



# THE EFFECTS OF NEIGHBORHOOD CHANGE ON HEALTH: A JOINT MEETING OF THE HCTF AND FIT CITY PHL

November 20, 2019



# WELCOMING & OPENING REMARKS

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- **Barry Seymour**, Executive Director, DVRPC
- **Dr. Valerie Arkoosh**, Chair, Montgomery County Board of Commissioners, HCTF Co-Chair
- **Keri Salerno**, Senior Director of Economic Inclusion, Public Health Management Corporation, FitCityPHL Chair



# KEYNOTE PRESENTATIONS

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## The State of Residential Development across Philadelphia

Anne Fadullon, *Director of Planning and Development*, City of Philadelphia

## The Impact of Residential Displacement on Healthcare Access and Mental Health among Original Residents of Gentrifying Neighborhoods in New York City

Sungwoo Lim, DrPH, MS, *Director of Research and Evaluation*, Bureau of Epidemiology Services, Division of Epidemiology, New York City Department of Health and Mental Hygiene





# Anne Fadullon

Director of Planning and Development

## Residential Development Across Philadelphia

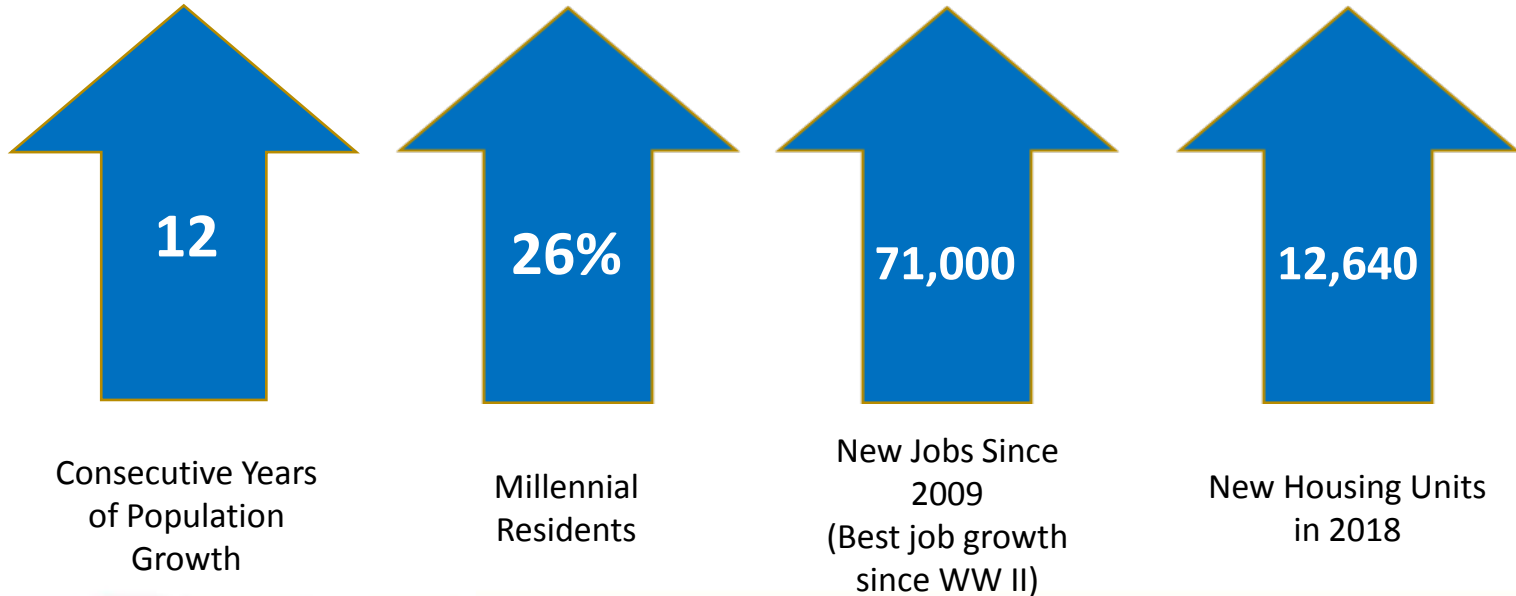
### Healthy Communities Task Force & Fit City PHL

