Multiple Documents

Part	Description
1	100
2	Exhibit Rebuttal Declaration of Dr. Katherine Farris
3	Exhibit Rebuttal Declaration of Dr. Christy M. Boraas Alsleben
4	Exhibit Declaration of Dr. Timothy R.B. Johnson

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

PLANNED PARENTHOOD SOUTH ATLANTIC, *et al.*,	)	
Plaintiffs,	)	
v.	)	
JOSHUA STEIN, *et al.*,	)	Case No. 1:23-cv-00480-CCE-LPA
Defendants,	)	
and	)	
PHILIP E. BERGER, *et al.*,	)	
Intervenor-Defendants.	)	

REPLY IN FURTHER SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT AND RESPONSE IN OPPOSITION TO INTERVENORS' CROSS-MOTION FOR SUMMARY JUDGMENT

INTRODUCTION

All parties agree that after *Dobbs*, abortion must be treated like all other health care. And by filing cross-motions for summary judgment, the parties agree that the constitutionality of the Hospitalization Requirement and the Intrauterine Pregnancy (IUP) Documentation Requirement can be resolved as a matter of law.

But Intervenors would pretermit the Court's analysis of those questions by emptying the applicable legal standards of meaning and consequence. According to Intervenors, the Court need not actually apply rational basis review to either challenged provision because the legislature always wins. Plaintiffs' burden is significant, but the rational basis standard

is not so toothless. *Mathews v. Lucas*, 427 U.S. 495, 510 (1976). And here, there is no genuine dispute of material fact that the Hospitalization Requirement and IUP Documentation Requirement lack a rational relationship to patient safety—the only government interest put forth to justify either provision.

Intervenors' attempts to defeat Plaintiffs' vagueness challenge by rewriting the IUP Documentation Requirement fare no better. Their back-tracking on the provision's meaning and penalties cannot cure its fundamental lack of guidance regarding how certain a provider must be about the existence of an intrauterine pregnancy before providing a medication abortion. This lack of guidance is fatal, as providers cannot constitutionally be forced to guess at whether their evidence-based medical protocols comply with the law's requirements.

Intervenors' efforts to evade meaningful review of these provisions' constitutionality must be rejected. The law, correctly applied, warrants summary judgment for Plaintiffs.

ARGUMENT

I. Rational Basis Review Is Not A Rubber Stamp.

A claimed interest in patient safety does not give the legislature a free pass to evade judicial review. To the contrary, courts have authority to strike down arbitrary, irrational, or pretextual health and safety legislation under the rational basis standard. *See Air Line Pilots Ass'n, Int'l v. O'Neill*, 499 U.S. 65, 75 (1991) ("Even legislatures . . . are subject to *some* judicial review of the rationality of their actions."); *Trump v. Hawaii*, 585 U.S. 667,

705–06 (2018) (laws fail rational basis when "it is impossible to 'discern a relationship to legitimate state interests' or . . . the policy is 'inexplicable by anything but animus'"). In *Romer v. Evans*, 517 U.S. 620 (1996), the Supreme Court explained that "even in the ordinary equal protection case calling for the most deferential of standards, we insist on knowing the relation between the classification adopted and the object to be attained," which requires a judicial determination whether the challenged laws are "grounded in a *sufficient factual context* for [the court] to ascertain some relation between the classification and the purpose it serve[s]." *Id*. at 632–33 (emphasis added). While courts "correctly show deference" to legislatures acting in the name of health and safety, "such deference cannot be an excuse for the Court to abdicate its duty to protect the constitutional rights of all people." *Catherine H. Barber Mem'l Shelter, Inc. v. Town of N. Wilkesboro Bd. of Adjustment of Town of N. Wilkesboro*, 576 F.Supp.3d 318, 343 (W.D.N.C. 2021).

Precedent therefore belies Intervenors' suggestion that, under rational basis review, they automatically win. DE 98 (Int. Br.) at 23–26. Intervenors ignore that while the state is not required to make an affirmative evidentiary showing, *Doe v. Settle*, 24 F.4th 932, 943 (4th Cir. 2022), any presumption of legislative rationality can be overcome by "common knowledge" or evidence, *Borden's Farm Prods. Co. v. Baldwin*, 293 U.S. 194, 209 (1934); *see also St. Joseph Abbey v. Castille*, 712 F.3d 215, 226 (5th Cir. 2013) (deference to the legislature does not demand that courts ignore the history or context of the law); *Merrifield v. Lockyer*, 547 F.3d 978, 990 (9th Cir. 2008); *Craigmiles v. Giles*, 312 F.3d 220, 224 (6th Cir. 2002). In particular, Intervenors' novel claim that they can evade judicial review

merely by introducing evidence, no matter how thin or irrelevant, and that the Court must then ignore Plaintiffs' evidence, DE 98 at 25–26, is wholly unsupported by precedent. The rational basis standard does not require this Court to defer to the Intervenors' evidence without further analysis. Even under rational basis review, "the simple articulation of a justification for a challenged classification does not conclude the judicial inquiry." *Phan v. Virginia*, 806 F.2d 516, 521 n.6 (4th Cir. 1986).

