



# Welcome to the 2017 Indiana Health Workforce Collaborative!

*Thank You to Our Sponsors:*



INDIANA UNIVERSITY



# The Bowen Health Workforce Information Portal (HWIP)

Hannah L. Maxey, PhD, MPH, RDH

Director, Bowen Center for Health Workforce Research & Policy

Connor W. Norwood PhD, MHA

Associate Director, Bowen Center for Health Workforce Research & Policy

The following speaker for this program has disclosed no actual or potential conflict of interest in regard to this program:

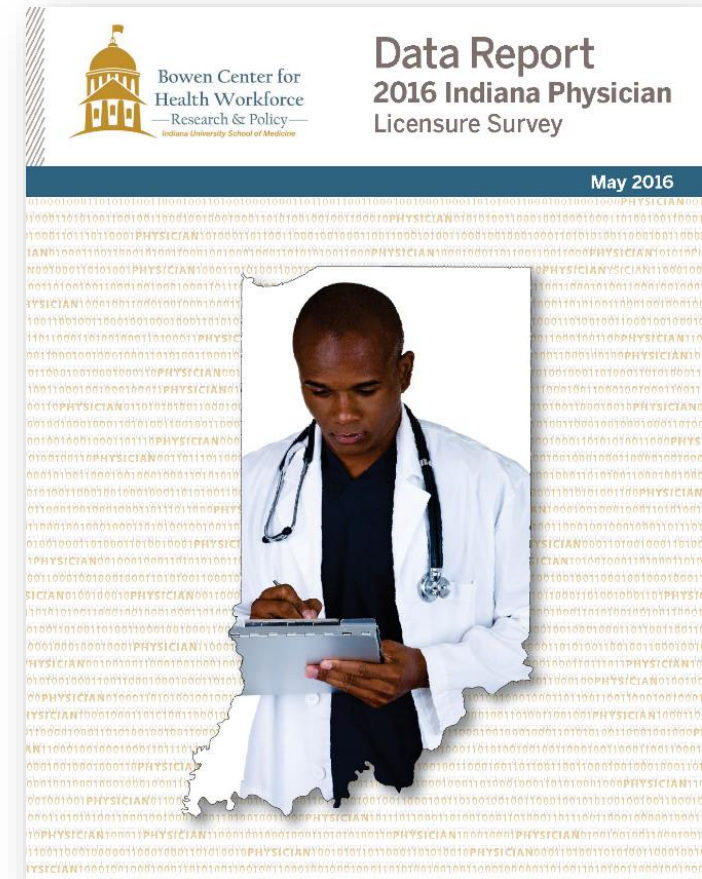
Connor W. Norwood, PhD, MHA  
Hannah L. Maxey, PhD, MPH



# Background

# History of Health Workforce Data in Indiana

- Lengthy Data Reports
  - Demographics
  - Practice Characteristics
  - Supply & Distribution
- Select Few Professions
- Limited resources for ad hoc analyses and data requests



# The Governor's Health Workforce Council

- Governor's Health Workforce Council and Bowen Center for Health Workforce Research and Policy partnership
  - Health Workforce Policy Coordination in Indiana
  - Health Workforce Data Coordination in Indiana



# The State of Health Workforce Data in Indiana

- Desire for high quality health workforce data to inform policy-making process
- Development of the Indiana Health Professions Database
- Development of the Bowen Health Workforce Information Portal (HWIP)
  - Data visualization can improve access to and understanding of complex health workforce data



# Bowen Health Workforce Information Portal (HWIP): Development Process



# The Development Process: Our Partners

- **Indiana Health Professions Database**
  - Collaboration with IU Department of Biostatistics
- **Bowen Health Workforce Information Portal (HWIP)**
  - Collaboration with the Polis Center at IUPUI



# The Advisory Committee

Family Social Services Administration – Jen Walthall

Department of Workforce Development – Michael Barnes

Indiana State Department of Health– Joan Duwve

Indiana State Nursing Association – Blayne Miley

Indiana State Medical Association – Julie Reed

Indiana State Dental Association – Doug Bush

Area Health Education Centers – James Ballard

Community Mental Health Centers – Matt Brooks

The Office of Governor Eric Holcomb – Andre Bennin



# Needs Assessment

- Summer 2016
- Assessed:
  - Stakeholder needs
  - Bowen center's workflow
  - Data management processes
- Determine possible solutions