November 20, 2019



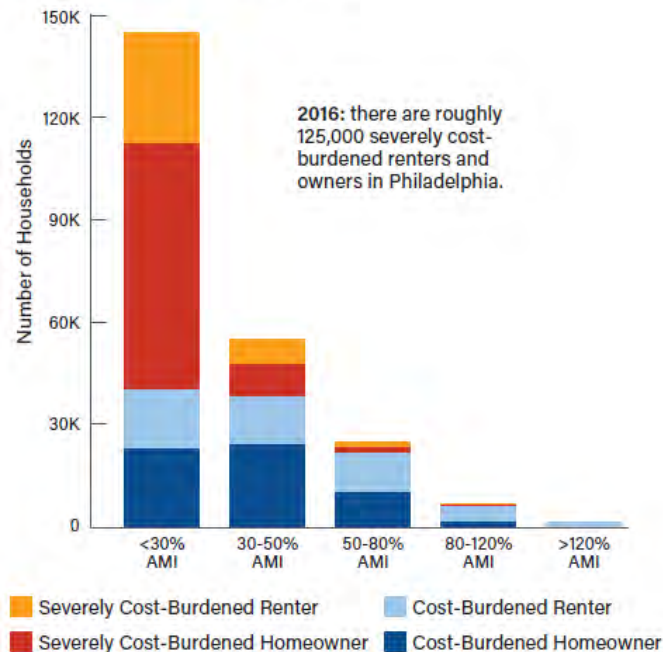
City of  
Philadelphia

# Philadelphia Market Conditions





### Cost-Burdened<sup>4</sup> Households



### Condition of Housing Stock

- 

Over **88%** of homes were built prior to 1980
- 

**29,000\*** residential properties below average exterior condition
- 

**31,000\*** housing units without complete kitchens
- 

**27,000\*** housing units without complete plumbing facilities
- 

**11,000\*** exterior residential property violations

**25%**  
living in poverty<sup>2</sup>

**24,000**  
eviction filings in 2017

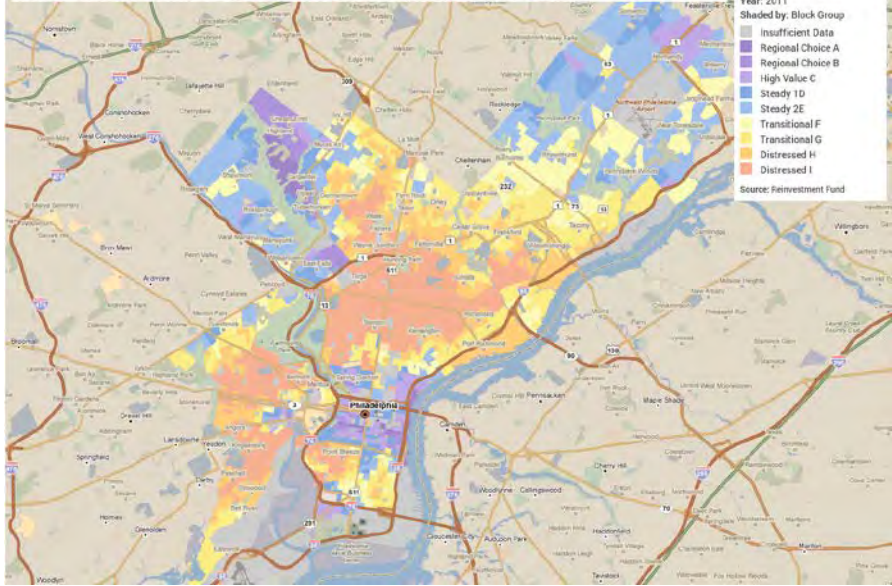
**42,900**  
Housing Authority wait list<sup>3</sup>