Intervenors' suggestion that the challenged requirements are shielded from review because legislatures have "wide discretion . . . in areas where there is medical and scientific uncertainty," DE 98 at 24 (quoting *June Med. Servs. v. Russo*, 140 S.Ct. 2103, 2136 (2020) (quoting *Gonzales v. Carhart*, 550 U.S. 124, 163 (2007)) (Roberts, C.J., concurring in the judgment)), is equally unavailing. In *Gonzales*, both legislative and judicial factual disputes abounded, 550 U.S. at 161–63, but in this case, no such medical and scientific uncertainty exists: as explained below, Intervenors have failed to identify genuine disputes of material fact on the specific question of the provisions' relationship to patient safety. Intervenors cannot invoke medical and scientific uncertainty as "magic words" in hopes that "this Court will rubber stamp the classification no matter the facts." *Mem'l Shelter*, 576 F.Supp.3d at 341.

This Court therefore can and should consider Plaintiffs' undisputed evidence demonstrating that there is no rational relationship between either the Hospitalization Requirement or the IUP Documentation Requirement and the state's asserted safety interest. *See id*. (granting summary judgment to plaintiffs under rational basis review); *City*

of Greensboro v. Guilford Cnty. Bd. of Elections, 248 F.Supp.3d 692, 702–05 (M.D.N.C. 2017) (analyzing record evidence to grant summary judgment to plaintiff on an equal protection claim using rational basis).

II. The Hospitalization Requirement Fails Rational Basis Review.

The undisputed record demonstrates that there is no health and safety benefit to requiring procedural abortions, but not miscarriage management, to be provided in a hospital. For this reason the Hospitalization Requirement has no rational relationship to patient health and safety—the only state interest proffered by Intervenors. *See* DE 98 at 22; DE 94-6 (PI Hr'g Tr.), 98:6–16. And because the Hospitalization Requirement's classification is driven by animus, not patient safety, it fails to serve any *legitimate* government interest. *U.S. Dep't of Agric. v. Moreno*, 413 U.S. 528, 534–35 (1973). Where, as here, the relationship between a distinction in the law and its purported aim is "so attenuated as to render the distinction arbitrary or irrational," it violates the Equal Protection Clause. *Nordlinger v. Hahn*, 505 U.S. 1, 11 (1992).

A. There Is No Genuine Dispute Of Material Fact As To Whether Procedural Abortion Patients Are Similarly Situated To Miscarriage Management Patients.

As the Court found at the preliminary injunction stage following expedited discovery, procedural abortion patients and miscarriage management patients are similarly situated regarding the medical procedures they seek and the safety of that care. DE 80 (PI Ord.) at 28–31. Subsequent discovery has confirmed that there is no genuine dispute of material fact on this point.

Intervenors fail to identify evidence rebutting Plaintiffs' evidence that procedural abortion and miscarriage management procedures carry the same (low) risks. *See* DE 94 (MSJ Br.) at 6–7, 12. In fact, they concede that the procedures entail "similar *types* of complications," asserting instead that there is a dispute of fact regarding the *rate* at which complications arise. DE 98 at 23 (citing DE 97-2 (Wubbenhorst Report) ¶90; DE 94-4 (Second Bane Dep.), 56:11–25; DE 97-3 (Wheeler Report) ¶50)), *see also id*. at 25 (citing DE 97-4 (Bane Report) ¶¶55–57; DE 97-2 ¶¶90, 92–93). But none of the evidence they cite actually creates a genuine and material dispute regarding the comparable safety of abortion and miscarriage management.

For example, Intervenors invoke studies examining the risk of complications following first-trimester medication abortion and the rates of bleeding and infection for abortions up to nine weeks' gestation, DE 97-2 ¶¶89–90, but the Hospitalization Requirement applies only to procedural abortion after the twelfth week of pregnancy—rendering this claimed dispute immaterial. *See* DE 94-5 (Second Wubbenhorst Dep.), 31:6–32:1 (admitting that the cited studies do not discuss outcomes for second trimester patients); Rebuttal Decl. of Katherine Farris, M.D., FAAFP ("Farris MSJ Rebuttal Decl."), attached as **Exhibit 1** ¶49.

Intervenors' contentions based on miscarriage mortality rates, DE 98 at 25 (citing DE 97-2 ¶¶92–93), are similarly off base. Indeed, the research upon which Intervenors' witness Dr. Wubbenhorst relies reports an abortion mortality rate *lower* than the miscarriage mortality rate that she uses as a comparator in her report. DE 94-5, 40:13–

43:11. Notably, Dr. Wubbenhorst's report *misrepresents the miscarriage mortality ratios* in the cited study by a factor of ten—for example, listing a ratio of 5 deaths per 1,000,000 miscarriages between 12–15 weeks of gestation rather than (as the study reports) *50* deaths per 1,000,000 miscarriages at that gestational age range. *Compare* DE 97-2 ¶¶91–93 & tbl. 1, *with* Farris MSJ Rebuttal Decl. ¶49; *see also* DE 94-5, 32:21–38:24 (acknowledging that "it's possible that [she] made a mistake").

