April 2021 | Data Brief

A Snapshot of Health Workforce Diversity in South Carolina

Introduction

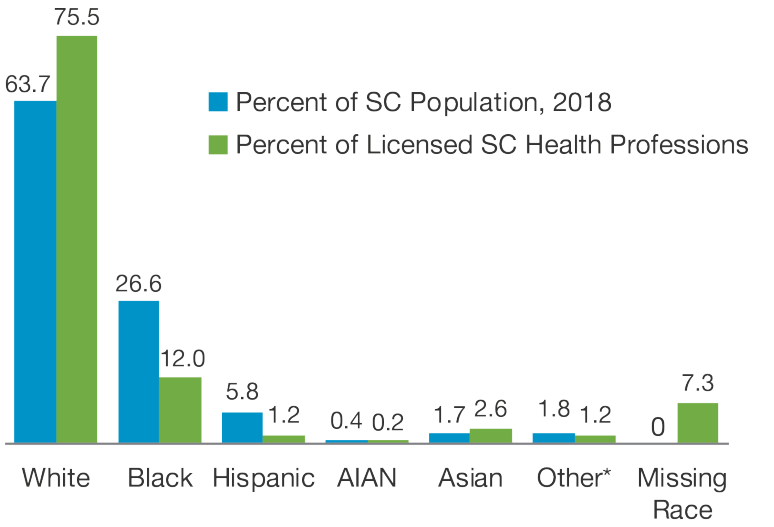
A racially and ethnically diverse health workforce helps improve provider-patient communication, patient outcomes and satisfaction, and access to care for underserved populations; reduce disparities in healthcare; and provide better experiences for students in the health professions.[1,2,3,4] A diverse health workforce that is well-distributed across the state improves the chances of racial concordance,[5] or shared identity, between providers and patients, allowing patients to establish relationships with providers who share common backgrounds and have similar life experiences. Racial diversity in the health professions is also an important factor in workforce and economic development efforts.

This brief provides a broad overview of how the racial and ethnic diversity of South Carolina's health professionals compares to that of the state's population. See data notes on page 6 for sources and limitations.

