
21st Century Skilled Physician Workforce: Telemedicine in Indiana

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Telemedicine: What is it?

Telemedicine is a 21st Century approach to delivering health care and addressing health workforce shortages.

It involves the remote diagnosis and treatment of patients by means of telecommunications technology (video, picture, voice, etc.). *In Indiana Code, it is defined as: “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 location and a patient in another location.”*¹

Telemedicine in Indiana

In Indiana, physicians who offer telemedicine services are held to the same standards as a physician providing in-person health care services.² In addition to holding a medical license, Indiana has a certification for telemedicine providers, administered by the Indiana Professional Licensing Agency (IPLA); however, physicians who predominately practice within Indiana are not required to file this certification.³ There are currently 226 physicians reported to hold this telemedicine certification.⁴ As of the 2017 medical license renewal period, 1,394 of Indiana’s licensed physicians (808 when excluding those that reported radiology as their specialty) reported delivering care through telemedicine services.

The purpose of this report is to describe characteristics of Indiana physicians that self-reported being engaged in providing telemedicine services in order to inform current and future related efforts. The data presented here are a subset from the *2017 Physician Licensure Survey Data Report*.⁵

¹Per IC 25-1-9.5-6

²Per IC 25-1-9.5-7 (a)

³Telemedicine Services and Prescriptions, Ind. Code § 25-1-9.5

⁴As reported by the Indiana Professional Licensing Agency on May 31, 2018

⁵Data Report: 2017 Indiana Physician Licensure Survey, (2018). Bowen Center for Health Workforce Research and Policy, Indiana University School of Medicine

Who is included in this report?

Of the 27,473 medical licenses that were administered during the renewal period in 2017, 1,394 physicians held active licenses, responded to the licensure survey, self-reported actively practicing medicine and were identified as being engaged in telemedicine (see Figure 1). An additional 586 physicians reporting radiology as their specialty were excluded from this study, as remote interpretation of radiologic studies are a standard practice in the field of radiology.⁶ **A total of 808 physicians are included in this report.** The following sections describe the characteristics of these physicians.

