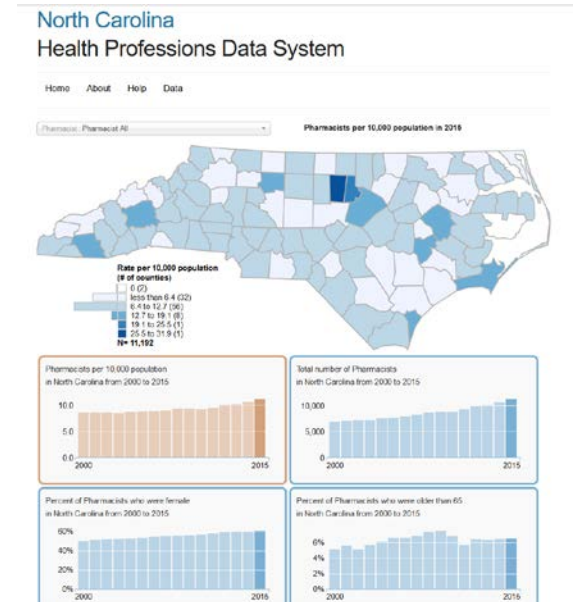
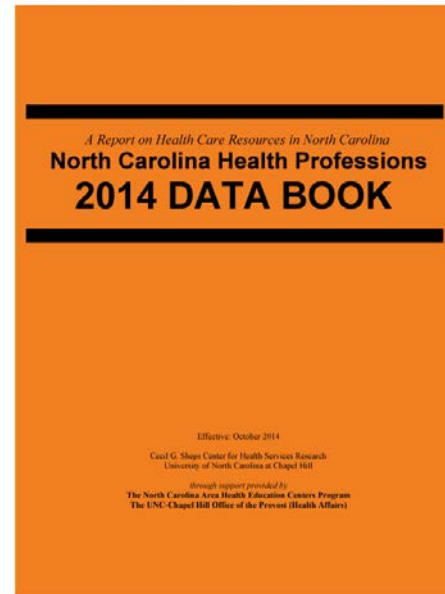


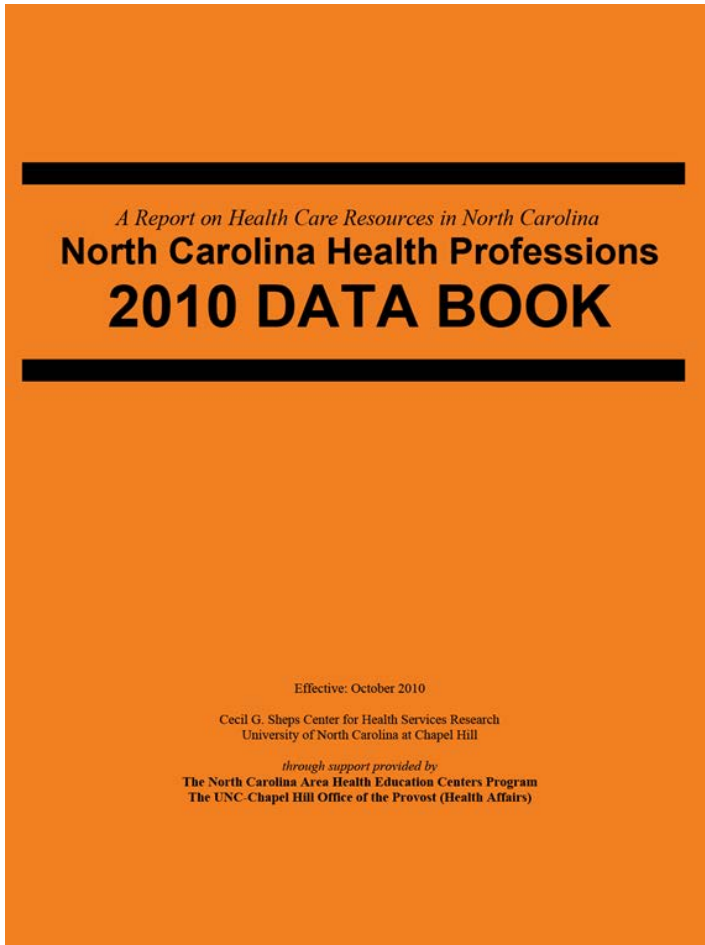
# Developing Interactive Data Visualizations for State Workforce Planning and Policy

