

# Analyzing the database “National Plan and Provider Enumeration System (NPPES)”

## TECHNICAL REPORT

### 1. Overview

We mined and performed analytics on a large publicly available database. The National Plan and Provider Enumeration System (NPPES) database report the status of the US healthcare providers.

### 2. Methodology

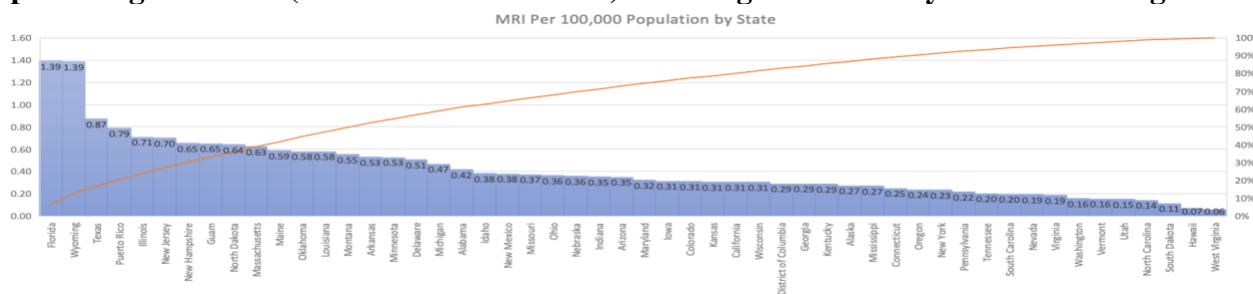
Data was downloaded from The National Plan and Provider Enumeration System (NPPES) database reports on the 23<sup>rd</sup> of January 2022.

STATA SE Version 17 was the statistical package used for analyzing the data.

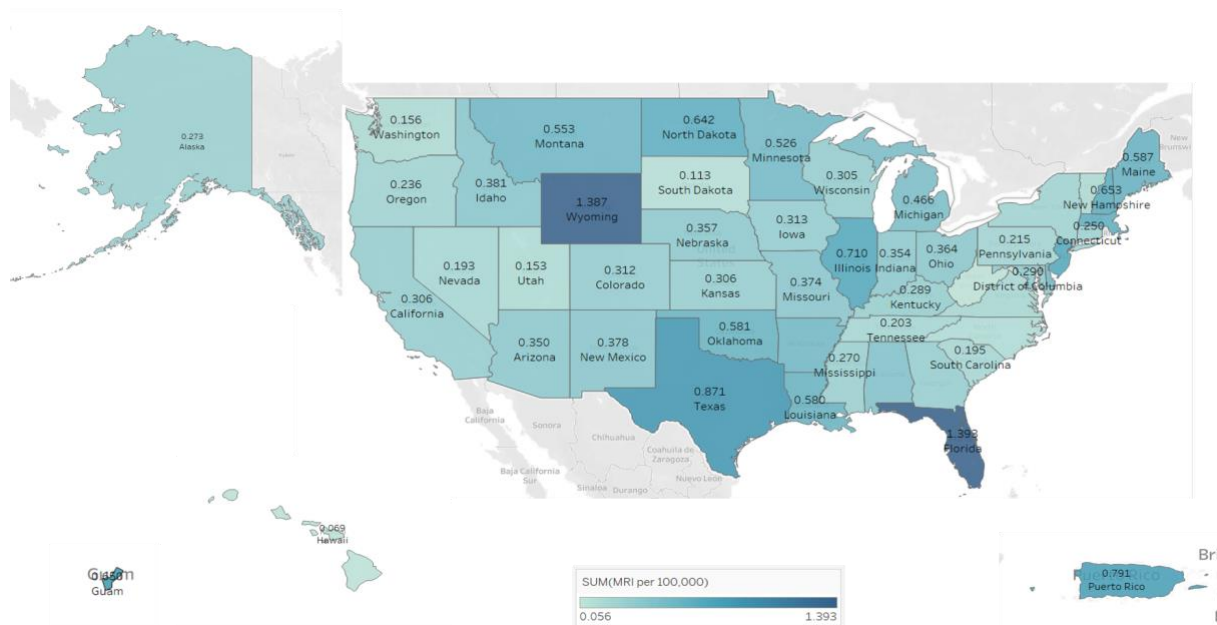
Excel and Tableau were used for creating the visuals.

### 3. Data Analysis

**Figure 1. Pareto Chart showing the significant few states contributing to the high-frequency percentage of MRIs (On the left of the chart) and insignificant many states on the right of the chart.**



**Figure 5. Heat map showing the contribution of Florida and Wyoming. Title: MRI per 100,000 population by state in the U.S.**



Florida and Wyoming are the highest states and in exploring census data for geriatric populations in the USA it was found that Florida has the second-highest geriatric population in the USA while Wyoming has the second-lowest geriatric population in the USA, attributing the MRIs to geriatric populations is not feasible and requires further research.

## 4. References

Shanosky, N., McDermott, D., Kurani, N. “How do U.S. healthcare sources compare to other countries?”. *Peterson-KFF Health System Tracker*, Aug 12, 2020.

Stewart, C. “Number of magnetic resonance imaging (MRI) units in selected countries as of 2019 (per million population)”. *Statista*, Jul 5, 2021.