

Describing Changes to Abortion Clinical Practices in Response to the Covid-19 Pandemic: A Regional-Based Analysis

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Abstract

Introduction: During the pandemic, every state was at liberty to determine if abortion services were an essential or non-essential service. This furthered disparities in resource availability based on location. Our study analyzes changes in abortion care practices as a response to COVID-19 on a regional basis.

Methods: The Society of Family Planning conducted surveys between April and December 2020, asking clinics to describe their initial practices and changes that occurred due to the pandemic. The primary variable of interest was abortion care and practice changes resulting from the pandemic. We conducted a regional analysis of practice changes. 4 regions were studied, Northeast, Midwest, South, and West.

Results: Of 74 clinics surveyed, 58 clinics provided abortion services. Clinic locations were divided into four regions: Northeast (34.5%), Midwest (17.2%), South (20.7%), West (27.6%), mainly in urban environments (96.6%). During the pandemic, the maximum and minimum gestation averages remained the same across three trimesters. Clinics in the west started or expanded telemedicine for informed consent more than any other region ($p=0.007$). Compared to the South, the other regions were successful in implementing telemedicine for medication abortion, particularly at the end of 2020 ($p=0.011$). Practices in the Midwest reported reduced numbers of in-person first-trimester abortions and D&E abortions.

Conclusion: Sites throughout the country responded differently during the pandemic. Some regions, such as the West, were able to adapt more quickly without compromising access to resources. Studying these changes and analyzing success of implementation will allow for increased access to abortion services in rural or underserved areas.

Introduction

Since the landmark Roe v. Wade case highlighted the importance of agency in decisions regarding reproductive health in 1973, 1,336 abortion restrictions have been enacted by states in the United States (US) [1]. 2021 was declared the first year in US history that more than 100 abortion restrictions have been enacted [2]. Previous studies have shown that restrictions on abortion are correlated with adverse effects on maternal and children's health [3]. Additionally, abortion restrictions have been shown to disproportionately affect vulnerable populations, such as those from low socioeconomic status and racial minorities [4,5]. Women being denied abortions were more likely to experience

economic insecurity, be in poverty, and more likely to receive public assistance [6].

The COVID-19 pandemic exacerbated pre-existing restrictions on abortion nationally. The Society of Family Planning has previously shown that 16% reported cessation of some abortion services due to the pandemic [7]. Other clinics transitioned to telemedicine abortion services to better accommodate patients with minimal physical contact. Studies focusing on the use of telemedicine to provide medical abortion services during COVID-19 highlighted the efficacy and safety of mifepristone use and distribution [8]. However, telemedicine services are influenced by broader barriers to care, such as disparities in

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internet access and digital literacy, and language proficiency [9]. Additionally, 19 states prohibit the use of telemedicine to provide abortion services [10]. In addition to general challenges associated with the pandemic, at least 11 states had attempted to classify abortion as a non-essential medical procedure, decreasing patients ability to access to abortion care [11].

The COVID-19 pandemic presented a novel opportunity for clinics to implement innovative measures across the US to provide abortion services during the pandemic. Previous studies focusing on abortion care during the COVID-19 pandemic were limited by follow-up rates, sample size, and narrow geographical scope [8,12,13,14]. This study aims to describe the unique challenges the COVID-19 pandemic posed to abortion care across the US across different time points in the pandemic using data collected by the Society for Family Planning starting from February 2020. We seek to highlight geographical disparities in abortion care in the US to elucidate differences in accessibility to abortion during the pandemic, a time when medical services were limited to essential services only.

Methods

The Society of Family Planning (SFP) began a longitudinal study of clinical practice changes due to the COVID-19 pandemic in the spring of 2020 [7]. The SFP Abortion Clinical Research Network (the Network) encompasses 78 abortion clinics throughout the United States. These clinics were geographically located across the US and included a variety of clinical settings. Enrolled clinics completed 3 online surveys across 3 time periods of February-April 2020 (T1), May-July 2020 (T2), and August-October 2020 (T3). Survey information was collected through Qualtrics [15]. Participating sites, such as ours, had the ability to apply for access to the de-identified data utilized in the present study. Further survey information can be found at: <https://societyfp.org/research-support/abortion-clinical-research-network/network-study-family-planning-visits-during-the-covid-19-pandemic/>. As the information is de-identified, the Advarra Institutional Review Board deemed this study exempt.