South Carolina's Health Workforce Is Not as Diverse as the State's Population

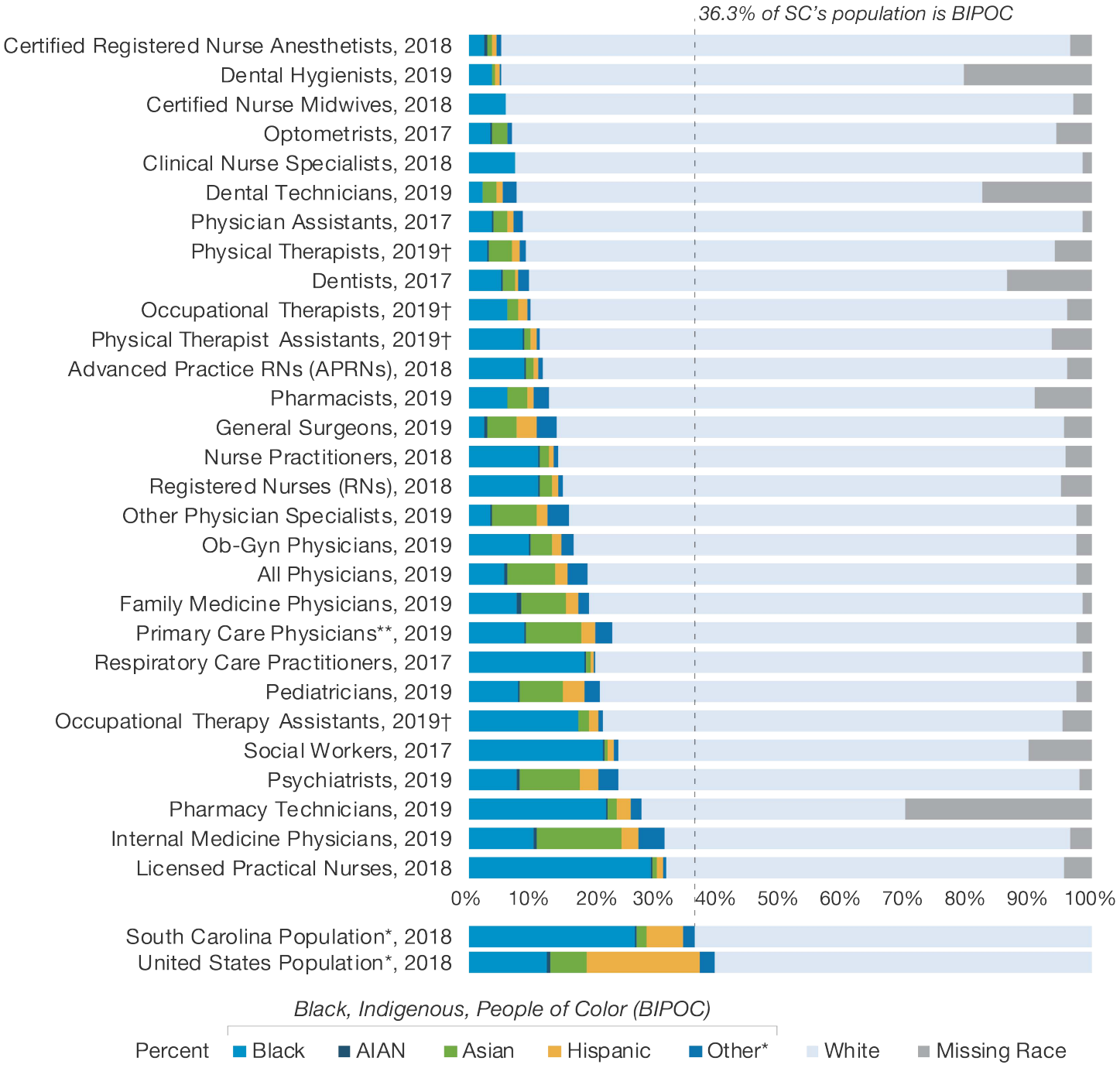
In South Carolina, individuals identifying as Black, Indigenous and People of Color (BIPOC) comprise 36% of the state's overall population, yet they represent less than 25% of the state's licensed healthcare workforce (**Figure 1**). Black, Hispanic and American Indian/Alaska Native (AIAN) individuals are particularly underrepresented in the state's health workforce. **Figure 2** and **Table 1** show the racial/ethnic breakdown of licensed health professionals in South Carolina, as well as total population in South Carolina and the United States. No single health profession is as diverse as the state's population; however, 29.2% of licensed practical nurses (LPNs) are Black compared to 26.6% of the state's population. AIAN individuals make up 0.4% of the population, and of all the professions tracked, only three physician specialties – family medicine, general surgery and psychiatry – meet or exceed that proportion. While Hispanic individuals make up 5.8% of the state's population, no single health profession is more than 2.8% Hispanic. Asian individuals are overrepresented in the licensed health professions (2.6%), particularly among physicians (7.8%), compared to 1.7% of the state's population.

Figure 1. Comparison of Racial Diversity of South Carolina's Population and Health Professions, 2017-2019



Notes: *For US and SC population, "other" includes "Native Hawaiian and Other Pacific Islander" and "two or more races"; for SC health professions, "other" is listed as a race category. AIAN = American Indian or Alaskan Native. Data are current as of most recent licensure file year [see Data Notes, page 6].
Sources: US and SC Population: Social Explorer Tables (SE), Population Estimates 2018, Table T22: Hispanic or Latino Origin by Race. Social Explorer; U.S. Census Bureau. https://www.socialexplorer.com/tables/POPEST2018/R12743732, accessed 2/16/2021. Health professions data: Analysis of licensure data by the SC Office for Healthcare Workforce [see Data Notes, page 6]. All data are self-reported by the licensee at time of initial application for licensure.

