The State of the Physician Workforce

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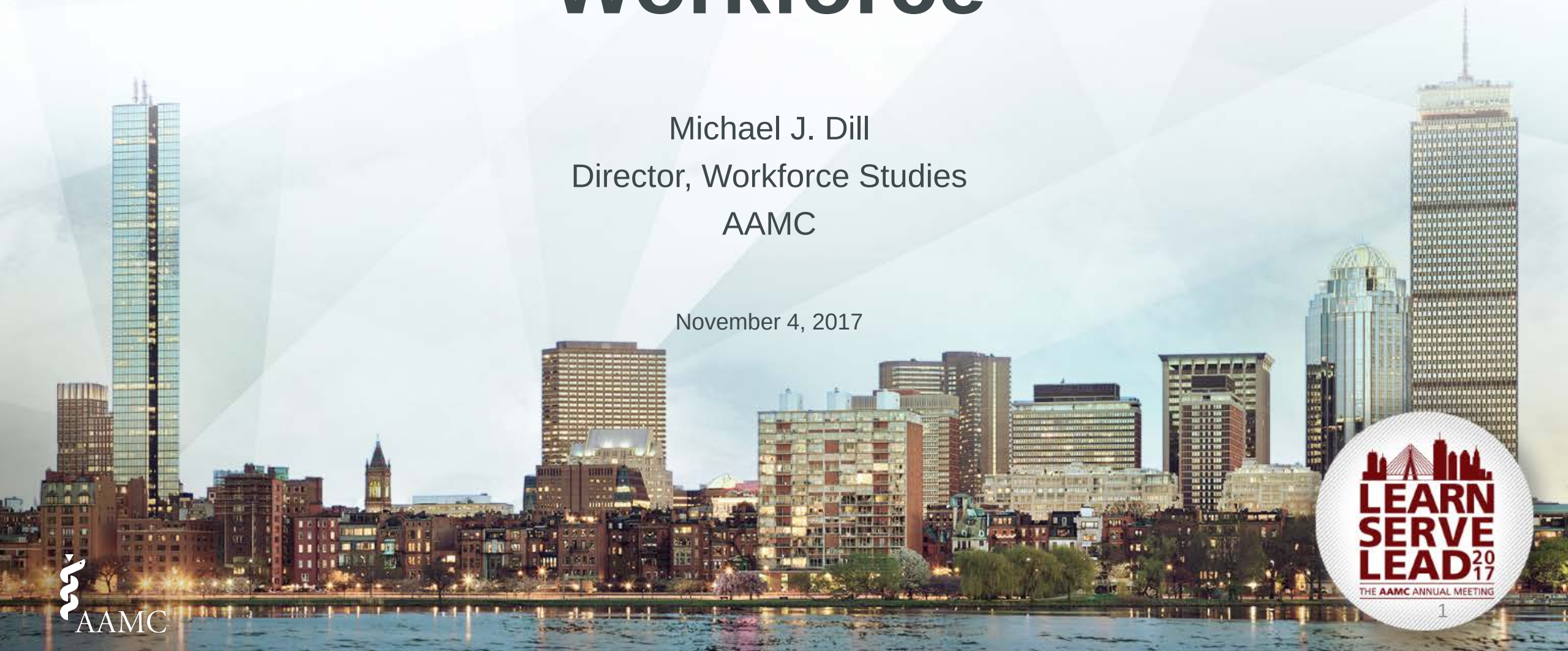
AAMC

November 4, 2017



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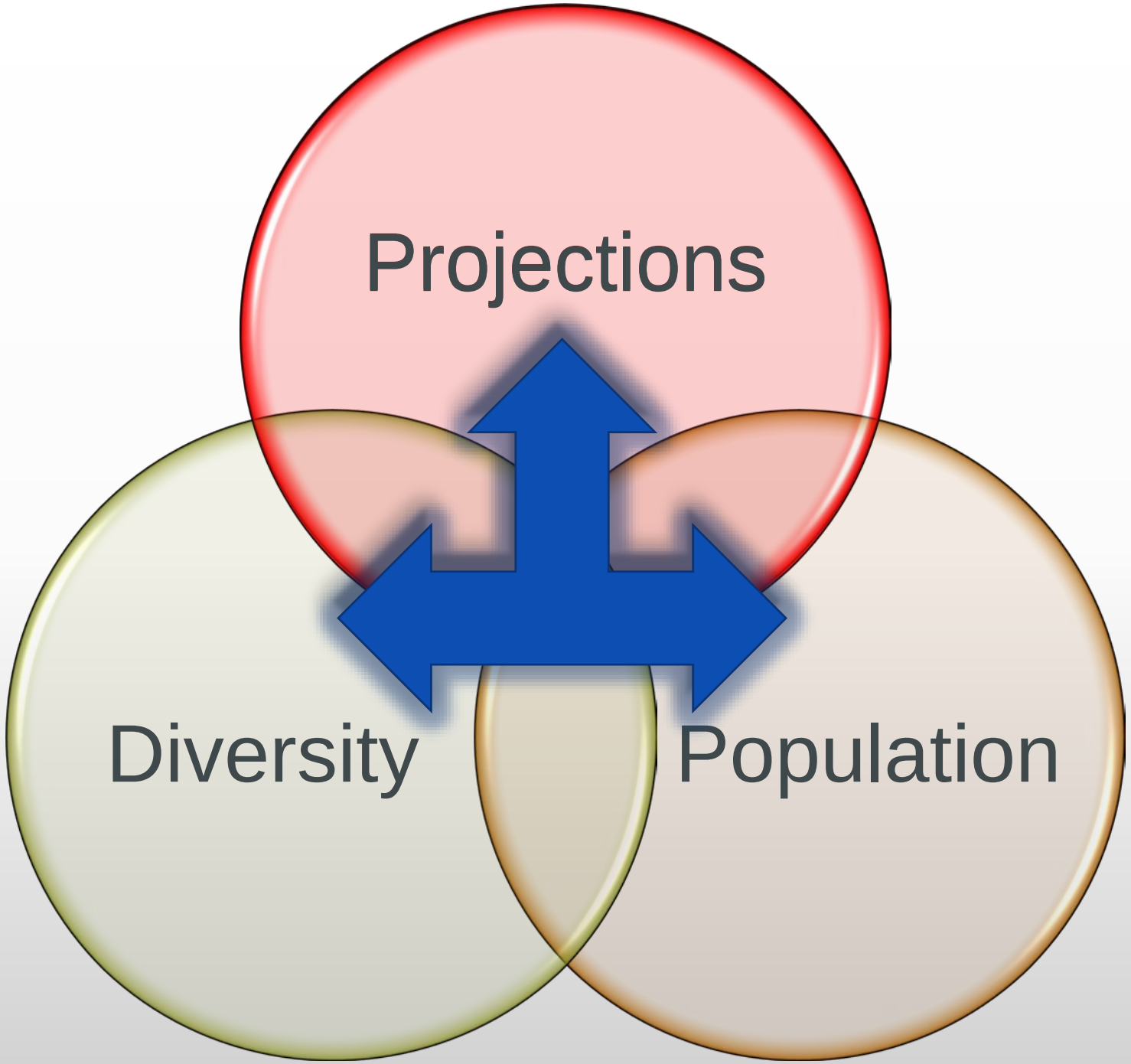
THE AAMC ANNUAL MEETING



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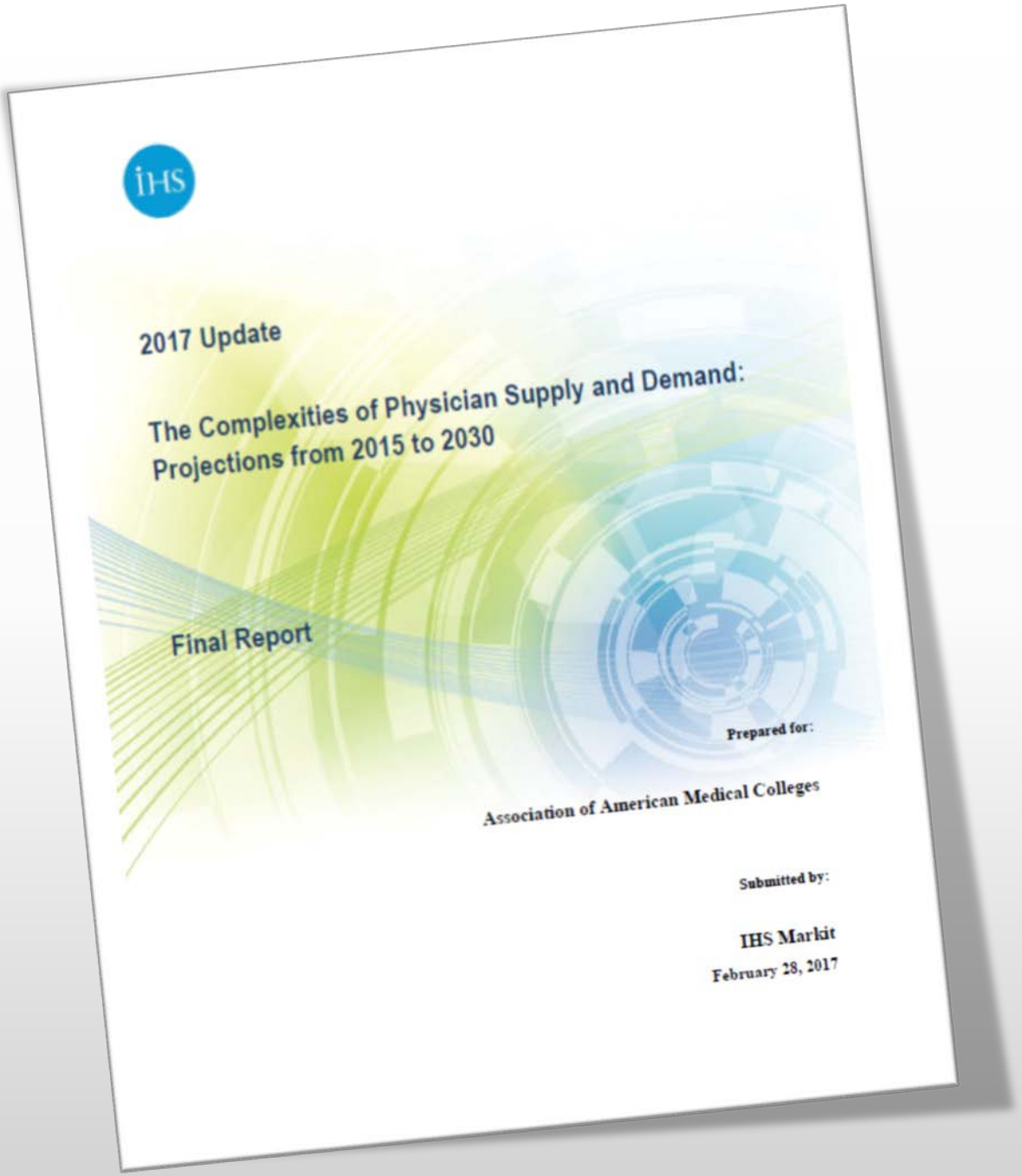
Projections

Supply, demand, specialty groups


IHS
2017 Update
The Complexities of Physician Supply and Demand:
Projections from 2015 to 2030
Final Report
Prepared for:
Association of American Medical Colleges
Submitted by:
IHS Markit
February 28, 2017

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What’s new?

- Updated data
- Refined hospitalists estimates
- Updated PA & APRN supply projections
- Population health scenario
- Metro/non-metro location data for demand and utilization equity

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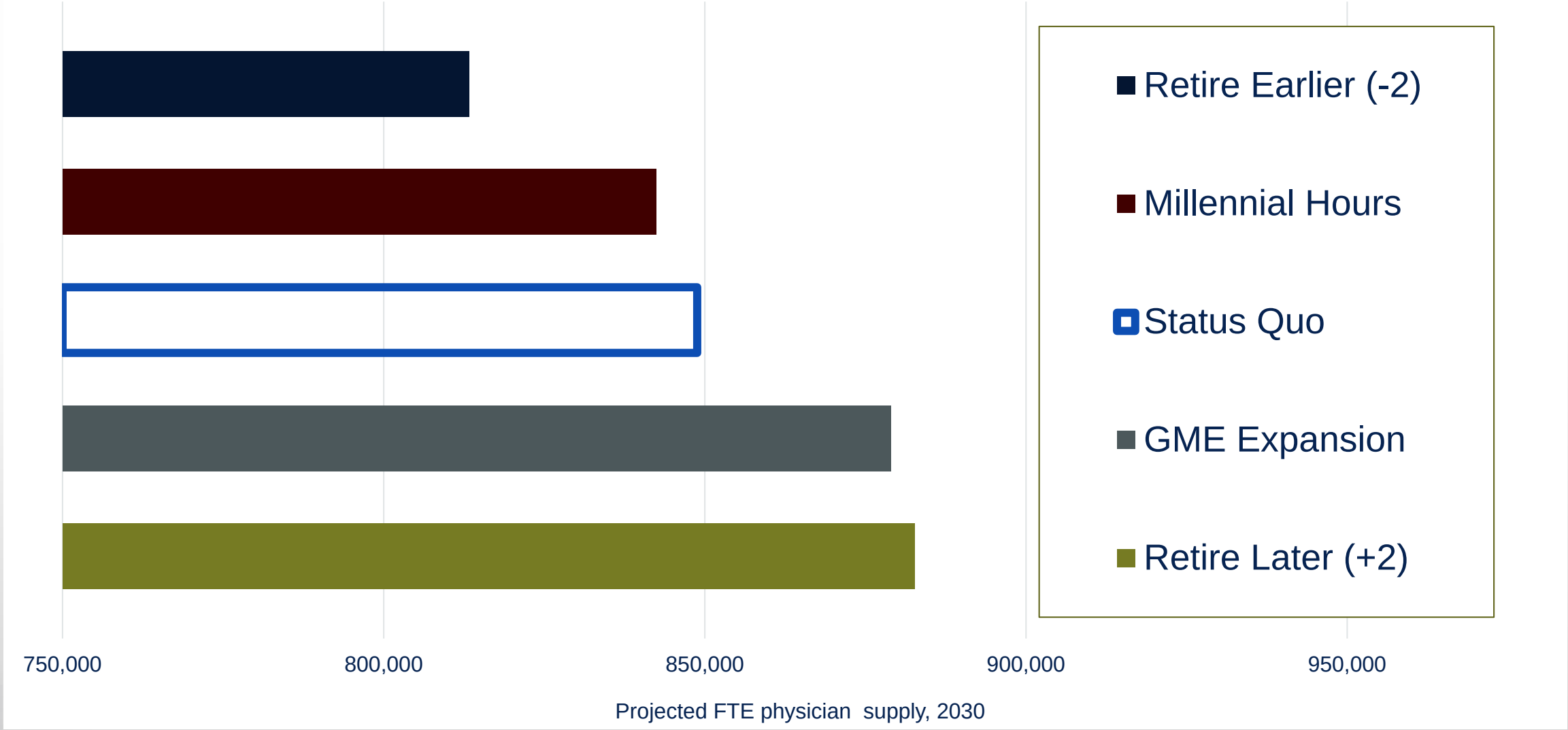
Key takeaways from the updated projections

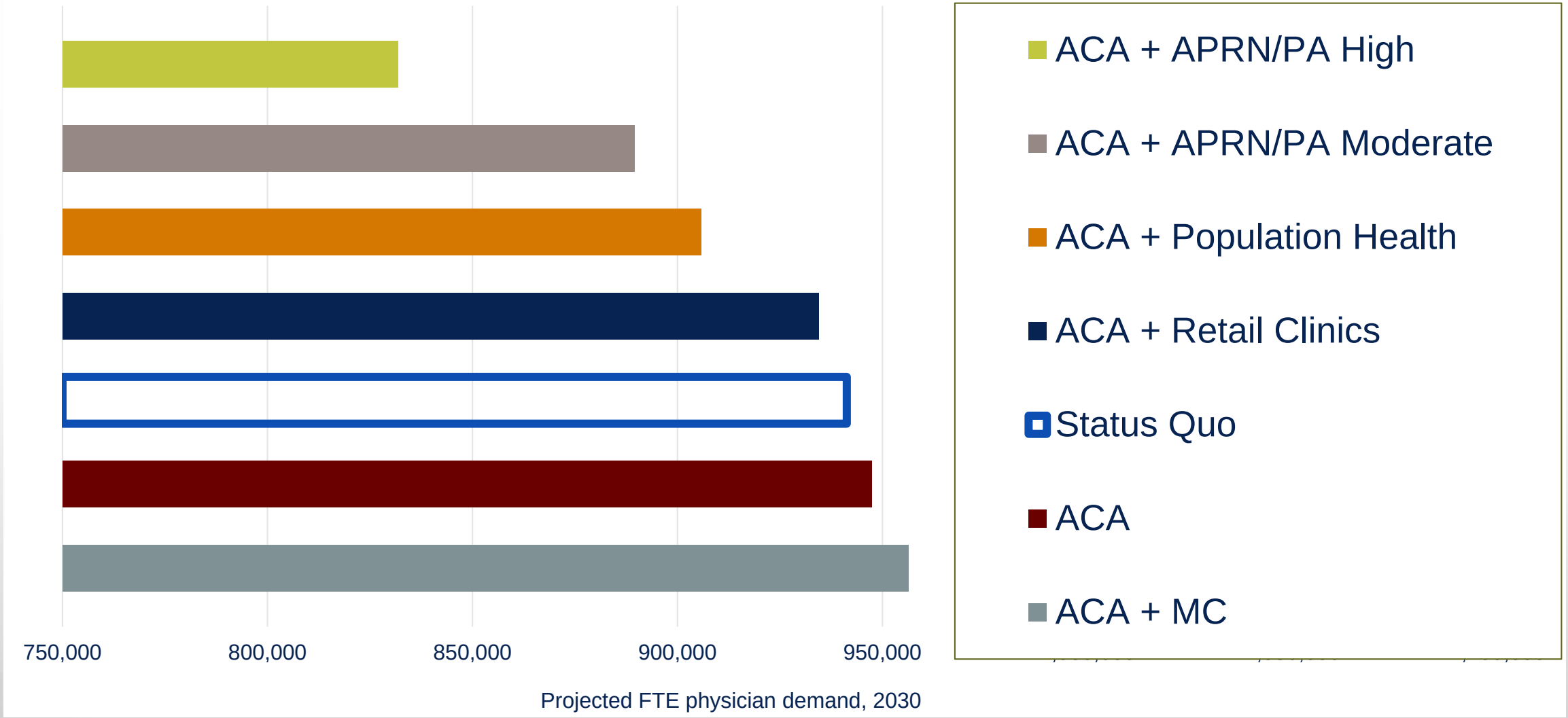
- Physician demand continues to grow faster than supply
- Projected total physician shortfall of between 40,800 and 104,900 physicians by 2030
- Shortages in both primary and specialty care – with a particularly large shortage in surgical specialties
- Consistent with 2015 & 2016 projections reports

Supply scenarios include retirement, work hours, GME expansion



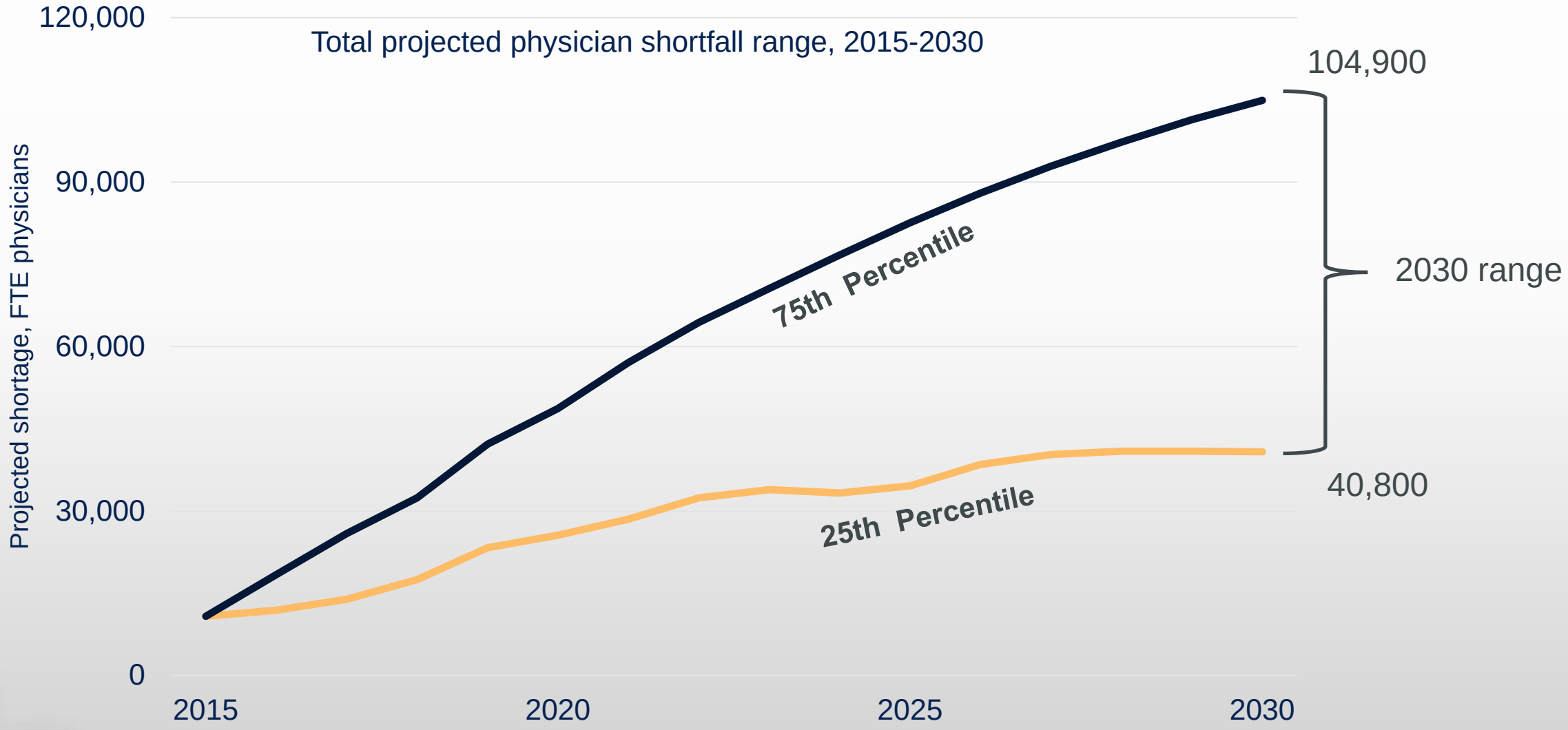
Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

Demand scenarios include ACA, APRNs/PAs, population health, retail clinics, managed care



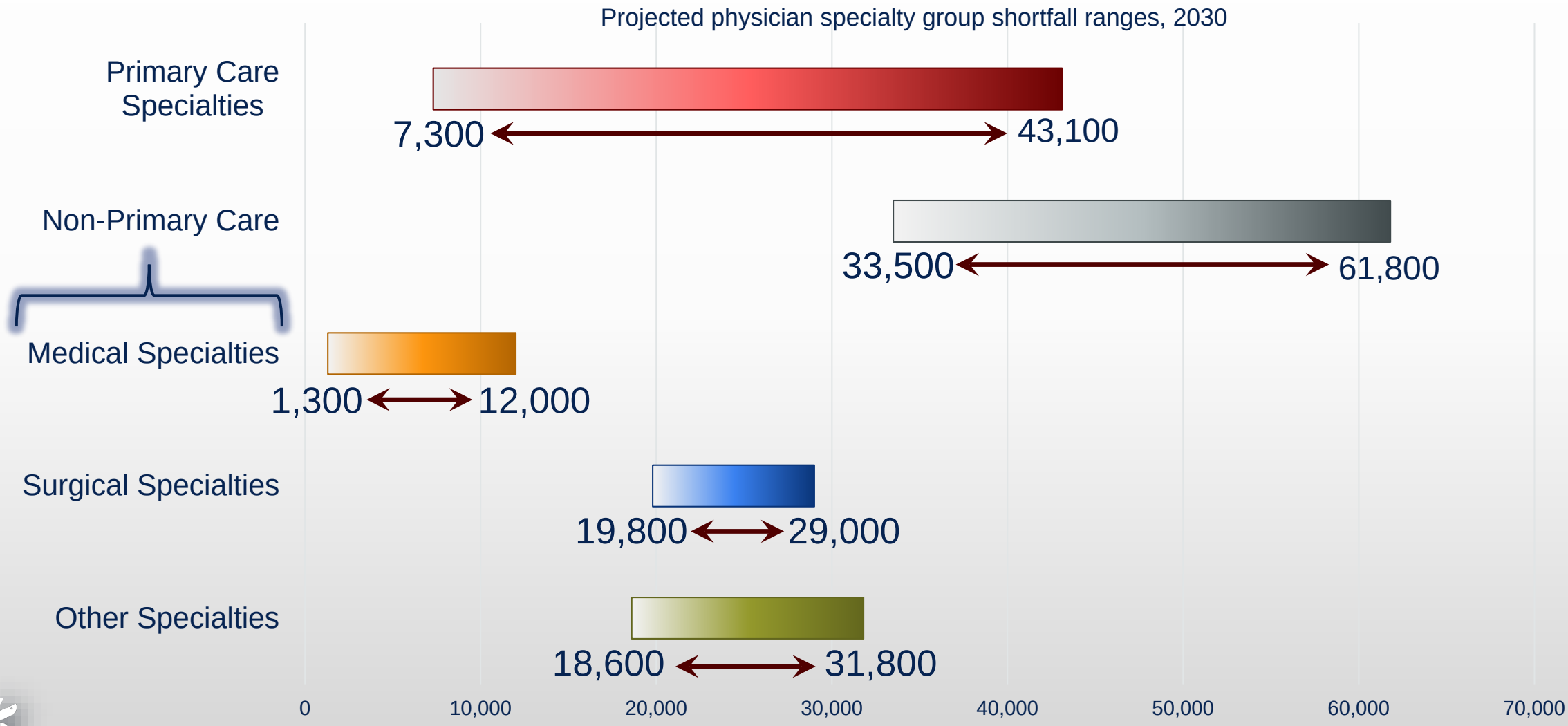
Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

An increasing overall shortage of physicians is projected through 2030



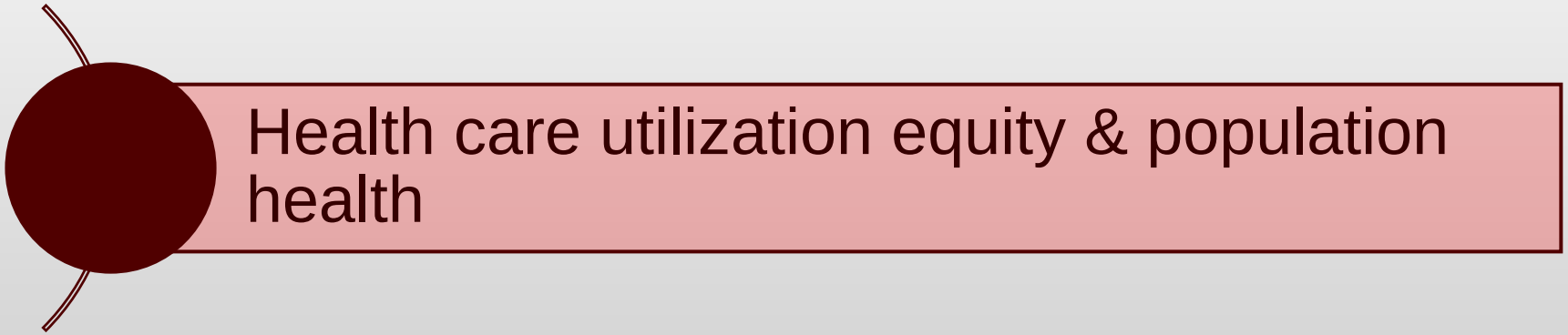
Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

The size and range of projected physician shortages varies by specialty group



Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

Projections



We model Health Care Utilization Equity to better understand magnitude of unmet need

- What if barriers disappeared? How much more utilization (in 2015)?