**Evan Galloway**  
Data Visualization Analyst  
Program on Health Workforce  
Research and Policy

May 4, 2017



# The data book was the signature product of the HPDS.



## Durham



MSA county designation: Metropolitan

AHEC Region: Wake AHEC

### 2013 ACTIVE HEALTH PROFESSIONALS\*

#### Physicians<sup>§</sup>

Non Federal Physicians	2,131
Primary Care Physicians	525
Family Practice	65
General Practice	5
Internal Medicine	156
Obstetrics/Gynecology	34
Pediatrics	124
Other Primary Care	141
Other Specialties	1,606
Physicians per 10,000 Population	74.5
Primary Care Physicians per 10,000 Population	18.4
Federal Physicians**	159

#### Dentists and Dental Hygienists

Dentists	203
Dental Hygienists	142

#### DEMOGRAPHICS

#### Nurses

Registered Nurses	6,851
Nurse Practitioners	409
Certified Nurse Midwives	12
Licensed Practical Nurses	627

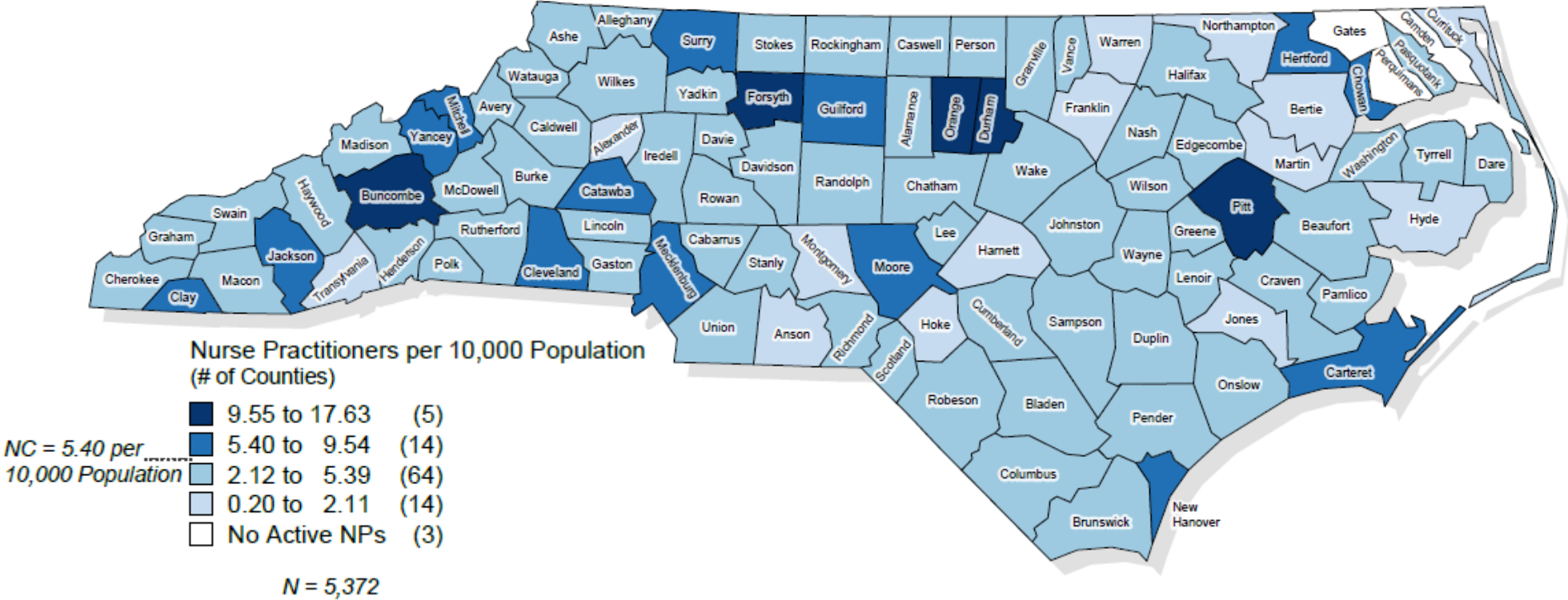
#### Other Health Professionals

Chiropractors	50
Occupational Therapists	191
Occupational Therapy Assistants	46
Optometrists	38
Pharmacists	738
Physical Therapists	355
Physical Therapist Assistants	32
Physician Assistants	333
Podiatrists	10
Practicing Psychologists	289
Psychological Associates	32
Respiratory Therapists	240