Figure 2. Racial Diversity of Licensed Health Professionals, South Carolina, 2017-2019



Notes: *For US and SC population, "other" includes "Native Hawaiian and Other Pacific Islander" and "two or more races"; for SC health professions, "other" is listed as a race category. AIAN = American Indian or Alaskan Native. Hispanic origin is considered an ethnicity, not a race; however, Hispanic is collected as a race category on health professional licensure applications. To match this, population data are shown as non-Hispanic by race, with Hispanic including all races that indicated they were of Hispanic origin. Some professions had more complete race information than others; reasons for missing race data are unknown. ** Includes family medicine, general internal medicine, ob/gyn and pediatrics. Data are current as of most recent licensure file year as listed. † Preliminary data.

Sources: US and SC Population: Social Explorer Tables (SE), Population Estimates 2018, Table T22: Hispanic or Latino Origin by Race. Social Explorer; U.S. Census Bureau. https://www.socialexplorer.com/tables/POPEST2018/R12743732, accessed 2/16/2021. Health professions data: SC Office for Healthcare Workforce, derived from data collected by the SC Department of Labor, Licensing and Regulation and housed by the SC Revenue and Fiscal Affairs Office. All data are self-reported by the licensee at time of initial application for licensure.

Table 1. Racial Diversity of Total Population and Health Professions, South Carolina, 2017-2019

Profession	Total	Percent White	Black	AIAN	Asian	Other*	Hispanic	Missing
United States Population, 2018	**326,687,501**	**60.5%**	**12.5%**	**0.7%**	**5.7%**	**2.4%**	**18.3%**	**0%**
South Carolina Population, 2018	**5,084,156**	**63.7**	**26.6**	**0.4**	**1.7**	**1.8**	**5.8**	**0**
Physicians, 2019	13,047	78.4	5.8	0.3	7.8	3.1	2.0	2.5
*Primary Care***	*5,902*	*74.4*	*8.9*	*0.4*	*8.8*	*2.7*	*2.3*	*2.5*
Family Medicine	*1,984*	*79.0*	*7.8*	*0.6*	*7.2*	*1.9*	*1.9*	*1.6*
Internal Medicine	*1,596*	*65.2*	*10.5*	*0.3*	*13.7*	*4.3*	*2.7*	*3.4*
Ob-Gyn	*604*	*80.6*	*9.6*	*0.3*	*3.5*	*2.0*	*1.5*	*2.5*
Pediatrics	*908*	*76.4*	*7.9*	*0.3*	*7.0*	*2.4*	*3.3*	*2.5*
General Surgery	*440*	*81.4*	*2.5*	*0.5*	*4.8*	*3.4*	*3.0*	*4.5*
Psychiatry	*564*	*73.8*	*7.6*	*0.7*	*9.6*	*3.2*	*3.0*	*2.1*
Other Specialties	*6,951*	*81.5*	*3.6*	*0.2*	*7.2*	*3.4*	*1.6*	*2.4*
Registered Nurses (RNs), 2018	41,572	79.9	11.2	0.2	2	0.8	1	5
Advanced Practice RNs (APRNs), 2018	4,667	84.1	8.9	0.3	1.2	0.7	0.8	4
Nurse Practitioners	*3,376*	*81.3*	*11.1*	*0.3*	*1.4*	*0.8*	*0.9*	*4.3*
Certified Registered Nurse Anesthetists	*1,155*	*91.6*	*2.6*	*0.3*	*0.8*	*0.7*	*0.7*	*3.4*
Clinical Nurse Specialists	*68*	*91.2*	*7.4*	*0*	*0*	*0*	*0*	*1.5*
Certified Nurse Midwives	*67*	*91*	*6*	*0*	*0*	*0*	*0*	*3*
Licensed Practical Nurses, 2018†	8,489	63.7	29.2	0.2	0.8	0.7	0.9	4.5
Dentists, 2019	2,463	76.8	5.3	0.1	2	1.6	0.6	13.6
Dental Hygienists, 2019	2,760	74.1	3.8	0.0	0.5	0.4	0.6	20.5
Dental Technicians, 2019	91	74.7	2.2	0	2.2	2.2	1.1	17.6
Pharmacists, 2019	4,957	78	6.1	0.1	3.3	2.3	1	9.1
Pharmacy Technicians, 2019	7,199	42.4	22.0	0.3	1.6	1.6	2.2	30.0
Physical Therapists, 2019†	3,202	84.9	3.1	0.1	3.7	0.8	1.4	6
Physical Therapist Assistants, 2019†	1,920	82.1	8.8	0.1	1.0	0.7	0.9	6.4
Occupational Therapists, 2019†	1,394	86.1	6.1	0	1.9	0.5	1.5	3.9
Occupational Therapy Assistants, 2019†	762	73.9	17.6	0.1	1.6	0.8	1.4	4.6
Physician Assistants, 2017	1,276	89.7	3.8	0.2	2.1	1.5	1	1.6
Social Workers, 2017	2,362	66	21.5	0.2	0.7	0.7	0.9	10.1
Optometrists, 2017	529	87.5	3.6	0.2	2.3	0.6	0.2	5.7
Respiratory Care Practitioners, 2017	2,126	78.1	18.6	0.2	0.8	0.4	0.4	1.5