# Needs Assessment

- Coordination/aggregation of health workforce data into one place
- Integration with the Indiana Health Professions Database
- Improved access to health workforce supply data
- Tool for basic analysis of health workforce supply data



Bowen Center for  
Health Workforce  
Research & Policy  
Indiana University School of Medicine

**Spatial Information Infrastructure and  
Visualization Solution**

**Needs Assessment Report**

Prepared by



**The Polis Center**

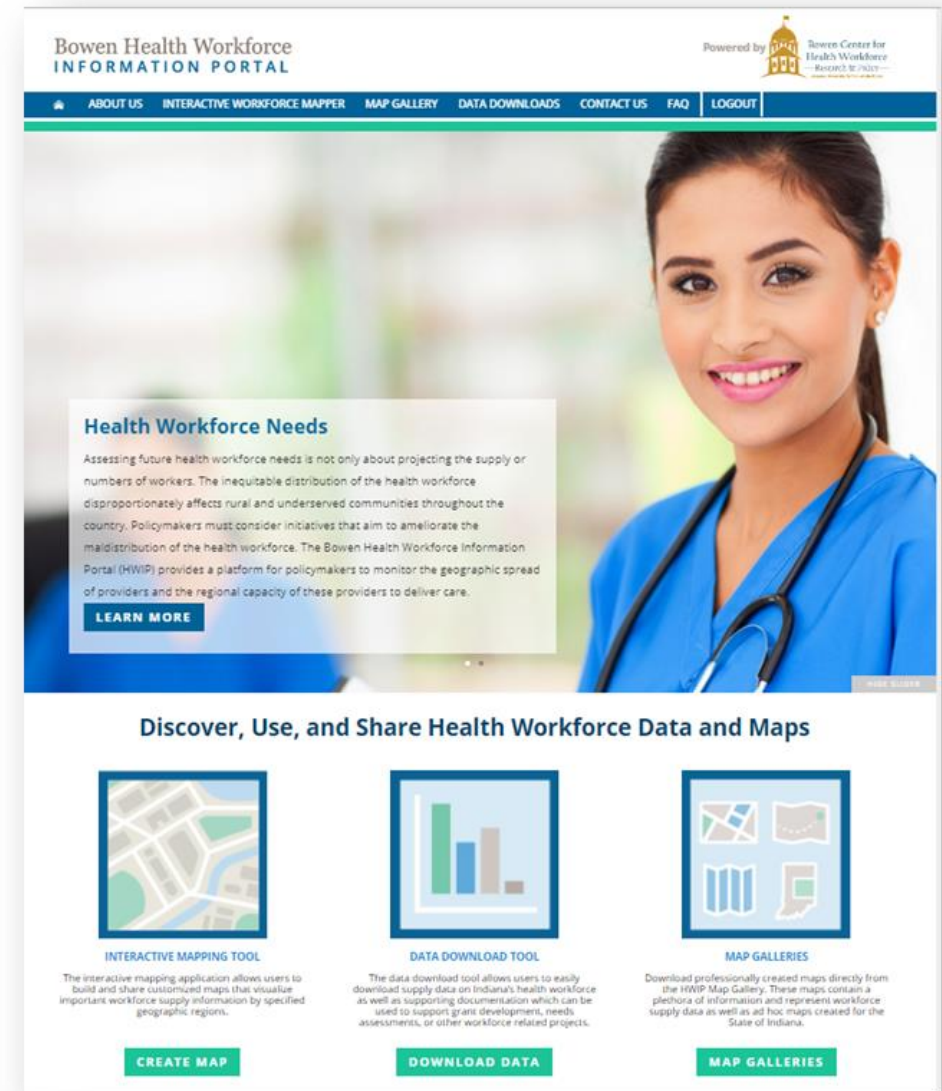
AN INDIANA UNIVERSITY SCHOOL OF MEDICINE CENTER  
FOR HEALTH WORKFORCE RESEARCH & POLICY



INDIANA UNIVERSITY

# The Portal's Core Structure

- **Portal Page**, main website that serves as the single point of access for health workforce data content.
  - <http://in-polis-app28.ads.iu.edu/bowen/>
- **Map Gallery**, for access to view and download a collection of high-quality maps created by Bowen.
- **Interactive Mapping** for interactive overlay, display, and navigation of relevant sets of health workforce map layers.
- **Data Download**, for registered users to download data files of interest.