The primary variable of interest was changes in abortion practices as a direct result of the COVID-19 pandemic. The T1 survey specifically asked about early changes in clinical practice due to the onset of the COVID-19 pandemic. T2 and T3 surveys asked about ongoing changes such as the incorporation of telemedicine for contraceptive counseling and changes in availability of contraceptive care compared to during the initial phases of the pandemic. As characterized by the Network, respondents were categorized into four regions: Northeast, South, Midwest, and West. Clinic types included independent practices, Planned Parenthood affiliates, and hospital-based/academically affiliated clinics. Only clinics completing all three surveys and providing information on abortion were included in this study. All analysis was conducted using IBM Statistical Software for the Social Sciences (SPSS) version 25.0 for Mac [16].

Results

A total of 58 clinics met inclusion criteria. Most clinics in the Northeast and West were academic/hospital-based (75%) whereas those in the Midwest and the South were independent clinics (50%) (Table 1). The Midwest had the highest number of abortion encounters across the entire study period, with all regions experiencing an overall decrease in encounters during May to July 2020 (Table 1).

Table-1: Demographics of clinics surveyed by region.

Clinic Demographics				
	Northeast	Midwest	South	West
Academic/Hospital-Based	15 (75%)	3 (30%)	2 (17%)	8 (50%)
Planned Parenthood affiliate	3 (15%)	2 (20%)	4 (33%)	6 (38%)
Independent clinic	2 (10%)	5 (50%)	6 (50%)	2 (13%)
Total	20 (35%)	10 (17%)	12 (21%)	16 (28%)
Average Number of Abortion Encounters				
	Northeast	Midwest	South	West
T1	66.1	395.8	317.5	95.7
T2	59.6	386.1	258	96.2
T3	86.6	398.4	355	90.7

Table-2: Abortion services offered by surveyed clinics.

Abortion services					
	Northeast	Midwest	South	West	p-value
Minimum gestation (days)	24.4±14.9	25.6±12.3	20.8±15.3	6.3±29.5	0.035
Maximum gestation (days)	147.2±38.1	151.9±23.4	153±30.2	115.1±77.6	0.132
Services offered					
	Northeast	Midwest	South	West	p-value
Options counseling	19 (95%)	8 (80%)	9 (75%)	15 (94%)	0.191
Medication abortion	20 (100%)	8 (80%)	12 (100%)	15 (94%)	0.051
1st trimester surgical or procedural abortion	19 (95%)	10 (100%)	12 (100%)	15 (94%)	0.6
2nd trimester surgical or procedural abortion	16 (80%)	10 (100%)	12 (100%)	14 (88%)	0.23
Induction abortion	7 (35%)	2 (20%)	3 (25%)	6 (38%)	0.66
Abortion providers					
	Northeast	Midwest	South	West	p-value
In-house providers	19 (95%)	5 (50%)	8 (67%)	14 (88%)	0.024
Contract providers	5 (25%)	6 (60%)	8 (67%)	7 (44%)	0.163
Providers fly in from out of state	0 (0%)	3 (30%)	3 (25%)	1 (6%)	0.097

Table 2 summarizes the clinical practices of abortion clinics during the study period. The West had more stringent criteria for maximal gestational age for abortion practices (115.1 days or 16.4 weeks' gestation). Services offered widely across all regions included options counseling, medication abortions, and first and second trimester procedural abortion. Induction abortion was performed by few clinics in each region (Northeast 35% vs Midwest 20% vs South 25% vs West 37.5%, $p=0.66$, Table 2). There were no significant geographic differences in abortion services provided. Clinics in the Northeast and the West depended on in-house providers to provide abortion care (Northeast 95% vs Midwest 50% vs South 67% vs West 88%, $p=0.024$, Table 2). The Midwest and the South were dependent on contract providers and providers flying in from out of state to provide care as seen in Table 2.

