

# Trends in Residency Training Outcomes

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# Center for Health Workforce Studies

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- Academic research center based at the School of Public Health at the University at Albany, SUNY
- Mission: To provide timely, accurate information and conduct policy-relevant research about the health workforce
- Goal: To inform public policies, the health and education sectors, and the public
- Founded: 1996

# Graduate Medical Education in the U.S.

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- In the US there are almost 10,000 programs and more than 120,000 residents in training
- ~20,000 new physicians enter practice annually
- More than \$16 billion spent annually on training

Sources: Brotherton, S.E., & Etzel, S. I. (2017). Graduate medical education, 2016-2017. *Journal of the American Medical Association*, 318(23), 2368-2387. doi:10.1001/jama.2017.16203; U.S. Government Accounting Office. (2018, March). *Physician Workforce*. GAO-18-240. Retrieved from <https://www.gao.gov/assets/700/690581.pdf>

# New York's Contribution

- In New York there are more than 1,100 programs and almost 16,000 residents
  - 12% of all programs and 13% of all residents in the US are in New York

State	Residents	Programs
New York	16,256	1,194
California	11,067	915
Pennsylvania	8,189	670
Texas	8,163	656
Illinois	6,203	474
Ohio	6,150	539

Source: Brotherton, S.E., & Etzel, S. I. (2017). Graduate medical education, 2016-2017. *Journal of the American Medical Association*, 318(23), 2368-2387. doi:10.1001/jama.2017.16203

# NY Resident Exit Survey

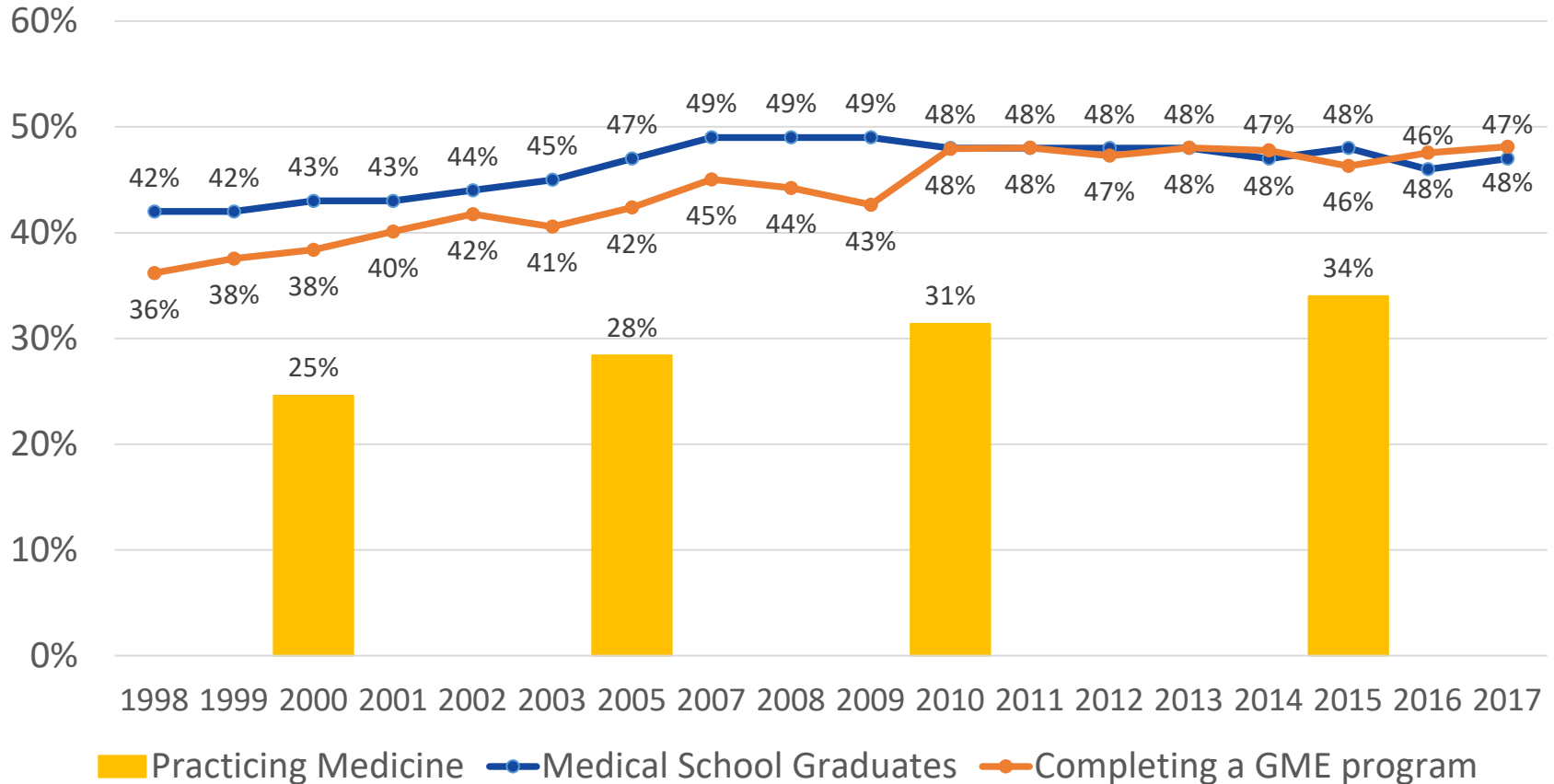
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- Conducted annually since 1998 (except 2004 and 2006)
- A survey of all residents and fellows completing a training program in New York (approximately 5,000 annually)
- Substantial assistance from GME directors and programs directors
- Average annual response rate greater than 60%
- Provides snapshot of new physicians and job market

