NO. 23-2194

United States Court of Appeals

for the Fourth Circuit

GENBIOPRO, INC.,

Plaintiff-Appellant,

– v. –

KRISTINA RAYNES, in her official capacity as Prosecuting Attorney of Putnam County; PATRICK MORRISEY, in his official capacity as Attorney General of West Virginia,

Defendants-Appellees,

- and -

MARK A. SORSAIA, in his official capacity as Prosecuting Attorney of Putnam County,

Defendant.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA, HUNTINGTON DIVISION, IN CASE NO. 3:23-cv-00058, HONORABLE ROBERT C. CHAMBERS, U. S. DISTRICT COURT JUDGE

BRIEF OF AMICI CURIAE ECONOMISTS IN SUPPORT OF PLAINTIFF-APPELLANT

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INTEREST OF AMICI CURIAE

Amici curiae are seven distinguished economists who research the impact of abortions policies: Marianne Bitler, Professor, University of California, Davis; Raymond Caraher, Ph.D. Candidate, University of Massachusetts Amherst; Kelly M. Jones, Assistant Professor, American University, Research Fellow, IZA; Jason M. Lindo, Professor, Georgia Institute of Technology, Research Associate, National Bureau of Economic Research (NBER), Research Fellow, IZA; Caitlin Knowles Myers, John G. McCullough Professor of Economics, Middlebury College, Research Fellow, IZA; David Slusky, Professor of Economics, University of Kansas, Research Associate, NBER, Research Fellow, IZA; and Joanna Venator, Assistant Professor, Boston College.¹ Amici submit this brief to assist the Court by presenting empirical evidence demonstrating how abortion restrictions have conclusively burdened abortion access. *Amici* have no personal interest in the outcome of this case. Amici affirm that no party or counsel for any party authored this

¹ *Amici curiae* appear in their individual capacities. *Amici*'s views are their own and do not reflect the views of their academic institutions, their employer, or any other organizations with which they are affiliated; institutional affiliations are listed for identification purposes only.

brief in whole or in part and that no one other than *amici* or their counsel contributed any money that was intended to fund the preparation or submission of this brief. All parties have consented to this filing.

SUMMARY OF ARGUMENT

In the wake of *Dobbs v. Jackson Women's Health Organization*, 142 S. Ct. 2228 (2022), West Virginia enacted its Unborn Child Protection Act ("UCPA"),² adding to its constellation of prior abortion restrictions,³ the prohibition of abortion in almost all cases, at any stage of pregnancy. Appellants challenge the UCPA and other West Virginia abortion restrictions as preempted by Food and Drug Administration ("FDA") regulations. Appellants argue that the FDA, as directed by Congress, has already established a regime for ensuring that the abortion medication mifepristone is approved and available—and that this regime preempts West Virginia's restrictions and ban on such medications.

² W. Va. Code § 16-2R-1 et seq.; id. § 61-2-8.

³ See *id.* §§ 16-2I-2 (requiring a waiting period and counseling before an abortion procedure); 30-3-13a(g)(5) (prohibiting providers from prescribing mifepristone via telemedicine); *see also id.* § 30-1-26(b)(9) (providing for a rule banning the prescription of mifepristone via telemedicine).

In a provision of the Food and Drug Administration Amendments Act of 2007 ("FDAAA"), Congress delegated to the FDA the authority to develop a risk evaluation and mitigation strategy ("REMS") for safe access and use of mifepristone. In so doing, Congress specifically required the FDA to "[a]ssur[e] access" and "minimiz[e] burden" on patient access to the drug.⁴ In particular, Congress requested that the FDA consider burdens on access to the medication by "patients who have difficulty accessing health care (such as patients in rural or medically underserved areas)."⁵ Further, Congress mandated that the FDA assure access in a manner that "minimize[s] the burden to the healthcare delivery system."⁶

Appellants argue that West Virginia's ban on abortion medication stands in contradiction to Congress's access-focused mandate and the FDA's subsequent development of REMS assuring safe access to mifepristone. Moreover, because West Virginia's UCPA bans all abortions, West Virginians already have "difficulty accessing [abortion]

⁶ Id.

⁴ 21 U.S.C. § 355-1(f).

⁵ Id.

health care"—a factor that Congress required the FDA to consider in balancing the burden on access to mifepristone, but a factor plainly ignored by, and worsened by, the UCPA.