Scenario 1: Insurance & Metro/ Non-metro

- People without medical insurance and people living in non-metropolitan areas => utilization patterns equivalent to their insured peers living in metropolitan areas

Scenario 2: Insurance, Metro/Non-metro, & Race/Ethnicity

- Everyone => utilization patterns equivalent to white insured populations residing in metropolitan areas

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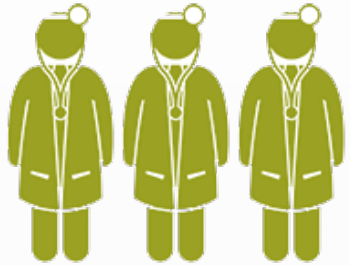
Estimated Additional Physicians Needed if U.S. Had Achieved Health Care Utilization Equity in 2015

Scenario 1: Insurance & Metro/ Non-metro



34,800

Additional Physicians

Scenario 2: Insurance, Metro/Non-metro, & Race/Ethnicity

96,800

Additional Physicians

Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

Estimated Additional Physicians Needed if U.S. Had Achieved Health Care Utilization Equity in 2015

Primary Care

Scenario 1 (Insurance, Metro)

10,300

Scenario 2 (Insurance, metro, race)

21,800

Specialty Care

Scenario 1 (Insurance, metro)

24,500

Scenario 2 (Insurance, metro, race)

75,000

Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

We model population health measures to better understand their long term workforce implications

- Scenario models the workforce implications of achieving selected Healthy People 2020 goals
  - Sustained 5% body weight loss for overweight and obese adults
  - Improved blood pressure, cholesterol, and blood glucose levels for adults with elevated levels
  - Smoking cessation

Achieving population health goals would have different short- and long-term effects on demand

- Short-term: 1% decline in physician demand
- Long-term: 2% increase in physician demand (by 2030)

- Shifts in demand for select physician specialties
- Shifts in utilization across delivery settings

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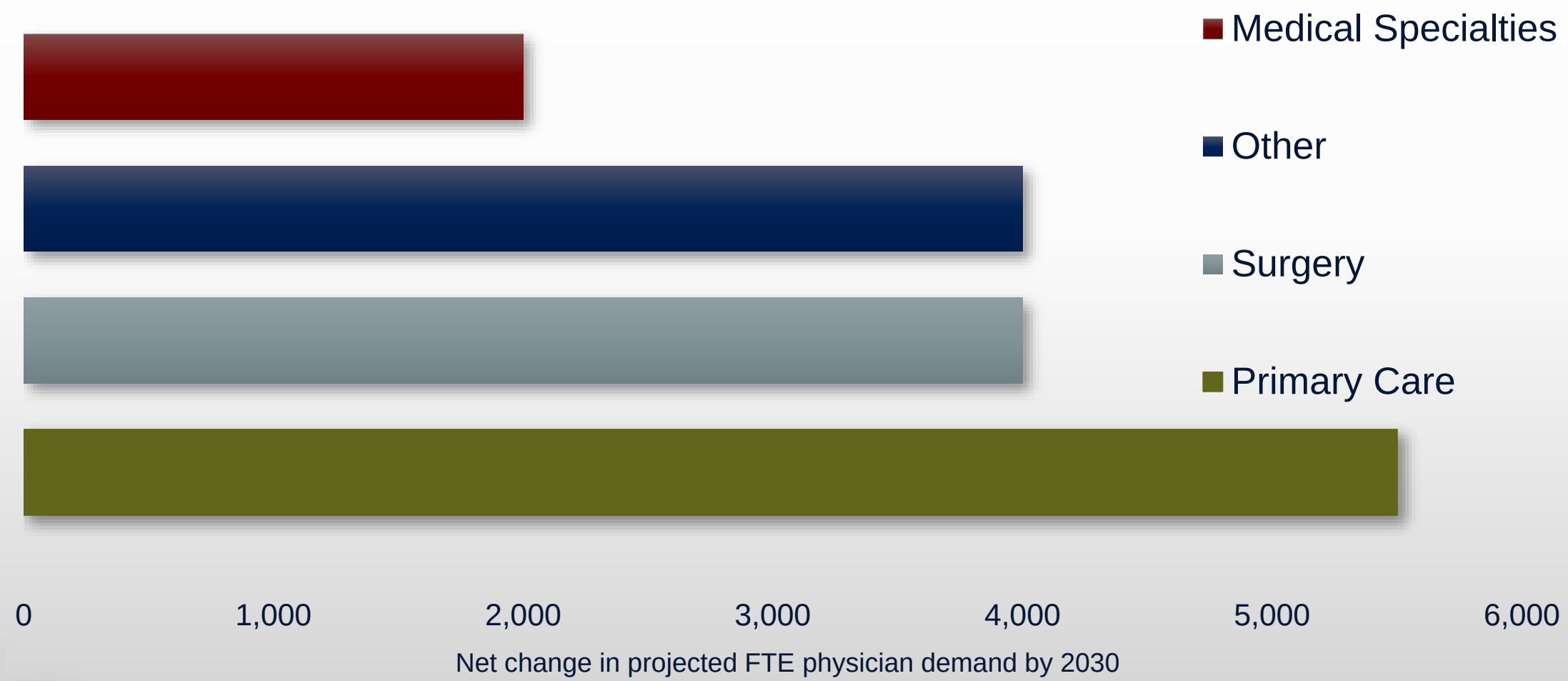
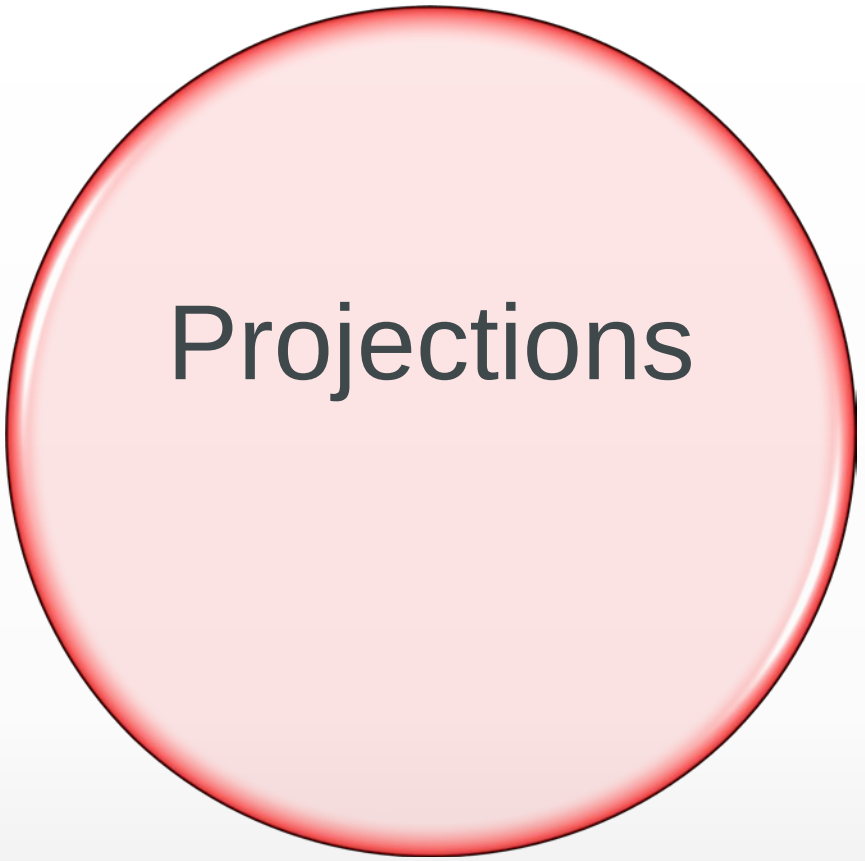
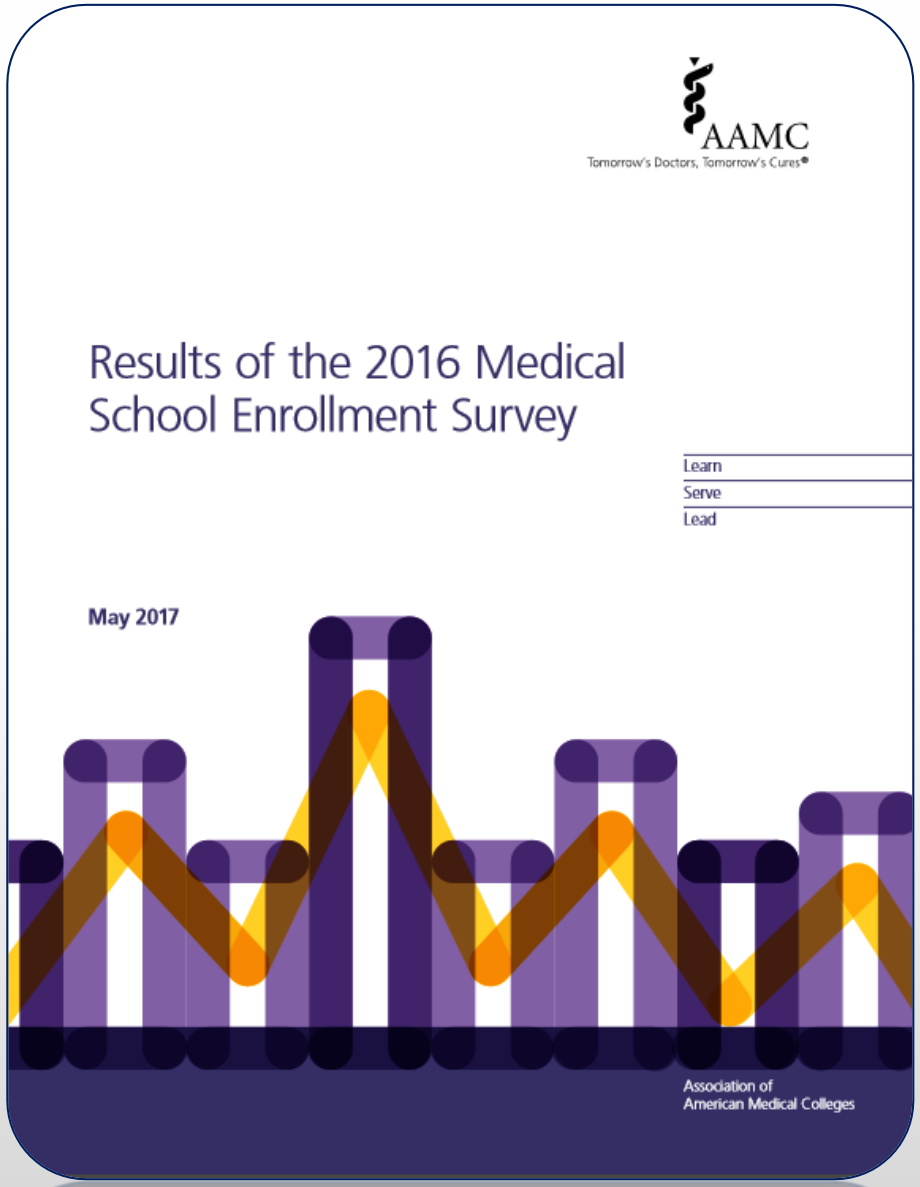
Effect of achieving population health goals would differ across specialty groups



Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.



Underlying trends: UME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Tomorrow's Doctors, Tomorrow's Cures
Results of the 2016 Medical School Enrollment Survey
Learn
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May 2017
Association of American Medical Colleges

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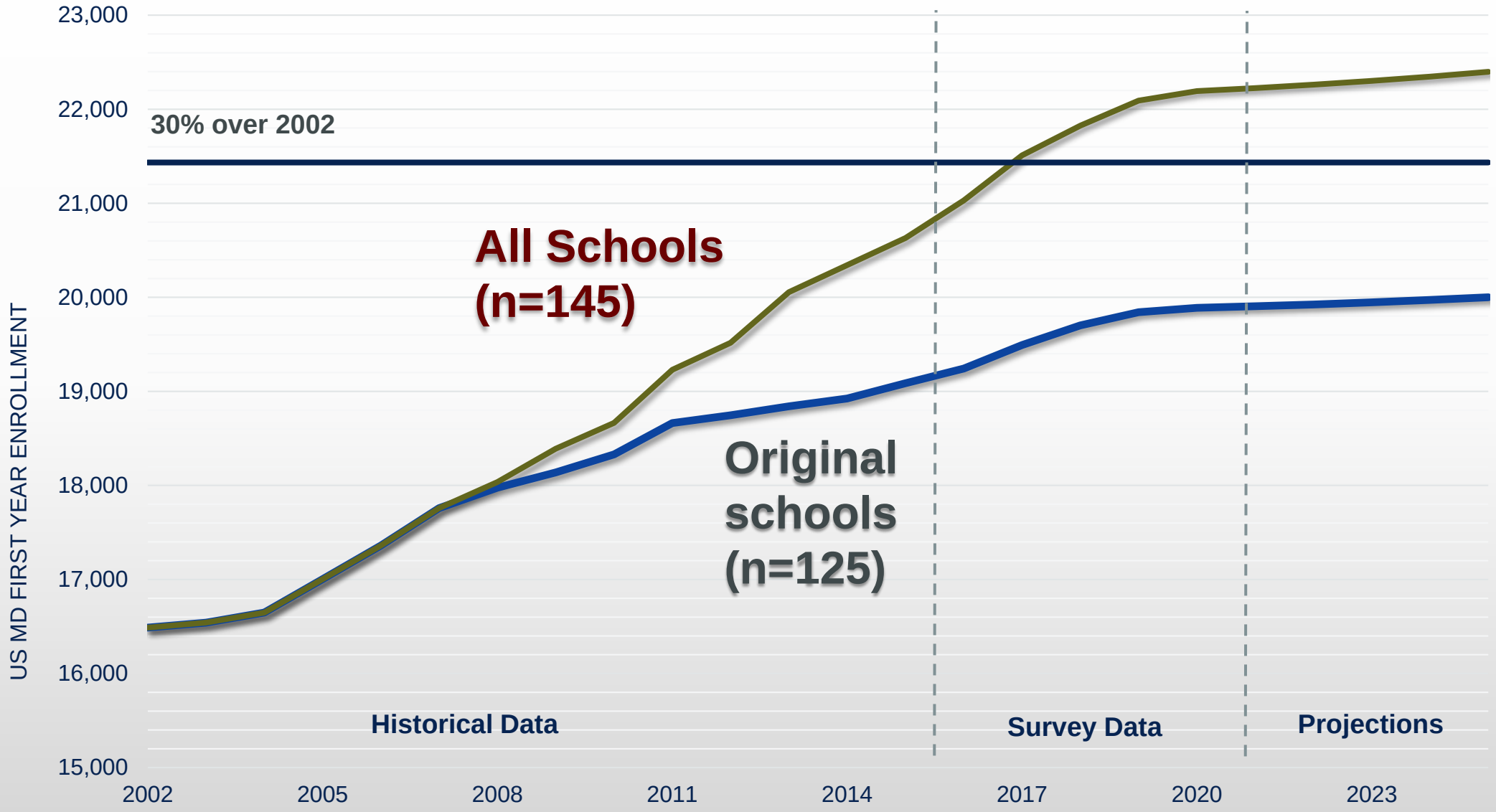
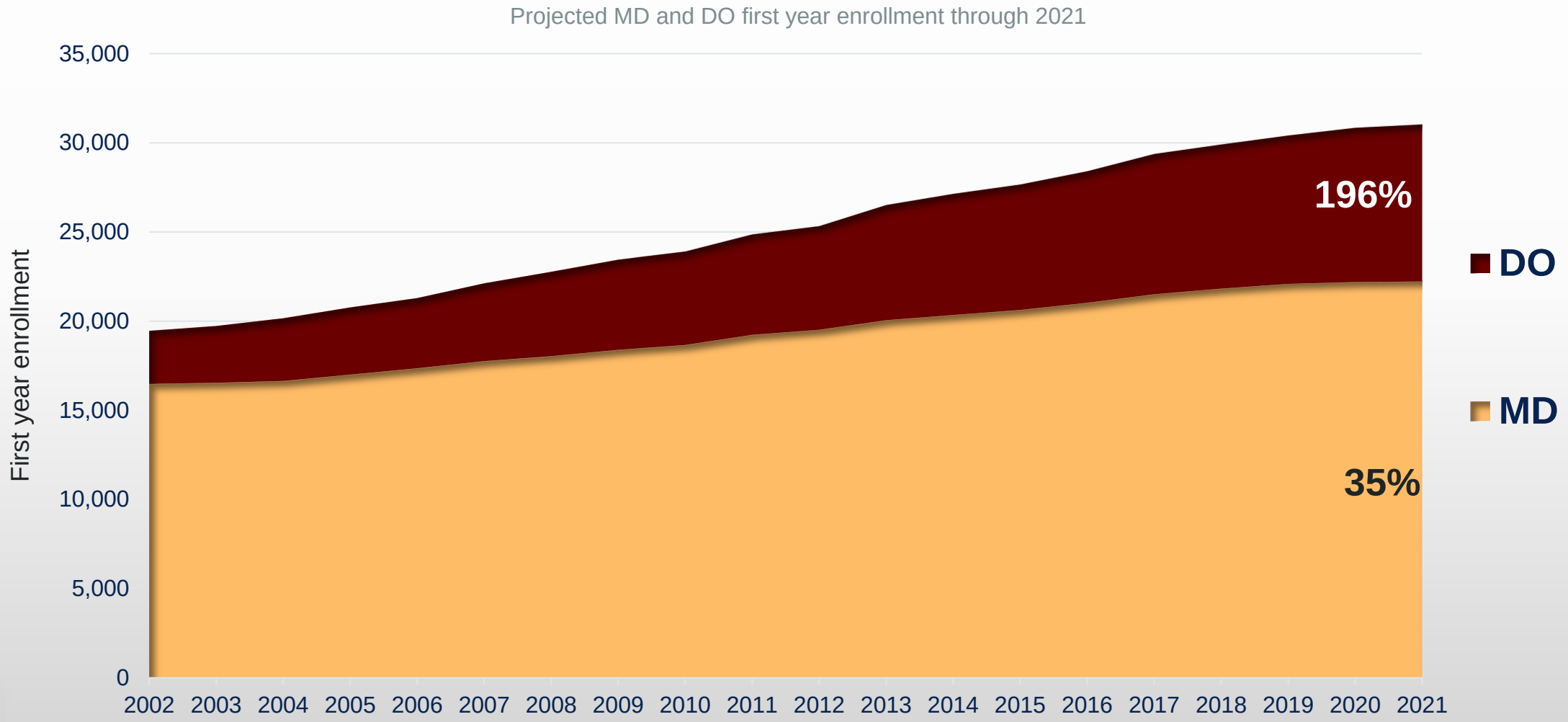
US MD enrollment expected to exceed 30% increase



Source: AAMC 2016 Medical School Enrollment Survey Report

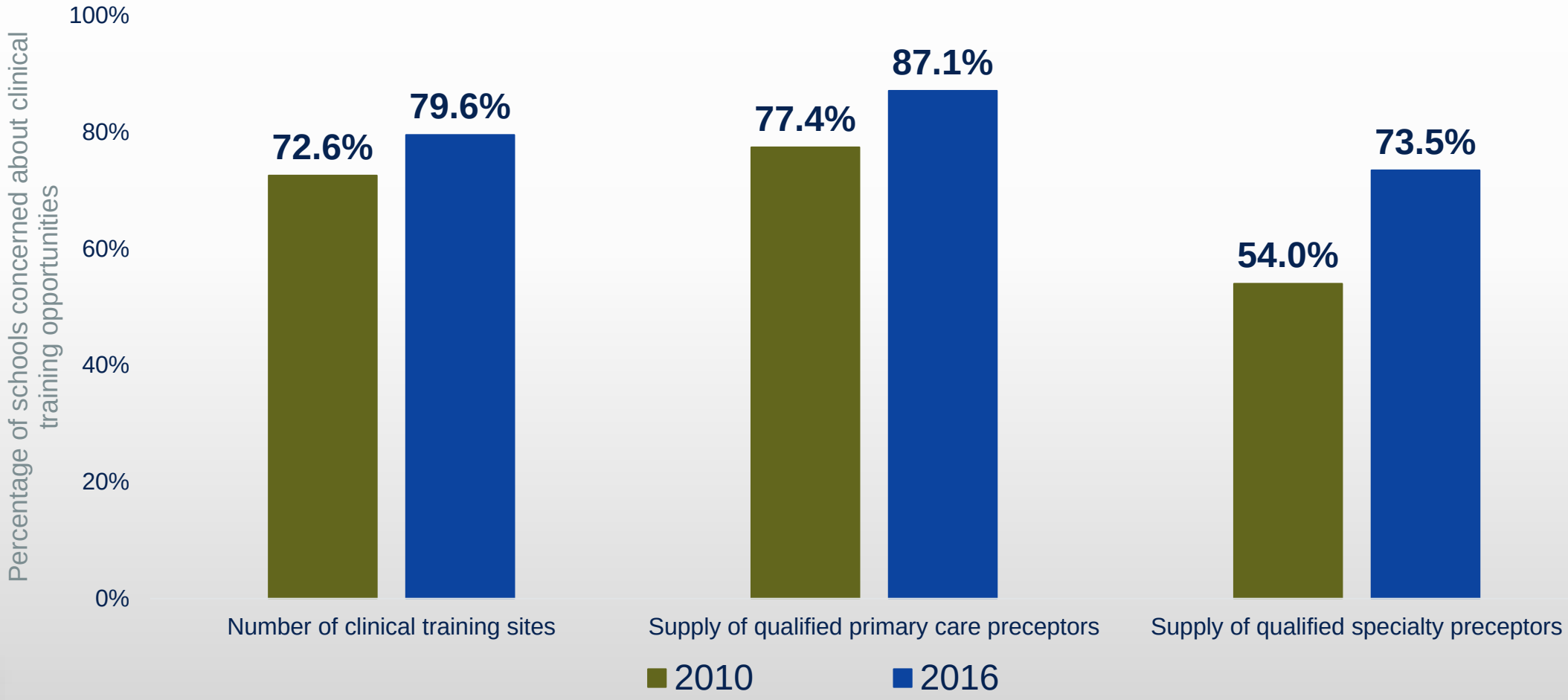
Overall MD & DO first year enrollment is projected to grow 59% between 2002 and 2021



