# Trends in New York Residency Training Outcomes

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### **Center for Health Workforce Studies**

- Based at the School of Public Health at the University at Albany, SUNY
- Not-for-profit academic research center
- Mission: To provide timely, accurate data and conduct policy-relevant research about the health workforce
- Goal: To inform public policies, the health and education sectors, and the public
- Center was founded in July, 1996



### The New York Physician Workforce, 2014

	New York
Number of Physicians	72,969
Average Age	51
Percent Female	34%
Percent Underrepresented Minority	9%
Principal Practice Setting	
Solo	25%
Group	33%
Hospital	31%
Other	10%

Underrepresented Minorities (URMs) include Blacks/African Americans, Hispanic/Latinos, and American Indians/Alaska Natives

Data source: New York Physician Re-registration Survey (1995-2014)



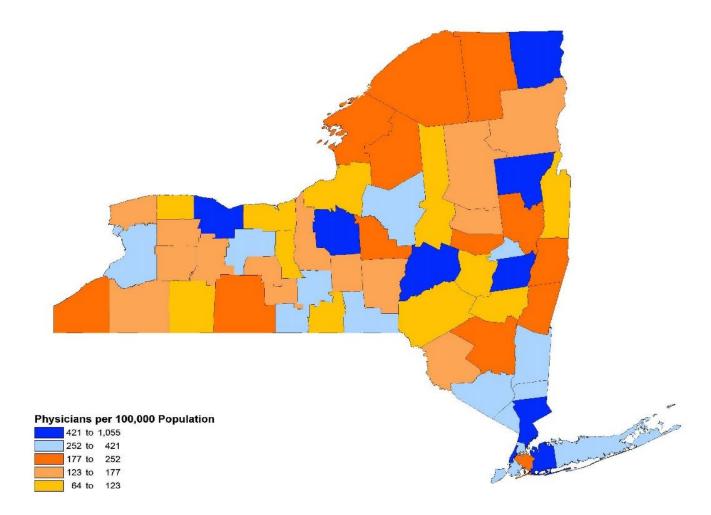
#### **Physician Specialties**

Specialty Group	Counts	Per 100k Pop.	%
Primary Care	22,171	114	30%
Non-Primary Care	50,798	261	70%
Ob/Gyn	3,874	20	5%
IM Specialties	10,667	55	15%
General Surgery	1,798	9	2%
Surgical Specialties	8,849	45	12%
Facility Based	8,523	44	12%
Psychiatry	6,302	32	9%
Total	72,969	374	100%

Facility Based Specialties include Anesthesiology, Radiology, and Pathology



### The Distribution of Physicians in New York





#### Where do they come from?

	NY Physician Workforce
Percent International Medical Graduate	33%
Percent NY Medical Graduate	40%
Percent with Residency Training in NY	77%



#### **GME** in the U.S. and New York

- In the US there are almost 10,000 programs and more than 120,000 residents
- 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
- California trains the 2nd highest number of physicians
  - Almost 11,000 annually (or about 5,000 fewer than New York)



### The New York Resident Exit Survey

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



### The Present and Future New York Physician Workforce

	NY Physician Workforce	NY Residents/Fellows, 2016
Percent Female	34%	48%
Percent URM	9%	16%
Principal Practice Setting		
Solo	25%	1%
Group	33%	40%
Hospital	31%	51%
Other	10%	8%



### Monitoring the New York Physician Workforce

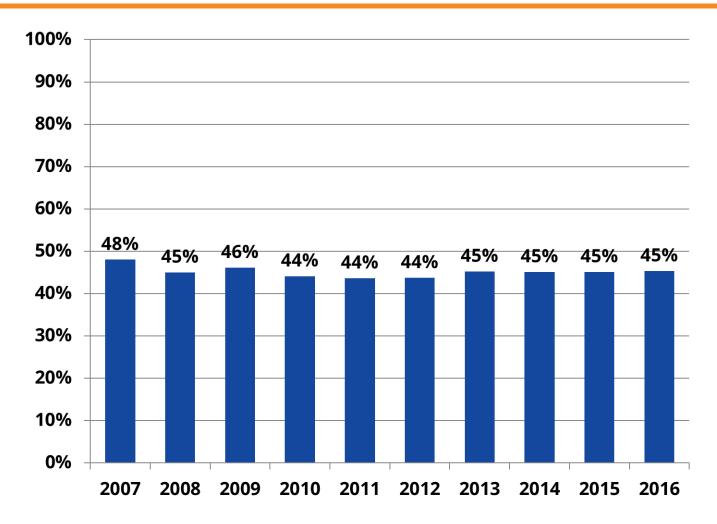
	NY Residents/Fellows, 1998	NY Residents/Fellows, 2016
Percent Female	36%	48%
Percent URM	13%	16%
Principal Practice Setting		
Solo	4%	1%
Group	47%	40%
Hospital	31%	51%
Other	8%	8%