# Demographic Trends among New Physicians

# More Women are Becoming Physicians

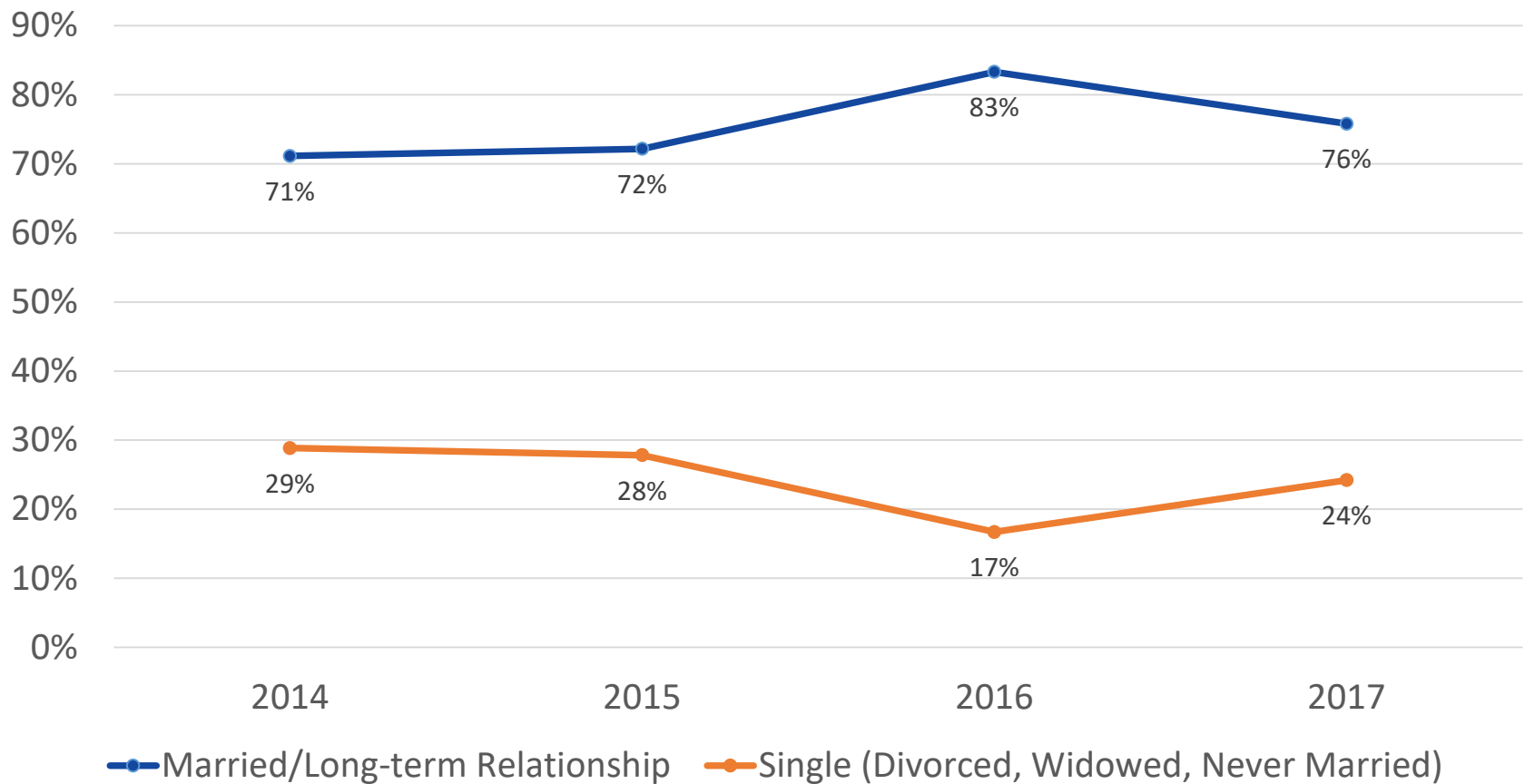
Representation of Women in Medicine



Sources: Association of American Medical Colleges, American Medical Association, NY Resident Exit Survey