Source: AAMC 2016 Medical School Enrollment Survey Report

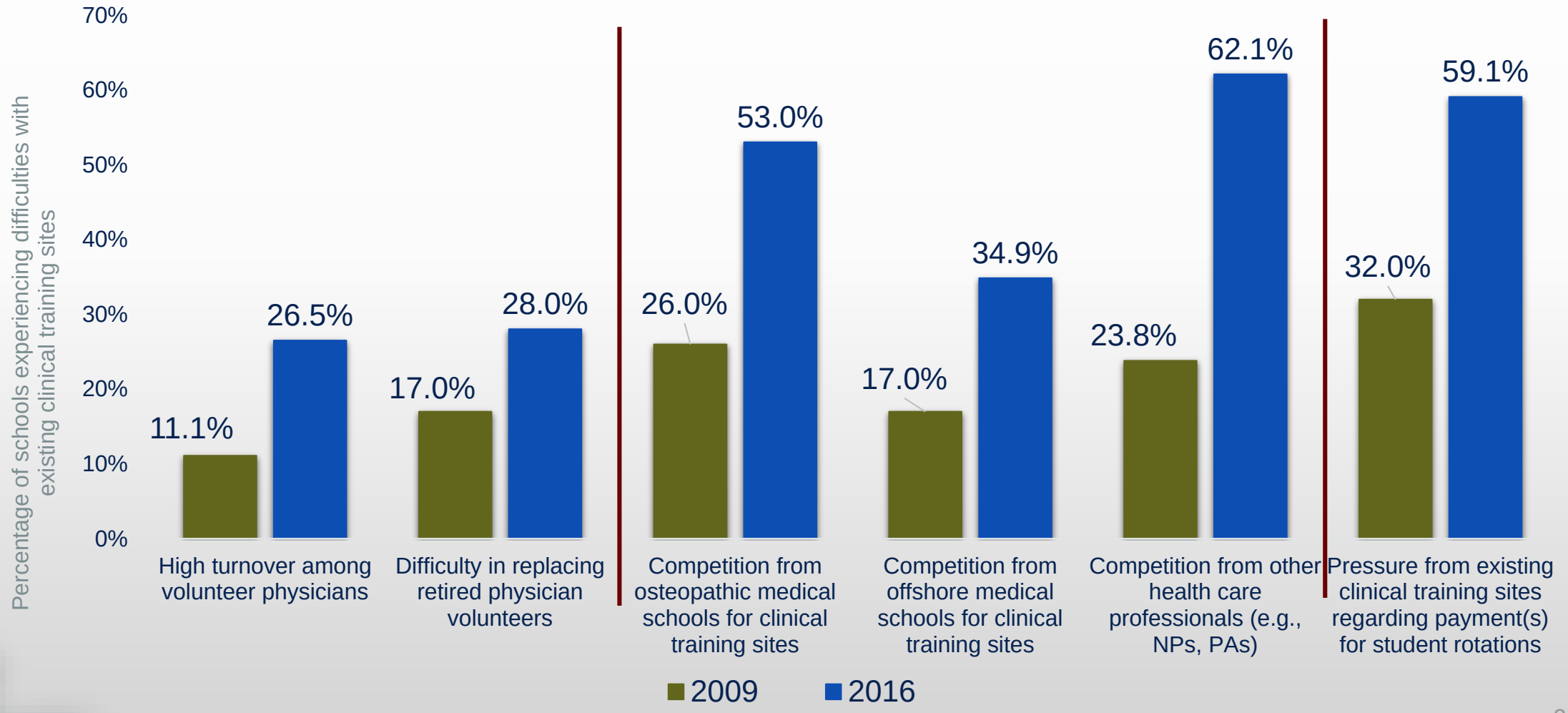

Admissions/UME
Clerkships
Match/GME

Medical schools are increasingly concerned about clinical training opportunities for their students



Source: AAMC 2016 Medical School Enrollment Survey Report

Medical schools experiencing more difficulties with existing clinical training sites



Source: AAMC 2016 Medical School Enrollment Survey Report


American Association of Colleges of Nursing
aacom
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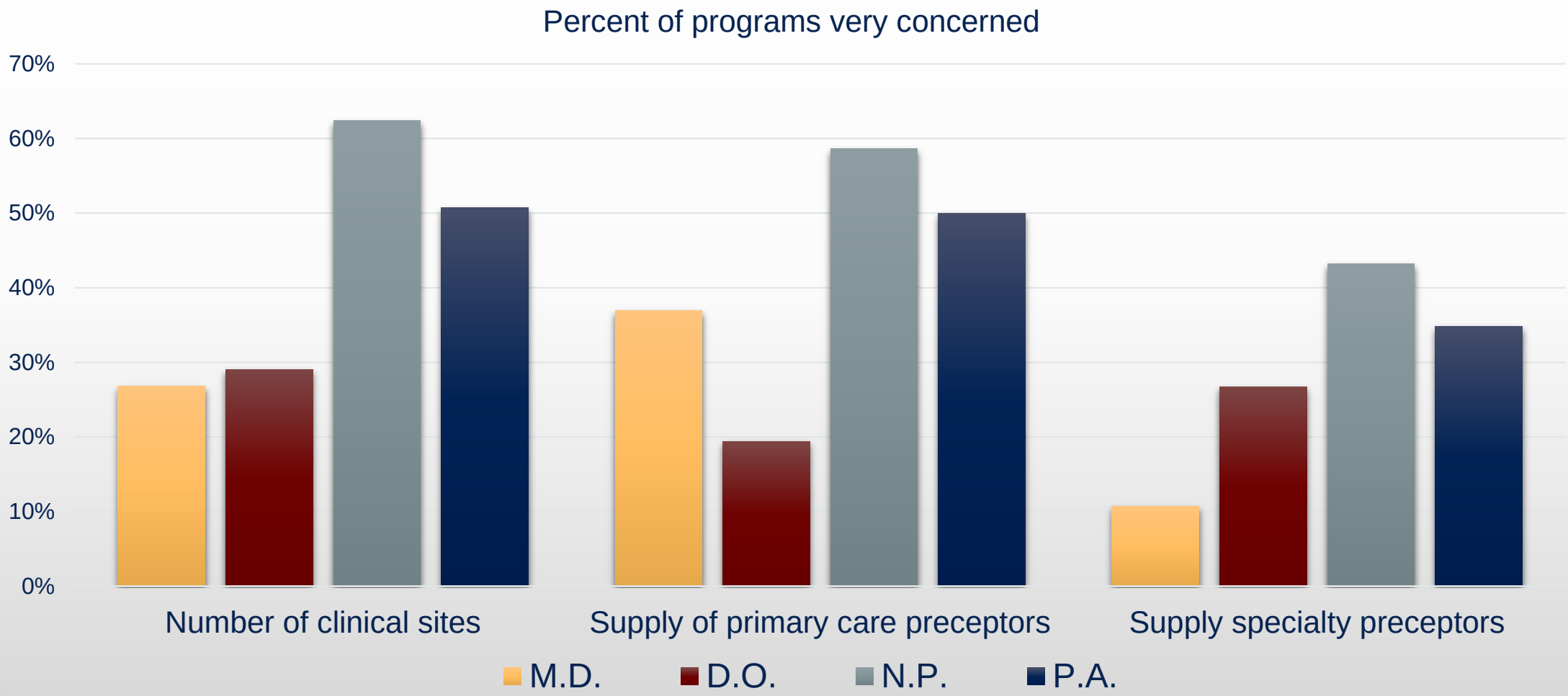
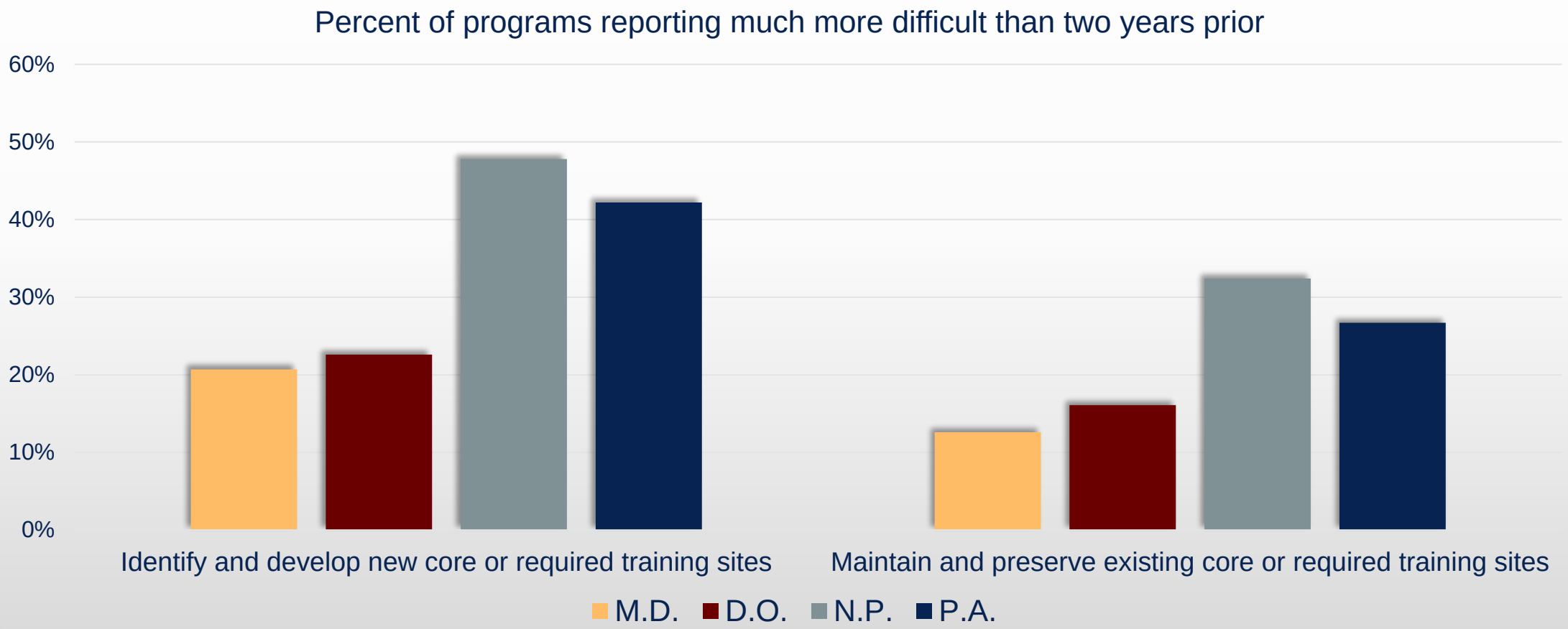
Recruiting and Maintaining U.S. Clinical Training Sites
Joint Report of the 2013 Multi-Discipline Clerkship/Clinical Training Site Survey

Adequacy of clinical opportunities for students an across-the-board concern

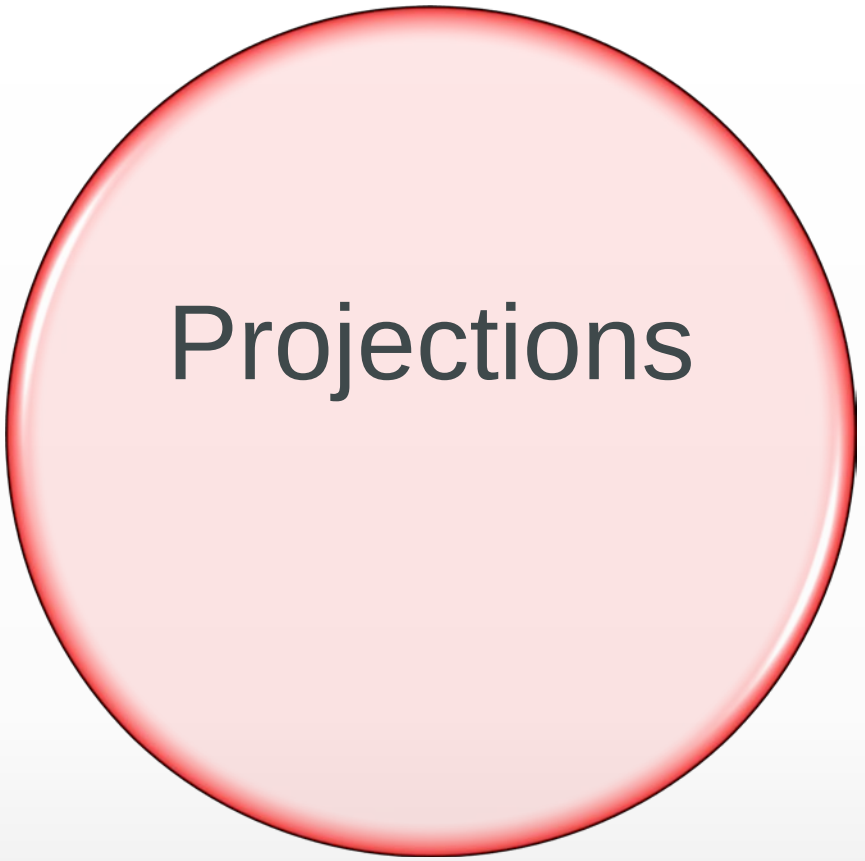


Source: Recruiting and Maintaining U.S. Clinical Training Sites: Joint Report of the 2013 Multi-Discipline Clerkship/Clinical Training Site Survey.

Clerkship/clinical training sites were getting harder to develop & maintain 4 years ago

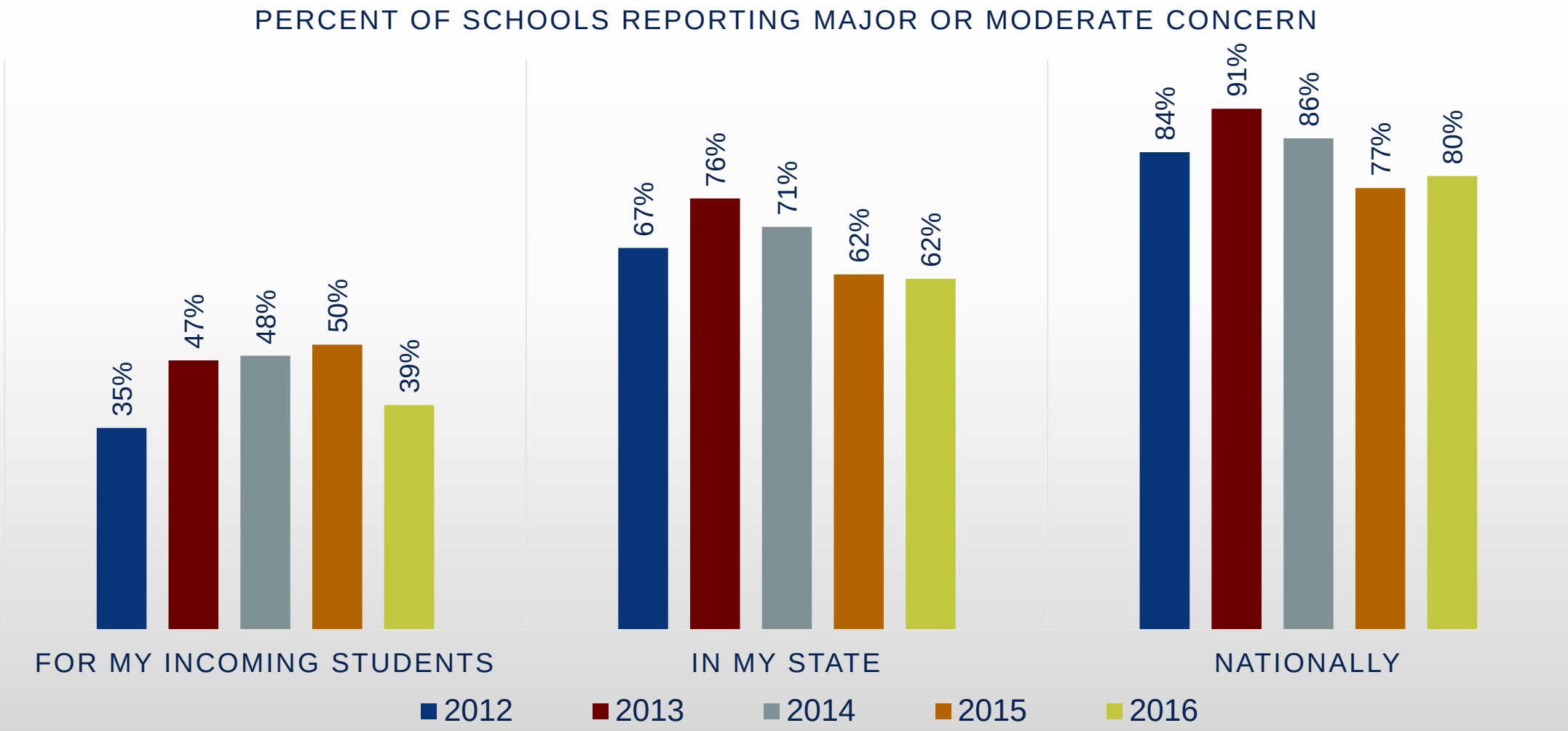


Source: Recruiting and Maintaining U.S. Clinical Training Sites: Joint Report of the 2013 Multi-Discipline Clerkship/Clinical Training Site Survey.