Notes: *For US and SC population, "other" includes "Native Hawaiian and Other Pacific Islander" and "two or more races"; for SC health professions, "other" is listed as a race category. AIAN = American Indian or Alaskan Native. Hispanic origin is considered an ethnicity, not a race; however, Hispanic is collected as a race category on health professional licensure applications. To match this, population data are shown as non-Hispanic by race, with Hispanic including all races that indicated they were of Hispanic origin. ** Includes family medicine, general internal medicine, ob/gyn and pediatrics. Data are current as of most recent licensure file year as listed. † Preliminary data.

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Improving Diversity Among the Health Professions

Improving diversity is a complex issue. Structures and systems exist that put certain populations, such as Black and American Indian, in a position of disadvantage compared to other populations, resulting in increased disparities over time. This is referred to as **systemic, structural, institutional or societal racism.**[6] Examples of systemic racism are evident in income and personal wealth, education, housing, criminal justice, the environment, healthcare and more. There are several societal and structural challenges that have slowed efforts to improve the diversity of the state's health workforce, but there are strategies that can help reduce these barriers. While not an exhaustive list, this section includes selected challenges, strategies for improving workforce diversity, and examples of current state programs that support diversity efforts.

Selected challenges to diversifying the health workforce

- **Disparities and implicit bias in academic preparation:** Factors such as socioeconomic status, parental education levels, and educators' implicit biases contribute to racial and ethnic disparities in K-12 education achievement, particularly in math and science, leaving students inadequately prepared for academic success in health professional education programs.[7,8]
- **Standardized testing:** There are known racial and ethnic disparities in standardized test scores, such as the SAT, GRE and MCAT. These scores are often used as an initial filter in university, medical school and other graduate health education program admissions processes, and may prevent candidates' full application from being reviewed.[9,10]
- **Lack of BIPOC role models and mentors:** "*It's hard to be what you can't see*." [11] Without enough BIPOC health professionals visible in the community and in leadership positions, BIPOC students too often don't realize that they, too, can become a healthcare professional. This is exacerbated in areas that are rural or are of lower socioeconomic status, where there are fewer, if any, health professionals and where the possibility of becoming a healthcare worker may go overlooked.
- **Cost and student debt:** The cost of health professional training programs and student debt burden can be prohibitive to disadvantaged students, many of whom are from racial and ethnic minorities and are first generation college students. Without strong guidance from family, friends and educators, and good financial literacy, navigating the forms and processes to apply for financial aid creates additional barriers.

