

INDIANA NURSING WORKFORCE ADVISORY GROUP

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OBJECTIVES

- **Welcome and Introductions**
- **Bowen Center for Health Workforce Research & Policy (Bowen Center) Roles and Responsibilities**
- **Overview of 2019 Nurse Licensure Survey Tool**
- **Presentation and Discussion of 2019 Indiana Nursing Workforce Data Report**
- **Data Visualization Efforts**
- **Discussion of Upcoming Indiana Nursing Workforce Brief**
- **Next Steps**



WELCOME AND INTRODUCTIONS

State Government:

- Indiana State Department of Health
- Indiana State Board of Nursing

Academia:

- Indiana University School of Nursing
- University of Southern Indiana
- Vincennes University
- Indiana State University
- Ball State University
- Ivy Tech Community College
- Council of Indiana Deans and Directors of Nursing Education

Trade Associations:

- Indiana Center for Nursing
- Indiana State Nurses Association
- Indiana Organization for Nursing Leadership
- Coalition of Advanced Practice Registered Nurses of Indiana

Employer Associations:

- Indiana Rural Health Association
- Indiana Primary Health Care Association
- Indiana Hospital Association

Guests



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Roles & Responsibilities



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BOWEN CENTER: WHO WE ARE



- Housed within the Department of Family Medicine at IU School of Medicine
- Offices located in Long Hall
- Team of people (and partners) with training and expertise in public health, policy, informatics, biostatistics, and geographic information systems



BOWEN CENTER: WHAT WE DO

- **Data Stewardship**
 - Steward data on licensed health professions for State of Indiana
 - Produce and disseminate reports/white papers/etc.
 - Provide technical assistance to state leadership/ legislators/agencies and stakeholders
 - Manage health professional shortage area designation activities for the State of Indiana
- **Policy Research and Technical Assistance**
 - Support Governor's Health Workforce Council
 - Perform research and policy analyses
 - Provide ad hoc technical assistance



BRIEF HISTORY OF INDIANA NURSING WORKFORCE DATA



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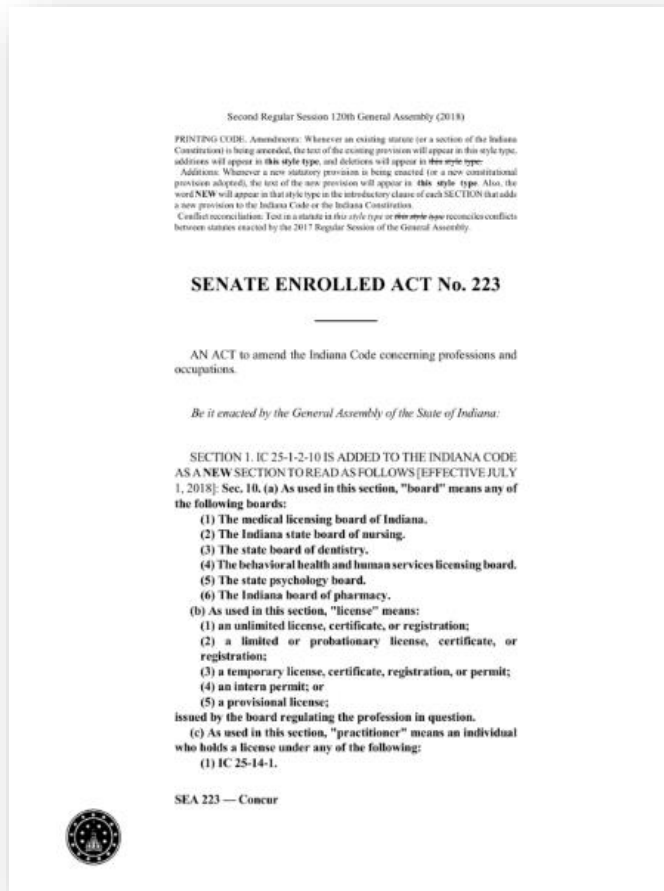
HISTORY OF NURSING DATA IN INDIANA

Data Sources/Management

- Voluntary license renewal surveys were implemented in 1997 by Indiana Health Care Professional Development Commission and the Health Professions Board



SENATE ENROLLED ACT 223-2018



“Information provided by health practitioners” (including LPNs, RNs, APRNs)

Requires online licensees to provide select information during license renewal:

1. Specialty/field of practice
2. Location
3. Setting type
4. Hours worked per week
5. Services provided
6. Educational/training
7. Telemedicine participation



OVERVIEW OF 2019 NURSING LICENSURE SURVEY TOOL



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2019 NURSING LICENSURE SURVEY TOOL

New Information

In 2019, two new questions were added to meet SEA 223-2018 requirements:

- Services provided
- Populations served

Governor's Health Workforce Council serves as review and approval body for the survey tool

Survey is accessible at:

<https://scholarworks.iupui.edu/bitstream/handle/1805/18969/2019%20Nurse%20Survey%20Instrument.pdf?sequence=1&isAllowed=y>



