

# PRACTICE OUTCOMES FOR THE FIRST DECADE OF RURAL PHARMACY EDUCATION (RPHARM) PROGRAM GRADUATES



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## Background

- There is a deficit of rural pharmacists in Illinois (11.4% of population are rural residents vs. 9% of pharmacists practice rurally) and in the US (20% of population are rural residents vs. 13.9% of pharmacists practice rurally)<sup>1-3</sup>.
- Enablers of rural pharmacy practice include having a rural background, rural training experiences during pharmacy school, and a desire to return to their hometown<sup>4-6</sup>.

The 4-year Rural Pharmacy Education (RPHARM) Program at University of Illinois Chicago College of Pharmacy started in 2010 with aims to:

Attract students with rural backgrounds.

Encourage students to practice rural pharmacy.

Offer clinical, community-engaged, and didactic learning experiences specific to rural environments.

## Purpose

Examine the characteristics of practice outcomes for the first 10 graduating classes of the RPHARM Program to determine program effectiveness.

## Methods

- Hometown ZIP codes were classified as rural if the rural-urban commuting area (RUCA) code was  $\geq 4.0$  using RUCA code 3.0<sup>1</sup>.
- Descriptive analysis done using SPSS 27 (Chicago: IBM Corporation).
- Distance from practice location to graduate's hometown measured using Google Maps<sup>7</sup>.

Definitions of rural used to classify practice outcomes:

RUCA code of 4.0 or higher<sup>1</sup>

Federal Office of Rural Health Policy (FORHP) designated rural ZIP code<sup>8</sup>

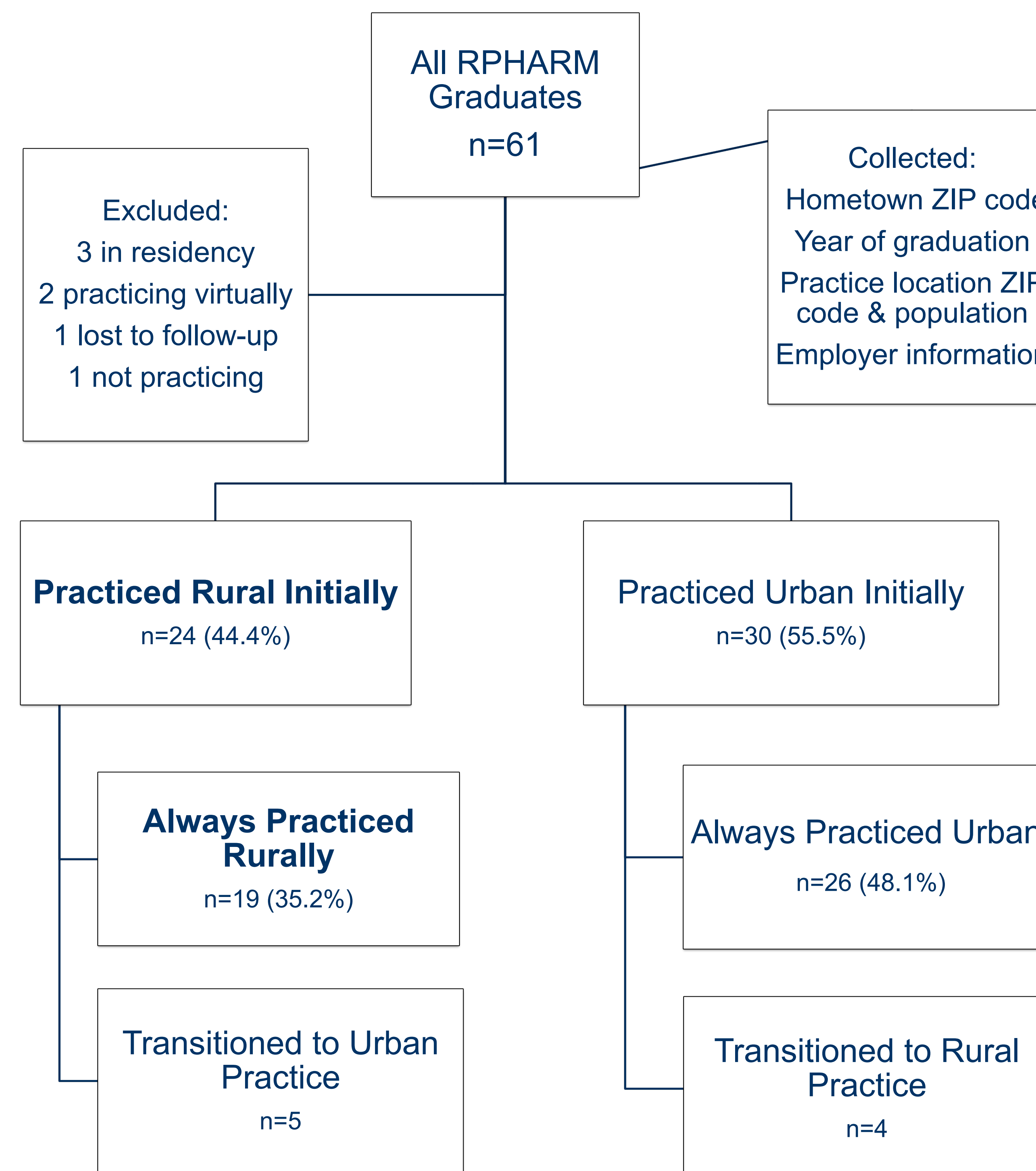
Non-metropolitan Core Based Statistical Areas<sup>9</sup>

Population less than 50,000 people<sup>10</sup>

## Outcomes

- RPHARM graduate data from 2014-2023 was included for those in physical practice locations (n=54).
- 40.7% (22/54) of RPHARM graduates were from rural hometowns.