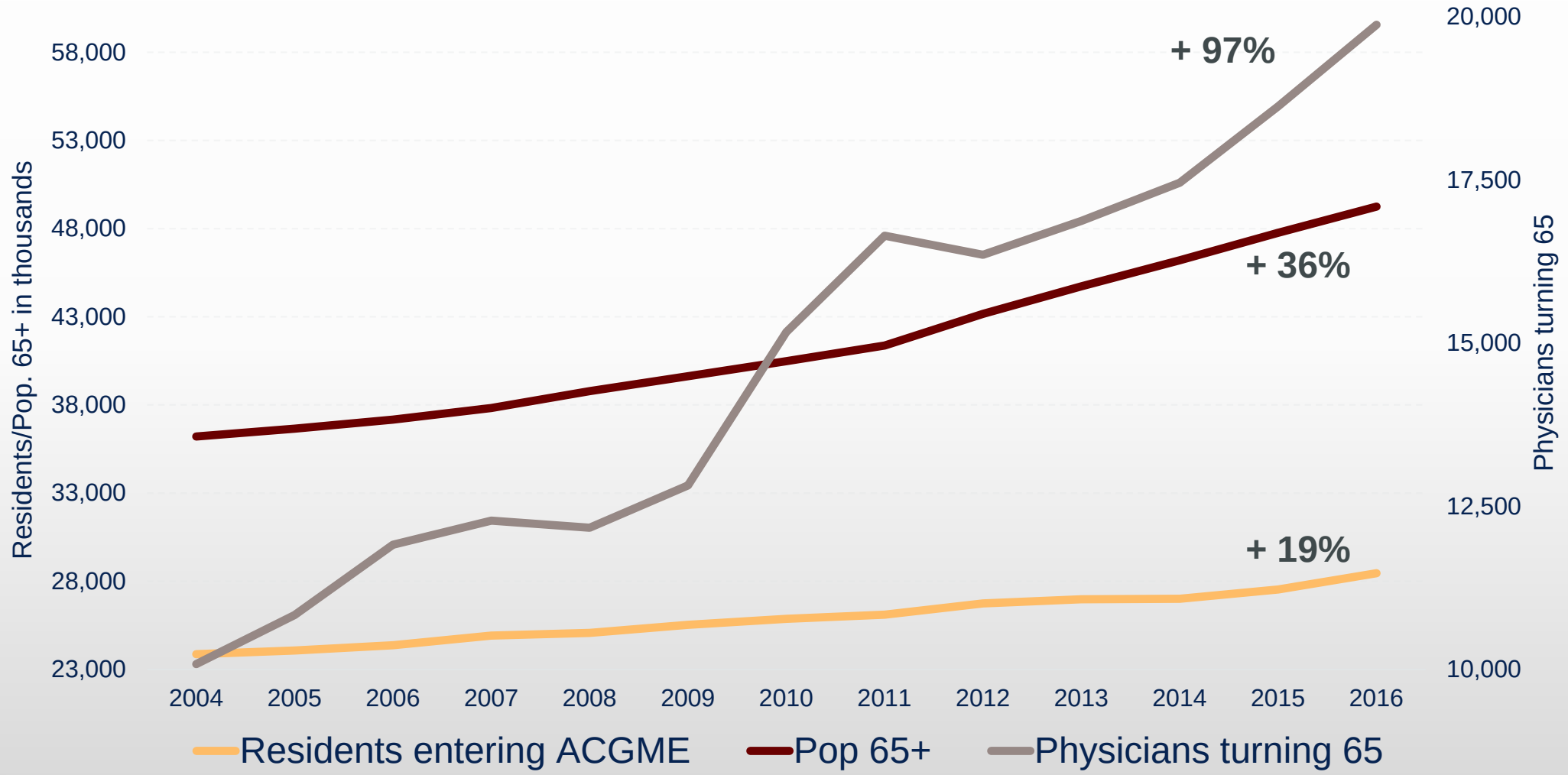
Underlying trends: GME

Percentage of schools concerned about graduate medical education, 2012–2016

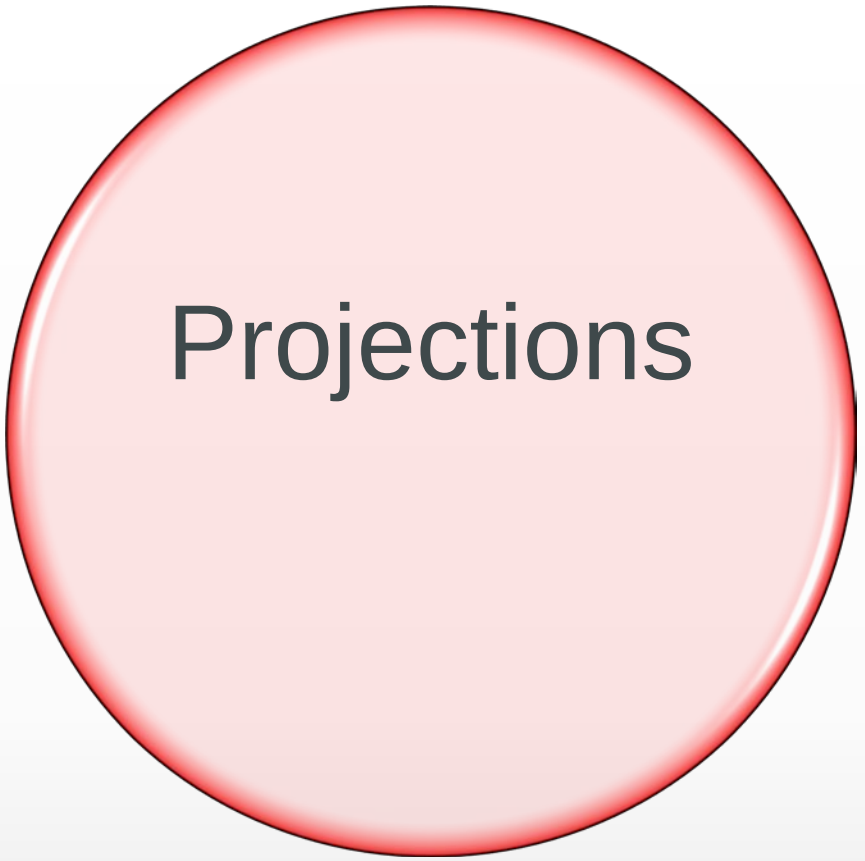


Source: AAMC 2016 Medical School Enrollment Survey Report

Production of new physicians not keeping up with aging workforce and population

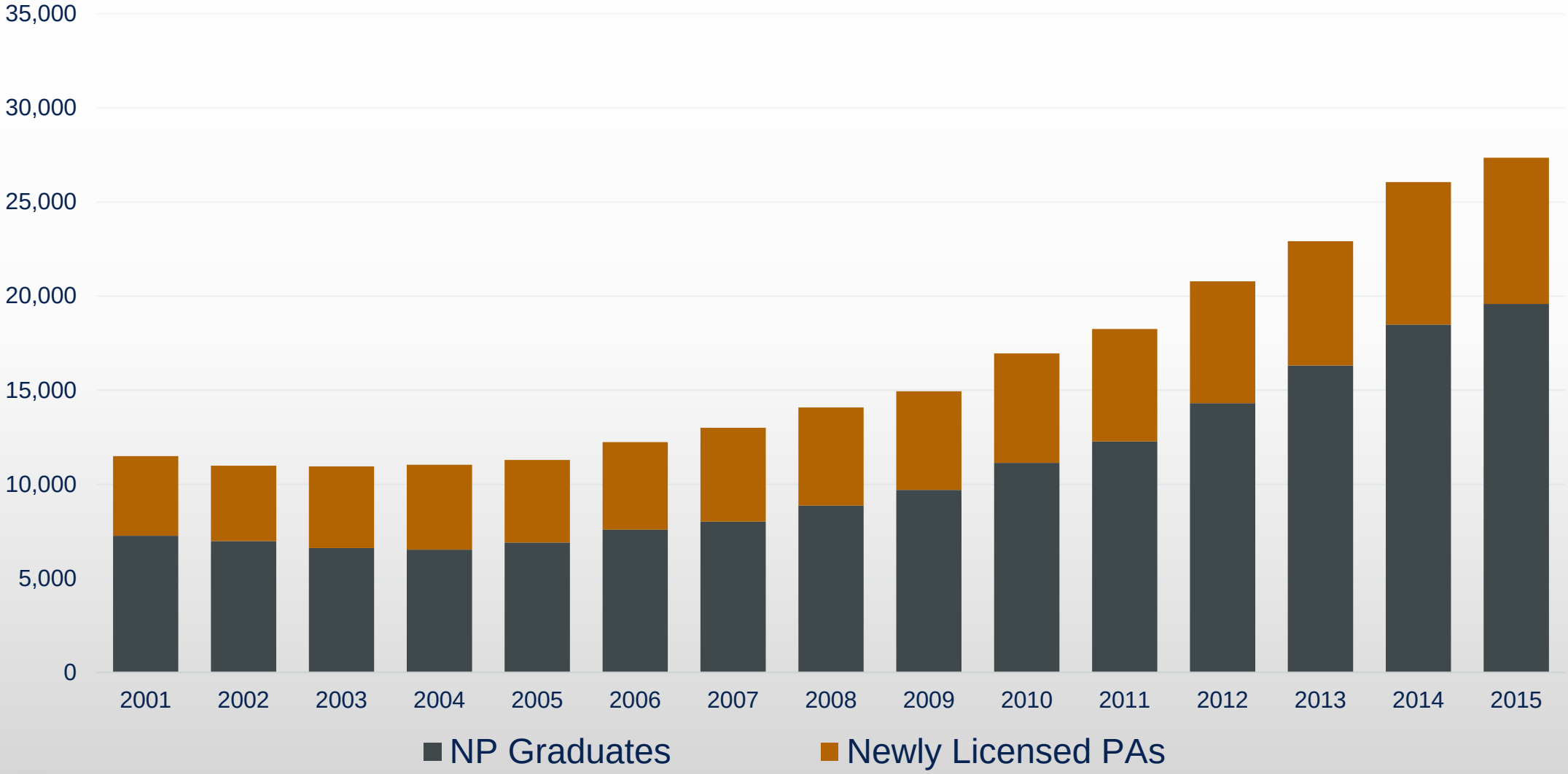


Source: ACGME, Census, AMA Physician Masterfile; US Census Bureau



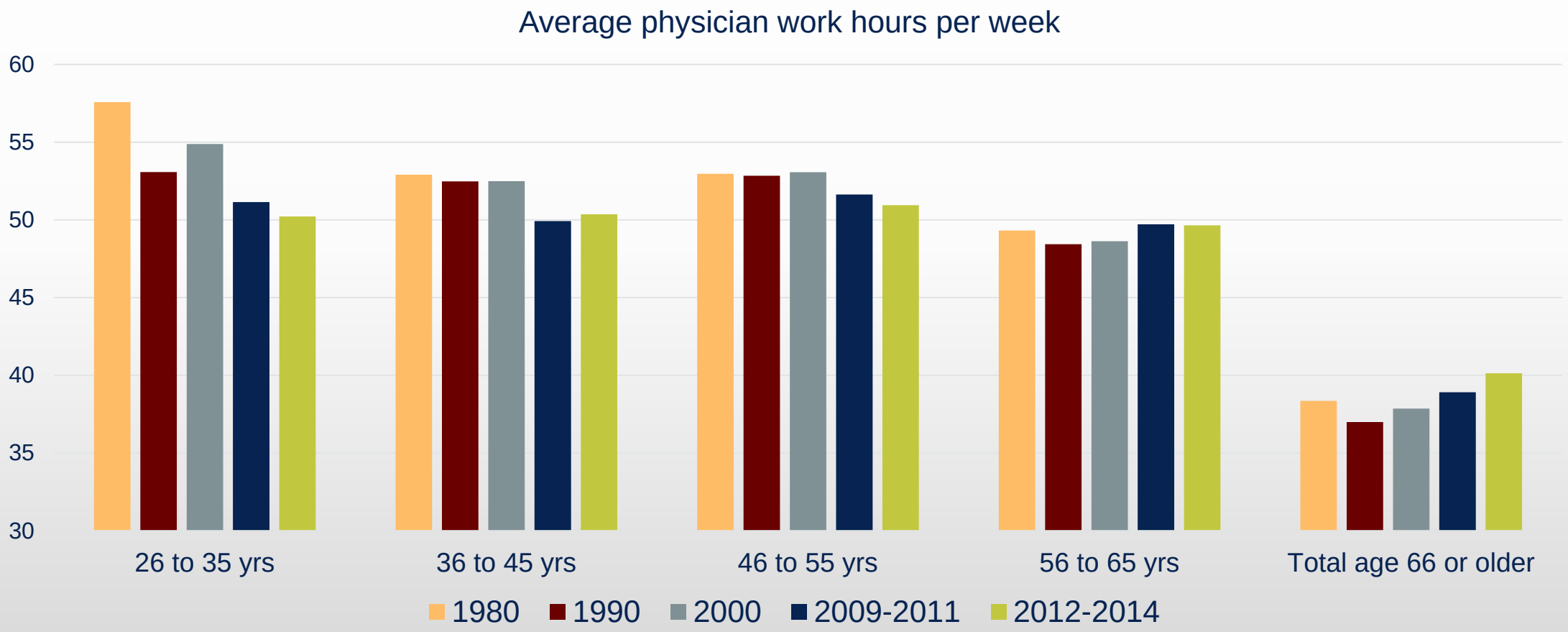
Underlying trends: Physician practice

Numbers of new PAs and NPs still growing rapidly



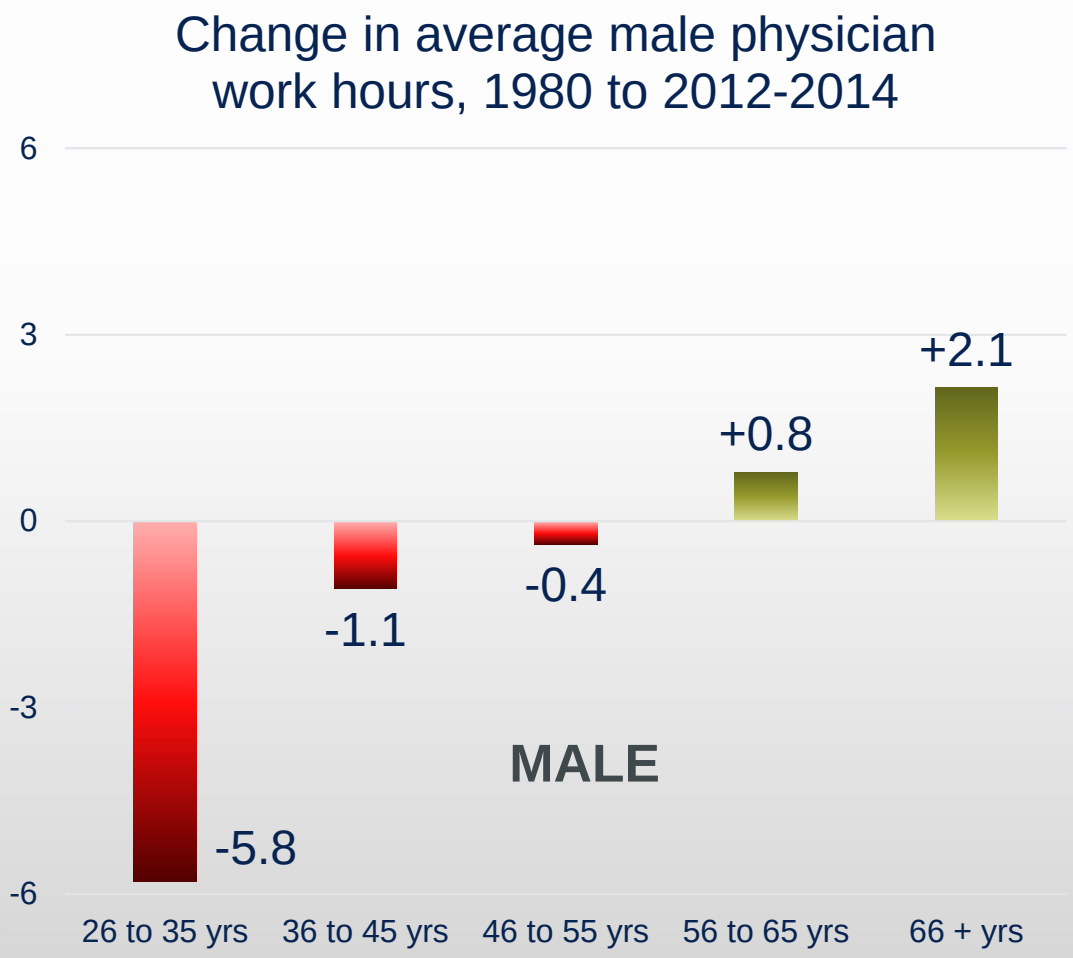
Source: NCCPA; AACN.

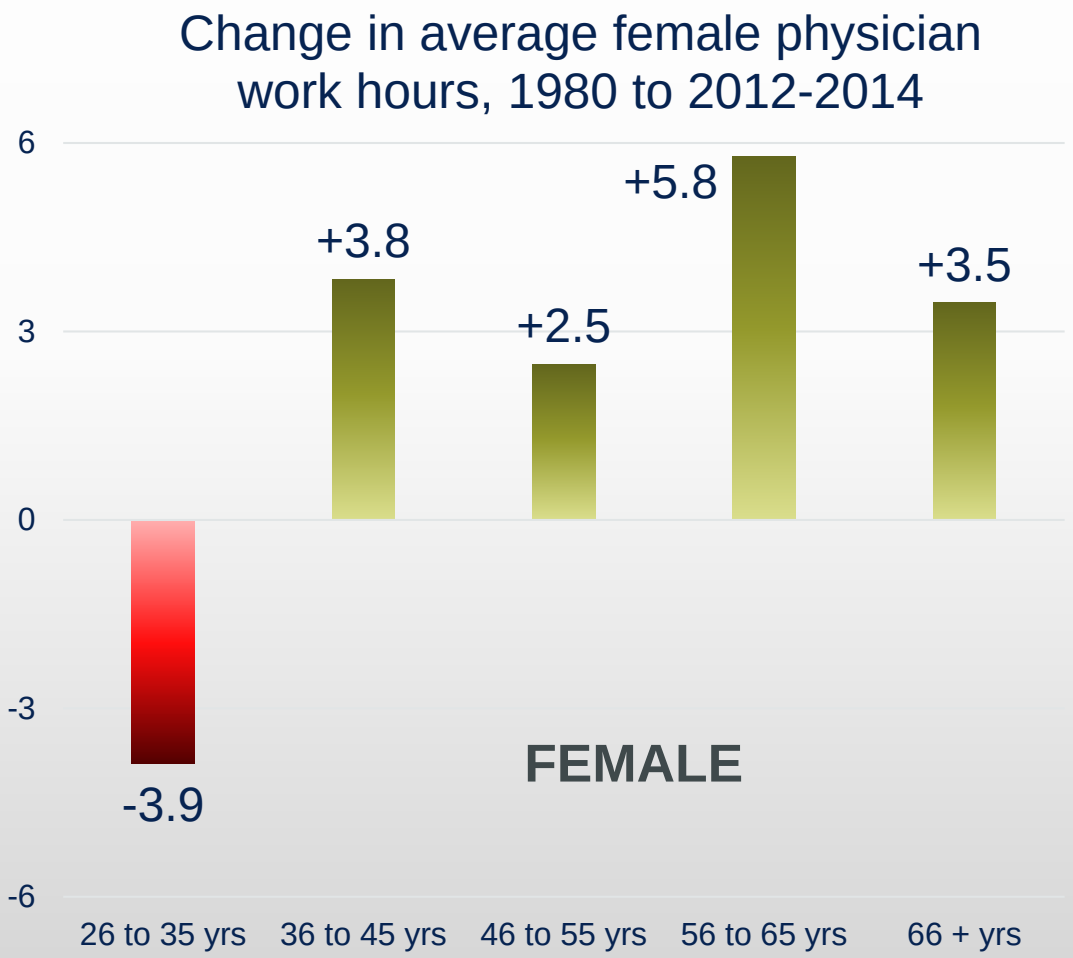
The shift in physician work hours has varied by age group



Source: Census (Decennial/ACS).

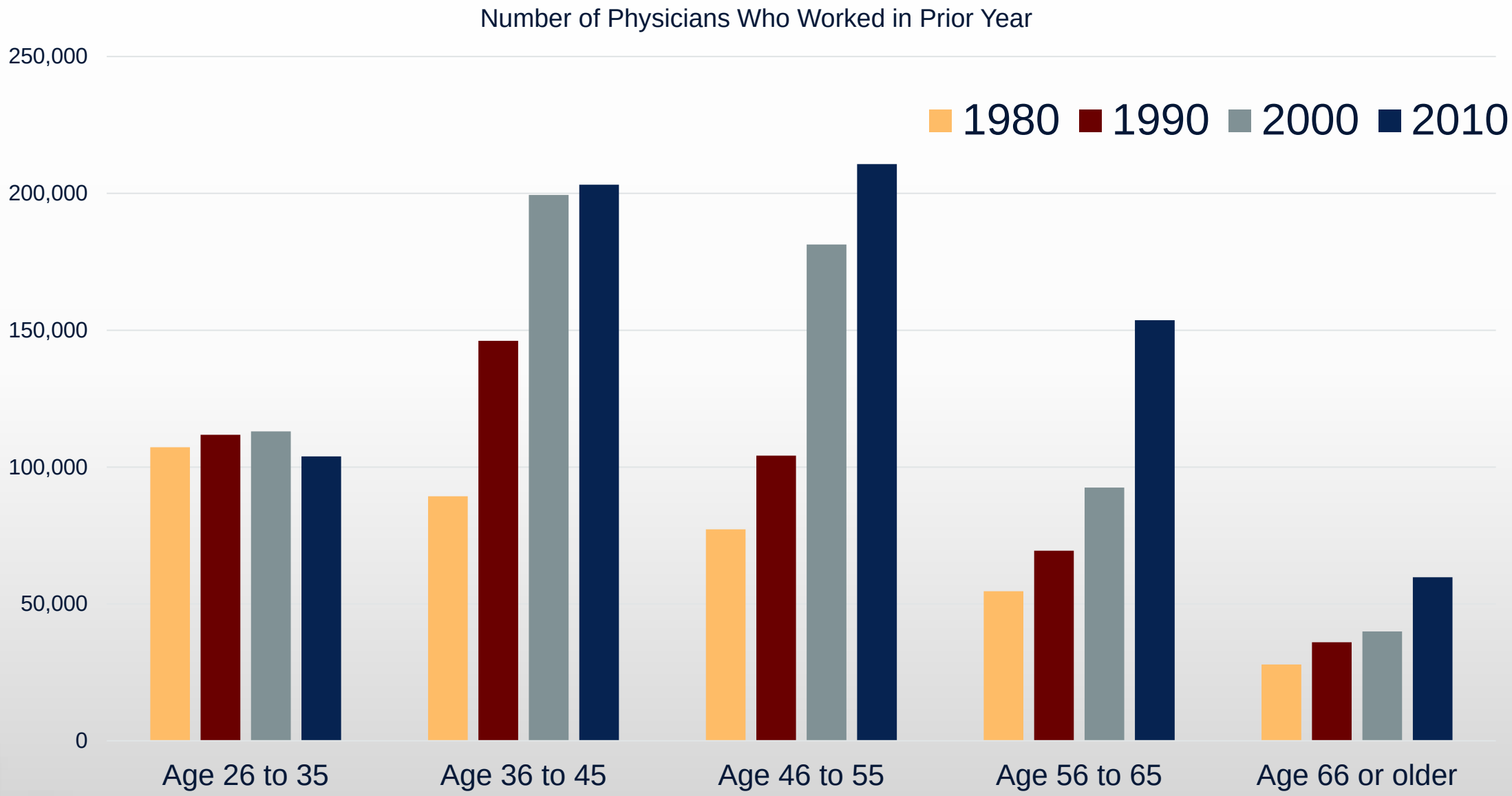
The shift in physician work hours has varied by age group and sex





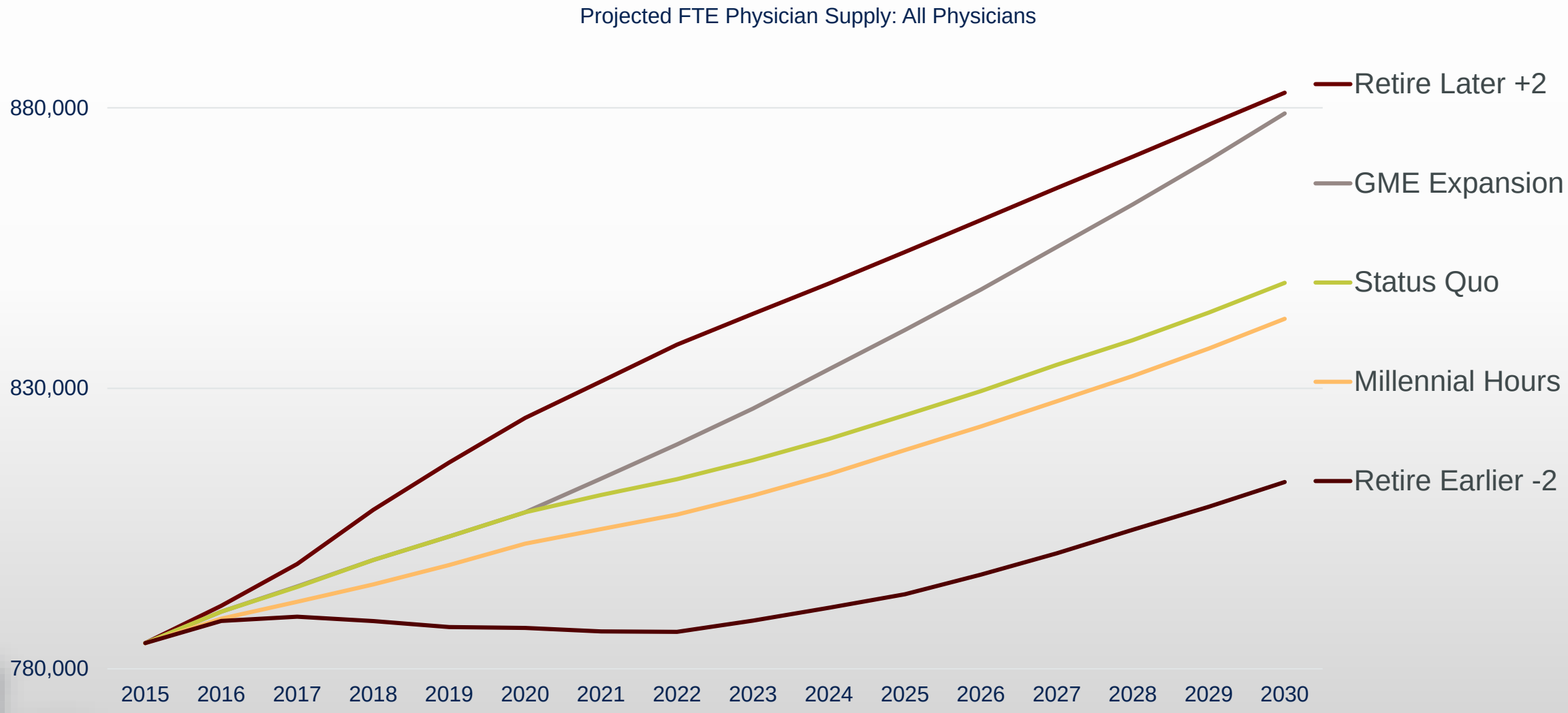
Source: Census (Decennial/ACS).

The US physician workforce is getting older



Source: United States Census Bureau. Note: Data for 2010 are a combination of 2009, 2010, 2011 American Community Surveys. *In 2000 and 2010, “Other” includes two or more races

Retirement scenarios remain the most extreme physician supply projections

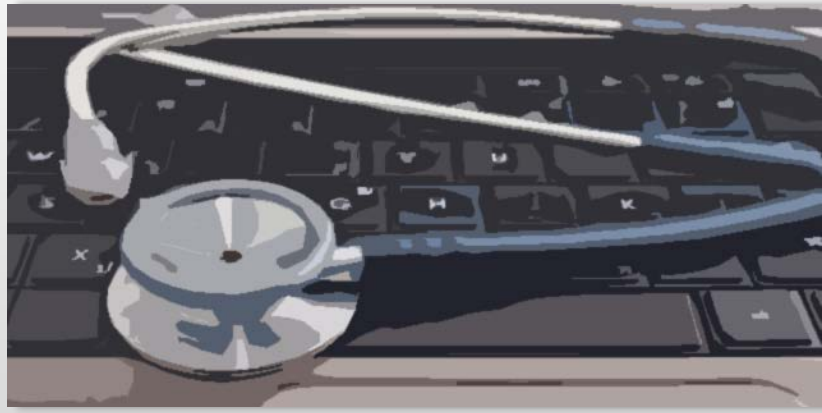


Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

Technology can improve access to a wide array of services

From a patient perspective, we ask about:

- Viewing lab results online
- Making appointments online
- Telephone communication
- Email communication
- Video communication



Consumers report overall increases in most types of technology use

DATA REMOVED PENDING PUBLICATION.