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2019 NURSING LICENSURE SURVEY TOOL – CONSIDERATIONS

APRN Specialty

Table 3.6: Advanced Practice Registered Nurse Employment Specialty and Telemedicine Services

APRN Specialty	Total		Providing Telemedicine Services			
			Yes		NO	
	N	%	N	%	N	%
Total	7,746		634		7,112	
Primary Care Specialties	3,041	39.3	283	44.6	2,758	38.8
Other Specialty	1,872	24.2	134	21.1	1,738	24.4
Internal Medicine Subspecialties	631	8.1	54	8.5	577	8.1
Anesthesiology, Pathology, Radiology or Emergency Medicine	595	7.7	17	2.7	578	8.1
Psychiatry (Adult and Child)	389	5.0	79	12.5	310	4.4
Obstetrics & Gynecology	358	4.6	13	2.1	345	4.9
Pediatrics Subspecialties	341	4.4	10	1.6	331	4.7
Surgical Specialties	241	3.1	18	2.8	223	3.1
Not in Direct Patient Care	209	2.7	20	3.2	189	2.7
General Surgery	69	0.9	6	1.0	63	0.9

Source: Indiana Registered Nurse License and Supplemental Survey Data, 2019

PRESENTATION AND DISCUSSION OF 2019 INDIANA NURSING WORKFORCE DATA REPORT



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2019 INDIANA REGISTERED NURSE WORKFORCE DATA REPORT



116,259 Registered Nurse License Renewals in 2019

- 114,954 survey respondents (remaining 4,339 were inactive licenses or offline renewals)

81,539 Indiana Registered Nurses were included within the data report

- Inclusion criteria: actively practicing in nursing, serving Hoosiers (either in-person or via telemedicine)



TRENDS IN INDIANA REGISTERED NURSE DATA

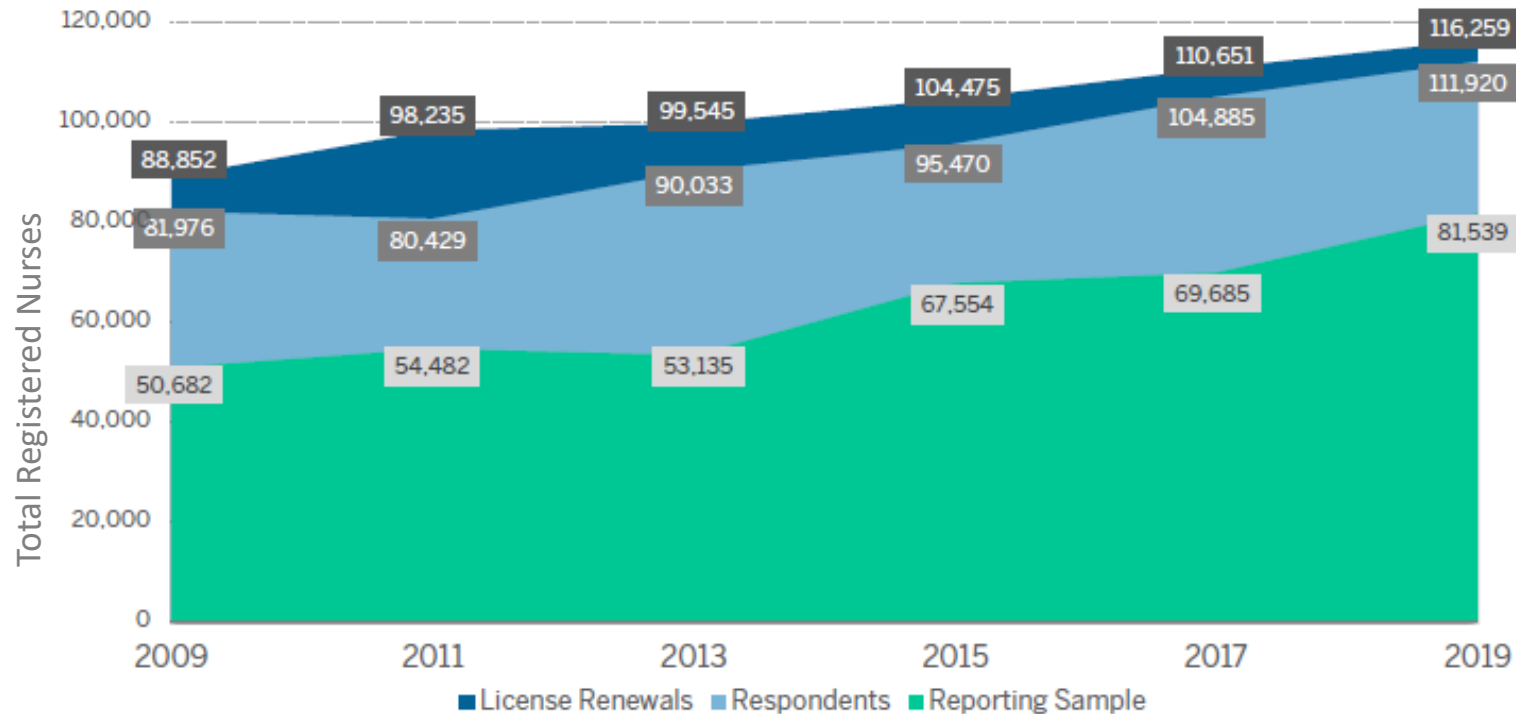
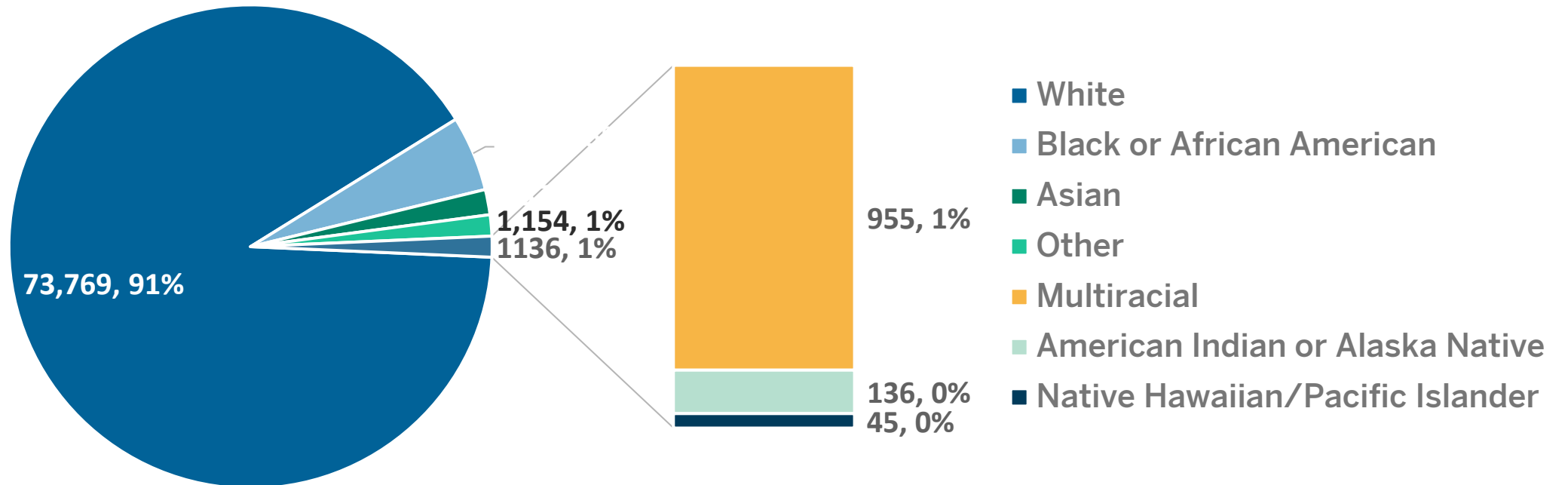