# Retention of New Physicians after Completing Training in New York

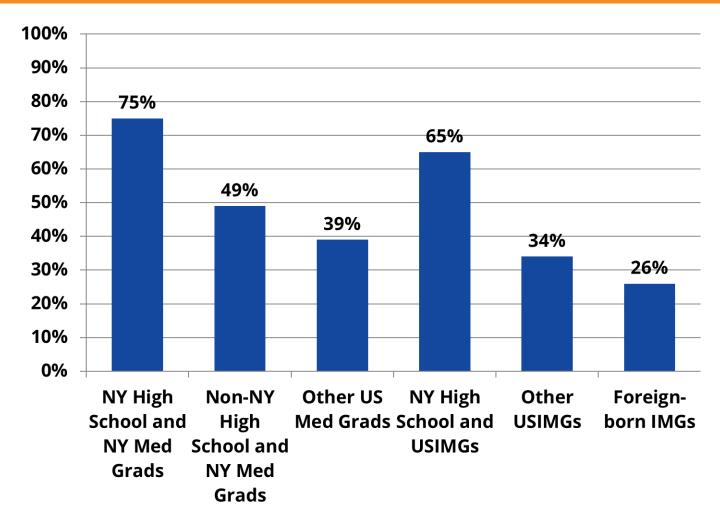


### Instate Retention of Physicians Completing Training in NY



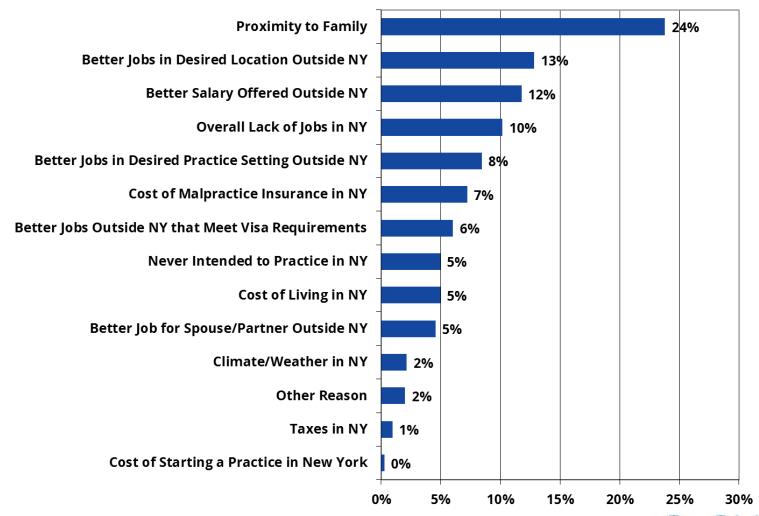


#### In-State Retention by High School Location, Medical School Location, and Citizenship Status



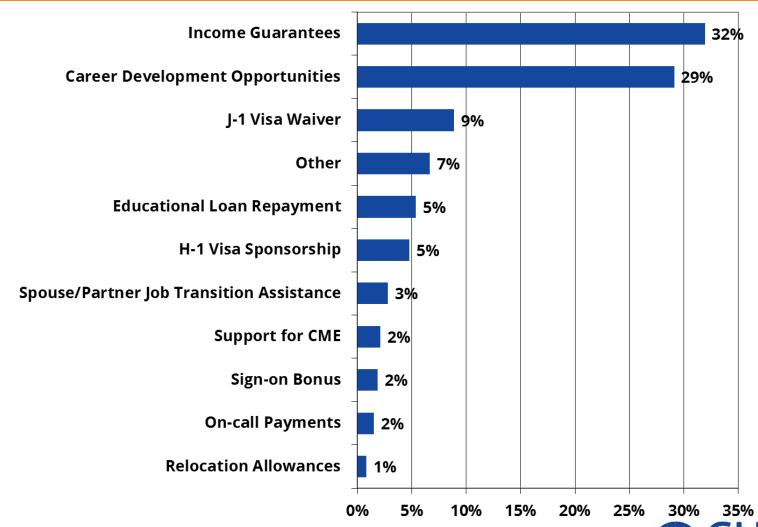


#### Principal Reasons for Practicing Outside of New York





#### Most Influential Incentive Received for Accepting a Practice Position



# What Job Characteristics are Important to Newly-trained Physicians?



#### Importance of Job Characteristics

	Not at all Important	Of little importance	Important	Very Important
Predictable start and end time each workday	2.4%	7.6%	51.5%	38.5%
Length of each workday	1.4%	10.4%	52.0%	36.2%
Frequency of overnight calls	2.0%	5.4%	43.1%	49.5%
Frequency of weekend duties	2.3%	6.2%	43.5%	49.5%



#### "Very Important" Job Characteristics by Gender and Race/Ethnicity

	Female	Male	URMs	Non-URMs
Predictable start and end time each workday	43.5%*	33.3%	43.6%	37.6%
Length of each workday	41.5%*	30.9%	40.2%	35.5%
Frequency of overnight calls	54.2%*	44.7%	53.6%	48.8%
Frequency of weekend duties	53.0%*	43.0%	50.8%	47.6%

<sup>\*</sup> *p* < .05 *for t-test* 