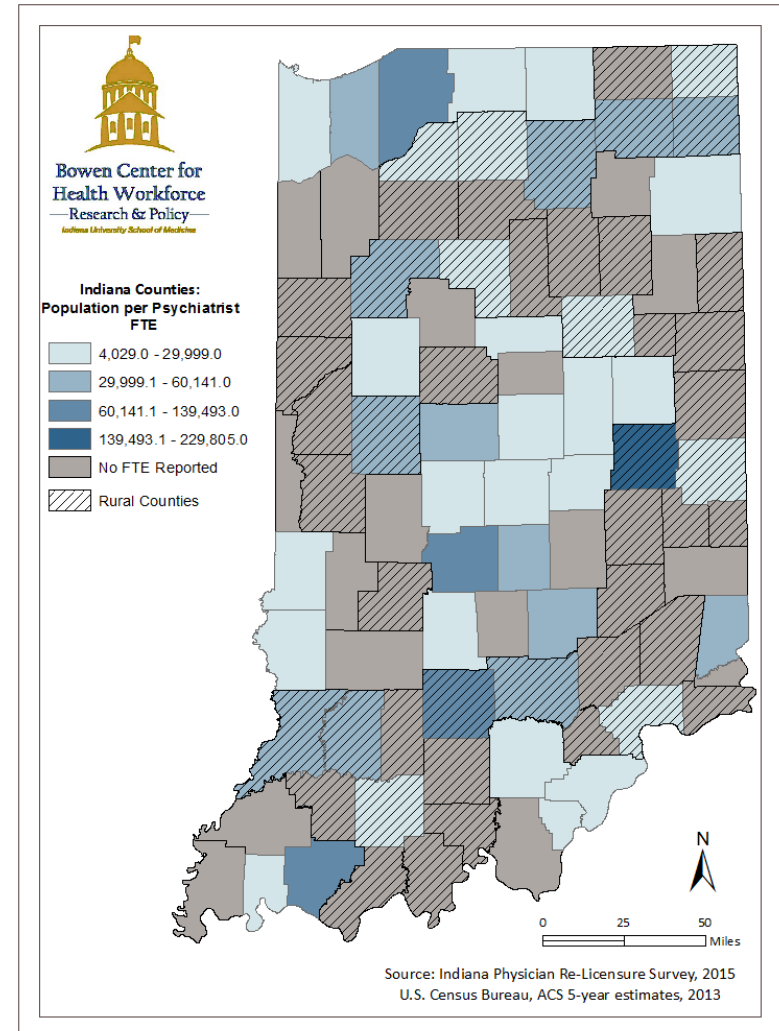
# Establishing HWIP Themes

- **Surveyed stakeholders and advisory committee**
- **Grouping data into common themes**
  - Supply, Distribution, & Characteristics
  - Education Pipeline
  - Federal Workforce Shortage Designations
  - Mental & Behavioral Health
- **Packaging data in common themes will improve user friendliness**