Figure 1.2 Total RNs in counts of license renewals, survey respondents and reporting sample.

Source: Figure 1.2 of 2019 Indiana Registered Nurse Workforce Data Report

INDIANA REGISTERED NURSE DEMOGRAPHICS

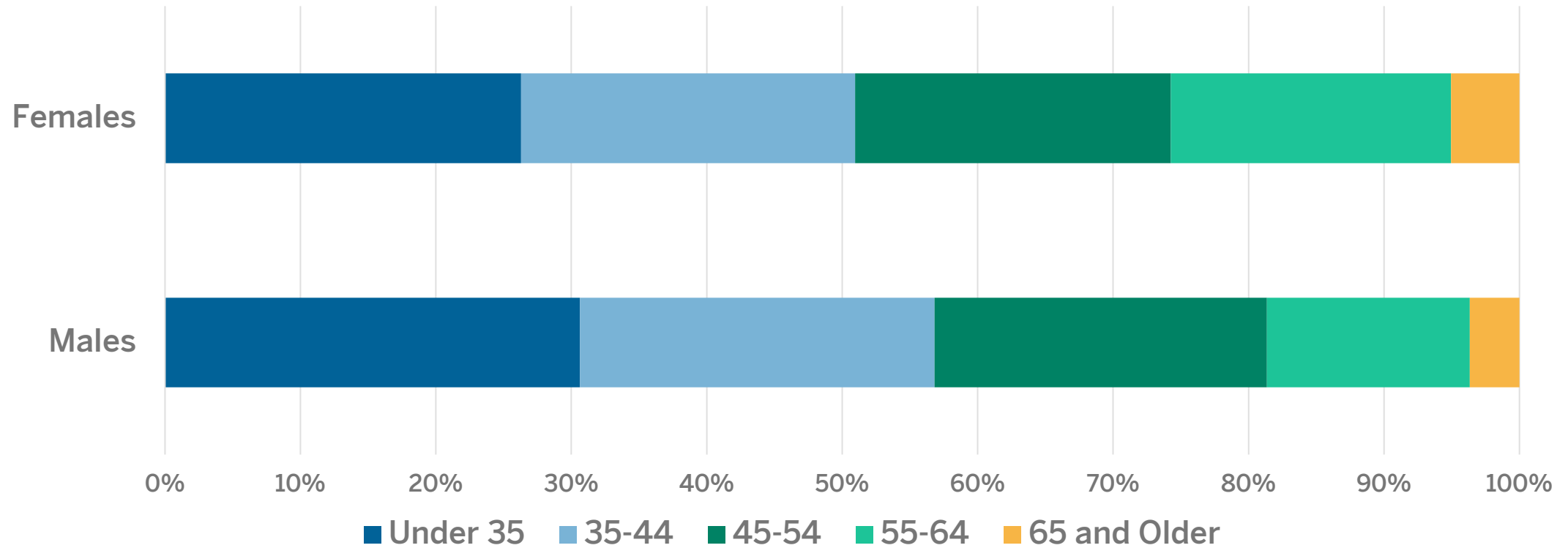
Indiana Registered Nurse Race