**5,600**  
experiencing homelessness

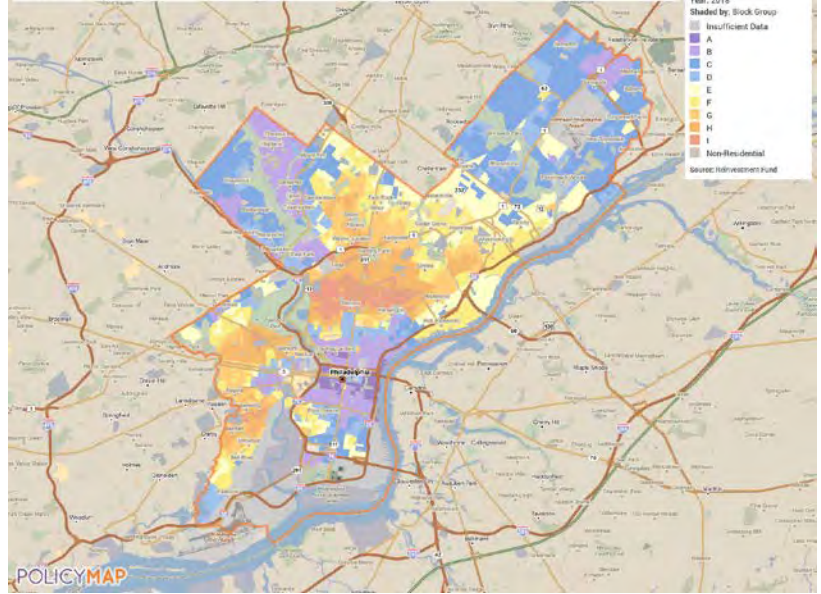




### Reinvestment Fund's 2011 Market Value Analysis (MVA) of Philadelphia.



### 2018 Philadelphia MVA

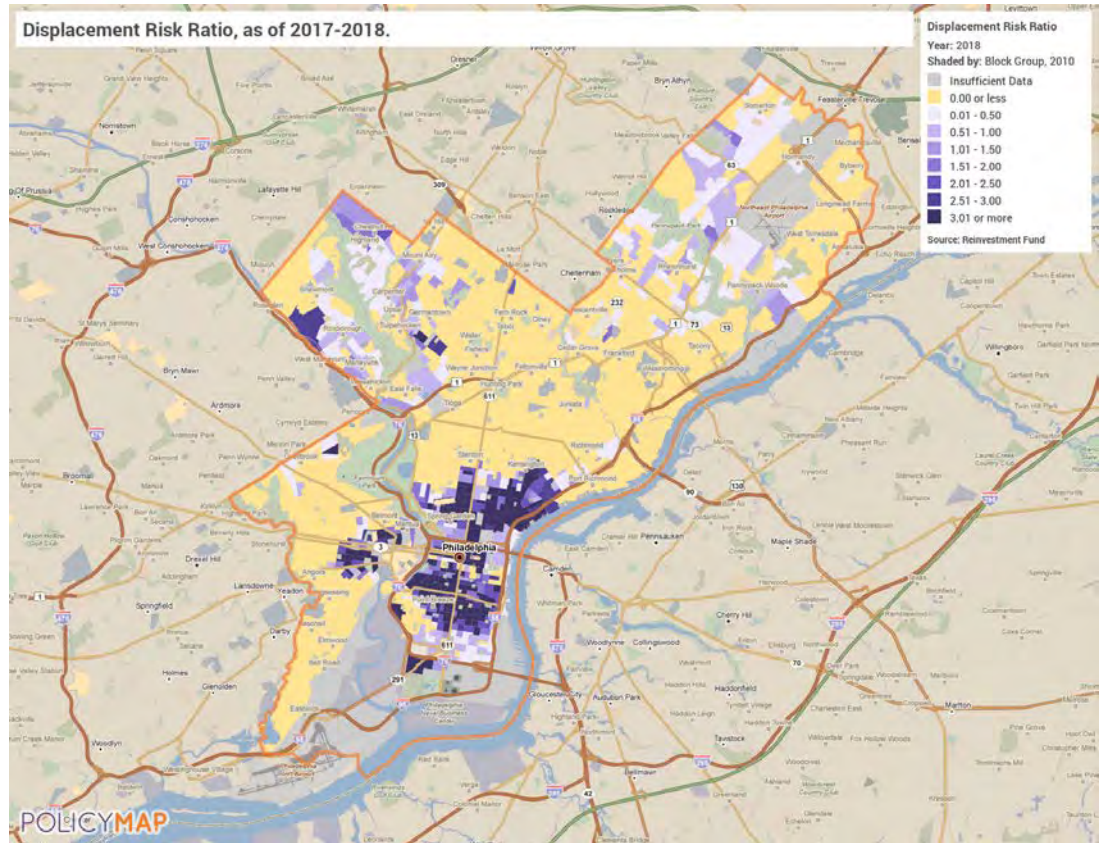


POLICYMAP





### Displacement Risk Ratio, as of 2017-2018.





# Housing for Equity:

## AN ACTION PLAN FOR PHILADELPHIA

October 2018







Workforce



Market Rate



Public Housing



Affordable



Homeless

# WEST PARK

> DISTRICT PLAN



**City of Philadelphia and the  
Philadelphia Housing Authority**

**Assessment of Fair Housing**

**December 23, 2016**

# 10-Year Housing Goals

Housing Type	AMI Range	Income	Owner		Renter		Total
			Preserved <sup>5</sup>	New <sup>6</sup>	Preserved <sup>5</sup>	New <sup>6</sup>	
Homeless						2,500	2,500
Affordable	<30%	\$0-25k	20,000		18,000	1,400	39,400
	30-50%	\$25-42k	2,000		6,000	4,200	12,200
	50-80%	\$42-67k	2,000	6,000	10,000	1,400	19,400
Workforce	80-120%	\$67-100k	5,500	4,000		2,000	11,500
Market-Rate	>120%	\$100k+		7,500		7,500	15,000
<b>Total</b>			<b>29,500</b>	<b>17,500</b>	<b>34,000</b>	<b>19,000</b>	<b>100,000</b>





# Key Themes

- Housing our Most Vulnerable Residents
- Preserving and Protecting Long-Term Affordability
- Pathways to Sustainable Homeownership and Wealth Creation
- Encouraging Equitable Growth without Displacement
- Encouraging Efficient and Innovative Development and Rehabilitation to Promote Greater Housing Choice


# House our Most Vulnerable Residents



# Preserve & Protect Long-Term Affordability



# Pathways to Sustainable Homeownership

Sponsored by the  Philadelphia Redevelopment Authority



Philadelphia Neighborhood  
Home Preservation  
Loan Program



# Equitable Growth Without Displacement





# Innovation for Greater Housing Choice





# Implementing the Plan



# Resources 2019-2028

**New Resources:**  
10-Year Total: \$581,000,000

Federal	\$0
Local	\$186,000,000
State	\$0
Private/Leverage	\$395,000,000

**Current Resources:**  
10-Year Total:  
\$5,595,500,000

Federal	\$4,194,500,000
Local	\$749,000,000
State	\$92,000,000
Private/Leverage	\$560,000,000

**10-Year Total:**  
\$6,176,500,000

Federal	\$4,194,500,000
Local	\$935,000,000
State	\$92,000,000
Private/Leverage	\$955,000,000

# We're Doing It!



Home Repair Loan Program



First-time Homebuyer Assistance



Funding for Pilot Programs





Thank you!

Questions?



City of  
Philadelphia



# Assessing the impact of displacement on emergency department visits and hospitalizations among residents of gentrifying neighborhoods

November 20, 2019

**Sungwoo Lim, Pui Ying Chan, Sarah Walters, Gretchen Culp, Mary Huynh, and Hannah Gould**

# Background

- Displacement is associated with adverse health outcomes
- One of the possible drivers of displacement is gentrification
  - Gentrification is a process of urban development whereby resource-deprived neighborhoods are revitalized via influx of affluent, educated residents
- However, evidence from systematic, quantitative assessments is limited





# Study questions

1. Does displacement to poor, non-gentrifying neighborhoods increase difficulty in accessing health care and therefore increase hospital use?
2. Does displacement disrupt existing social ties, resulting in an increased level of stress and mental health (MH) issues and therefore increased MH-related ED visits/hospitalizations?



