Six Domains of Health Workforce Equity Webinar Series – Session 1

Thursday, June 20, 2024

Dr. Patricia Pittman, PhD, FAAN, Director
Margaret Ziemann, MPH, Research Scientist
The Fitzhugh Mullan Institute for Health Workforce Equity, Milken Institute School of Public Health,
The George Washington University

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $550,000 with 0 percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov

STAR² CENTER TEAM

SUZANNE SPEER
(she/her)
Vice President of Workforce Development
sspeer@clinicians.org

DR. MICHELLE FERNÁNDEZ GABILONDO
DSW, MSW
(she/her/ella)
Director of Workforce Development
mfernandez@clinicians.org

MARIAH BLAKE
MPA
(she/her)
Associate Director of Workforce Operations & Compliance
mblake@clinicians.org

HELEN RHEA VERNIER
MSC
(she/her)
Associate Director of Workforce Development
hvernier@clinicians.org

SYDNEY AXELROD
MA
(she/her)
Training Specialist
saxelrod@clinicians.org

ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

ACU ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

STAR²CENTER SOLUTIONS TRAINING AND ASSISTANCE FOR RECRUITMENT & RETENTION

Access to Care & Clinician Support

Recruitment & Retention

- National Health Service Corps
- Resources
- Training
- Networking

STAR² CENTER

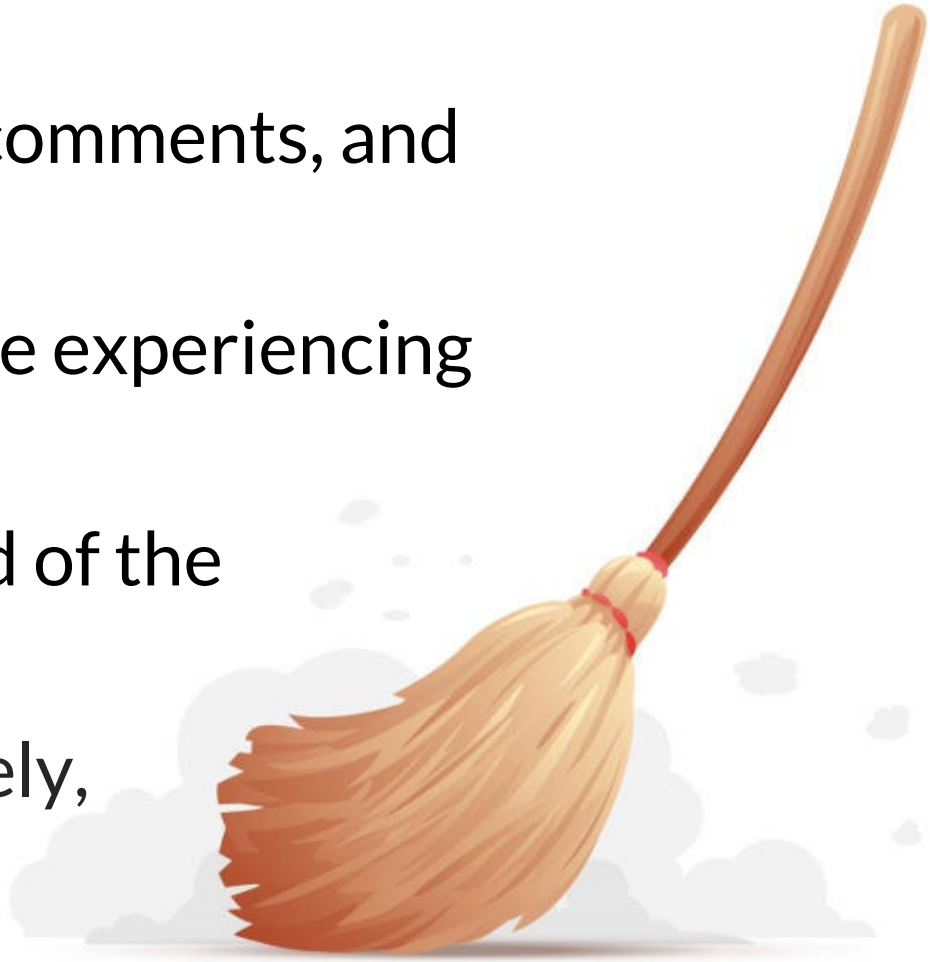
- National Cooperative Agreement awarded in 2014
- Funded by the Bureau of Primary Healthcare
- One of 22 National Training and Technical Assistance Partners (NTTAPs)
- Produces **FREE** Resources, Training, and Technical Assistance

www.chcworkforce.org

Contact us: info@chcworkforce.org

HOUSEKEEPING

- This session is being recorded. The **recording and slides** will be sent to all registrants.
- Use the **chat box** to ask questions, share comments, and thoughts.
- Send a message to **Mariah Blake**, if you are experiencing technical difficulties.
- Please complete the **evaluation** at the end of the session.
- Be as present as possible, listen deliberately, share generously



WEBINAR PRESENTERS

DR. PATRICIA PITTMAN
PHD, FAAN
Director, The Fitzhugh Mullan Institute for Health Workforce Equity
ppittman@gwu.edu

MARGARET ZIEMANN
MPH
Research Scientist, The Fitzhugh Mullan Institute for Health Workforce Equity
mziemann@gwu.edu

Health Workforce Equity:
Diversity, Training, & Distribution

Webinar 1: June 20, 2024

Prepared for the Association of Clinicians for the Underserved

Patricia Pittman | ppittman@gwu.edu

Fitzhugh Mullan Professor of Health Workforce Equity

Margaret Ziemann | mziemann@gwu.edu

Research Scientist

Fitzhugh Mullan Institute for Health Workforce Equity

THE GEORGE WASHINGTON UNIVERSITY

THE GEORGE WASHINGTON UNIVERSITY

WASHINGTON, DC

Webinar Objectives

Webinar participants will be able to:

1. Define the 6 domains of health workforce equity (HWE)
2. Explain the relationship between each domain and health equity
3. Understand the policies and programs that affect each HWE domain
4. Describe metrics that can be used to assess each HWE domain
5. Identify high and low performing HWE states based on select metrics
6. Locate relevant HWE resources from the Mullan Institute

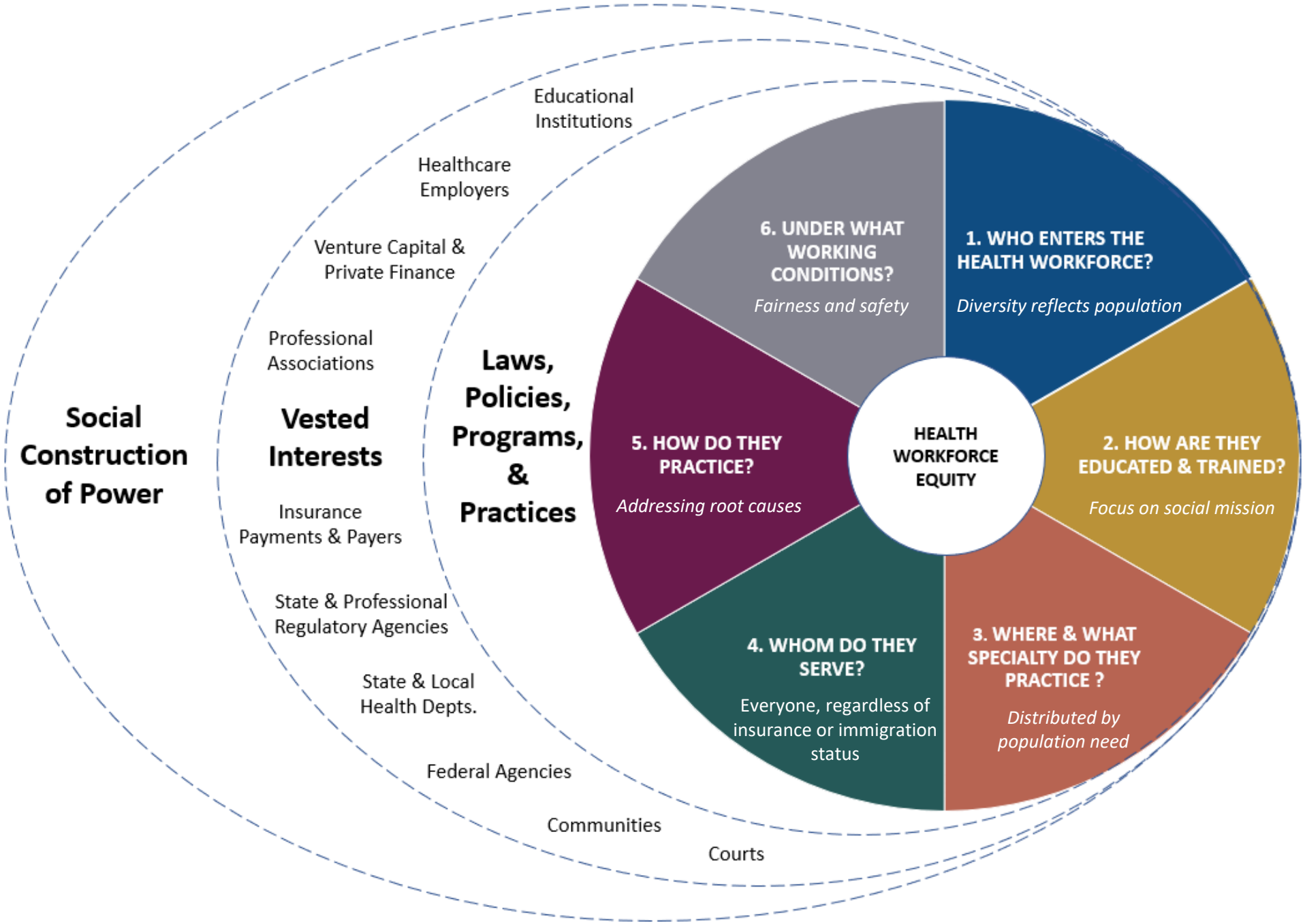
Fitzhugh Mullan
Institute for Health
Workforce Equity
THE GEORGE WASHINGTON UNIVERSITY

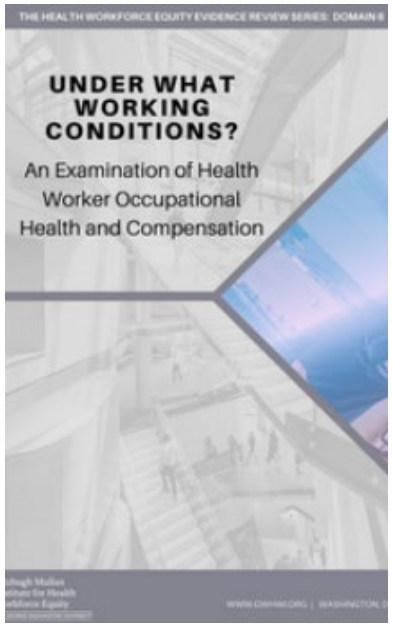
Health Workforce Policy Analysis Goes Beyond Counts

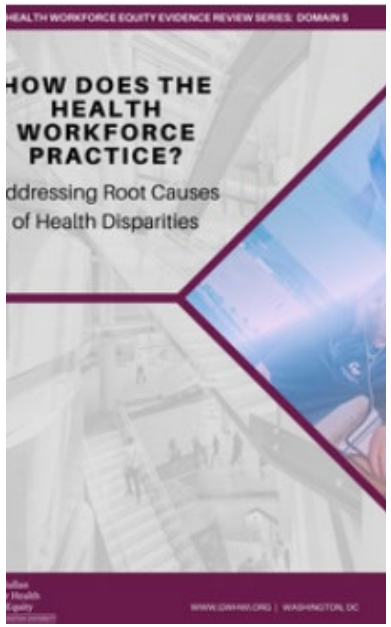
Our vision is a world in which there is a diverse health workforce that has the competencies, opportunities, and courage to ensure everyone has a fair opportunity to attain their full health potential.

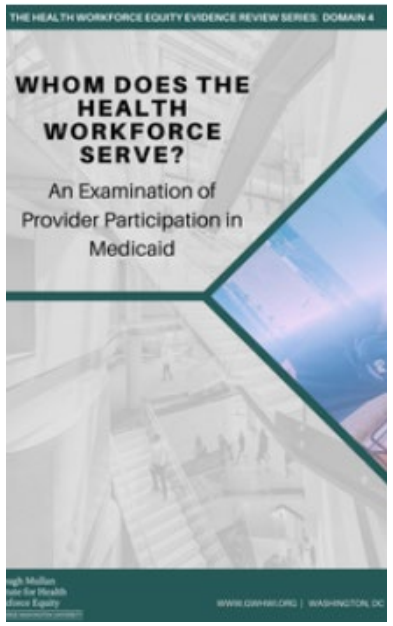
We call this Health Workforce Equity.

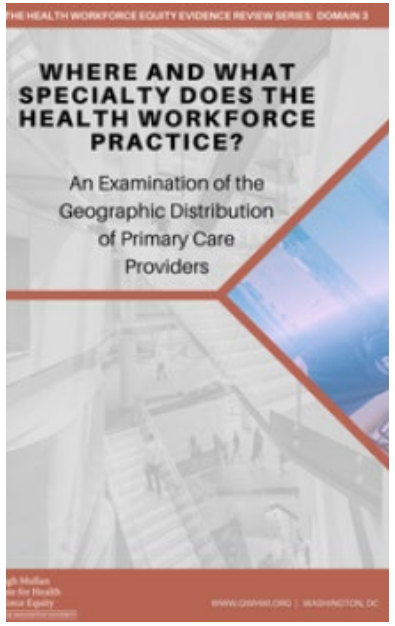
Fitzhugh Mullan
Institute for Health
Workforce Equity
THE GEORGE WASHINGTON UNIVERSITY

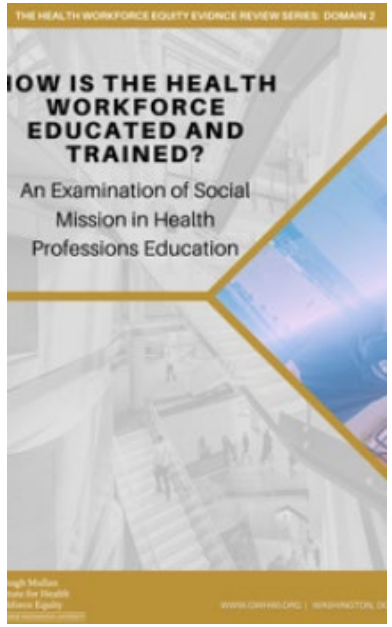

Social Construction of Power
Vested Interests
Laws, Policies, Programs, & Practices
Educational Institutions
Healthcare Employers
Venture Capital & Private Finance
Professional Associations
Insurance Payments & Payers
State & Professional Regulatory Agencies
State & Local Health Depts.
Federal Agencies
Communities
Courts
HEALTH WORKFORCE EQUITY
1. WHO ENTERS THE HEALTH WORKFORCE?
Diversity reflects population
2. HOW ARE THEY EDUCATED & TRAINED?
Focus on social mission
3. WHERE & WHAT SPECIALTY DO THEY PRACTICE ?
Distributed by population need
4. WHOM DO THEY SERVE?
Everyone, regardless of insurance or immigration status
5. HOW DO THEY PRACTICE?
Addressing root causes
6. UNDER WHAT WORKING CONDITIONS?
Fairness and safety

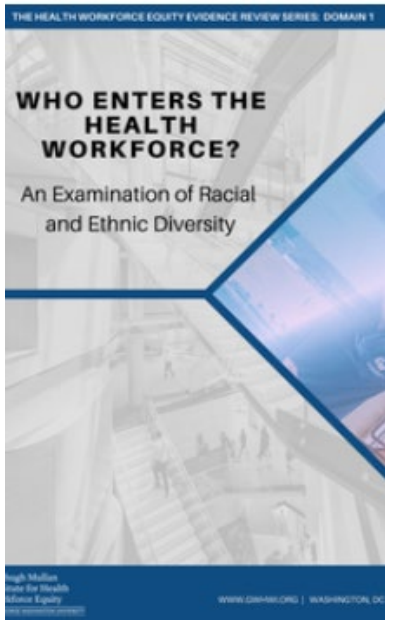








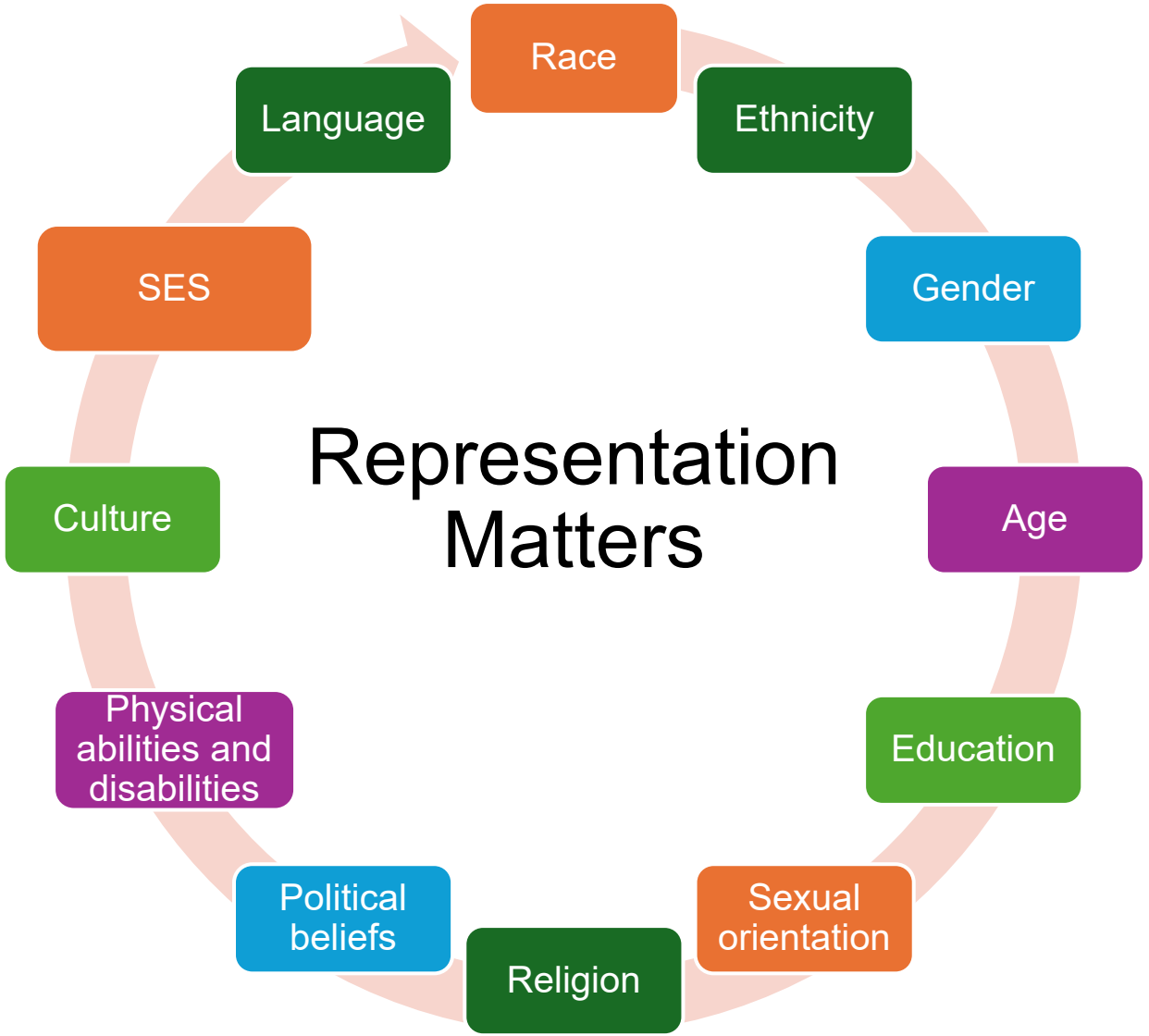




Health Workforce Equity Evidence Review Series


1. WHO ENTERS THE HEALTH WORKFORCE?
2. HOW ARE THEY EDUCATED & TRAINED?
3. WHERE & WHAT SPECIALTY DO THEY PRACTICE ?
4. WHOM DO THEY SERVE?
5. HOW DO THEY PRACTICE?
6. UNDER WHAT WORKING CONDITIONS
HEALTH WORKFORCE EQUITY

