

INDIANA UNIVERSITY AND INDIANA HEALTH PROFESSIONALS

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SCHOOL OF MEDICINE

BOWEN CENTER FOR HEALTH

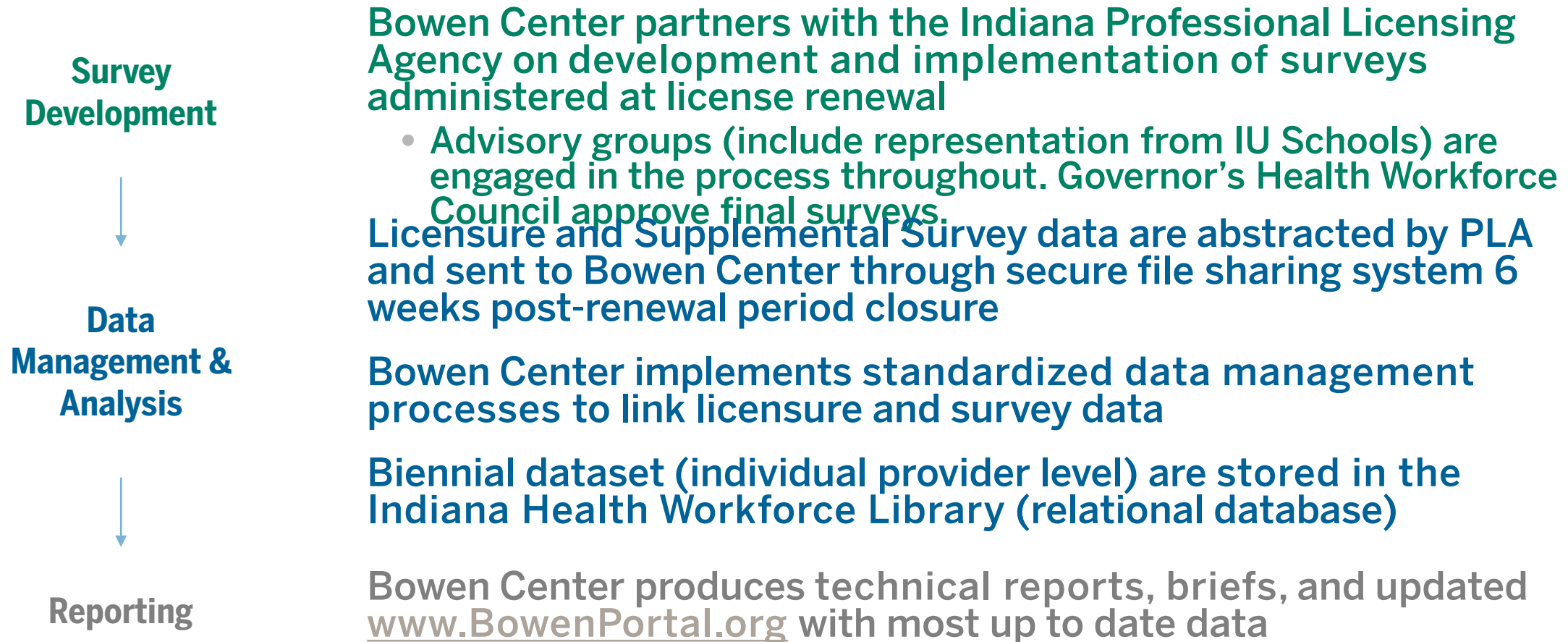
WORKFORCE RESEARCH & POLICY

BOWEN CENTER FOR HEALTH WORKFORCE RESEARCH & POLICY

- Established as Bowen Research Center in 1990s
- Housed in IUSM, Department of Family Medicine
- Re-named in 2016
- Current portfolio heavily focused on state service
- Engaged in collaborative research
- Serving as a national resource to executive branch agencies across United States and state universities



CRADLE TO GRAVE: BOWEN CENTER DATA



BOWEN CENTER FOR HEALTH WORKFORCE RESEARCH & POLICY: DATA STEWARDSHIP

Licensed Health Professions

- Medicine*
- Nursing*
- Dentistry*
- Pharmacy*
- Dental Hygiene*
- Optometry
- Podiatry
- Physical Therapy
- Occupational Therapy


Data Types

- Licensure
- Supplemental Survey
 - Demographics
 - Educational
 - Employment
 - Practice
 - Safety-net participation
 - Populations served
 - Services provided

* Denotes licenses that are required to provide supplemental information during license renewal per SEA 223-2018.