#### "Very Important" Job Characteristics by Relationship Status and Dependent Children

	Married/ Long-term Relationship	Single/ Divorced	Dependent Children	No Dependent Children
Predictable start and end time each workday	40.2%*	29.6%	43.3%*	35.7%
Length of each workday	37.5%*	29.6%	39.9%*	34.1%
Frequency of overnight calls	50.2%	46.2%	52.5%	47.8%
Frequency of weekend duties	49.0%	43.2%	51.8%*	45.9%

<sup>\*</sup> *p* < .05 *for t-test* 



### Do Job Characteristics Influence Medical Specialty Choice?

	Predictable start and end time each workday	Length of each workday	Frequency of overnight calls	Frequency of weekend duties
Primary Care (n=336)	43.5%*	42.0%*	56.8%*	54.8%*
Ob/Gyn (n=71)	38.0%	31.0%	45.1%	49.3%
Medicine Subspecialties (n=200)	36.0%	32.0%	49.0%	45.5%
Surgical Specs (n=100)	22.0%*	20.0%*	29.0%*	31.0%*
Facility Based (n=122)	33.6%	27.9%*	39.3%*	44.3%
Psychiatry (n=92)	56.5%*	57.6%*	71.7%*	69.6%*
Other (n=275)	36.4%	36.0%	46.5%	42.2%*

<sup>\*</sup> p < .05 for t-test (eg, primary care compared to non-primary care specialties, ob/gyn compared to non-ob/gyn specialties, etc.)



#### Trends in Job Market Demand for Newly-trained Physicians



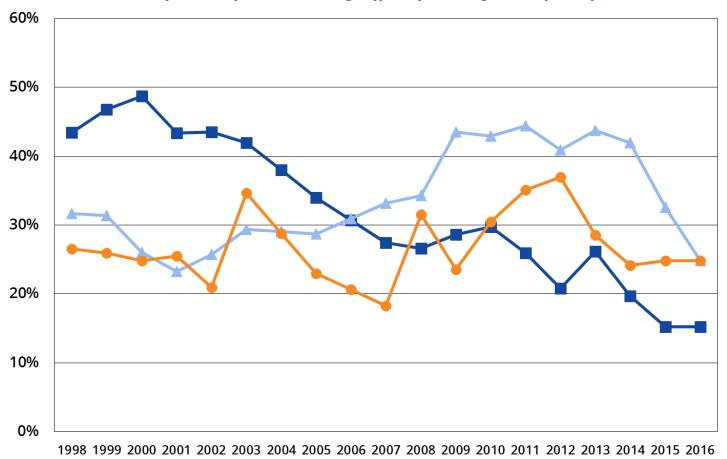
### Measuring Relative Demand by Specialty