# The data book also contains maps of provider rates.

## Nurse Practitioners per 10,000 Population North Carolina, 2014



**Note:** Data include active, instate NPs licensed in North Carolina as of October 31, 2014. **Source:** North Carolina Health Professions Data System, with data derived from the North Carolina Board of Nursing, 2014. **Produced by:** Program on Health Workforce Research and Policy, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.



# How can we increase access to and interest in this data?

- Put it online
- Make it interactive
- Allow people to take images and data with them
- More maps!
- Add new dimensions for the data
  - Longitudinal data
  - Profession specialties
  - Demographic data (age, sex, underrepresented minorities)



# Who do we want to use this data?

## External

- Policymakers
- Researchers
- Licensing boards
- Educators
- Employers

## Internal

- Our team
  - Auditing data
  - New research questions



# How was this created?

## Tools

- SAS for data cleaning and construction of longitudinal files
- LAMP stack for hosting data
- D3/javascript for frontend

## Team

- Jim Terry – SAS programmer
- Julie Spero – project leader
- Evan Galloway – frontend developer
- Health workforce team
- Sheps Center Web Services



UNC

THE CECIL G. SHEPS CENTER  
FOR HEALTH SERVICES RESEARCH

# Thank you to our partners!

- North Carolina Board of Nursing
  - North Carolina Board of Optometry
  - North Carolina Board of Pharmacy
  - North Carolina Board of Podiatry Examiners
  - North Carolina Medical Board
  - North Carolina Psychology Board
  - North Carolina Respiratory Care Board
  - North Carolina State Board of Chiropractic Examiners
  - North Carolina State Board of Dental Examiners
  - North Carolina Board of Occupational Therapy
  - North Carolina Board of Physical Therapy
- 
- North Carolina Area Health Education Centers (NC AHEC)



[nchealthworkforce.sirs.unc.edu](https://nchealthworkforce.sirs.unc.edu)





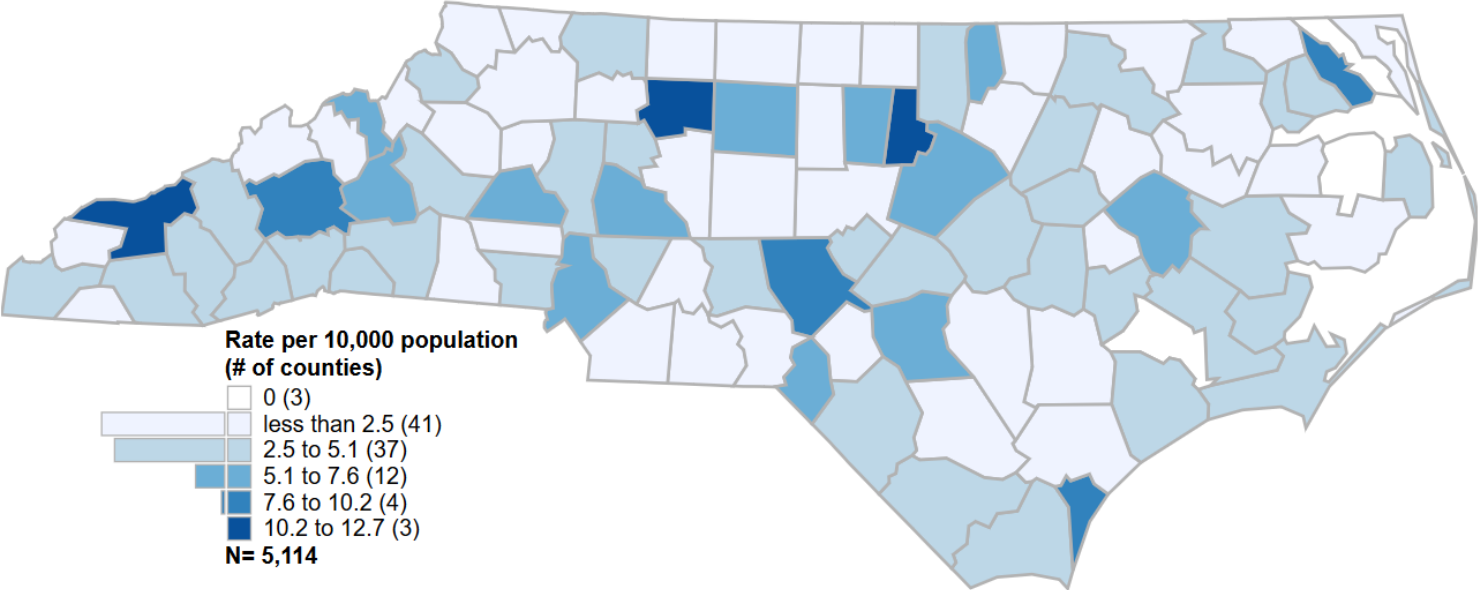
# North Carolina Health Professions Data System

