

# Barriers to Accessing Healthcare Among New York City Residents

## Sargunvir Sondhi

### Introduction

Healthcare utilization is an essential component of maintaining both physical and mental health. But, 40% of Americans have reported delaying seeking health care when they needed it (Masterson et al. 2021). Thus, health care access barriers represent a significant public health problem. Here, the impact of several demographic characteristics, and the prevalence of factors that prevented the study participants from receiving the health care they needed was analyzed.

### Objectives

To investigate the demographic factors and barriers impacting healthcare access among NYC adults

### Methods

- Data from the 2013-2014 New York City Health and Nutrition Examination Survey (NYC HANES) was used (Thorpe et al. 2015).

### Measures

- Outcome variable: whether the participant avoided getting health care when they needed it in the past 12 months.
- Measures: age, gender, race, Hispanic/Latin Identification, Education Level, Income Level, and Poverty level of the study participant's census tract.
- Bivariate analysis to compare distribution differences using weighted chi square tests
- Poisson regression analysis to conduct a multivariable analysis of health care access
- Prevalence of the missed visit types and healthcare access barriers was analyzed

### Results

#### Bivariate Analysis of Demographic Factors Among NYC Adults

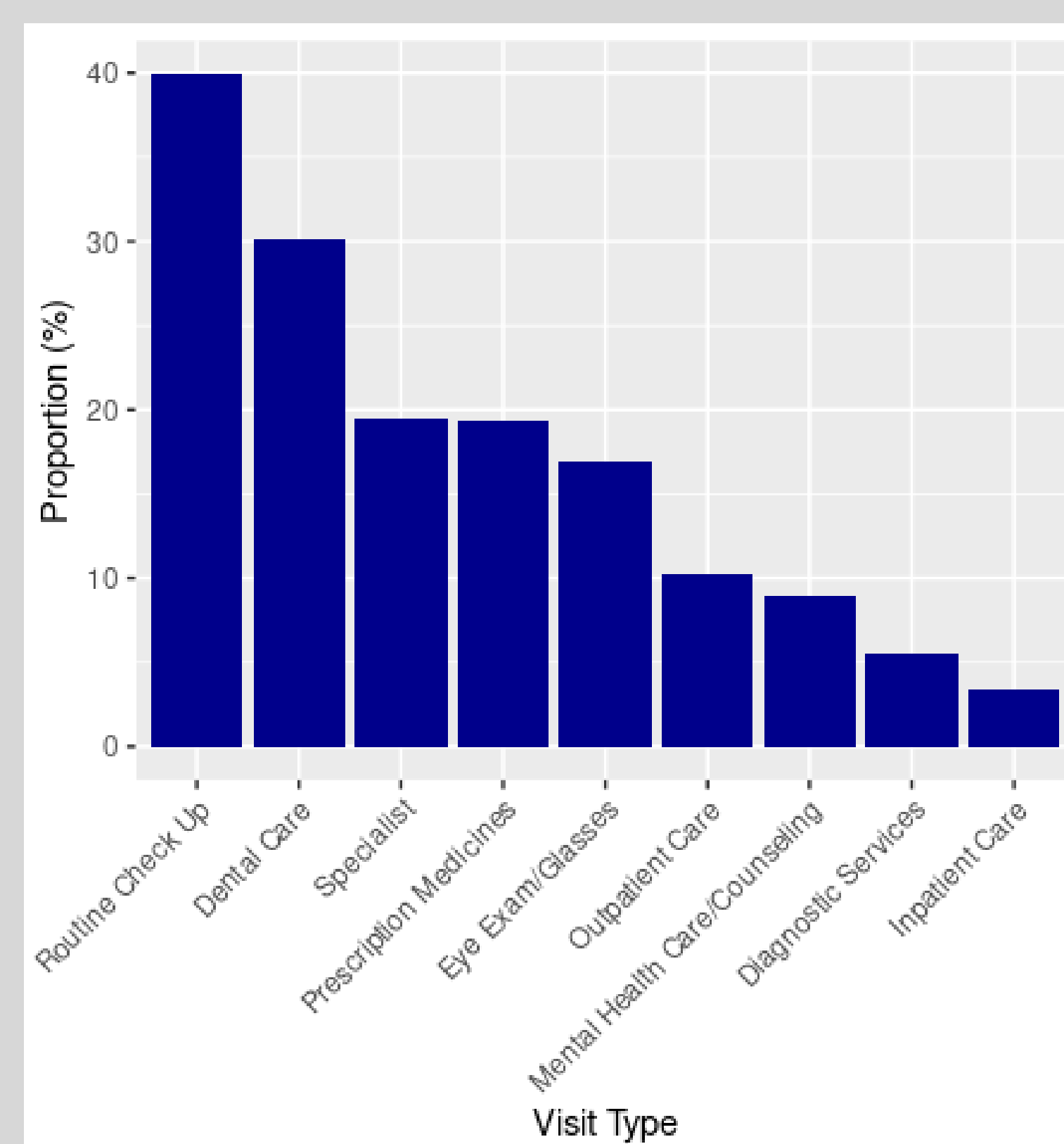
Demographic Characteristics	Exposed: Needed health care but did not get it in the last 12 months	Not Exposed: Received health care when needed in last 12 months	P-value (Chi-square/test)
<b>Age</b>			$\chi^2 = 7.283$ $p = .1217$
20-29	23.90%	22.44%	
30-39	24.77%	18.85%	
40-49	19.11%	17.90%	
50-59	17.44%	16.80%	
60 and over	14.77%	24.02%	
<b>Gender</b>			$\chi^2 = 2.670$ $p = .102$
Male	40.03%	47.25%	
Female	59.97%	52.75%	
<b>Race</b>			$\chi^2 = 3.518$ $p = 0.6207$
White	47.91%	43.67%	
Black	23.14%	25.08%	
Indian American/Alaskan Native	1.78%	0.787%	
Native Hawaiian/Other Pacific islander	0%	0.681%	
Asian	12.35%	14.80%	
<b>Other race</b>	14.82%	14.98%	
<b>Hispanic/Latino Identification</b>			$\chi^2 = 1.210$ $p = .2714$
Yes	31.04%	26.71%	
No	68.96%	73.29%	
<b>Education Level</b>			$\chi^2 = 0.412$ $p = 0.9378$
Less than high school diploma	20.11%	18.57%	
High School graduate/GED	22.29%	23.98%	
Some college or associate's degree	23.57%	22.50%	
College graduate or more	34.03%	34.95%	
<b>Income level</b>			
Less than \$25,000	43.89%	34.57%	
\$25,000 - \$49,999	28.76%	21.18%	
\$50,000 - \$74,999	10.77%	12.90%	
\$75,000 - \$99,999	4.43%	11.07%	
\$100,000 or more	12.13%	20.29%	
<b>Poverty level in SP's census tract</b>			$\chi^2 = 7.356$ $p = 0.196$
0 - 5%	4.11%	6.24%	
5 - <10%	15.73%	21.99%	
10 - <20%	37.67%	33.31%	
20 - <30%	26.71%	21.04%	
30 - <40%	10.27%	11.18%	
40 - 100%	5.48%	6.24%	