Selected strategies to improve health workforce diversity

- **Enhance health careers pipeline programs:** Expose students to health career opportunities earlier, support immersive summer careers academies and science enrichment programs, pair BIPOC high school students with BIPOC health professions students and faculty, and develop stronger community partnerships with health professions education programs. However, as mentioned above, the lack of exposure to healthcare and mentors of any kind of health profession in rural and underserved areas is challenging and remains a limiting factor for improving access to health careers for those students.
- **Address admissions policies:**[12,13] Without sacrificing academic standards, examine admissions policies that may prevent qualified BIPOC students from being accepted into health professional training programs. Develop more holistic admissions processes that more fully consider background, life experience (e.g., military) and other qualities in addition to test scores. Increase the diversity of admissions committees to include more BIPOC individuals, women, and younger members. Address implicit bias in admissions processes by conducting training and increasing awareness for committee members.

- **Diversify and support health professions faculty:**[14] Increasing the number of BIPOC faculty translates to more mentors and role models for health professions students. However, there must first be a more diverse workforce from which faculty can be hired. Retention of diverse faculty requires more mentoring and support for BIPOC adjunct and junior faculty. This includes recognition of the so-called "minority tax":[15] as institutions try to improve employee diversity, the already small number of BIPOC faculty and staff are asked to take on increasingly numerous roles serving as minority representation on institutional committees (e.g., a diversity council). These roles are not traditionally valued as highly in the faculty tenure process, and they take time away from patient care and academic scholarship, leading to feelings of low appreciation and burnout.

Selected examples of programs to improve health workforce diversity in South Carolina

- **South Carolina Area Health Education Consortium (SC AHEC)**: SC AHEC has a strong commitment to increasing diversity among health professionals and promoting broader geographic distribution of providers to rural and underserved areas. SC AHEC's Health Careers Programs (HCP) and Health Professions Student (HPS) programs expose students – especially those from underserved and underrepresented populations – to health careers programs starting in high school and support these students through undergraduate studies and health professional training programs. www.scahec.net
- **Secondary Schools:** Many high schools across the state have college prep tracks that include STEM preparation and exposure to health sciences. There are some charter schools and magnet programs in the state, however, that focus specifically on preparing students for careers in the health professions.[a] One of these schools, the **Orangeburg High School for Health Professions**, appears to focus on students from disadvantaged backgrounds. In 2020, student enrollment at this charter school was listed as 373, all students were from disadvantaged backgrounds, and 98% of students were BIPOC.[16,17]
- **South Carolina Technical Colleges**: The state's technical colleges enroll more students and are more diverse than other higher education institutions in the state. In Fall 2019, there were more than 75,000 students enrolled in the state's technical colleges, and 41% of those students identified as BIPOC.[18] Studies from North Carolina show that community college nursing graduates are more likely to practice near where they trained[19] and are more likely than those with higher degrees to work in rural and economically distressed counties.[20] These studies suggest that, in addition to supporting a diverse pool of students, technical colleges produce graduates that practice locally and in areas of high need.
- **Health Occupation Students of America – Future Health Professionals (HOSA):** HOSA is a global, student-led association that promotes health careers, supports health science education students (including adult learners) and instructors and provides leadership development. In 2019-2020, the South Carolina chapter of HOSA had 4,640 members.[21] http://www.schosa.org/
- **TRIO Programs**: Federal TRIO Programs include several pipeline programs that assist low-income individuals, first generation college students and individuals with disabilities from middle school through postbaccalaureate programs. While not limited to health careers, these programs identify individuals who have the potential to succeed in higher education and provide them with academic, career and financial counseling. Several technical colleges and universities in South Carolina receive TRIO funding to provide these services. https://www2.ed.gov/about/offices/list/ope/trio/index.html

[a] Other examples of high schools that focus on the health sciences include the Marion County School of Practical Nursing (Marion), Ridge View High School Institute for Health Sciences (Columbia), Carolina High and Health Professions Magnet Academy (Greenville), and the South Carolina Governor's School for Science & Mathematics (Hartsville).