Due to the UCPA, abortion clinics can no longer operate in West Virginia and West Virginians cannot get access to mifepristone in almost any circumstance. That West Virginians would therefore have "difficulty accessing [abortion] care" may be expected, but there is also a growing body of empirical research demonstrating this impact. This brief aims to summarize that research which conclusively shows how West Virgiania's abortion laws impede access to abortion care, including patients' access to mifepristone, and render patients in West Virginia, to borrow from the FDAAA, "medically underserved" when it comes to abortion care.

Using economic research tools, including causal inference methods, economists have determined that abortion clinic closures increase the distances patients must travel to obtain care. These increased distances in turn burden patient access, as demonstrated by a corresponding reduction in abortions and increase in births. Economists have not only studied the impact of abortion restrictions on

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abortion rates as mediated by travel distance, but also the resulting impacts on healthcare delivery in still-open clinics, including those across state lines. The research shows that an abortion restriction in one geographic area leads to increased clinic congestion in neighboring areas without abortion restrictions. Increased clinic congestion also impedes access by leading to delays in abortion timing, reduction in abortions, and an increase in births.

Abortion medications like mifepristone—which per the FDA can be dispensed by a retail pharmacy instead of in-person at a clinic, and can be prescribed via telemedicine without an in-person clinic visit could ameliorate the access gap created by long travel distances and congested clinics. However, bans on telemedicine and medication abortion such as those in effect in West Virginia, eliminate that option and force patients to undertake significant travel and visit clinics in person—and thus hinder their access to care.

ARGUMENT

Abortion restrictions, like West Virginia's UCPA, serve as barriers to accessing abortion care. Over the past two decades, and especially within the past five years, economic research has found that restrictions

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that increase travel distance to the nearest abortion provider or that increase clinic congestion, reduce abortions and increase births. This research has not only documented *associations* between restrictions and abortion rates but has used causal inference methods to confirm that such laws are in fact the *cause* of measured changes in abortions and births.

A primary causal inference method used in the studies described here is known as "difference in differences." Rather than simply comparing abortion rates in counties (or states) that enacted an abortion restriction versus those that did not, the difference-indifferences method compares the *change* in abortion rates over time in areas where restrictions are enacted, to the change over time in areas where no such legislation occurred. This method accounts for the fact that places that choose to enact restrictions are inherently different from places that do not, and that such differences may also affect the outcomes of interest. It also accounts for the fact that measured changes over time may be due to underlying trends that are unrelated to the restrictions enacted. Thus, economists are able to isolate the impact of the legislation as opposed to other factors inherent to a

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particular state or time period. In the field of economics and other social sciences, the difference-in-differences method is widely considered capable of identifying a causal relationship between a policy and an outcome of interest.

A. Abortion restrictions that increase the travel required to reach a provider reduce access to care.

Research suggests that a primary mechanism by which abortion restrictions affect abortion rates is by increasing the travel a patient must undertake to seek abortion care. Now that there are no remaining abortion clinics in West Virginia, a resident would need to travel an average of 108 miles to the nearest abortion provider in a neighboring state, an increase of 62 miles from prior to the enactment of the UCPA.⁷ Economic research confirms that increased travel to an abortion provider hinders access to abortion care as shown by a resulting decrease in abortions and increase in births.

⁷ Caitlin Myers, Forecasts for a Post-Roe America: The Effects of Increased Travel Distance on Abortions and Births, 43 Journal of Policy Analysis and Management, https://www.zotero.org/google-docs/?nfkXTA (2024).

1. Pre-*Dobbs* research demonstrates that extended travel distances reduce abortions and increase births.

Abortion clinic closures in the 2010s in Texas and Wisconsin offered early opportunities for economists to assess the impact of increased travel distance on abortion access. In 2013, the Texas legislature passed HB2, which, among other restrictions, required (1) that abortion providers obtain admitting privileges at a hospital within 30 miles of their clinic location, and (2) that abortion facilities meet the onerous building standards of an ambulatory surgical center.⁸ By 2016, 24 abortion facilities in Texas (58% of its facilities) had closed and the distance to the nearest abortion provider increased by as much as 100 miles for some Texas counties.⁹

Four separate studies have confirmed that the increased distances to clinics brought about by HB2 decreased abortion rates in Texas. ^{10, 11,}

⁸ Daniel Grossman et al., *Change in Distance to Nearest Facility and Abortion in Texas, 2012 to 2014*, 317 n.4 Journal of the American Medical Association at 437 (2017).