# HWIP Map Gallery

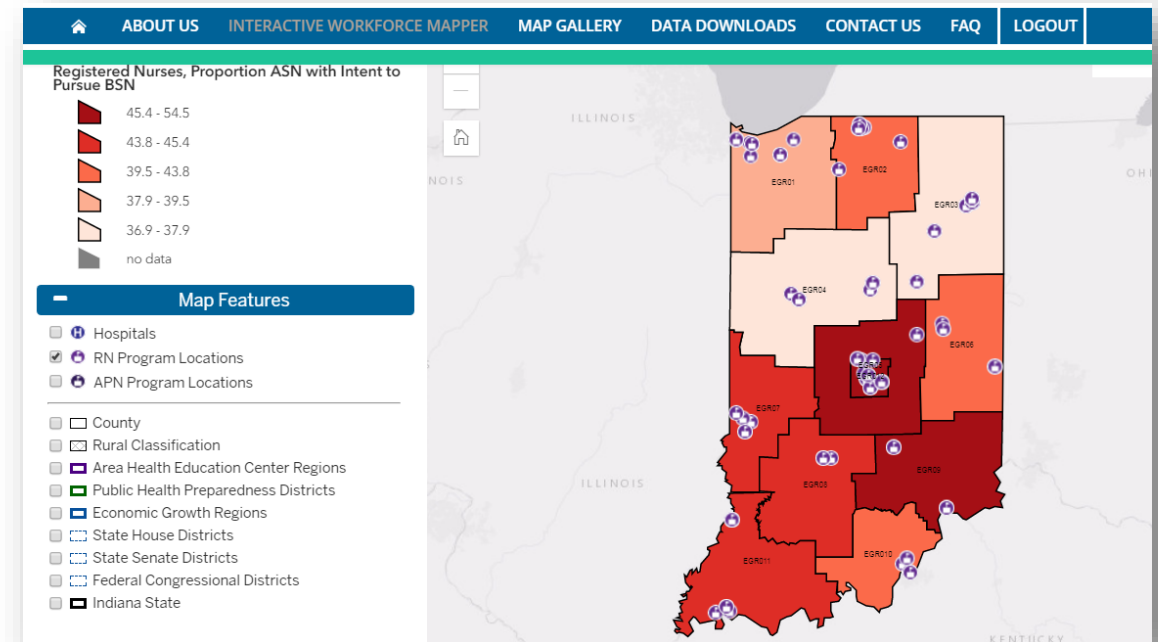
- Professionally created maps
  - Organized by:
    - Theme
    - Profession
    - Ad hoc
- Available in various formats:
  - PDF
  - JPEG
  - EPS





# HWIP Interactive Workforce Mapper

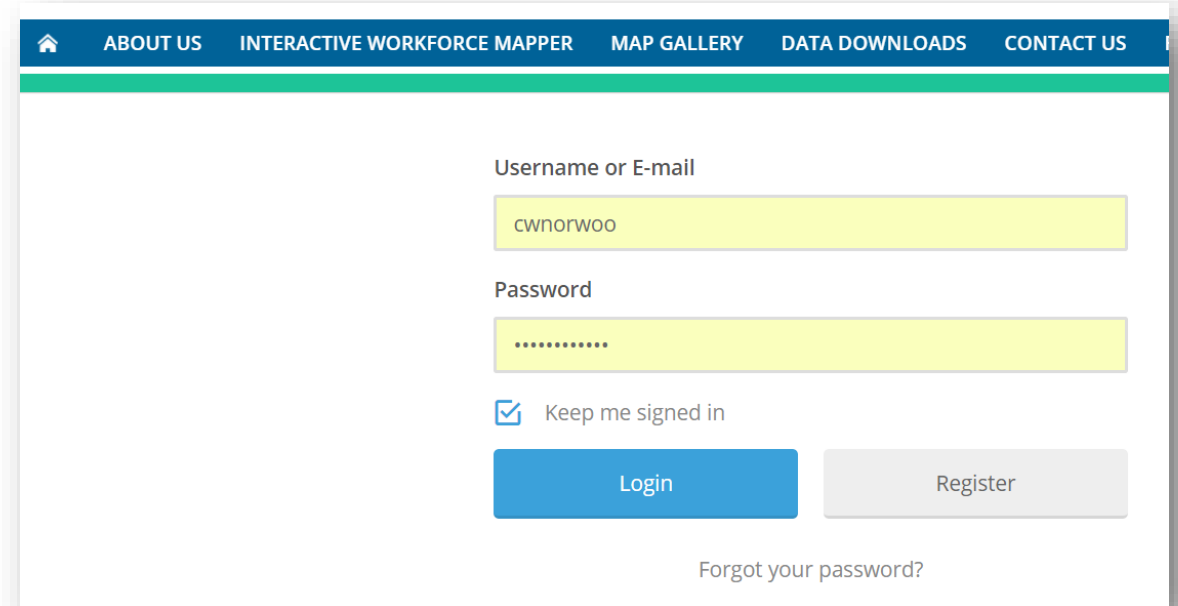
- Explore & share health workforce supply data
- Users can create, print, and share custom maps





# HWIP Data Download & Registration

- Access and download health workforce data by themes or professions
- Users must register to download data
  - Evaluation
  - Technical Support



The screenshot shows the login and registration interface of the HWIP Data Download & Registration portal. At the top, a dark blue navigation bar contains links: HOME, ABOUT US, INTERACTIVE WORKFORCE MAPPER, MAP GALLERY, DATA DOWNLOADS, and CONTACT US. Below the navigation bar, the main content area is white. It features a login form with two input fields: 'Username or E-mail' (containing 'cwnorwoo') and 'Password' (containing masked characters). Below the password field is a checkbox labeled 'Keep me signed in' which is checked. There are two buttons: a blue 'Login' button and a grey 'Register' button. At the bottom of the form, there is a link that says 'Forgot your password?'.