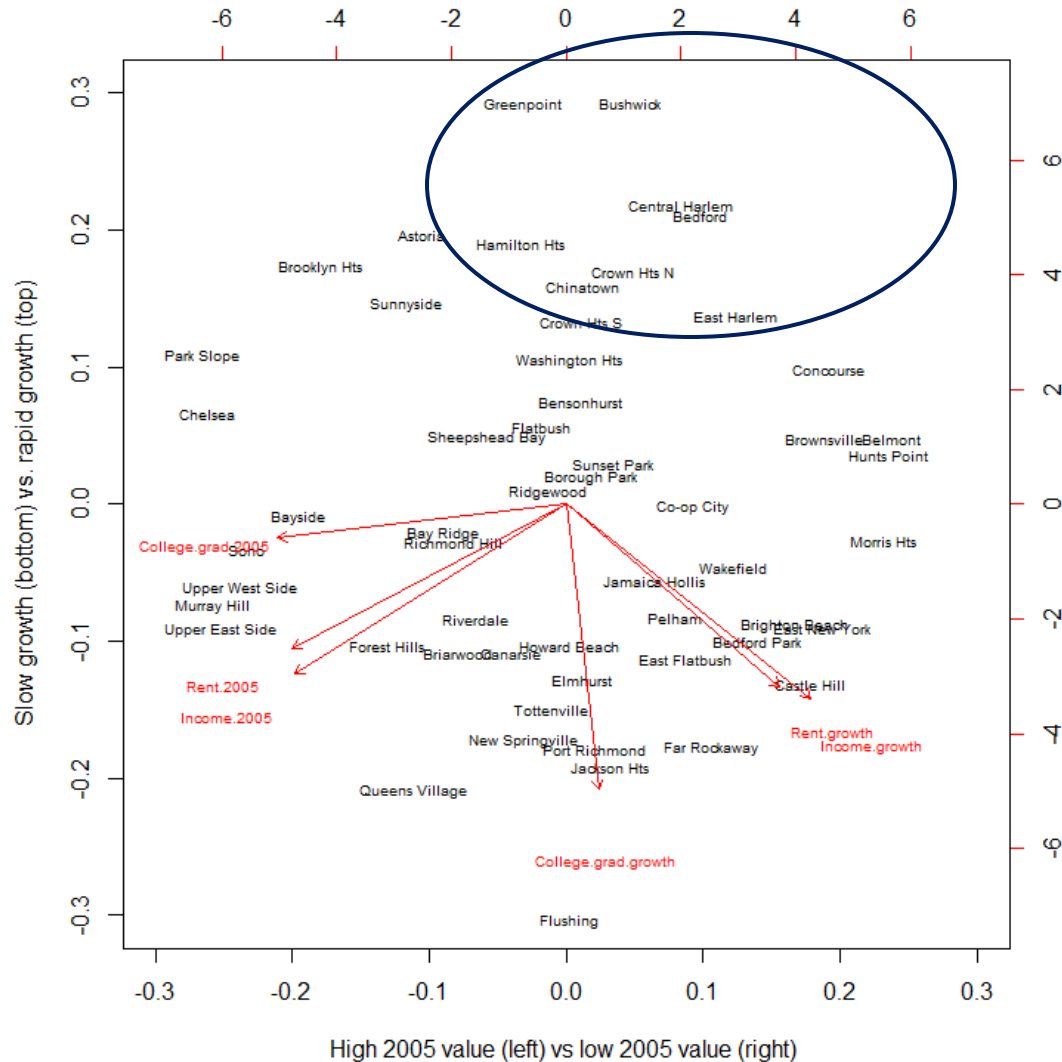
# Methods

# Identifying gentrifying neighborhoods

- Neighborhood (PUMA) level variables from 2005-2014 American Community Survey
  - % of college graduate in 2005
  - Median household income in 2005
  - Median rental price in 2005
  - Growth in each of the above 3 variables from 2005 to 2014
- Principal component analysis
- Gentrifying neighborhoods: low 2005 values and fast growth
- Poor, non-gentrifying neighborhoods: low 2005 values and slow growth

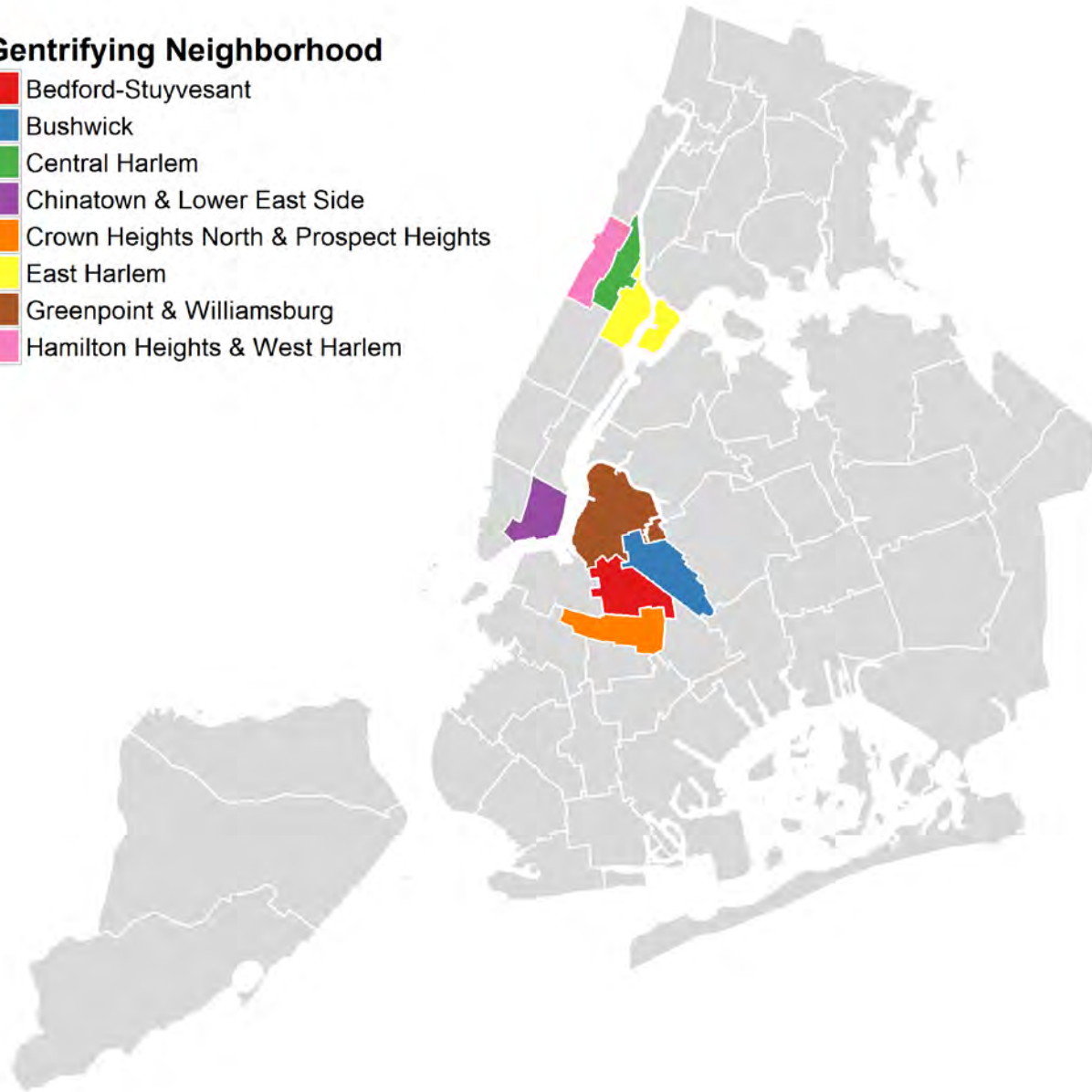


# Gentrifying neighborhoods



## Gentrifying Neighborhood

- Bedford-Stuyvesant
- Bushwick
- Central Harlem
- Chinatown & Lower East Side
- Crown Heights North & Prospect Heights
- East Harlem
- Greenpoint & Williamsburg
- Hamilton Heights & West Harlem



