

# Measuring Demand for Nurse Practitioners: What Online Job Postings Can Tell Us

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## ABSTRACT

**Objective:** The purpose of this study was to assess demand for nurse practitioners (NPs) in New York State (NYS) using online job postings, comparing them to current NYS NP supply and distribution.

**Methods:** Job postings were obtained through Burning Glass Technologies (BGT), for NYS NP positions in 2014. Data acquisition was funded by a grant award from the Physician Assistant Education Association (PAEA), Washington, D.C. Two thousand postings were randomly selected for analysis and were coded based on setting, specialty, required degree/certification, employment status, and urban/rural status. This random sample represents 46% of NYS NP job postings provided by BGT. Current data on active NYS NPs were obtained from the NYS's mandatory NP re-registration survey, which collects information on practice status, location, demographics, and education.

**Findings:** Eighteen percent of NP postings were in rural areas and 82% were in urban areas, compared to 12% of active NPs in rural areas and 88% in urban areas. A lower percentage (59%) of employers recruiting in rural areas offered full-time positions, compared to NPs who reported currently working full-time in rural areas (69%). Eighty-one percent of working NPs in rural areas are practicing in ambulatory care settings, compared to 76% in urban areas. Only 33% of the job postings for NPs in rural areas and 26% in urban areas were for ambulatory care settings.

**Conclusions:** This analysis suggests that job posting data is consistent with current workforce trends in urban areas, with the distribution of postings is similar to the distribution of active NPs practicing in those areas. However, there is greater demand for NPs in rural areas compared to their current distribution, indicating increased interest in NPs for practice opportunities in rural areas of the state.

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## INTRODUCTION

- Demand for nurse practitioners (NPs) is growing in New York State (NYS).
  - In 2016, NYS hospitals in both rural and urban areas reported difficulty recruiting NPs and physician assistants, and anticipate hiring more NPs.<sup>1</sup>
  - Between 2014-2024, Bureau of Labor and Statistics (BLS) projections anticipate job growth for NPs to increase by 32%.<sup>1</sup>
- The purpose of this study was to assess demand for NPs in NYS using online job postings, compared to current supply and distribution of active NYS NPs.
- Demand data on NYS NPs was obtained from Burning Glass Technologies (BGT) data base which encompasses job postings from job posting websites, company websites, etc. Data acquisition was funded by a grant award from the Physician Assistant Education Association (PAEA), Washington, D.C. (Funding of this project does not necessarily constitute an endorsement of the findings of this research report by the PAEA.)
- Supply data on NYS NPs was obtained from a mandatory NP re-registration survey.