#### Poisson Linear Regression Analysis

Demographic Characteristics	Odds Ratio	95% Confidence Interval		P-value
		Lower	Upper	
<b>Age</b>				
20-29	Ref	Ref	Ref	Ref
30-39	1.30	0.79	2.13	0.2968
40-49	1.16	0.68	2.00	0.58039
50-59	0.84	0.46	1.52	0.56628
60 and over	0.44	0.23	0.84	0.01348
<b>Gender</b>				
Male	Ref	Ref	Ref	Ref
Female	1.38	0.95	1.99	0.08798
<b>Race</b>				
White	Ref	Ref	Ref	Ref
Black	0.77	0.47	1.25	0.28187
Indian American/Alaskan Native	1.74	0.65	4.67	0.27204
Native Hawaiian/Other Pacific islander	0	0.00	0.00	< 2e-16
Asian	0.68	0.38	1.22	0.19456
Other race	0.62	0.33	1.17	0.1411
<b>Hispanic/Latino Identification</b>				
Yes	Ref	Ref	Ref	Ref
No	0.85	0.51	1.44	0.54977
<b>Education Level</b>				
Less than high school diploma	Ref	Ref	Ref	Ref
High School graduate/GED	0.89	0.49	1.61	0.70508
Some college or associate's degree	1.12	0.65	1.93	0.69142
College graduate or more	1.16	0.65	2.08	0.62099
<b>Income level</b>				
< \$25,000	Ref	Ref	Ref	Ref
\$25,000 - \$49,999	0.85	0.55	1.32	0.46676
\$50,000 - \$74,999	0.56	0.32	0.99	0.04607
\$75,000 - \$99,999	0.27	0.12	0.61	0.00191
\$100,000 or more	0.35	0.16	0.79	0.01148

