

# Demand for Self-Managed Online Telemedicine Abortion in the United States During the Coronavirus Disease 2019 (COVID-19) Pandemic

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## INTRODUCTION

For many in the United States, abortion care is already difficult to access,<sup>1</sup> and the coronavirus disease 2019 (COVID-19) pandemic has created yet more potential barriers—including infection risk at clinics and state policies limiting in-clinic services. The severity of these state policies varies, but, in the most extreme case, Texas effectively suspended all abortions for approximately 4 weeks.<sup>2</sup> As a result, people may increasingly be seeking self-managed abortion outside the formal health care system.

Using data from Aid Access, the sole online abortion telemedicine service in the United States, we assessed whether demand for self-managed medication abortion increased as in-clinic access became more challenging.

## METHODS

Aid Access provides medication abortion up to 10 weeks of gestation for those who make a request using an online consultation form.<sup>3</sup> We analyzed fully de-identified data provided by the service on all 49,935 requests received between January 1, 2019, and April 11, 2020, when the service temporarily paused.

We used regression discontinuity to compare requests from each state before and after the state implemented a business-closure order to slow virus transmission.<sup>4</sup> We also compiled information on the scope and implementation date of any state-level COVID-19–related abortion restrictions.<sup>2</sup> We assessed the significance of each state's discontinuity using a likelihood-ratio test compared with a null model without a discontinuity, and we calculated the percentage difference between actual requests and expected requests under the null model in the “after” period. For each state, we examined the prevalence of COVID-19 on the day of the business-closure order.<sup>5</sup> We also examined median daily time spent at home by residents in each state using data from aggregated, anonymized mobile device GPS traces provided by SafeGraph.<sup>6</sup> See Appendices 1–6, available online at <http://links.lww.com/AOG/C18>, for details of all analyses. The University of Texas at Austin Institutional Review Board approved the study.

## RESULTS

From March 20, 2020, to April 11, 2020 (the average “after” period across all states), there was a 27%

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increase in the rate of requests for self-managed medication abortion across the United States ( $P<.001$ ) (Table 1).

Eleven states showed individually significant increases in requests, ranging from 22% in Ohio ( $P=.012$ ) to

94% in Texas ( $P<.001$ ) (Table 1). Median time spent at home was 5% higher for these states compared with states without significant changes in requests ( $P=.037$ ) (Appendix 6, <http://links.lww.com/AOG/C18>). States with significant increases in requests either

**Table 1. Actual Compared With Expected Numbers of Requests for Self-Managed Medication Abortion in the “After” Period for the United States Overall and for Each State Included in the Study**

Change in Aid Access Requests	State	Actual Requests*	Expected Requests	Percent Change Over Baseline Trend <sup>†</sup>	95% CI
Significant increase	All states <sup>‡</sup>	3,343	2,638.2	26.7	22.7 to 32.2
	Texas	787	406.4	93.6	76.5 to 113.3
	Massachusetts	37	22.4	64.9	15.6 to 164.3
	New York	157	97.9	60.4	33.1 to 98.7
	Louisiana	135	85.3	58.3	28.6 to 101.5
	Washington	52	38.5	34.9	2.0 to 92.6
	California	219	169.2	29.4	11.7 to 51.0
	New Jersey	77	59.6	29.1	2.7 to 71.1
	Illinois	75	58.7	27.7	1.4 to 70.5
	Oklahoma	39	31.0	25.7	7.1 to 85.7
	Tennessee	83	66.7	24.4	1.0 to 62.7
Ohio	173	142.0	21.8	4.2 to 45.4	
Significant decrease	Kentucky	39	55.9	-30.2	-45.1 to -7.1
Changes of at least 20%, but not significant	Kansas	22	16.7	32.0	-12.0 to 144.4
	New Mexico	15	11.4	31.3	-21.1 to 120.0
	Oregon	20	16.7	20.1	-20.0 to 122.2
	Utah	8	11.3	-28.9	-23.1 to 100.0
Changes of less than 20% and not significant	Minnesota	20	17.6	13.8	-14.0 to 53.1
	Maryland	49	43.9	11.6	-6.8 to 36.3
	Virginia	124	111.7	11.0	-18.4 to 60.0
	Arizona	40	36.1	10.9	-13.0 to 42.6
	South Carolina	67	61.4	9.0	-20.5 to 59.1
	Mississippi	35	32.6	7.4	-18.9 to 53.6
	Colorado	43	40.1	7.1	-12.3 to 34.8
	Georgia	93	87.2	6.7	-28.6 to 81.8
	West Virginia	20	19.2	4.2	-26.3 to 64.7
	Iowa	28	27.1	3.3	-15.2 to 29.2
	Indiana	84	81.5	3.1	-9.2 to 18.3
	Florida	226	219.5	3	-34.6 to 70.0
	Missouri	17	17.0	0	-18.3 to 21.2
	Pennsylvania	103	105.4	-2.3	-40.0 to 10.0
	Connecticut	12	12.5	-3.7	-21.1 to 15.5
	North Carolina	97	102.8	-5.6	-32.6 to 34.8
	Nevada	31	33.5	-7.4	-26.7 to 16.7
	Michigan	63	69.0	-8.7	-31.5 to 27.6
	Wisconsin	37	41.4	-10.7	-33.3 to 25.9
	Arizona	34	38.3	-11.1	-33.7 to 10.0
Alabama	55	65.8	-16.4	-55.6 to 60.0	