Largest divergence in consumers' use of technology reported for video communication

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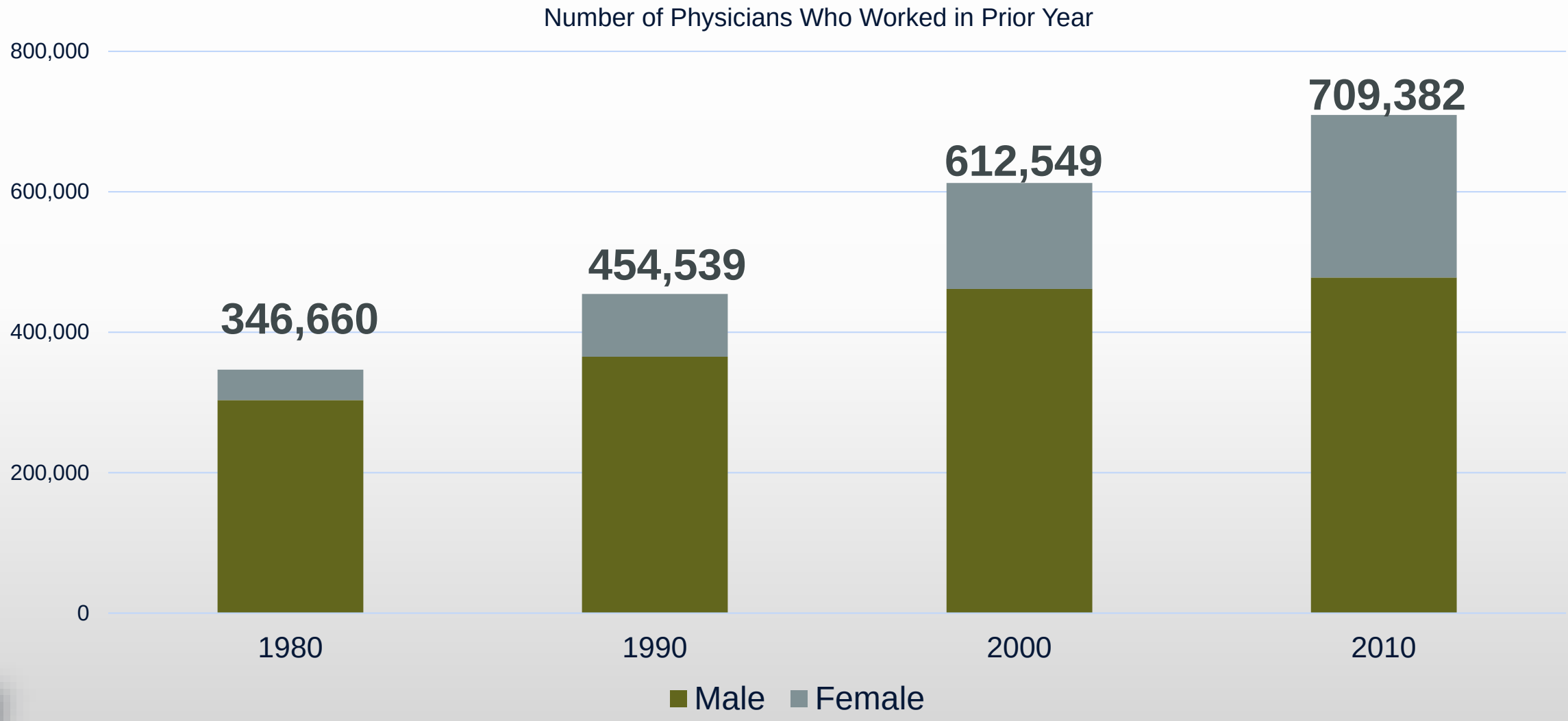
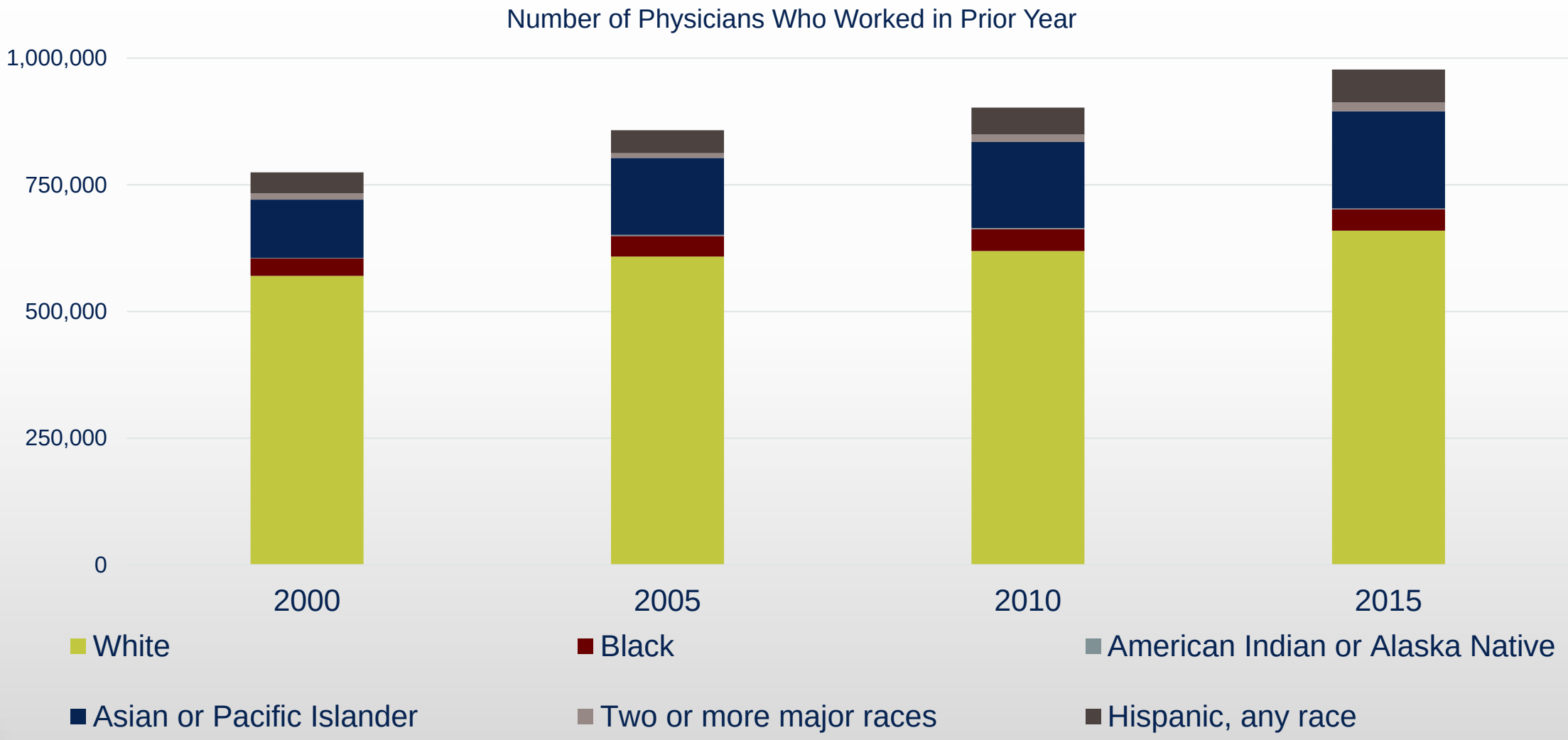
Workforce

Physician workforce in the US continues to grow and to include more female physicians



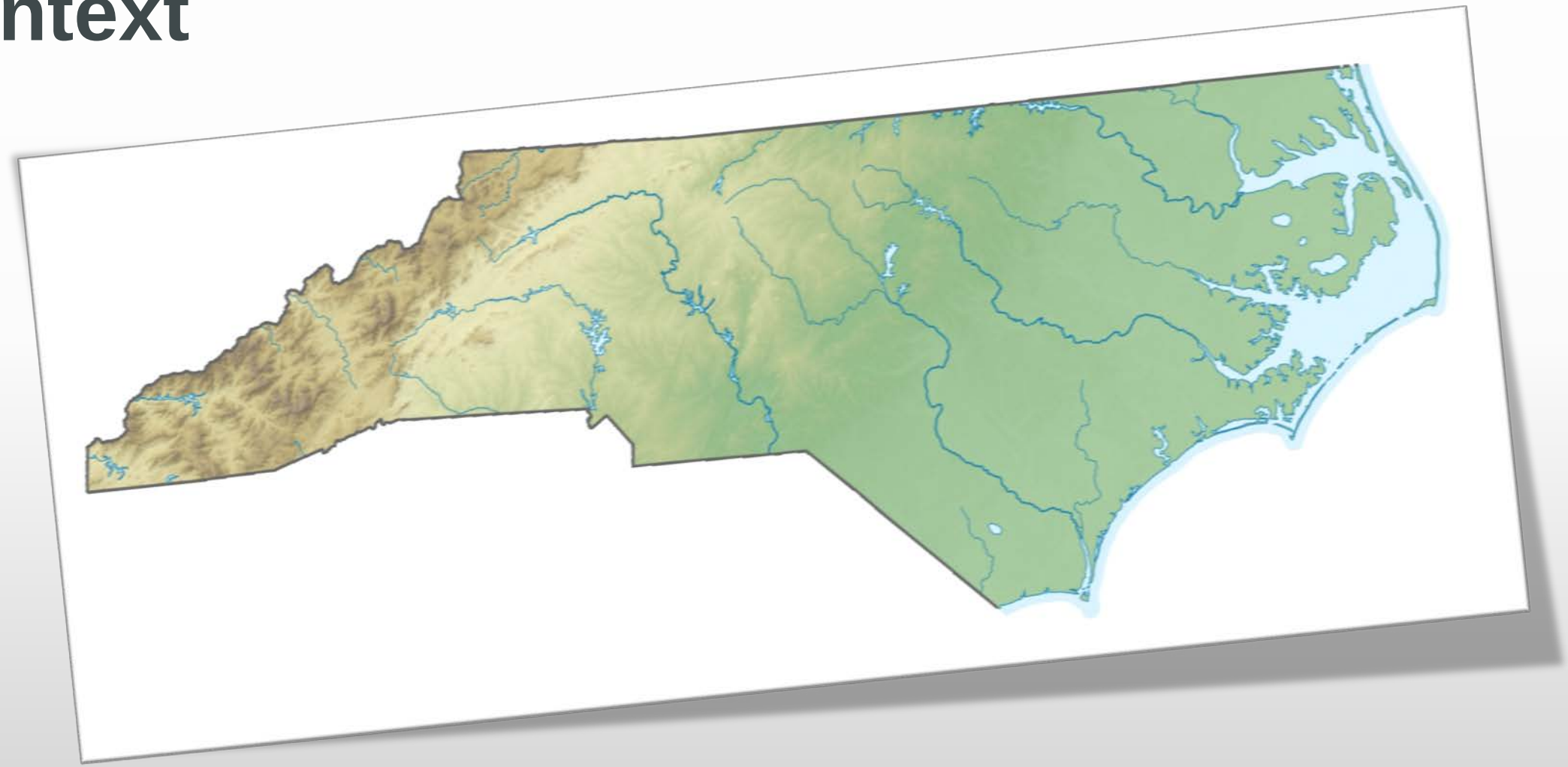
Source: United States Census Bureau
Note: Data for 2010 are a combination of 2009, 2010, 2011 American Community Surveys

Physician workforce is slowly becoming more racially and ethnically diverse



Source: United States Census Bureau. Note: Data for 2010 are a combination of 2009, 2010, 2011 American Community Surveys. *In 2000 and 2010, “Other” includes two or more races

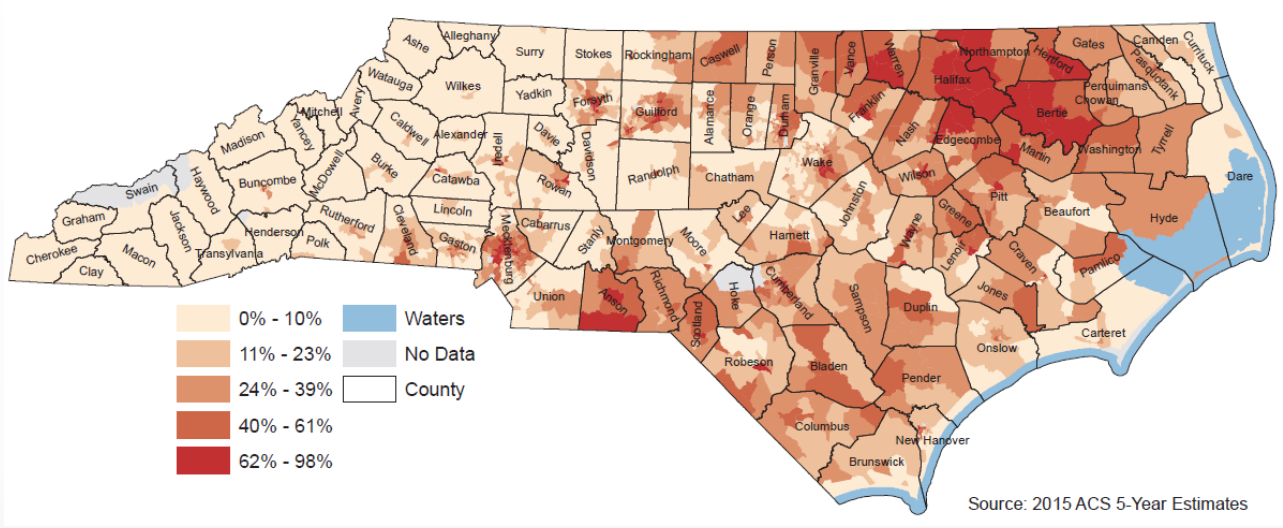
North Carolina makes a good case study in the need to understand workforce diversity in context



Data Source: 2015 American Community Survey 5-year Estimates; 2014 North Carolina Physician Licensure Data

Black or African American population and physician distributions dissimilar

Population

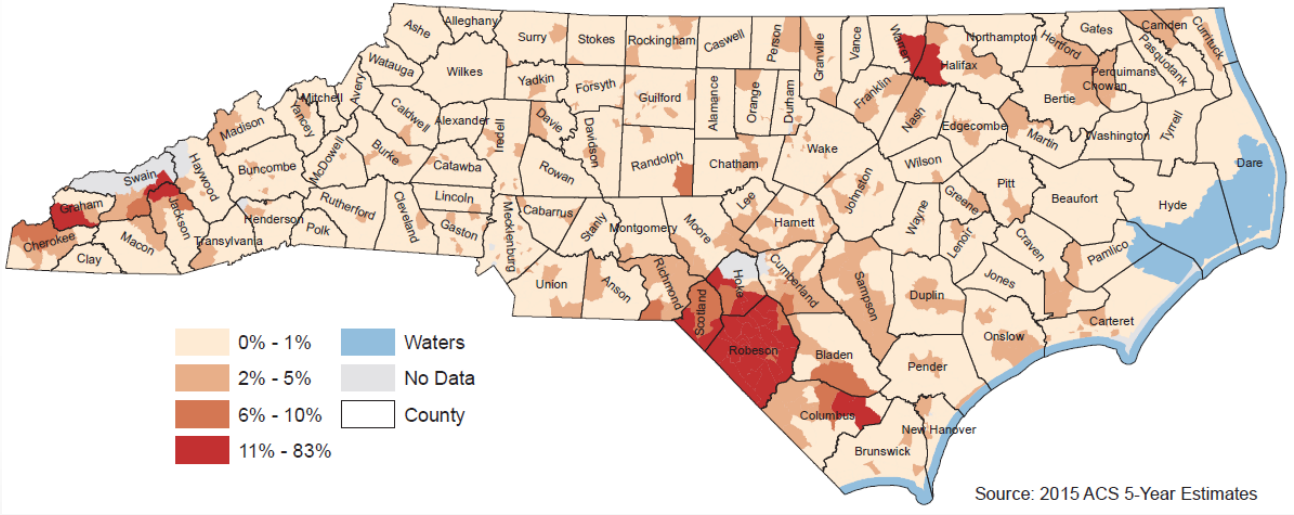


PHYSICIAN DATA REMOVED PENDING PUBLICATION.

Data Source: 2015 American Community Survey 5-year Estimates; 2014 North Carolina Physician Licensure Data

American Indian / Alaska Native population and physician distributions somewhat similar

Population



PHYSICIAN DATA REMOVED PENDING PUBLICATION.

Data Source: 2015 American Community Survey 5-year Estimates; 2014 North Carolina Physician Licensure Data

IMGs comprise a significant part of the nation's physician workforce

24.5% of 2016 active **physicians** were International Medical Graduates (IMGs).[1]

24.9% of 2015-2016 active **residents** were International Medical Graduates (IMGs).[2]

[1]2017 State Physician Workforce Data Report, AAMC Workforce Studies.
[2] 2016 AAMC Report on Residents, December 2016

Deferred Action for Childhood Arrivals (DACA) program uncertainty could impact workforce diversity

Students with DACA status:

113 Applied to U.S. medical schools for the 2016-2017 year

65 Enrolled in U.S. medical schools in the 2016-2017 year

AAMC expects increased enrollment of DACA Dreamers in 2017-2018 since most with confirmed DACA status have not yet finished their undergraduate degrees.

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[1] https://www.forbes.com/sites/brucejapsen/2017/09/05/how-trumps-move-to-end-daca-worsens-the-doctor-shortage/#738df05d5b06.

Education pipeline

Small but important gains from medical school expansion

- Most expansion - highest proportions in primary care and practicing in underserved and rural areas.
- Racial and ethnic diversity of matriculants increased modestly - new schools contributed disproportionately.

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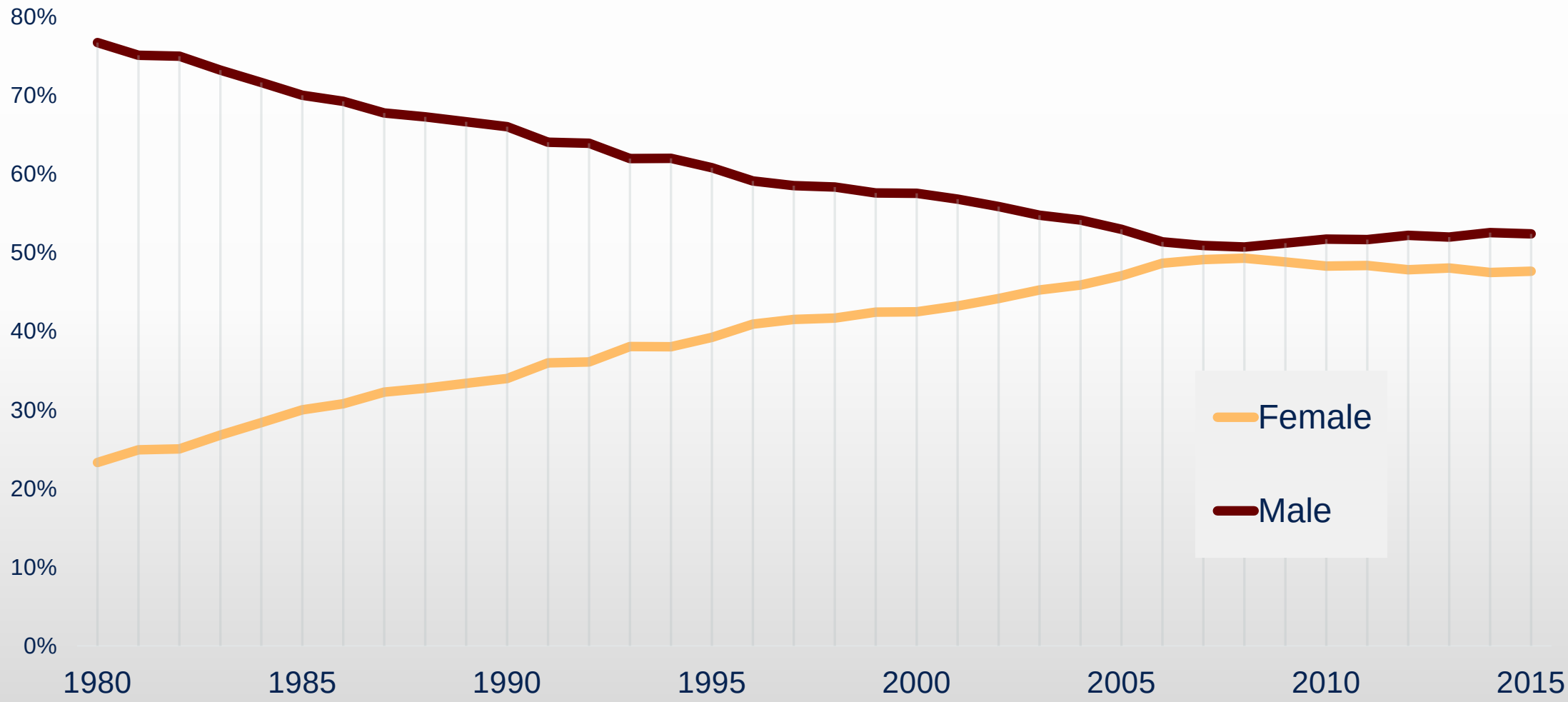
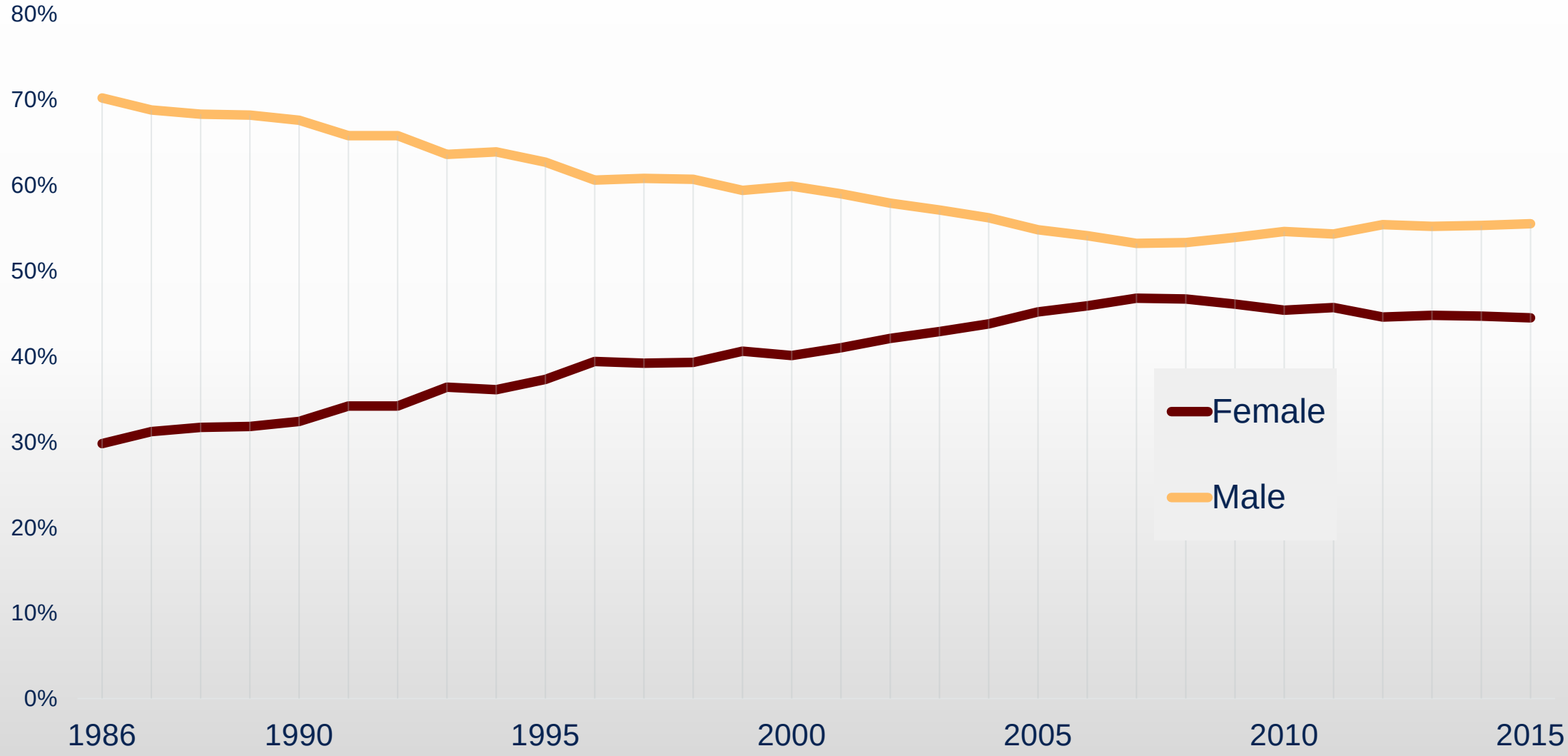
Shipman, Jones, Erikson, & Sandberg. 2013. “Exploring the Workforce Implications of a Decade of Medical School Expansion: Variations in Medical School Growth and Changes in Student Characteristics and Career Plans”. Academic Medicine 88(12): 1904–1912.