Relationship to Health Equity

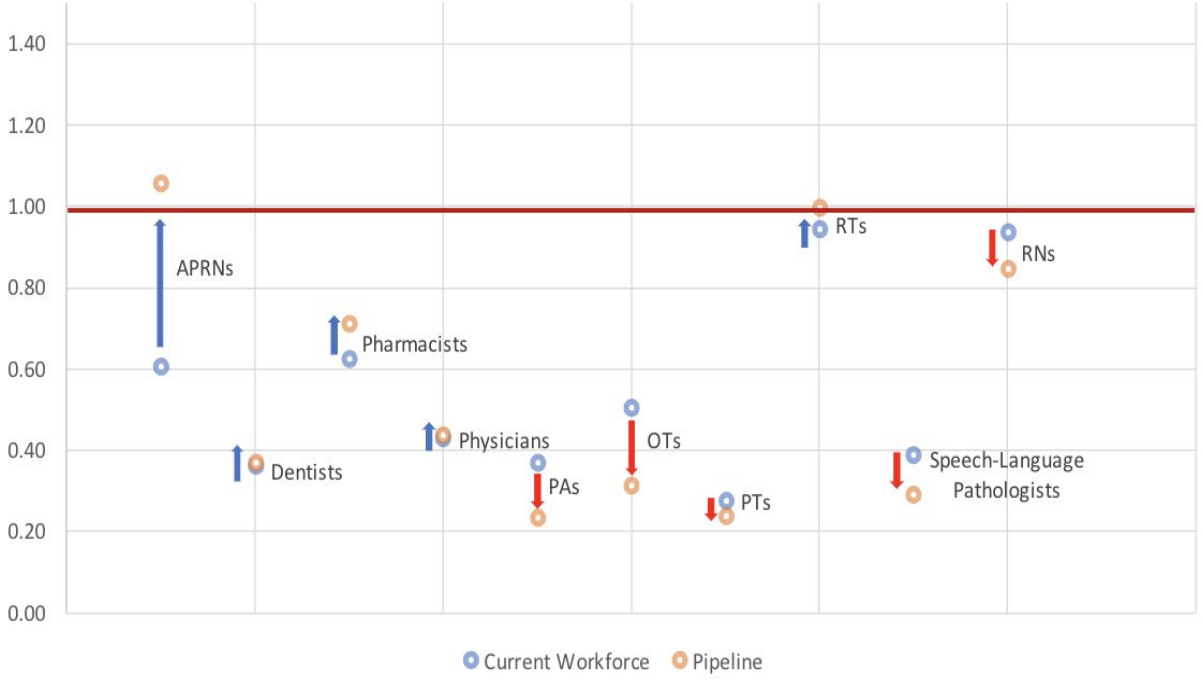

Representation Matters
Race
Ethnicity
Gender
Age
Education
Sexual orientation
Religion
Political beliefs
Physical abilities and disabilities
Culture
SES
Language

There is a relationship between the diversity of the health workforce and health equity outcomes

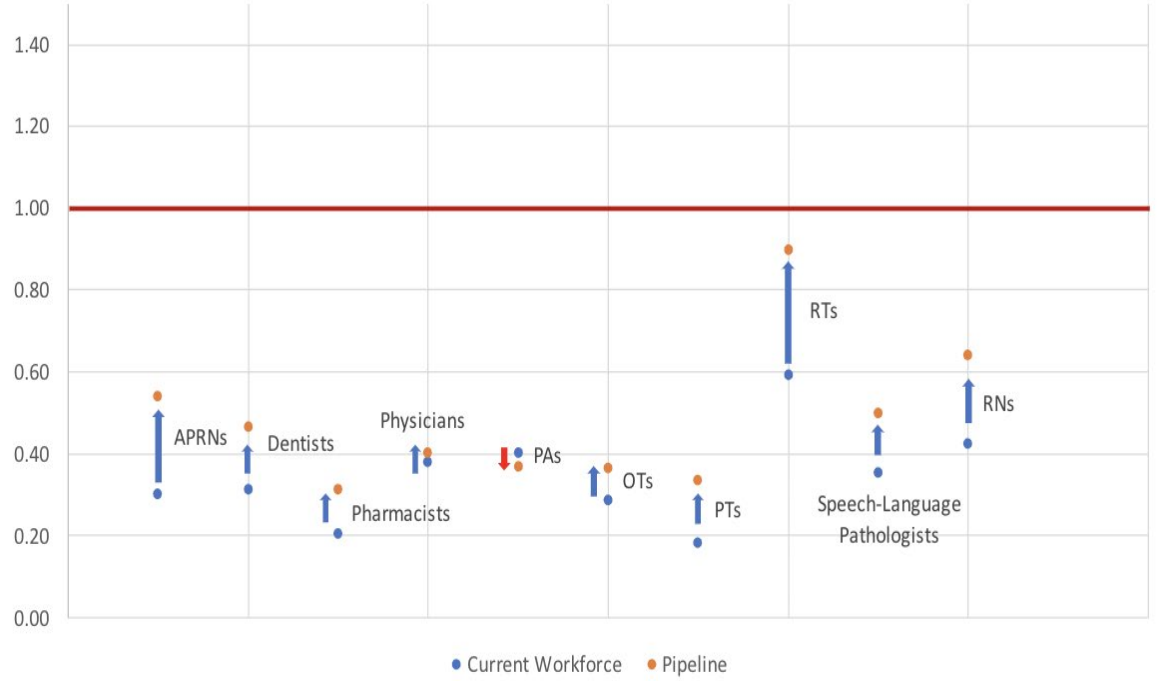
Access	Cultural Competency	Care Quality	Health Outcomes	But also…
Nonwhite physicians provide a disproportionate share of care to underserved populations. (Marrast, 2014) 	A more diverse educational pipeline, makes non-URM graduates better prepared to serve diverse population and reduces implicit bias. (Saha, 1999; van Ryn, 2015) 	Black patients are more likely to receive preventive and needed medical care when their physician is Black. (Saha, 1999; Alsan, 2019) 	Mortality rates for Black babies cut dramatically when cared for by Black doctors after birth[5] and presence of Black PCPs associated with reduced mortality rate for Black individuals. (Greenwood, 2020; Snyder, 2023) 	…diversifying the health workforce is an inherent equity issue for workers and the communities they represent 

Nature and Magnitude of the Problem

Black and Hispanic practitioners are underrepresented in the current and future health workforce



Black/African American Diversity Index

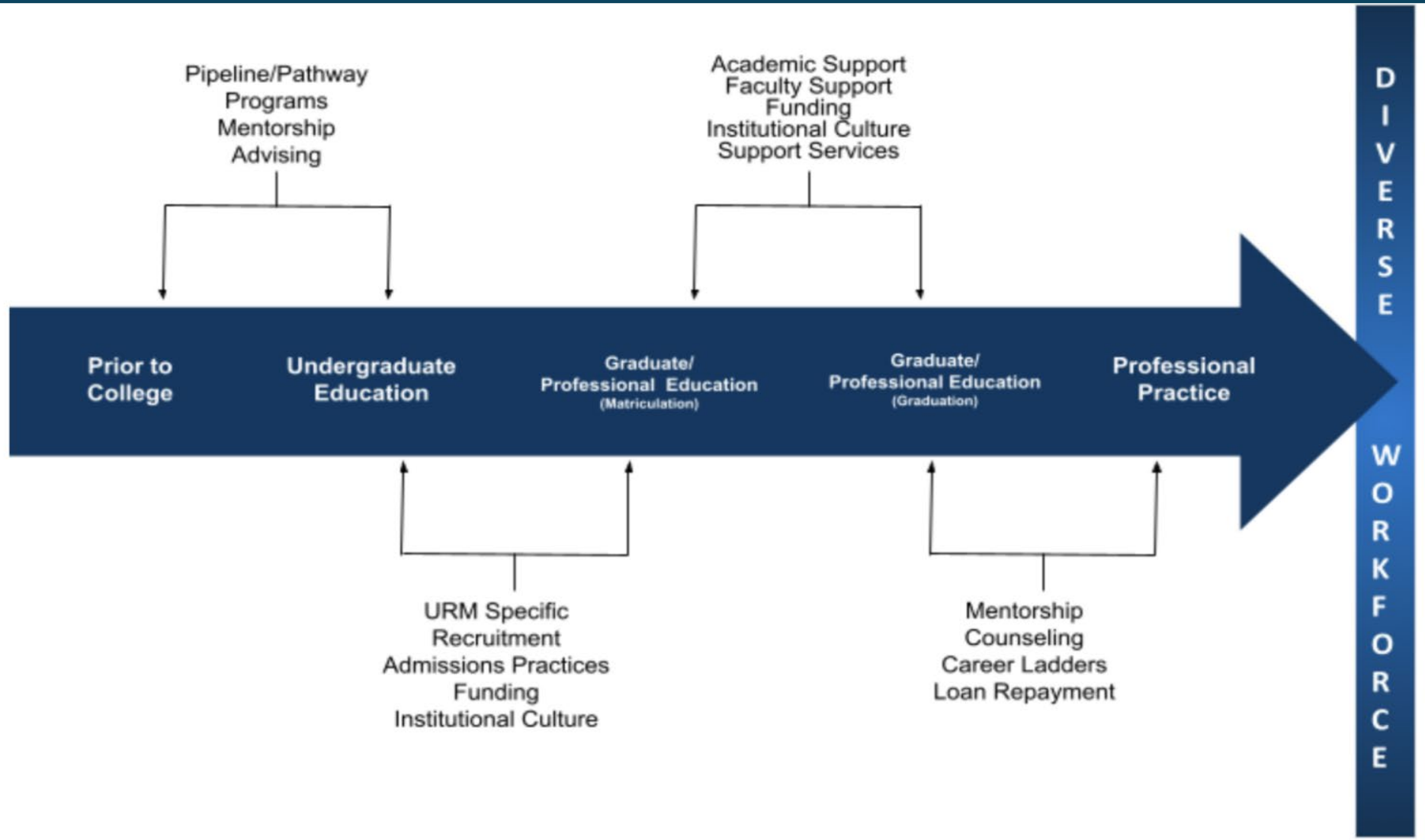


Hispanic/Latinx Diversity Index

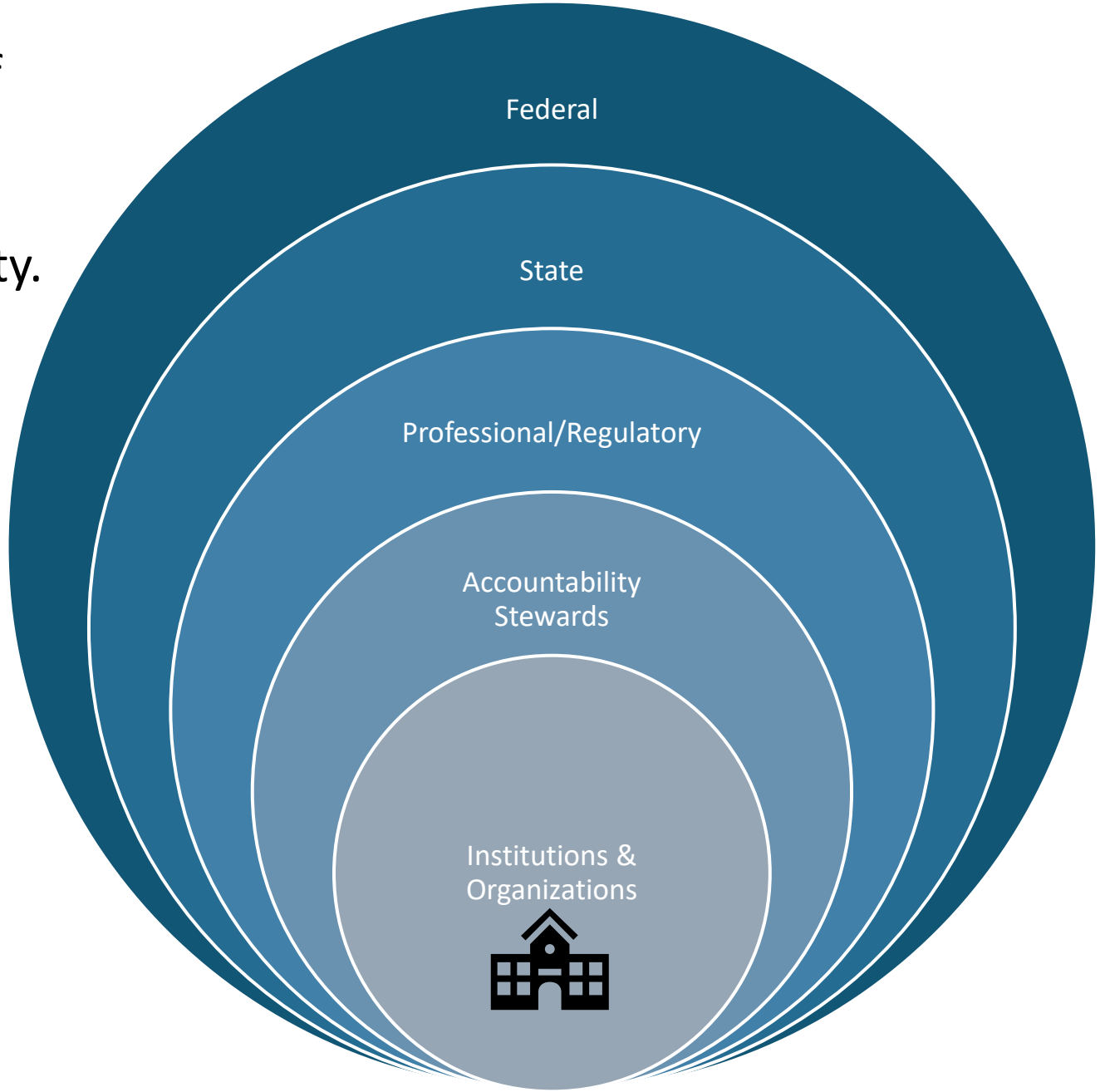
Source: Fitzhugh Mullan Institute for Health Workforce Equity, Health Workforce Diversity Tracker 2021

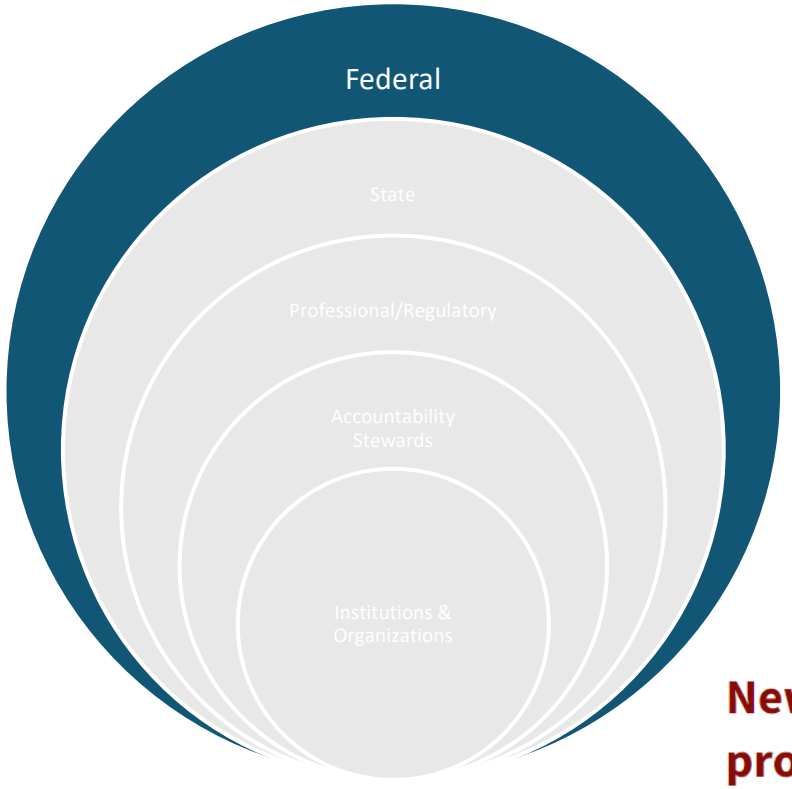
Policies and Programs to Address the Problem

Practices across the education and practice pathway can promote health workforce diversity



Different levels of policy action can facilitate health workforce diversity.





HRSA Health Workforce

Health Careers Pipeline and Diversity Programs

Academic Year 2017-2018

HRSA is the primary federal agency for improving health care to people who are geographically isolated or economically or medically vulnerable. HRSA programs help those in need of high quality primary health care by supporting the training of health professionals – focusing in particular on the geographical distribution of providers to areas where they are needed most.

The Health Careers Pipeline and Diversity Programs support initiatives that aim to increase the diversity of the nation's health professions workforce and to offer high quality, culturally-competent care within underserved communities. Specific efforts focus on the recruitment, retention, and support of trainees from disadvantaged and/or underrepresented backgrounds leading to increased distribution of health professionals in high need areas. Ensuring a national health workforce that is diverse and representative of the communities it serves has been shown to facilitate the delivery of effective, high quality, culturally sensitive, and patient-centered care. Below is a descriptive summary of the characteristics and accomplishments of grant programs and trainees who received Health Careers Pipeline and Diversity Program funding during Academic Year 2017-2018.

Select Program Characteristics

Program Name	Awardees	Trainees	Trainee Characteristics				Graduates/ Program Completers
			Underrepresented Minority (URM)		Disadvantaged		
COE	21	5,045	4,475	88.7%	2,518	49.9%	3,025
HCOP	17	5,017	3,597	71.7%	4,602	91.7%	2,868
HCOP: Skills	6	683	524	76.7%	674	98.7%	332
SDS	79	3,047	1,945	63.8%	3,047	100.0%	1,051

New award enhancement for Spanish-language proficiency

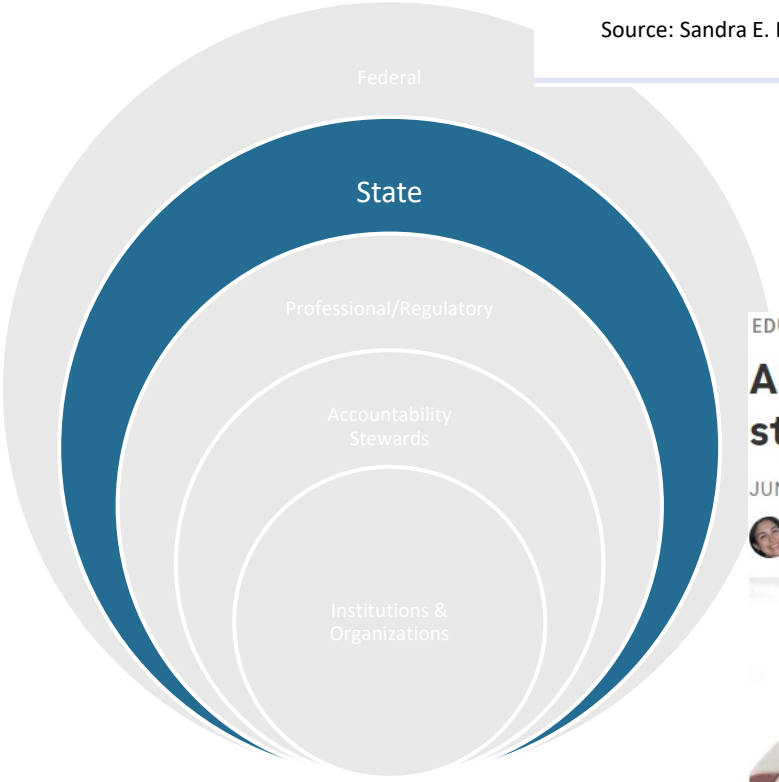
For the 2024 NHSC loan repayment programs, we aim to address language access barriers to health care. To support this effort, we will provide a one-time enhancement award of $5,000 for a total loan repayment award of:

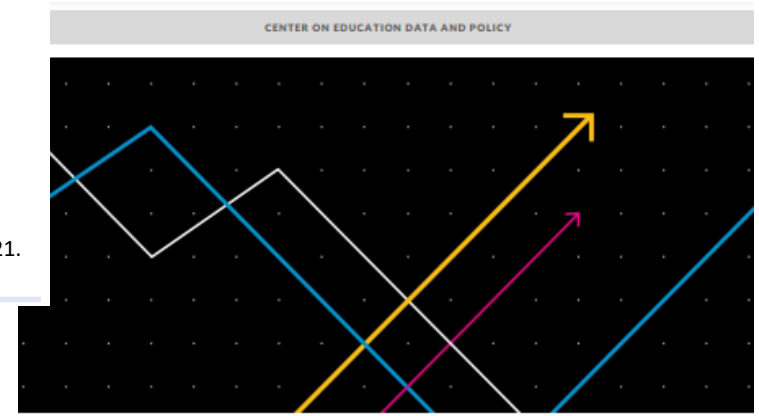
Primary care participants (physicians, nurse practitioners, certified nurse midwives, physician assistants serving in a primary care HPSA):

- **Up to $80,000** for full-time participants.
- **Up to $42,500** for half-time participants.