Source: Table 2.1 of 2019 Indiana Registered Nurse Workforce Data Report

INDIANA REGISTERED NURSE DEMOGRAPHICS

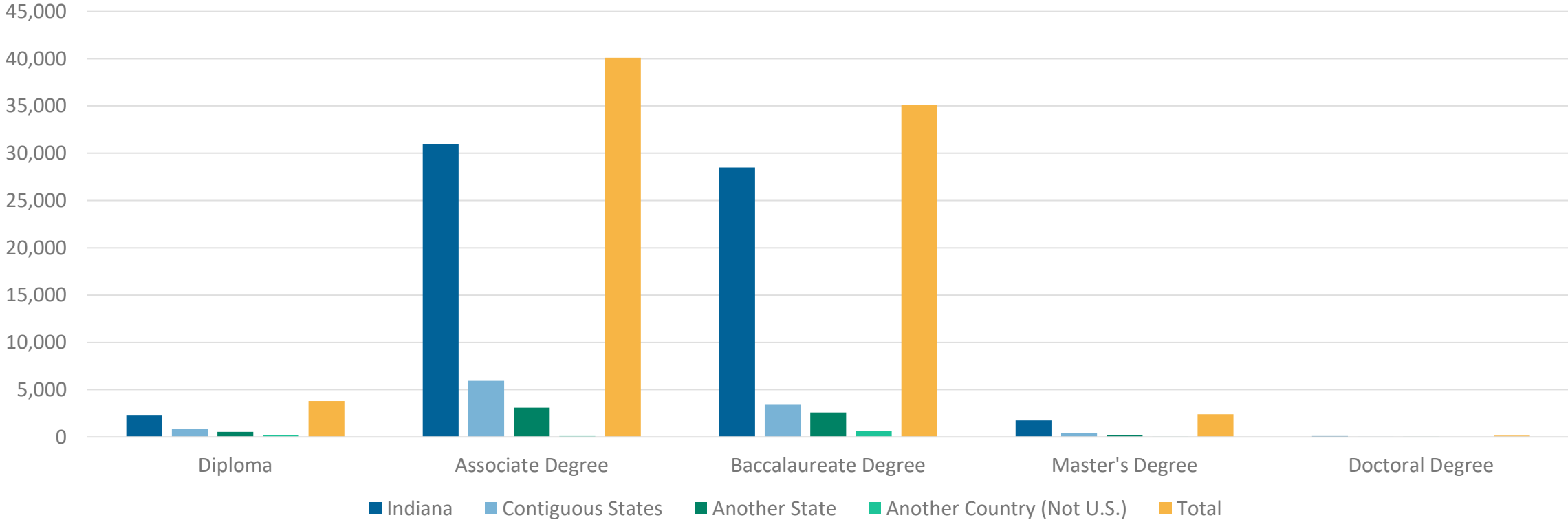
Indiana Registered Nurse Age by Gender



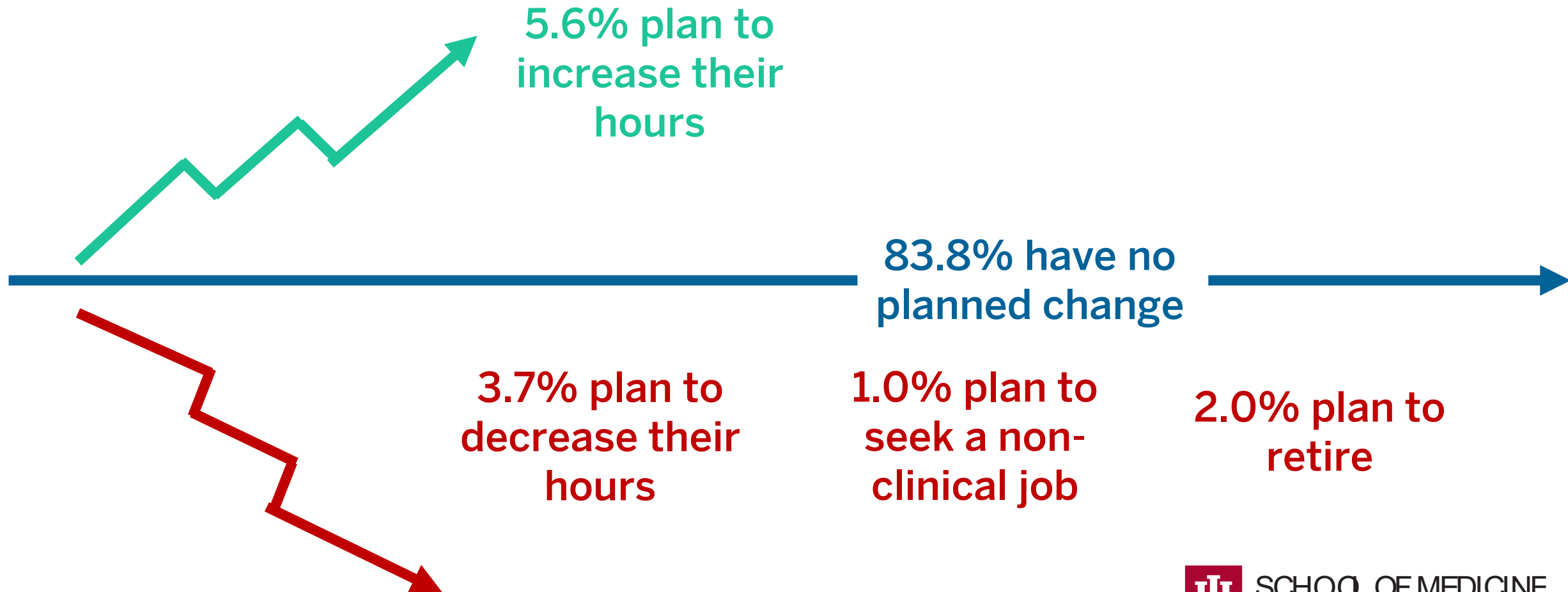
Source: Table 2.1 of 2019 Indiana Registered Nurse Workforce Data Report