Percentage of U.S. medical school graduates by sex, 1980-2015



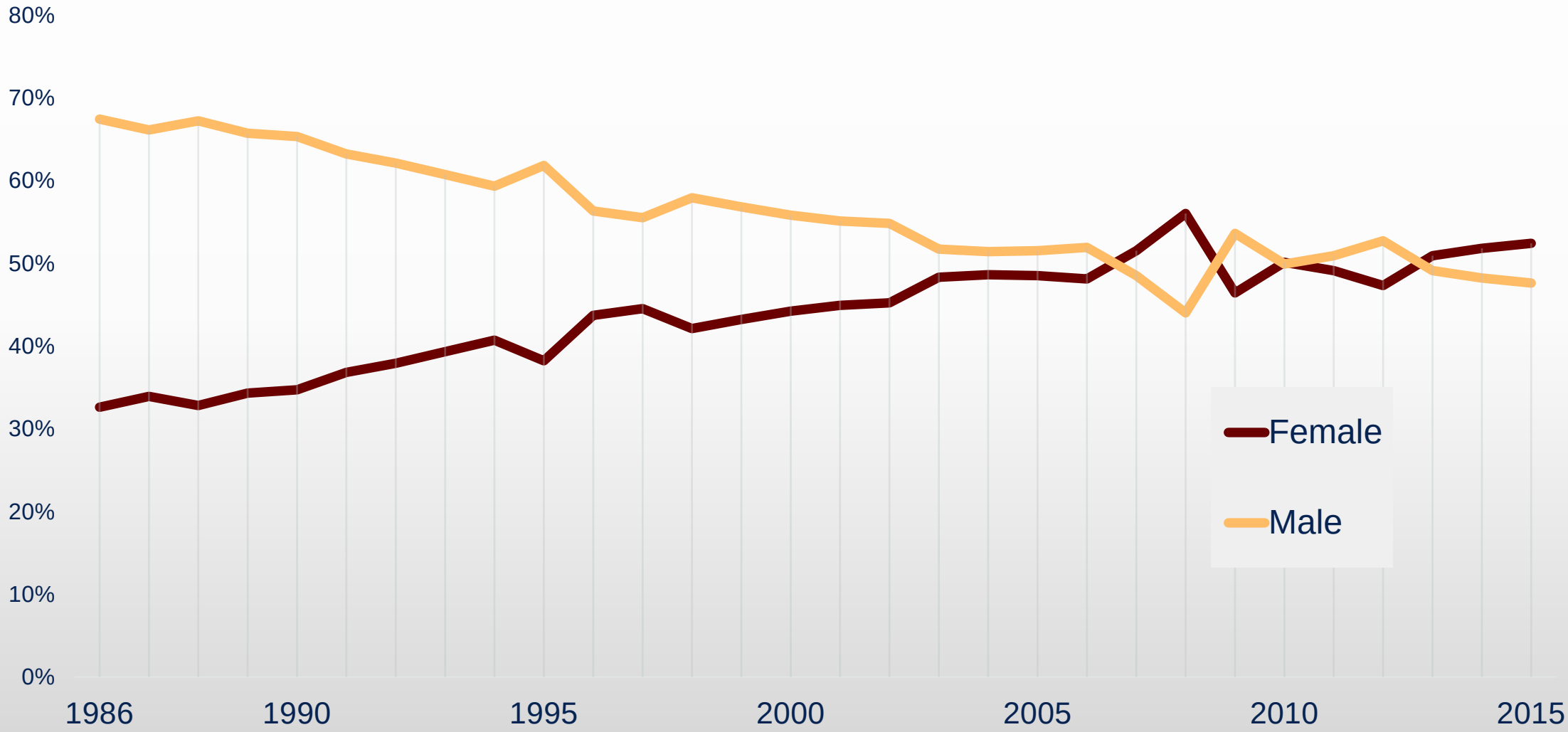
Source: AAMC Data Warehouse: Student file, as of 1/7/2016.

Percentage of U.S. medical school white graduates by sex, 1986-2015



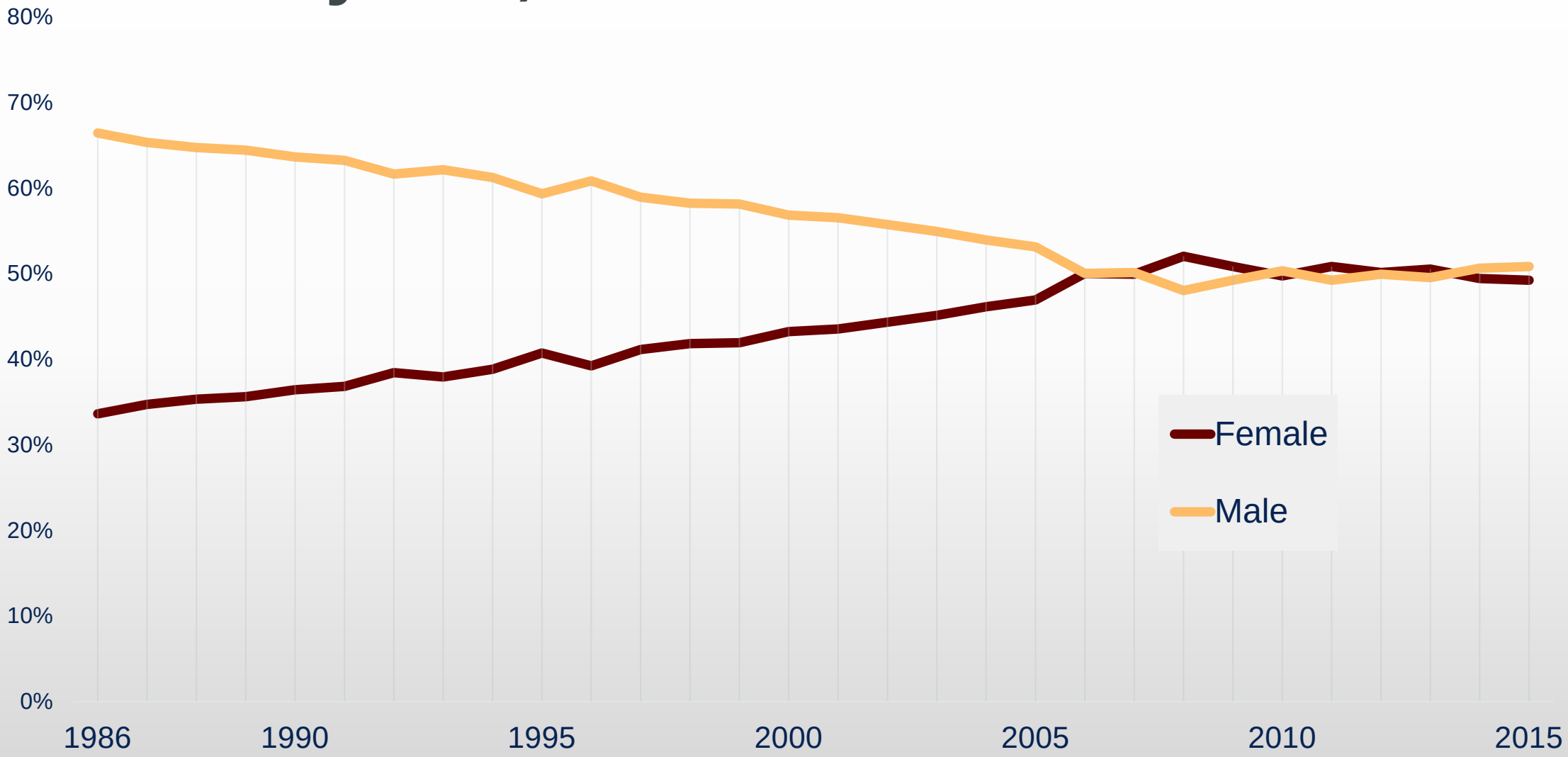
Source: AAMC Data Warehouse: Student data and Applicant and Matriculant file, as of 7/11/2016.

Percentage of U.S. medical school Hispanic graduates by sex, 1986-2015



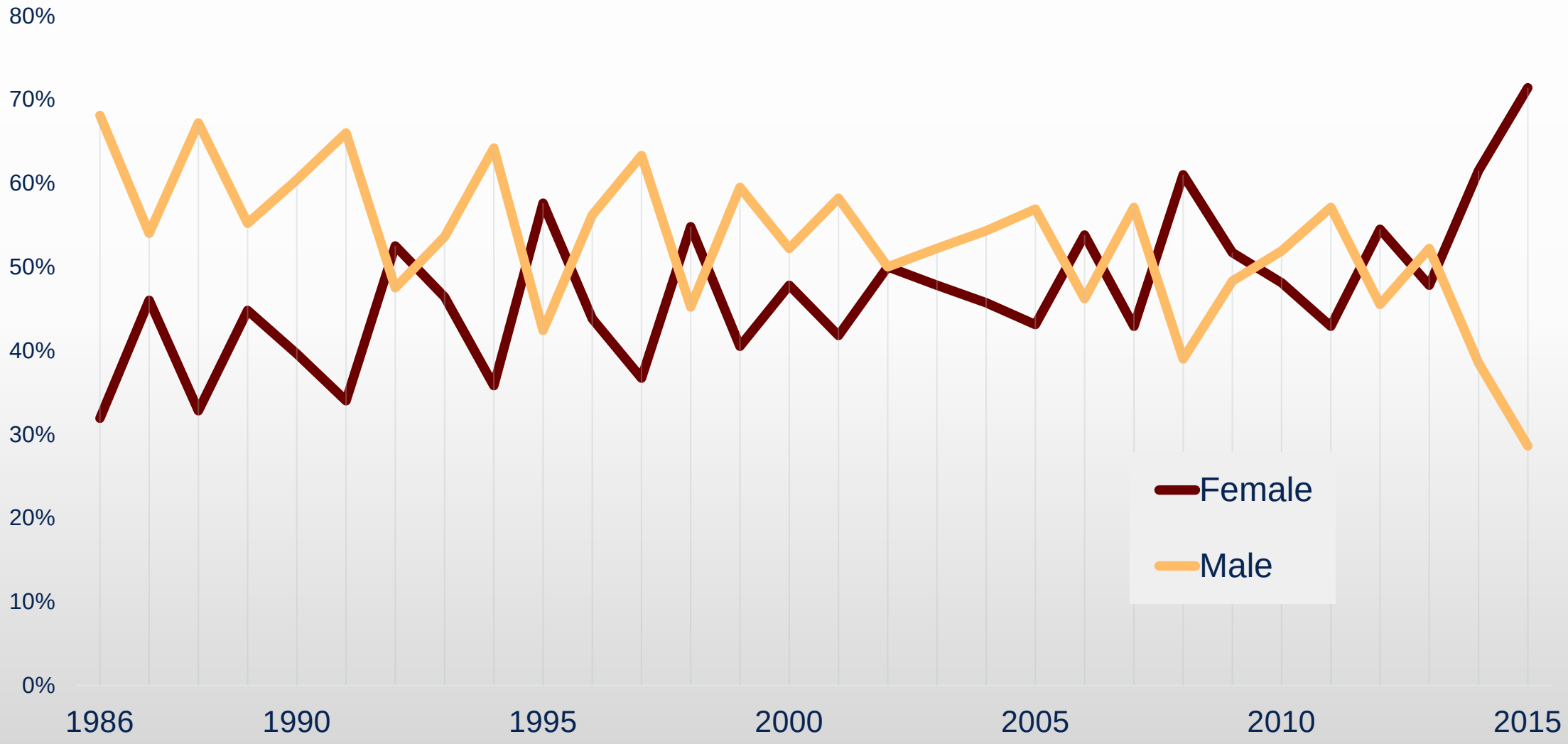
Source: AAMC Data Warehouse: Student data and Applicant and Matriculant file, as of 7/11/2016.

Percentage of U.S. medical school Asian graduates by sex, 1986-2015



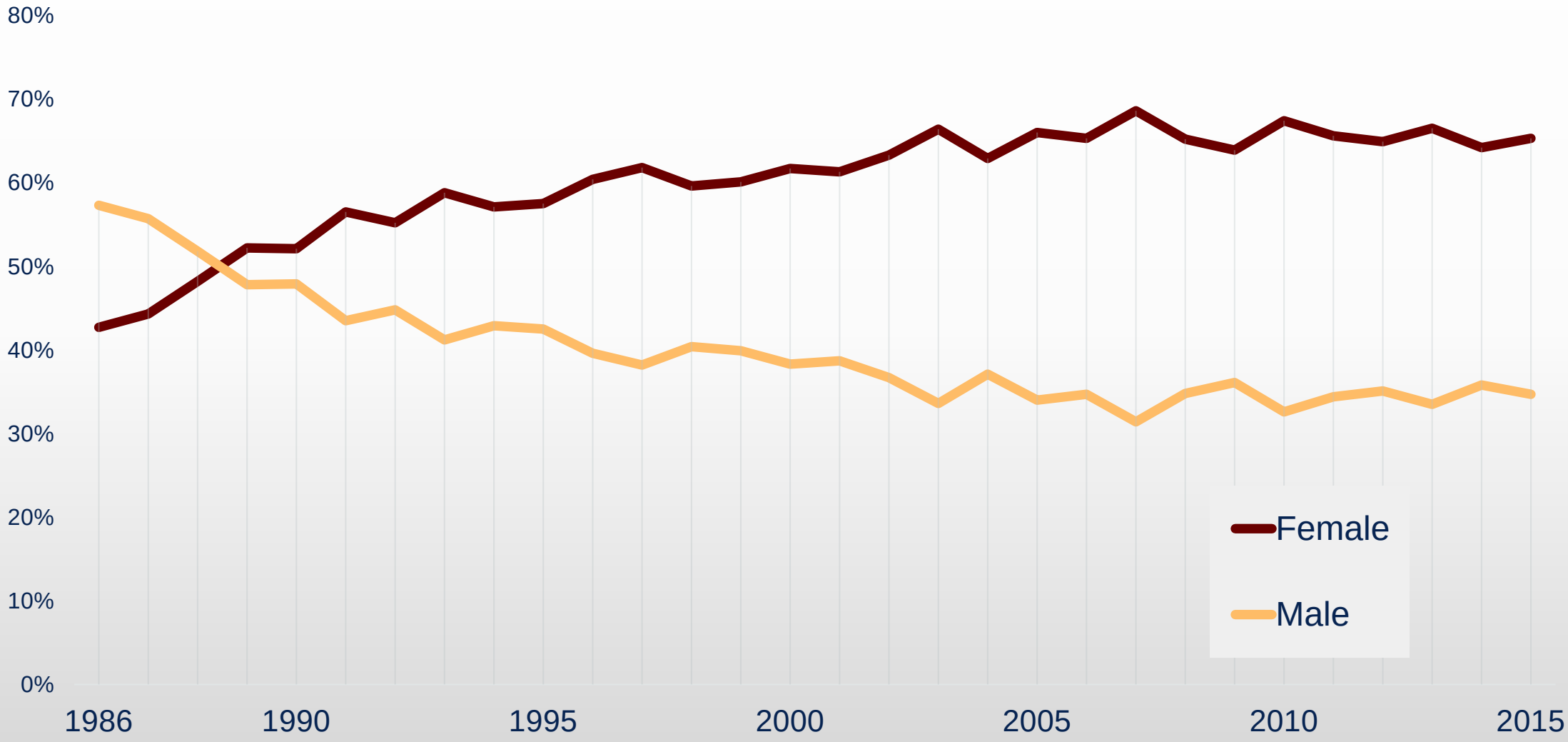
Source: AAMC Data Warehouse: Student data and Applicant and Matriculant file, as of 7/11/2016.

Percentage of U.S. medical school American Indian/Alaska Native graduates by sex, 1986-2015



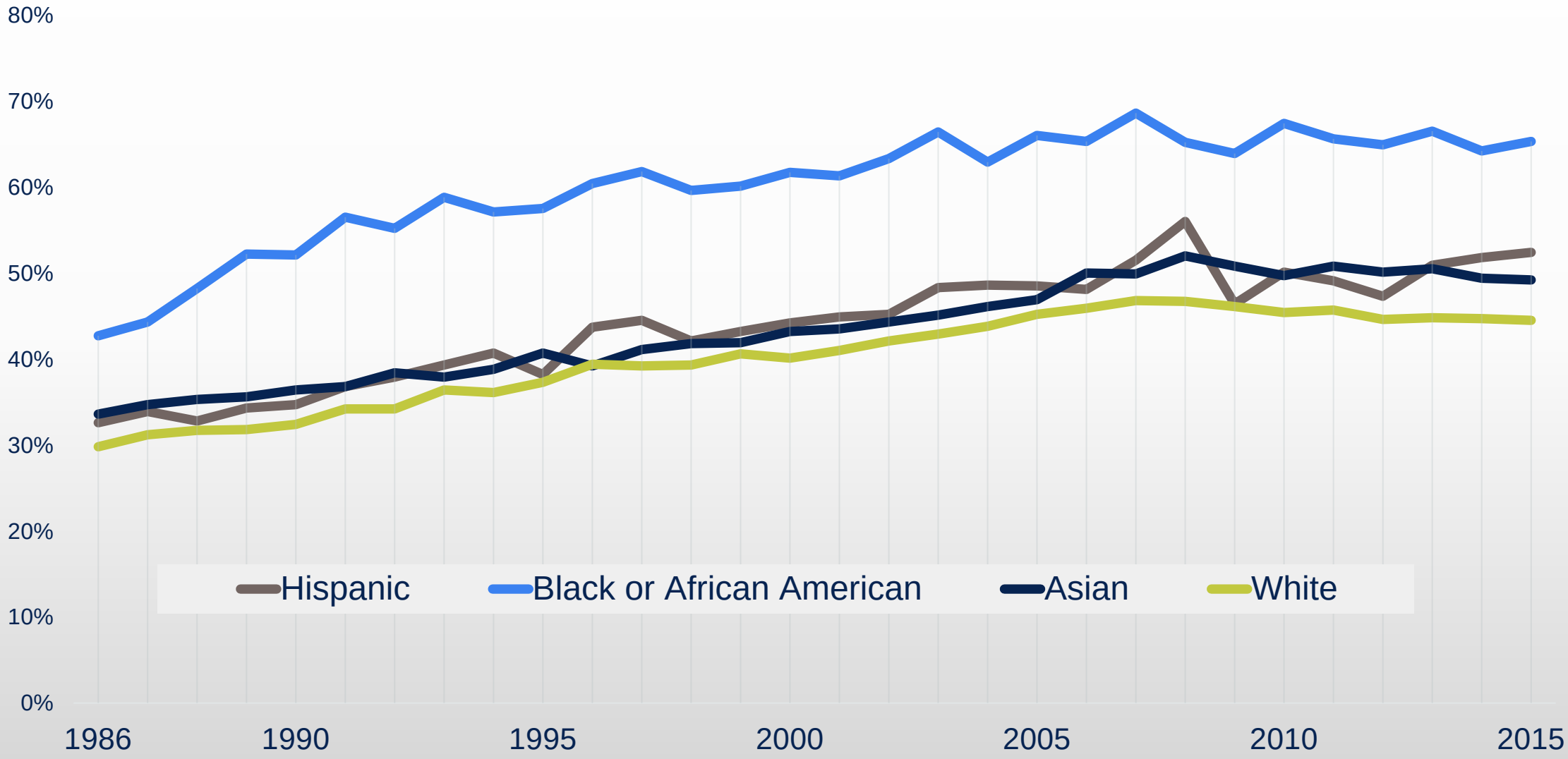
Source: AAMC Data Warehouse: Student data and Applicant and Matriculant file, as of 7/11/2016.

Percentage of U.S. medical school Black or African American graduates by sex, 1986-2015



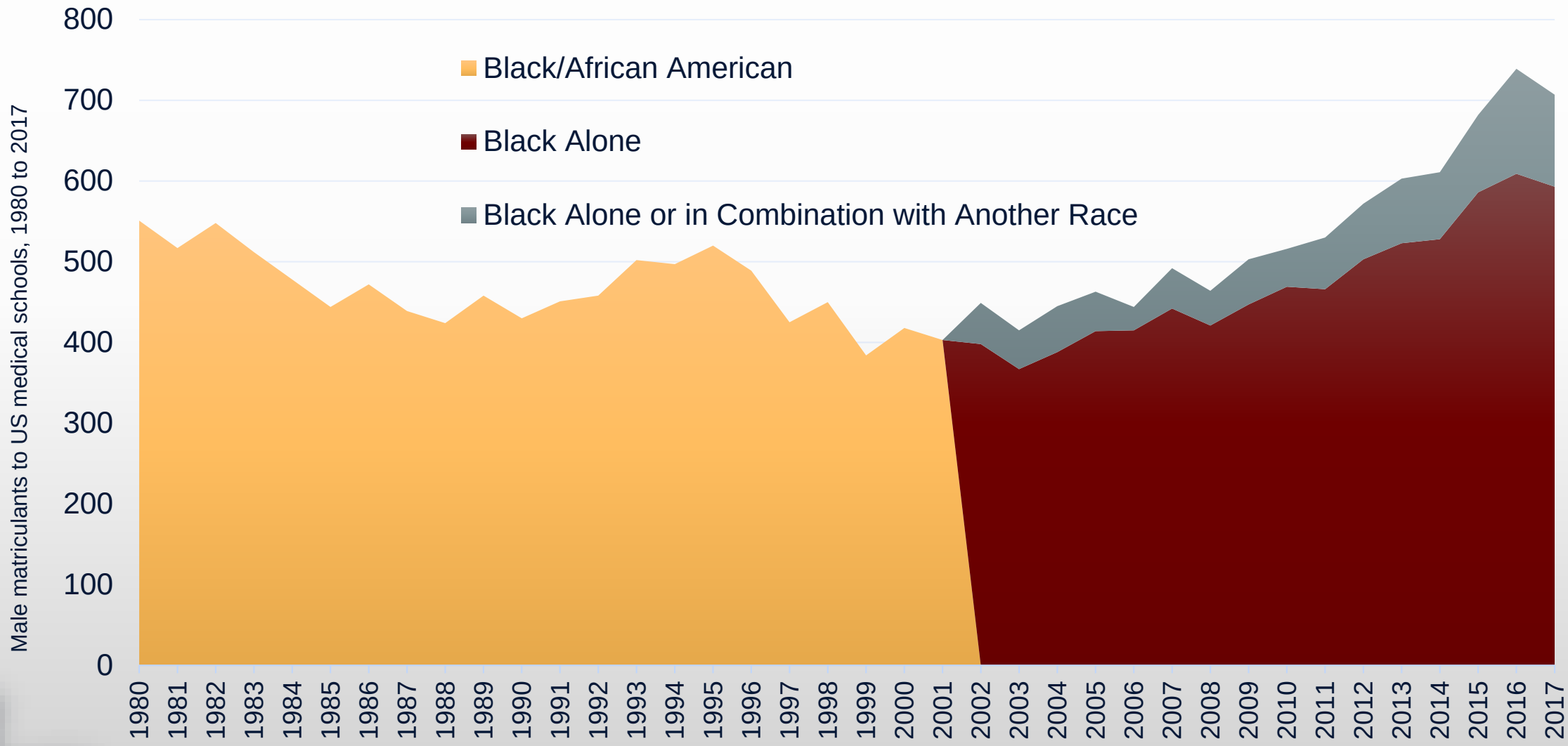
Source: AAMC Data Warehouse: Student data and Applicant and Matriculant file, as of 7/11/2016.

Percentage of U.S. medical school female, 1986-2015



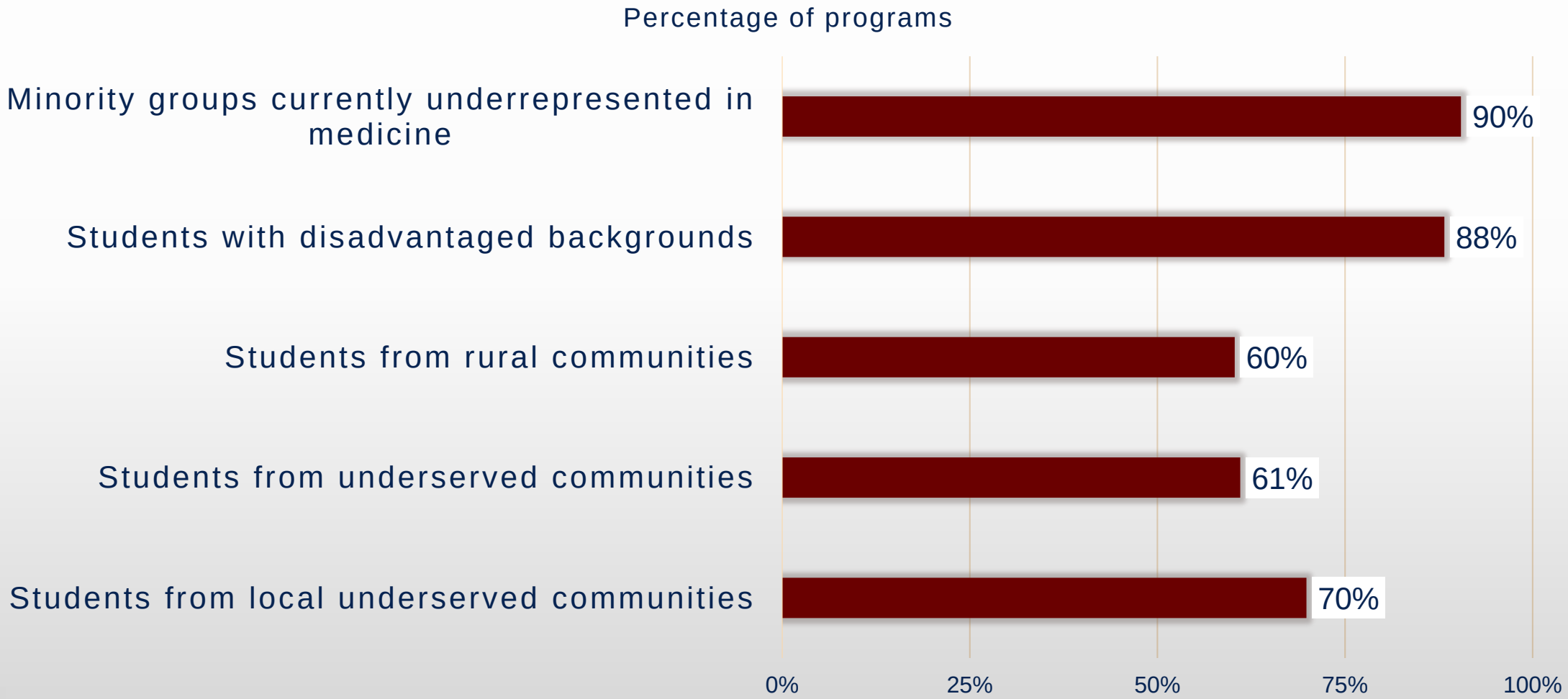
Source: AAMC Data Warehouse: Student data and Applicant and Matriculant file, as of 7/11/2016.