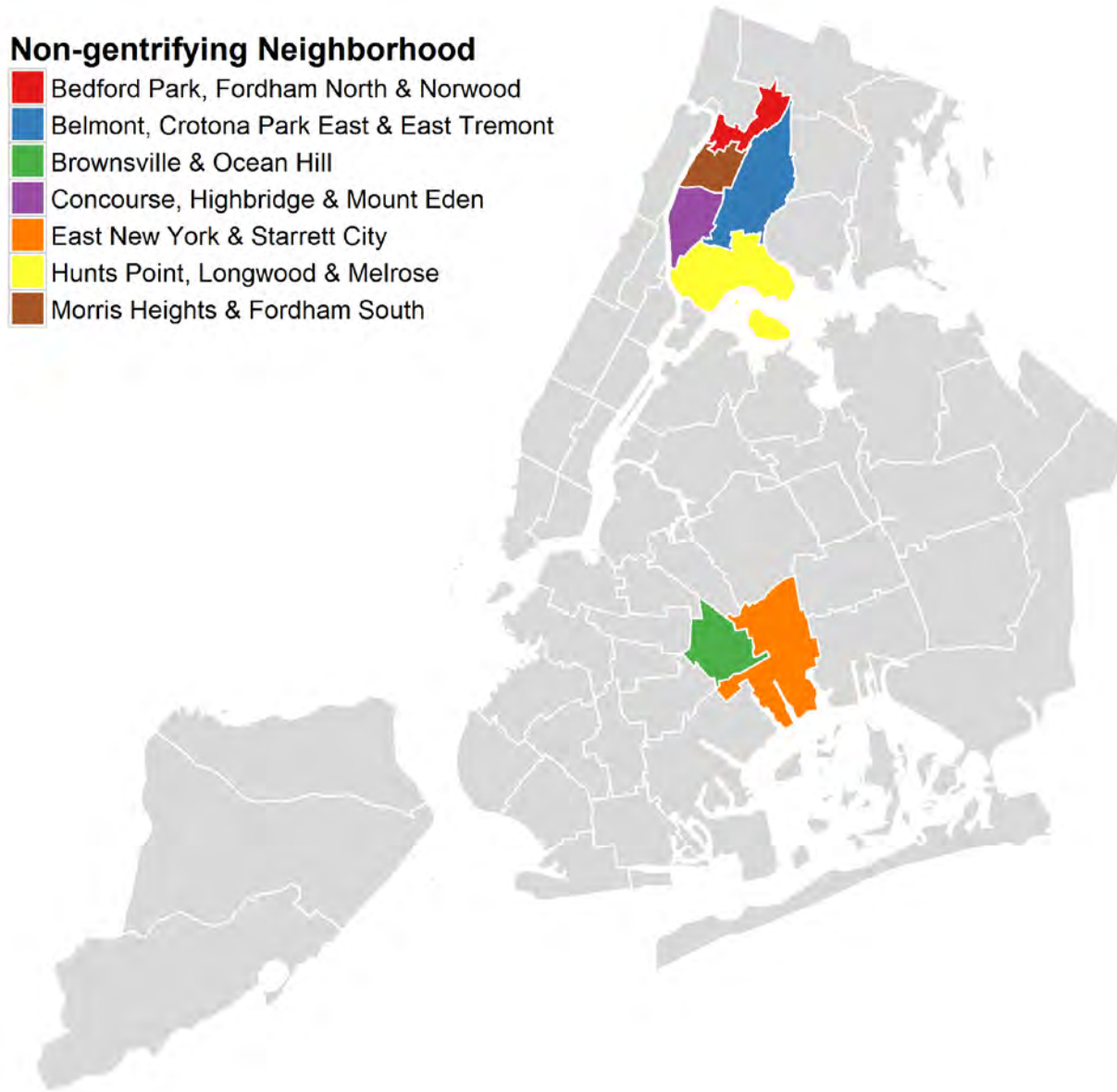
# Poor, non-gentrifying neighborhoods





## Non-gentrifying Neighborhood

- Bedford Park, Fordham North & Norwood
- Belmont, Crotona Park East & East Tremont
- Brownsville & Ocean Hill
- Concourse, Highbridge & Mount Eden
- East New York & Starrett City
- Hunts Point, Longwood & Melrose
- Morris Heights & Fordham South



# Data and Cohort Selection

- Data: 2006-2014 Statewide Planning and Research Cooperative System (SPARCS) data
- Cohort: adult (18+) with least one ED visit or one hospitalization and geocodable address every 2 years since 2006
- Excluded individuals with  $> 3$  unique addresses per year before baseline ( $<1\%$ )
  - Possible homeless people & people sharing the same identifier