\* Actual requests are cumulative counts for the period from initial business-closure order to April 11, 2020. Expected requests were obtained as forecasts from the null model for each state, which assumes no discontinuities.

<sup>†</sup> Percent increases are percentages, calculated as  $100 \times (\text{actual} - \text{expected}) / \text{expected}$ .  $P$ -values were obtained from a likelihood ratio test of the regression-discontinuity model vs the null model of no discontinuity. Low  $P$ -values indicate evidence for the presence of a discontinuity (ie, that the percent increase over baseline is statistically significant).

<sup>‡</sup> Thirteen states and Washington, DC, were omitted owing to fewer than 10 expected postrestriction requests: Alaska, Delaware, Hawaii, Idaho, Maine, Montana, North Dakota, Nebraska, New Hampshire, Rhode Island, South Dakota, Vermont, Wyoming.

had particularly high COVID-19 rates or more severe COVID-19-related restrictions on in-clinic abortion access (Appendix 5, <http://links.lww.com/AOG/C18>).

## DISCUSSION

Our results may reflect two distinct phenomena. First, more people may be seeking abortion through all channels, whether due to COVID-19 risks during pregnancy, reduced access to prenatal care, or the pandemic-related economic downturn.<sup>7,8</sup> Second, there may be shift in demand from in-clinic to self-managed abortion during the pandemic, possibly owing to fear of infection during in-person care or inability to get to a clinic because of childcare and transit disruptions. In support of these possibilities, we observed higher levels of stay-at-home behavior in states with significant increases in requests.

Among states that limited access to in-clinic abortion during the pandemic, we observed larger increases in requests in states with the most severe and longest-lasting restrictions. Texas, the state with the most restrictive measures, showed the largest increase in requests, despite a relatively low burden of COVID-19 during the study timeframe.

In terms of limitations, we could not measure all pathways to self-managed abortion in the United States, and we may have lacked power to detect changes in some states with low request numbers or where abortion restrictions were implemented toward the end of the study.

The World Health Organization recommends telemedicine and self-management abortion-care models during the pandemic, and the United Kingdom has temporarily implemented fully remote provision of abortion medications.<sup>9,10</sup> In the United States, such services would depend on sustained changes to the U.S. Food and Drug Administration's Risk Evaluation and Mitigation Strategy, which requires patients to collect mifepristone at a hospital or medical facility, as well as changes to state-specific laws that prohibit remote provider consultation.<sup>11</sup> Our findings suggest that telemedicine models for medication abortion should be a policy priority; when in-clinic abortion

services are not accessible, people may seek alternative ways of accessing time-sensitive care.

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## PEER REVIEW HISTORY

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