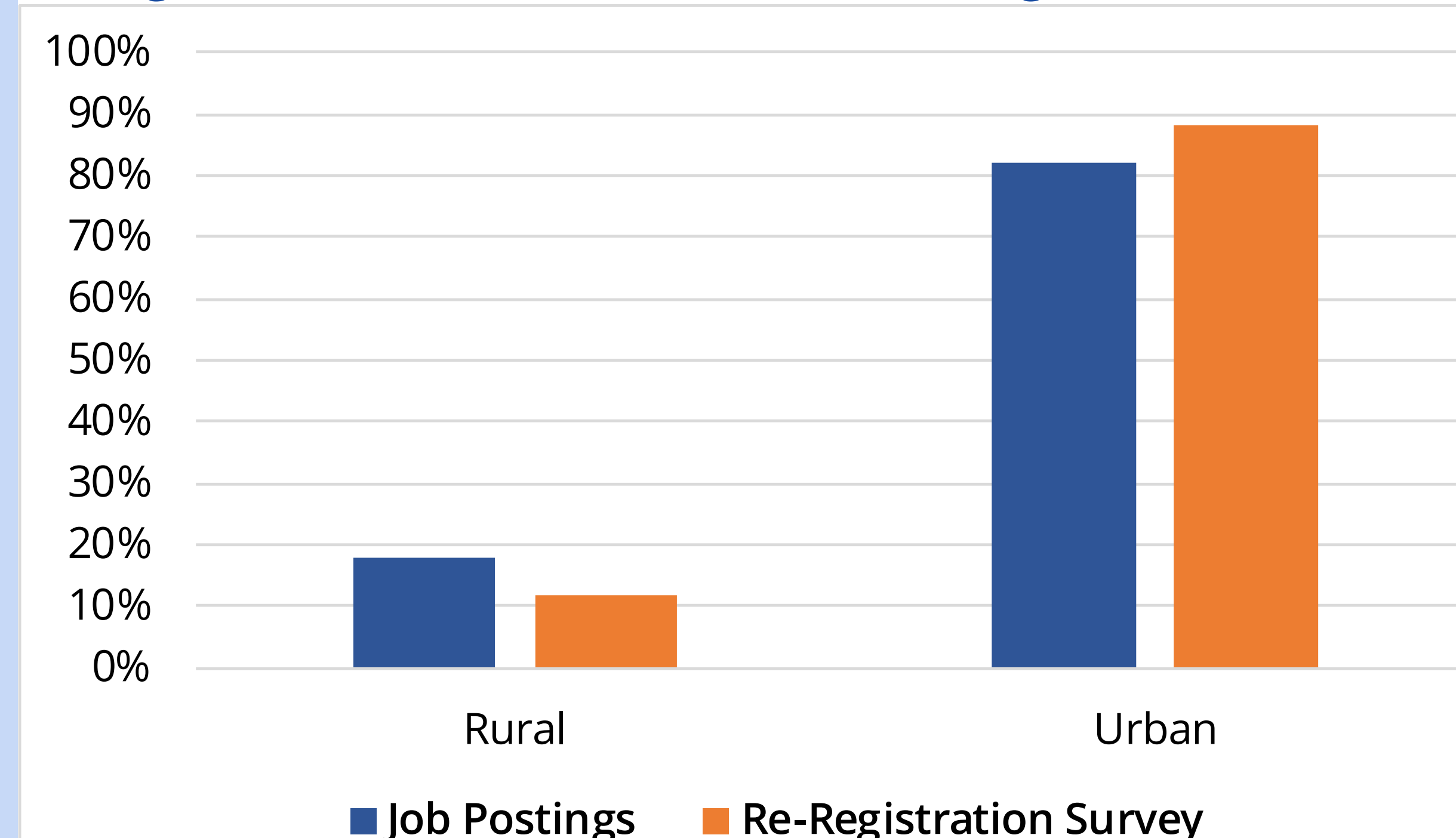
## METHODS

- The analysis for this study included job posting data specifically for NPs in NYS in 2014 and responses from the mandatory re-registration survey in 2016.
- BGT data included 4,300 NYS NP postings and from this a random sample of 2,000 postings were selected.
  - Data drawn from BGT looked at setting, job location, specialty, required degree/certification, employment status, location, and urban/rural status.
- The re-registration survey collected 5,746 responses from NYS NPs over a 13-month time frame.
  - The re-registration sample represents one-third of the total number of NPs in NYS.
  - Data drawn from the re-registration survey looked at practice status, location, demographics, and education.

## RESULTS

- Eighteen percent of NP postings were for jobs in rural areas and 82% were in urban areas, compared to 12% of active NPs in rural areas and 88% in urban areas.

