

CIVIC [REDACTED] DIGITAL [REDACTED] FELLOWSHIP [REDACTED] [REDACTED]

Developing a U.S. Healthcare Provider-Business Linkage Framework

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Demographic Programs Division

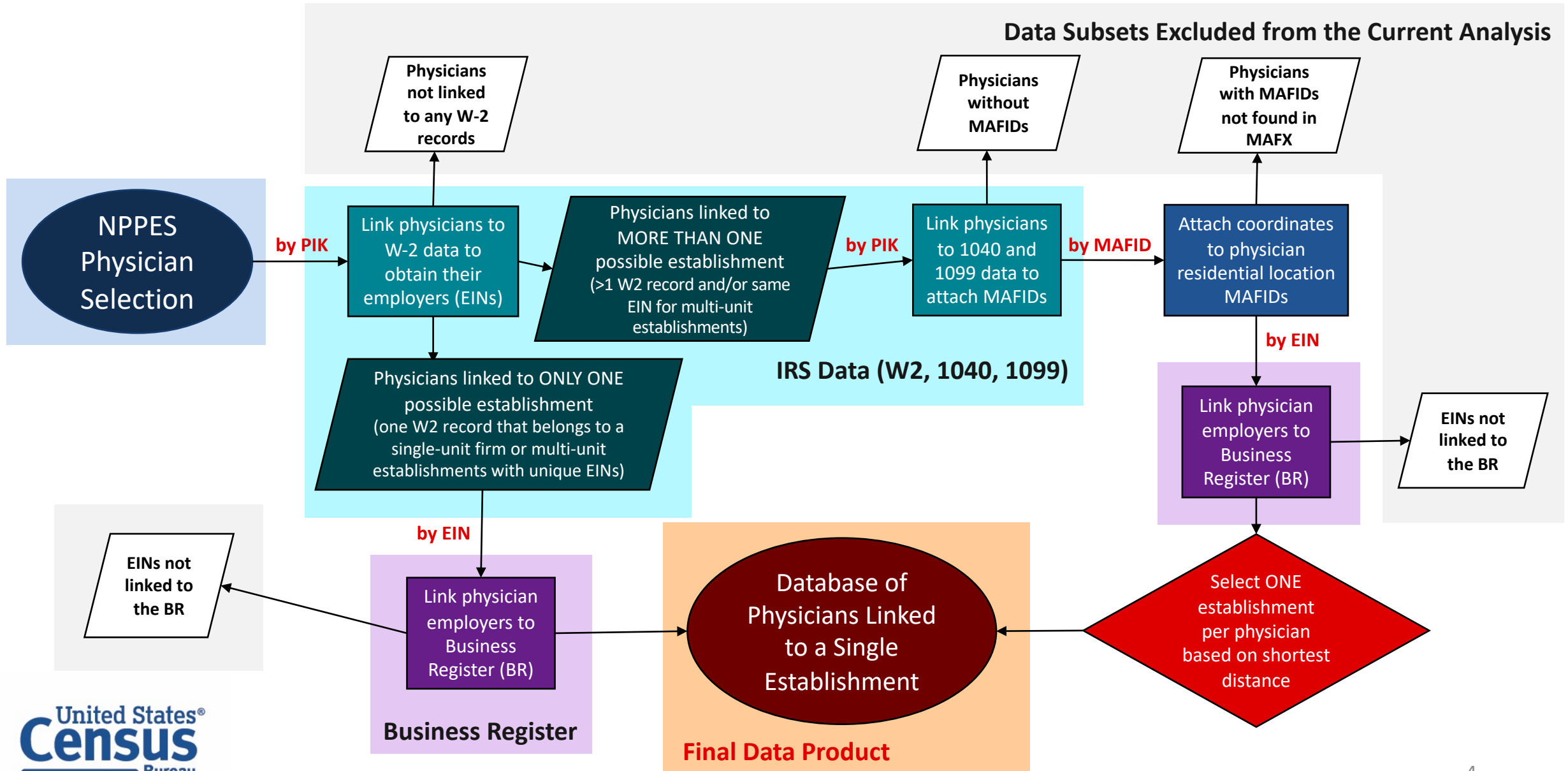
Project Overview

- Develop a new framework for linking multiple existing data sources on healthcare providers and their places of employment
- Better understand the structure of the U.S. healthcare system and where healthcare providers are employed and located
- The resulting framework may be used to
 - Produce new data products on characteristics of healthcare providers and businesses
 - Create the gold standard survey frame of healthcare providers and businesses
- Goal is to produce regular data products to display trends over time