Even setting aside these remarkable errors, Dr. Wubbenhorst's testimony regarding the "rates of death from miscarriage" is irrelevant to the issues presented here. It says nothing about the relative risk of *procedures to manage miscarriage*, as opposed to risks that attend the miscarriage itself. Accordingly, Intervenors have not identified a material dispute of fact regarding whether procedural abortion and miscarriage management are similarly situated in terms of complication rates. *See Mem'l Shelter*, 576 F.Supp.3d at 327 ("'Factual disputes that are irrelevant or unnecessary will not be counted.' . . . If the evidence is merely colorable, or is not significantly probative, summary judgment is appropriate." (quoting and citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248, 249–50 (1986)).

Intervenors next identify possible physiological differences between abortion patients and some miscarriage patients, DE 98 at 23, 25, but these differences are not material to patient safety.[1] "The similarly situated inquiry does not just ask whether two

[1] Indeed, the differences Intervenors identify are not even *categorical* differences between miscarriage patients and abortion patients. For example, Dr. Bane noted in her

groups are similarly situated; it asks whether they are similarly situated with respect to the statute's objective." *Kadel v. Folwell*, Nos. 22-1721, 22-1927, 2024 WL 1846802, at *18 (4th Cir. April 29, 2024) (en banc); *see also Mem'l Shelter*, 576 F.Supp.3d at 338. Intervenors' witness Dr. Bane, who testified to these physiological differences, conceded she was not aware of any research comparing the *safety* of abortion and miscarriage management. DE 94-4, 55:25–56:8, 75:10–20, 77:21–78:18. To the extent some abortion patients require more cervical preparation than miscarriage patients, this physical difference does not make the procedure riskier. Decl. of Timothy R.B. Johnson, M.D. ("Johnson MSJ Rebuttal Decl."), attached as **Exhibit 3** ¶¶39–40; *accord* DE 94-4, 71:1–73:7; DE 97-4 ¶¶55–57 (Dr. Bane recounting differences between procedures to evacuate the uterus in an abortion and in miscarriage management, without testifying that one is more dangerous than the other). And Intervenors have never disputed that the cervical preparation process is managed as safely in an outpatient setting as in a hospital setting. Johnson MSJ Rebuttal Decl. ¶40.

Equally unsupported are Intervenors' attempts to suggest that "softening of fetal cortical bone" after fetal demise makes miscarriage management safer than procedural abortion, DE 97-7 (Bane Addendum); *see also* DE 98 at 25 (citing DE 97-7). The 25-year-

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report that miscarriage may involve a natural softening and partial opening of the cervix that does not occur in abortion patients, DE 97-4 ¶56, but conceded at her deposition that this is "not always the case" and that some miscarriage patients' cervixes remain "closed and thick," as they would generally be for abortion patients. DE 94-4, 52:1, 52:21-25; *see also* Johnson MSJ Rebuttal Decl. ¶¶37–38.

old textbook that Dr. Bane cites does not suggest that any differences in cortical softening make abortion *riskier* than miscarriage. *See* DE 94-4, 66:15–68:25. Because the operative question is whether any identified differences matter for purposes of providing abortion safely after the twelfth week of pregnancy, *Mem'l Shelter*, 576 F.Supp.3d at 338; *Kadel*, 2024 WL 1846802, at *18, these ostensible physiological distinctions do not create a *material* dispute of fact.

Finally, Intervenors suggest that abortion patients and miscarriage management patients are not similarly situated because there are moral or ethical differences between abortion and miscarriage management. DE 98 at 5 (citing DE 97-2 ¶74 (abortion is not "ethically . . . identical to miscarriage"); DE 97-3 ¶15 ("It is the intentional taking of life that makes these completely different procedures.")). But Intervenors have not offered any evidence or arguments linking these alleged non-medical differences to the state's only asserted interest: protecting patient health and safety. These putative differences are therefore immaterial to the question whether abortion and miscarriage management are similarly situated for purposes of patient safety. *See Mem'l Shelter*, 576 F.Supp.3d at 338; *Kadel*, 2024 WL 1846802, at *18.

Unable to identify any genuine, material disputes of fact, Intervenors appear to suggest that whether miscarriage management patients and procedural abortion patients are similarly situated is necessarily a fact question for trial. DE 98 at 23 ("[W]hether 'a plaintiff . . . is similarly situated to those who have been treated differently is a factual issue for a jury'" (quoting *Willis v. Town of Marshall*, 275 Fed.App'x 227, 233 (4th Cir. 2008))). But

courts can enter summary judgment on claims involving questions of fact when the *material* facts are not in dispute. *Willis*, 275 F.App'x at 236 ("[F]actual issues . . . may be resolved by a judge at the summary judgment stage."); *see also Porter v. Clarke*, 290 F.Supp.3d 518, 531 (E.D. Va. 2018) (granting summary judgment where factual dispute at the summary judgment stage was "not dispositive"), *aff'd*, 923 F.3d 348 (4th Cir. 2019). In this case, there is no genuine dispute regarding facts that are material to the question whether procedural abortion patients and miscarriage management patients are similarly situated—as Intervenors acknowledge by cross-moving for summary judgment on this claim.

B. There Is No Genuine Dispute Of Material Fact As To Whether The Hospitalization Requirement Is Rationally Related to Patient Safety.

Intervenors similarly fail to identify any genuine dispute that the Hospitalization Requirement's classification between procedural abortion and miscarriage management is not rationally related to patient safety.