SURVEY DEVELOPMENT: EXAMPLE OF 2019 PHYSICIAN AND REGISTERED NURSE SURVEY TOOLS


INDIANA UNIVERSITY
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Bowen Center for Health Workforce Research and Policy

2019 Physician Re-Licensure Survey Instrument

1. What is your employment status?
RADIO BUTTONS

- a. Actively working in a position that requires a medical license
- b. Actively working in a field other than medicine
- c. Not currently working
- d. Retired

2. What is your race? Mark one or more boxes.
MULTI CHECK BOX

- a. White
- b. American Indian or Alaska Native
- c. Native Hawaiian/Pacific Islander
- d. Black or African American
- e. Asian
- f. Some Other Race

3. Are you of Hispanic or Latino origin?
RADIO BUTTONS

- a. Yes
- b. No


4. Where did you complete your medical degree?
DROP-DOWN LIST

- a. Indiana
- b. Michigan
- c. Illinois
- d. Kentucky
- e. Ohio
- f. Another State (not listed)
- g. Another Country (not U.S.)

5. Where did you complete your residency training?
DROP-DOWN LIST

- a. Indiana
- b. Michigan
- c. Illinois
- d. Kentucky
- e. Ohio
- f. Another State (not listed)
- g. Another Country (not U.S.)

1110 W. Michigan Street Long Hall, #200 Indianapolis, IN 46202 (317) 278-4818 (317) 274-4444 (fax) family.medicine@iu.edu/hrs


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**2019 Nurse Re-Licensure Survey Instrument (Administered to Registered Nurses and
Advanced Practice Registered Nurses)**

1. What is your employment status?
RADIO BUTTONS

- a. Actively employed in nursing full-time
- b. Actively employed in nursing part-time
- c. Actively employed in nursing per diem
- d. Actively employed in a field other than nursing
- e. Working in nursing only as a volunteer
- f. Unemployed and seeking work as a nurse
- g. Unemployed and not seeking work as a nurse
- h. Retired

2. What is your race? Mark one or more boxes.
MULTI CHECK BOX

- a. White
- b. American Indian or Alaska Native
- c. Native Hawaiian/Pacific Islander
- d. Black or African American
- e. Asian
- f. Some Other Race

3. Are you of Hispanic or Latino origin?
RADIO BUTTONS

- a. Yes
- b. No

4. What type of nursing degree/credential qualified you for your first US RN license?
RADIO BUTTONS

- a. Diploma - nursing
- b. Associate degree - nursing
- c. Baccalaureate degree - nursing
- d. Master's degree - nursing
- e. Doctoral degree - nursing