# New Physicians are in Committed Relationships

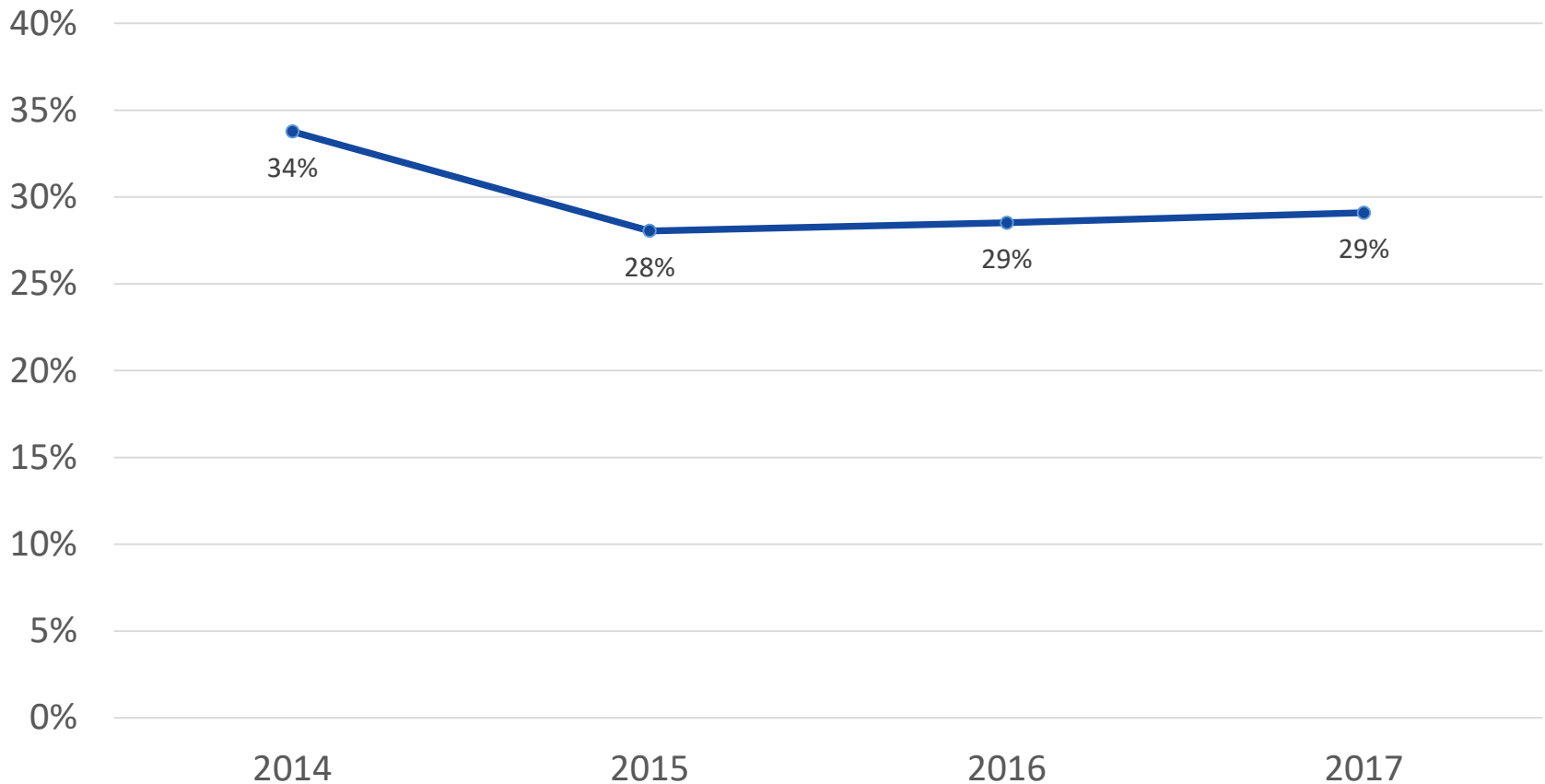
Relationship Status Trends





# Parental Responsibility Trends among New Physicians

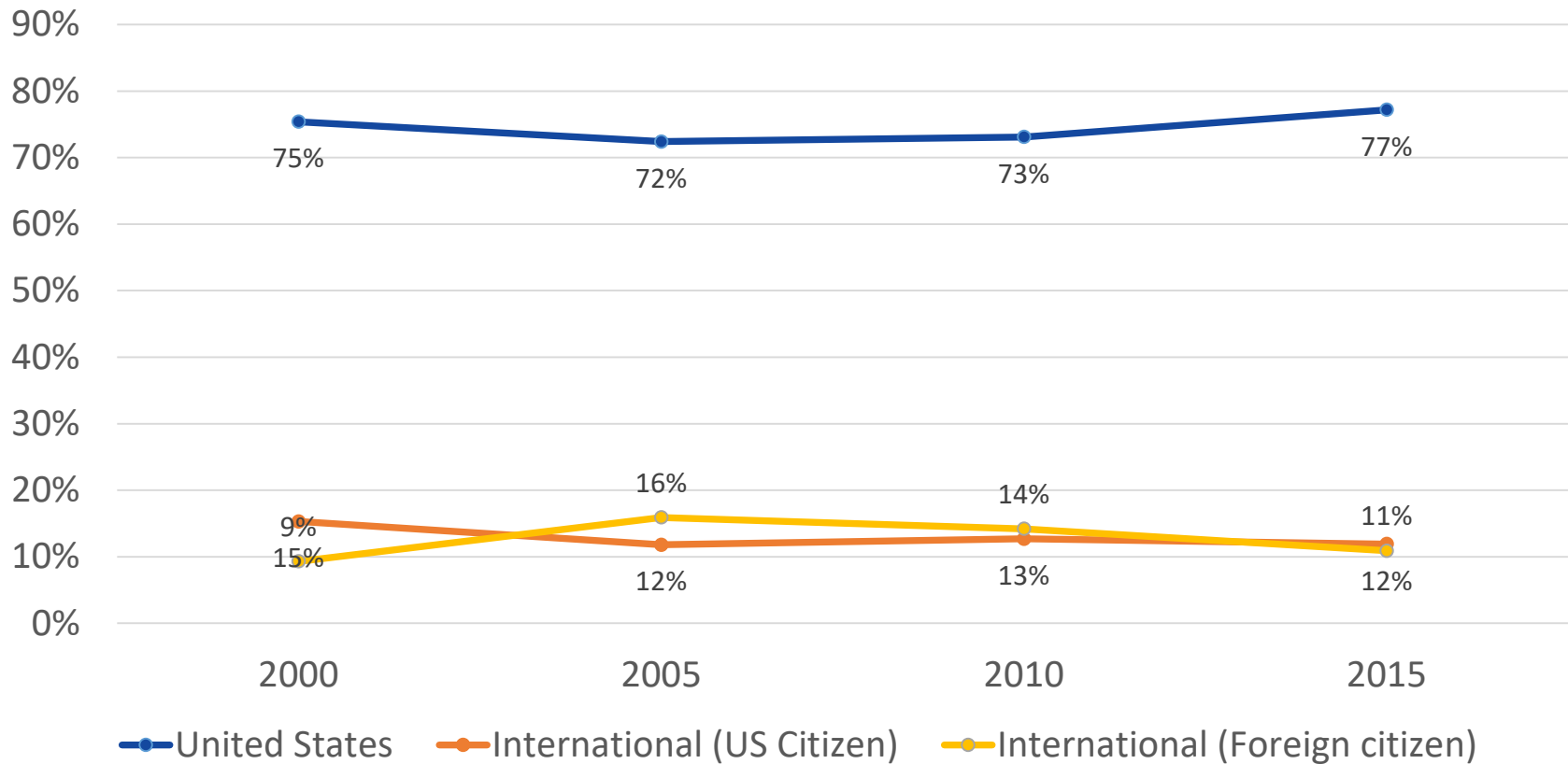
Percentage of New Physicians who Have Dependent Children



# Education Trends among New Physicians

# Trends in Medical School Location

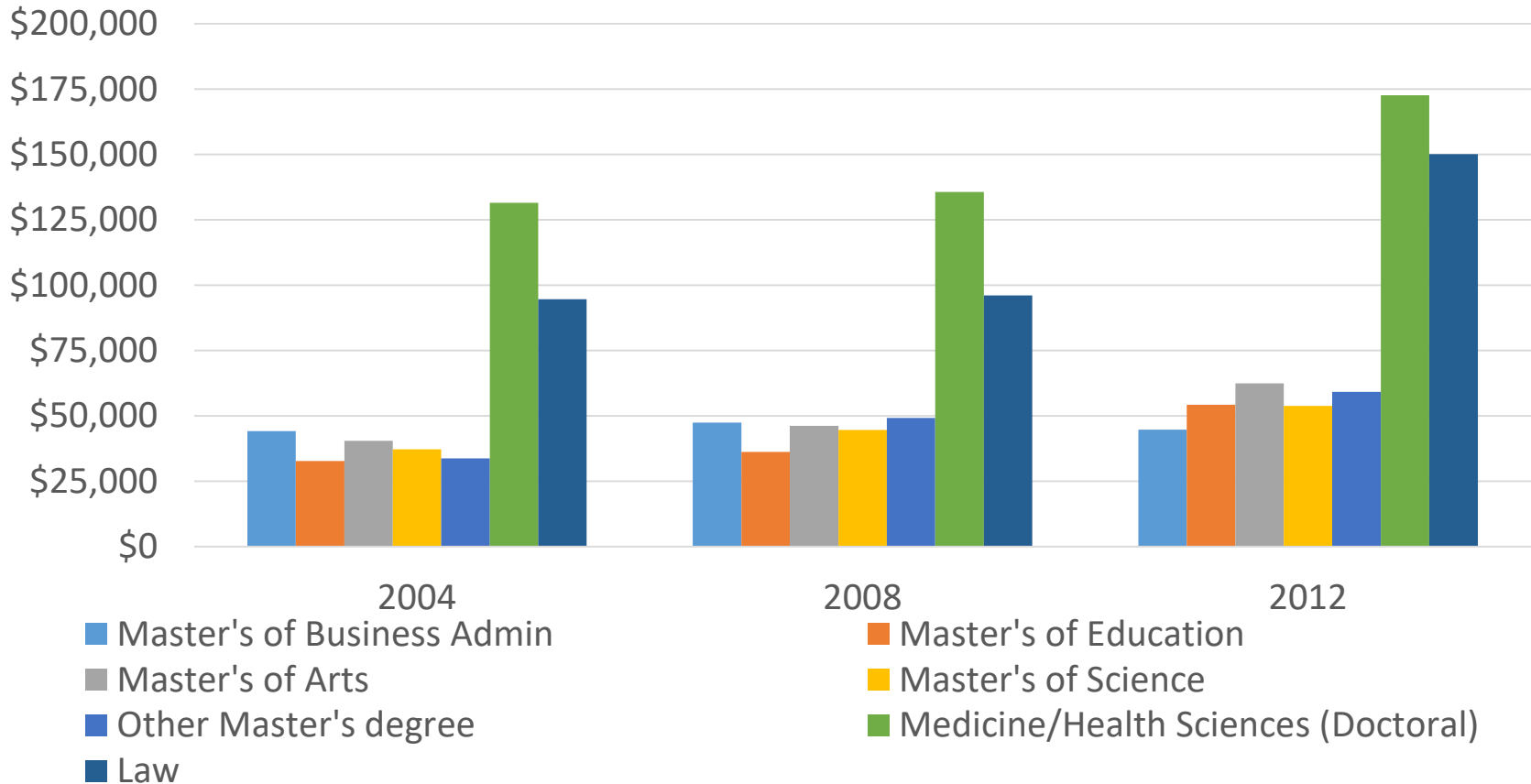
## Medical School Location among 1<sup>st</sup> Year Residents