Specifically, Intervenors' attempts to create a dispute of material fact fall short because they fail to show how their alleged safety concerns about abortion after the twelfth week of pregnancy do not *also* apply to miscarriage management at the same gestational age. Meanwhile, Plaintiffs have presented uncontroverted evidence that abortions performed in outpatient clinics are just as safe as, and sometimes safer than, those performed in hospitals, and that the risk of complications requiring hospitalization is vanishingly small. DE 94 at 4–6; Farris MSJ Rebuttal Decl. ¶¶6–9, 16–25, 42–44. Plaintiffs

do not dispute that it is "impossible [to] be sure whether complications may arise for a particular patient until after the abortion procedure begins." DE 98 at 5. But that is the case for *all* medical procedures, and does not create a legitimate reason to single out abortion, Farris MSJ Rebuttal Decl. ¶¶20–22, 25.

It is undisputed that the same complications could arise for miscarriage management patients, DE 94 at 6–7; DE 98 at 23, and North Carolina law does not require that miscarriage management take place in hospitals. Plaintiffs have put forth evidence demonstrating that the rate of complications is comparable or even higher for miscarriage management than for abortion—in particular, the rate of disseminated intravascular coagulation is higher for miscarriage management than for abortion. DE 94-1 (Farris MSJ Decl.) ¶¶29 & n.12, 37 & n.28; Farris MSJ Rebuttal Decl. ¶¶45–52; Rebuttal Decl. of Christy M. Boraas Alsleben, M.D., M.P.H. ("Boraas MSJ Rebuttal Decl."), attached as **Exhibit 2** ¶27; *see also* DE 94-4, 64:16–20, 79:7–81:10 (25-year-old textbook cited by Dr. Bane notes the risk of disseminated intravascular coagulation for miscarriage patients). Intervenors have failed to create a genuine dispute of material fact on this point.[2] *See supra* Part II.A.

[2] Indeed, one of the studies that Intervenors' witness Dr. Bane cited on postabortion emergency room use—which at any rate did not contain a comparison of abortions performed in hospitals as opposed to outpatient clinics—has been retracted by the publication due to its methodological weaknesses and bias. DE 97-4 ¶38; Boraas MSJ Rebuttal Decl. ¶13.

Similarly, Intervenors' contention that "underlying clinical conditions may alter the risks and difficulty of the [D&E] procedure," DE 97-3 ¶50, applies equally to procedural abortion and miscarriage management, DE 94-3 (Wheeler Dep.), 182:7–183:25; Farris MSJ Rebuttal Decl. ¶¶45, 50, so it does not create a genuine dispute as to whether the Hospitalization Requirement's classification serves patient safety.[3] As Dr. Wheeler acknowledged, "technically the procedure is similar" for both contexts.[4] DE 97-3 ¶50. Indeed, Dr. Wheeler testified that she is not aware of "any research directly comparing the safety of D&C or D&E for induced abortion with the safety of D&E or D&C for spontaneous abortion." DE 94-3, 184:24–185:13. That commonality is an additional illustration of how the two groups are similarly situated, supporting rather than weakening Plaintiffs' position.

[3] Intervenors characterize Dr. Wheeler as a "former abortion provider." DE 98 at 5. However, Dr. Wheeler testified that she stopped performing abortions "early" in her time at Millcreek Women's Center, where she worked from 1991–2008, meaning that her abortion experience dates back approximately 25–33 years. DE 94-3, 38:2–4, 62:17–63:2. Dr. Wheeler could not recall, even approximately, the details of the abortions she provided, including the number of D&Es she performed for abortion or for miscarriage patients or whether she performed any in an ambulatory surgical center as opposed to a hospital. *See* DE 94-3, 105:3–106:4, in particular 105:13–16.

[4] Dr. Wheeler testified that she understood from a literature review that providers typically start performing D&Es at 13 to 14 weeks LMP but acknowledged that she "can't answer for most providers" in terms of actual contemporary practice. DE 94-3, 43:25–44:6. In practice, abortion providers today generally switch from aspiration to D&E around 15 weeks LMP, depending on the provider's practice and each patient's individual medical characteristics. DE 94-1 ¶26; Farris MSJ Rebuttal Decl. ¶17; DE 74-1 (Boraas Dep.), 58:5–59:4, 151:17–23; Johnson MSJ Rebuttal Decl. ¶42.

Moreover, Intervenors are wrong to claim that the Hospitalization Requirement improves safety for patients with preexisting medical conditions that increase the risk associated with abortion, because those patients are already referred to hospitals for their care. Farris MSJ Rebuttal Decl. ¶¶25, 29. Instead, the Requirement mandates hospitalization for patients at exceedingly low risk of experiencing a complication requiring hospital treatment, who would otherwise be able to obtain their abortion at an outpatient clinic just as safely, sooner, at lower cost, in a more comfortable environment, and with less logistical burden. *See Moreno*, 413 U.S. at 537–38 (striking down law that, "in practical operation," fails to address the government's ostensible concern and instead harms people to whom that concern does not apply).

Nor is it relevant that "hospitals can immediately switch to perform 'intraabdominal surgery' when necessary to treat patients suffering uterine perforations." DE 98 at 6. Some uterine perforations can be treated in outpatient facilities, DE 94-1 ¶51, and as to those that cannot, Plaintiffs have introduced undisputed evidence that PPSAT's robust hospital transfer protocol fully protects patients in the rare event of a hospital transfer. *See* Farris MSJ Rebuttal Decl. ¶¶20, 39–40; *see also* Boraas MSJ Rebuttal Decl. ¶22.