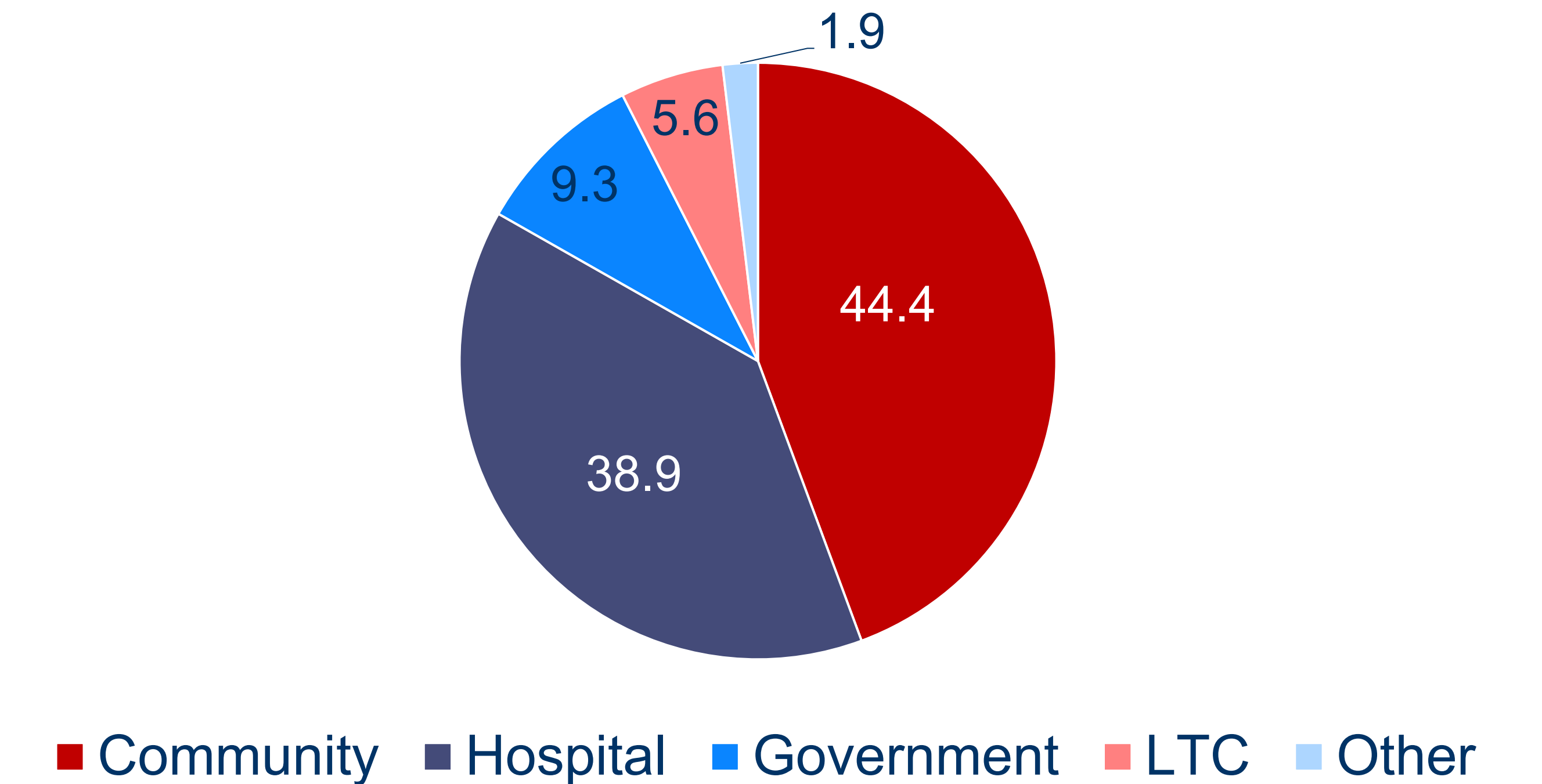
**Figure 1. RPHARM Graduate Outcomes Assessment & Job Movement**



**Table 2. Practice Outcome Metrics**

Practice <50 miles from hometown	57.4% (31/54)
Practice 50-100 miles from hometown	13% (7/54)
Practiced rurally at some point	51.8% (28/54)
Currently practice in Illinois	74.1% (40/54)
Rural hometown & practice rurally	68.2% (15/22)
Urban hometown & practice rurally	21.9% (7/32)

**Figure 2. Practice Type by Percent**



**Table 1. Practice Outcomes by Rural Definition**

	ZIP Code RUCA code (%)	FORHP ZIP Code Designation (%)	Core Based Statistical Areas (%)	Practice Location Population < 50,000 (%)
Rural	42.6	44.4	33.3	57.4
Not Rural	57.4	55.6	64.8	42.6

## Conclusions

- It is rewarding that 35.2-57.4% of RPHARM graduates were practicing in rural locations.
- High rates of rural graduates returning to rural communities and urban graduates converting to rural pharmacy practice indicates RPHARM Program success.
- Most graduates remain in same type of community where they initially began practicing.
- Results suggest a high likelihood that graduates will practice pharmacy near their hometown (70.4%  $\leq$  100 miles), regardless of its rurality.
- Important to take rural background into account during recruitment of students into rural pharmacy training programs.

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References available upon request.