# Data and Cohort Selection (2)

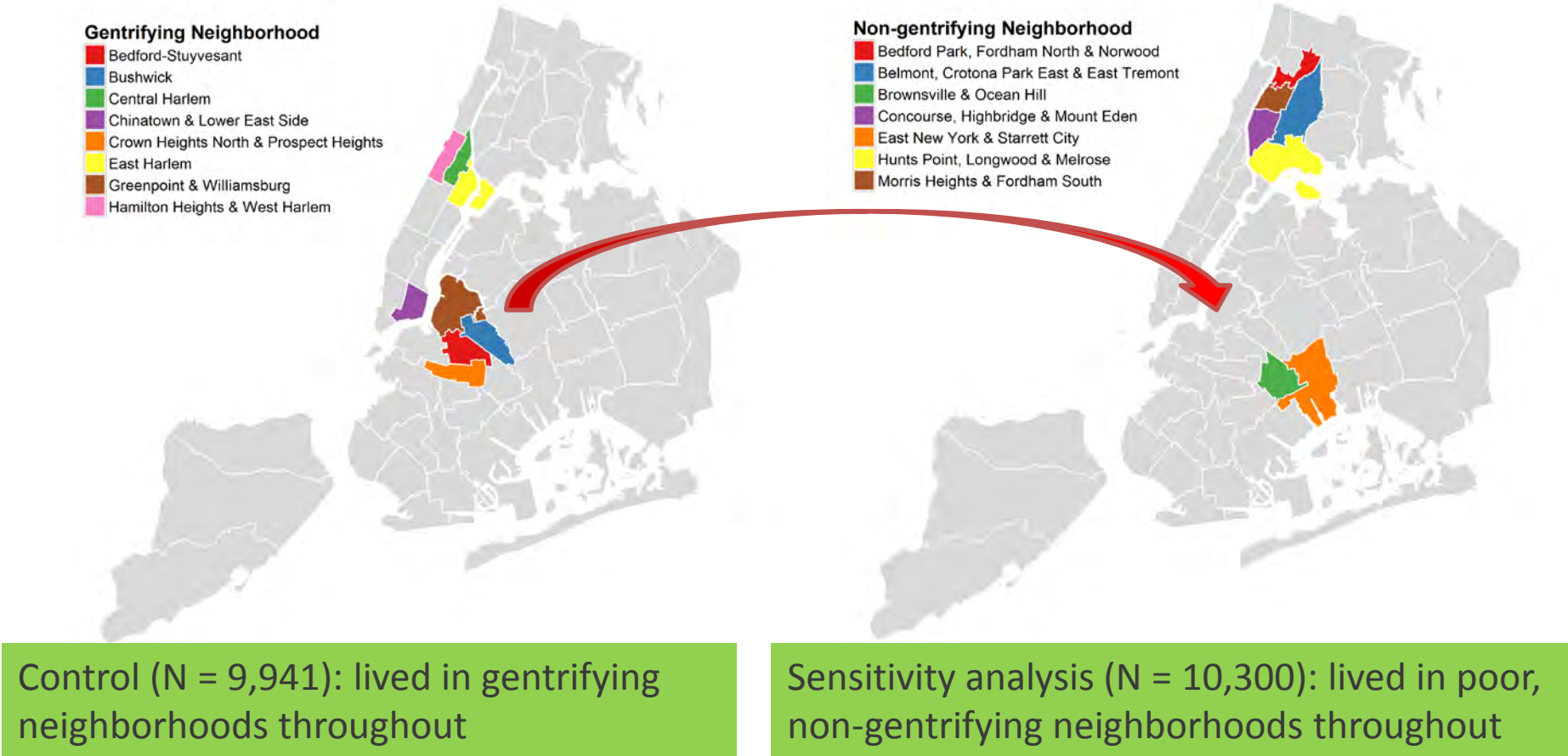
Displaced (N = 3,032) : lived in gentrifying neighborhoods in 2006 and has ever moved to a poor, non-gentrifying neighborhood

## Gentrifying Neighborhood

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## Non-gentrifying Neighborhood

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# Variables

- Baseline (time point of displacement)
  - Displaced: midpoint between visit with the first “displacement” and the previous visit
  - Control: average baseline date of displaced group (12/29/2009)
- Outcomes
  - Rates of ED visits, rates of hospitalizations, rates of MH-related ED visits & hospitalizations
- Exposure: Displacement
- Covariates
  - Demographics, clinical characteristics, healthcare utilization prior to baseline, # of residential movements prior to baseline



# Statistical analysis

- 1<sup>st</sup> step: Inverse probability of treatment weighting (IPTW)
  - To balance baseline characteristics between displaced and control groups
    - Age at baseline
    - Sex
    - Pre-baseline # of ED visits/year
    - Pre-baseline # of hospitalizations/year
    - History of diagnosis (15 Clinical Classifications Software diagnosis categories)
    - # of residential movements during the year before baseline





# Statistical analysis (2)

- 2<sup>nd</sup> step: negative binomial regression with IPTW & robust variance estimation
  - Outcome = exposure +sex + age + # of visits during the year before baseline + # of residential movement during the before baseline +offset (log of total follow-up years)