Texas's Top 10 Percent rule raised college attendance, graduation, and earnings for students from underrepresented high schools who gained access to UT Austin but did not reduce these metrics for those who were crowded out.

Source: Sandra E. Black & Jeffrey T. Denning & Jesse Rothstein, 2020. NBER Working Paper 26821.





EDUCATION

Arizona offers free college tuition to the state's Native students

JUNE 28, 2022 · 10:55 AM ET

Sequoia Carrillo

RESEARCH REPORT

Variation in Community College Funding Levels

A Focus on Equity

Sandy Baum *Jason Cohn*

December 2023

URBAN INSTITUTE · ELEVATE · THE · DEBATE

California Medicine Scholars Program

Research Letter

FREE

December 4, 2018

Association Between the Liaison Committee on Medical Education's Diversity Standards and Changes in Percentage of Medical Student Sex, Race, and Ethnicity

Dowin H. Boatright, MD, MBA, MHS[1]; Elizabeth A. Samuels, MD, MPH, MHS[2]; Laura Cramer, PhD, ScM[3]; et al

» Author Affiliations | Article Information

JAMA. 2018;320(21):2267-2269. doi:10.1001/jama.2018.13705

To improve diversity in undergraduate medical education, in 2009, the Liaison Committee on Medical Education (LCME) introduced 2 diversity accreditation standards mandating US allopathic medical schools to engage in systematic efforts to attract and retain students from diverse backgrounds and develop programs, such as pipeline and academic enrichment programs, to broaden diversity among qualified applicants.[1] These standards characterized diversity broadly, including but not limited to sex, race/ethnicity, and socioeconomic status. Because individual medical schools undergo accreditation review at least every 8 years, the LCME would have evaluated all schools for adherence by 2017. This observational study examined the change in US medical school matriculant sex, race, and ethnicity after the implementation of the LCME diversity accreditation standards.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

AAP Perspective: Race-Based Medicine

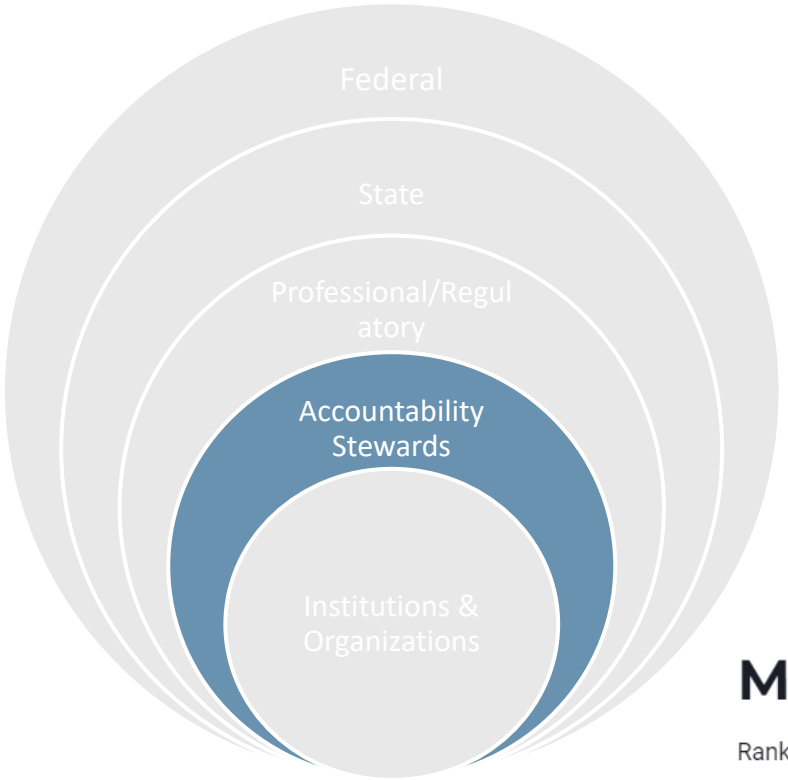
American Academy of Pediatrics Board of Directors and Executive Committee

INTRODUCTION

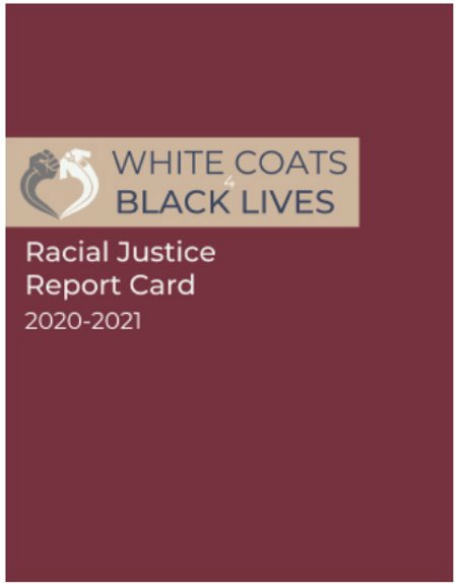
Race is not a biological category that produces health disparities due to genetic differences; rather, it is a social category that can have devastating biological consequences. Social inequality impacts people's physical and mental health. In other words, race should not be viewed as a risk factor that predicts disease, disease severity, and disability but as a risk marker of bias, discrimination, and vulnerability.

RACE AS A MEDIATOR OF STRUCTURAL INEQUALITIES

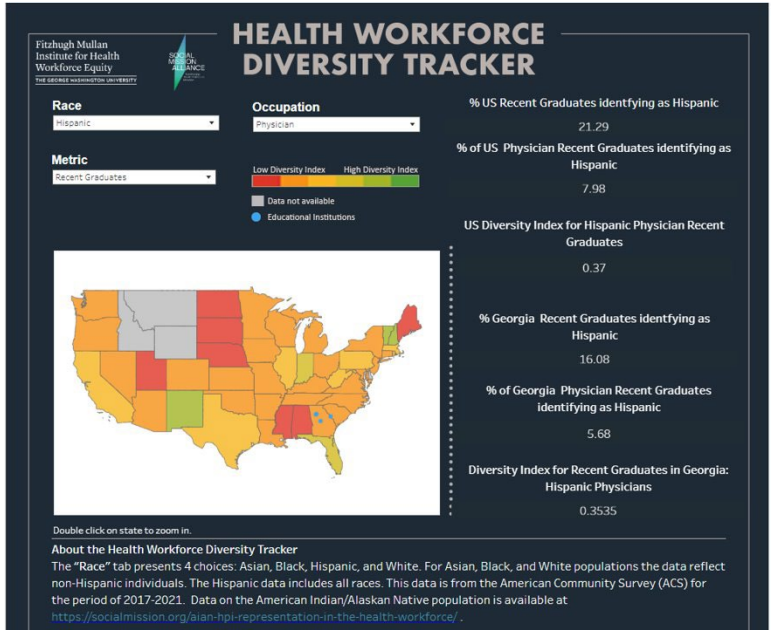
In 2019, the American Academy of Pediatrics (AAP) cautioned against false notions of racial biology in its policy statement "The Impact of Racism on Child and Adolescent Health," naming racism as a social



Students & Advocates



Researchers



Media

Most Diverse Medical Schools

Ranked in 2023, part of Best Medical Schools

Prospective medical students looking to attend an institution with minority representation can use the Most Diverse Medical Schools ranking to narrow their search. Each medical school's ranking is based on the percentage of each medical school's fall 2021 total enrollment as reported to U.S. News that are underrepresented minority students and how that percentage compares with state and national race-ethnic-group proportions. U.S. News worked with the Robert Graham Center, a division of the American Academy of Family Physicians, on this ranking. Read the methodology »

BEST GRAD SCHOOLS
U.S.News & WORLD REPORT
RANKINGS

Revolutionizing Health Professions Admissions to Achieve an Inclusive Workforce

Mytien Nguyen, Randl Dent, Tonya L. Fancher, Arra Jane Soriano, Charlene K. Green and Mark C. Henderson

The Annals of Family Medicine February 2023, 21 (Suppl 2) S75-S81; DOI: https://doi.org/10.1370/afm.2922

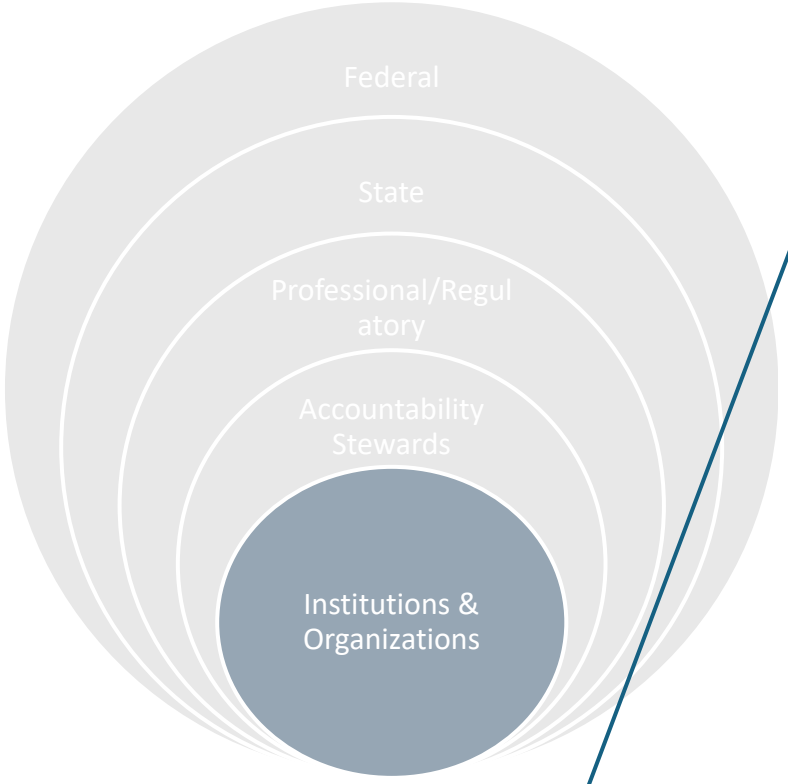


Table 4. Summary of Strategies for Health Professional Admission Practices

Theme	Strategies
Admission metrics	Implement threshold MCAT score specific to the health professions institution, allowing applicant metrics to be masked early in the admissions process.
	De-prioritize GPA and standardized test scores while placing greater emphasis on alternative metrics (eg, experience working with disadvantaged communities and applicant alignment with school mission).
	Examples of alternative admission metrics can be found in Table 1.
Aligning admission practices with institutional mission	Use the Health Professions admissions mission statement to inform the entire admissions process including the initial screening, interviews, and final decision.
	Evaluate your school's social mission index[18] annually to ensure the school, specifically admission practices, are advancing the mission.
	Recruit new committee members with diverse perspectives and backgrounds, particularly those from underrepresented groups. Students should be included as full voting members.
	Review and align composition of admissions committee with the mission of the institution or committee charge.
	Require anti-bias, anti-racism, and anti-ableist training for committee members and explain characteristics of mission-aligned applicants.
	Re-examine admission processes for potential exclusionary practices, particularly for students with disabilities.
Community partnerships to fulfill the social mission	Develop relationships with community-based organizations, local K-12 schools, community colleges, and 4-year institutions.
	Partner with nearby community colleges, training their advisors about how to best prepare students for a successful application.
	Include community members as interviewers or partners in the admissions process.
	Develop training pathways to address local or regional health workforce shortages.
Student support and retention	Encourage belonging and affirmation in the interview process.
	Provide tangible wrap-around support such as scholarships, financial education, and transportation.
	Implement mentorship from faculty of similar backgrounds and peer support to aid students' academic success and belonging.
	Create support services and infrastructure to support students with disabilities.
	Collect and use institutional data on the student experience to change policies and/or personnel to better support students

GPA = grade point average; K-12 = kindergarten through grade 12; MCAT = medical college admissions test.

UCDAVIS HEALTH | SCHOOL OF MEDICINE

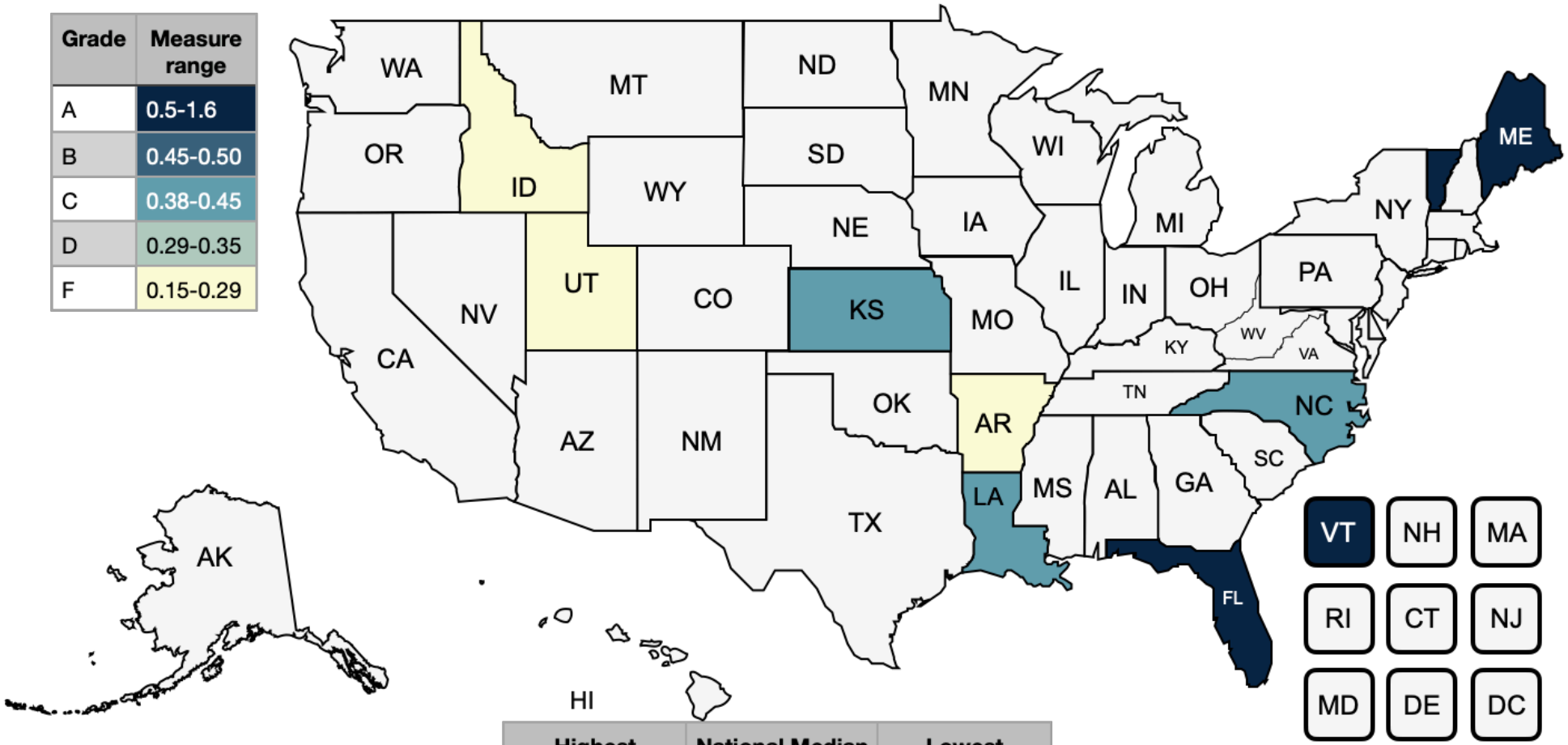
HWE Domain 1 State Level Performance Measurement

Health Workforce Diversity: Focus on State Performance

Metric	Definition	Data Source
Diversity of the workforce	Within each state, the cumulative percentage of dentists, pharmacists, and physicians who identify as Black, Hispanic, or American Indian/Alaskan Native relative to the percentage of the cumulative workforce population of these races and ethnicities, aged 20-65.	American Community Survey (ACS), U.S. Census Bureau
Diversity of the pipeline	Within each state, the cumulative percentage of graduates of dental, pharmacy, and medical schools who identify as Black, Hispanic, or American Indian/Alaskan Native relative to the percentage of the cumulative population for these races and ethnicities, aged 20-35.	American Community Survey (ACS), U.S. Census Bureau[31] Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics

Goal 1: Health Workforce Diversity
HWE 1-a: Percent URM Health Workforce to Percent URM State Pop. 20-65

Grade	Measure range
A	0.5-1.6
B	0.45-0.50
C	0.38-0.45
D	0.29-0.35
F	0.15-0.29



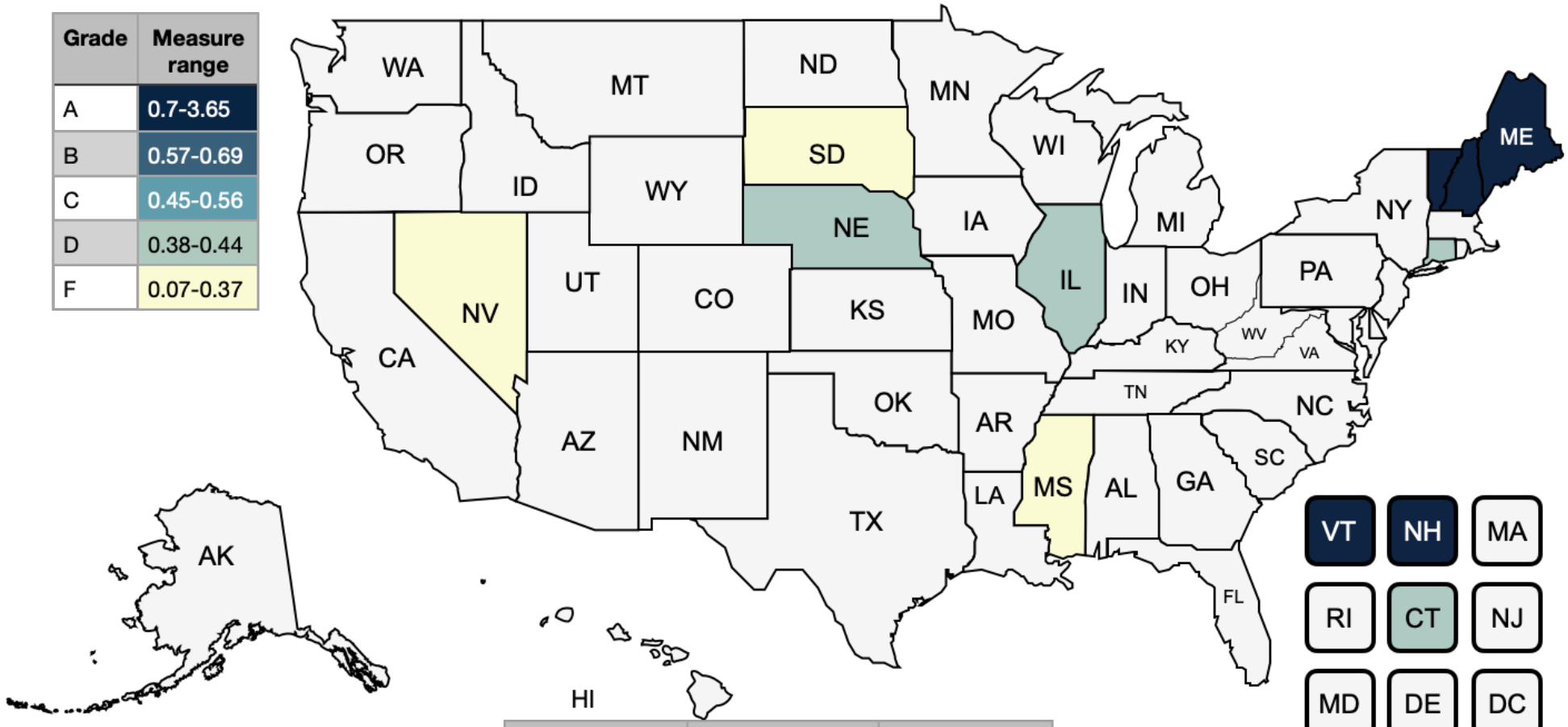
Highest	National Median	Lowest
VERMONT (1.6%)	0.41%	ARKANSAS (0.15%)

Data Source: American Community Survey (2015 & 2020)

Goal 1: Health Workforce Diversity

HWE 1-b: Percent URM Health Workforce Pipeline to Percent URM State Pop. 20-35

Grade	Measure range
A	0.7-3.65
B	0.57-0.69
C	0.45-0.56
D	0.38-0.44
F	0.07-0.37



Highest	National Median	Lowest
NEW HAMPSHIRE (3.65%)	0.52%	MISSISSIPPI (0.07%)

Data Source: American Community Survey (2015 & 2020); IPEDS (2019)


1. WHO ENTERS THE HEALTH WORKFORCE?
2. HOW ARE THEY EDUCATED & TRAINED?
3. WHERE & WHAT SPECIALTY DO THEY PRACTICE ?
4. WHOM DO THEY SERVE?
5. HOW DO THEY PRACTICE?
6. UNDER WHAT WORKING CONDITIONS
HEALTH WORKFORCE EQUITY

Relationship to Health Equity

Social Mission of Health Professions Education

The role of schools in advancing health equity and addressing health disparities

Nearly 1 Million
Current Trainees

Diversity
Primary Care
Rural & Underserved
Equity Practitioners

Health Equity

Institutions

- Governance
- Climate and Culture
- Diversity

Education & Activities

- Equity-oriented Curriculum
- Community Engagement
- Health Equity Research
- Activism

Policy

- Federal & State Policy
- Accreditation & Certification
- Grantmaking
- Dismantle Systemic Discrimination

Nature and Magnitude of the Problem

Top ranked medical schools create physicians who do not meet the priority healthcare needs of the nation.