Data Sources

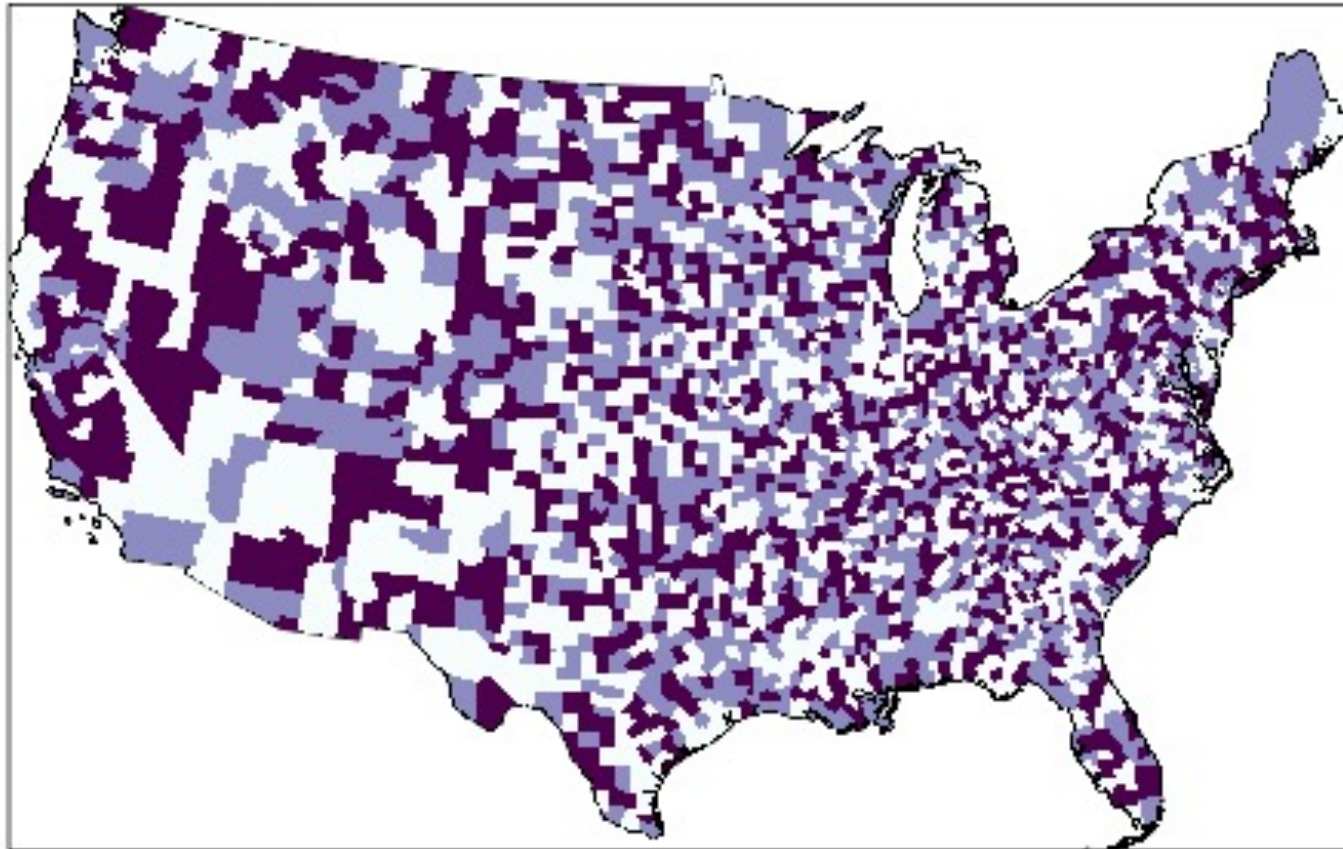
- CMS's National Plan and Provider Enumeration System (NPPES)
 - Identify current physicians and their characteristics
- IRS data (W-2, 1040, and 1099 tax forms)
 - Identify physician employers
 - Identify physician residential locations
 - *Used to calculate distance to closest potential employer*
 - Additional physician characteristics
- Business Register (BR)
 - Identify characteristics of firms and establishments that employ physicians
 - Identify employer locations
- Master Address File Extract (MAFX)
 - Attach coordinates to physician locations

Assigning Physicians to Establishments (Diagram)

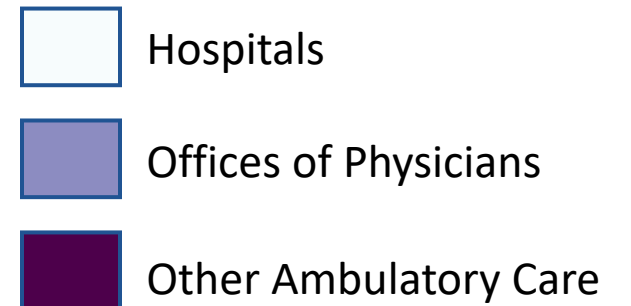


(DUMMY DATA)

