

# Health Workforce Equity

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THE GEORGE WASHINGTON UNIVERSITY



*I spent the summer of 1965 in Holmes County, Mississippi. I had just finished my first summer of medical school and went south as a medical civil rights worker.*

*It was a momentous summer for me. I suddenly knew why I was in medical school. I wanted to be a civil rights doctor, a doctor for the people of Holmes County and others like them.*

Fitzhugh Mullan

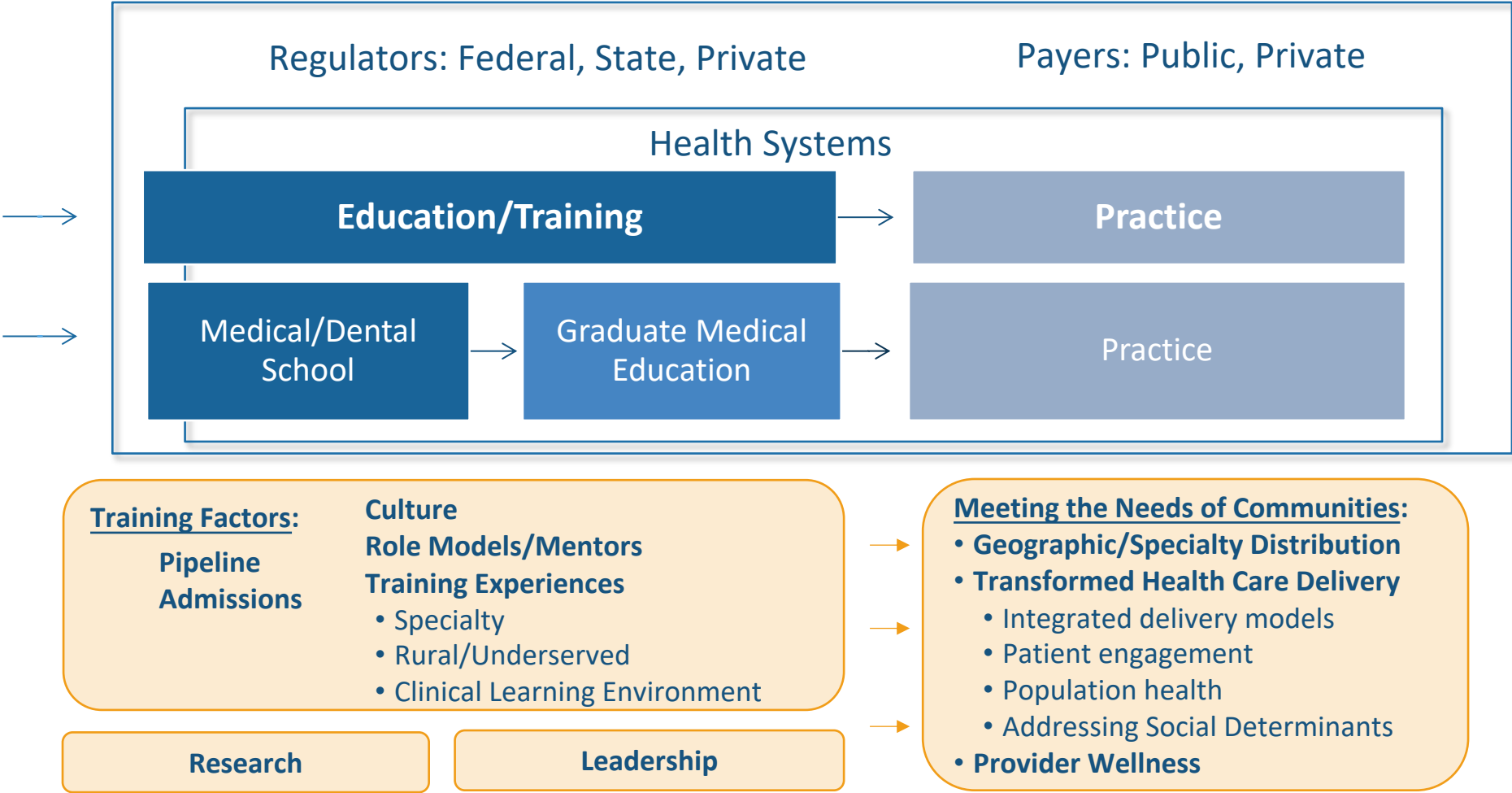


*Why do we become doctors?*

*For a lot of people attracted to medicine, there is something more – a sense of what I will call “social mission” that is more than the desire to heal. Social mission recognizes that there are inequities in the world, and more to the point, in access to health and health care.*