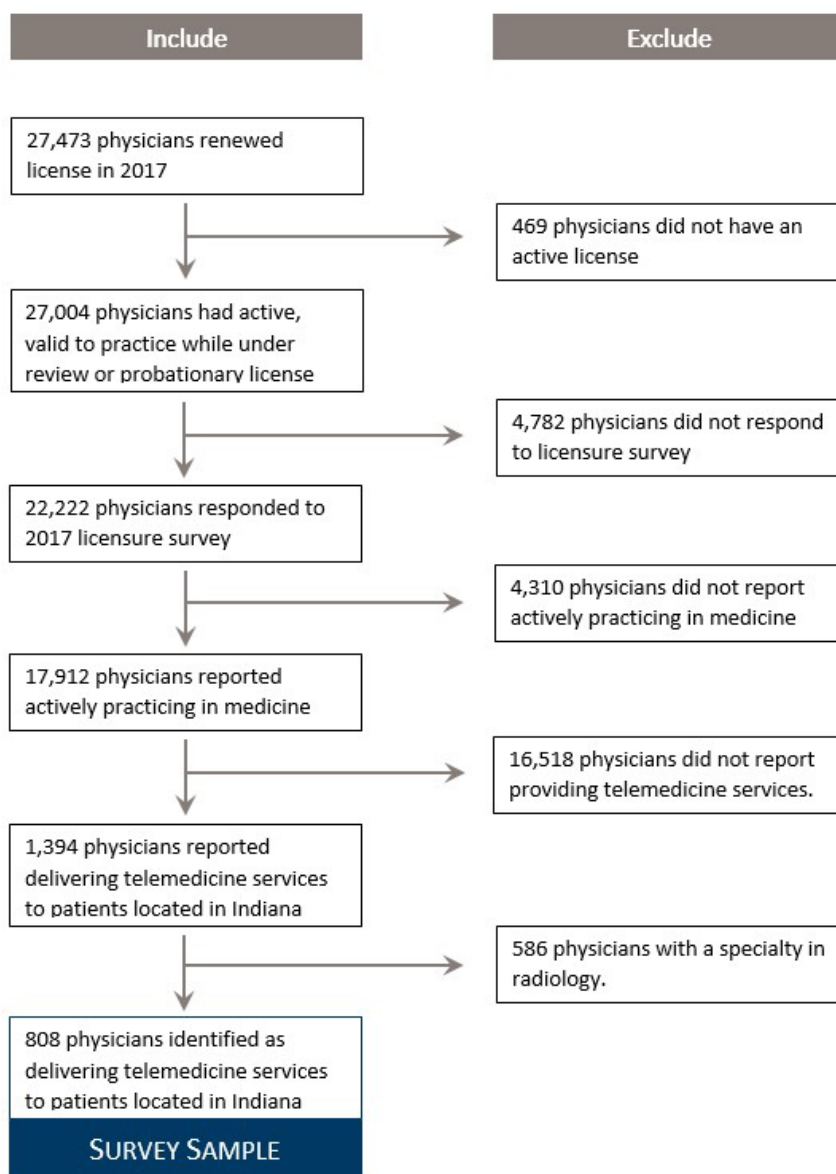


Figure 1. Survey sample selection criteria for Indiana Telemedicine physicians

⁶ E Silva III, J Breslau, RM Barr, LA Liebscher, M Bohl, T Hoffman, et al. (2013). ACR white paper on teleradiology practice: a report from the Task Force on Teleradiology Practice. Journal of the American College of Radiology, 10(8), 575-585.

Characteristics of Telemedicine Physicians Providing Services to Hoosiers

Demographics

The “face” of the physician workforce is changing in Indiana and nationally. Figure 2 compares the age and gender distribution of telemedicine physicians to the overall workforce. In general, physicians self-reporting telemedicine tend to be slightly younger than the overall workforce. Although age trends are similar for both males and females, a greater proportion of female physicians – both those self-reporting as telemedicine providers and in the overall workforce – are represented in the younger age categories than males. This is in alignment with general trends among all physicians, where younger cohorts of physicians have greater representation of females.

Physicians from racial and ethnic minority groups account for a greater proportion of those self-reporting telemedicine than in the overall workforce. See Figures 3 and 4 for more details on the distribution of race and ethnicity among telemedicine physicians.