Most Common Physician Employer Industry Group by County

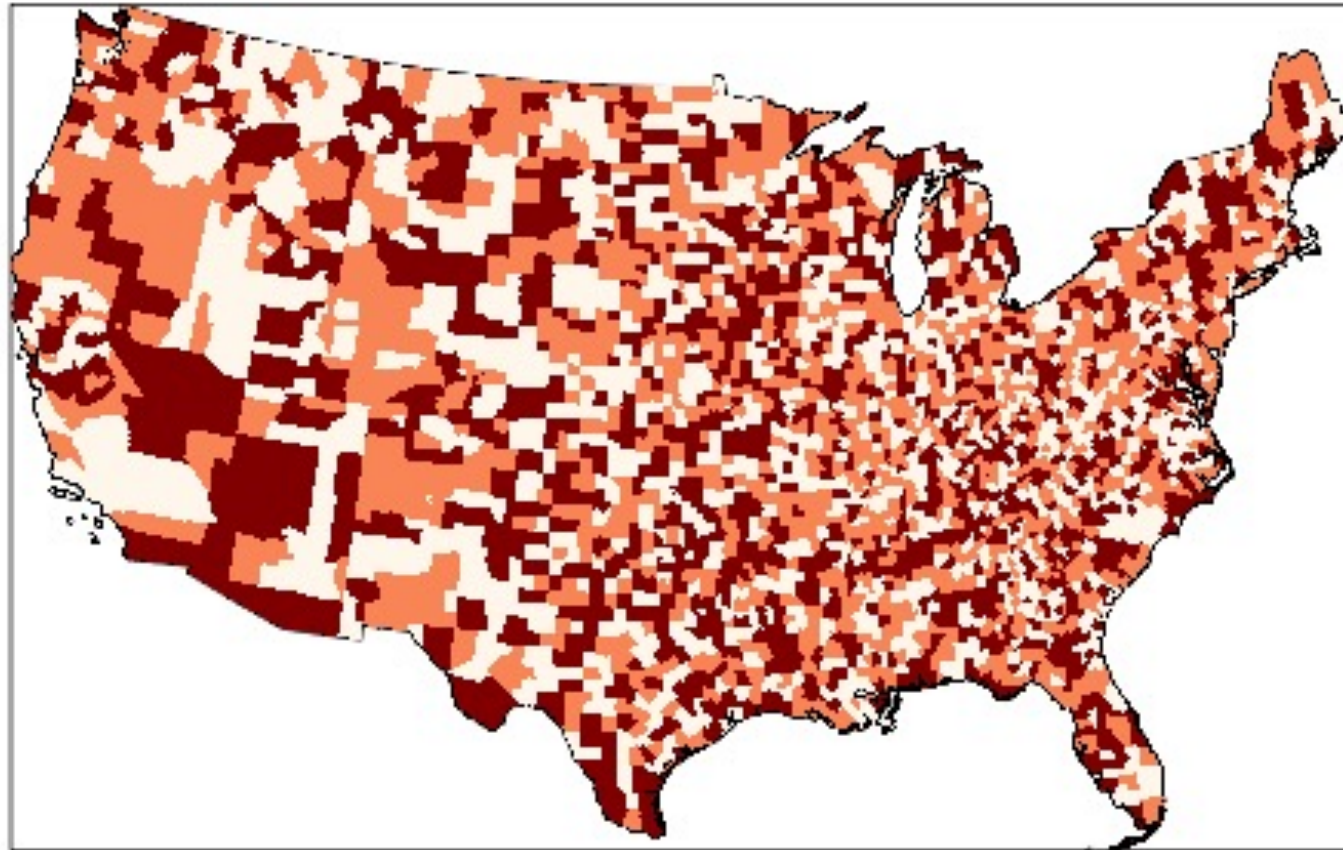


Most Common Industries Employing Physicians by County

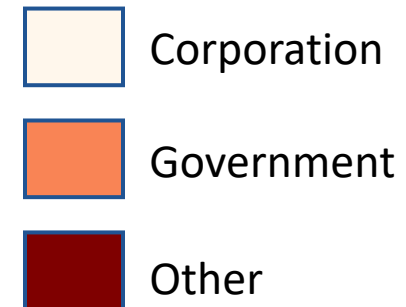


(DUMMY DATA)

Most Common Physician Employer Legal Status by County



**Most Common form of
Organizations
Employing Physicians
by County**



Conclusions, Further Exploration, and Next Steps

- Analyze additional physician, firm, and establishment characteristics
 - Physician specialization, rural vs urban establishment location, establishment employment size
- Produce additional summary statistics and visualizations
- Link to other data sources
 - Economic Census, Service Annual Survey (SAS), etc.
- Improve the method of assigning physicians to establishments
- Compare the final dataset with other data products