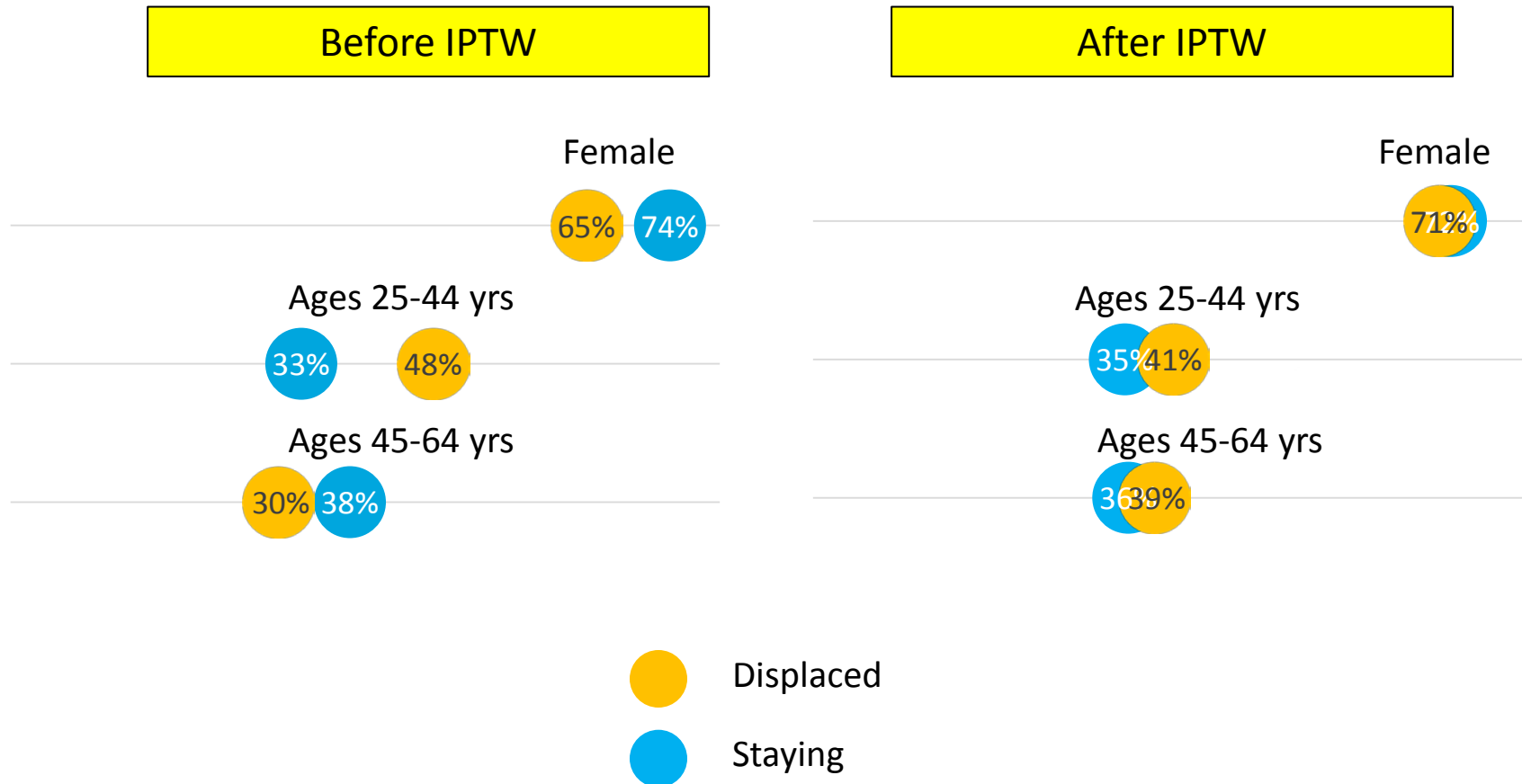
# Results

# Cohort characteristics

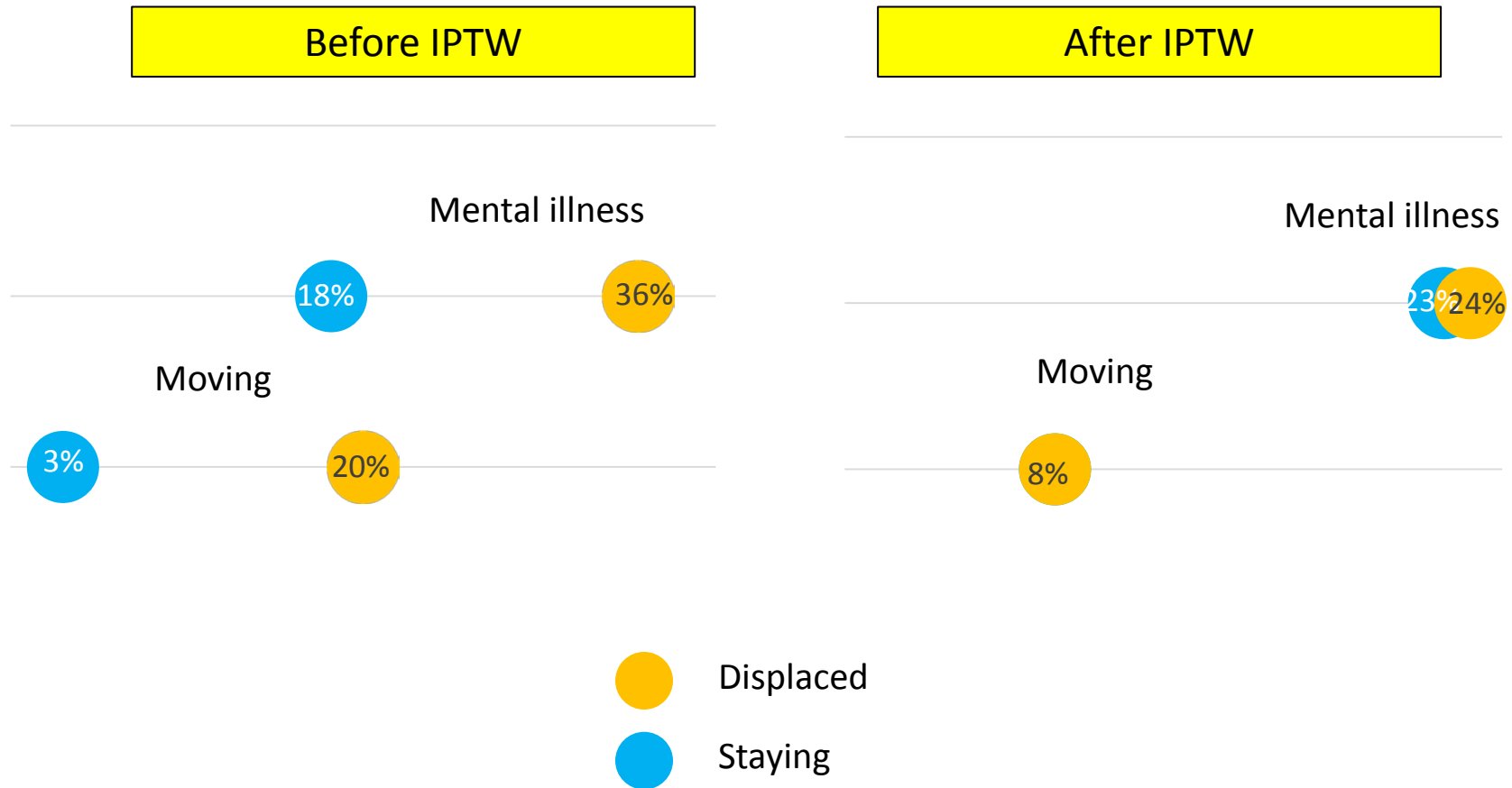
- Cohort members vs. the general NYC adult population in 2010
  - Higher % of women (72% vs. 54%)
  - Higher % of persons aged 45-64 years (37% vs. 28%)
  - Higher % of health insurance (93% vs. 83%)
  - Similar % of mental illness (22% vs. 21%)
  - Similar % of diabetes (9% vs. 9%)