Fitzhugh Mullan

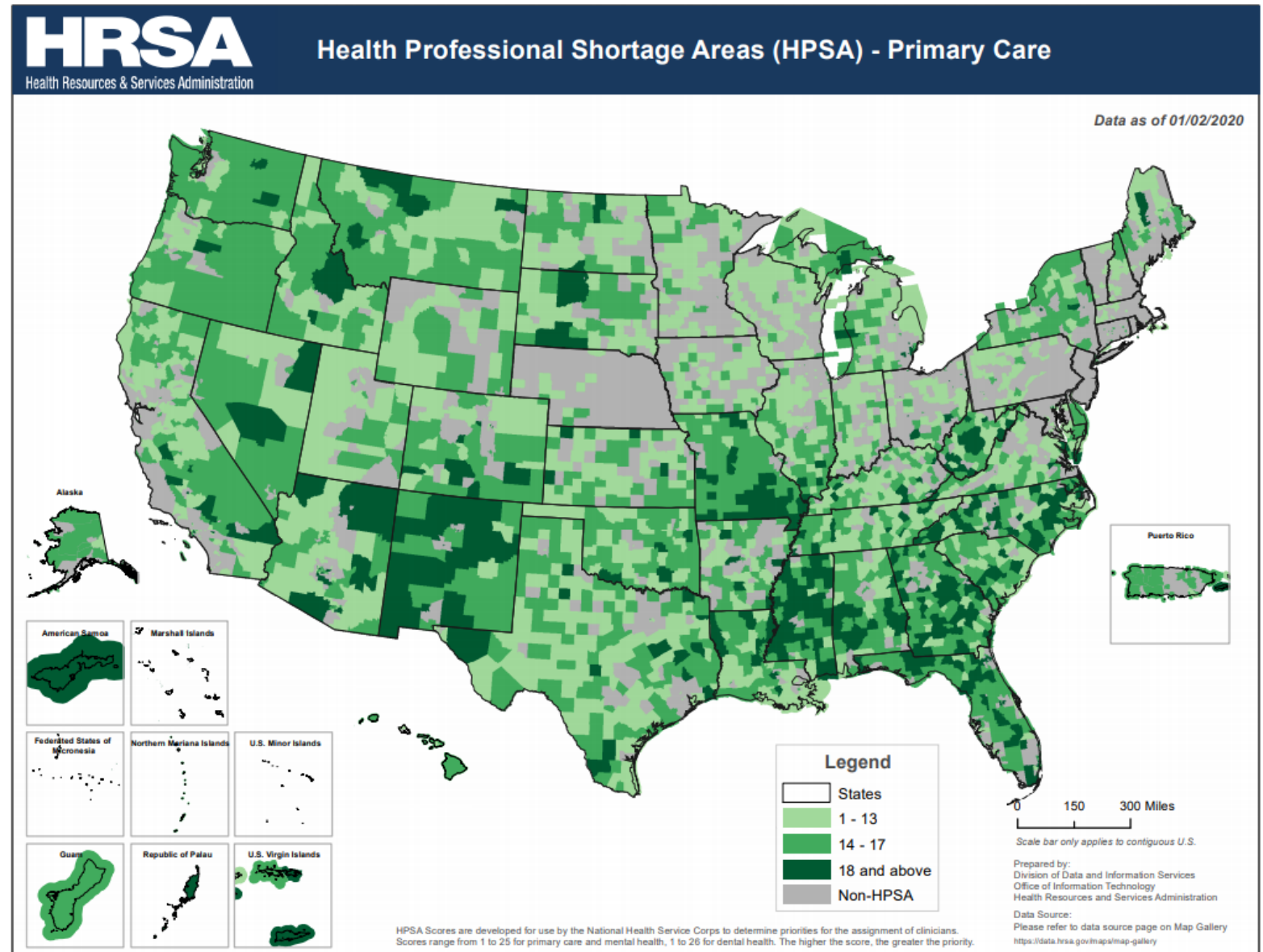
# Health Workforce Development



## National Center for Health Workforce Analysis, 2016

Projected a shortage of **23,640** primary care physician FTEs in 2025.