Intervenors' argument that the Hospitalization Requirement's classification is rationally related to patient safety because "miscarriage management more typically happens in hospitals or ambulatory surgical centers," DE 98 at 26, would perhaps make sense if S.B. 20 were silent on the topic of miscarriage management. But S.B. 20 *expressly carves out miscarriage management* from the definition of procedural abortion, and

therefore from the Hospitalization Requirement. N.C. Gen. Stat. § 90-21.81. Courts may look at an overall regulatory scheme to determine if, in operation, the classification bears a rational relationship to its purported end. *See Moreno*, 413 U.S. at 536–38; *Merrifield*, 547 F.3d at 991 ("[T]his type of singling out, in connection with a rationale so weak that it undercuts the principle of non-contradiction, fails to meet the relatively easy standard of rational basis review."); *Progressive Credit Union v. City of New York*, 889 F.3d 40, 49 (2d Cir. 2018) (in considering an equal protection claim under rational basis court looked to whether "a statute *or regulatory regime* imposes different classifications or regulatory burdens" (emphasis added)). Here, the legislature expressly chose to regulate abortion differently from miscarriage management in a range of ways, one of which is the Hospitalization Requirement. As Plaintiffs have explained, there is no health and safety justification for that disparate treatment. DE 94 at 6-7. Additionally, as discussed in Part II.C, *infra*, certain differences in how and where miscarriage and abortion are managed are the product of abortion stigma, not any difference in the treatments or their risks.

Intervenors argue that "[s]tates may rationally 'distinguish[] between abortion services and other medical services when regulating physicians or women's healthcare.'" DE 98 at 28 (quoting *Greenville Women's Clinic v. Bryant*, 222 F.3d 157, 173 (4th Cir. 2000)). But in *Greenville Women's Clinic*, the Fourth Circuit upheld the challenged regulation because the record showed that it "largely track[ed]" the "standards and guidelines issued by the ACOG, Planned Parenthood, and the National Abortion Federation" and thus was reasonably directed at promoting health, *id.* at 167–69—not

because "distinguishing between abortion services and other medical services" is a *per se* rational means of advancing patient health, as Intervenors argue here. DE 98 at 28 (quoting *Greenville Women's Clinic*, 222 F.3d. at 173); *see also* DE 80 at 30–31 (rejecting Intervenors' suggestion that *Greenville Women's Clinic* precludes the Court from conducting a rational basis analysis).

Intervenors cite cases considering Indiana's second-trimester hospitalization requirements under the *Roe* and *Casey* standards, *see* DE 98 at 29, but fail to grapple with *Planned Parenthood of Ind. & Ky., Inc. v. Comm'r, Ind. Dep't of Health*, 64 F.Supp.3d 1235, 1257–58 (S.D. Ind. 2014), which invalidated an abortion restriction on equal protection grounds under rational basis review. Moreover, Intervenors overread the significance of the cited cases: in *Whole Woman's Health Alliance v. Rokita*, 13 F.4th 595 (7th Cir. 2021) (per curiam), the Seventh Circuit stayed a preliminary injunction against a hospitalization requirement for second-trimester abortions simply because the challenged law had previously been upheld by a "summary and unreasoned" order from the U.S. Supreme Court, *id*. at 598. The Seventh Circuit did not conduct any case-specific legal or factual analysis, instead leaving for "resolution after full briefing and argument" the plaintiffs' argument that "improvements in medicine make the use of hospitals or surgical centers unnecessary." *Id*. Similarly, in *Whole Woman's Health Alliance v. Rokita*, Nos. 21-2480 & 21-2573, 2022 WL 2663208, at *1 (7th Cir. July 11, 2022), the court performed no substantive analysis but rather remanded the case for further consideration given the *Dobbs* decision.

Finally, Intervenors claim it is irrelevant that the Hospitalization Requirement imposes unique burdens on survivors of rape or incest and patients with grave fetal diagnoses. *See* DE 98 at 28–29. But "[t]he proper focus of constitutional inquiry is the group for whom the law is a restriction," *Kadel*, 2024 WL 1846802, at *12 (quoting *City of Los Angeles v. Patel*, 576 U.S. 409, 418 (2015)), so the Court must ask whether the Hospitalization Requirement rationally furthers patient safety *for these patients*, as they are the only ones the Requirement actually affects. The Hospitalization Requirement applies to abortions after the twelfth week of pregnancy, when abortion is permitted only in cases of rape, incest, life-limiting anomaly, or medical emergency. N.C. Gen. Stat. §§ 90-21.81B, 90-21.82A(C). Plaintiffs have not challenged the rationality of the Hospitalization Requirement for patients experiencing medical emergencies. And it is undisputed that abortions due to rape, incest, or life-limiting anomaly are generally not more medically complicated than abortions in other circumstances. Farris MSJ Rebuttal Decl. ¶¶30, 33; Boraas MSJ Rebuttal Decl. ¶33; *accord* DE 94-3, 184:1–20; *see also* DE 94-1 ¶57 (PPSAT has received referrals from North Carolina hospitals for patients seeking abortion after the twelfth week of pregnancy due to a "life-limiting" anomaly).