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SURVEY IMPLEMENTATION



MENU

DEMOGRAPHICS*

QUESTIONS*

>> Survey

Attach Documents

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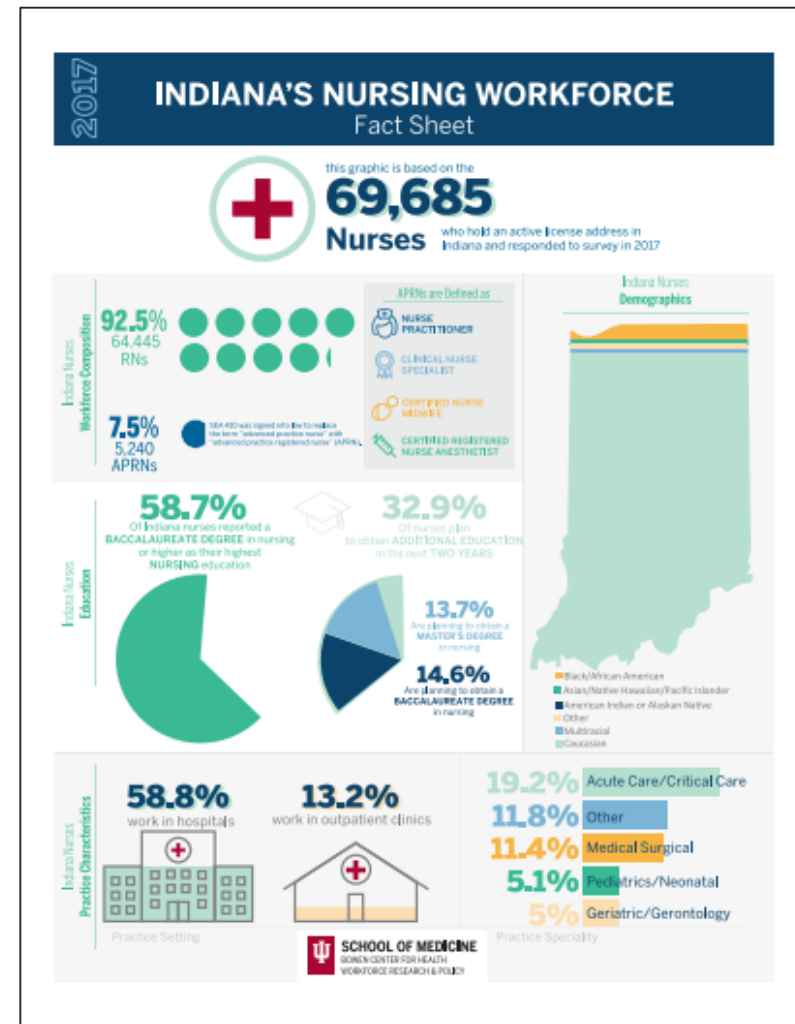
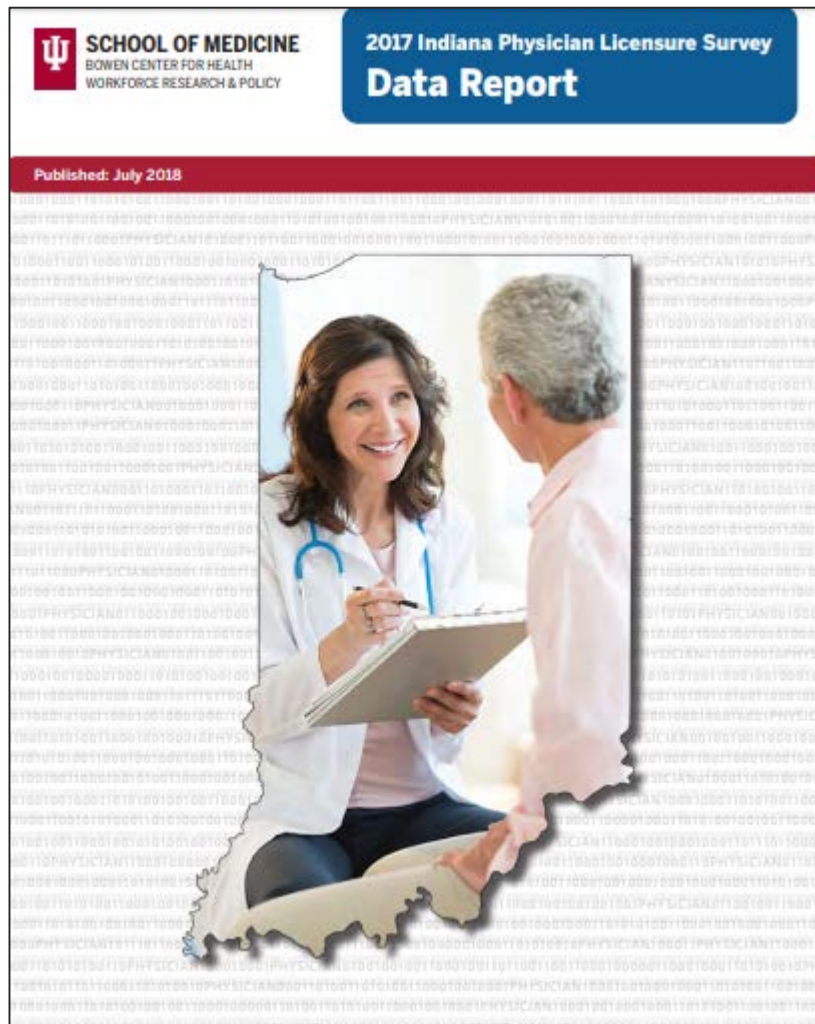
Survey Information