*With delivery system changes and full utilization of NP and PA services, the projected shortage can be effectively mitigated.*

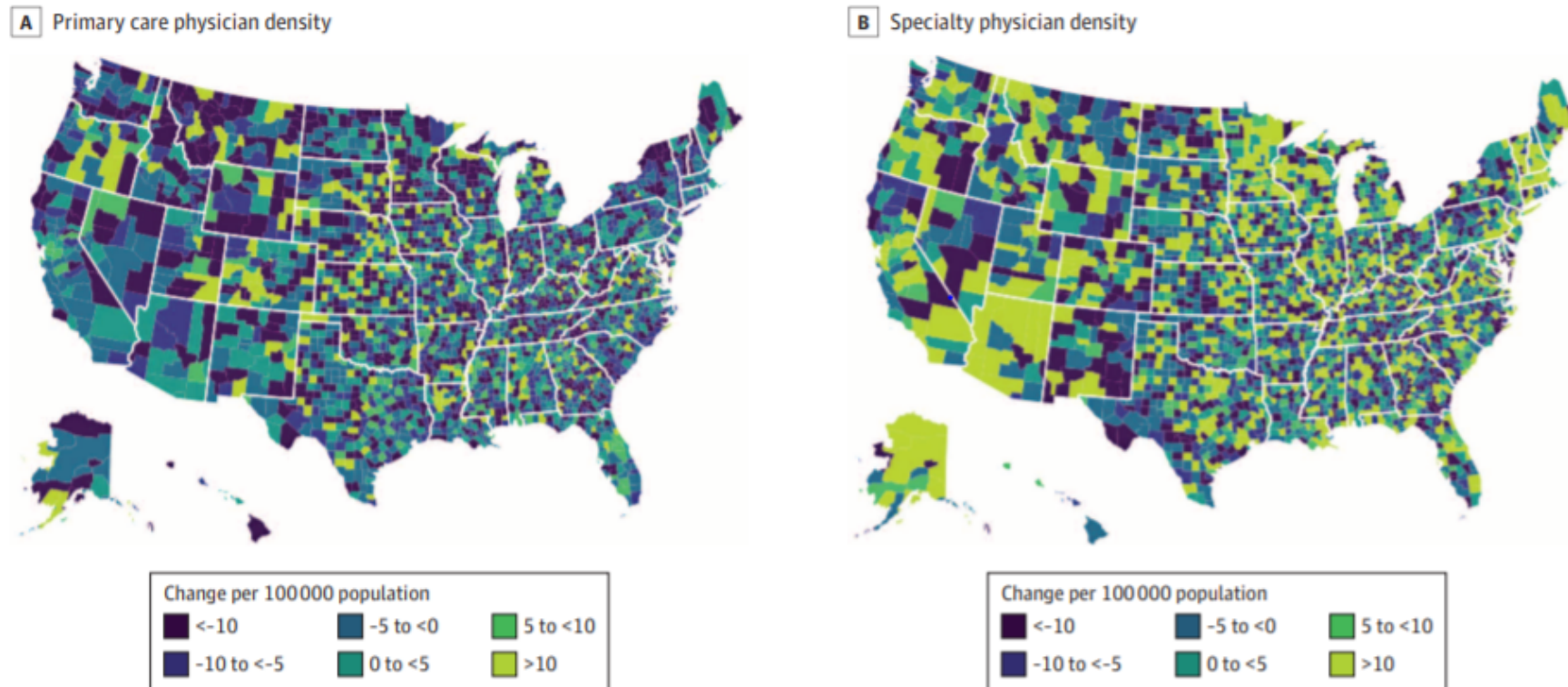




# Association of Primary Care Physician Supply with Population Mortality in the United States, 2005-2015.

Basu et al. JAMA Int Med. 2019

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