The Social Mission of Medical Education: Ranking the Schools

Fitzhugh Mullan, MD; Candice Chen, MD, MPH; Stephen Petterson, PhD; Gretchen Kolsky, MPH, CHES; and Michael Spagnola, BA

Rank	School	State	Social Mission Score†	Primary Care Physicians		Physicians Practicing in HPSAs		School–State (Nation) Ratio of Underrepresented Minorities	
				Total, %	Standardized Score‡	Total, %	Standardizec Score‡	Ratio	Standardized Score‡
Highest 20									
1	Morehouse School of Medicine	GA	13.98	43.7	1.20	39.1	1.40	3.15	11.38
2	Meharry Medical College	TN	12.92	49.3	2.00	28.1	0.14	2.99	10.78
3	Howard University	DC	10.66	36.5	0.19	33.7	0.78	2.71	9.68
4	Wright State University Boonshoft School of Medicine	OH	5.34	49.2	1.98	28	0.12	1.31	3.23
5	University of Kansas	KS	4.49	45.2	1.42	43.9	1.96	0.77	1.12
6	Michigan State University College of Human Medicine	MI	4.13	43.6	1.20	26.5	–0.05	1.24	2.99
7	East Carolina University Brody School of Medicine	NC	3.72	51.9	2.36	34.2	0.84	0.62	0.52
8	University of South Alabama	AL	3.15	42	0.97	52.7	2.97	0.29	–0.78
9	Ponce School of Medicine	PR	3.02	33	–0.31	43.8	1.94	0.84	1.38
10	University of Iowa Carver College of Medicine	IA	2.97	37.1	0.28	21	–0.69	1.35	3.38
Lowest 20§									
1	Vanderbilt University	TN	–3.95	21.9	–1.86	20.8	–0.70	0.13	–1.38
2	University of Texas Southwestern Medical Center	TX	–3.64	26.8	–1.18	15.1	–1.36	0.21	–1.09
3	Northwestern University Feinberg School of Medicine	IL	–3.11	24.4	1.51	19.5	–0.86	0.30	–0.74
4	University of California, Irvine	CA	–3.02	32.9	–0.32	14.2	–1.47	0.17	–1.24
5	New York University	NY	–2.65	24.3	–1.53	22.1	–0.55	0.34	–0.57
6	University of Medicine and Dentistry of New Jersey—NJ	NJ	–2.46	23.7	–1.61	17.8	–1.05	0.54	0.20
7	Uniformed Services University of the Health Sciences	MD	–2.36	29.6	–0.78	21.4	–0.64	0.24	–0.95
8	Thomas Jefferson University	PA	–2.34	32.1	–0.42	20.6	–0.72	0.18	–1.19
9	Stony Brook University	NY	–2.21	29.1	–0.85	20.4	–0.76	0.33	–0.60
10	Albert Einstein College of Medicine of Yeshiva University	NY	–2.13	26.1	–1.28	24.8	–0.25	0.33	–0.60

Activities and Indicators of Social Mission in Health Professions Education

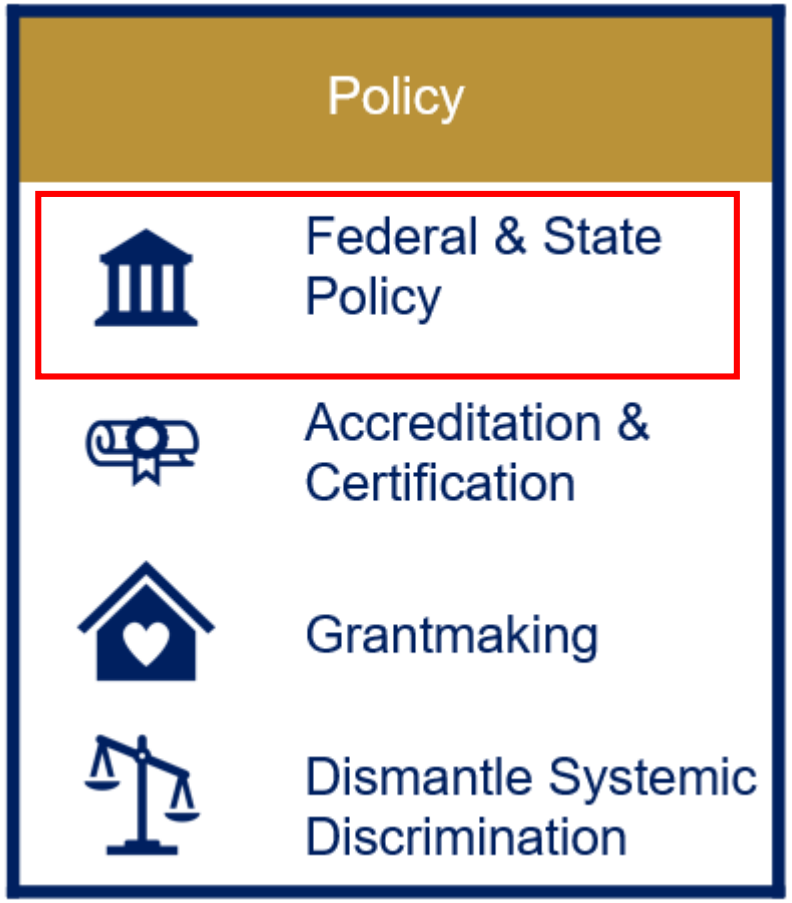
Domain	Activities	Indicators
Educational program	• Clinical rotations or courses with patients from underserved communities off site • Social mission embedded in the curriculum • Development of training programs for new, critical members of the health team	• Number and quality of clinical or course hours in underserved communities • Curriculum content focused on the social determinants of health, health disparities • Training for community health workers, medical assistants, dental hygienists, dental assistants, and/or nurse's aides
Community engagement	• Concordance between community needs and education • Participation in clinics, offices, or programs in the local community • Meaningful bidirectional community partnerships	• Use of a community health needs assessment to inform educational activities • Community feedback on the value and effectiveness of programs • Legal partnerships, faith-based partnerships, FQHC partnerships/practice or clinical teaching arrangements, school/education partnerships, public health department partnerships, philanthropic organization partnerships
Governance	• Social mission values explicit in written goals	• Mission statement or strategic plan includes social mission terms
Diversity and inclusion	• Diversity and inclusion in the recruitment and admissions processes • Student diversity • Faculty diversity • Academic leadership diversity	• Principles of holistic review in admissions policies • Student body and graduating classes reflect the racial and ethnic distribution of the population • Faculty reflects the racial, ethnic, and gender distribution of the populace and includes LGBTQ+ individuals • Academic leadership reflects the racial, ethnic, and gender distribution of the populace and includes LGBTQ+ individuals
Institutional culture and climate	• Faculty and student training in the social mission • Faculty and student activism • Career counseling on primary care and priority health care needs	• Training in unconscious/implicit bias, cultural competency/cultural humility, health-related advocacy issues, and social determinants of health • Noncredit and credit participation in community-oriented programs/institutions • Percentage of graduates going into primary care/general community–based practice
Research	• Participation in social mission–related research projects • Community needs affect research agenda	• Number of research projects in community-engaged research, health equity/health disparity research, health promotion/health disease prevention research, social determinants of health research, and health/community needs research • Community needs assessment guides research agenda

Abbreviations: FQHC, federally qualified health center; LGBTQ+, lesbian, gay, bisexual, transgender, and queer.

Source: Batra, 2020

Policies and Programs to Address the Problem

Different levels of policy action can promote the social mission of health professions education.



HRSA Workforce Program Aims

ACCESS
Make it easier for people to access health care

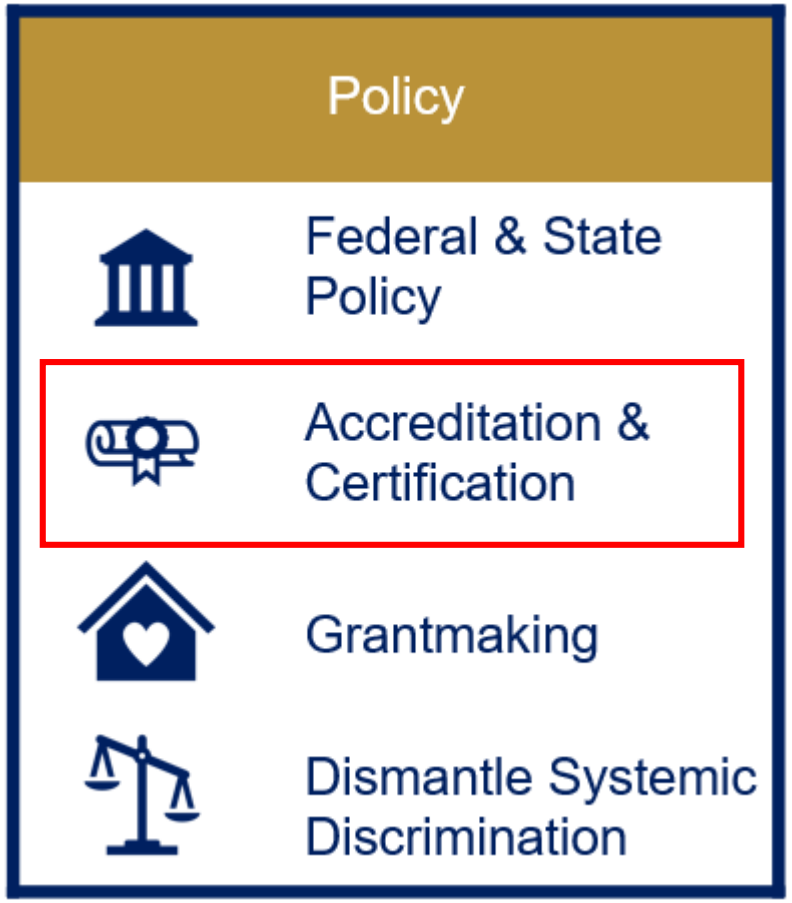
SUPPLY
Balance the supply of health workers with the demand for care

DISTRIBUTION
Improve distribution of the health workforce

QUALITY
Improve the quality of the health workforce and the care they provide

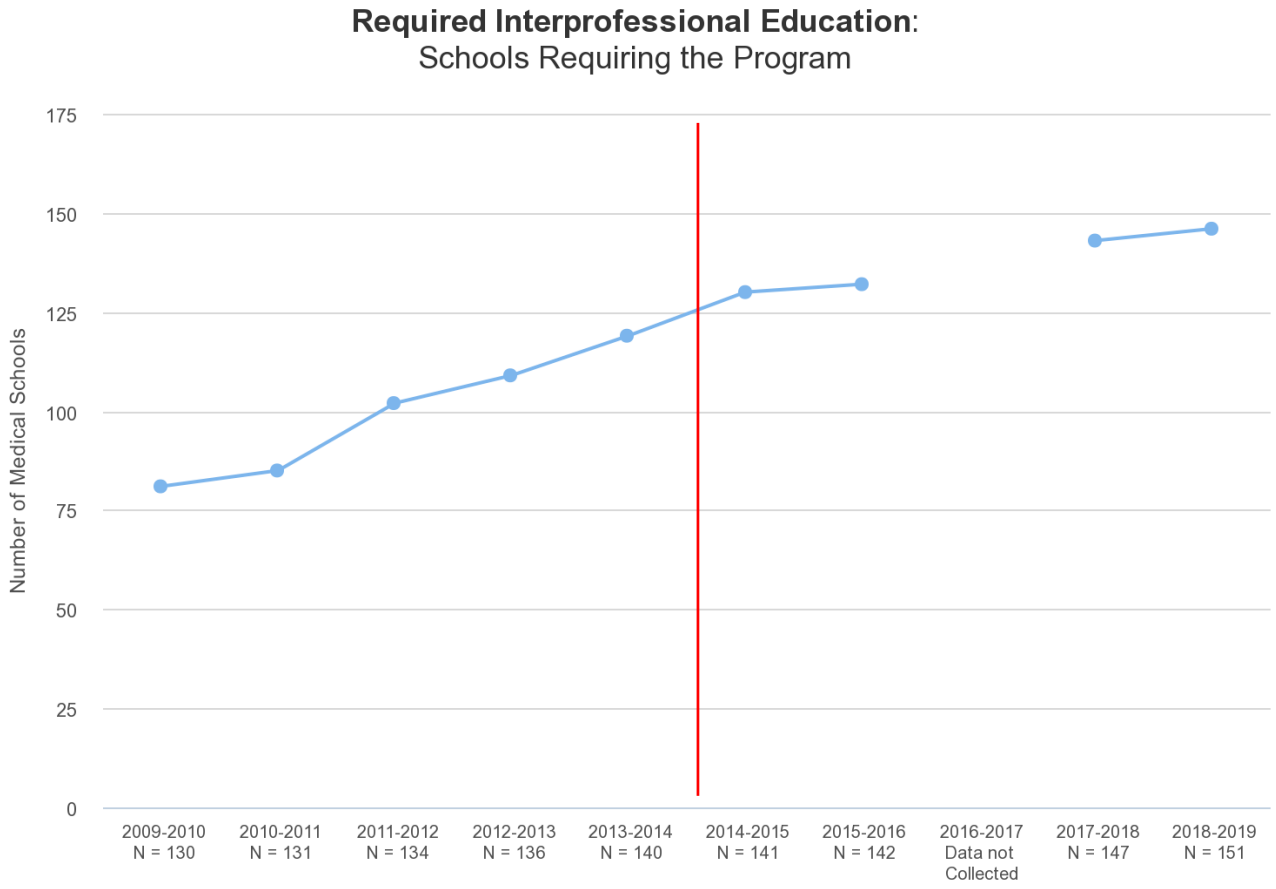
- **Authorization & Investment:** Title VII and VIII of the Public Health Service Act:
  - Workforce Diversity Programs
  - Primary Care Workforce Programs
  - Interdisciplinary Care and Community-based Linkages
  - Nursing Workforce Development Programs
  - Public Health, Preventive Medicine, Oral Health Training Programs
- **Programming & funding requirements:** that prioritize the development and implementation of curriculum that includes health equity and cultural humility

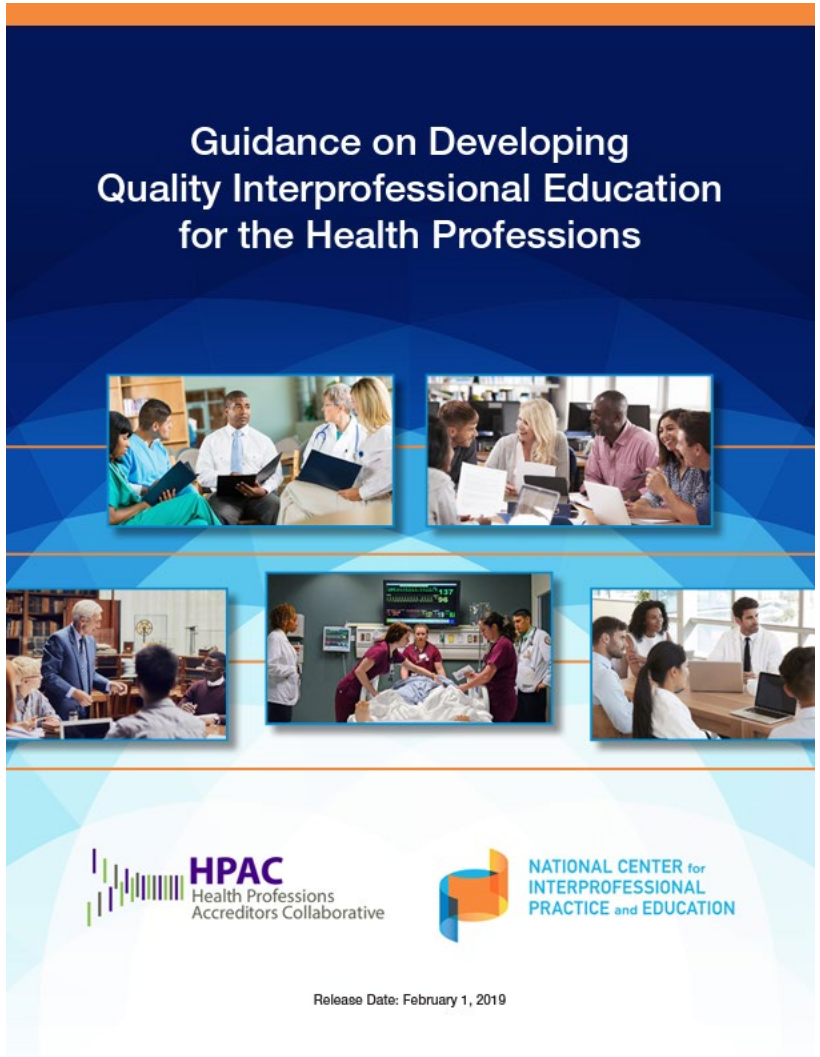
Different levels of policy action can promote the social mission of health professions education.



- Accreditation Standards
- Competency requirements
- Certification and licensing exams

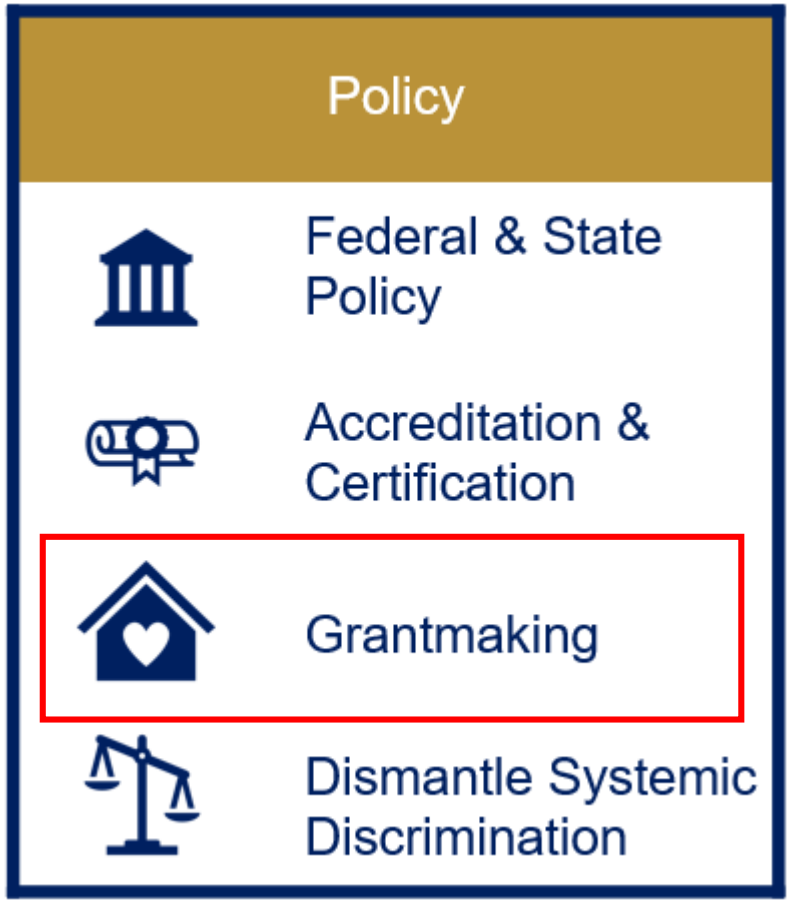
Accreditation: The case of Interprofessional Education





Data Source: Liaison Committee on Medical Education (LCME) Annual Medical School Questionnaire Part II

Different levels of policy action can promote the social mission of health professions education.