Indeed, the Hospitalization Requirement is particularly harmful for patients in these circumstances. Survivors of sexual assault might be forced to recount traumatic events to an increased number of staff, or receive general anesthesia for their hospital abortion despite preferring to remain conscious. DE 94-1 ¶¶87, 95. Outpatient abortion clinic staff have specifically chosen to work with abortion patients, making them more likely than

general hospital staff to treat abortion patients compassionately and without judgment. Johnson MSJ Rebuttal Decl. ¶47; DE 94-1 ¶¶95–98; Farris MSJ Rebuttal Decl. ¶¶33–34. For the specific patients it affects, the Hospitalization Requirement is not rationally related to the Intervenors' asserted interest in patient health and safety.[5]

For all these reasons, the Hospitalization Requirement's classification between abortion and miscarriage management "simply does not operate so as rationally to further" the asserted interest in patient safety. *Moreno*, 413 U.S. at 537.

C. Animus Against Abortion Providers And Patients Is Not A Legitimate Justification.

Absent any health and safety justification for the Hospitalization Requirement's distinction between abortion and miscarriage management, the only explanation is animus against abortion providers and abortion patients. *Romer*, 517 U.S. at 632, 635 (striking down a law where "its sheer breadth [was] so discontinuous with the reasons offered for it" that it seemed "inexplicable by anything but animus"). Such animus against "a politically unpopular group" never constitutes a legitimate governmental interest. *Moreno*, 413 U.S. at 534. And Intervenors cannot use animus-based stereotypes as a substitute for

[5] Where, as here, arbitrary distinctions give rise to both due process and equal protection claims, the two claims are often evaluated together. *See, e.g.*, *St. Joseph Abbey*, 712 F.3d 215; *Craigmiles*, 312 F.3d 220. Accordingly, given the lack of a rational relationship between the Hospitalization Requirement's purported ends and its means, and because the relief requested on both claims is the same—declaratory and permanent injunctive relief against the Hospitalization Requirement—Plaintiffs respectfully ask the Court to grant them summary judgment on their substantive due process claim as well as their equal protection claim challenging the Hospitalization Requirement.

actual evidence. *City of Cleburne v. Cleburne Living Ctr.*, 473 U.S. 432, 448 (1985) ("[M]ere negative attitudes, or fear, unsubstantiated by factors which are properly cognizable in a zoning proceeding, are not permissible bases for [differential treatment of similarly situated comparators]."). Here, Intervenors rely on baseless stereotypes about abortion providers' skill and safety, but leave undisputed Plaintiffs' evidence of their outstanding safety record. This is a textbook violation of rational basis review as applied in *Cleburne* and *Moreno*.[6]

Plaintiffs' evidence of animus against abortion providers and patients is undisputed. Indeed, instead of disputing Plaintiffs' evidence of animus, Intervenors simply deny that it exists. DE 98 at 24. For decades, abortion providers have faced threats, professional retaliation, harassment, and physical violence—even murder—and patients seeking abortion must overcome unique obstacles to access care, including protesters attempting to prevent them from reaching their appointments. Johnson MSJ Rebuttal Decl. ¶¶25–35; Farris MSJ Rebuttal Decl. ¶11; DE 94-1 ¶¶76–82. Providers and patients are not targeted in this way for any other type of medical care. Johnson MSJ Rebuttal Decl. ¶34; DE 94-1 ¶77.

[6] Whether the Court reads *Cleburne*, *Moreno*, and *Romer* to establish a more searching rational basis standard triggered by colorable allegations of animus, *see, e.g.*, *Bishop v. Smith*, 760 F.3d 1070, 1096–1103 (10th Cir. 2014) (Holmes, J., concurring), or instead as applications of one-size-fits-all rational basis review, *see* DE 94-6 at 66:15–67:3 (Intervenors' counsel's colloquy with the Court on this point), the Hospitalization Requirement fails because its classification between abortion and miscarriage management is explicable only as the product of animus, which—under either characterization of the standard—is never a legitimate government interest.

Plaintiffs' evidence of the animus underlying the Hospitalization Requirement, specifically, is similarly undisputed. Dr. Timothy R.B. Johnson, former chair of the University of Michigan Medical School's Department of Obstetrics and Gynecology, explains that the Hospitalization Requirement's distinction between abortion and miscarriage management is not based on any medical justification, but instead reflects the view "that abortion is distasteful, that contemporary abortion providers provide substandard medical care, and that women with undesired pregnancies are less deserving of compassionate and holistic care than women undergoing spontaneous pregnancy loss." Johnson MSJ Rebuttal Decl. ¶14.