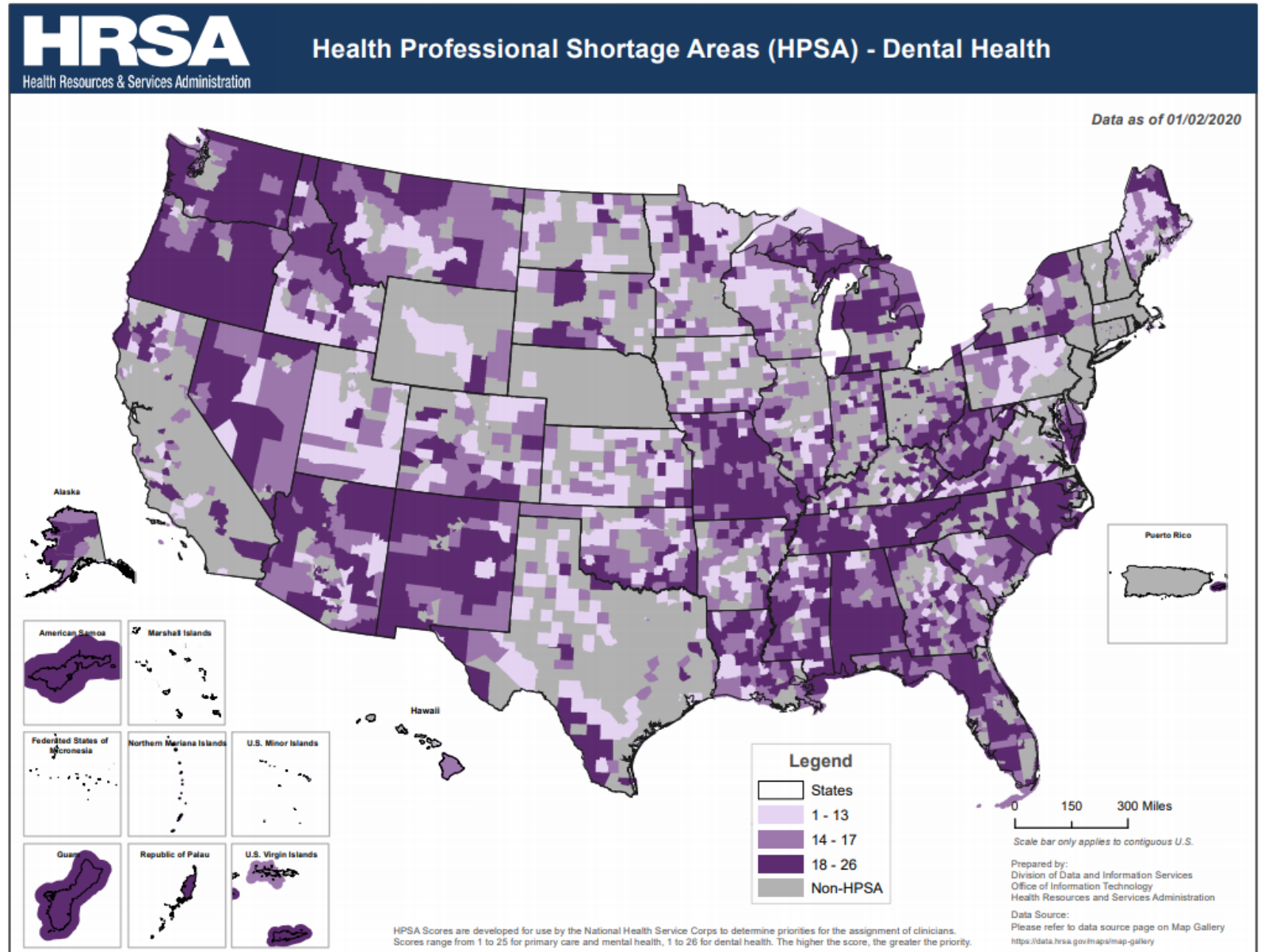


- Every 10 additional primary care physician per 100,000 population → 51.5-day increase in life expectancy
- An increase in 10 specialist physicians per 100,000 population → 19.2-day increase

## National Center for Health Workforce Analysis, 2015

All 50 states and DC are projected to experience a shortage of dentists.