⁹ *Id.* The admitting privileges and building standards provisions of HB2 were ultimately struck down as unconstitutional in *Whole Woman's Health v. Hellerstedt*, 579 U.S. 582 (2016). These studies evaluated conditions prior to the Supreme Court's decision.

¹⁰ Grossman et al., supra note 8, at 437.

¹¹ Troy Quast et al., Abortion Facility Closings and Abortion Rates in

^{12, 13} By collecting data on abortion provider locations and calculating the distance patients in Texas counties would need to travel to an open facility before and after HB2, Lindo et al. determined that relative to having an abortion provider within 50 miles, an increased distance of 50–100 miles causes a reduction in abortion rates of 16%. Likewise, greater increases in distance result in larger decreases in abortion rates: increasing to a distance of 100–150 miles reduces abortion by 28%, 150–200 miles reduces abortion by 38%, and 200+ miles reduces abortion by 44%.¹⁴ Fischer, Royer, and White also found consistent impacts on abortion and births due to HB2.¹⁵ Looking at Texas clinics during the period from 2011 to 2014, they determined that the absence

Texas, 54 INQUIRY: The Journal of Health Care Organization, Provision, and Financing at 1-7 (2017).

¹² Jason Lindo et al., How Far Is Too Far? New Evidence on Abortion Clinic Closures, Access, and Abortions, 55 n.4 Journal of Human Resources at 1137-1160 (2020).

¹³ Stefanie Fischer et al., *The Impacts of Reduced Access to Abortion and Family Planning Services on Abortions, Births, and Contraceptive Purchases*, 167 Journal of Public Economics at 43–68 (2018).

¹⁴ Lindo et al., *supra* note 12, at 1137–1160.

¹⁵ Fischer et al., supra note 13, at 43–68.

of a clinic within 50 miles increases births by 1.3% to 2.8%, and the absence of a clinic within 100 miles increases births by 1.7%.

A study focused on Wisconsin paints a similar story. Studying the closure of two of Wisconsin's five abortion clinics between 2013 to 2015, Venator and Fletcher found that increasing the distance to a provider reduces abortion rates and increases births, and that larger increases have larger impacts.¹⁶ After the clinic closures in Wisconsin, they estimated that a 100-mile increase in travel distance reduces abortions by 30.7% and increases births by 3.2%.¹⁷

In addition to state-specific studies, researchers relying on national data also found that increased travel distance to the nearest provider is a barrier to abortion access. Laws targeting the provision of abortion (sometimes known as "TRAP" laws) like Texas's HB2, were enacted in more than 20 states and have also been found to increase distance to providers in those states by an average of 10 miles due to

¹⁶ Venator, Joanna et al., Undue Burden Beyond Texas: An Analysis of Abortion Clinic Closures, Births, and Abortions in Wisconsin, 40 n.3 Journal of Policy Analysis and Management at 774–813 (2021).
¹⁷ Id.

clinic closures that follow.¹⁸ Multiple studies have shown that these TRAP laws in turn reduce abortions by 4–5%^{19, 20, 21} and increase births by 2-3%.²² Longer travel distances have also been shown to decrease abortions, regardless of the cause of the increased distance. Myers compared county-specific changes over time in distance and in abortions and found that an increase in travel distance from 0 to 100 miles reduces abortions by 19.4% and increases births by 2.2%.²³ An increase from 100 miles to 200 miles reduces abortions by 12.8% and increases births by 1.6%.²⁴

 $^{24}Id.$

¹⁸ Jones, Kelly M. et al., TRAP'd Teens: Impacts of Abortion Provider Regulations on Fertility & Education, IZA Discussion Paper No. 14837 (2021).

¹⁹ *Id*.

²⁰ Arnold, Grace E., *The Impact of Targeted Regulation of Abortion Providers Laws on Abortions and Births*, Global Labor Organization Discussion Paper No. 1093 (2022).

²¹ Caraher, Raymond, *Reproductive Injustice? A County-Level Analysis* of the Impact of Abortion Restrictions on Abortion Rates, Political Economy Research Institute Working Paper No. 573 (2023).

 $^{^{22}}$ Arnold, supra note 20, at 23.