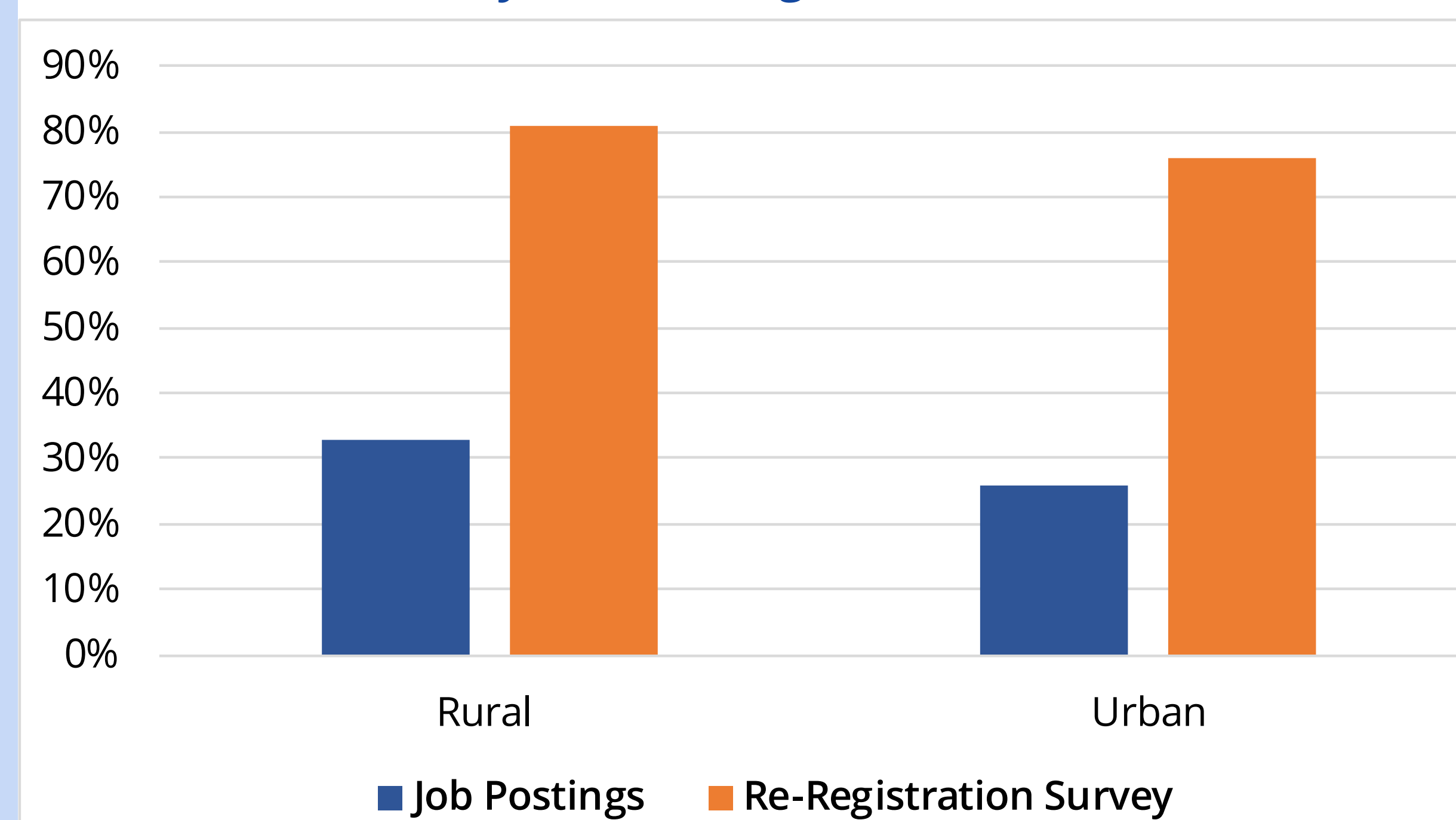
**Figure 1. Comparison of NYS NP Job Postings to NP Re-registration Results in Rural/Urban Settings: 2014, 2016**



Source: National job postings data from Burning Glass Technologies (2015), coded by the authors.

- Eighty-one percent of NPs working in rural areas were practicing in ambulatory care settings, compared to 76% in urban areas.
- Of those job postings that specified practice setting, 33% of postings were in rural areas and 26% in urban areas were in ambulatory care settings.

**Figure 2. Comparison of NYS NP Job Postings to NP Re-registration Results in Ambulatory Care Settings: 2014, 2016**



Source: National job postings data from Burning Glass Technologies (2015), coded by the authors.

- A greater percentage of NPs (69%) are currently working full-time, compared to the percentage of job postings (59%) for full-time positions for rural areas.

## RESULTS (cont.)

**Figure 3. Comparison of NYS NP Job Postings to NP Re-registration Results for Full-time Employment Status: 2014, 2016**



Source: National job postings data from Burning Glass Technologies (2015), coded by the authors.

## LIMITATIONS

- Twenty-five percent of job postings did not specify practice setting for which NPs were being recruited.
- Thirty-five percent of job postings for hospital settings did not specify if the position was for inpatient/ER or outpatient settings.

## DISCUSSION

- Demand for NPs appears to be growing, especially in rural areas, where there are less physicians.
- Research can assist health service researchers and policy makers utilize job posing data as a valuable starting point for long-term assessments of the trends in demand for NPs in NYS.

## CONCLUSIONS

- Distribution of postings for NPs in urban areas was similar to current trends of active NPs practicing in urban areas.
- Job postings showed a higher demand for NPs in rural areas, compared to active NPs currently practicing in rural areas.
- Providers and policy makers may want to consider strategies to support the recruitment and retention of NPs in NYS.

## REFERENCE

1. Martiniano R, Boyd L, Rosario R, Gao J, Liu Y, Harun N, Wang S, Moore J. *The Health Care Workforce in New York, 2015-2016: Trends in the Supply and Demand for Health Workers*. Rensselaer, NY: Center for Health workforce Studies, School of Public Health, SUNY Albany; February 2017.