INDIANA REGISTERED NURSES QUALIFYING EDUCATION

Where Indiana Registered Nurses Received Their Qualifying Education



INDIANA REGISTERED NURSE EMPLOYMENT PLANS IN NEXT 2 YEARS



INDIANA REGISTERED NURSE PRACTICE

Top 3 Practice Settings

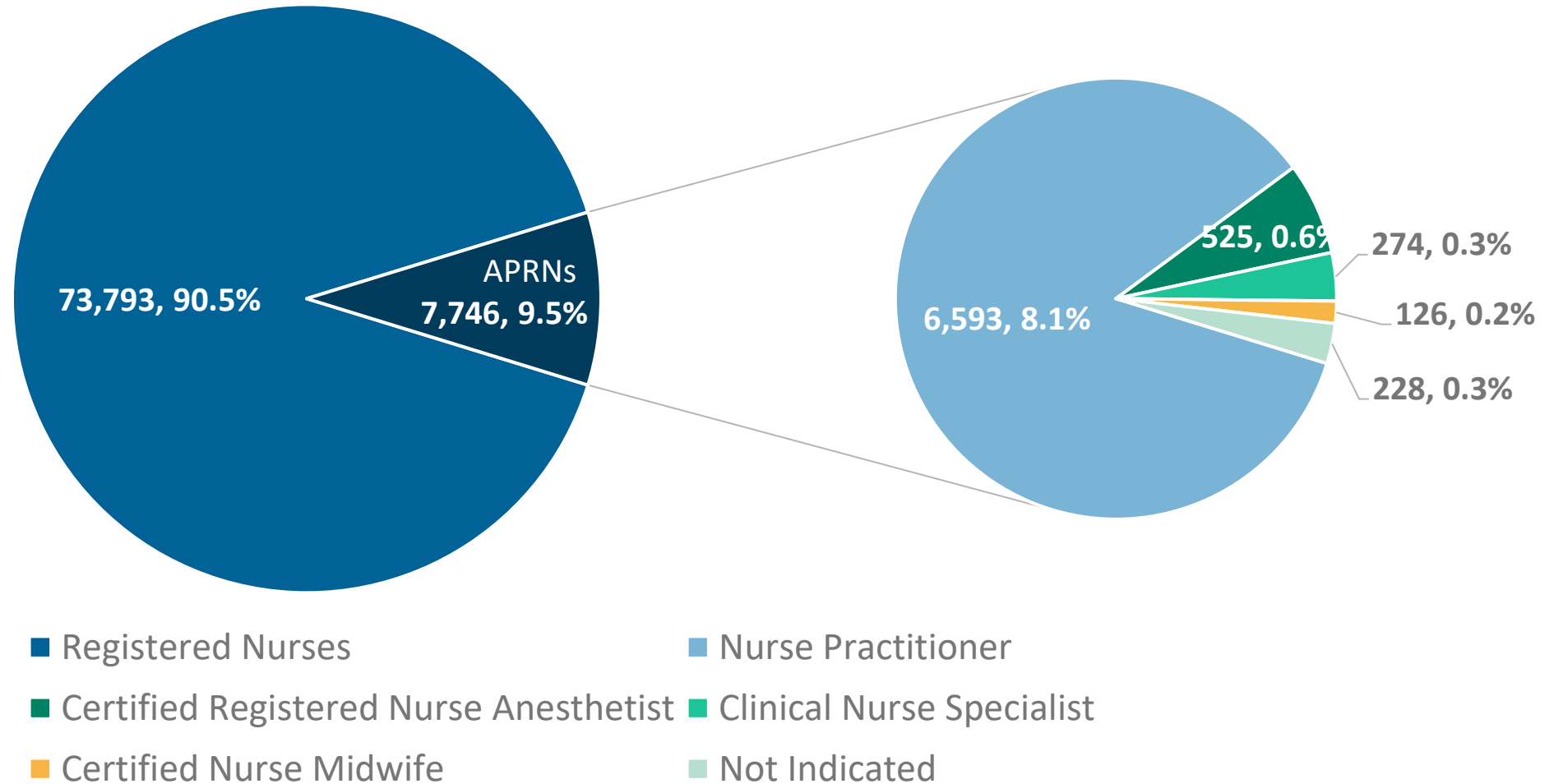
55.9% Hospital

14.6% Outpatient Clinic

7.0% Nursing Home/Extended Care Facility/Assisted Living Facility



INDIANA REGISTERED NURSES & APRNS



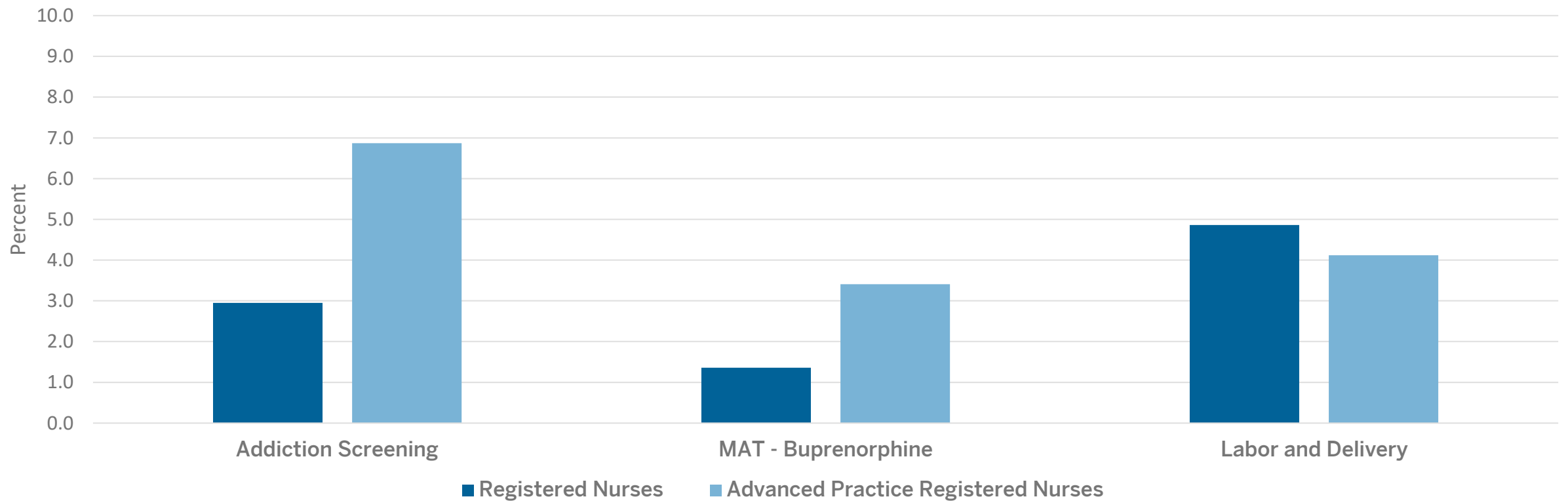
INDIANA TELEMEDICINE APRNS

Top specialties among those Indiana APRNs that reported providing telemedicine to Indiana residents:

1. Primary Care Specialties
2. Other Specialties
3. Psychiatry (Adult and Child)
4. Internal Medicine Subspecialties

INDIANA REGISTERED NURSES: KEY SERVICES PROVIDED

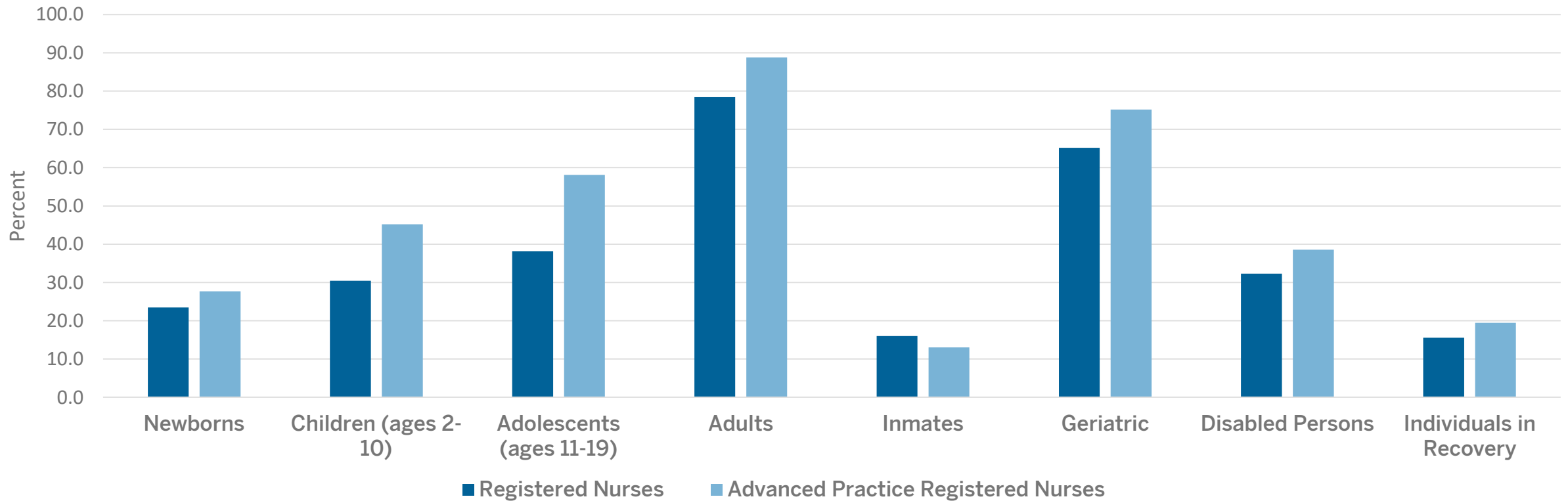
% of Workforce Providing Selected Services



Source: Tables 2.7, 2.8, 3.7, 3.8 of 2019 Indiana Registered Nurse Workforce Data Report

INDIANA NURSES: POPULATIONS SERVED

% of Workforce Serving Each Population



Source: Tables 2.9, 2.10, 3.9, 3.10 of 2019 Indiana Registered Nurse Workforce Data Report

ADVISORY GROUP DISCUSSION

Supply data help us understand the current landscape of the nursing workforce but there is a paucity of sufficient benchmarks and projection modeling.

As we consider developing information for Indiana, what are your thoughts or current initiatives regarding measuring nursing workforce capacity and demand?



DATA VISUALIZATION EFFORTS



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COVID-19

Healthcare Reserve Workforce For COVID-19

Indiana is committed to supporting our health workforce in any way possible. The Indiana State Department of Health has tasked the Bowen Center with collecting information from potential health care professionals and students volunteers and then sharing that information with hospitals in need of more workforce support.

[Become/Find a Volunteer](#)

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.

[CREATE MAP](#)

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.

[DOWNLOAD DATA](#)

MAP GALLERIES

Download professionally created maps directly from the HWP 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.

[MAP GALLERIES](#)

Current Visualizations

Choose a Theme > **SUPPLY DISTRIBUTION AND CHARACTERISTICS** EDUCATION PIPELINE

Primary Care Physicians, Population per FTE Ratio

33,776-140,570 (1)
13,380-33,776 (2)
5,114-13,380 (23)
764-5,114 (65)
No Reported Data

Federal benchmark for sufficient capacity is 3,500 population per 1.0 FTE primary care physician.

Note: The number in parentheses represents the number of counties/areas that fall in that color category.

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

Primary Care Physicians in Indiana

Population per FTE Ratio

Trends Workforce General Population

Population per FTE Ratio

Year	2015	2017	2019	2021	2023	2025
Value	2130	1950	N/A	N/A	N/A	N/A

Total Physician Licenses (by license address)

Year	2015	2017	2019	2021	2023	2025
Value	14610	15540	N/A	N/A	N/A	N/A

Total Physician Respondents (by license address)