After 30+ years, Black male matriculation is slowly increasing above 1980 levels



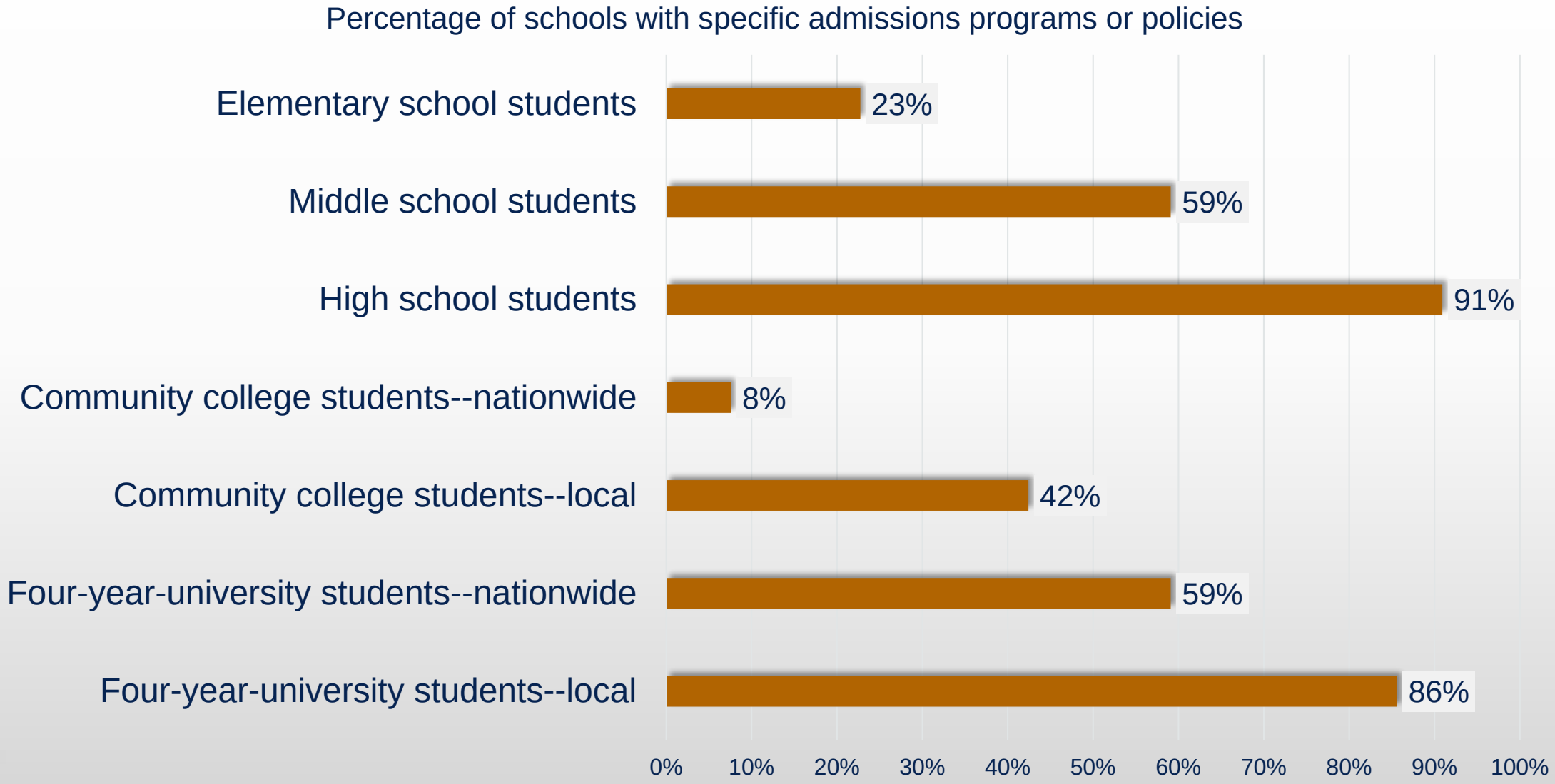
Source: AAMC AMCAS APP_BIO tables. Race is only available for permanent residents.

Most USMD schools have programs or policies designed to recruit a diverse student body



Source: AAMC 2016 Medical School Enrollment Survey Report

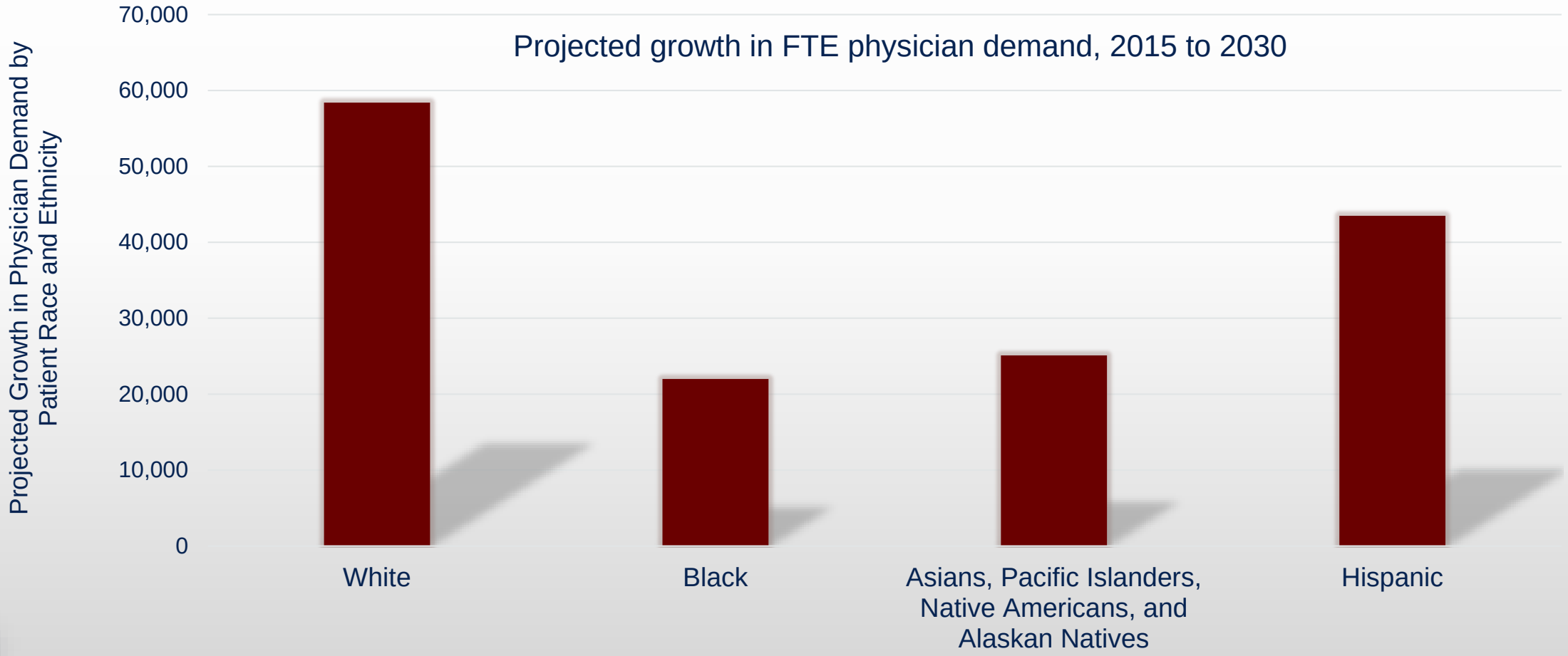
Recruitment programs begin in elementary school



Source: AAMC 2016 Medical School Enrollment Survey Report

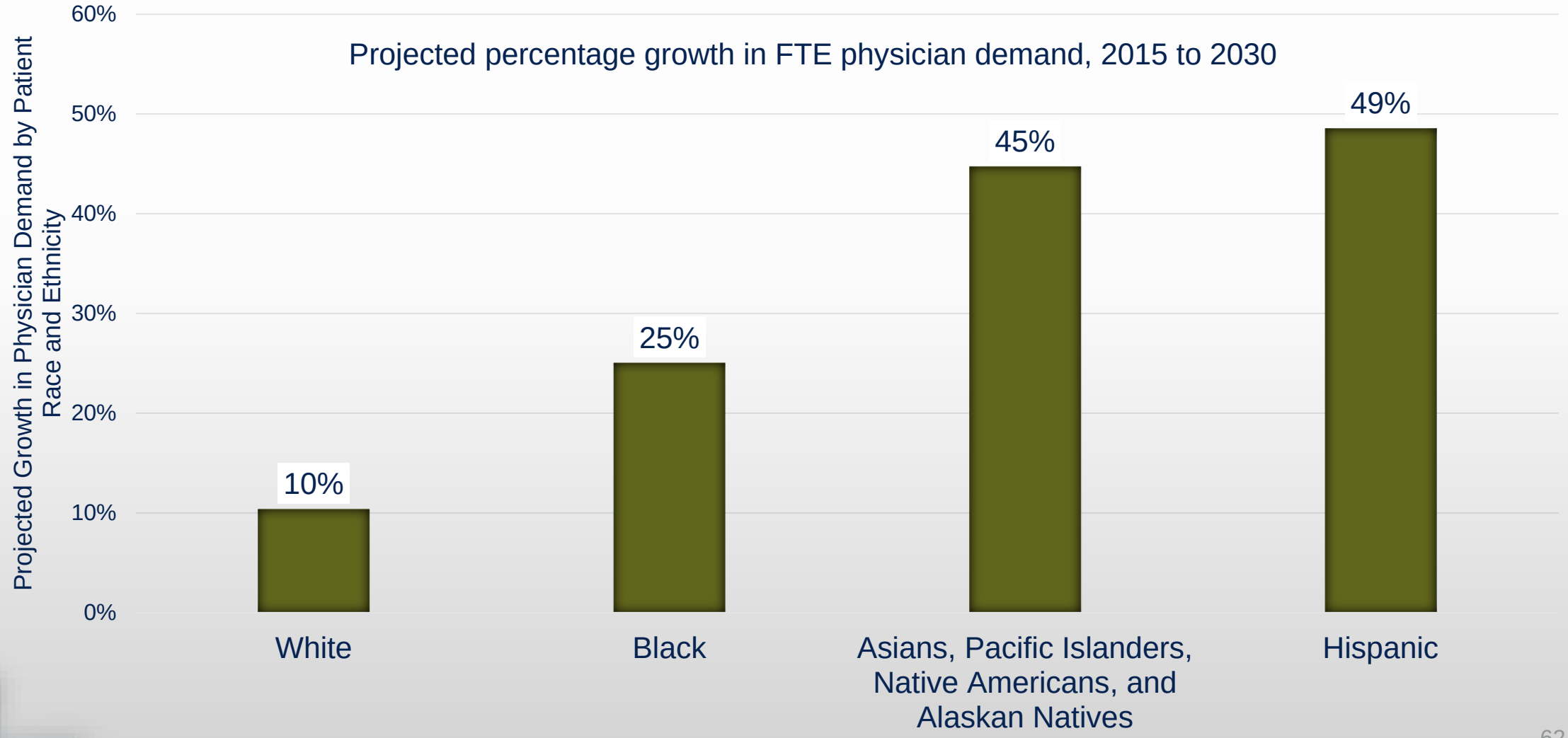
Demand

More absolute future growth in utilization projected from whites than other groups



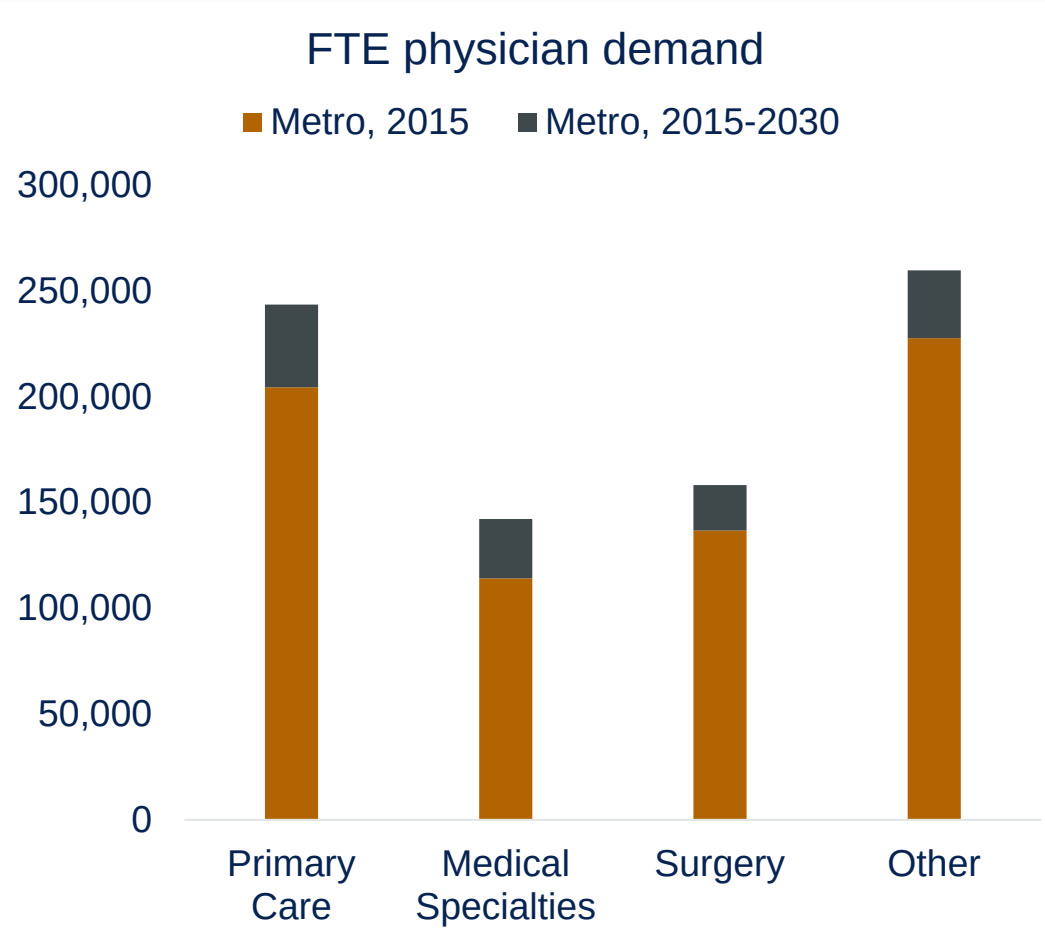
Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

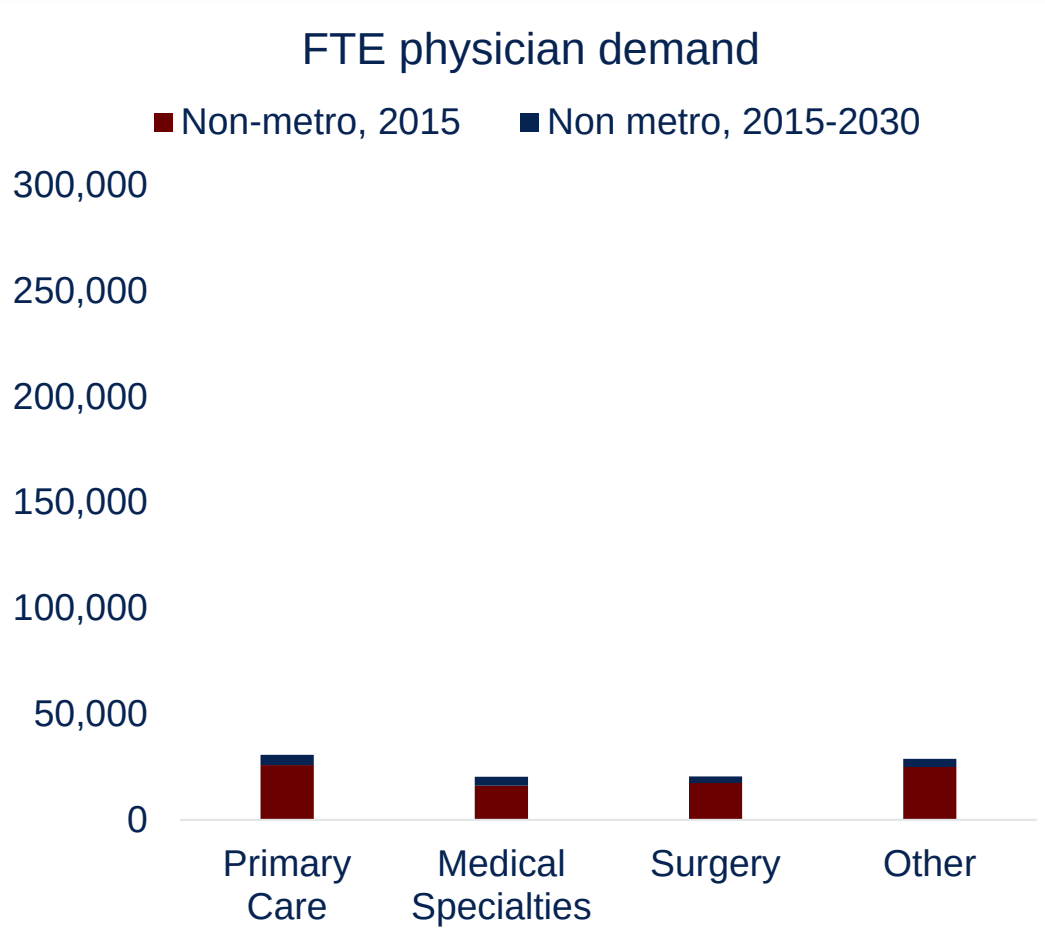
Much faster utilization growth rates projected for other groups than for whites



Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

The vast majority of physician demand – current and projected – is in metropolitan areas

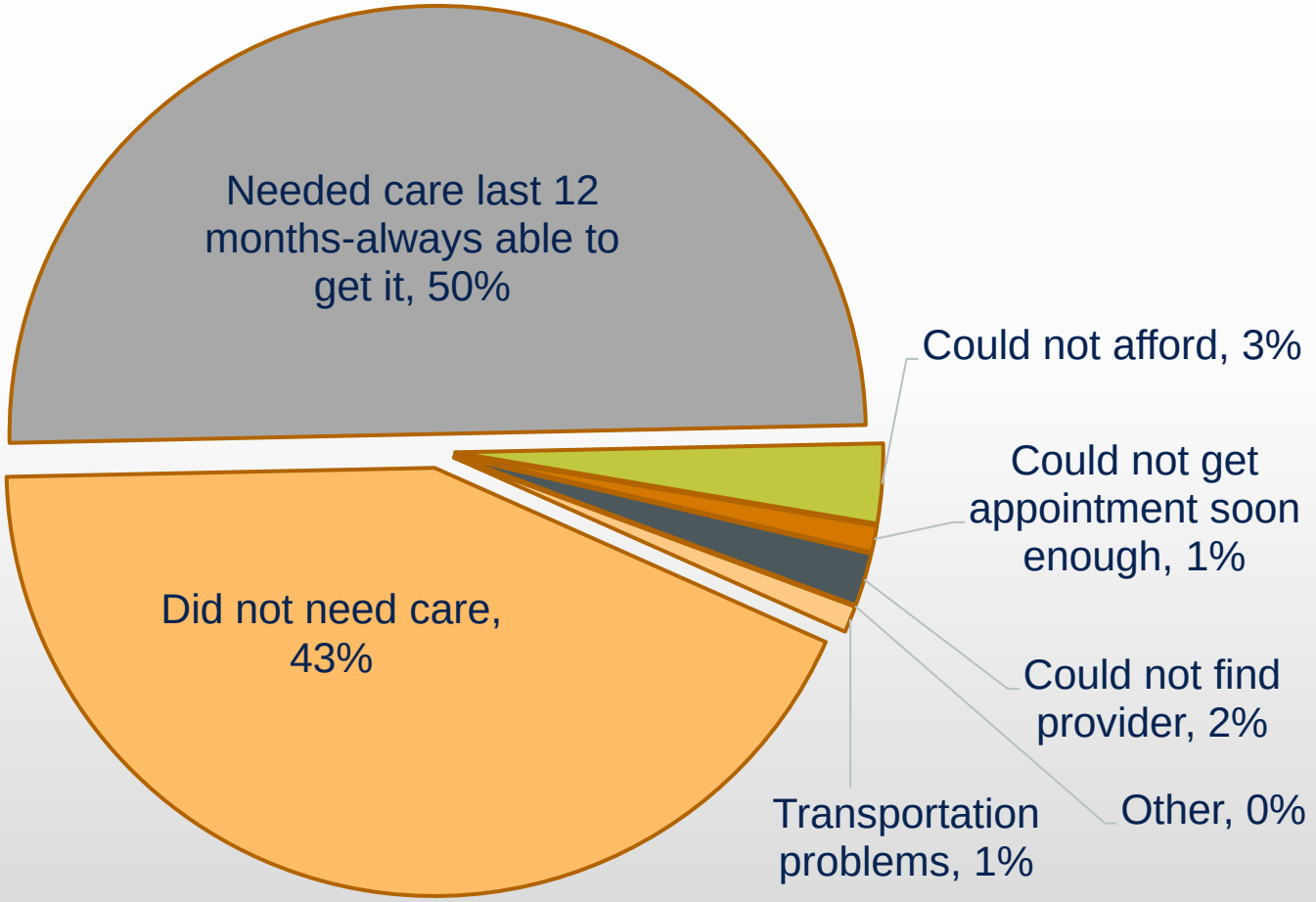




Source: AAMC, 2017 Update: Complexities of Physician Supply and Demand: Projections from 2015 to 2030.