Dr. Johnson's testimony summarizes the history of abortion stigma and explains that a key feature is the stereotype that abortion providers do not care about their patients' safety, only profit. *Id.* ¶¶18–24. Dr. Farris's testimony confirms that abortion providers in North Carolina are stereotyped in this way. DE 94-1 ¶¶76–78; *see also* Farris MSJ Rebuttal Decl. ¶¶11, 36–39. And this stereotype is evident both in the lobbying materials that Intervenors produced in discovery, *e.g.* DE 74-11 (*Chemical Abortion: Protocols for a Risky Business*) at 2–3 (lobbying materials referring to "the negligent and profit-seeking abortion drug industry"), and in the testimony of Intervenors' three witnesses. *See* DE 97-2 ¶¶130–135; *contra* DE 94-1 ¶78; Farris MSJ Rebuttal Decl. ¶¶8, 20, 22, 36–40. As Dr. Johnson explains, the very terminology used by Intervenors' witnesses is suffused with this animus. Johnson MSJ Rebuttal Decl. ¶¶15, 21–23 (explaining that "abortionist" and "chemical abortion" are not medical terms but rather pejorative, stigmatizing terms that

evoke "dangerous, back-alley activity"); *see also* DE 94-5, 69:1–75:7 (Intervenors' witness admitting to replacing the term "medication abortion" with "chemical abortion" throughout her expert report, including in direct quotes from other sources but without indicating that change).[7] These unfounded stereotypes about abortion providers are the basis of laws like the Hospitalization Requirement that, under the guise of protecting patients, single out abortion from all other health care despite the overwhelming evidence of abortion's safety.

As to animus against abortion patients, Dr. Johnson explains that differences in the management of abortion and miscarriage—such as miscarriage management patients being treated in an operating room under deep sedation or general anesthesia rather than in an outpatient clinic with moderate sedation—*are attributable to abortion stigma* rather than any medical difference between the patients or the procedures involved. Johnson MSJ Rebuttal Decl. ¶¶35–41, 51–54; *see also* DE 94-1 ¶¶39–40; Farris MSJ Rebuttal Decl. ¶23. Remarkably, while these differences in management may reflect a desire to "shield" miscarriage management patients from discomfort, they actually expose those patients to greater medical risk because deeper levels of sedation are associated with a greater risk of complications. Johnson MSJ Rebuttal Decl. ¶¶52–54; Farris MSJ Rebuttal Decl. ¶27; *accord* DE 94-3, 200:8–11, 203:14–204:9; DE 94-4, 47:9–49:19. Based on published

[7] Notably, after this biased language was pointed out to Intervenors through Dr. Johnson's expert report in discovery, Intervenors' summary judgment brief now uses the term "drug-induced abortion" instead of "chemical abortion," which is the phrase Intervenors used in their earlier filings and in their witnesses' declaration and deposition testimony.

research demonstrating this fact by Dr. Johnson and colleagues,[8] the University of Michigan hospital changed its practices to "manag[e] pregnancy loss *more like* induced abortion." Johnson MSJ Rebuttal Decl. ¶54. In short, patients are safer when abortion and miscarriage management are treated alike, regardless of the clinical setting.

Even if one accepts Intervenors' unsubstantiated and biased premise that outpatient abortion providers are more likely to be unsafe than hospital-based physicians, requiring *all* abortions to occur in a hospital is a vastly overinclusive—and therefore irrational—means of serving the government's interest in patient safety. In *Moreno*, the Supreme Court expressed skepticism about Congress's "wholly unsubstantiated assumptions" that a household with unrelated members was more likely to commit fraud than a household consisting entirely of relatives. *See* 413 U.S. at 535. But *even accepting those assumptions*, the Court "still could not agree with the Government's conclusion that the denial of essential federal food assistance to all otherwise eligible households containing unrelated members constitutes a rational effort to deal with these concerns." *Id*. at 535–36. Similarly, given its sweeping overinclusiveness, the Hospitalization Requirement's categorical ban on outpatient clinics providing abortion after the twelfth week of pregnancy is not a rational

[8] Johnson MSJ Rebuttal Decl. ¶52 & nn.29–30 (citing Lisa H. Harris et al., *Surgical Management of Early Pregnancy Failure: History, Politics, and Safe, Cost-Effective Care*, 196 Am. J. Obstetrics & Gynecology 445.e1 (2007); Vanessa K. Dalton et al., *Patient Preferences, Satisfaction, and Resource Use in Office Evacuation of Early Pregnancy Failure*, 108 Obstetrics & Gynecology 103, 108 (2006)).

effort to address the legislature's "wholly unsubstantiated" concern about patient safety at outpatient abortion clinics. *Id*. at 535.

This is particularly so given that—as in *Moreno*—other, unrelated provisions already address the legislature's ostensible concern. *See id.* at 536–38. North Carolina strictly regulates abortion providers, requiring them to be re-licensed annually and subjecting them to regular inspections, both announced and unannounced. Farris MSJ Rebuttal Decl. ¶41; *see also* Johnson MSJ Rebuttal Decl. ¶46. The existence of this regulatory scheme "casts considerable doubt" on any suggestion that the Hospitalization Requirement is rationally related to an interest in protecting patients from unsafe clinical settings—all the more so in light of the undisputed evidence of PPSAT's extraordinarily low complication rate. *See* DE 94-1 ¶¶48–53 (just 34 out of the 43,339 abortions that PPSAT performed in North Carolina between January 1, 2020, and December 31, 2023 (0.078 percent) resulted in hospital transfer); *City of Greensboro*, 248 F.Supp.3d at 703 (granting summary judgment to plaintiffs because even though it was possible to "imagine factual situations in which the legislature might have a rational basis" for the challenged classification, those "hypothetical factual situations do not exist in this case").