Public and private funders:

- Program/grant objectives
- Targeted outreach
- Eligibility requirements
- Application review criteria
- Award making decisions
- Program/grant requirements
- Evaluation metrics

The Josiah Macy Jr. Foundation is the only national foundation dedicated solely to improving the education of health professionals.

Our guiding principle is that health professional education has at its core a strong social mission: to serve the public's needs and improve the health of the public.

Different levels of policy action can promote the social mission of health professions education.

Institutions

- Governance
- Climate and Culture
- Diversity

Education & Activities

- Equity-oriented Curriculum
- Community Engagement
- Health Equity Research
- Activism

TABLE 3
Results for individual social mission areas
School name here
Institution name here

★★★★ TOP QUARTILE
★★★ SECOND QUARTILE
★★ THIRD QUARTILE
★ FOURTH QUARTILE
— NOT SCORED

Social Mission Areas		Result in relation to all participating schools	Result in relation to all participating medical schools
Area1	Curriculum	★★★	★★★★
Area2	Extracurricular activities	★	★★
Area3	Targeted education	—	—
Area4	Global health	★★	★★
Area5	School mission	★★	★★★
Area6	Curriculum and community needs	★	★
Area7	Community collaborations	★	★
Area8	Student diversity	★★★	★★★
Area9	Faculty diversity	★	★★
Area10	Academic leadership diversity	★★★	★★★★
Area11	Pipeline programs	★	★★
Area12	Student training	—	—
Area13	Faculty training	—	—
Area14	Student-run clinics	★★	★★★
Area15	Student activism	—	—
Area16	Faculty activism	—	—
Area17	Primary care	★★	★★
Area18	Research focus	★★★	★★★

Note: Results for individual areas were divided into Quartiles. The Top Quartile is the highest quartile and the Fourth Quartile is the lowest quartile. Areas in which a substantial number of questions were left blank on your survey were not scored.

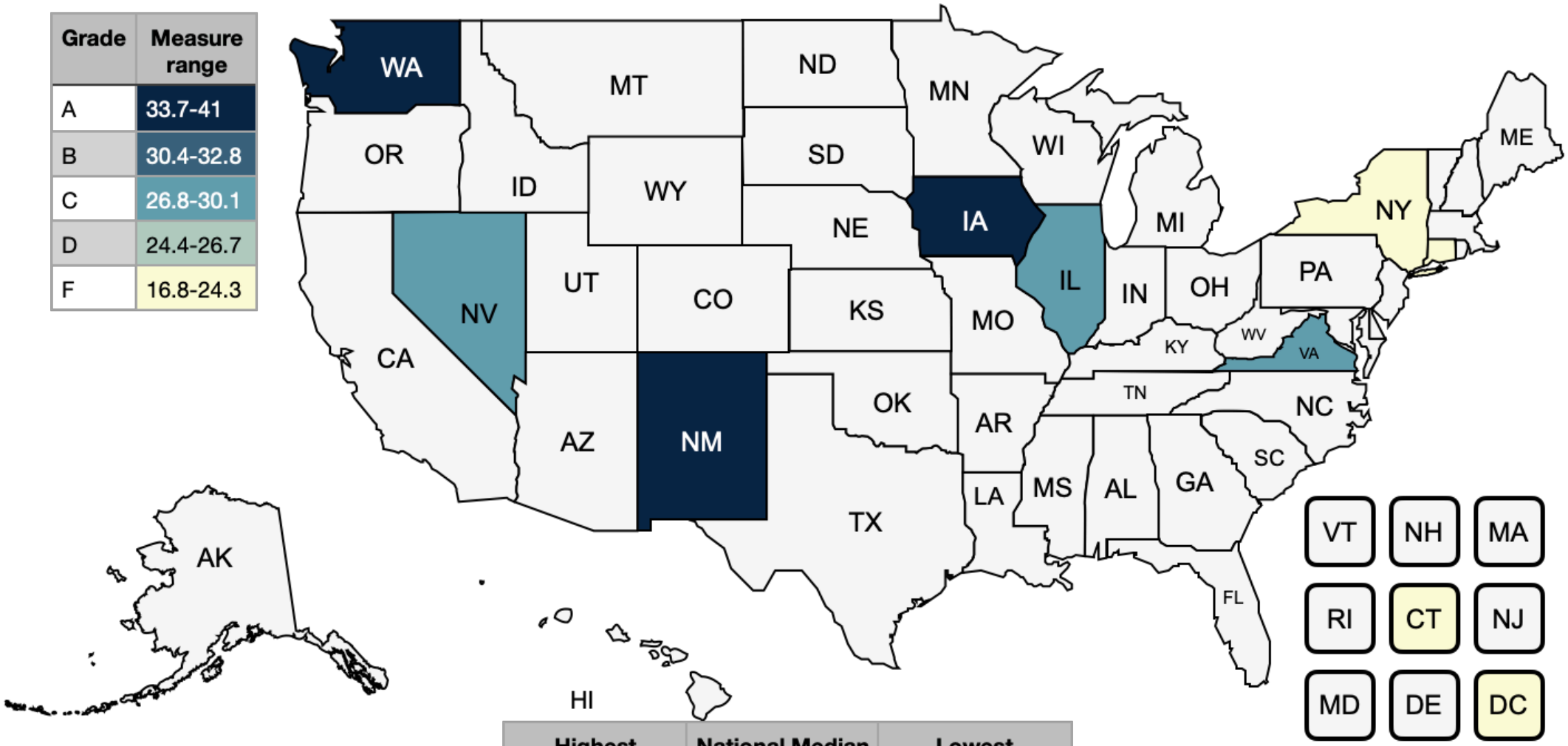
HWE Domain 2 State Level Performance Measurement

Health Professions Education & Training: Focus on State Performance

Metric	Definition	Data Sources
Primary care production - graduates	The number of physicians who graduated between 2013-2015 and are practicing in a primary care field divided by the total number of graduating physicians from each medical school, aggregated at the state level based on the school's geographical location.	Robert Graham Center - Analysis of AMA Physician Master File, U.S. News and World Reports[33(a)]
Practice in underserved areas - graduates	Percentage of each school's 2013-2015 medical and osteopathic graduates practicing direct patient care in Health Professional Shortage Areas.	Robert Graham Center - Analysis of AMA Physician Master File, U.S. News and World Reports[34(a)]
Medicaid acceptance - graduates	The proportion of medical school graduates from 2009 to 2012 who treated at least 150 Medicaid beneficiaries in 2016 T-MSIS, based on the state where they graduated.	Transformed Medicaid Statistical Information System (T-MSIS), CMS[35] National Plan & Provider Enumeration System (NPPES), CMS[36] AMA Physician Master File, American Medical Association[37]

Goal 2: Health Professions Education
HWE 2-a-1: Average Primary Care Score (All Schools)

Grade	Measure range
A	33.7-41
B	30.4-32.8
C	26.8-30.1
D	24.4-26.7
F	16.8-24.3

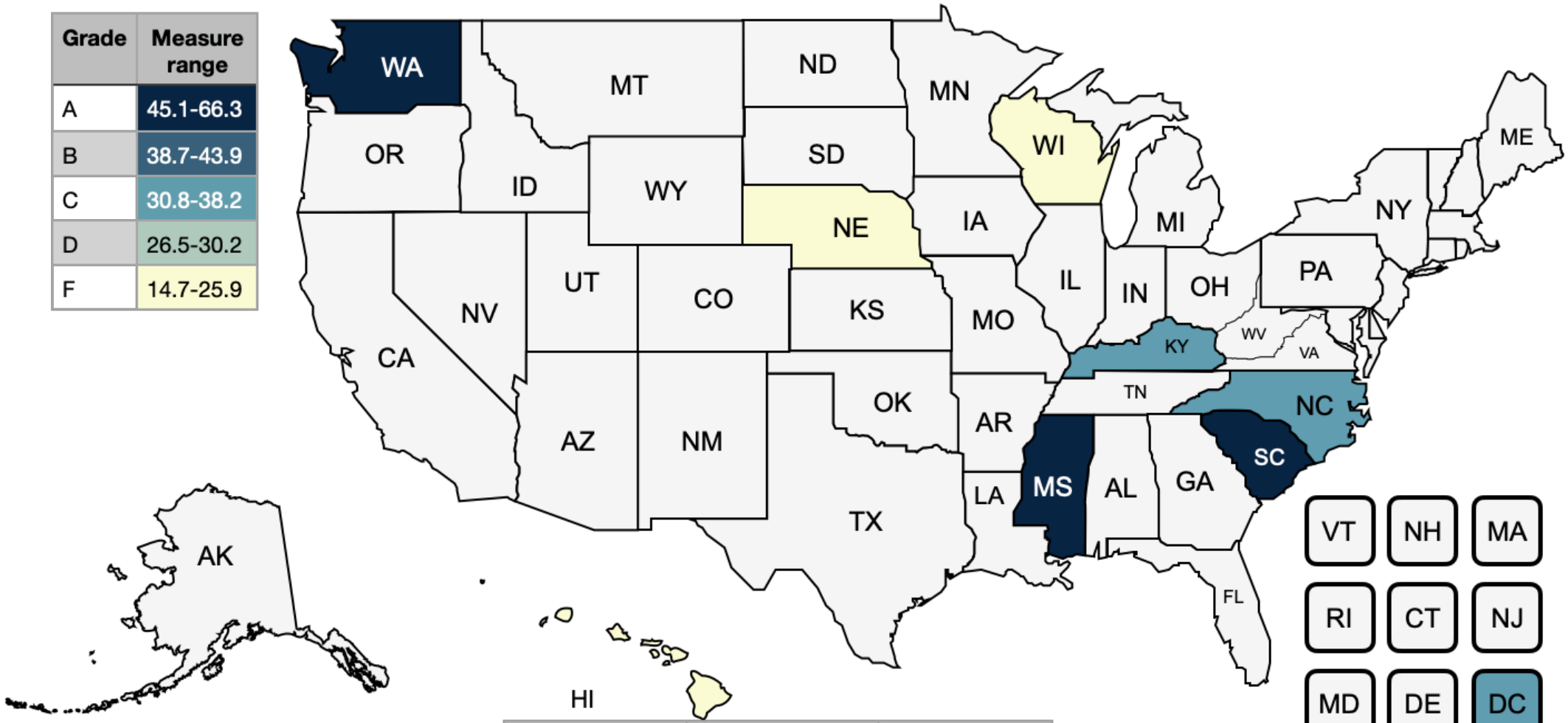


Highest	National Median	Lowest
WASHINGTON (41)	27.4	CONNECTICUT (16.8)

Data Source: U.S. News and World Reports (2022) – Robert Graham Center analysis of AMA Physician Master File

Goal 2: Health Professions Education
HWE 2-b-1: Average Score for Practice in Underserved Area (All Schools)

Grade	Measure range
A	45.1-66.3
B	38.7-43.9
C	30.8-38.2
D	26.5-30.2
F	14.7-25.9

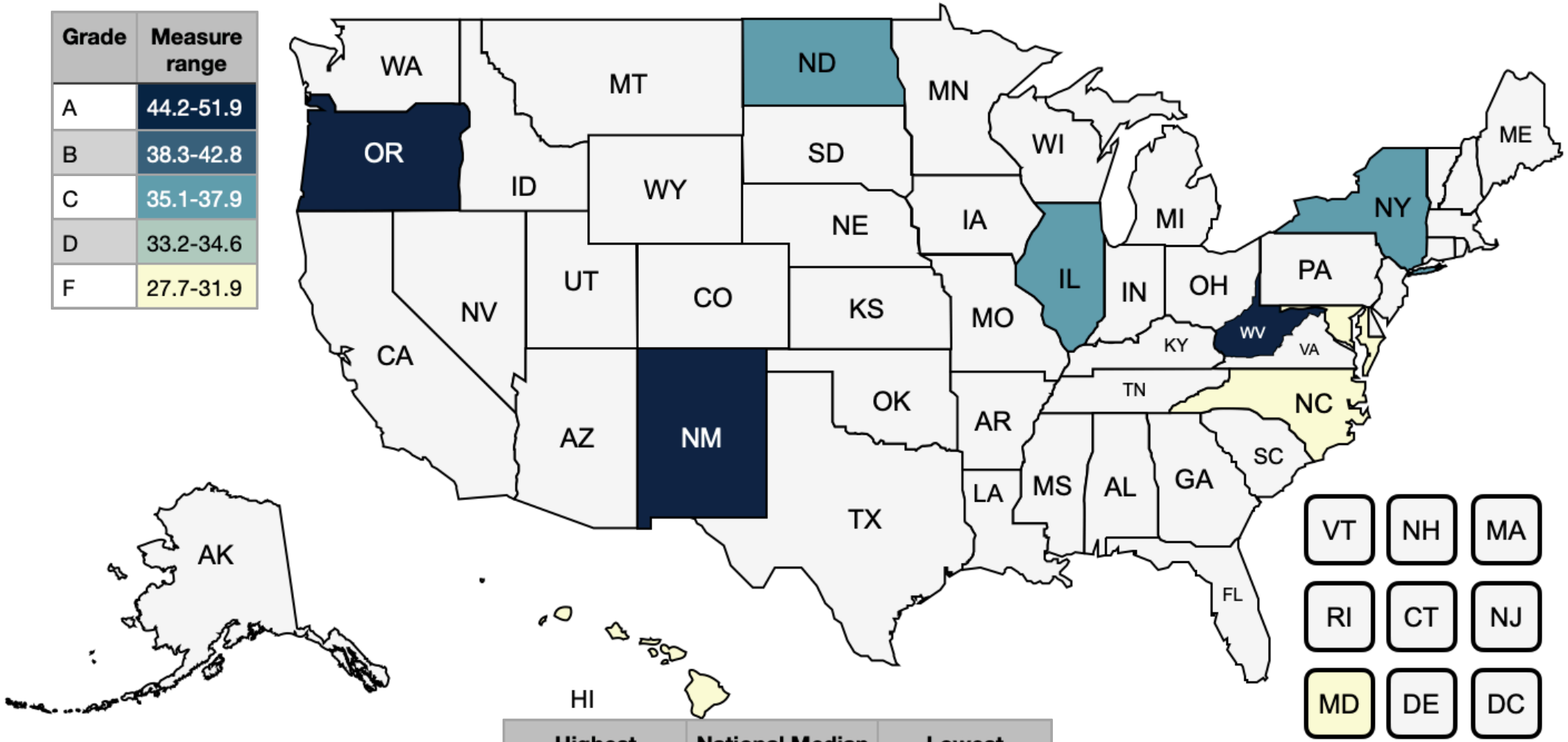


Highest	National Median	Lowest
SOUTH CAROLINA (66.3)	34.6	HAWAII (14.7)

Data Source: U.S. News and World Reports (2022) – Robert Graham Center analysis of AMA Physician Master File

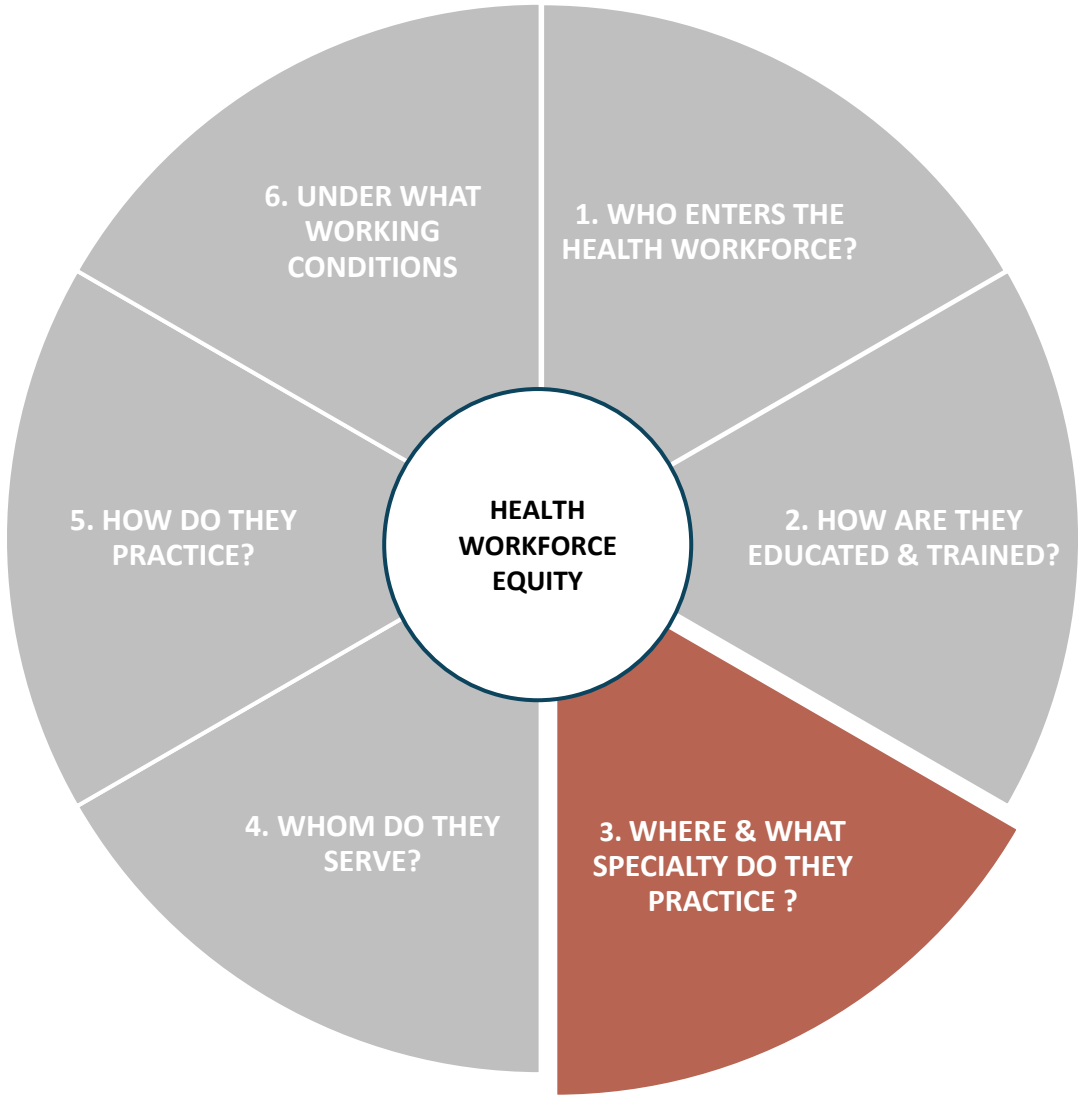
Goal 2: Health Professions Education
HWE 2-c: Percent Medical Graduates Treating 150 or More Medicaid Beneficiaries

Grade	Measure range
A	44.2-51.9
B	38.3-42.8
C	35.1-37.9
D	33.2-34.6
F	27.7-31.9



Highest	National Median	Lowest
NEW MEXICO (51.86%)	35.92%	MARYLAND (27.69%)

Data Source: Transformed Medicaid Statistical Information (T-MSIS) (2019)