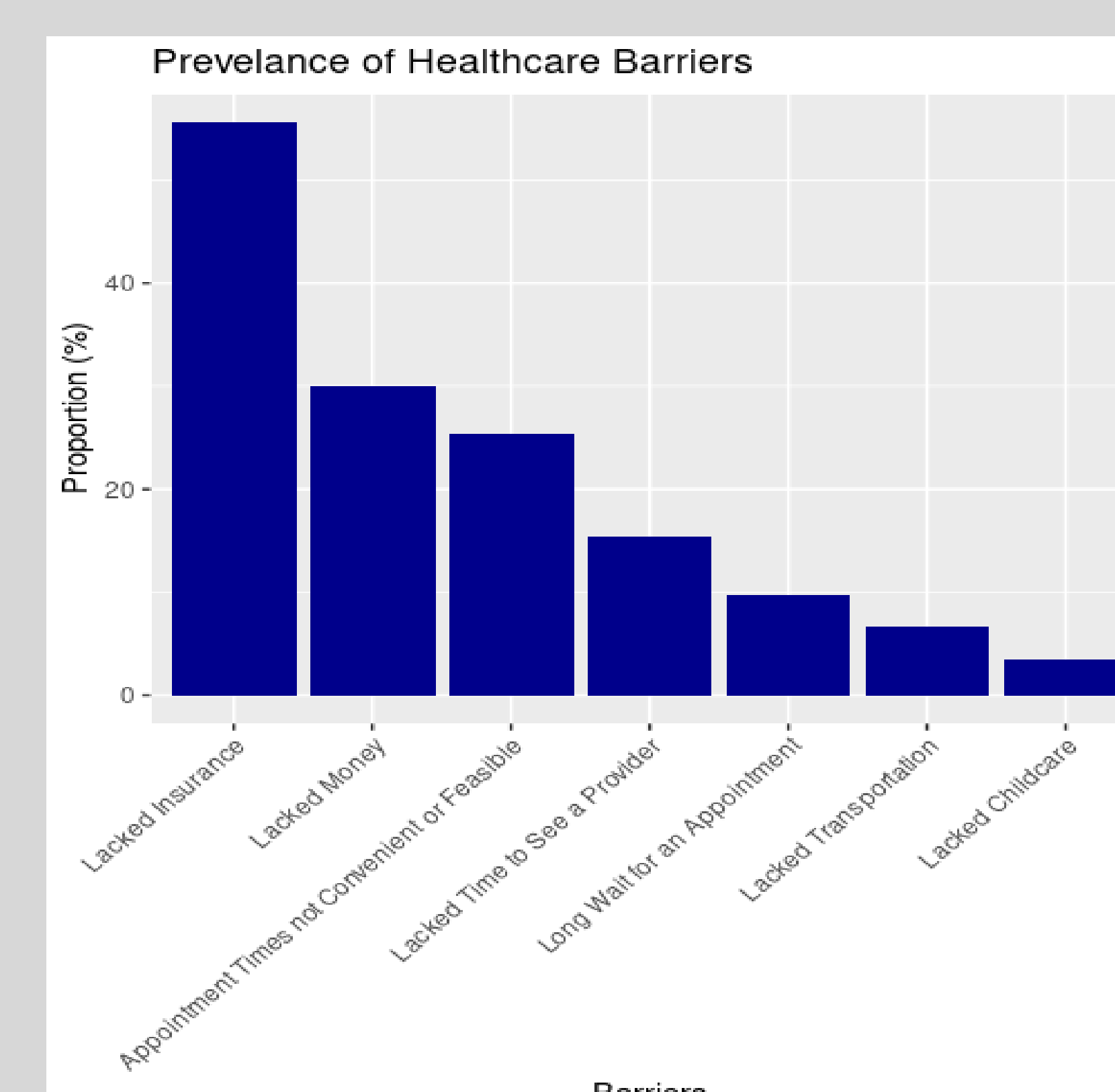
### Results

#### Prevalence of the Types of Visits missed by NYC adults



### Results

#### Prevalence of Healthcare Barriers among NYC adults



### Discussion/Conclusion

Our work raises serious concerns. We found a significant effect of income, with those earning less avoiding healthcare more commonly. We also found that the most prevalent barriers faced by NYC adults were financial (lacking money, childcare, insurance, or transportation). By extending coverage to health care to constituents and increasing the number of physicians, we can assuage some of the financial health care obstacles and increase access (Butkus et al. 2020; Macciosek et al. 2010)

Further, the most missed types of visits were routine checkups and dental visits. Primary care visits have been associated with increased preventative care interventions and improved longitudinal health outcomes (Hostetter et al. 2020). Further, preventative dental visits have also been associated with reducing non preventative visits and future dental costs (Sen et al. 2013). Thus, there is a critical need to improve access to these types of visits.

### Acknowledgement

Data was collected by NYC HANES 2013-2014

### Faculty Advisor

Dr. Simone Reynolds, PhD.

### References

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