*Increased use of dental hygienists could reduce the projected dentist shortage if they are effectively integrated into the delivery system.*



# Rural Health Workforce

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



# Workforce Diversity

Occupation	White	African-American	Hispanic	Asian/Pacific Islander	American Indian/Alaskan Native
U.S. (2018)	60.7	13.4	18.1	6.0	1.3
Physicians	70.6	5.8	10.0	21.4	0.1
Physician Assistants	79.5	9.1	8.3	8.5	1.0
Registered Nurses	77.7	11.1	5.0	9.1	0.4
Dentists	77.6	3.7	8.1	16.9	0.1
Psychologists	88.2	5.3	11.4	4.1	0.1

Snyder, et al. [Facilitating Racial and Ethnic Diversity in the Health Workforce](#). 2015

# 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		Underrepresented Minorities in the School, %	Underrepresented Minorities in the State (Nation), %
				Total, %	Standardized Score‡	Total, %	Standardized Score‡	Ratio	Standardized Score‡		
<b>Highest 20</b>											
1	Morehouse School of Medicine	GA	13.98	43.7	1.20	39.1	1.40	3.15	11.38	83.3	26.5
2	Meharry Medical College	TN	12.92	49.3	2.00	28.1	0.14	2.99	10.78	79.3	26.5
3	Howard University	DC	10.66	36.5	0.19	33.7	0.78	2.71	9.68	71.9	26.5
4	Wright State University Boonshoft School of Medicine	OH	5.34	49.2	1.98	28	0.12	1.31	3.23	19.0	14.5
5	University of Kansas	KS	4.49	45.2	1.42	43.9	1.96	0.77	1.12	11.6	15.1
6	Michigan State University College of Human Medicine	MI	4.13	43.6	1.20	26.5	−0.05	1.24	2.99	23.7	19.1
7	East Carolina University Brody School of Medicine	NC	3.72	51.9	2.36	34.2	0.84	0.62	0.52	17.3	28.1
8	University of South Alabama	AL	3.15	42	0.97	52.7	2.97	0.29	−0.78	8.2	28.7
9	Ponce School of Medicine	PR	3.02	33	−0.31	43.8	1.94	0.84	1.38	82.5	98.8
10	University of Iowa Carver College of Medicine	IA	2.97	37.1	0.28	21	−0.69	1.35	3.38	8.1	6.0
<b>Lowest 20§</b>											
1	Vanderbilt University	TN	−3.95	21.9	−1.86	20.8	−0.70	0.13	−1.38	3.6	26.5
2	University of Texas Southwestern Medical Center	TX	−3.64	26.8	−1.18	15.1	−1.36	0.21	−1.09	9.3	44.7
3	Northwestern University Feinberg School of Medicine	IL	−3.11	24.4	1.51	19.5	−0.86	0.30	−0.74	7.9	26.5
4	University of California, Irvine	CA	−3.02	32.9	−0.32	14.2	−1.47	0.17	−1.24	7.0	41.2
5	New York University	NY	−2.65	24.3	−1.53	22.1	−0.55	0.34	−0.57	9.0	26.5
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	14.8	27.7
7	Uniformed Services University of the Health Sciences	MD	−2.36	29.6	−0.78	21.4	−0.64	0.24	−0.95	6.5	26.5
8	Thomas Jefferson University	PA	−2.34	32.1	−0.42	20.6	−0.72	0.18	−1.19	4.8	26.5
9	Stony Brook University	NY	−2.21	29.1	−0.85	20.4	−0.76	0.33	−0.60	10.5	31.7
10	Albert Einstein College of Medicine of Yeshiva University	NY	−2.13	26.1	−1.28	24.8	−0.25	0.33	−0.60	8.8	26.5
11	Boston University	MA	−2.12	26.7	−1.19	23.3	−0.42	0.35	−0.52	9.4	26.5
12	Loyola University Chicago Stritch School of Medicine	IL	−2.06	33.7	−0.20	20.7	−0.72	0.20	−1.14	5.2	26.5
13	University of Pennsylvania	PA	−2.03	19.1	−2.27	20.4	−0.76	0.74	0.99	19.5	26.5
14	Medical College of Wisconsin	WI	−2.02	33.5	−0.23	15.9	−1.28	0.36	−0.51	9.4	26.5
15	Albany Medical College	NY	−2.00	30.7	−0.63	24.2	−0.32	0.22	−1.06	5.7	26.5
16	Columbia University	NY	−1.98	20.3	−2.10	31.8	0.57	0.37	−0.45	9.8	26.5
17	Texas A&M University	TX	−1.95	37	0.26	16.2	−1.24	0.24	−0.97	10.6	44.7
18	Duke University	NC	−1.91	22.3	−1.82	23.9	−0.34	0.55	0.24	14.5	26.5
19	Stanford University	CA	−1.90	27.4	−1.10	16.2	−1.23	0.59	0.43	15.7	26.5
20	Johns Hopkins University	MD	−1.90	24.3	−1.53	26.7	−0.02	0.40	−0.35	10.5	26.5