- 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

Percent of New Physicians Having Difficulty Finding a Satisfactory Job



Primary Care

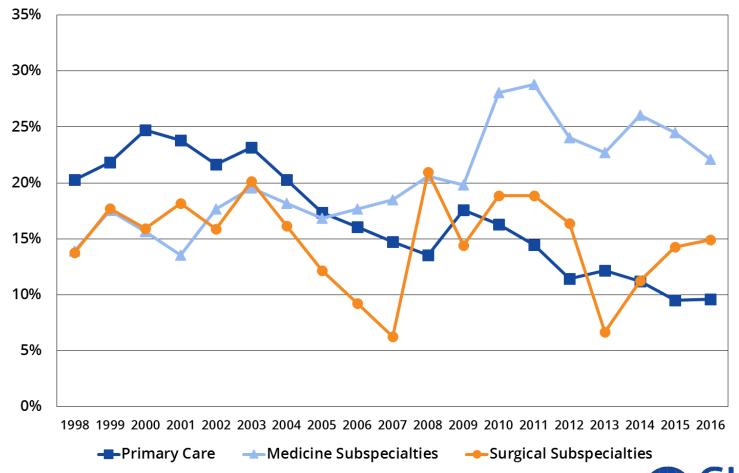
Medicine Subspecialties

Surgical Subspecialties



### Changing Plans Due to Limited Practice Opportunities

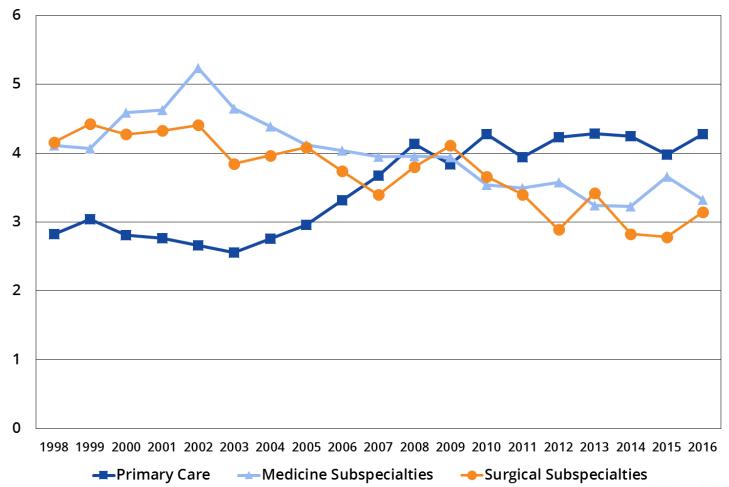
Percent of New Physicians Having to Change Plans Due to Limited Practice
Opportunities





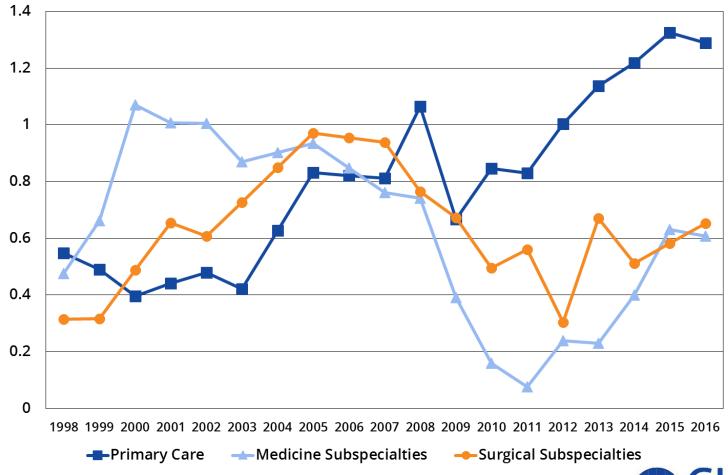
#### **Job Offers Received**

#### Mean Number of Job Offers for New Physicians



### Assessment of Regional Job Market

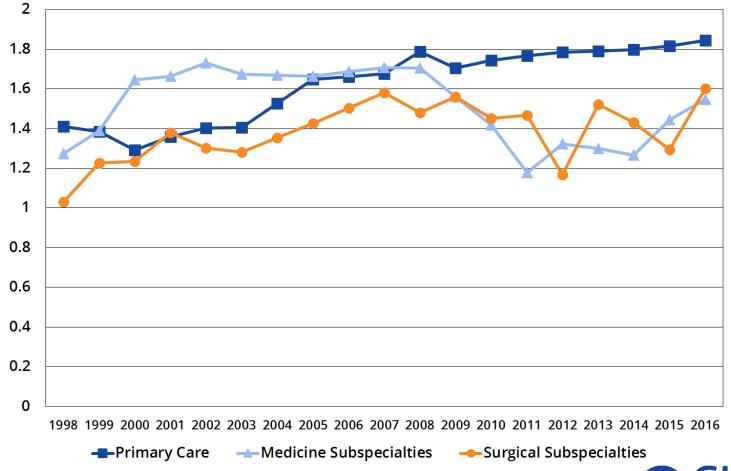
Mean Scores for New Physicians' Perceptions of the Regional Job Market (Many Jobs = 2, Some Jobs = 1, Few Jobs =0, Very Few Jobs = -1, and No Jobs = -2)