Clinics were asked to provide additional information regarding changes in abortion care services during the COVID-19 pandemic (Table 3). Some clinics reported increased gestational age limit for abortion visits. Multiple clinics reported increasing the estimated gestational age limit for medical abortions from 10.0 weeks to 11.0 weeks across all regions. One clinic in the West reported increasing their gestational age limit for abortion services from 15 weeks to 17 weeks' gestation. Clinics in the Northeast reported that all procedural abortions were postponed for patients 10 weeks' gestation or above. Clinics in the Northeast (20%) and South (8%) began offering same day cervical preparation and procedure for dilation and evacuation procedures. Clinics across all

regions reported ultrasound changes in response to the pandemic (Northeast 35% vs Midwest 10% vs South 8% vs West 50%). Most clinics reported that prior to the pandemic, all patients needed to have an ultrasound prior to abortion services. This changed during the pandemic and ultrasounds were no longer required for medication abortions with patients who self-reported certainty of their last menstrual period. One clinic in the South stated that while they changed their policy to accommodate patients, very few patients selected no-ultrasound methods. Practices changed in all regions so that no touch medication abortions were provided to patients with no contraindications (Northeast 40% vs Midwest 20% vs South 8% vs West 50%, $p=0.209$, Table 3). Some clinics reported reduced number of in-person first-trimester and dilation and evacuation (D&E) procedures, mostly affecting the Midwest (40% reduction in first-trimester abortions, 30% reduction in D&E abortions). Simultaneously, the Midwest and South reported an increase in the volume of patients traveling from out of state (Northeast 0% vs Midwest 40% vs South 41.7% vs West 6%).

Table-3: Abortion service changes during the COVID-19 pandemic by surveyed clinics

Abortion Services Changes					
	Northeast	Midwest	South	West	p-value
Increased gestational age limit for some abortion visits	4 (20%)	1 (10%)	3 (25%)	6 (38%)	0.553
Changed minimum gestational age requirement for abortion visits	3 (15%)	1 (10%)	0 (0%)	2 (13%)	0.622
Began offering same day cervical prep and procedure for D&E	2 (20%)	0 (0%)	1 (8%)	0 (0%)	0.581
Ultrasound changes	7 (35%)	1 (10%)	1 (8%)	8 (50%)	0.096
No- or low-test medication abortion protocol	8 (40%)	2 (20%)	1 (8%)	8 (50%)	0.209
Reduced number of in-person first-trimester abortions	3 (15%)	4 (40%)	1 (8%)	3 (19%)	0.487
Reduced number of in-person D&E abortions	3 (15%)	3 (30%)	1 (8%)	3 (19%)	0.861
Volume of patients traveling to site from out of state (OOS)					
	Northeast	Midwest	South	West	p-value
We rarely/never have patients from OOS	8 (40%)	0 (0%)	0 (0%)	4 (25%)	0.021
Increased	0 (0%)	4 (40%)	5 (42%)	1 (6%)	
Decreased	4 (20%)	2 (20%)	1 (8%)	2 (13%)	
Stayed the same	8 (40%)	4 (40%)	6 (50%)	8 (50%)	

Table-4: Changes to abortion service appointments available during COVID-19 pandemic.

Availability of abortion service appointments								
	Northeast		Midwest		South		West	
	T2	T3	T2	T3	T2	T3	T2	T3
Increase	4 (20%)	3 (15%)	1 (10%)	1 (10%)	3 (25%)	1 (8%)	3 (19%)	4 (25%)
Decrease	4 (20%)	3 (15%)	1 (10%)	2 (20%)	7 (58%)	7 (58%)	2 (13%)	0 (0%)
Stay the same	11 (55%)	13 (65%)	8 (80%)	7 (70%)	2 (17%)	4 (33%)	10 (63%)	11 (69%)

The majority of clinics reported that from May 2020 to October 2020 (T2 and T3), availability remained the same (Table 4). Some clinics reported increased availability for appointments. One clinic in the West reported that they stopped scheduling at 5.0 weeks' and the earliest abortions were performed at 6.0 weeks', decreasing the need for appointments. Clinics in the Midwest reported that they began to highly recommend or require patients below 10 weeks' gestation to perform a medication abortion, thus increasing availability for procedural visits. Northeastern clinics echoed this sentiment, stating that they were reserving operating room slots of patients that needed procedural abortions due to medical complications or gestational age greater than 10 weeks'.