²³ Myers, Caitlin, Forecasts for a Post-Roe America: The Effects of Increased Travel Distance on Abortions and Births, 43 No. 1 Journal of Policy Analysis and Management at 3962 (2024).

2. Post-*Dobbs* bans increased travel distances and births.

More recently, another set of abortion laws have created new opportunities to study the impact of abortion restrictions. After the Supreme Court's ruling in Dobbs v. Jackson Women's Health Organization, 142 S. Ct. 2228 (2022), many states enacted abortion bans, while some states did not impose changes. Considering the impact of post-Dobbs abortion bans in effect in 14 states as of 2023, Myers found that these bans increase the average travel distance nationally from 25 to 86 miles, with travel distances in ban states increasing from 49 to 304 miles on average.²⁵ Considered as time-taken to reach an abortion provider, post-Dobbs abortion bans have increased average driving time to a provider by 56 minutes nationally and by 207 minutes in states with abortion restrictions.²⁶ For West Virginians in particular, Myers found that the UCPA increased the average travel

 $^{^{25}}$ Id.

²⁶ Caitlin Myers et al., *Abortion Access Dashboard*, Sept. 1, 2023, https://experience.arcgis.com/experience/6e360741bfd84db79d5db774a1 147815. In West Virginia, the average drive time to the closest facility since the UCPA went into effect has increased from 1.2 hours to 1.9 hours.

distance to an abortion provider from 62 miles to 106 miles, with some counties increasing to more than 200 miles.²⁷

Applying her findings on the estimated impacts of travel distance based national county-level data from 2009 to 2020, discussed above, Myers predicts the impacts of post-*Dobbs* bans, and resulting increases in distance on abortions and births, as shown in **Figure 1**. The bans are predicted to reduce abortions by 3.1% nationally, and by as much as 21.2% in states enforcing bans. In West Virginia, the increase in distance is predicted to reduce abortions by 7.5%.²⁸

Myers predicts that three-quarters of the reductions in abortions resulting from the 14 post-*Dobbs* bans would result in additional births.²⁹ Indeed, recent evidence supports the impact on birth rates. Dench et al. rely on recent birth registers through mid-2023, and find that birth rates have increased by 2.3% in ban states relative to nonban states.³⁰ These impacts on births support the conclusion that the

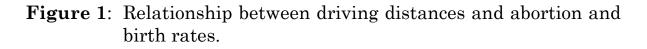
²⁷ Id.

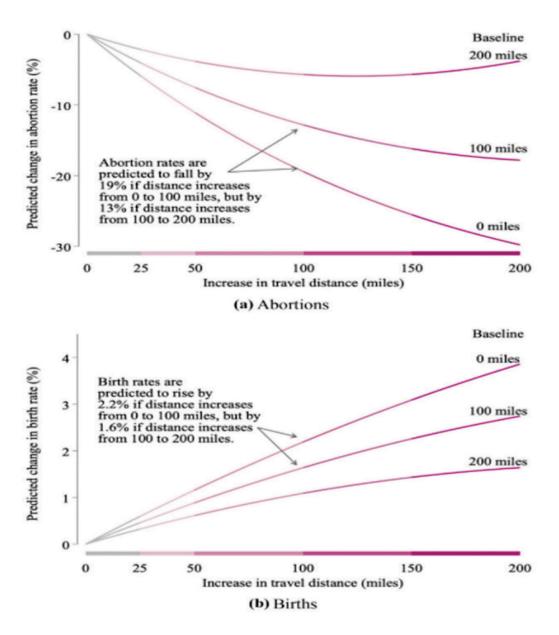
²⁸ Myers, *supra* note 23, at 39–62.

²⁹ Id.

³⁰ Daniel Dench et al., *The Effects of the Dobbs Decision on Fertility*, IZA Discussion Paper No. 16608 at 4 (2023).

observed reductions in abortions represent women who would have obtained an abortion but for the distance, and who gave birth as a result of not reaching a provider.³¹





³¹ Myers, *supra* note 23, at 39–62.