Source: American Medical Association

# Education Debt is Rising Among New Graduates

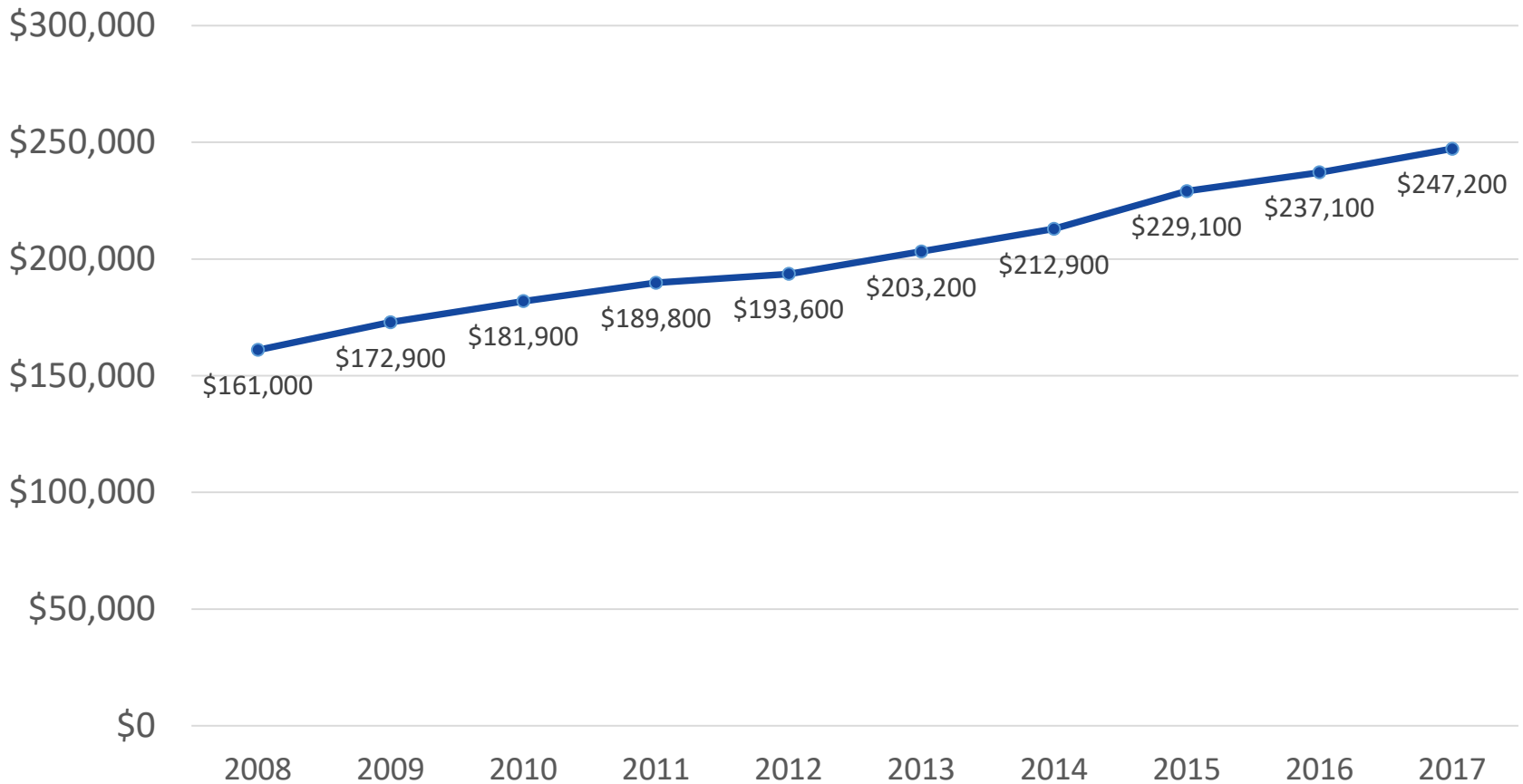
Education Debt Trends (in 2017 dollars)



Source: Delisle, J. (2014). *The Graduate Student Debt Review*. Retrieved from <https://www.newamerica.org/education-policy/policy-papers/the-graduate-student-debt-review/%7Bfilename%7D/downloads/GradStudentDebtReview-Delisle-Final.pdf>

# Education Debt Continues to Increase among New Physicians

Education Debt among New Physicians (in 2017 dollars)



# Important Job Characteristics for New Physicians

# “Very Important” Job Characteristics

	2014	2015	2016	2017
Predictable start and end time each workday	36.6%	37.2%	38.2%	39.0%
Length of each workday	34.7%	35.5%	34.4%	37.8%
Frequency of overnight calls	49.1%	48.2%	47.8%	50.4%
Frequency of weekend duties	48.0%	48.1%	46.8%	48.0%

# “Very Important” Job Characteristics by Gender

	Male	Female
Predictable start and end time each workday	34.0%	41.9%*
Length of each workday	31.3%	40.1%*
Frequency of overnight calls	44.0%	54.0%*
Frequency of weekend duties	43.2%	52.5%*

\* denotes a statistically significant difference.



# “Very Important” Job Characteristics by Relationship Status and Dependent Children

	Married/ Long-term Relationship	Single	Dependent Children	No Dependent Children
Predictable start and end time each workday	39.4%*	33.2%	41.0%*	36.3%
Length of each workday	36.8%*	32.6%	38.1%*	34.5%
Frequency of overnight calls	50.3%*	45.3%	50.4%	48.1%
Frequency of weekend duties	49.1%*	43.8%	50.0%*	46.6%

\* denotes a statistically significant difference.

# “Very Important” Job Characteristics by Specialty Group

	Predictable start and end time each workday	Length of each workday	Frequency of overnight calls	Frequency of weekend duties
Primary Care	39.9%*	37.0%	52.8%*	48.5%
Ob/Gyn	32.1%*	26.6%*	43.2%*	47.5%
Medicine Subspecialties	39.0%	36.9%	51.8%	50.4%
Surgical Specialties	21.3%*	18.9%*	28.9%*	31.7%*
Facility Based	35.4%	34.4%	46.2%	49.2%
Psychiatry	52.2%*	51.2%*	70.2%*	71.0%*
Other	38.6%	37.4%	45.5%	43.3%

\* denotes a statistically significant difference (eg, primary care compared to non-primary care specialties, ob/gyn compared to non-ob/gyn specialties, etc.)