# Graduate Medical Education

Determines size, specialty distribution, geographic distribution of the physician workforce

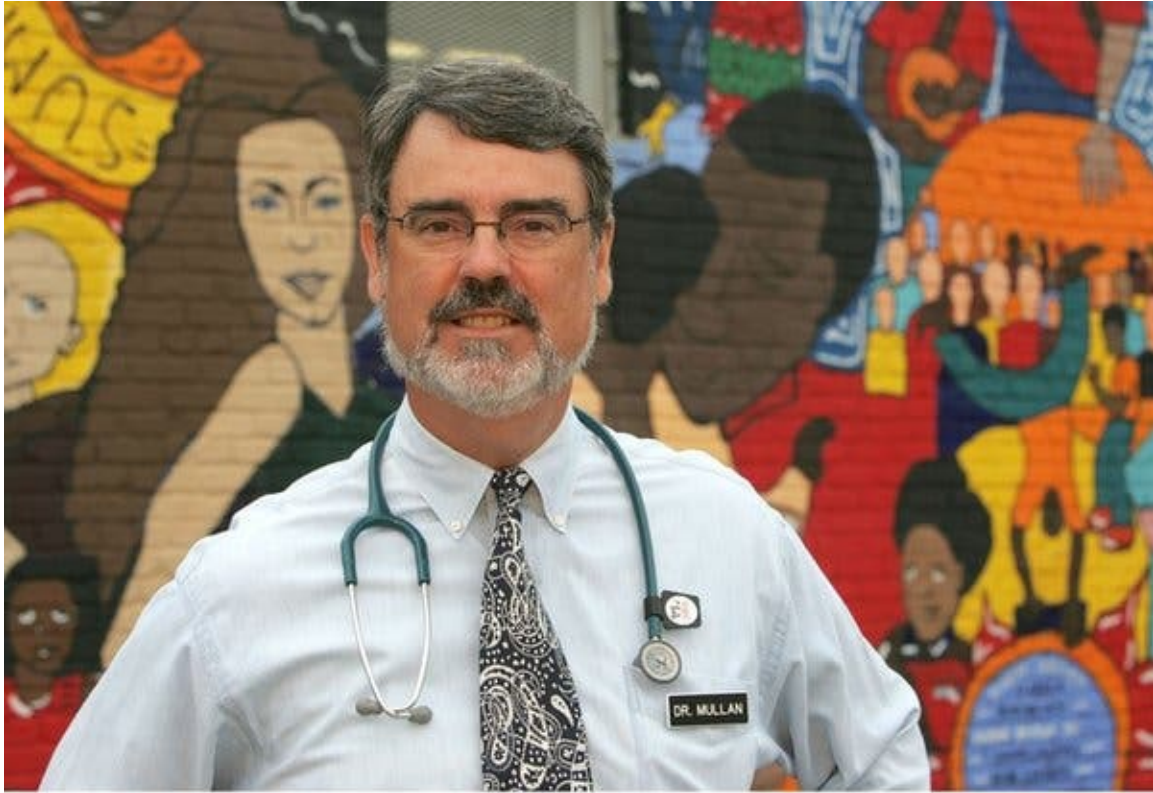
2019 Residency Match:

- 17,251 primary care (53.6%)
- Considering future specialization, primary care drops to 30%

Specialty	No. Positions	No. Matches	% U.S.
Orth. Surgery	755	752	91.8%
Dermatology	30	28	76.7%
Family Medicine	4,107	3,827	39.0%
Internal Medicine	8,116	7,892	41.5%
Psychiatry	1,740	1,720	60.6%

## Federal Funding

Program	GME Spending
Medicare (2015)	\$12.5 B
Medicaid (federal share, 2015)	\$2.4 B
Medicaid (state share, 2015)	\$1.8 B
Children's Hospital GME (2019)	\$0.325 B
Teaching Health Centers GME (2019)	\$0.1265 B
VA (2015)	\$1.5 B
<b>TOTAL</b>	<b>\$18.65 B</b>