# A Case Study: Registered Nurses

- *Registered Nurses (RN)*- # 1 on Hoosier 50 Hot Jobs
  - <https://netsolutions.dwd.in.gov/hh50/>
- Institute of Medicine (IOM) recommends 80% of nursing workforce trained at Baccalaureate level by 2020
- Initiatives aimed at transitioning ASN to BSN in order to meet employer demand and IOM recommendation



# A Case Study: Registered Nurses

- What percent of the RN workforce in Indiana is trained at the Baccalaureate level?
- Are ASNs interested in receiving additional training to advance to the BSN level?
- If so, where are they located throughout Indiana.



# A Case Study: Federal Workforce Shortage Designations

- Health Professional Shortage Areas (HPSA)
  - Medicaid Bonuses
  - Recruitment and Retention of Healthcare professionals
- Ratio of 3,500 people per 1 primary care physician full-time equivalent (FTE)

## PRIMARY CARE HEALTH PROFESSIONAL SHORTAGE AREAS CRITERIA

A geographic region, often a county, can be designated as a Primary Care HPSA if it meets one of the following criteria:

1. The area is a rational area for the delivery of primary medical care services.
2. One of the following conditions prevails within the area:
  - a. The area has a population to full-time-equivalent primary care physician ratio of at least 3,500:1.
  - b. The area has a population to full-time-equivalent primary care physician ratio of less than 3,500:1 but greater than 3,000:1 and has unusually high needs for primary care services or insufficient capacity of existing primary care providers.
3. Primary medical care professionals in contiguous areas are over utilized, excessively distant, or inaccessible to the population of the area under consideration.



# Future Directions

- Continuous process improvement
- Ongoing evaluation
- In the pipeline:
  - New Geographies (ex. Legislative districts)
  - New Professions
  - New Data indicators
  - New Datasets
  - Fact sheets
- Down the road:
  - Longitudinal data
  - Custom Fact Sheets/Reports



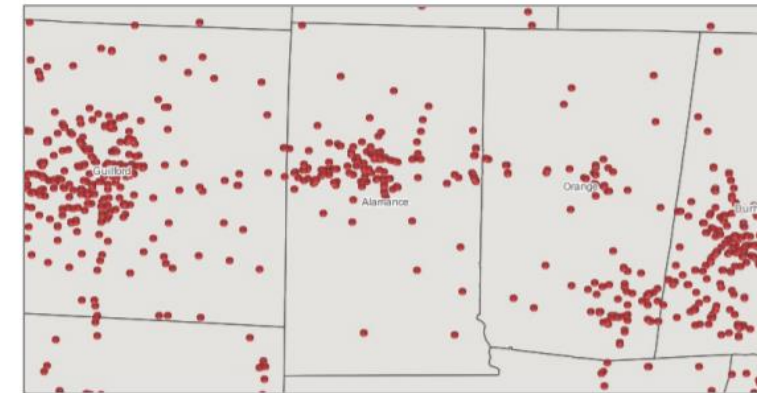
## Retailer Density Report

Alamance

### Density Metrics

	Alamance	North Carolina Statewide
Vendors Per Capita		
Total population	151,170	9,544,249
Number of retailers	167	9,799
Number retailers per 1,000 people	1.1	1.0
Number of people per retailer	905.0	974.0
Proximity to Youth Serving Locations		
Number of retailers within 1,000 ft of school	7	697
Percent of retailers within 1,000 ft of school	4 %	7 %
Tobacco Swamp * Measure		
Total square miles	435	53,819
Total square miles of tobacco swamp *	7	846
Percent swamp	2 %	2 %
Population in swamp	4,925	317,907
Percentage of population in swamp	3 %	3 %

\* A "tobacco swamp" is defined as more than 3.0 retailers per 1,000 people.



Page 1 of 8

<http://www.countertobacco.org/>

Jun 20, 2017



INDIANA UNIVERSITY