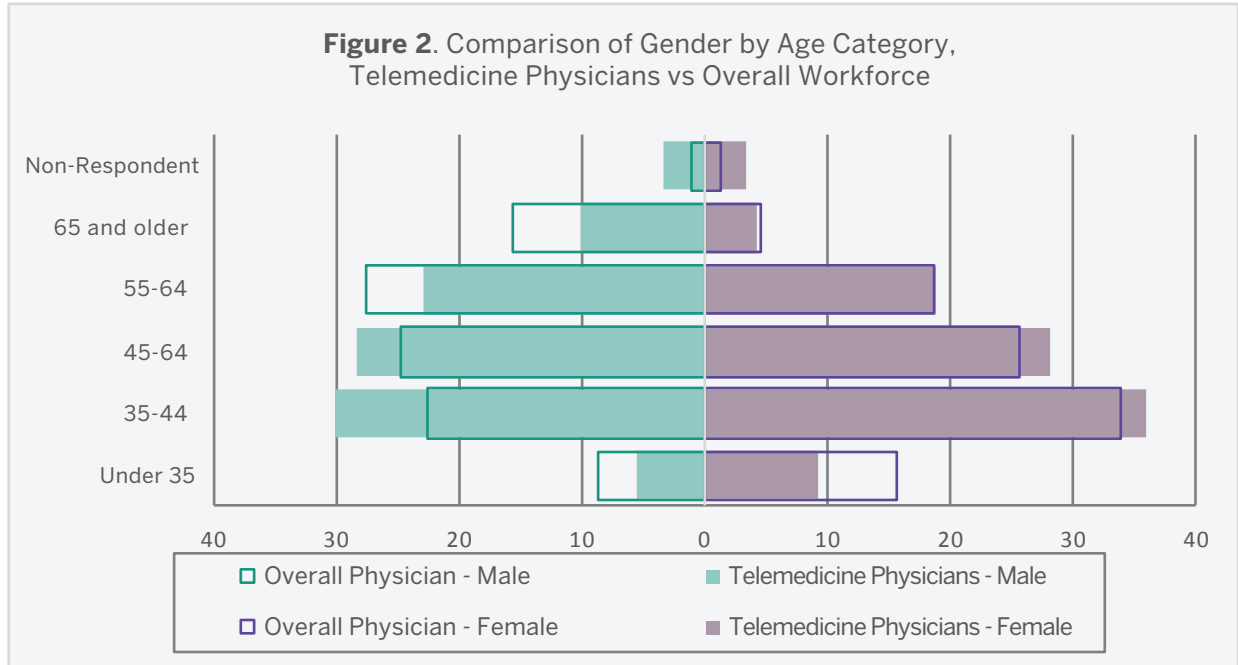


Figure 3. Racial Breakdown Comparison, Telemedicine Physicians vs. the 2017 Indiana Physician Workforce