Based on her estimates, Myers also makes predictions about abortion access if bans go into effect in ten additional states, as is predicted to occur.³² In that scenario, where 24 states will have implemented abortion bans, average travel distance to a provider will increase to 154 miles nationally, abortions are predicted to fall by an additional 5.2%, and births are predicted to increase by an additional 1.5%.³³ West Virginians specifically are predicted to face an average of 122.9 miles to their nearest provider and will likely experience a 9% decrease in abortion rates (relative to the pre-*Dobbs* scenario).³⁴

Recent research measuring abortion access and outcomes indicates that for many patients, driving distances of 50 or 100 miles can be an insurmountable obstacle. The effects of bans on births are highest in states where bordering states also have bans in place, again indicating that distance to providers is paramount.³⁵

 $^{32}Id.$

³³ Id.

 $^{34}Id.$

 $^{^{35}}$ Dench et al., supra note 30, at 15.

3. Mandatory waiting period research also suggests that more travel causes increased delays, reduced abortions, and increased births.

Another set of abortion restrictions that economists have studied are mandatory waiting period laws. Research shows that mandatory waiting periods delay and decrease abortions, especially when they require additional trips to a clinic, further indicating that the amount of travel required is a primary factor in how waiting period laws burden access. A 2001 study by Bitler and Zavodny showed that mandatory waiting periods increase the proportion of abortions performed after the first trimester by 2.3 percentage points and increase the number of post-first-trimester abortions by 41%.³⁶ More recent studies have confirmed this finding, especially for waiting periods that require two trips to a clinic.

In 2015, Tennessee added a 48-hour waiting period law whereby patients had to visit a clinic for counseling first and then wait 48 hours before returning to the clinic to receive abortion care.³⁷ Lindo and

³⁶ Marianne Bitler et al., *The Effect of Abortion Restrictions on the Timing of Abortions*, 20 J Health Econ. at 1011–1032 (2001).

³⁷ Jason Lindo and Mayra Pineda-Torres, *New Evidence on the Effects of Mandatory Waiting Periods for Abortion*, 80 Journal of Health Economics at 102533 (2021).

Pineda-Torres found that the Tennessee waiting period law increased the share of abortions occurring in the second trimester by 3-5 percentage points, a roughly 50% increase from the baseline of 6.7%.³⁸ Likewise, Altındağ and Joyce found that a 2015 Arkansas law that required patients to make two clinic visits with a waiting period in between decreased abortion rates overall by 17%.³⁹ Similarly, in a nationwide study, Myers found that mandatory waiting periods affect abortions and births. Specifically, she found that two-trip mandatory waiting periods delay abortions (increasing second trimester abortions by 19%), reduce overall abortions by 9%, and increase births by 1.5%.⁴⁰

4. Abortion restrictions that increase travel burden certain groups more than others.

The impacts of abortion restrictions are not uniform across all people seeking abortions. Congress specifically required the FDA to consider the burden on access to mifepristone for those who "have

³⁸ Id.

³⁹ Onur Altındağ et al., Another Day, Another Visit: Impact of Arkansas' Mandatory Waiting Period for Women Seeking an Abortion by Demographic Group, 213 Journal of Public Economics at 104715 (2022).

⁴⁰ Caitlin Myers, Cooling Off or Burdened? The Effects of Mandatory Waiting Periods on Abortions and Births, IZA Discussion Paper No. 14434 (2021).

difficulty accessing health care" including "patients in rural or medically underserved areas."⁴¹ And indeed three-quarters of abortion seekers are poor or low-income.⁴² Traveling to access care may require significant costs, including airfare, gas, time off from work, childcare and hotel stays, all of which may be especially burdensome for individuals living in poverty, and all of which are likely to be greater the longer the travel distance imposed.

Research also suggests that abortion restrictions may affect abortion rates and births more in rural and high-poverty areas. For example, in their analysis of Tennessee's 2015 mandatory waiting period law, Lindo and Pineda Torres compared the impacts of the law across three different "health areas"—state-defined data reporting areas comprising multiple counties—and found the most significant effects were felt in the area with the highest poverty rate and lowest median income.⁴³ Similarly, Myers estimates that the effect of waiting

⁴¹ 21 U.S.C. § 355-1(f)(2)(C)(ii).

⁴² Jenna Jerman et al., *Characteristics of U.S. Abortion Patients in 2014* and Changes Since 2009, New York: Guttmacher Institute, (May 2016), https://www.guttmacher.org/report/characteristics-us-abortion-patients-2014.

