within a 5-mile radius of vet clinic
- **Measure of local educational quality:** *County Mean Test-Based Achievement Pooled Across Subjects*, Stanford Education Data Archive (SEDA), 2022
- **Demographic measures:**
  - Percent of county population aged 65 and older
  - Median household income

Variable	Marginal effect
Large animal practice	-0.0289
Mixed animal practice	-0.0595**
Clinic size (number of employees)	-0.0072**
In a metro area	0.0270
Number of nearby shopping outlets	0.0008
Number of nearby childcare outlets	-0.0002
County high school quality	0.0209
Median household income	0.0000
Percent of population over 65	-0.1718

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