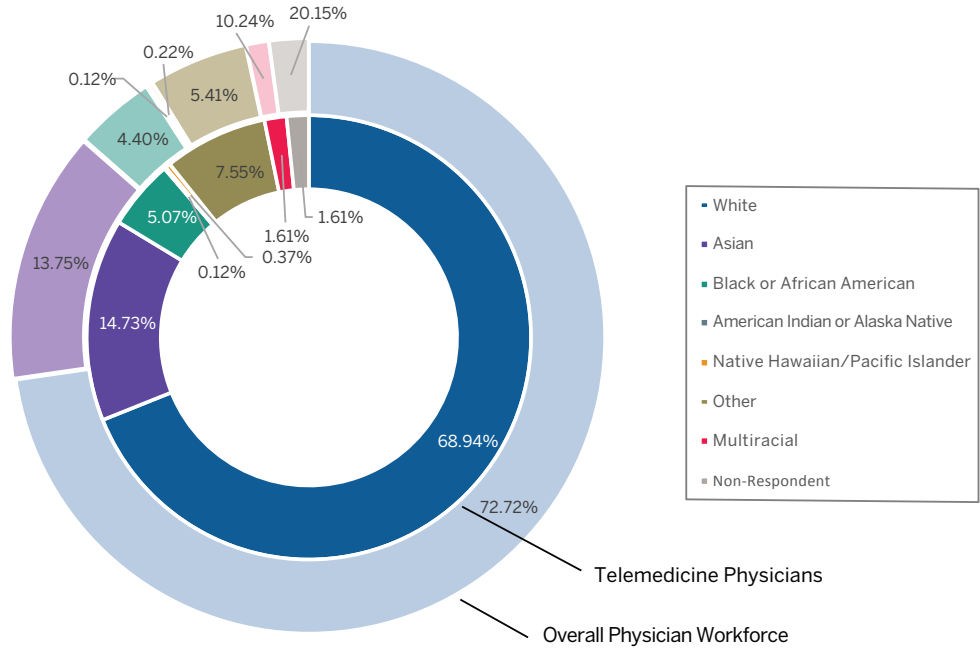
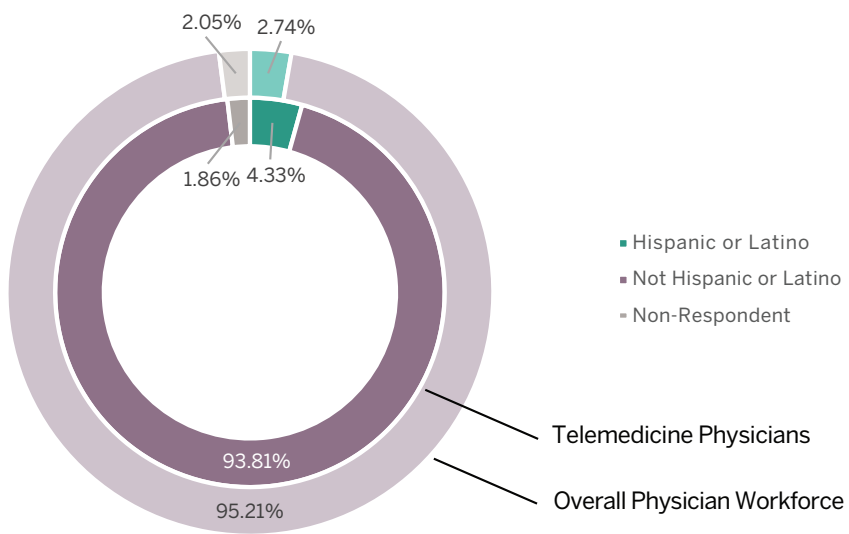
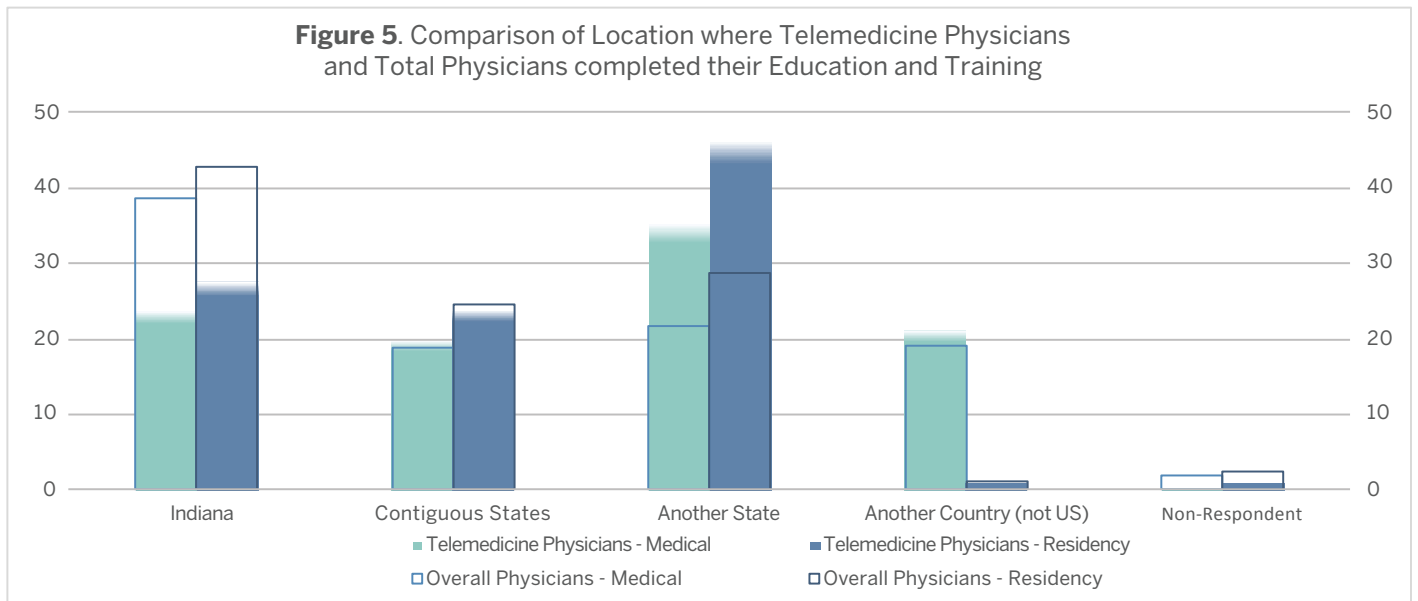


Figure 4. Ethnicity Comparison, Telemedicine Physicians vs. the 2017 Indiana Physician Workforce



Education and Training: Telemedicine Physicians vs. All Physicians

As compared to all total physician workforce in Indiana, **a greater proportion of telemedicine physicians self-reported completing medical or residency training outside of the mid-west (Indiana and its contiguous states)** (Medical Education: 35.15%; Residency: 46.41%) Figure 5 provides more details on educational characteristics.



