

Rates of Delayed Care Among Detroit Residents During the COVID-19 Pandemic



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INTRODUCTION

The coronavirus disease 2019 (COVID-19) pandemic has had dramatic effects on healthcare delivery in the USA, with decreased utilization of emergent, elective, and routine services,^{1, 2} particularly among non-White adults and adults in poor health.^{3, 4} However, little is known about how frequently delayed care has subsequently been received, and whether disparities exist in which patients have received delayed care. The objective of this study was to assess delays in medical care during the pandemic in a cohort of Detroit residents and assess whether patients who experienced delays subsequently received delayed care.

METHODS

The Detroit Metro Area Communities Study (DMACS) is an annual longitudinal panel survey of Detroit residents aged 18 and older.⁵ Data are collected by trained interviewers and/or by self-administered surveys. We conducted a cross-sectional analysis of COVID-19 survey data collected in October, 2020. The study was approved by the University of Michigan Institutional Review Board.

Respondents were asked whether they had experienced delays for any reason in 11 common types of care (routine well check-ups, care for new conditions, follow-up for ongoing conditions, surgical procedures, birth control, Pap smears, mammograms, colonoscopies, dental cleaning, urgent dental care, and other). Additionally, for each type of delayed care, respondents were asked if they had subsequently received that care as of the time of the survey.

Respondents were coded as having personal experience with COVID-19 if they reported having ever tested positive for COVID-19, or if a friend or family member had become ill or died from COVID-19. Survey-weighted descriptive statistics and multivariable logistic regression were used to analyze the data using Stata-MP version 16.0 (College Station, TX).

RESULTS

Of the 1760 panelists invited, 1012 respondents completed the survey, for a response rate of 60% (Table 1). Nearly half (46.8%, 95% CI 42.3–51.3%) of respondents reported at least one type of delayed care—most commonly dental cleaning (23.5%, 95% CI 19.7–27.3%) and routine check-ups (23.0%, 95% CI 19.2–26.8%) (Fig. 1). Only 22.8% (95% CI 18.9–26.6%) of respondents reported having received the delayed care, representing about half (48.7%) of the respondents who experienced care delays (Fig. 1). In adjusted analyses, being non-Hispanic Black, belonging to other non-Hispanic minority/multiracial groups, and having personal experience of COVID-19 were significantly associated with delayed care. Among those who experienced delayed care, respondents reporting fair/poor health status had significantly lower adjusted odds of subsequently receiving the delayed care (Table 1).

DISCUSSION

In March 2020, the US Centers for Disease Control and Prevention recommended delaying all non-emergent care during the national COVID-19 emergency. Such policies, along with fear of exposure, resulted in disruptions in access to care and delayed or forgone care. We found that almost half of Detroit residents in our cohort experienced a delay in medical care during the first seven months of the pandemic. Non-White individuals and individuals with personal experience with COVID-19 were more likely to experience care delays. Among individuals experiencing care

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Table 1 Sample Description and Logistic Regression Models Predicting Delayed Care and Receipt of Delayed Care Between March 2020 and October 2020

Variable	Weighted N (%)	Predicting delays in care		Predicting receipt of delayed care	
		aORs	95% CI	aORs	95% CI
Total respondents (%)	1012 (100)	920 (90.9)		449 (44.4)	
Race/ethnicity					
Non-Hispanic White	104.2 (10.4)	Reference		Reference	
Non-Hispanic Black	775.7 (77.1)	1.86*	1.06, 3.27	1.31	0.55, 3.09
Hispanic	80.7 (8.0)	1.45	0.58, 3.65	0.84	0.17, 4.19
Other (non-Hispanic multi-race or non-Hispanic other)	45.1 (4.5)	3.41**	1.57, 7.40	1.16	0.32, 4.24
Self-reported health status					
Excellent/very good/good	785.5 (77.9)	Reference		Reference	
Fair/poor	223.1 (22.1)	1.45	0.87, 2.41	0.42**	0.22, 0.79
Gender					
Male	442.6 (43.8)	Reference		Reference	
Female	558.3 (55.3)	1.27	0.84, 1.91	0.92	0.51, 1.67
Gender non-conforming/non-binary/other	9.3 (0.9)	4.46	0.54, 36.80	2.87	0.40, 20.67
Income					
Below \$35,000	535.3 (53.7)	Reference		Reference	
\$35,000 or more	461.4 (46.3)	1.14	0.72, 1.79	0.87	0.46, 1.63
Employment status					
Employed in the last month	464.2 (48.3)	Reference		Reference	
Unemployed in the last month	134.6 (14.0)	1.26	0.67, 2.38	0.73	0.30, 1.76
Out of labor force in the last month	361.6 (37.7)	1.06	0.66, 1.68	1.48	0.76, 2.87
Insurance status					
Uninsured	115.6 (11.9)	Reference		Reference	
Insured	856.4 (88.1)	0.81	0.44, 1.52	1.12	0.46, 2.71
Education status					
Less than high school/high school/GED	488.5 (48.5)	Reference		Reference	
Greater than high school or GED	519.3 (51.5)	0.78	0.50, 1.22	0.71	0.39, 1.28
Personal experience with COVID-19					
No	588.4 (58.2)	Reference		Reference	
Yes	423.6 (41.9)	1.54*	1.03, 2.31	1.07	0.60, 1.91