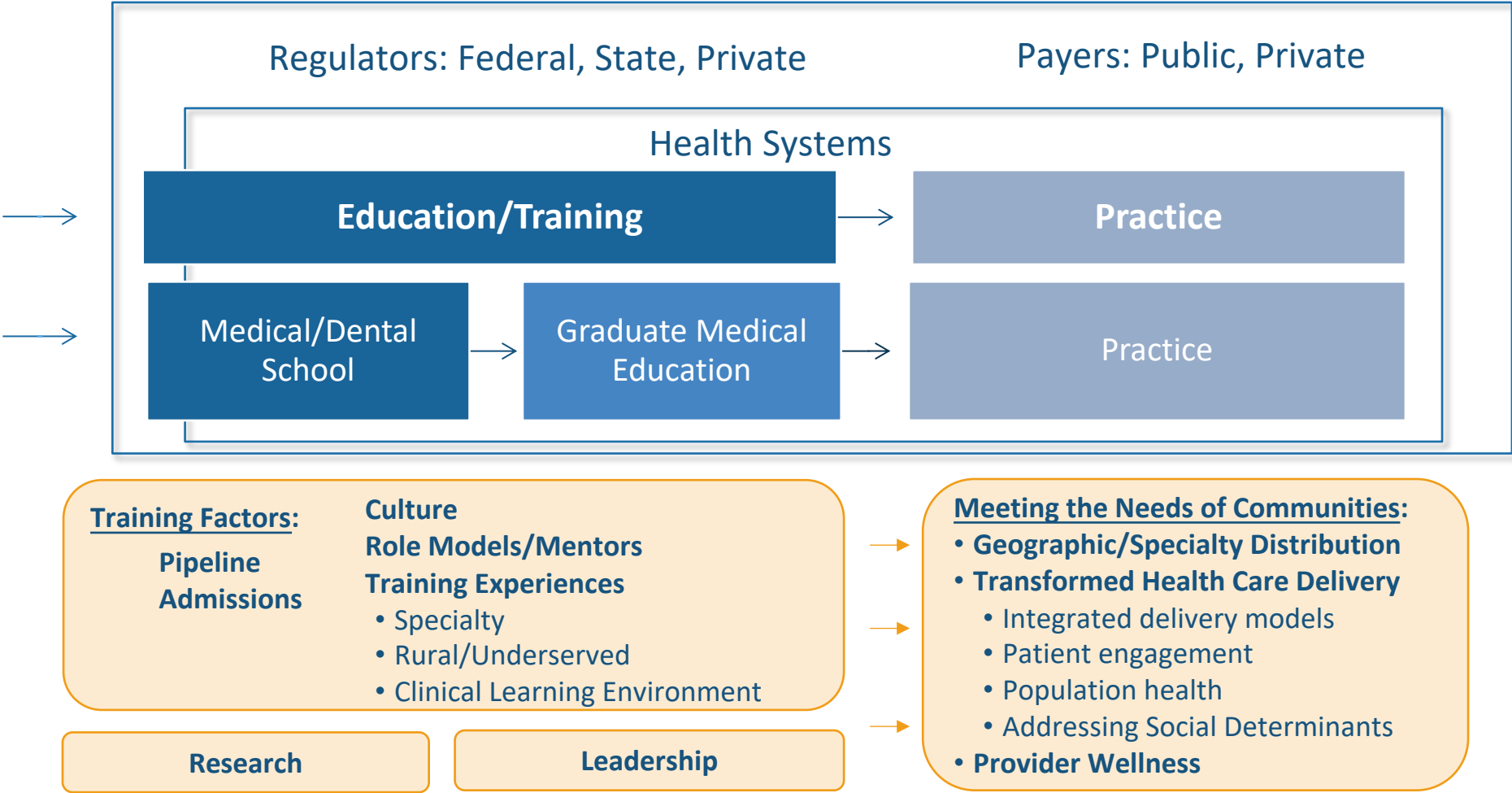


*The civil rights doctor and many others have spent careers in pursuit of what we now call health equity, but the world has not moved as far as he would have wanted.*

*The civil rights doctor's mission turned out to be changing the culture of medicine, making the idea of health equity central to the character of medicine, and positioning medicine as an agent of social as well as individual healing.*

Fitzhugh Mullan

# Health Workforce Development





What health workforce policies and systems support health disparities/inequities?

What health workforce policies and systems are needed to advance health equity?

What can I do to advance health equity?



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