[Home](#) [About](#) [Help](#)

Choose a profession

and a primary area of practice

Physician Assistants per 10,000 Population in 2015

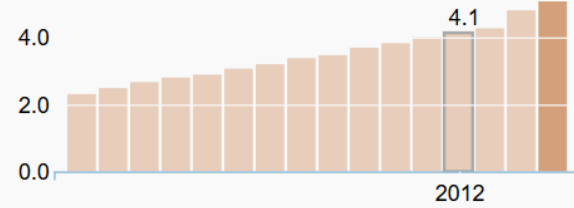


DOWNLOAD MAP AS IMAGE

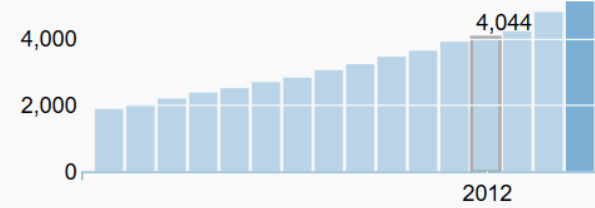
DOWNLOAD DATA



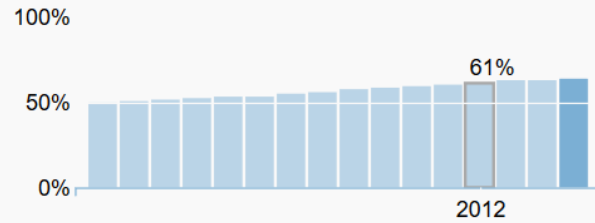
Physician Assistants per 10,000 Population in North Carolina from 2000 to 2015



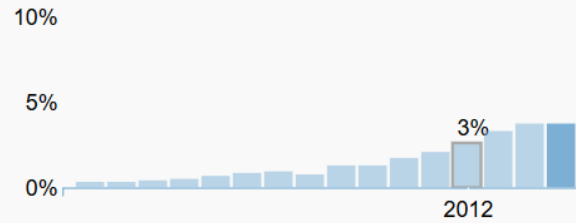
Total Number of Physician Assistants in North Carolina from 2000 to 2015



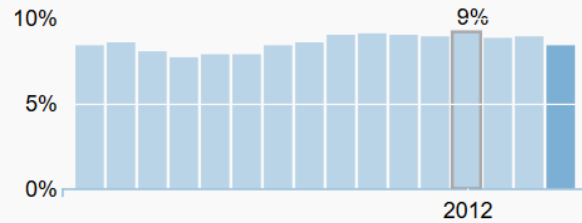
Percent of Physician Assistants who were Female in North Carolina from 2000 to 2015



Percent of Physician Assistants who were 65 or Older in North Carolina from 2000 to 2015



Percent of Physician Assistants who were Underrepresented Minorities in North Carolina from 2000 to 2015



**Notes:** Data include active, licensed physician assistants in practice in North Carolina as of October 31 of each year. Physician assistant data are derived from the North Carolina Board of Medicine. County estimates are based on primary practice location. Population census data and estimates are downloaded from the North Carolina Office of State Budget and Management via NC LINC and are based on US Census data.

**Source:** North Carolina Health Professions Data System, [Program on Health Workforce Research and Policy](#), Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Created May 03, 2017 at <https://nchealthworkforce.sirs.unc.edu/>.