Specialty

Figure 6 and 7 provide comparative illustrations of the specialty composition for all physicians and those self-reporting telemedicine. Specialty composition is similar in the two groups. Exceptions to this are neurology and anesthesiology. The types of medical care services commonly provided by a physician varies by specialty. **Additional research is needed to understand the specific types of services provided to Hoosiers by physicians through telemedicine.**

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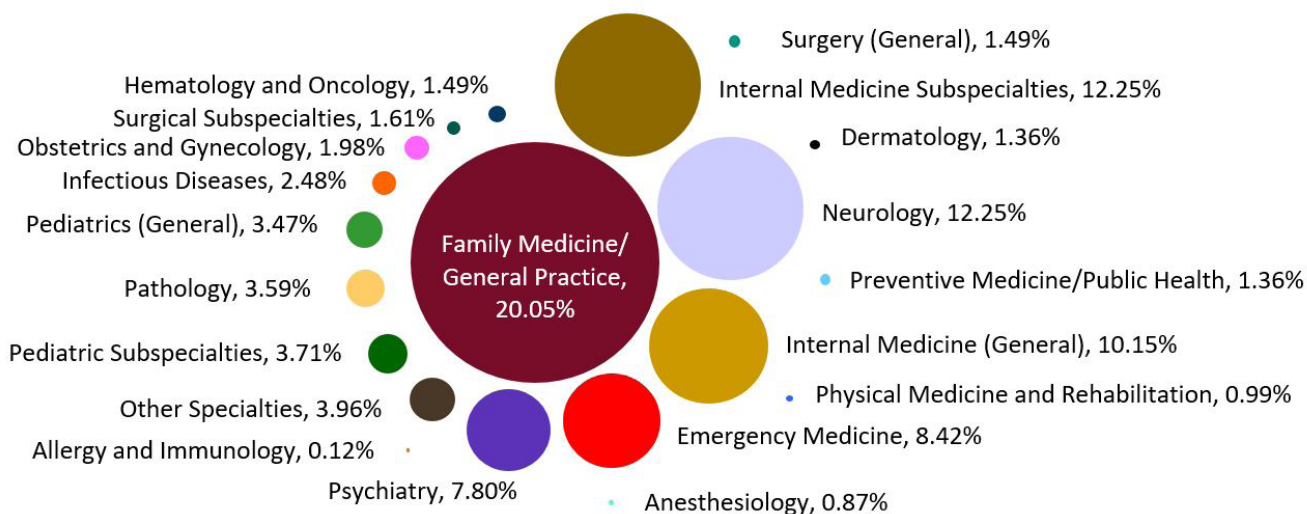


Figure 6. Bubble graph displaying the proportion of telemedicine physicians in each specialty group