This survey is required beginning January 1, 2019 by **Senate Enrolled Act No. 223**. This survey allows for programmatic and policy recommendations to improve workforce performance, address identified workforce shortages, and retain practitioners. The aggregate survey information will be published in an annual report and made available to the public. Previous survey data is accessible at www.bowenportal.org. For questions regarding this survey you may review this [Frequently Asked Questions](#) document. If you have additional questions, please contact the Bowen Center for Health Workforce Research & Policy at bowenctr@iu.edu and 317-278-0316.

Once you complete the survey, click on **Complete to proceed**.

Question	Answer
01.) What is your employment status?	Retired
02.) What is your race? Mark one or more boxes.	<input checked="" type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> Asian <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> Other
03.) Are you Hispanic or Latino origin?	No
04.) Where did you complete your medical degree?	Indiana
05.) Where did you complete your residency training?	Indiana
06.) Which of the following best describes the area of practice in which you spend most of your professional time? Please select only one response.	Other Specialties
07.) Do you use telemedicine to deliver services to patients located in Indiana (as defined in IC 25-1-9.5-6; the delivery of health care services using electronic communications and information technology, including: secure videoconferencing, interactive audio-using store and forward technology, or remote patient monitoring technology between a provider in one (1) location and a patient in another location)?	No
08.) What is the street address of your primary practice location (for telemedicine providers: where the patient is located)? If this does not apply, please indicate "N/A"	1
09.) In what city is your primary practice location? If this does not apply, please indicate "N/A"	1
10.) In what state is your primary practice location? Please indicate state using 2-letter postal abbreviation. If this does not apply, please indicate "N/A"	ID
11.) What is the 5-digit ZIP code of your primary practice location? If this does not apply, please indicate "N/A"	1
12.) Which of the following categories best describes the practice setting at your primary practice location? If this does not apply, please select "not applicable."	Research Laboratory
13.) Estimate the average number of hours per week spent in direct patient care at your primary practice location. If this does not apply, please select "not applicable."	17 – 20 hours per week
14.) Estimate the percentage of Indiana Medicaid patients at your primary practice location. If this does not apply, please select "not applicable."	Indiana Medicaid accounts for 21% - 30% of my practice
15.) Are you accepting new Indiana Medicaid patients at any or all of your practice locations?	No
16.) If you selected no on the previous question, but you are enrolled as an Indiana Medicaid provider, please describe barriers to participation. If this does not apply, please indicate	

DATA REPORTING: EXAMPLE OF 2017 RESOURCES



DATA REPORTING: PUBLICLY ACCESSIBLE DATA ON BOWEN PORTAL

BOWEN CENTER FOR HEALTH WORKFORCE
RESEARCH & POLICY

INFORMATION PORTAL

Powered by **SCHOOL OF MEDICINE**
BOWEN CENTER FOR HEALTH
WORKFORCE RESEARCH & POLICY

ABOUT US
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COMING SOON: AUGUST 2019

TRENDS VISUALIZATION!

	ADAMS COUNTY	VIGO COUNTY	DEARBORN COUNTY	INDIANA
Physicians				
Nurses (FTE)				
Address				
Ratio				
Characteristics				
Uses				

CREATE A ONE PAGER
GO TO WORKFORCE MAPPER

Map Features

- Hospitals
- Critical Access Hospitals
- Community Health Centers - State Funded
- Federally Qualified Health Centers
- Long Term Care Facilities
- Rural Health Centers
- Rural Classification
- Dental Health - HPSA
- Mental Health - HPSA
- Primary Care - HPSA
- County
- Area Health Education Center Regions

HIDE SLIDER

Discover, Use, and Share Health Workforce Data and Maps

INTERACTIVE MAPPING TOOL

The interactive mapping application allows users to build and share customized maps that visualize important workforce supply information by specified geographic regions.

