

SPECIAL REPORT SERIES

A Longitudinal Assessment of Diversity in Indiana's Health Workforce



Introduction & Methodology

INTRODUCTION

Health Workforce Diversity: Recruiting and retaining a diverse health workforce is a top priority in Indiana and across the United States. A diverse health care team, including individuals from many racial, ethnic, and cultural backgrounds, is well-positioned to support the delivery of care to diverse patient populations.¹ Increased diversity and representation within the health workforce is often associated with better health outcomes, enhanced patient satisfaction, and improved access to care within underserved communities.^{2,3,4} In fact, health workforce diversity is recognized as one of the domains essential to advancing overall health equity,⁵ as health professionals from racial and ethnic underrepresented minority groups are more likely to practice in underserved communities experiencing severe workforce shortages.^{6,7,8} Diversifying the health workforce is crucial to enhance health care access and quality for underserved communities.

Policies Seeking to Affect Positive Change: There are numerous national and state initiatives that focus on enhancing health workforce diversity. These initiatives are championed by government agencies at the federal and state levels, professional associations, academic organizations/institutions, and other entities with a commitment to enhancing health workforce diversity. Such initiatives include but are not limited to pipeline programs that support early recruitment of health professionals from underrepresented communities and incentive programs, such as scholarships and loan repayment, which seek to minimize cost barriers to higher education. While specific initiatives vary in structure, they generally share a common goal: To support individuals from diverse communities in their exploration and pursuit of health care occupations.

How is Underrepresented Minority Defined

According to the Bureau of Health Workforce - HRSA, an underrepresented minority is defined as, **“someone from a racial or ethnic group considered inadequately represented in a specific profession relative to the representation of that racial or ethnic group in the general population.”**

Did You Know?

Indiana’s population is less racially and ethnically diverse as compared to the United States overall.¹⁵ So, it is not surprising that Indiana’s representation of health professionals who identify as being part of a racial and ethnic minority is lower or similar to national estimates.¹⁶

The Role of Data: Information on health workforce diversity is vital to understand the past, determine current opportunities, and monitor progress towards enhancement. Indiana’s health workforce is comprised of many health professions, with varying degrees of diversity and representation. Accurately tracking diversity in Indiana’s health workforce overtime can provide insight on historical trends and inform future diversity initiatives.

Indiana Health Workforce Diversity Brief Series: The Indiana Health Workforce Diversity Brief Series presents historical diversity trends for selected Indiana health professions and explores related national and state initiatives for the purpose of informing related state-level policy and programming. This document describes the data sources and methods used to produce the series. Questions or comments related to the brief series may be directed to Bowenctr@iu.edu.

METHODOLOGY

DATA SOURCES AND PROFESSIONS

Indiana Health Professions Data: The Bowen Center for Health Workforce Research and Policy (Bowen Center) generates health workforce data reports and policy briefs presenting information collected during the biennial (every two years) license renewal for selected Indiana health professionals.⁹ Demographic information, including race, ethnicity, age, and sex, have been collected from various health professionals since 1997.¹⁰ Demographic information were extracted to produce trends charts and figures by profession for each biennium where data were collected and available.

Professions Included in the Series: This report series includes seven health profession specific briefs. Historical data collection varied by profession. Data reported are by profession based on availability. The health professions included in the report series are:

1. Physician Workforce, including a breakout of Primary Care Physicians and Psychiatrists
2. Registered Nurse Workforce, including Advanced Practice Registered Nurses
3. Oral Health Workforce, including Dentists and Dental Hygienists
4. Behavioral Health and Human Services Workforce
5. Psychologists
6. Pharmacists
7. Physician Assistants

DELINEATING DIVERSITY DATA

The definitions of race and ethnicity used for this series came from the Office of Management and Budget (OMB) and are commonly used by the US Census Bureau:^{17,18}

- Asian,
- Native Hawaiian/Pacific Islander,
- American Indian or Alaska Native,
- Black or African American,
- Multiracial,
- Some Other Race,
- White, and
- Hispanic/Latino(a) or Spanish Origin.