⁴³ Jason Lindo and Mayra Pineda-Torres, *supra* note 37, at 19–20.

periods nationally is larger in counties with high poverty and high unemployment, as well as counties far from abortion providers.⁴⁴ Caraher suggests that the impacts of TRAP laws on abortion rates may be driven by counties in the bottom quartile for median household income versus counties in the top quartile for median household income.⁴⁵

Abortion restrictions also have greater impacts on other populations that have difficulty accessing health care, such as adolescent women and women of color. This is true for impacts of mandatory waiting periods, TRAP laws, and distance to providers more generally.^{46, 47, 48, 49}

⁴⁴ Myers, *supra* note 40, at 2.

⁴⁵ Caraher, *supra* note 21, at 2. Note that this evidence is suggestive in that the author cannot statistically reject that the effects are the same across these two types of counties.

⁴⁶ Lindo and Mayra Pineda-Torres, *supra* note 37, at 5.

 $^{^{47}}$ Myers, *supra* note 40, at 10.

⁴⁸ Jones et al., *supra* note 18.

⁴⁹ Myers, *supra* note 23, at 39–62.

B. Abortion restrictions that increase clinic congestion impede access to care.

While increased travel distance is a primary method by which abortion restrictions burden patients, it is not the only method by which abortion restrictions impact access. As clinics in states without abortion restrictions accommodate expanding populations of patients traveling from out of state, resources are stretched thin. Research shows that this increased demand can create longer wait times for residents and non-residents seeking care, thus reducing abortions and increasing births. This research is relevant here, because Congress repeatedly commanded that the FDA balance restrictions and access so as to minimize the "burden on the health care delivery system." § 355-1(f)(2)(D). Yet these laws impose severe burdens on that system, as shown by increased congestion and wait times.

1. Clinic closures cause congestion in still-open clinics, thereby delaying abortion timing, reducing abortions, and increasing births.

Following Texas's 2013 HB2, Lindo et al. found that a clinic closure in the Dallas-Fort Worth area increased the average service population per remaining clinic in the area from 380,000 people to 480,000 people, without changing travel distance for individuals in that area.⁵⁰ As a result, clinic wait times in that area increased from two to twenty days.⁵¹ Lindo et al. also found that the increased congestion led to delayed abortions as measured by gestational age at the time of abortion and that a 100,000-person increase in the average service population reduces abortion use by 7%.⁵²

Similarly, Hall found clinic congestion to be an important effect of a 2011 TRAP law in Pennsylvania. That law required facilities providing abortions to meet the requirements of ambulatory surgical centers, resulting in the closure of nine of the twenty-two clinics in the state. Because all the closures were in urban areas where other clinics remained open, the resulting congestion occurred without any change to travel distance.⁵³ Hall's research revealed that this increase in

⁵⁰ Lindo et al., *supra* note 12, at 1137–1160.

 $^{{}^{51}}Id.$

⁵² Lindo et al. predict that such an increase in congestion could increase the birth rate by as much as 0.5%, though they do not estimate statistically significant impacts of congestion on births.

⁵³ Andrea M. K. Hall, Negative Supply Shocks and Delayed Health Care: Evidence from Pennsylvania Abortion Clinics, Dec. 15, 2023, MPRA Paper 119872, University Library of Munich, Germany.

congestion delayed abortion timing (decreasing abortions in the first 8 weeks of gestation and increasing abortions between weeks 9 and 12).⁵⁴

2. Abortion restrictions in one area burden the healthcare system in neighboring areas.

In practice, abortion restrictions in one state can affect access even in a state without such restrictions. Texas provides a clear example of this phenomenon. A 2021 (pre-*Dobbs*) abortion ban in Texas was reported to significantly increase congestion at abortion providers in neighboring Oklahoma and surrounding states, with some clinics citing patient counts increasing tenfold or more.⁵⁵ By March 2022, all four clinics in Oklahoma reported having no available appointments.⁵⁶

Post-*Dobbs*, clinics in states adjacent to restricted states have reported congestion. Clinics run by Planned Parenthood of the Rocky Mountains (which operates in Colorado, New Mexico, and southern

⁵⁶ Amelia Thomson-DeVeaux, It Can Already Take Weeks To Get An Abortion, FiveThirtyEight, Apr. 18, 2022, https://fivethirtyeight.com/features/it-can-already-take-weeks-to-get-an-

abortion/ (last accessed Jan. 12, 2024).

⁵⁴ Id.