### Assessment of National Job Market

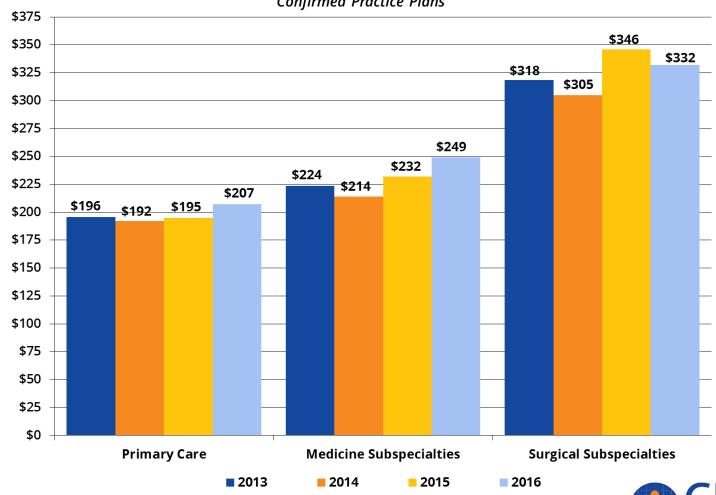
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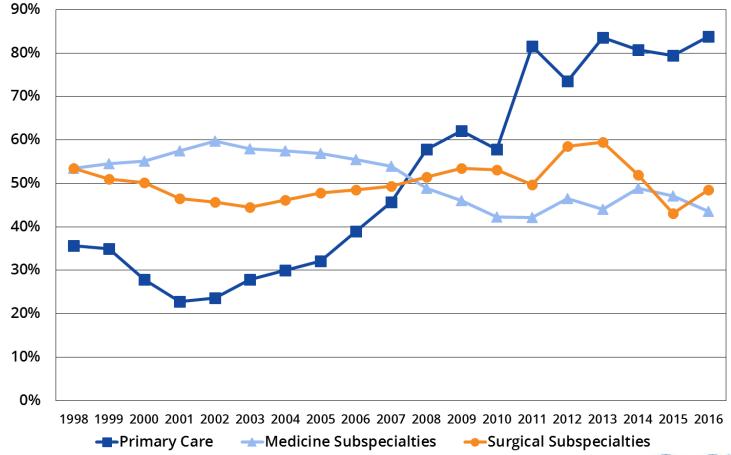
#### **Starting Salaries**





#### The Relative Demand for Primary Care Physicians Has Surpassed Specialists

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



### Relative Demand by Individual Specialty

- Highest Relative Demand
  - Family Medicine
  - Emergency Medicine
  - General Internal Medicine
- Lowest Relative Demand
  - Pathology
  - Radiology
  - Pediatric Subspecialties



### Trends in Physician Income



#### Physician Income

- Median starting salary in 2016: \$233,500
- Physician income has increased over time (even after taking into account inflation)
- Gender differences in physician income over time
  - Adjusting for specialty, setting, patient care hours, practice location, age, race/ethnicity, citizenship status, type of medical education, and inflation



#### Gender Differences in New Physician Income have Increased Over Time

#### Gender Differences in Physician Income in 2016 Dollars, 2001-2016



#### Gender Differences in Physician Income by Primary Care Specialties, 2014-2016

	Income Difference	Significance
Family Medicine	-\$20,134	.0001
General IM	-\$15,214	.0000
General Pediatrics	-\$2,759	.0000
Obstetrics/Gynecology	-\$12,697	.0001

Negative dollars indicate that females earn less than males



#### Conclusions



#### Summary

- Proximity to family and one's hometown greatly influences the practice location of newly-trained physicians
- Job characteristics that lead to a more manageable lifestyle are considered either "important" or "very important" to more than 85% of newly-trained physicians
- The demand for primary care physicians has increased substantially over the last 20 years relative to specialists
- Gender differences in physician income have increased over time despite more women entering medicine



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