# Trends in Job Market Demand for New Physicians

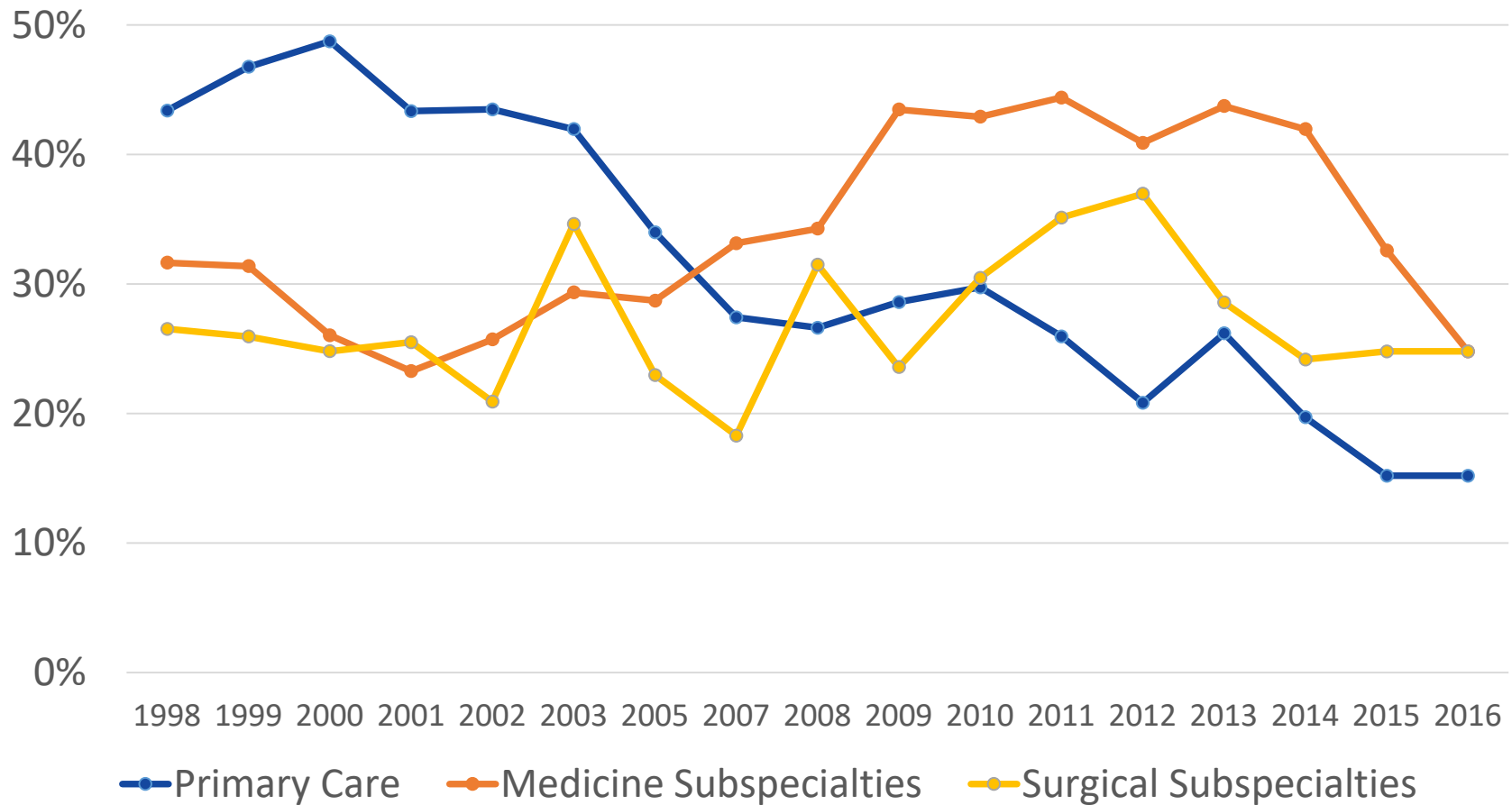
# Measuring Relative Demand by Specialty

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- Difficulty finding a satisfactory practice position
- Changing plans due to limited practice opportunities
- Number of job offers
- Assessment of regional job market
- Assessment of national job market
- Change in starting income over time

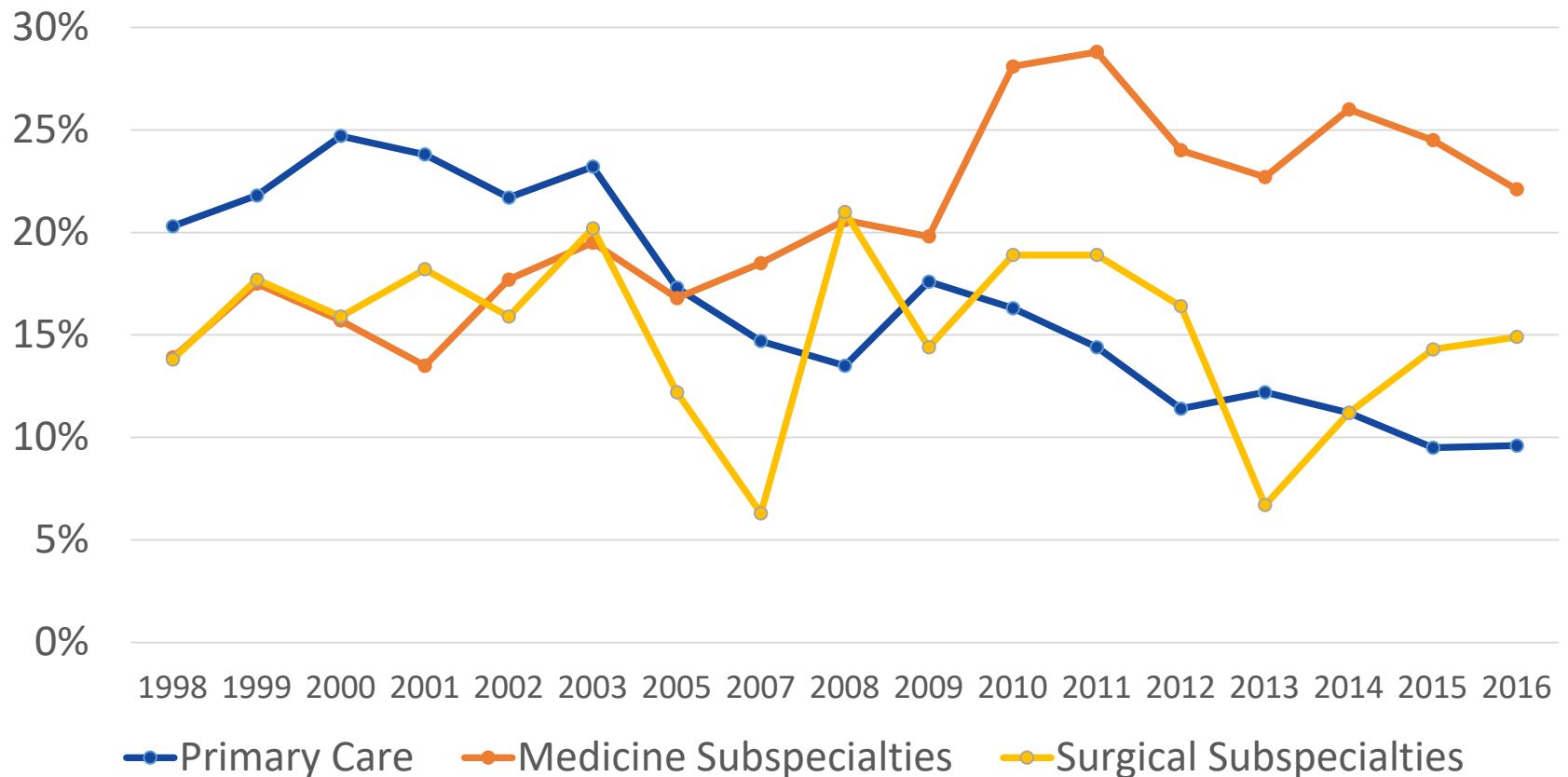
# Difficulty Finding a Satisfactory Practice Position