The use of these definition enables direct comparisons to the population. It is important to note that there have been discussions regarding disaggregation of broader racial and ethnic categories to capture social, historical, and economic barriers more accurately.¹⁹

Example: 'Asian' (race category) has been identified as a broad category that could be disaggregated to better delineate between various groups: Southeast Asian, Far East Asian, and South Asian.

Disaggregation of selected categories may help identify underrepresented racial and ethnic subpopulations that may not be captured accurately within Indiana's workforce.

A breakdown of the biennial data collected to support these briefs can be found in Table 1.1.

Table 1.1: Report Year of Health Professional Data Collected

Health Profession	1997 - 1998	1999 - 2000	2001 - 2002	2003 - 2004	2005 - 2006	2007 - 2008	2011 - 2012	2013 - 2014	2015 - 2016	2017 - 2018	2019 - 2020	2021 - 2022
Physicians	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Primary Care Physicians				✓	✓	✓	✓	✓	✓	✓	✓	✓
Psychiatrists									✓	✓	✓	✓
Registered Nurses	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Advanced Practice Registered Nurses	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Dentists							✓		✓	✓	✓	✓
Dental Hygienists							✓		✓	✓	✓	✓
Behavioral Health Workforce							✓		✓	✓	✓	✓
Psychologists							✓		✓	✓	✓	✓
Physician Assistants				✓	✓	✓	✓		✓	✓	✓	✓
Pharmacist				✓		✓	✓		✓	✓	✓	✓

POPULATION COMPARISONS

To contextualize Indiana's health workforce demographics, a snapshot of Indiana's population demographics was obtained from the census bureau.¹¹ This information enables comparisons of Indiana's health workforce racial and ethnic diversity to that of the population overall, useful to determine the extent to which Indiana's health workforce is reflective of the population.

POLICY CONTEXT

Research was conducted to explore national and state-level initiatives which can provide a policy context to diversity in the health workforce. Many national and state-level programs and funding have been implemented to promote health workforce diversity. These initiatives may have a significant impact on the expansion of the diversity in the health workforce. Profession specific programs and initiatives were identified which may provide useful in understanding the current state and plan for future diversity initiatives.

With the development and management of the Indiana Health Professions Database, Indiana is positioned to assess trends in the diversity of its health professionals. This brief is the first of a report series which explores diversity of the health workforce.

LIMITATIONS

Changes to data collection methods have occurred over the license renewal periods included in this report (1997 – 2021). The implementation of Indiana Code 25-1-2-10¹² in January 2019 required health professionals to provide supplemental information during license renewal, including whether they participate in telehealth. Indiana policy changes have resulted in more complete data on Indiana's health workforce and have resulted in an increase in the total number of health professionals known to provide health care services for Indiana residents.¹³ Additionally, several modifications to supplemental license renewal surveys have been made that may impact data collected regarding race and ethnicity, such as collapsing racial categories in some years and not in others.¹⁴ Finally, to ensure confidence in future trends data, Indiana is taking steps to minimize changes to supplemental survey questions and data collection methods.

CONSIDERATIONS

The data found in our report series is limited to historical trends in the demographic characteristics of Indiana health professionals. However, future analysis of the geographic distribution, full time equivalent (FTE), and professionals' characteristics of health professional who are part of racial and ethnic minority groups may provide more context as to where our professionals are practicing, if they reflect the communities they serve, and how they service these various populations.