DATA DOWNLOAD TOOL

The data download tool allows users to easily download supply data on Indiana's health workforce as well as supporting documentation which can be used to support grant development, needs assessments, or other workforce related projects.

MAP GALLERIES

Download professionally created maps directly from the HWIP Map Gallery. These maps contain a plethora of information and represent workforce supply data as well as ad hoc maps created for the State of Indiana.

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A DEEPER DIVE INTO THE AVAILABLE DATA: 2017 EDUCATIONAL CHARACTERISTICS

PHYSICIANS (MDs & DOs)

Table 2.2: Physician Education and Training Characteristics

Location of Training Program	Medical School		Residency	
	N	%	N	%
Indiana	4,274	38.6	4,751	42.9
Contiguous State	2,094	18.9	2,730	24.6
Other US State	2,396	21.6	3,188	28.8
Another Country	2,111	19.0	136	1.2
Non-Respondents	210	1.9	280	2.5
Total	11,085	100.0	11,085	100.0

Source: Indiana Physician Re-Licensure Survey, 2017

Sub-Groups

Primary Care
Psychiatry

Table 3.2: Primary Care Education and Training Characteristics

Location of Training Program	Medical School		Residency	
	N	%	N	%
Indiana	1,719	42.2	2,179	53.5
Contiguous State	723	17.7	851	20.9
Other US State	755	18.5	959	23.5
Another Country	862	21.2	39	1.0
Non-Respondents	16	0.4	47	1.2
Total	4,075	100.0	4,075	100.0

Source: Indiana Physician Re-Licensure Survey, 2017

Table 4.2: Psychiatrist Education and Training Characteristics

Location of Training Program	Medical School		Residency	
	N	%	N	%
Indiana	148	34.2	170	39.3
Contiguous State	68	15.7	97	22.4
Other US State	102	23.6	164	37.9
Non-Respondents	2	0.5	2	0.5
Total	433	100.0	433	100.0

Source: Indiana Physician Re-Licensure Survey, 2017



TAPPING INTO THE DATA: A PROFILE OF INDIANA-TRAINED DENTISTS

Demographics

All Dentists		
Location of Dental Education	N	%
Indiana	2,195	81.4
Michigan	33	1.2
Illinois	104	3.9
Kentucky	120	4.4
Ohio	39	1.4
Another State (not listed)	196	7.3
Another Country (not U.S.)	10	0.4
Total (2018 Report Sample)	2,697	100

Demographics	All Dentists	Dentists Trained in Indiana
	%	%
Gender		
Male	69.7	71.2
Female	29.4	28.0
Race		
White	87.2	90.3
Asian	5.6	4.0
Black or African American	2.9	2.0
Native Hawaiian/Pacific Islander	0.3	0.2
American Indian or Alaska Native	<0.1	0.1
Other	1.3	1.2
Multiracial	1.5	1.4
Ethnicity		
Hispanic or Latino	2.3	1.7
Not Hispanic or Latino	85.6	86.0

81.4%
of Indiana dentists reported completing their dental education in Indiana (n=2,195)