New Physicians Having Difficulty Finding a Satisfactory Position



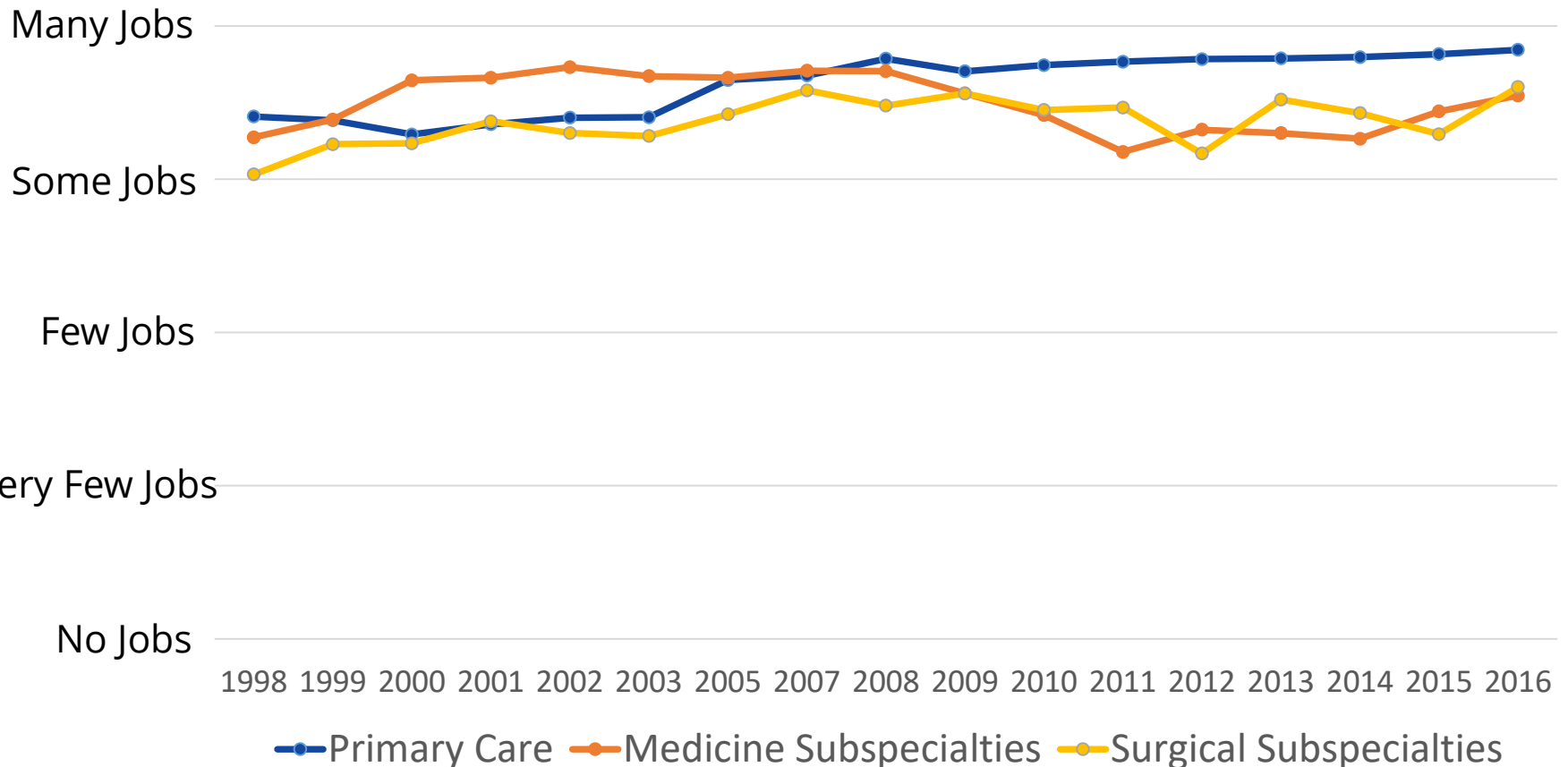
# Changing Plans Due to Limited Practice Opportunities