HEALTH WORKFORCE EQUITY
1. WHO ENTERS THE HEALTH WORKFORCE?
2. HOW ARE THEY EDUCATED & TRAINED?
3. WHERE & WHAT SPECIALTY DO THEY PRACTICE ?
4. WHOM DO THEY SERVE?
5. HOW DO THEY PRACTICE?
6. UNDER WHAT WORKING CONDITIONS

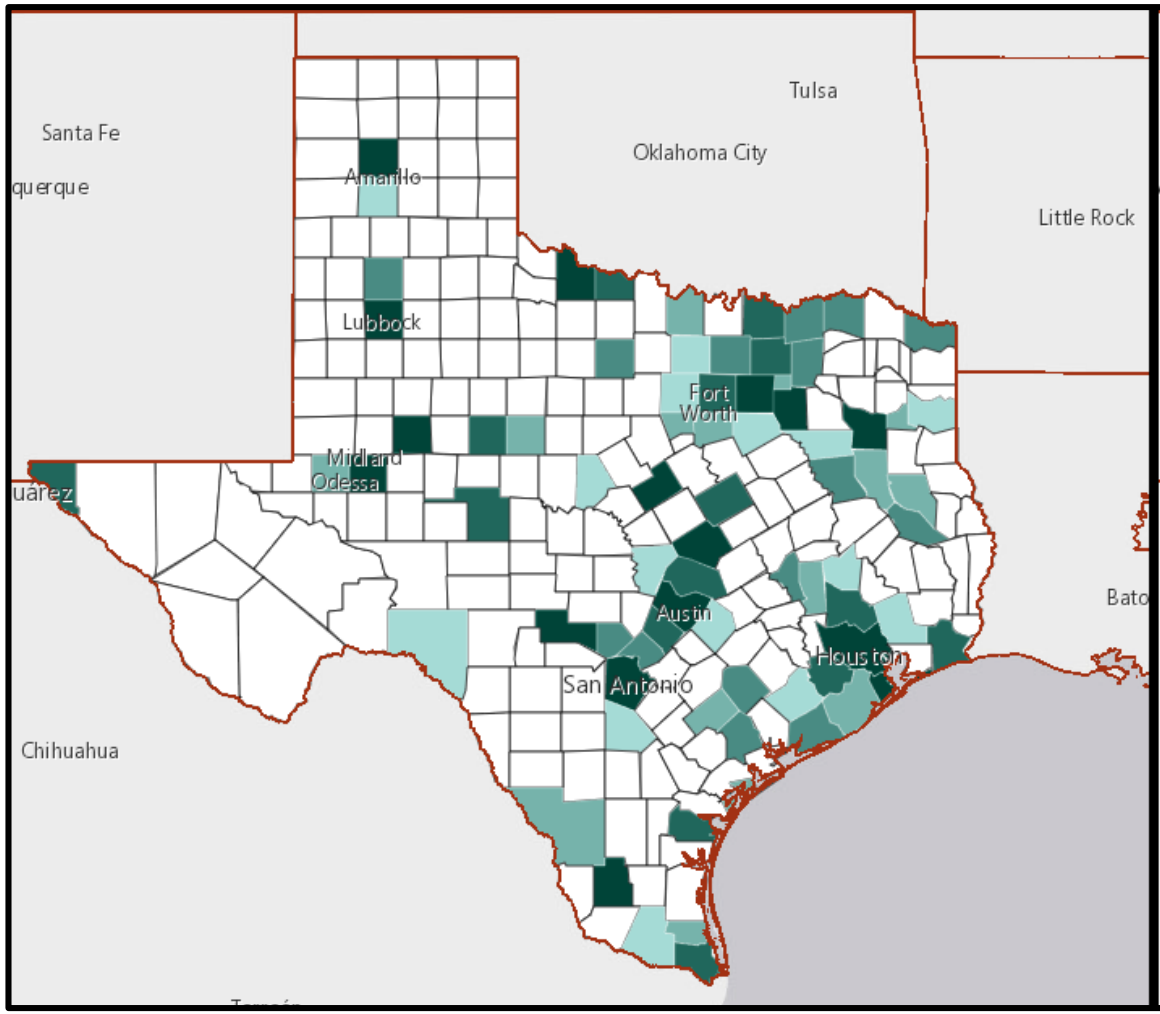
Relationship to Health Equity

Importance of primary care

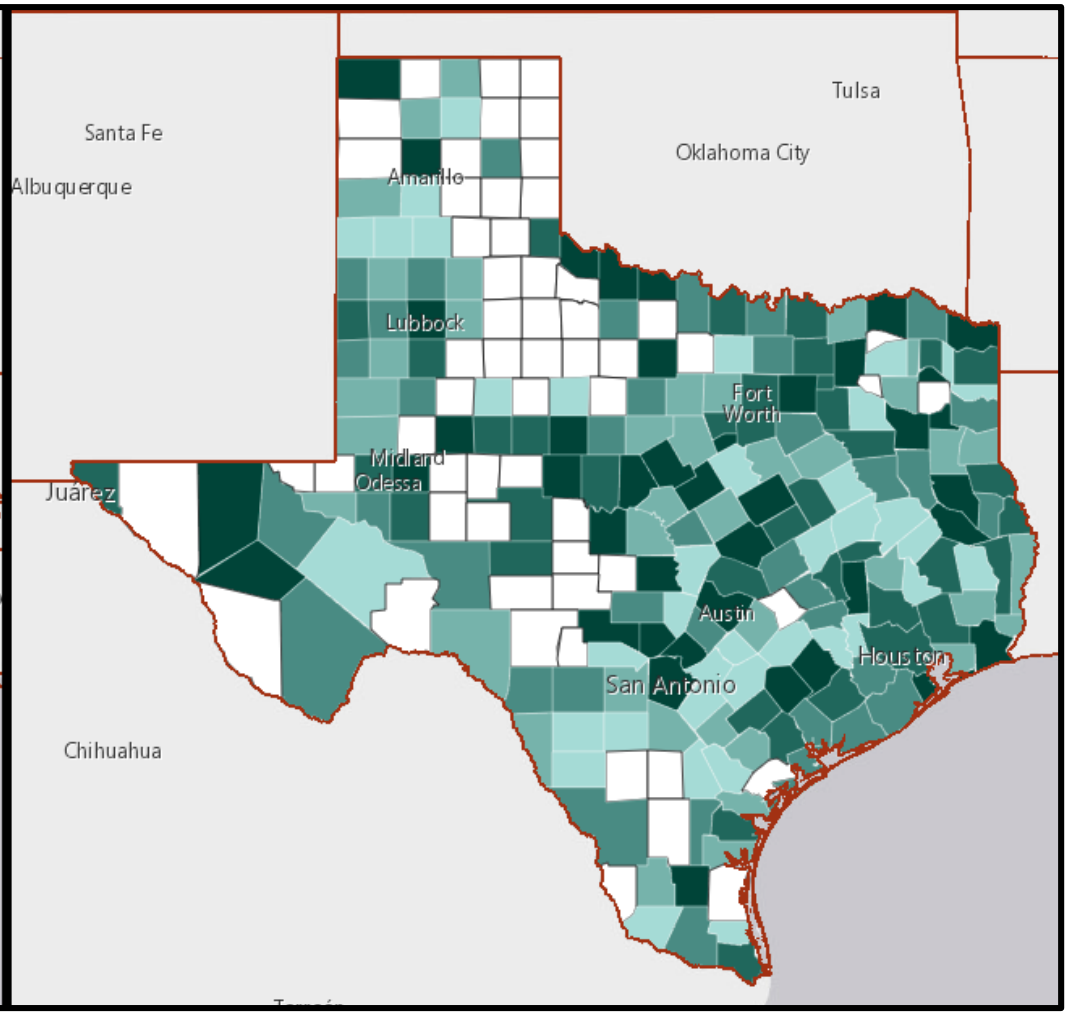
- Primary care only health care component where an increased supply is associated with better population health and more equitable outcomes.
- Higher ratios of primary care providers associated with:
  - ✓Life expectancy of more than 51 days for each 10/100K pop
  - ✓Lower rates of all-cause mortality and infant mortality
  - ✓Fewer ambulatory case-sensitive condition hospitalizations
  - ✓No significant differences in Medicare spending across groups

Role of Primary Care in Addressing Gaps in Care

Psychiatric and Addiction Specialists Only



Psychiatric and Addiction Specialists and Primary Care Providers

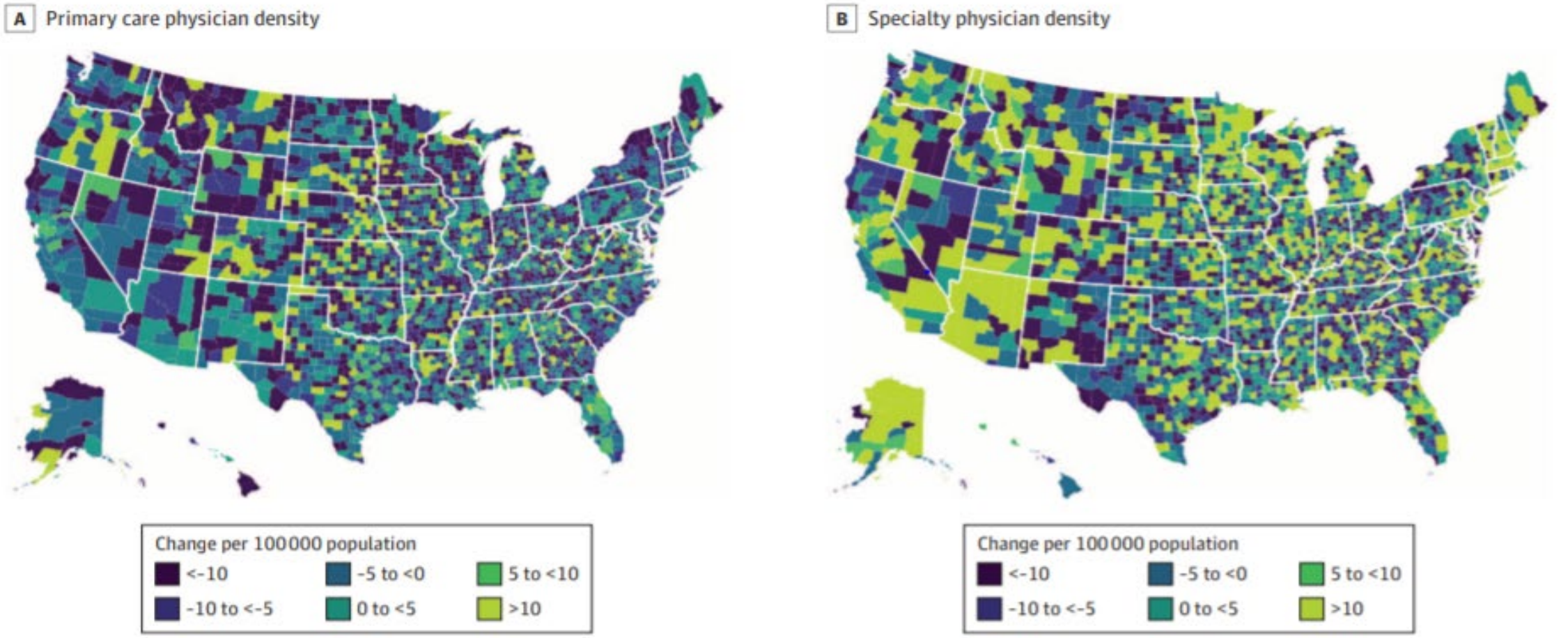


Nature and Magnitude of the Problem

Mean primary care physician supply decreasing, while specialty physicians increasing (though not in rural counties)

(Basu, 2019)

Figure 1. Changes in Density of Primary Care and Specialist Physicians in 3142 US Counties, 2005-2015



Underinvestment in the US primary care system persists

Primary Care Score associated with reduced all-cause mortality, all-case premature mortality, and cause-specific premature mortality

Table 2: Primary Care System and Practice Scores for OECD Countries

1975		*1985*		*1995*	
Country	*Score*	*Country*	*Score*	*Country*	*Score*
Countries Scoring above Mean					
Denmark	18	Denmark	18	U.K.	19
U.K.	17	U.K.	17	Denmark	18
Netherlands	14	Netherlands	15	Spain	16.5
Norway	13	Italy	13.5	Netherlands	15
Australia	12	Australia	13	Italy	14
Spain	11	Norway	13	Finland	14
Italy	10.5	Spain	11	Norway	13
Finland	10	Finland	10.5	Australia	13
Sweden	9.5	Canada	10.5	Canada	11.5
Canada	8	Sweden	9.5	Sweden	11
Countries Scoring below Mean					
Japan	7.5	Japan	7.5	Japan	7.5
Portugal	6	Portugal	7	Portugal	7
Greece	4	Germany	4	Belgium	4
Belgium	4	Belgium	4	Greece	4
Germany	4	Greece	4	U.S.A.	3
Switzerland	2.5	Switzerland	2.5	Germany	3
France	2	France	2	Switzerland	2.5
U.S.A.	1	U.S.A.	1	France	2
Summary Statistics by Decade					
Observations	18		18		18
Mean	8.85		9.27		9.65
Std. Dev.	5.01		5.26		5.51

Data Sources: Starfield 1998; Starfield and Shi 2002; European Health Observatory "Health Systems in Transition" publication series 1996–2001; OECD 2000, 2001; personal communications.

Source: The Contribution of Primary Care Systems to Health Outcomes within Organization for Economic Cooperation and Development (OECD) Countries, 1970–1998. Macinko, Starfield, and Shi. Health Services Research, 2005

Primary care receives about 5% of all health care spending in the US

(Martin et al., 2020)

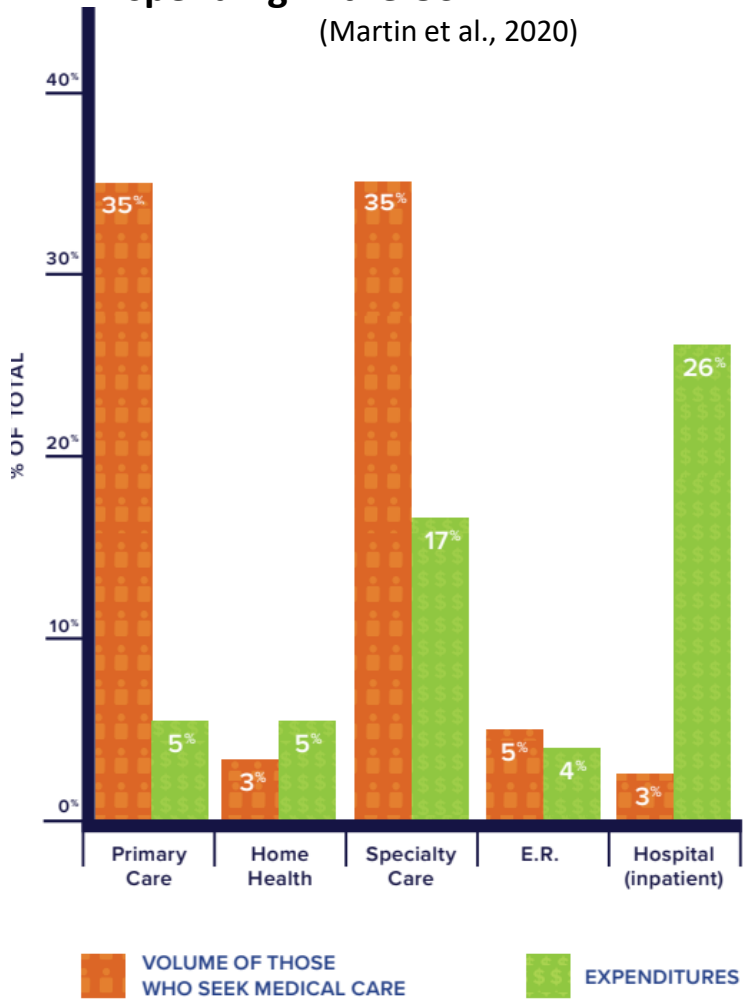


Figure source: National Academy of Sciences, 2021

Primary care explains physician shortfalls

Exhibit 4: Projected Primary Care Physician Shortfall Range, 2021-2036

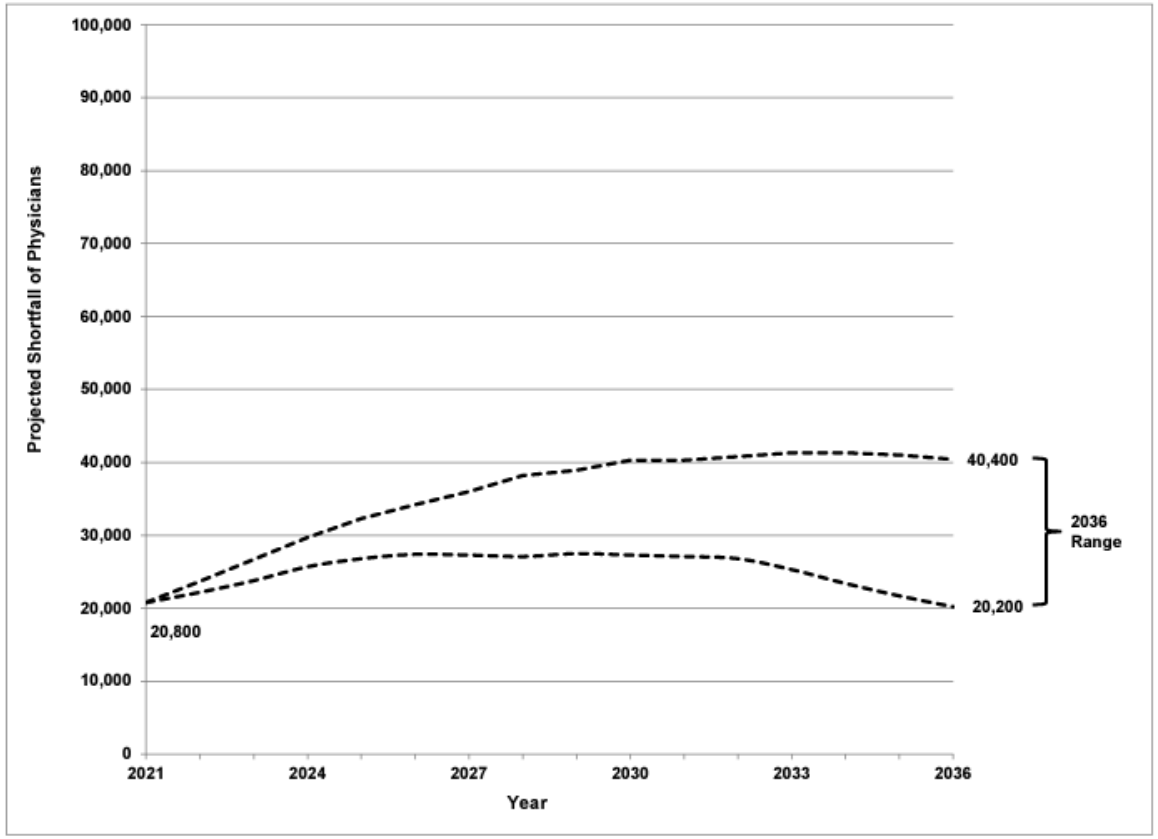


Figure Source: AAMC, 2024

Research Report

U.S. Graduate Medical Education and Physician Specialty Choice

Paul Jolly, PhD, Clese Erikson, MPAff, and Gwen Garrison, PhD

Academic Medicine, Vol. 88, No. 4 / April 2013

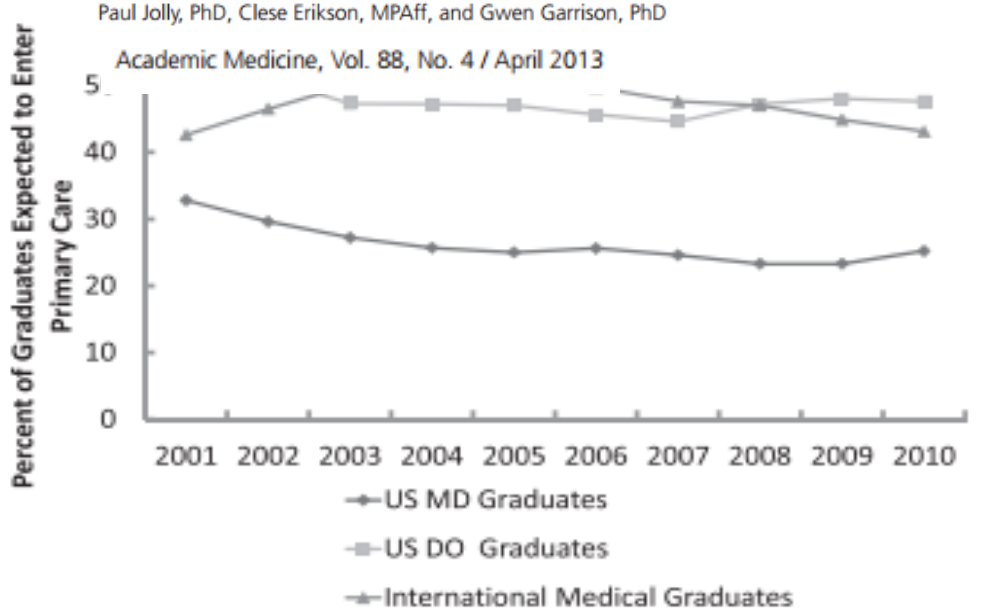


Figure 3 Estimated percentages of program year 1 residents (U.S. medical graduates, osteopathic graduates, and international medical graduates) who will enter primary care. Source: GMETrack Database, AAMC Data Warehouse, 2012.