# Displaced residents were more likely to be men and younger



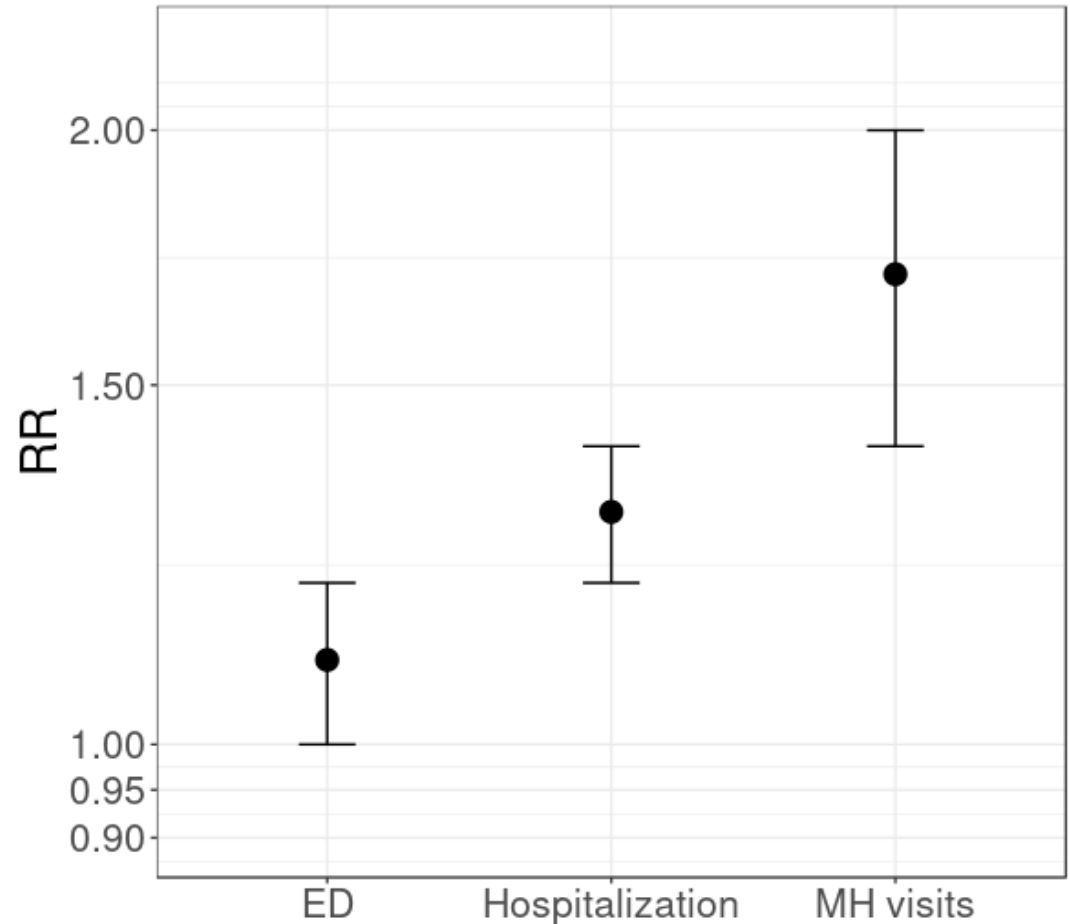
# Displaced residents were more likely to move, make ED visits, and be diagnosed with MH-related conditions prior to baseline





# Results from regression

- The cohort was followed up for average 5 years post-baseline
- Displacement vs. staying in the gentrifying neighborhoods was associated with higher rate of healthcare utilization



# Post-hoc analyses

- Displaced persons were compared with those staying in non-gentrifying, poor neighborhoods and similar results were observed
- Primary reasons for healthcare utilization were different between those who were displaced and stayed
  - Alcohol-related visits: 10% vs. 2%
  - Drug-related visits: 4% vs. 0.6%
- However, we continued to find high RR associated with displacement after taking out alcohol- and drug-related visits



# Discussion

# Summary

- Displaced persons, compared with those remaining in the gentrifying neighborhoods, had increased rates of ED visits, hospitalizations, and MH-related visits
  - This findings hold true when comparing with those who stayed in poor, non-gentrifying neighborhoods
- Limitations
  - Homeless people might have been included in the displaced group
  - Displacement might not result from gentrification



# Implications

- Raising awareness of negative impacts of displacement potentially due to gentrification
- Justifying efforts to strengthen systems for mental health support and services, especially for those who have been displaced





# Current and future works

- Developing a concept map to summarize various pathways from gentrification to health
  - Better understanding upstream inputs
  - Different impacts by in-migration and out-migration
- Analyzing other data sources and other outcomes
  - Housing instability and diabetes risk among people leaving the NYC public housing
  - Displacement and child mortality risk among residents of NYC gentrifying neighborhoods
  - Health impacts among original residents who remain in gentrifying neighborhoods
    - Food mirage phenomenon
  - Comparisons w/ other cities



**Thank you.**



For more information, contact NYC DOHMH  
Bureau of Epidemiology Services  
Dial 311 or visit [nyc.gov/health](http://nyc.gov/health)



# ACTIVE BREAK

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Kelly McIntyre, Physical Activity Coordinator,  
Get Healthy Philly



# WHAT'S HAPPENING IN OUR AREA?

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## IRA GOLDSTEIN, PH.D.

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President  
Policy Solutions,  
Reinvestment Fund

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Principal  
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## DAVIN REED, PH.D.

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Community  
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Economic Advisor  
Federal Reserve Bank of  
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# CLOSING REMARKS

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Christina Miller, Executive Director, Health Promotion Council  
HCTF Co-Chair





# NEXT STEPS

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- The HCTF has had a busy 2019 and will take a brief hiatus until Summer 2020. Stay tuned for future meetings!
- Please turn in your evaluations and recycle your name badges.
- AICP CM#: 9188778
- Continue the conversation over lunch!





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