Access to care

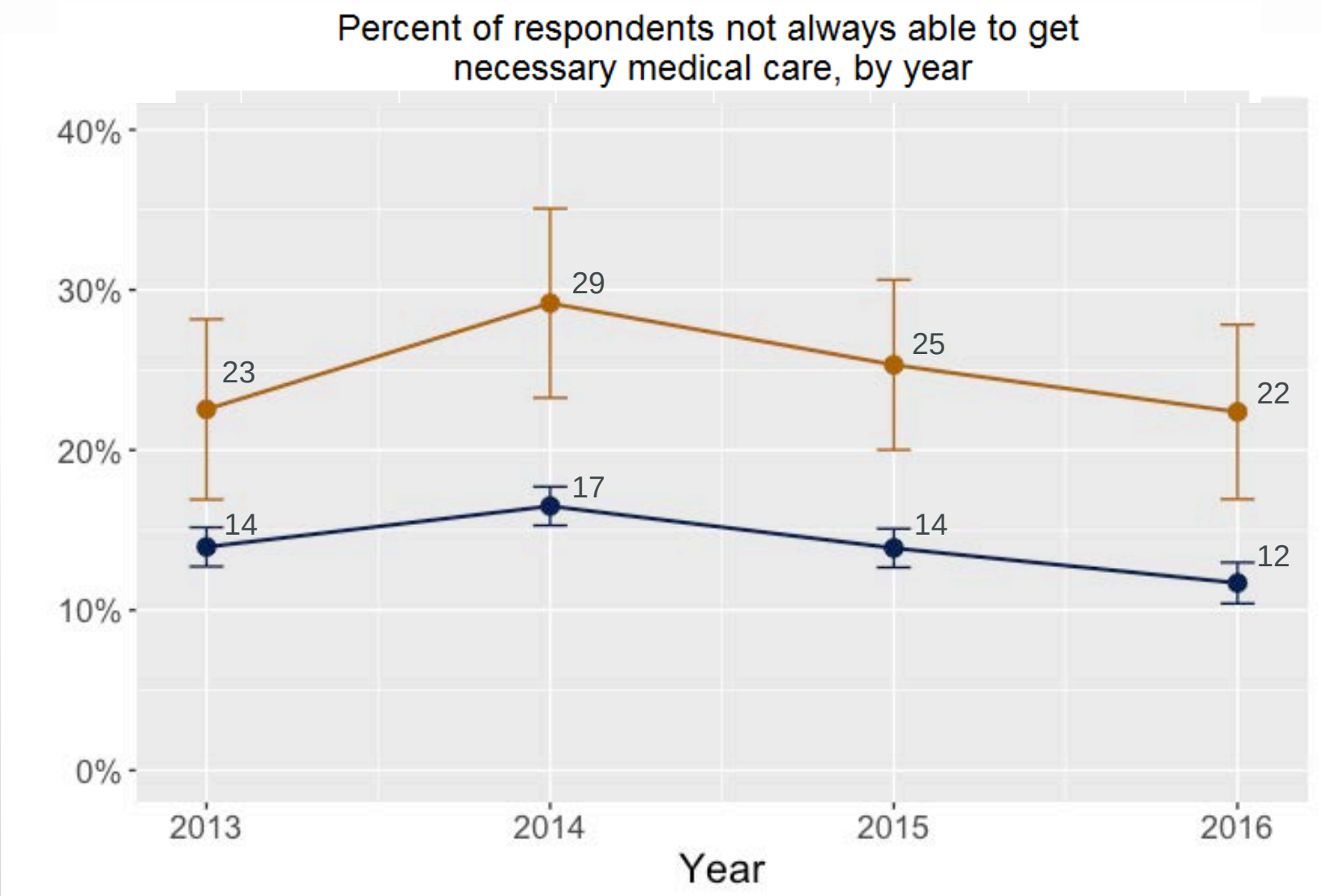
AAMC collects data on health care access from consumers



7% of U.S. adults (>17 million people) could not always get care

Source: AAMC Consumer Survey of Health Care Access (June, 2017)

LGB individuals consistently face greater challenges accessing care

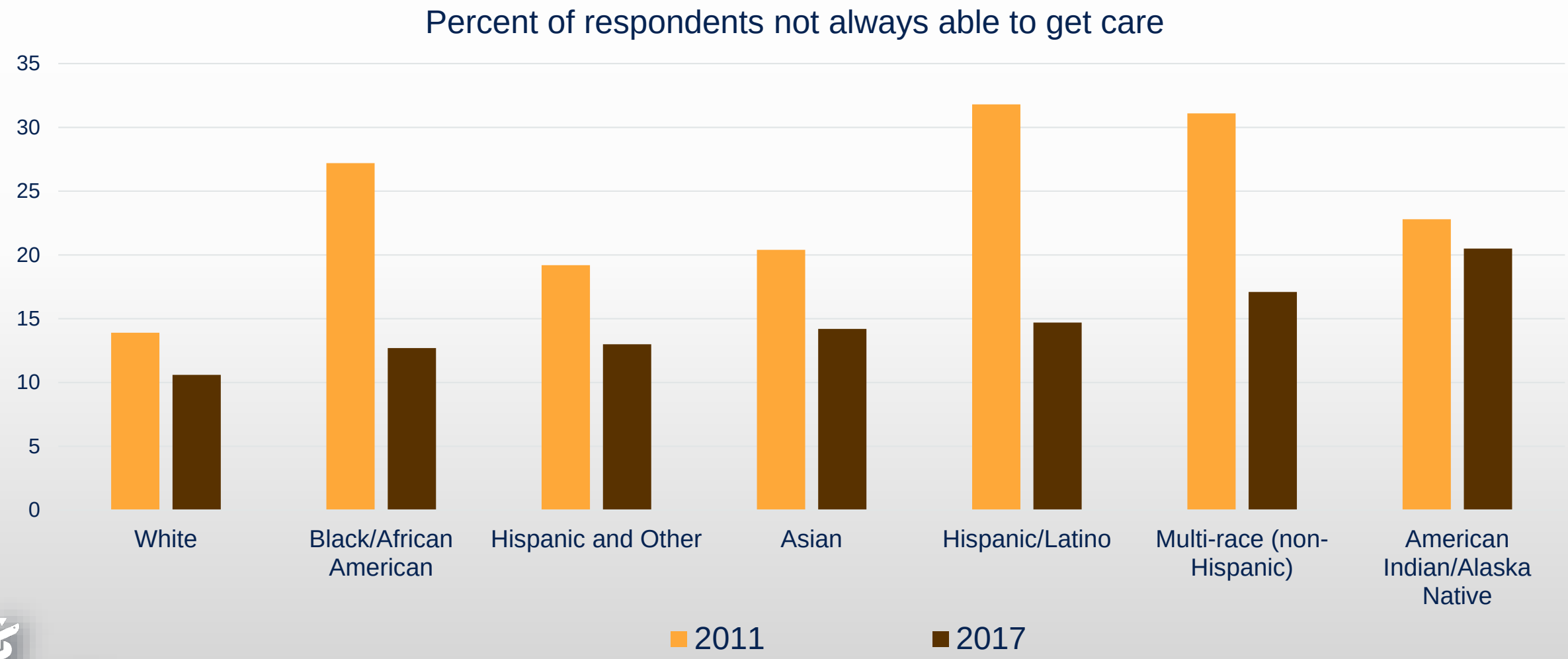


Gay, lesbian, or bisexual

Heterosexual or straight

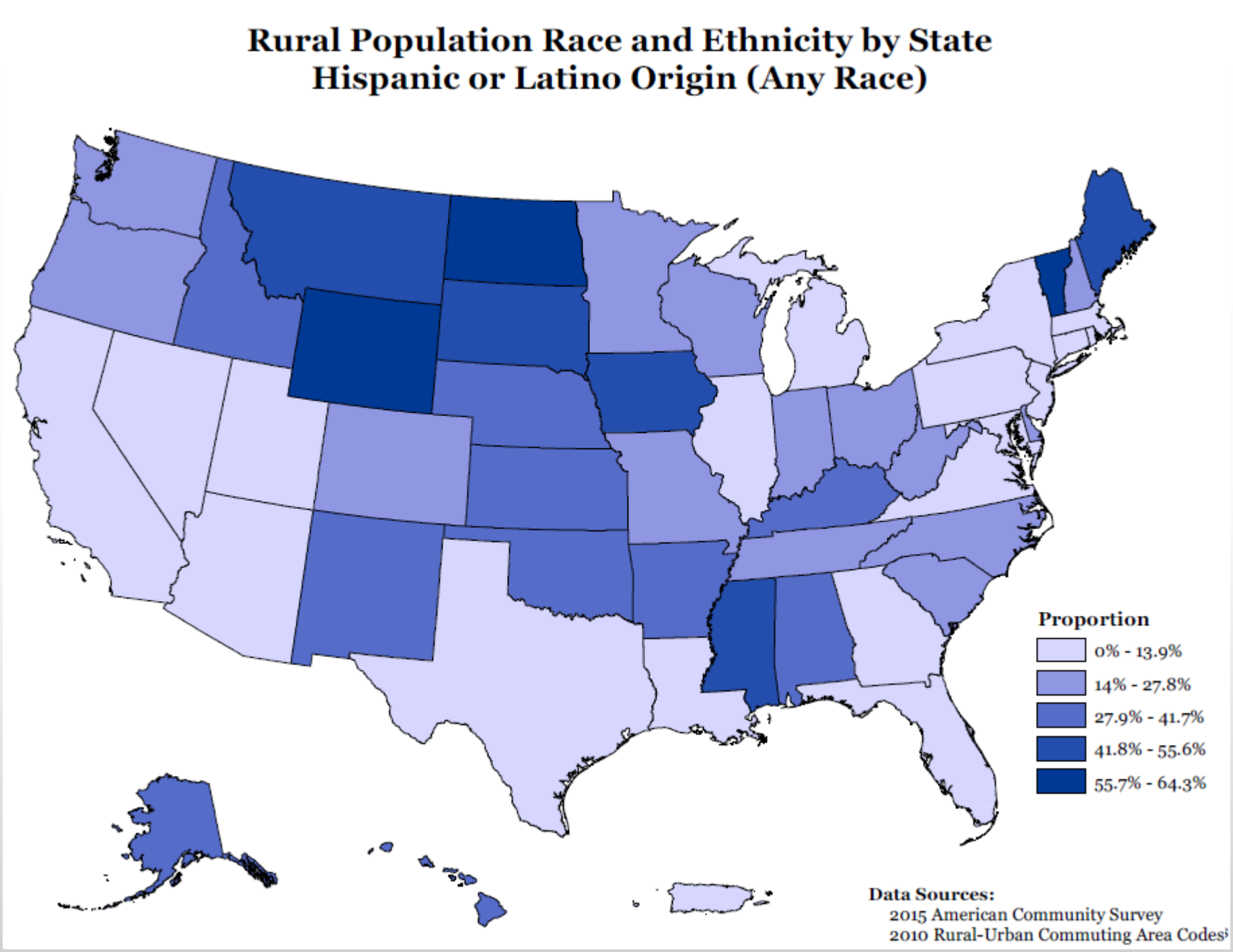
Source: AAMC Consumer Survey of Healthcare Access.

Access to care appears to be improving, though racial/ethnic disparities persist



Source: AAMC Consumer Survey of Health Care Access Native Hawaiian/Other Pacific Islander & Other excluded due to sample size.

The nation's rural population is not homogenous



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Rural access varies by race/ethnicity

DATA REMOVED PENDING PUBLICATION.

“The diversity of American medicine — and the conversations, ideas and breakthroughs this diversity sparks — may be one reason for our competitiveness as a global leader in biomedical research and innovation.”

- Dhruv Khullar, MD

Aaron Carroll, “Why America Needs Foreign Medical Graduates”. https://www.nytimes.com/2017/10/06/upshot/america-is-surprisingly-reliant-on-foreign-medical-graduates.html

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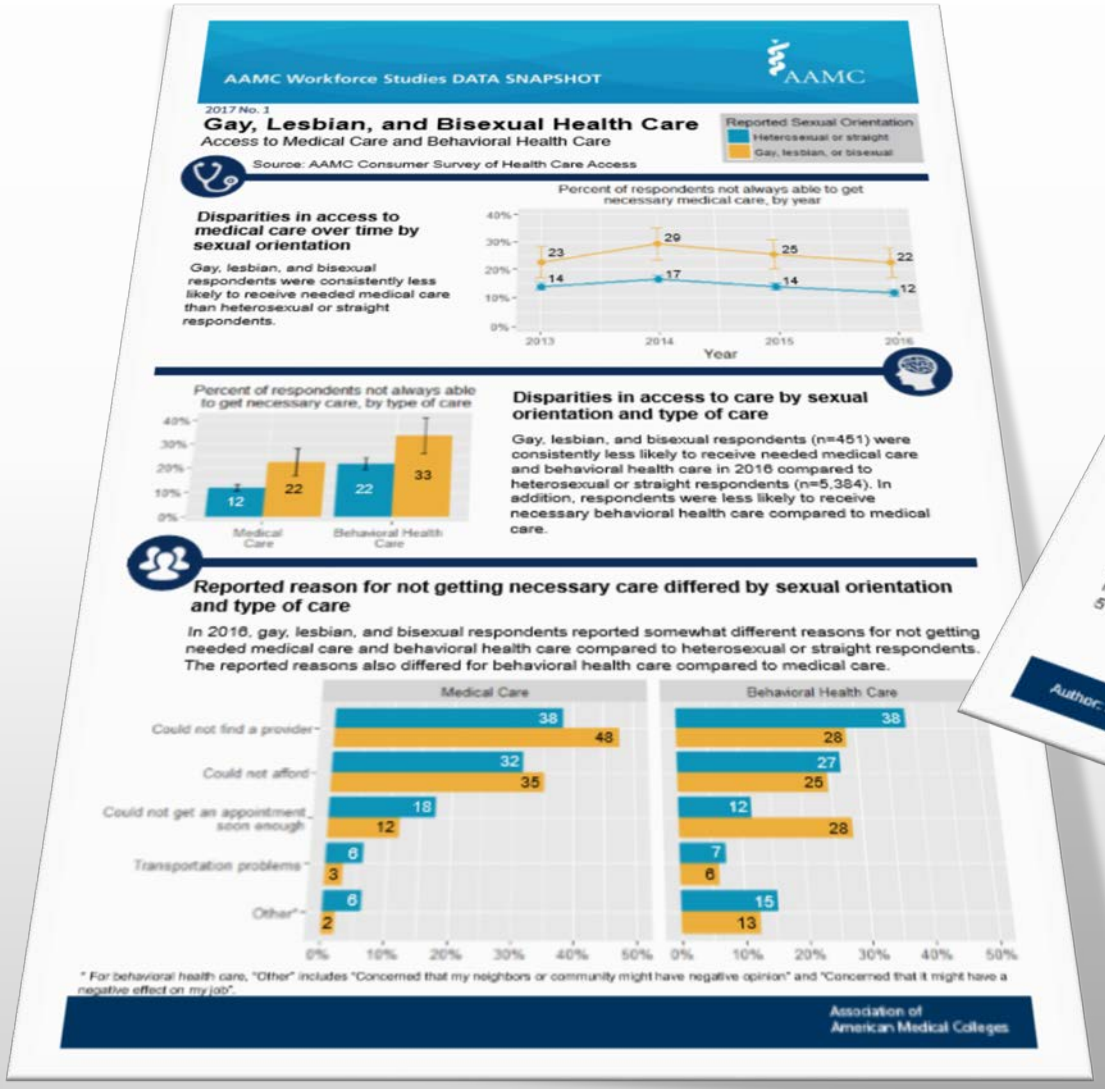
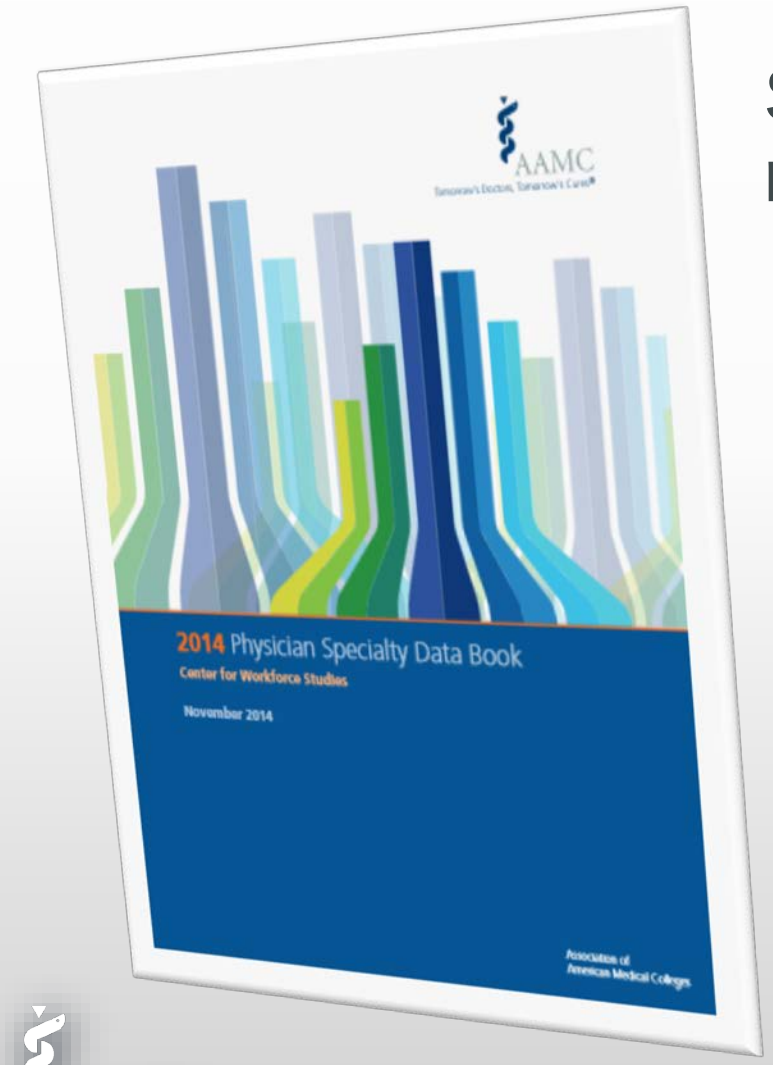
Data Snapshots



Physician data reports



State and specialty rankings and data on:

- Physician Supply
- UME/GME
- In-State Retention

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www.aamc.org/workforce

2018 Health Workforce Research Conference

Tysons, VA

May 9-11, 2018

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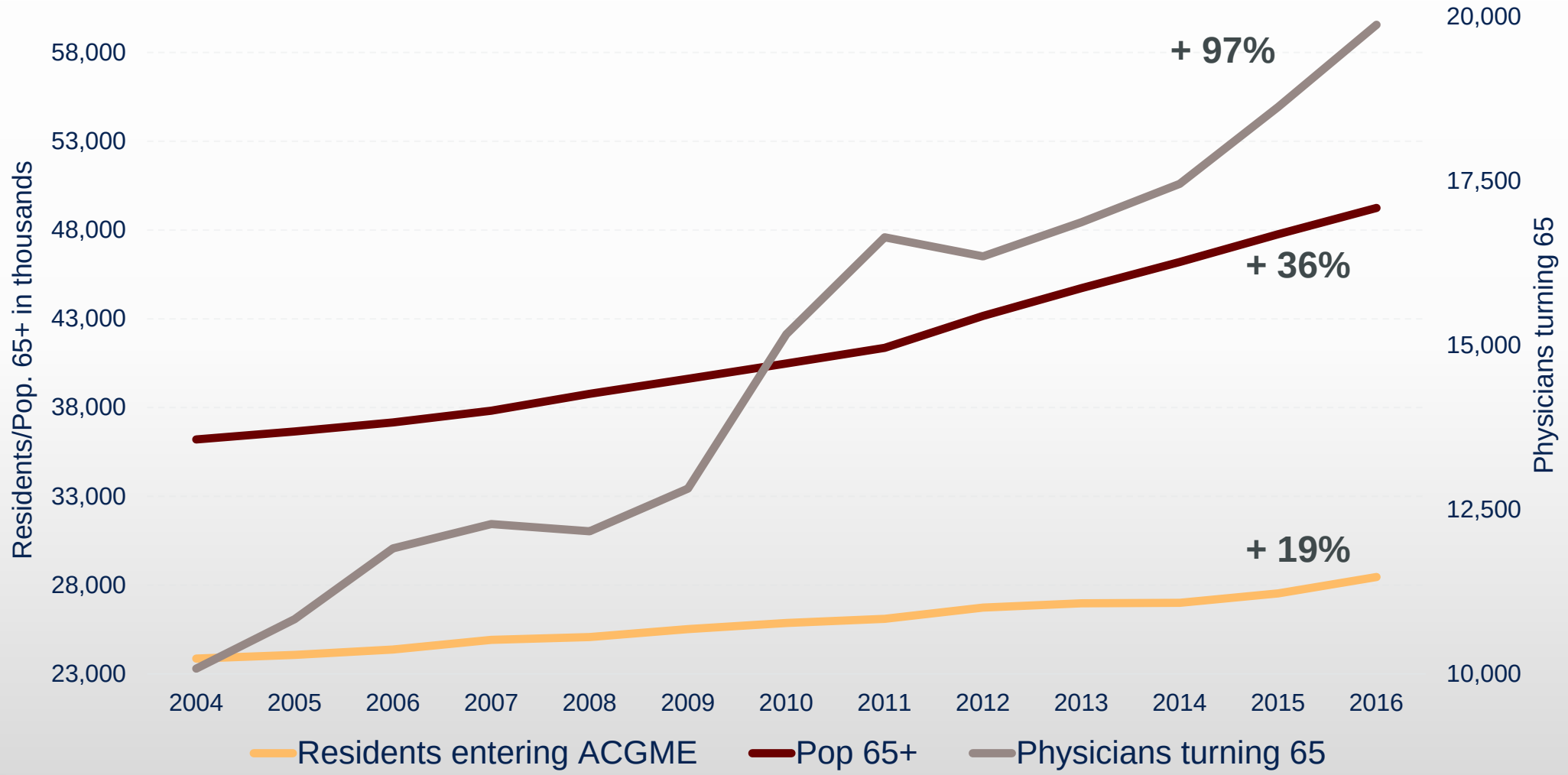
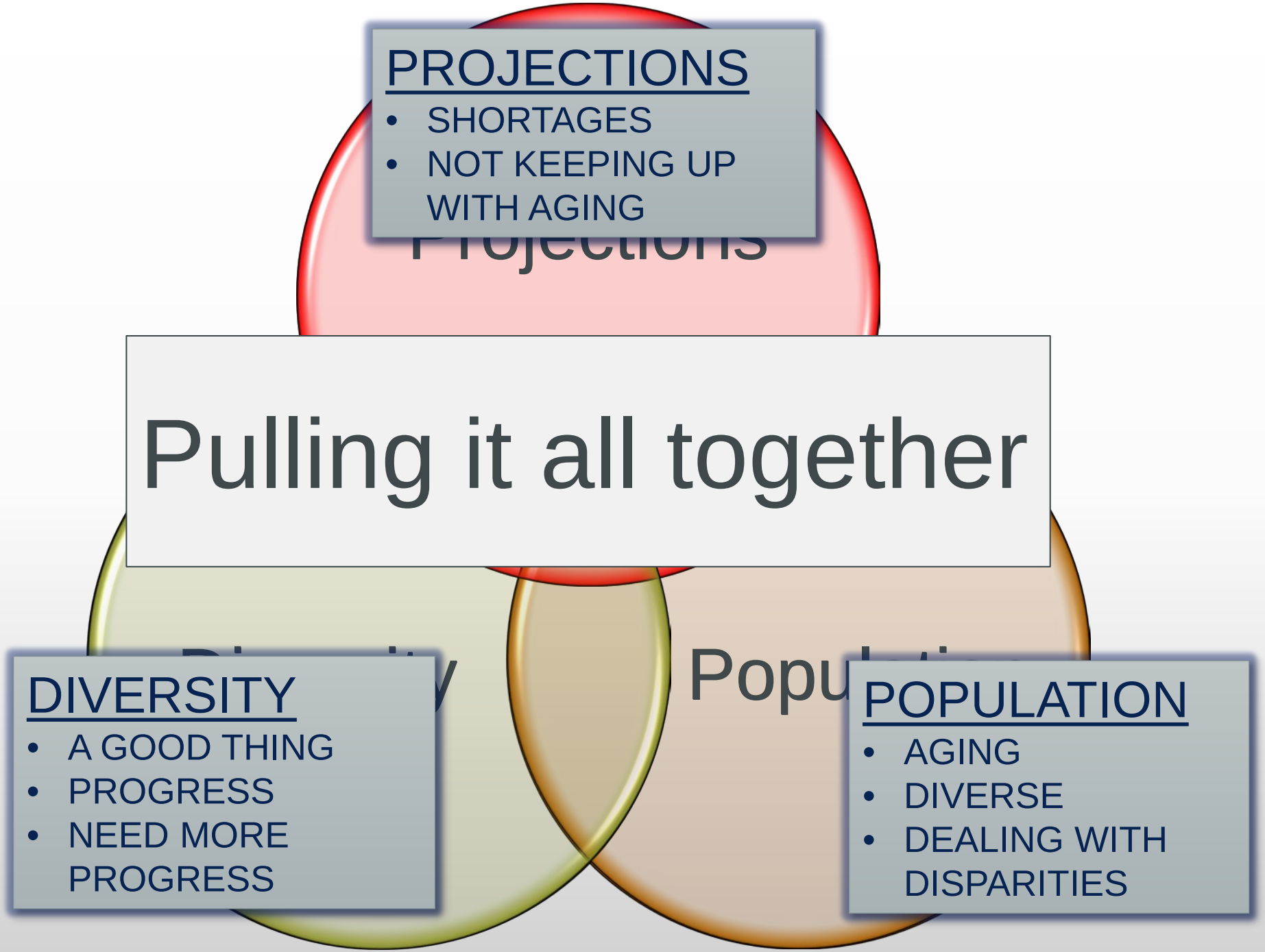
Production of new physicians not keeping up with aging workforce and population



Source: ACGME, Census, AMA Physician Masterfile; US Census Bureau


PROJECTIONS
• SHORTAGES
• NOT KEEPING UP WITH AGING
Pulling it all together
DIVERSITY
• A GOOD THING
• PROGRESS
• NEED MORE PROGRESS
POPULATION
• AGING
• DIVERSE
• DEALING WITH DISPARITIES

Where do we go from here?

- Extent of current shortages
- Work hours and retirement
- PAs and APRNs
- Clinical training/clerkships
- Distribution solutions
- Pipeline programs
- Keep tracking access

Questions?

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