New Physicians Having to Change Plans due to Limited Practice Opportunities



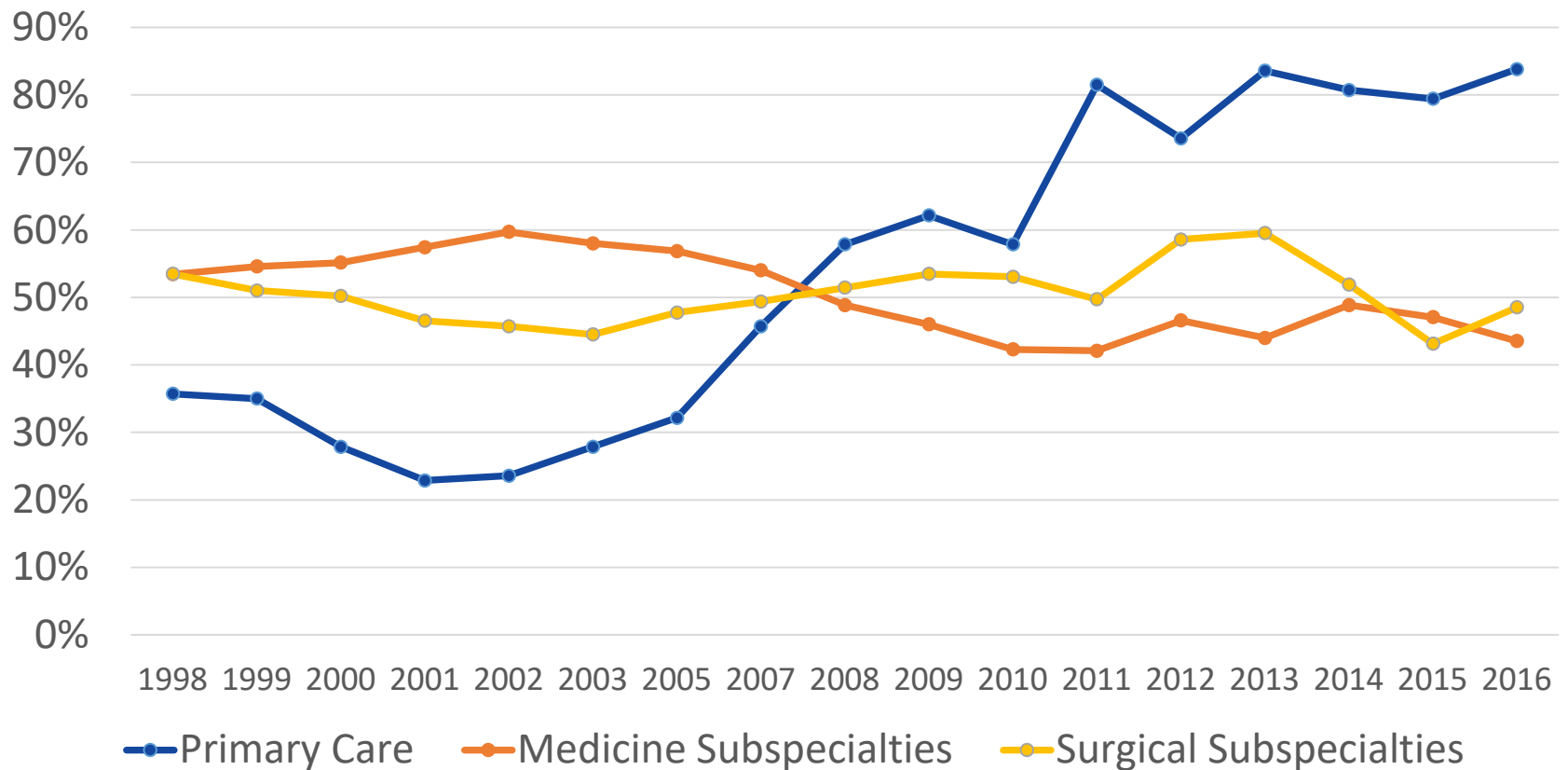
# Assessment of National Job Market

New Physicians' Perceptions of National Job Market in their Specialty



# Demand for Primary Care Physicians Has Surpassed Specialists

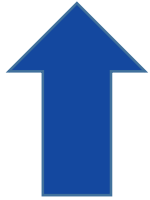
Percentile Rank of Relative Demand for New Physicians  
(Higher Percentage = Higher Demand)



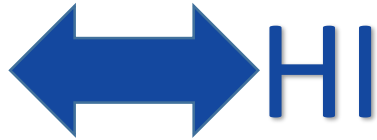


# Recent Trends in Demand in Selected Specialties

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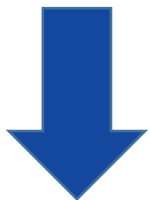
Neurology, Ophthalmology,  
Emergency Medicine



Family Medicine, Psychiatry,  
Internal Medicine



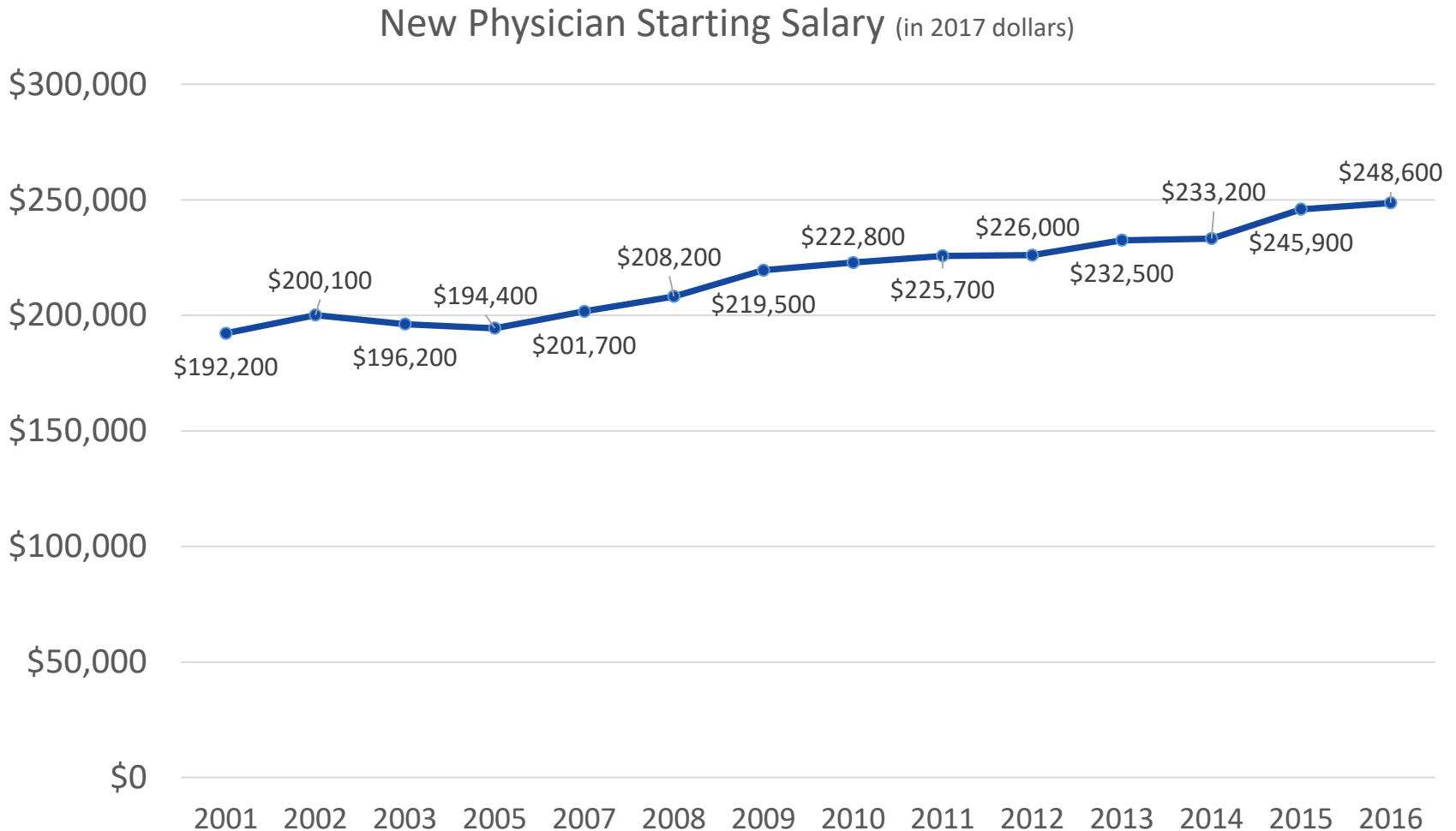
Pathology, Radiology, Infectious  
Disease