Conclusions

Racially concordant and culturally appropriate care leads to improved health outcomes and patient satisfaction, yet the racial and ethnic diversity of the healthcare workforce in South Carolina does not reflect the diversity of the state's population. Despite job losses during the recent economic recessions and the COVID-19 pandemic, healthcare employment remains more resilient than other sectors.[22] Investing resources in connecting more BIPOC individuals with education and job opportunities in healthcare – and supporting them in schools and workplaces – provides better access to stable employment and livable wages, and supports employers with the skilled and diverse workforce they need.

Strategies to address healthcare workforce diversity can be implemented across the continuum of health professions education and practice, to support students in high school, college and professional school; health professions faculty; and practicing health professionals. Structural changes at all levels of education should address explicit and implicit bias that affects disparities in K-12 education, admissions processes and retention of BIPOC faculty and providers.

South Carolina has several examples of programs that promote a more diverse health workforce. However, more work can be done to expose high school students to health careers programs, provide support and mentoring for BIPOC health professional students, and increase the number of BIPOC providers, faculty and health care leaders serving as role models and mentors. Educators, employers and workforce development experts can continue to work together to identify local and regional needs and to develop targeted programs to build a more diverse healthcare workforce.

Ultimately, these efforts to build and support a diverse healthcare workforce may help lead to improved access to care, improved health outcomes, higher patient satisfaction, reduced health disparities and improved job opportunities for South Carolina's residents.[1-4]

Licensure Data and Limitations

Data Notes

Licensure data were obtained from the South Carolina Department of Revenue and Fiscal Affairs Office (RFA), the official repository of data collected from the state's licensing boards under the South Carolina Department of Labor, Licensing and Regulation (LLR). Data were self-reported by individual health professionals during their initial application for licensure. Data reported here include individuals with an active license to practice and a primary practice address within South Carolina as of their license renewal year as follows:

- 2017: optometrists, physician assistants, social workers;
- 2018: licensed practical nurses*, registered nurses, advanced practice registered nurses;
- 2019: dentists, dental hygienists, dental technicians, occupational therapists*, occupational therapy assistants*, pharmacists, pharmacy technicians, physical therapists*, physical therapist assistants*, physicians (* = preliminary data).

Physician data include active, in-state physicians that have completed residency or are still in residency training and are working in nonfederal practice settings.

The licensing boards collect race as broad categories that may vary by profession. These categories include White or Caucasian, African American, Asian, American Indian, Hispanic, and Other. For the purposes of this brief and in line with U.S. Census categories, we use White, Black and AIAN for American Indian. Population data obtained through the online tool Social Explorer are reported by both race and ethnicity. For better comparison to health professions race, population data are shown as non-Hispanic by race (e.g., Black non-Hispanic), with Hispanic including all races that indicated they were of Hispanic origin (e.g., Black Hispanic).

Limitations

1. Hispanic origin is considered an ethnicity, not a race; however, it is collected as a race category on South Carolina health professional licensure applications. Additionally, there is no option to indicate multiple races. Individuals are asked to identify with one race, including Hispanic origin, which may skew results.
2. Some professions have more complete race data than others. For example, a large percentage of pharmacy technicians (30%), dental hygienists (20.5%), dental technicians (17.6%) and dentists (13.6%) were missing race, compared to just 2.5% of physicians. Reasons for missing data are unknown, but could include the board no longer collecting race on initial applications, individuals not reporting their race, data not being entered consistently from paper forms, or data not being collected for certain categories of license types (e.g., licensure by endorsement or reciprocity).
3. This brief focuses on racial and ethnic diversity. It is worth noting that other types of diversity, such as gender, sexual orientation and socioeconomic background, are also important,[23,24] and that many health professionals of all backgrounds are trained to provide culturally competent care, demonstrating respect for and responding to the cultural and linguistic needs of diverse patients.[25]

Suggested citation

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