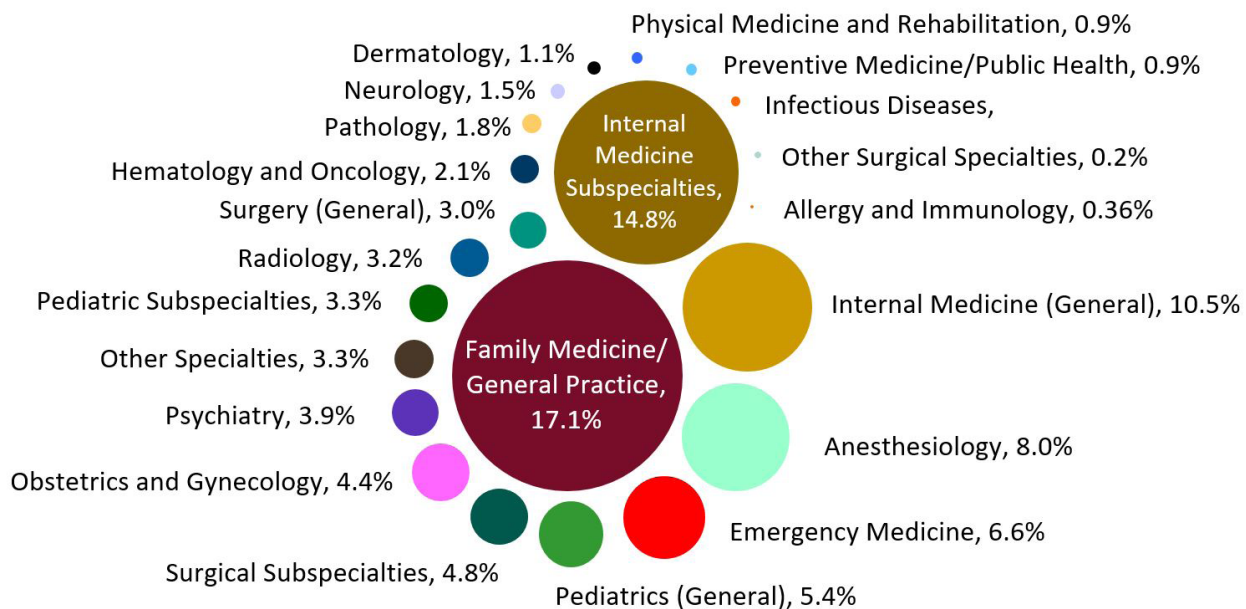
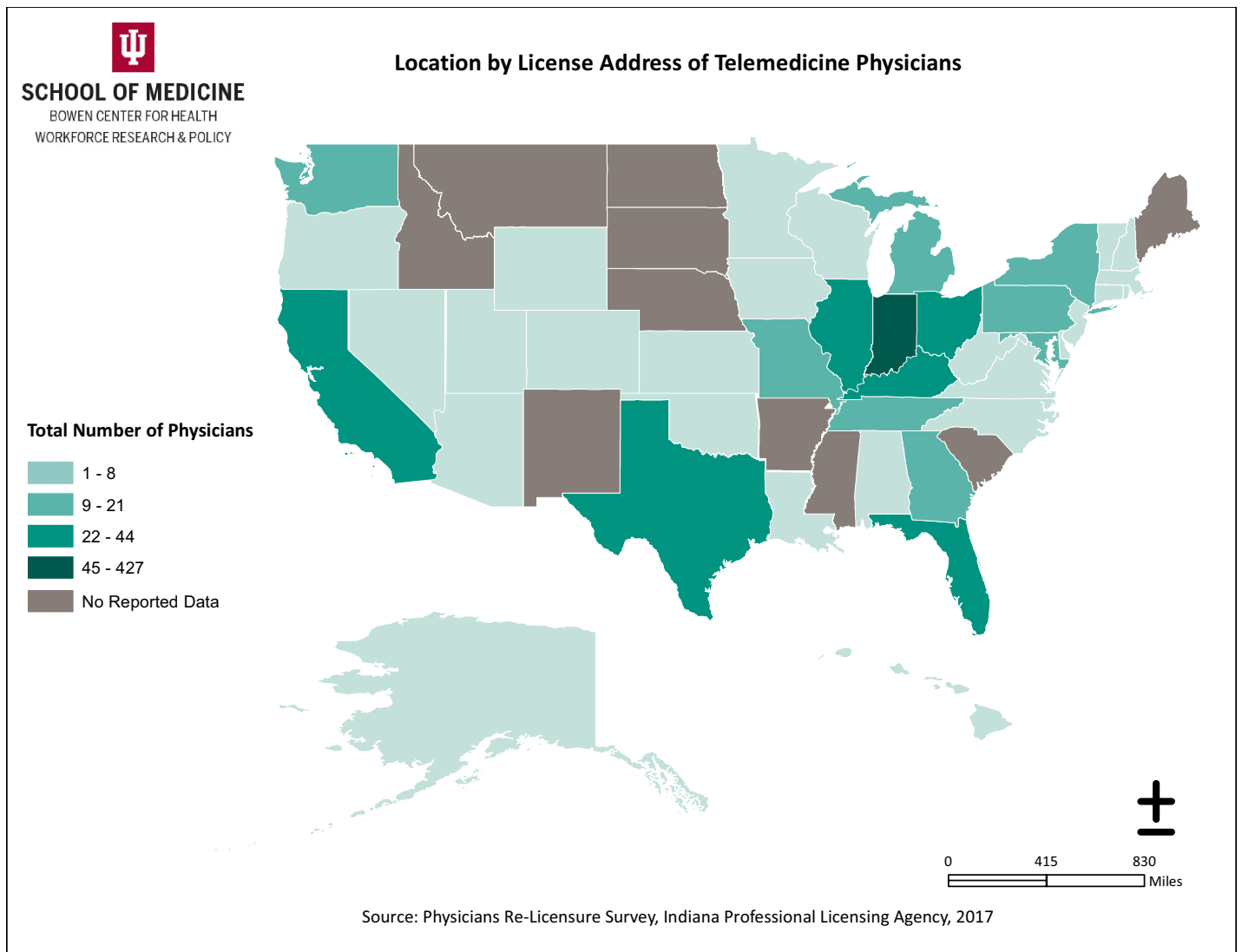