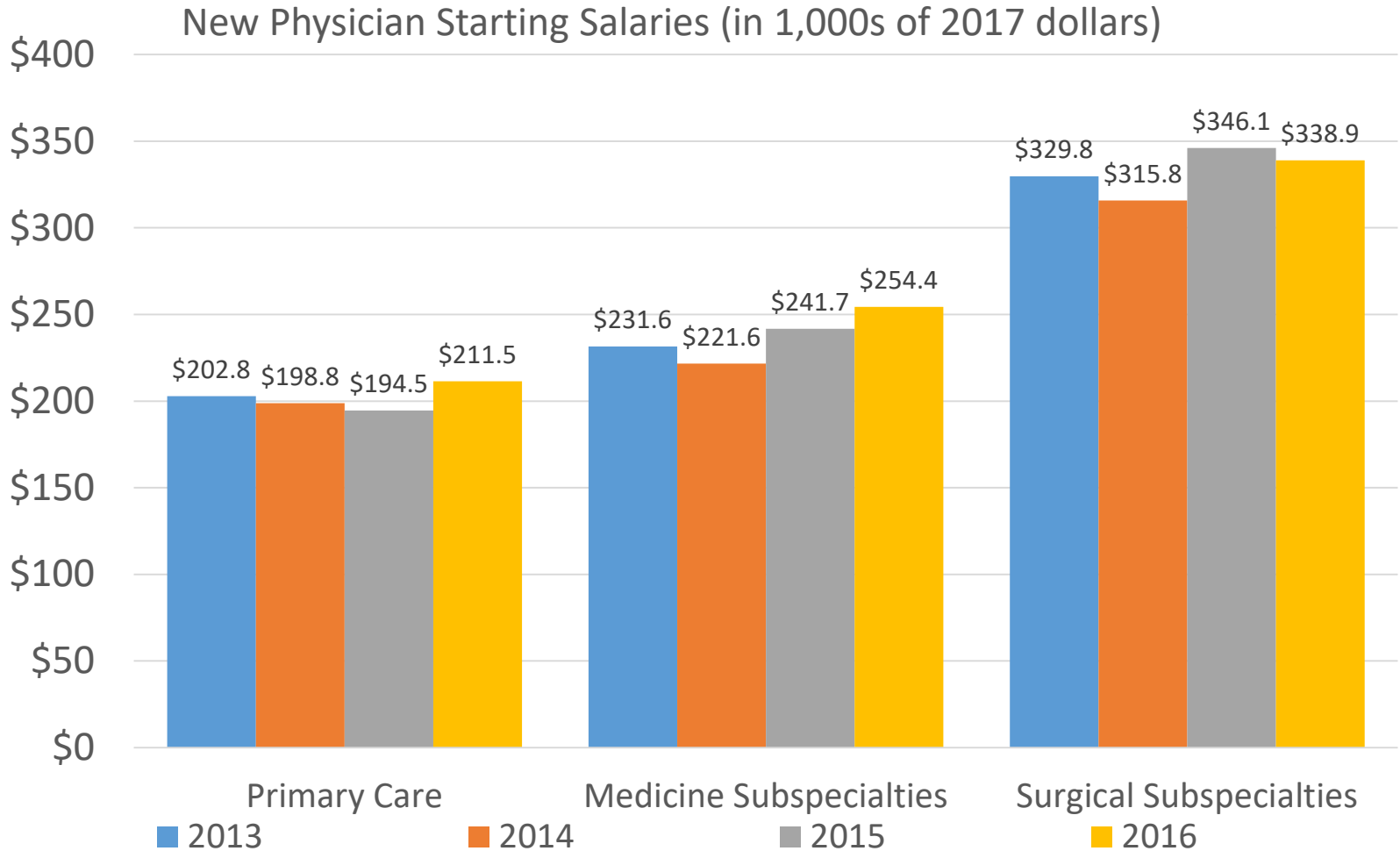
Neurosurgery, Anesthesiology,  
Critical Care Medicine

# Trends in New Physician Salary

# New Physician Salary has Increased Over Time



# Starting Salaries across Specialty Groups



# Gender Differences in New Physician Starting Salary

Difference in Men and Women's Starting Salaries (in 2017 dollars)



# Decomposing Gender Differences in Starting Salaries

## Factors

Specialty

Demographics (Age, Race/Ethnicity, Visa status, Type and Location of medical school)

Practice setting (Group, Hospital inpatient, Emergency room, etc.)

Practice location (Urban, Rural, etc.)

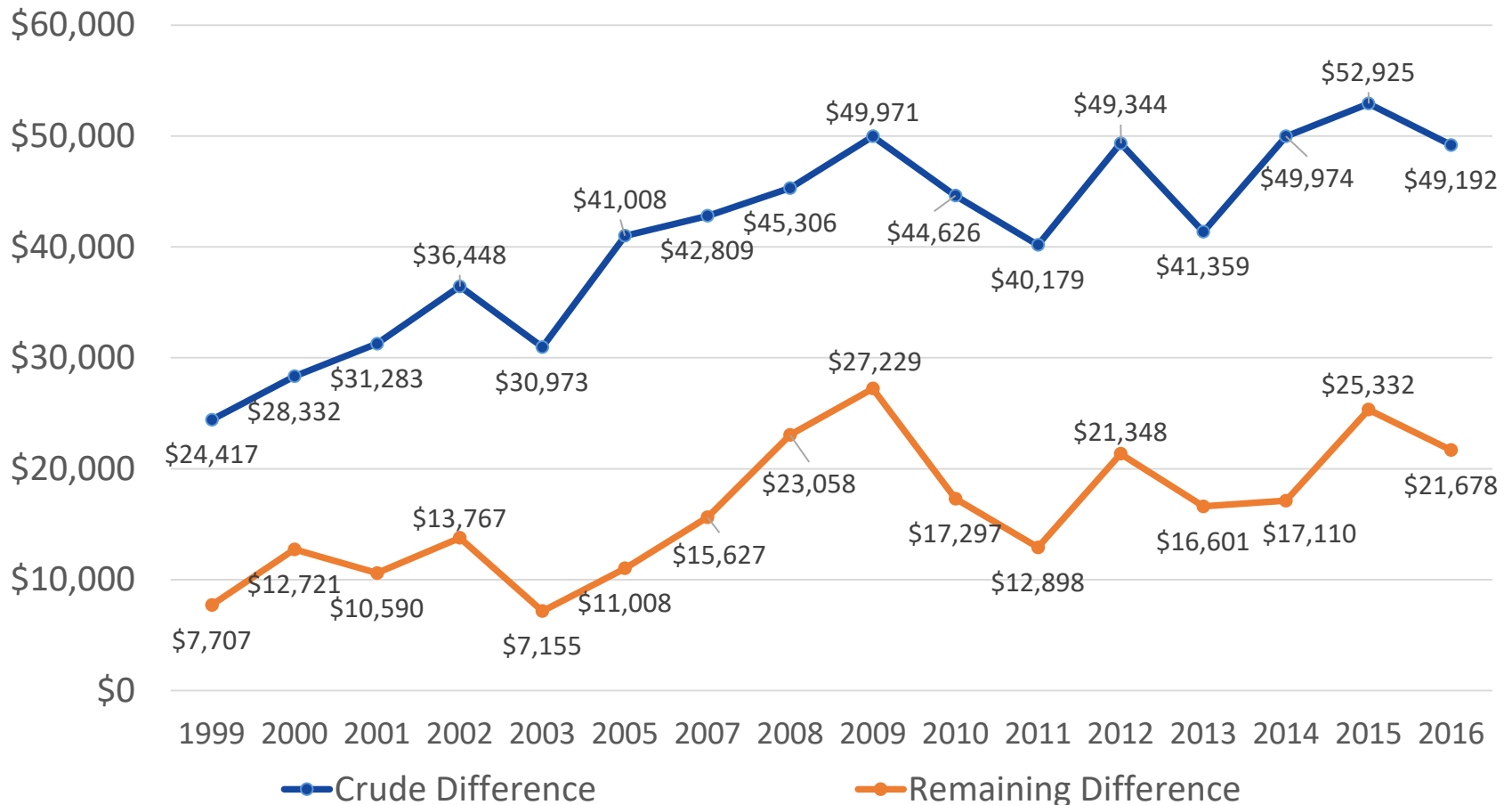
Weekly hours

Education debt

Job offers received

# Gender Differences in New Physician Starting Salary

Difference in Men and Women's Starting Salaries (in 2017 dollars)



# Conclusions



# Summary

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- Increasing representation of women among physicians
- Increasing education debt
- Desired job characteristics
- Demand trends
- Starting salary trends
- Persistence of gender differences

# Contact Information

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