It's not just physicians! The proportion of NPs and PAs working in primary care settings is also decreasing, despite growth in the professions overall, and growth as % of PCPs

Shortfalls get worse when examined through an equity lens

Exhibit 13: Current Use of FTE Physician Services per 100,000 Population by Patient Race and Ethnicity, 2021

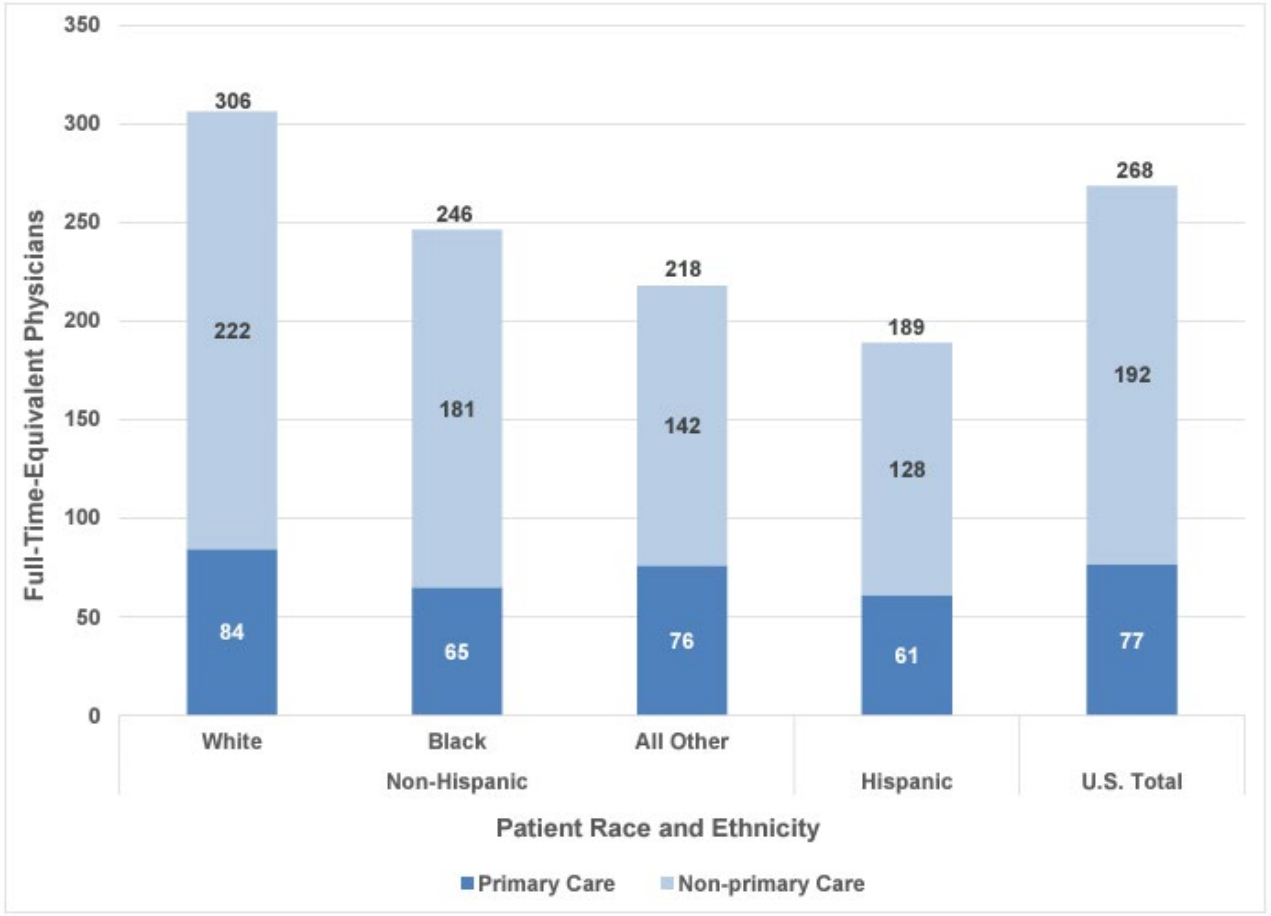


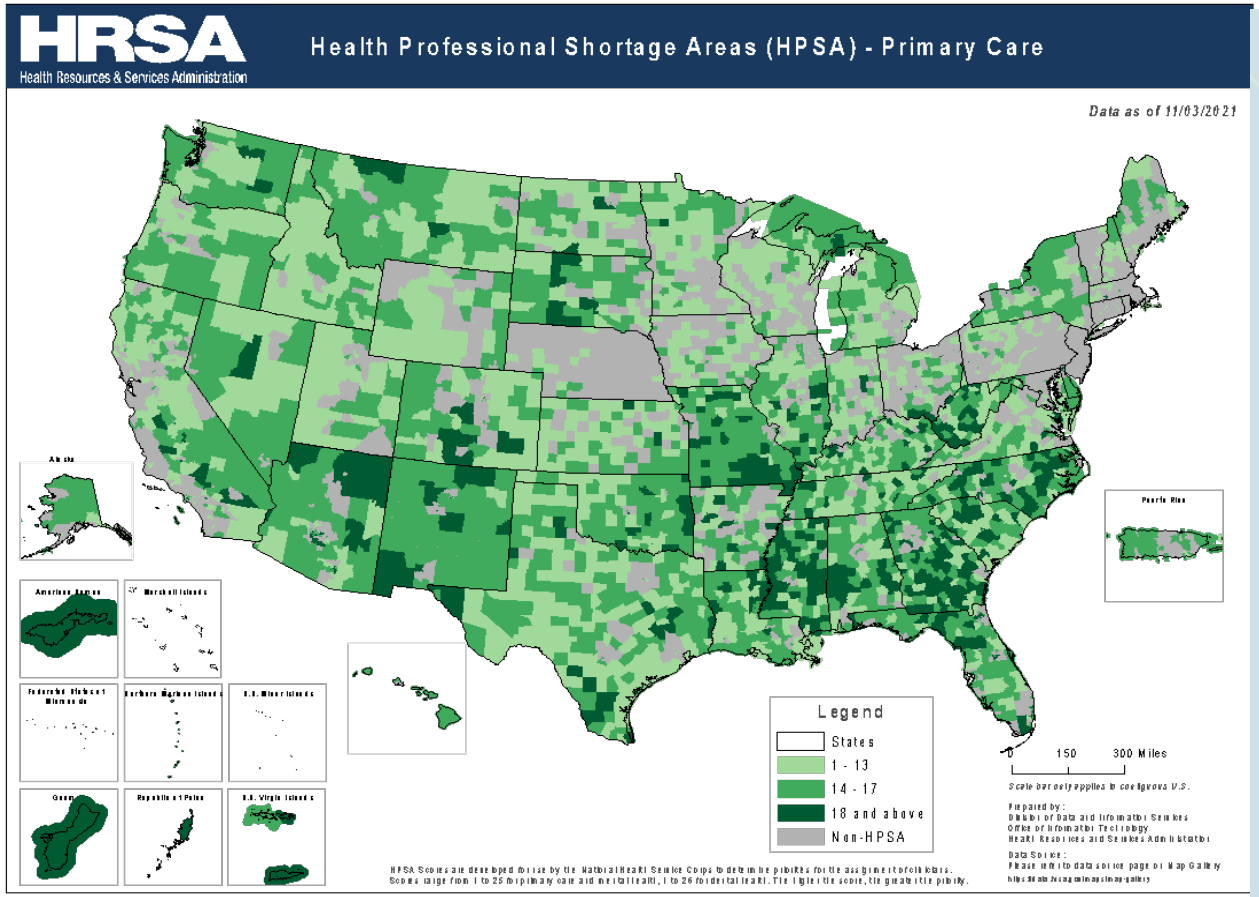
Figure Source: AAMC, 2024

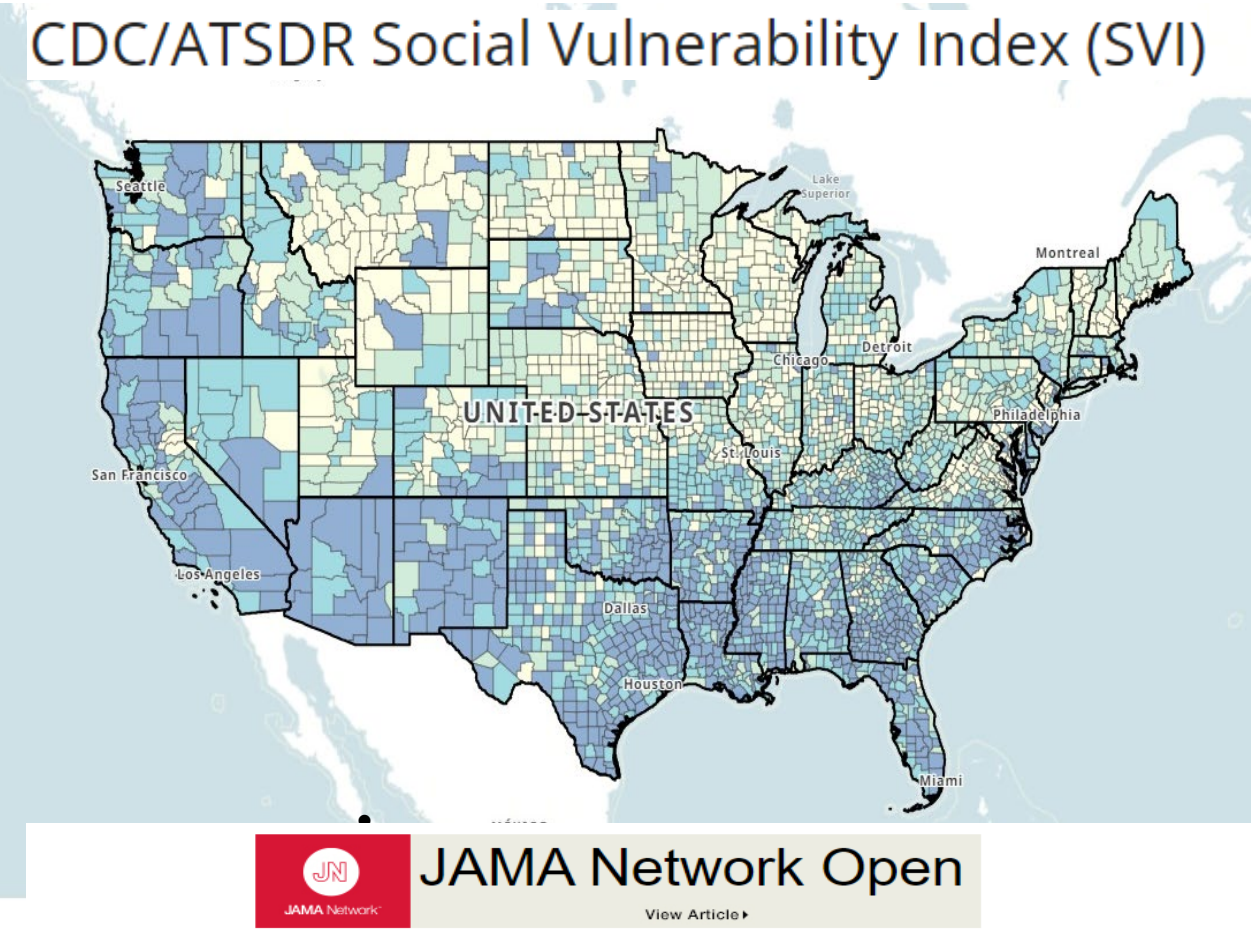
It's not just a supply issue: The health workforce is not equitably distributed

Occupation	Providers per 10,000 Rural Areas	Providers per 10,000 Urban Areas	Ratio
Physicians	13.1	31.2	0.42
Physician Assistants	2.3	3.4	0.66
Registered Nurses	85.3	93.5	0.91
Dentists	3.6	5.9	0.61
Psychologists	3.0	6.8	0.45

National Center for Health Workforce Analysis. Distribution of U.S. Health Care Providers Residing in Rural and Urban Areas. 2014

There is an observable relationship between primary care supply and social vulnerability





JAMA Network Open

View Article

JAMA Netw Open. 2022 Apr; 5(4): e229494.
Published online 2022 Apr 28. doi: 10.1001/jamanetworkopen.2022.9494
PMCID: PMC9051982
PMID: 35482310

Historic Redlining and Contemporary Behavioral Health Workforce Disparities

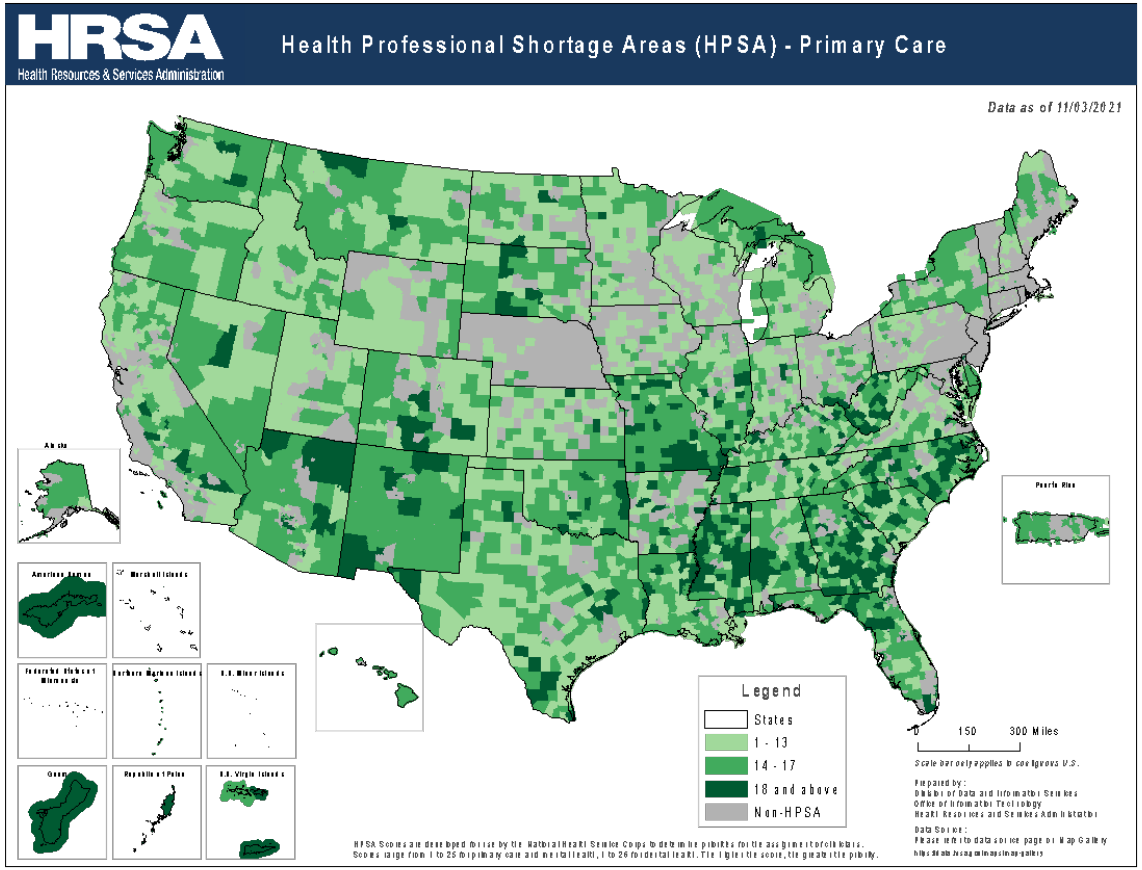
Clese E. Erikson, MPAff,[✉1] Randi B. Dent, PhD,[1] Yoon Hong Park, MPP,[1] and Qian Luo, PhD[1]

Programs and Policies to Address the Problem

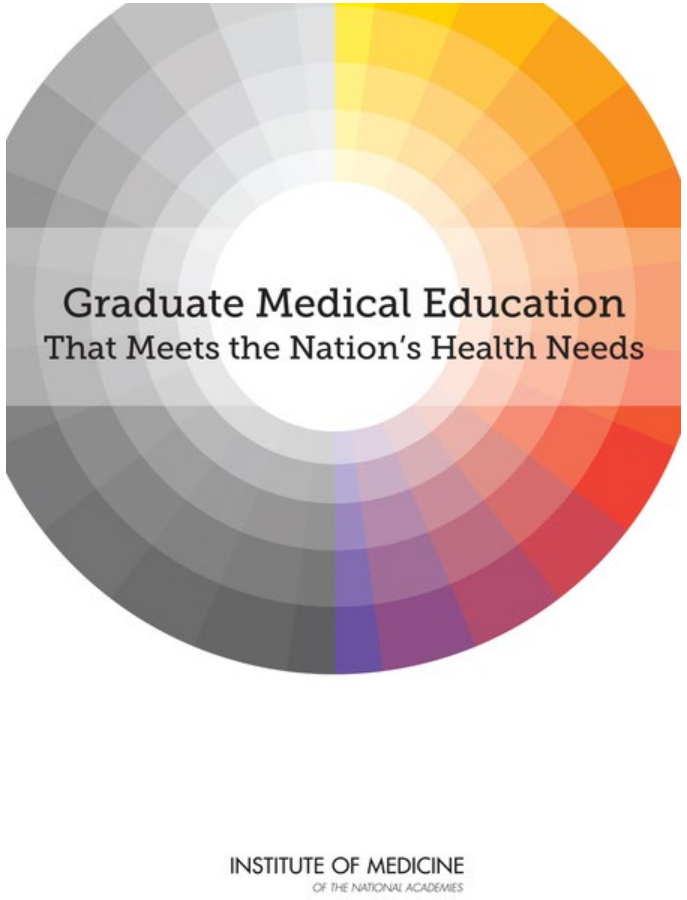
Federal

Health Professional Shortage Areas (HPSAs)

- As of March 2024, 74 million people live in primary care HPSAs, 58 million in dental HPSAs, and 122 million in mental health HPSAs (HRSA, 2024)
- A number of federal programs rely on HPSA or MUA designation for eligibility
  - Medicare HPSA payment bonus – 10%
  - NHSC
  - J-1 visas
  - FQHCs (MUAs)
- Challenges with the methods used to determine formula (e.g., doesn't consider the supply of NPs and PAs in an area)



IOM call for greater accountability in GME, 2014



The committee recommends that continued Medicare support for GME be contingent on its demonstrated value and contribution to the nation's health needs. Under the current terms of GME financing, there is a striking absence of transparency and accountability for producing the types of physicians that today's health care system requires. Moreover, newly trained physicians, who benefit from Medicare and Medicaid funding, have no obligation to practice in specialties and geographic areas where they are needed or to accept Medicare or Medicaid patients once they enter practice.

