

# The Effects of Race, Ethnicity, and Gender on New Physicians' Job Market Experiences

---

Presented by:

Yuhao Liu, MPA

Research Associate

Center for Health Workforce Studies

School of Public Health | University at Albany, SUNY

[yliu32@albany.edu](mailto:yliu32@albany.edu)

May 10, 2018

14<sup>th</sup> Annual AAMC Health Workforce Research Conference

Washington D.C.



# Center for Health Workforce Studies

---

- The Center for Health Workforce Studies (CHWS) was established in 1996
- Mission: To provide timely, accurate information and conduct policy-relevant research about the health workforce
- Goal: To assist health, professional, and educational organizations, policy makers, planners, and other stakeholders to understand issues related to the supply, demand, distribution, and the use of health workers

# Background and Purpose of Study

---

- There is growing concern about the diversity of the physician workforce
- Lack of diversity in the physician workforce may affect access to care and patient satisfaction due to issues around cultural competency
- This study investigates the effect of race, ethnicity, and gender on new physicians' job market experiences

# Data Source for Study

---

- New York Resident Exit Survey from 2014 to 2016
- Only physicians who had actively searched for a job were included in this analysis
- International medical graduates (IMGs) on temporary visas were excluded due to practice restrictions
- Total: 2,977 records

# Contents of NY Resident Exit Survey

---

- Background
  - Gender, Race, Marriage status, High school location, etc.
- Medical Education and Training
  - Type of medical education, Medical school location, Specialties, etc.
- Future Plans
  - Have actively searched for a job (Yes/No), Importance of job characteristics, etc.
- Practice Plans
  - Practice settings, Income, Location of principle practice, etc.
- Job Market Experiences
  - Number of offers received, Had difficulty finding a job (Yes/No), etc.

# Job Market Experiences Measured by Five Dimensions

---

## 1. Difficulty finding a practice position

	Frequency	Percentage
Yes	769	25.80%
No	2208	74.20%
Total	2,977	100.00%

## 2. Had to change plans due to limited practice opportunities

	Frequency	Percentage
Yes	468	15.70%
No	2509	84.30%
Total	2977	100.00%

# Job Market Experiences Measured by Five Dimensions

## 3. Number of job offers received

Mean	Standard Deviation
3.474	2.95533

## 4. Assessment of regional job market

- Score from -2 to 2; “no job” = - 2 and “many jobs” = +2

Mean	Standard Deviation
0.9221	1.07481

## 5. Assessment of national job market

- Score from -2 to 2; “no job” = - 2 and “many jobs” = +2

Mean	Standard Deviation
1.5633	0.75231

# Methods

---

- Multivariate logistic regression was used for difficulty finding a practice position and having to change plans
- Multivariate linear regression was used for number of job offers received, assessment of regional market, and assessment of national market
- Race and gender were used as explanatory variables
- Six additional factors were included as control variables



# Explanatory Variables Included in Models

- Race

	Frequency	Percentage
White	1424	47.80%
Black/African	183	6.10%
Hispanic/Latino	235	7.90%
Asian	910	30.60%
Other	225	7.60%
Total	2977	100.00%

- Gender

	Frequency	Percentage
Male	1550	52.10%
Female	1427	47.90%
Total	2977	100.00%

# Control Variables

---

## Citizenship Status

Native Born US, Naturalized US, Permanent Resident

## Type of Medical Education

Allopathic, Osteopathic, etc.

## Medical School Location

New York, Other US State, Canada, Other Country

## High School Location

New York, Other US State, Canada, Other Country

## Specialties (8 categories)

Primary Care, Ob/Gyn, General Surgery, etc.

## Age

# Results from Job Market Experience Regression Models

	Change Plans	Difficulty Finding Jobs	# of Job Offers	Regional Market	National Market
Hispanic	1.072	1.124	0.722	0.03	-0.041
Black	0.769	1.031	-0.243	0.097	0.012
Asian	1.282	1.332	-0.141	0.023	-0.036
Other Race	1.804	1.269	-0.009	-0.053	-0.103
Female	1.12	1.24	-0.593	-0.075	-0.025

*Reference Categories are White Physicians for race and Male Physicians for gender*

*Yellow Cells: experience is significantly ( $p < .05$ ) worse*

*Blue Cells: experience is significantly ( $p < .05$ ) better*

*White Cells: not significant*

# Results from Job Market Experience Regression Models (interaction effects)

	Change Plans	Difficulty Finding Jobs	# of Job Offers	Regional Market	National Market
White Female	1.197	1.174	-0.644	-0.114	-0.025
Hispanic Female	1.047	0.956	0.559	0.114	-0.059
Black Female	0.548	1.112	-0.784	0.025	-0.022
Asian Female	1.504	1.793	-0.753	-0.058	-0.054
Other Race Female	2.113	1.478	-0.245	-0.136	-0.125
Hispanic Male	1.194	1.386	0.571	-0.103	-0.035
Black Male	1.167	1.123	-0.293	0.063	0.025
Asian Male	1.302	1.147	-0.147	-0.003	-0.042
Other Race Male	1.839	1.267	-0.316	-0.071	-0.104

*Reference Category is White Male Physicians*

*Yellow Cells: experience is significantly ( $p < .05$ ) worse*

*Blue Cells: experience is significantly ( $p < .05$ ) better*

*White Cells: not significant*

# Key Findings and Implications

---

- Race and gender appear to affect new physicians' job market experiences
  - Female physicians had worse job market experiences compared to Male physicians
  - Asian physicians and physicians of Other Race had worse job market experiences compared to White physicians
  - Asian Female physicians had the worst job market experiences among all race and gender groups
  - Hispanic physicians (Male & Female) received more job offers compared to White physicians

# Implications

---

- It is important to ensure that physicians of different demographics have equitable job market experiences, in order to:
  - Achieve a more diverse health workforce
  - Increase cultural competency
  - Improve access to health care for all patient populations

# Questions?

---

- For more information, please email me at: [yliu32@albany.edu](mailto:yliu32@albany.edu)
- Visit us at:



@CHWS\_NY



@Centerforhealthworkforcestudies



[www.linkedin.com/company/center-for-health-workforce-studies](http://www.linkedin.com/company/center-for-health-workforce-studies)