Clinics in the South who saw availability decrease (58%) stated that they were trying to prioritize second-trimester appointments due to backlogs of appointments after cease-and-desist orders were implemented by the state in March and April. Most clinics reported that medication abortion assessments were conducted without an in-person visit, particularly between May and July 2020 (T2 Northeast 70% vs Midwest 60% vs South 50% vs West 81%, Table 5). Clinics in Northeast (T2 5%, T3 15%) and West (T2 19%, T3 13%, Table 5) began curbside pickup of medication abortion pills. Mail-delivery of medication abortion pills was not common in any region.

Telemedicine services were widely started or expanded during the pandemic (Table 6). Clinics endorsed heavy use of telemedicine for pre-abortion counseling in T2 (Northeast 60% vs Midwest 70% vs South 50% vs West 88%). Medication abortion appointments were also widely held over telemedicine (T2 Northeast 80% vs Midwest 80% vs South 33% vs West 81%). The West used telemedicine to provide informed consent (T2 81%) compared to other regions but were hesitant to use telemedicine for follow-up visits for surgical or procedural abortion compared to the Northeast. The Northeast showed expansion of telemedicine services from T2 to T3, while the West showed decreasing utilization in T3.

Table-5: Medication abortion changes during COVID-19 pandemic.

Medication Abortion Changes During COVID-19 Pandemic								
	Northeast		Midwest		South		West	
	T2	T3	T2	T3	T2	T3	T2	T3
Curbside pickup of medication abortion pills	1 (5%)	3 (15%)	0 (0%)	0 (0%)	1 (8%)	1 (8%)	3 (19%)	2 (13%)
Mail-delivery of medication abortion	0 (0%)	1 (5%)	0 (0%)	1 (10%)	0 (0%)	0 (0%)	1 (6%)	3 (19%)
Medication abortion assessment without an in-person visit	14 (70%)	15 (75%)	6 (60%)	6 (60%)	6 (50%)	4 (33%)	13 (81%)	12 (75%)
No changes	1 (5%)	0 (0%)	0 (0%)	0 (0%)	1 (8%)	4 (33%)	0 (0%)	0 (0%)

Table-6: Telemedicine services that were started or expanded during the COVID-19 pandemic.

Telemedicine abortion services								
	Northeast		Midwest		South		West	
	T2	T3	T2	T3	T2	T3	T2	T3
Pre-abortion counseling	12 (60%)	13 (65%)	7 (70%)	7 (70%)	6 (50%)	6 (50%)	14 (88%)	9 (56%)
Informed consent	8 (40%)	8 (40%)	2 (20%)	3 (30%)	2 (17%)	0 (0%)	13 (81%)	8 (50%)
Medication abortion	16 (80%)	19 (95%)	8 (80%)	5 (50%)	4 (33%)	5 (42%)	13 (81%)	12 (75%)
Follow-up visits for surgical or procedural abortion	9 (45%)	11 (55%)	3 (30%)	4 (40%)	3 (25%)	1 (8%)	6 (37.5%)	3 (18%)

Discussion:

We examined abortion access across regions in the US during the pandemic using survey data collected by the Society of Family Planning. During the pandemic, clinics endorsed increasing their gestational age for abortion provision, encouraging telemedicine for medication abortions for early abortions and changing ultrasound requirements prior to abortion procedures. Curbside pickup of medication abortion pills was implemented by the Northeast and the West, while telemedicine was quickly implemented by all regions for pre-abortion counseling. The Northeast showed expanded telemedicine services by the end of the study period while other regions displayed decreased utilization as the pandemic ensued. Our study showed that many clinics across the United States were able to adapt to COVID-19 restrictions in order to continue to provide abortion care

services. Widely implemented changes across all regions included increasing the gestational age limit for medication abortions from 10 weeks' gestation to 11 weeks' gestation and encouraged medication abortion over procedural abortion. Studies conducted early in the pandemic were unable to identify this trend [17].