Federal

Program	Spending
Medicare (2021)	$17.8 B
Medicaid (2022)	$7.4 B
Children's Hospital GME (FY 2023)	$385 M
Teaching Health Centers GME (FY2023)	$119 M (+ $330 M ARPA, 2021)

Teaching Health Center GME Program

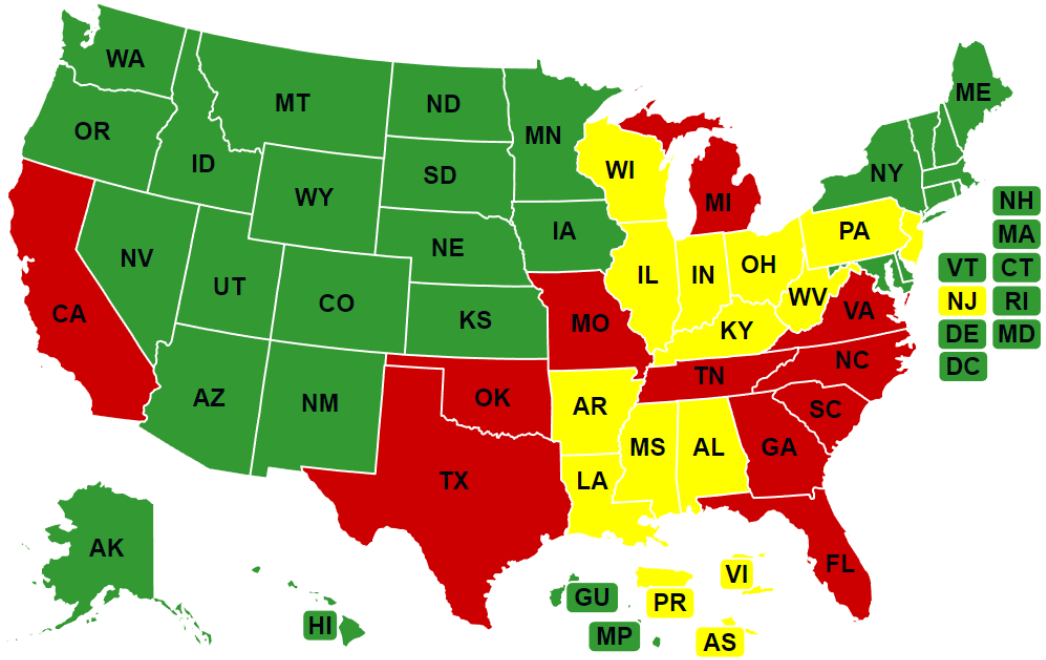
Helps communities grow their health workforce by training physicians and dentists in community-based settings with a focus on rural and underserved communities.

- The program aims to:
- **Increase** physicians and dentists trained in community-based settings
- **Improve** health outcomes for members of underserved communities
- **Expand** health care access in underserved and rural areas

States & Emerging Models of Care

- Use of NPs and PAs
- Telehealth
- Project ECHO
- Centers for Medicare and Medicaid Innovation
  - Accountable Care Organization
  - Comprehensive Primary Care, Primary Care First
  - Accountable Health Communities

State Practice Environment: NPs
(Source: American Association of Nurse Practitioners)



Legend

Full Practice
Reduced Practice
Restricted Practice

Health Professions' Schools

Targeted recruitment	Community-based training	Partnerships with community colleges
Significant relationship between race/ethnicity an underserved practice, growing up in a rural area and rural practice (Goodfellow, 2016; MacQueen, 2017)	Training in rural/underserved areas associated with post-graduate practice in those communities, student intent to practice in those settings (Goodfellow, 2016; Guilbault, 2017; Suphanchaimat, 2016; Levin, 2019; Talib, 2018)	Physicians who attended community college more likely to practice in underserved settings and train in family medicine (Talamantes, 2018, 2014)

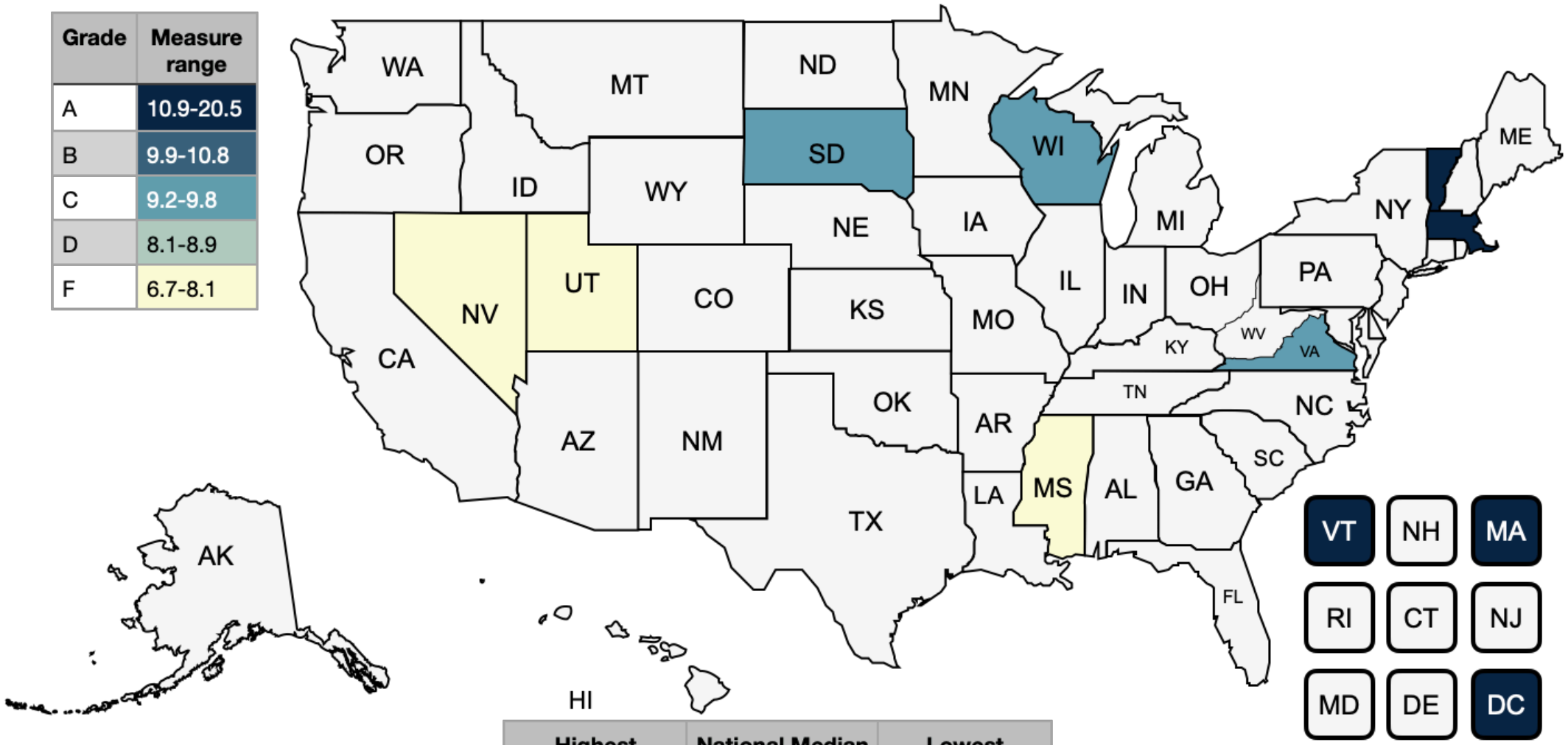
HWE Domain 3 State Level Performance Measurement

Specialty & Geographic Distribution Measures

Metric	Definition	Data Sources
Primary care clinician density per pop	The number of all primary care clinicians (3a.1); nurse practitioners (3a.2); physician assistants (3a.3) per 10,000 residents in each state	Area Health Resource File, HRSA U.S. Census Bureau
Behavioral health clinician density per pop	The number of behavioral health specialists (3b.1); psychiatrists and addiction medicine specialists (3b.2); psychologists (3b.3)per 100,000 residents in each state	IQVIA Xponent State Professional Licensure Files National Plan & Provider Enumeration System, (NPPES), CMS
% Clinicians in high-need areas	Percent of primary care clinicians working in high-need Health Professional Shortage Areas relative to the total number of primary care clinicians in a state.	National Plan & Provider Enumeration System (NPPES), CMS United States Postal Service (USPS) ZIP Code Crosswalk Files, U.S. Dept. of Housing and Urban Development
% primary care GME slots	The number of primary care GME slots relative to total GME slots.	National Resident Matching Program Report, National Resident Matching Program

Goal 3: Health Workforce Distribution
HWE 3-a-1: Number of Primary Care Physicians per State Pop. (10k)

Grade	Measure range
A	10.9-20.5
B	9.9-10.8
C	9.2-9.8
D	8.1-8.9
F	6.7-8.1

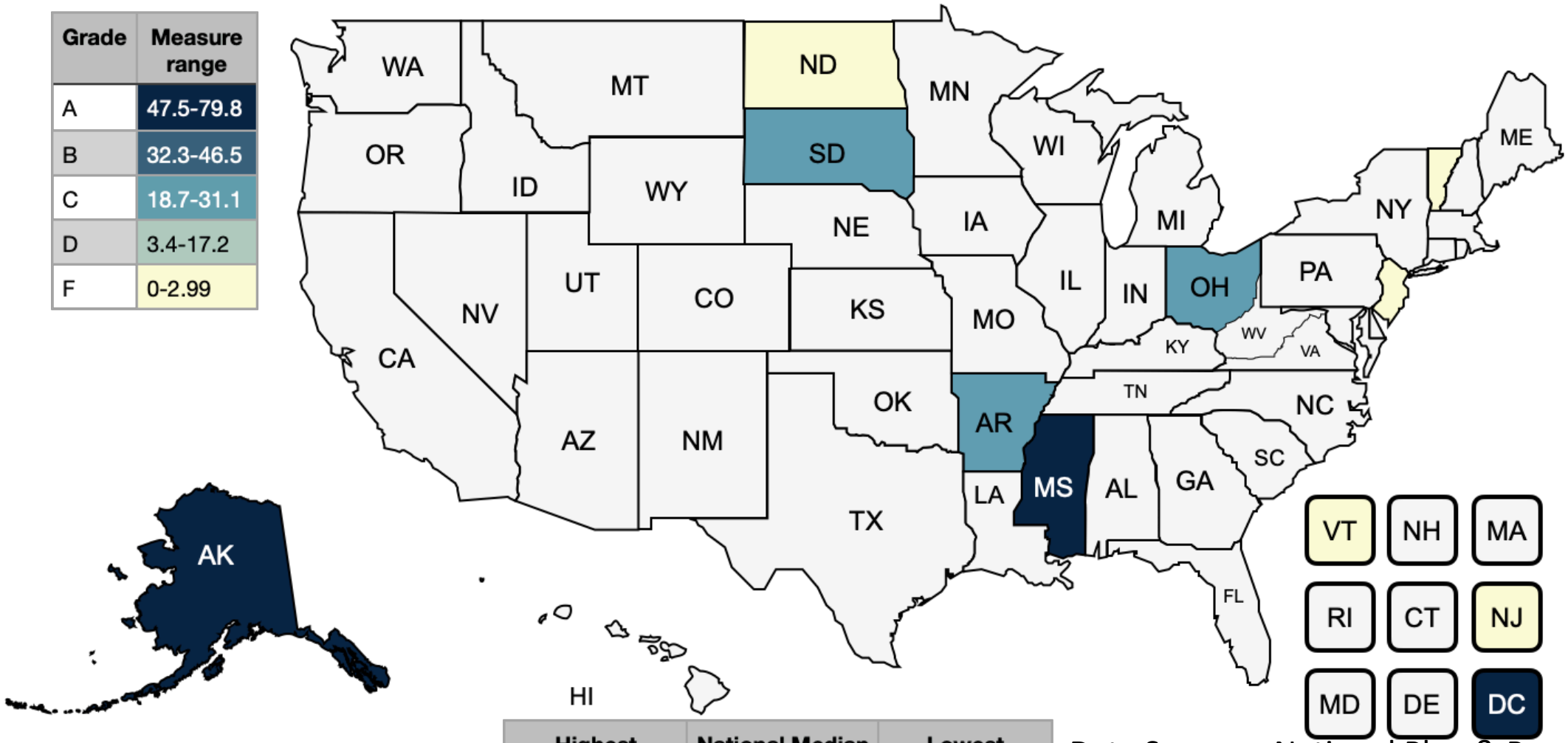


Highest	National Median	Lowest
DC (20.47)	9.40	UTAH (6.65)

Data Source: Area Health Resource File (HRSA, 2022)

Goal 3: Health Workforce Distribution
HWE 3-c: Percent of Primary Care Physicians Working in High Need HPSAs

Grade	Measure range
A	47.5-79.8
B	32.3-46.5
C	18.7-31.1
D	3.4-17.2
F	0-2.99

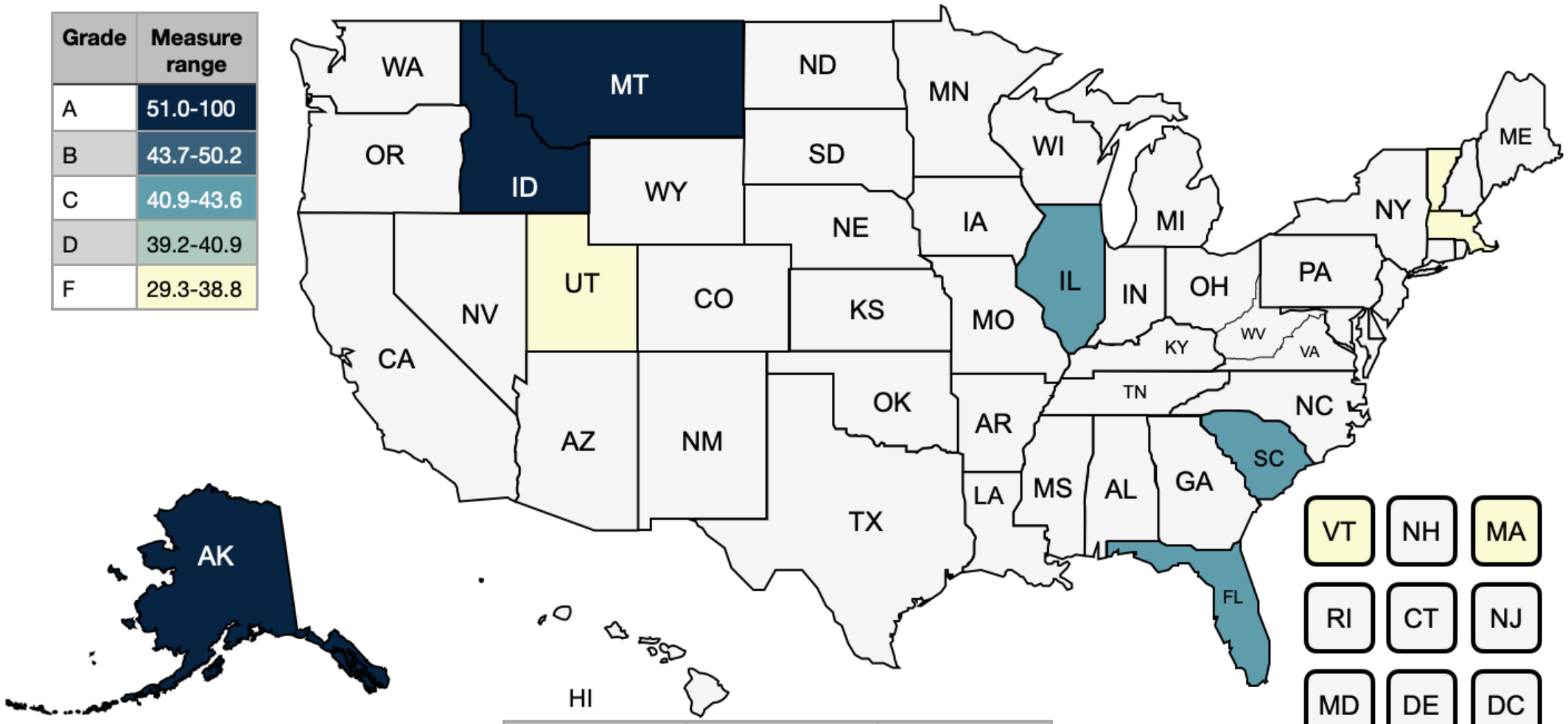


Highest	National Median	Lowest
ALASKA (79.81%)	21.99%	ARKANSAS (21.74%)

Data Sources: National Plan & Provider Enumeration Systems (NPPES, 2022); U.S. Dept. of Housing and Urban Development USPS ZIP Code Crosswalk Files

Goal 3: Health Workforce Distribution
HWE 3-d: Percent Primary Care GME slots

Grade	Measure range
A	51.0-100
B	43.7-50.2
C	40.9-43.6
D	39.2-40.9
F	29.3-38.8



Highest	National Median	Lowest
ALASKA (100%)	42.54%	UTAH (29.34%)

Data Sources: National Resident Matching Program Report; US Census Data

Mullan Institute Resources

Mullan Institute website	HWE Evidence Reviews	The Diversity Initiative	Health Workforce Trackers (including the Diversity Tracker)	Social Mission Alliance Website	HWE Metrics State Performance Maps (beta version)
https://www.gwhwi.org/	https://www.gwhwi.org/hweseries.html	https://www.gwhwi.org/workforcediversity.html	https://www.gwhwi.org/workforce-trackers.html	https://socialmission.org/	https://www.gwhwi.org/hwemaps-betatest.html

Fitzhugh Mullan Institute for Health Workforce Equity
THE GEORGE WASHINGTON UNIVERSITY

THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC

QUESTIONS

ACU
ASSOCIATION OF CLINICIANS
FOR THE UNDERSERVED

STAR²CENTER
SOLUTIONS TRAINING AND ASSISTANCE
FOR RECRUITMENT & RETENTION

Thank you!

Please fill out the evaluation!

ACU
ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

STAR²CENTER
SOLUTIONS TRAINING AND ASSISTANCE FOR RECRUITMENT & RETENTION

JOIN US IN DC!

clinicians.org/conferences/acu-2024/

ACU ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

STAR²CENTER SOLUTIONS TRAINING AND ASSISTANCE FOR RECRUITMENT & RETENTION

JOIN US IN DC!

Pre-Conference Workshops

- Justice, Equity, Diversity, & Inclusion: Interrogating Our Work: Perspectives on Social Drivers of Health and Disability
- Lifestyle Medicine: Advancing the Quintuple Aim through Lifestyle Medicine within Health Center Networks - In partnership with the American College of Lifestyle Medicine
- Workforce: Pouring from a Full Cup: Organizational Well-Being Planning & Implementation
- Unlocking Sustainable Funding: Strategies for Aligning Medicaid with Medical-Legal Partnership - In Partnership with the National Center for Medical-Legal Partnership

clinicians.org/conferences/acu-2024/pre-conference-workshops

ACU ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

STAR²CENTER SOLUTIONS TRAINING AND ASSISTANCE FOR RECRUITMENT & RETENTION

STAR² CENTER RESOURCES

- Recruitment & Retention Self-Assessment Tool
- Health Center Comprehensive Workforce Plan Template
- Implementing Staff Satisfaction Surveys Infographic
- Building a Resilient & Trauma-Informed Workforce Factsheet
- Turnover Calculator Tool
- Onboarding Checklist
- Supporting Mental Health Through Compensation Equity Factsheet
- C-Suite Toolkit: Health Professions Education & Training for Recruitment and Retention

You can find all of the STAR² Center's free resources here

Sign up for our newsletter here for new resources, trainings, and updates

ACU ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

STAR²CENTER SOLUTIONS TRAINING AND ASSISTANCE FOR RECRUITMENT & RETENTION

INTERESTED IN TRAINING ON YOUR OWN TIME?

Check out the STAR² Center Self-Paced Courses: chcworkforce.elearning247.com

And the ACU & STAR² Center Video webpage: www.youtube.com/channel/UCZg-CFN7Wuev5qNUWt69u0w/feed

And the STAR² Center Podcast page: www.chcworkforce.org/web_links/star%c2%b2-center-chats-with-workforce-leaders/

ACU
ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

STAR²CENTER
SOLUTIONS TRAINING AND ASSISTANCE FOR RECRUITMENT & RETENTION

STAY IN TOUCH!

- Chcworkforce.org
- Clinicians.org
- info@clinicians.org
- 844-ACU-HIRE

ACU
ASSOCIATION OF CLINICIANS FOR THE UNDERSERVED

STAR²CENTER
SOLUTIONS TRAINING AND ASSISTANCE FOR RECRUITMENT & RETENTION