ENDNOTES

- 1 Stanford FC. The Importance of Diversity and Inclusion in the Healthcare Workforce. *J Natl Med Assoc.* 2020 Jun;112(3):247-249. doi: 10.1016/j.jnma.2020.03.014. Epub 2020 Apr 23. PMID: 32336480; PMCID: PMC7387183.
- 2 Gomez LE, Bernet P. Diversity improves performance and outcomes. *J Natl Med Assoc.* 2019 Aug;111(4):383-392. doi: 10.1016/j.jnma.2019.01.006. Epub 2019 Feb 11. PMID: 30765101.
- 3 Garcia, Andrea N. MD, MS; Kuo, Tony MD, MSHS; Arangua, Lisa MPP; Pérez-Stable, Eliseo J. MD. Factors Associated With Medical School Graduates' Intention to Work With Underserved Populations: Policy Implications for Advancing Workforce Diversity. *Academic Medicine: January 2018 - Volume 93 - Issue 1 - p 82-89* doi: 10.1097/ACM.0000000000001917
- 4 Saha, S. , Guiton, G. , Wimmers, P. F. & Wilkerson, L. (2008). Student Body Racial and Ethnic Composition and Diversity-Related Outcomes in US Medical Schools. *JAMA: The Journal of the American Medical Association*, 300 (10), 1135-1145.
- 5 Pittman P, Chen C, Erikson C, Salsberg E, Luo Q, Vichare A, Batra S, Burke G. Health Workforce for Health Equity. *Med Care.* 2021 Oct 1;59(Suppl 5):S405-S408. doi: 10.1097/MLR.0000000000001609. PMID: 34524235; PMCID: PMC8428843.
- 6 Walker KO, Moreno G, Grumbach K. The association among specialty, race, ethnicity, and practice location among California physicians in diverse specialties. *J Natl Med Assoc.* 2012 Jan-Feb;104(1-2):46-52. doi: 10.1016/s0027-9684(15)30126-7.
- 7 Xierali IM, Nivet MA. The Racial and Ethnic Composition and Distribution of Primary Care Physicians. *J Health Care Poor Underserved.* 2018;29(1):556-570. doi: 10.1353/hpu.2018.0036.
- 8 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5871929/>
- 9 For more information on the data management procedures for all professions included in this report, see their respective data reports at <https://scholarworks.iupui.edu/handle/1805/5420>.
- 10 See appendix for details on health professions specific reporting year.
- 11 [United States Census Bureau: https://www.census.gov/programs-surveys/popest.html](https://www.census.gov/programs-surveys/popest.html)
- 12 Indiana Code 25-2-1-10. Available at: <https://iga.in.gov/legislative/laws/2021/ic/titles/025#25-1-2-10>
- 13 Beginning in 2019, Indiana health workforce supply reports include professionals physically located outside of Indiana that report providing direct care to residents of Indiana through telehealth.
- 14 For example, racial categories Asian, Hawaiian Native, and Pacific Islander were combined for some professions as recently as 2011 and only recently separated into distinct categories, as recommended by the OMB.
- 15 United States Census Bureau. Indiana Quick Facts. (2021). <https://www.census.gov/quickfacts/fact/table/IN.US/PST045221>
- 16 Health Resources and Services Administration (HRSA). Area Health Resources Files. <https://data.hrsa.gov/topics/health-workforce/ahrh>
- 17 Beginning in 2019, Indiana health workforce supply reports include professionals physically located outside of Indiana that report providing direct care to residents of Indiana through telehealth.
- 18 About the Topic of Race. United States Census Bureau. Available at. <https://www.census.gov/topics/population/race/about.html>
- 19 Revisions to the Standards for Classification of Federal Data on Race and Ethnicity. Federal Register, Office of Management and Budget. 1997;62(210). <https://www.govinfo.gov/content/pkg/FR-1997-10-30/pdf/97-28653.pdf>
- 20 Beginning in 2019, Indiana health workforce supply reports include professionals physically located outside of Indiana that report providing direct care to residents of Indiana through telehealth.
- 21 About the Topic of Race. United States Census Bureau. Available at. <https://www.census.gov/topics/population/race/about.html>
- 22 Revisions to the Standards for Classification of Federal Data on Race and Ethnicity. Federal Register, Office of Management and Budget. 1997;62(210). <https://www.govinfo.gov/content/pkg/FR-1997-10-30/pdf/97-28653.pdf>

ACKNOWLEDGEMENTS

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RECOMMENDED CITATION

A Longitudinal Assessment of Diversity in Indiana's Health Workforce: Introduction and Methodology. (2022). Bowen Center for Health Workforce Research and Policy. Indiana University School of Medicine.

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