⁵⁵ Sean Murphy, *Oklahoma Abortion Providers See Huge Influx of Texas Women*, AP News, Feb. 15, 2022, https://apnews.com/article/abortion-health-business-texas-oklahoma-65225decf918b820801d162f14b09b80 (last accessed Jan 12, 2024).

²²

Nevada), saw out-of-state patients more than double after *Dobbs*.⁵⁷ The organization reported that wait times peaked at 28 days shortly after *Dobbs*.⁵⁸

Similar issues were reported in the Midwest. Illinois—a wellknown haven for abortion care in the Midwest—reported a dramatic rise in congestion after *Dobbs*. ⁵⁹ Reproductive Health Services of Planned Parenthood of the St. Louis Region, a clinic located in Fairview Heights, Illinois, reported a 715% increase in patients from outside of Illinois or Missouri in the year after *Dobbs*.⁶⁰ Such "destination cities" now have extremely high average service populations per clinic, such as Wichita (1.8 million) and Cincinnati (1.4 million).⁶¹ As of September 2023, Cincinnati had only one clinic and no available appointments

⁵⁸ Id.

⁵⁹ Id.

⁶⁰ Id.

⁵⁷ Laura Ungar, It's Taking Longer to Get an Abortion in the US. Doctors Fear Riskier, More Complex Procedures, AP News, Dec. 9, 2023, https://apnews.com/article/abortion-care-wait-times-us-roe-dobbs-7b0a328bb34b0acb3d37e359a63712fc (last accessed Jan. 12, 2024).

 $^{^{61}}$ Myers et al., supra note 26.

within two weeks.⁶² Wichita had three clinics but only one had an available appointment within two weeks.⁶³

Even if patients in West Virginia are able to travel out of state, high congestion of clinics in states without restrictions affects the availability of appointments and waiting times for both in-state and out-of-state patients. The resulting delays in care could have serious implications for the complexity and cost of an abortion, including limiting the types of procedures available to patients. ^{64, 65} For example in Pennsylvania, medication abortions are only available through the tenth week of gestation, and some of the state's providers will not provide surgical abortions past week 18.⁶⁶ In addition, abortion services become more expensive and have an elevated risk of complications further along in a pregnancy.⁶⁷ For these reasons, delaying abortion care presents a serious burden on access.

- ⁶⁶ Id.
- ⁶⁷ Id.

⁶² *Id*.

⁶³ Id.

⁶⁴ Jason Lindo and Mayra Pineda-Torres, *supra* note 37, at 2.

 $^{^{65}}$ Hall, supra note 53, at 22.

C. Medication abortion, when available, could mitigate the impact of clinic closures.

It is important to consider here the role of medication abortion in potentially mitigating the impact of increased travel distances and clinic congestion. Medication abortion is an essential element of abortion care—more than half of abortions in the United States are medication abortions.⁶⁸ At-home medication abortion prescribed via telemedicine or by a local provider can eliminate travel distance-related barriers, reduce demand for clinical space, and thus improve access to care. Indeed, distance to clinic and cost of in-clinic care were top reasons reported by individuals for seeking medication abortion.⁶⁹ Eliminating travel may further save individuals driving time, gas, time off work, childcare, and hotel stays, as discussed *supra*. In areas with no remaining clinics, at-home medication abortion may be the only feasible option for many patients.

⁶⁸ Rachel Jones et al., *Medication Abortion Now Accounts for More than Half of All US Abortions*, Guttmacher Institute, Feb. 2022, https://www.guttmacher.org/article/2022/02/medication-abortion-now-accounts-more-half-all-us-abortions.

⁶⁹ Abigail Aiken et al., Association of Texas Senate Bill 8 With Requests for Self-Managed Medication Abortion, 5 No. 2 JAMA Network Open at e221122 (2022).

Given the research summarized above on the impact of travel distances and clinic congestion on abortion, there is no question that West Virginians have difficulty accessing abortion care. While medication abortion could alleviate some of these problems, West Virginia's ban on abortion medication prohibits any such alleviation and instead burdens patient access to care, in contravention of the FDA's mandate.

CONCLUSION

For the reasons set forth above, this Court should reverse the decision of the district court.

Dated: February 14, 2024

Respectfully submitted,

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Attorneys for Amici Curiae Economists

UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 23-2194 Caption: GenBioPro, Inc. v. Kristina Raynes, et al.

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