aOR, adjusted odds ratio; CI, confidence interval. * $p < 0.05$, ** $p < 0.01$, *** $p < 0$

delays, half had not subsequently received that care as of October, 2020, and individuals with fair or poor self-reported health were less likely to have received delayed care.

While other studies have examined risk factors for delayed care and found similar results to ours,^{3,4} to our knowledge, our study is among the first to assess overall rates of receiving delayed care and examine factors that predict subsequent receipt of delayed care. Our results suggest that non-White individuals were more likely to experience care delays, and that sicker individuals potentially experienced longer delays in receiving care than people in better health. Both findings could potentially result in worse health outcomes for these vulnerable

groups, and indeed, recent studies have shown both overall worsening of self-reported health and widening racial/ethnic disparities in self-reported health during the pandemic.⁶ Our study highlights the possibility that delays in care could be contributing to these adverse outcomes.

Study limitations include our inability to assess the exact duration of the care delays, confirm receipt of delayed care in medical records, or assess health outcomes of those who delayed care. Further, although our survey respondents were racially and socioeconomically diverse, these results may not be generalizable to other populations. Future work should assess whether pandemic-related care delays have led to changes in health outcomes for patients.

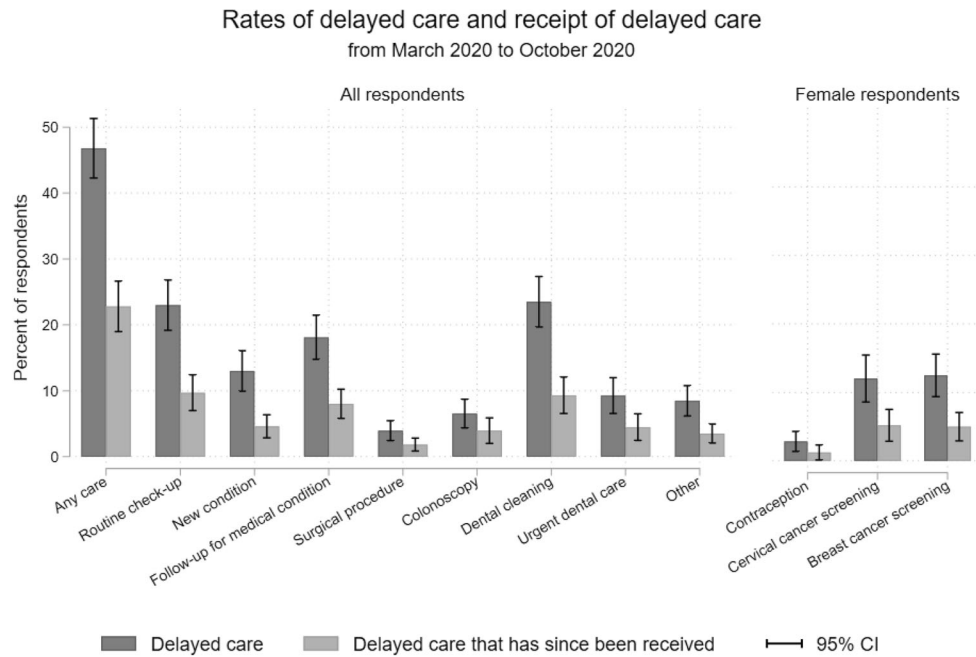


Fig. 1 Rates of delayed care and rates of receipt of delayed care from March 2020 to October 2020.

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