Year	2015	2017	2019	2021	2023	2025
Value	9739	10255	N/A	N/A	N/A	N/A

Percent Male

Year	2015	2017
Value	65.2	67.8

FUTURE OPPORTUNITIES: TABLEAU

Indiana COVID Dashboard at Regenstrief Institute

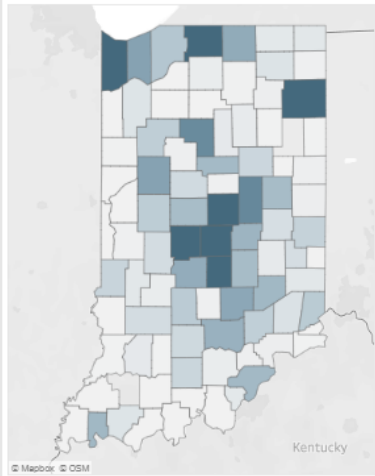


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Hospitalizations by County

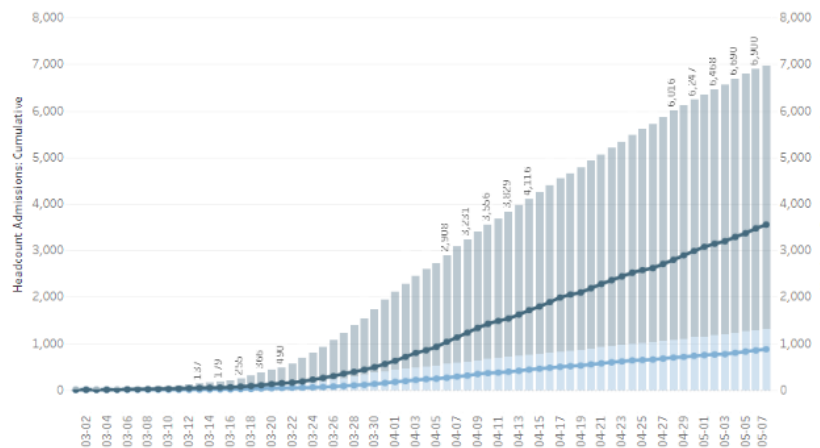
County
 ISDH Region
Hover over a county or ISDH region to view additional details for that area.



Hospitalizations by Race

Total Hospitalizations and Discharges : Cumulative Over Time

Cumulative Over Time
 Daily Totals
 Hospitalizations: Non-ICU (bars), ICU (Line)
 Discharges: Non-ICU (bars), ICU (Line)



Hospitalizations by Age and Sex

North Carolina Health Workforce

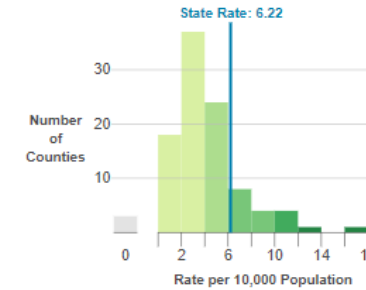
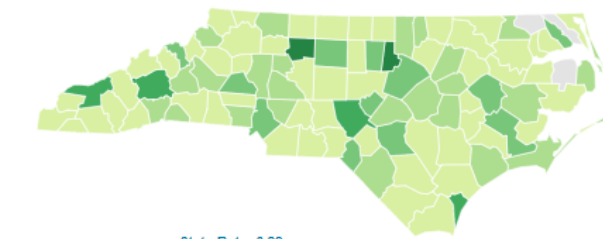


[Blog](#) [About](#) [Supply Data](#) [Other Publications/Data](#)

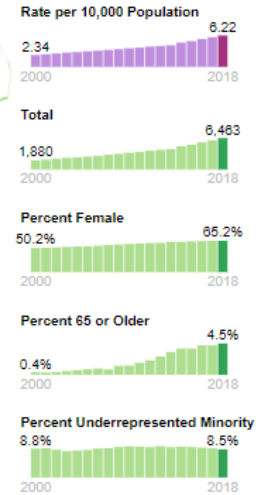
North Carolina Health Professional Supply Data

Choose a profession: and a specialty:

Physician Assistants per 10,000 Population by County, North Carolina, 2018



Profession Demographics for North Carolina



Select a Year: 2018 See data by: [DOWNLOAD AS IMAGE](#) [DOWNLOAD DATA](#) [TUTORIAL](#)

<https://www.regenstrief.org/covid-dashboard/>

<https://nhealthworkforce.unc.edu/supply/>



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ADVISORY GROUP DISCUSSION

From your perspective, what type of data visualizations would be most helpful on a public platform?



DISCUSSION OF UPCOMING INDIANA NURSING WORKFORCE BRIEF

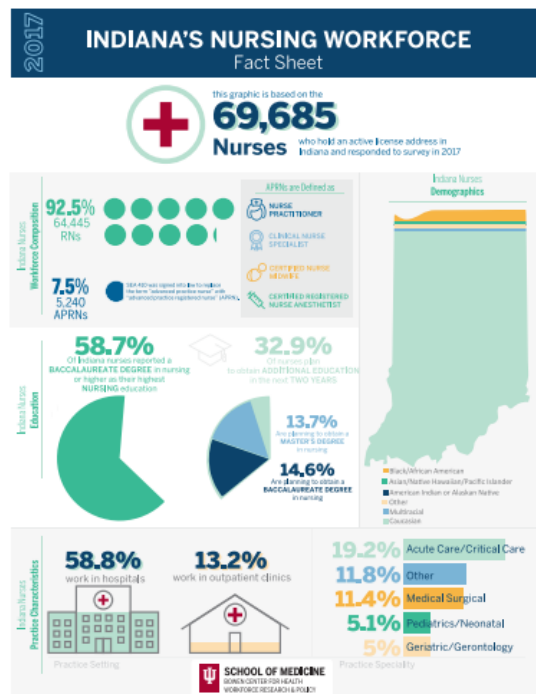


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LEARNING FROM PAST AND LOOKING AHEAD

2017 Indiana Nursing Workforce Brief

2019 Nursing Workforce Brief



From your perspective, are there any nurse workforce topics that might be informed by nurse workforce data in the coming year?

Source:

<https://scholarworks.iupui.edu/bitstream/handle/1805/18302/RN%20Fact%20Sheet-FINAL%28revised%29.pdf?sequence=6&isAllowed=y>



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CLOSING AND THANK YOU

Please feel free to reach out to the Bowen Center at any time for additional questions, specific data requests, or customized analyses (data or policy research).

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