Figure 7. Bubble graph displaying the proportion of overall Indiana physicians in each specialty group

Where are Indiana's Telemedicine Physicians located?

The largest proportion of telemedicine physicians have a license address in Indiana (52.85%). A significant number of Indiana's telemedicine physicians have license addresses in Illinois, Ohio, California, Kentucky, Texas and Ohio. **Altogether, 381 (or 47%) of physicians who self-reported providing telemedicine services to Indiana residents have license addresses in 38 states outside of Indiana.**



Summary

Telemedicine is a relatively innovative approach to delivering and increasing access to health care. This report examined data on 808 of Indiana's licensed physicians who self-reported that they provide telemedicine services. As compared to the overall physicians workforce in Indiana, these physicians:

- are generally younger and more racial and ethnically diverse;
- have a similar specialty composition (with a few noted exceptions);
- more received their training and maintain license addresses outside of the midwest (Indiana and our contiguous states).

Limitations

These data represent a sample of Indiana physicians who responded to an elective survey administered in conjunction with the 2017 medical license renewal period. Findings may not be representative of all physicians who deliver telemedicine services. **Also, Indiana has defined telemedicine in state statute (IC 25-1-9.5-6), but it is unknown whether physicians perceived a uniform definition of the term "telemedicine" when they completed the survey.**

Key Considerations

It is important to keep in mind that all physicians serving patients in Indiana are required to hold a license with the Indiana Medical Licensing Board. Indiana currently has an additional policy, Telemedicine Certification, to regulate telemedicine and monitor the providers offering this service to Hoosier residents.⁷

The current reported number of physicians with telemedicine certification in Indiana (n=226) is not consistent with the number of physicians who report offering telemedicine services in the 2017 Physician Re-Licensure Survey (n=808). This most likely points to existing exemptions which allow providers to practice telemedicine without a certification.

It is, however, important to note that the number of physicians self-reporting telemedicine with license addresses outside of the midwest (Indiana and contiguous states) is greater than the number of telemedicine certifications. Whether these physicians fall under the aforementioned exemption is not clear. Also unknown is whether telemedicine certification, as an additive regulatory intervention, is necessary for public protection and/or enhances health service quality.

Currently telemedicine certification is not a requirement for reimbursement of health services delivered through a telemedicine approach with Indiana Medicaid.

⁷ Per IC 25-1-9.5-9

Recommendations

- Determine whether there is any value (public safety/health service quality) added by the current Telemedicine Certificate required through IC 25-1-9.5-9
 - If value is identified, implement strategies to ensure participation among qualifying providers.
 - If no value is identified, consider discontinuing Telemedicine Certification in order to reduce potentially unnecessary state regulation and enhance government efficiency.
- Include Telemedicine as a category in the “Services Provided” question required by Senate Enrolled Act 223 for Indiana’s licensed physicians to support tracking/monitoring the workforce engaged in telemedicine services.
- Additional research is needed to understand the types of health services physicians are providing to patients through telemedicine in Indiana.