Across the country, clinics widely and quickly implemented the use of telemedicine to conduct pre-abortion counseling, medication abortion, and follow-up visits after in-person procedures. A study by Upadhyay et al. in 2020 sought to highlight various independent abortion clinics changes in response to the pandemic. Seventy one percent of clinics moved to telehealth visits for follow up, 41% started or increased telehealth for patient consultations and screening, and 20% of clinics started to allow quick pickup of medication abortion pills [18]. Like our study, this study also highlights geographic discrepancies. Facilities in the Northeast were more likely to report starting or increasing telehealth than facilities in the South (73% vs 23%, $p < 0.001$) [18]. The use of telemedicine in abortion care was already becoming more integrated into our current healthcare model prior to the start of the COVID 19 pandemic [18]. However, COVID-19 emphasized the practicality of this transition at a time when people were discouraged from meeting face-to-face. In a post-pandemic world, and one in which restrictions against abortion are becoming more common across the United States, continued use of telemedicine will allow for increased access to healthcare. Furthermore, contactless abortion care without routine ultrasound to confirm intrauterine pregnancy has been proven to be effective and safe, with clinical outcomes equivalent to in-person care [19].

To aid this emphasis on telemedicine, no-touch medical abortions, curbside delivery or mailing of mifepristone, and changes to ultrasound requirements before abortions were made to limit contact between providers and patients. The Northeast and West were more successful in implementing these changes than the Midwest and the South. One provider participating in the survey commented that this could be attributed to abortion bans implemented in the southern states during this time. In states such as Arkansas, Louisiana, West Virginia, and Texas, abortion care was suspended during the start of the pandemic due to laws placed into effect limiting "unnecessary" surgical procedures [20]. These laws posed significant barriers for women seeking abortion care, as they were sometimes forced to travel hundreds of miles across state borders to receive care at the closest available abortion facility [20]. The executive order in Texas was associated with decreased abortions during the month it was active and in its aftermath displayed an increase of abortions at 12 weeks' gestational age or more [21]. Ohio and West Virginia created executive orders to halt all "elective surgeries," which included all procedural abortions [22]. This was interpreted by physicians to encourage medication abortions prior to 10 weeks' gestation, explaining why we saw an increase of clinics recommending medication abortion at earlier gestational ages. Furthermore, Ohio, West Virginia, and Kentucky limited access to telemedicine abortion [22].

Strengths and Limitations:

This study provides valuable insight into changes in abortion care during the pandemic. Strengths of this study include the breadth of practice changes that were questioned in the survey, prompting responders to answer all aspects of abortion care

during the pandemic. We were able to collect both qualitative and quantitative data from respondents. The survey was answered by multiple types of clinics across the United States, making the results generalizable to represent changes in abortion care during the pandemic compared to previous studies.

This qualitative study is subject to recall bias, as surveys were filled out on a quarterly basis but asked about month-by-month changes. Each survey contained unique questions not included in other surveys. Therefore, we are unable to track trends in responses to questions over time. In addition, this data likely does not encapsulate all practice changes that occurred during the timeframe studied, as sites were only asked to report changes made specifically in response to the COVID-19 pandemic. Further, there is an overrepresentation of urban clinics and academic centers in this study, likely as a result of using a convenience sample. Inherent to this study, we were only able to identify clinics by region and not by state specifically, which might have allowed for more direct comparisons of legal restrictions and provider practices. Finally, the original survey did not include questions about patient demographics or socioeconomic status, both facts that would be helpful to further understanding access to abortion care in minority and low-income women.

Conclusion:

Geographic disparities in abortion care exist across the United States, a discrepancy which was furthered by the barriers brought by the COVID-19 pandemic. The pandemic created barriers that threatened patient's access to healthcare, but the family planning community was resilient in navigating these barriers through implementation of telemedicine and no-contact abortion care. Our study highlighted regional differences, showing that the Northeast and Midwest were better able to implement these changes and keep abortion care accessible compared to other regions due to political or logistical barriers. Further studies should analyze racial and socioeconomic barriers to access and address impact of barriers to contactless family planning practices. Practice changes made by the family planning community during the pandemic has increased accessibility to abortion care with changes that will last after the pandemic are over. Encouraging medication abortion for first-trimester abortions without routine ultrasound has previously been shown to be safe and effective and allows abortion providers to continue care where resources and access may be limited.

Conflicts of Interest: The authors report no conflicts of interest.

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