Demographically, Indiana-trained dentists mirror the total dentist workforce

Practice Characteristics

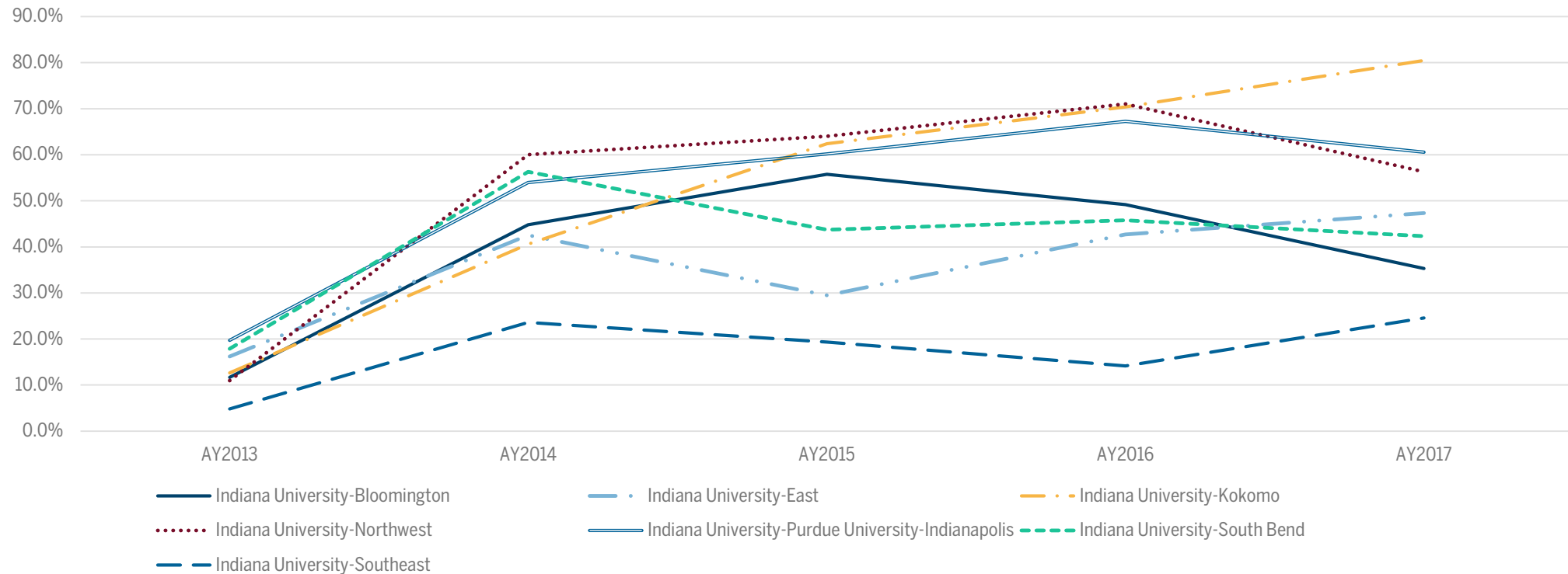
Practice Characteristics	All Dentists	Dentists Trained in Indiana
	%	%
Dental Practice Type		
General Dentistry	76.1	77.8
Orthodontics and Dentofacial Orthopedics	5.6	5.3
Pediatric Dentistry	4.8	4.6
Oral and Maxillofacial Surgery	3.8	3.4
Endodontics	2.6	2.5
Prosthodontics	1.8	1.0
Periodontics	1.8	1.6
Dental Public Health	1.6	1.4
Other	1.5	1.5
Oral and Maxillofacial Pathology	0.2	0.1
Oral and Maxillofacial Radiology	0.1	0.1

Indiana-trained dentists specialties are similar to those of the total dentist workforce

Also available: geolocation, faculty roles, Medicaid participation, etc.

TAPPING INTO THE DATA: EXAMINING RN RETENTION RATE BY CAMPUS

Indiana University RN Retention Rate by Campus, AY2013 - AY2017



OTHER USES OF HEALTH WORKFORCE DATA & POTENTIAL BENEFITS TO ACADEMIA

Other Uses: Evaluation Opportunities

- Market share analysis (*“How many of Indiana’s current [health occupation] graduated from IU?”*)
 - Strategic planning (expansion, program development,)
- Retention evaluation (match education/student profiles to licensure data) (*“How many IU graduates obtained a license in/practice in Indiana?”*)
- Longitudinal tracking of students by year (*“Do changes to IU admissions or curriculum impact Indiana health professions practice?”*)
- Tracking of select indicators (ex: racial diversity) (*“How is IU contributing to a culturally diverse health workforce in Indiana?”*)

Potential Benefits of Data

- Development
- Timely, transparent, confident reporting of ROI to funders
- Recruitment Tool for Students in All Professions



LOOKING BACK AND MOVING FORWARD

Over the last 5 years. . .developed infrastructure and recognized expertise

- The Bowen Center's expertise in health workforce data and policy research has become recognized by the executive and legislative branches of state government in Indiana (and other states), as well as by key health care and economic development stakeholders.

In the next 5 years. . . leverage resources for institutional and community development

- The Bowen Center plans to pursue a sustainable funding mechanism and leverage expertise to advance the mission of Indiana University and the health of 'Hoosiers'



QUESTIONS

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