At the same time, the Hospitalization Requirement is also *underinclusive* because it targets abortion while exempting similar procedures of equal or greater risk. In *Cleburne*, the Supreme Court considered the challenged zoning ordinance's underinclusiveness to be evidence of its irrationality and pretextual purpose. *See* 473 U.S. at 449. Here, procedures of equal or greater risk—not only miscarriage management, but also vasectomies,

colonoscopies, and childbirth—are not subject to hospitalization requirements. DE 94-1 ¶¶33–38, 46. Miscarriage management and childbirth are exempted from the Hospitalization Requirement in the very text of S.B. 20. *See* N.C. Gen. Stat. § 90-21.81(9b)(c)(i) (enacted as N.C. Gen. Stat. § 90-21.81(1c)(c)(i) by S.B. 20 § 1.2); N.C. Gen. Stat. § 90-178.4 (as amended by S.B. 20 § 4.3(d), effective Oct. 1, 2023); DE 80 at 29 n.16. And there is no indication that the North Carolina legislature will eventually pass a version of S.B. 20 regulating colonoscopies. As in *Cleburne*, this underinclusiveness marks the Hospitalization Requirement as irrational and even pretextual, not as an instance of the legislature addressing a legitimate safety concern "one step at a time." DE 98 at 26 (quoting *Williamson v. Lee Optical of Okla., Inc.*, 348 U.S. 483, 489 (1955)).

Furthermore, the Hospitalization Requirement is an "unusual deviation from the [legislature's] usual tradition" of declining to prescribe clinical settings by statute and instead permitting that decision to be made on an individualized basis, informed by each patient's personal medical circumstances, risks, and preferences and their provider's professional medical judgment. *United States v. Windsor*, 570 U.S. 744, 770 (2013). This is "strong evidence of a law having the purpose and effect of disapproval of that class"—here, abortion providers and patients. *Id.*; *accord City of Greensboro*, 248 F.Supp.3d at 701–02 (in granting summary judgment to plaintiffs on rational basis claim, noting that the legislature's decision to single out the City of Greensboro was an unprecedented departure from its usual practice).

As Intervenors agree,[9] after *Dobbs*, abortion must be treated like all other health care, and abortion patients and providers are entitled to the same constitutional protections applicable in the context of any other medical procedure. Namely, they cannot be singled out for irrational treatment without a legitimate government purpose, which is precisely what the Hospitalization Requirement does. "Equal protection of the laws is not achieved through indiscriminate imposition of inequalities." *Romer*, 517 U.S. at 633 (quoting *Sweatt v. Painter*, 339 U.S. 629, 635 (1950)). On this undisputed record, animus is the only explanation for the Hospitalization Requirement's distinction between abortion patients and miscarriage management patients. Summary judgment for Plaintiffs is warranted.[10]

III. The IUP Documentation Requirement Is Unconstitutional.

A. The IUP Documentation Requirement Is Void For Vagueness.

All parties agree that the IUP Documentation Requirement's vagueness is a purely legal question, amenable to resolution on summary judgment. DE 98 at 11 (citing *Manning v. Caldwell for City of Roanoke*, 930 F.3d 264, 272 (4th Cir. 2019) (en banc)). As an initial matter, the statute does not clearly specify the penalties attached to a violation of the IUP Documentation Requirement. Substantively, the IUP Documentation Requirement is vague as to whether a medication abortion may be provided when an intrauterine pregnancy is "probable," as opposed to *confirmed* via ultrasound. Moreover, what constitutes a

[9] DE 94-6, 74:14–18; DE 80 at 31 n.17.

[10] While Plaintiffs have also challenged the Hospitalization Requirement on vagueness grounds, DE 42 ¶83, they now abandon that claim.

"probable" intrauterine pregnancy is unclear. And Intervenors' contradictory positions on all these points throughout this litigation only underscore the statute's vagueness. As this Court has already determined, "the IUP requirement's high degree of ambiguity does not provide the fair warning the law requires and runs the risk of leading to inconsistent and arbitrary enforcement the law prohibits." DE 80 at 22. The Court should therefore reject Intervenors' arguments and grant Plaintiffs' motion for summary judgment on this claim.

1. What penalties apply?

Because the penalties attached to a statute inform how closely that statute must be scrutinized for vagueness, the IUP Documentation Requirement's penalties are a threshold question. *Manning*, 930 F.3d at 272–73. But as this Court has already recognized, the penalties for violating the IUP Documentation Requirement are themselves unclear. DE 80 at 20. As the Court held, "[p]roviders are entitled to 'reasonable notice' of whether they can be criminally prosecuted for violating this provision," DE 80 at 21 (citing *Johnson v. United States*, 576 U.S. 591, 596 (2015)).

Intervenors have changed their position on the IUP Documentation Requirement's penalties multiple times over the course of this case. At the hearing on Plaintiffs' motion for a temporary restraining order, Intervenors asserted that "there isn't a criminal provision attached" to the IUP Documentation Requirement. DE 52, 49:24–50:2. Opposing Plaintiffs' motion for a preliminary injunction, Intervenors argued that "the IUP documentation requirement gives rise to *both civil and criminal* penalties." DE 65 at 18 (emphasis added). Now, at summary judgment, Intervenors claim that a "physician who

violates the IUP Documentation Requirement is *not* subject to criminal penalties." DE 98 at 12. In other words, after flip-flopping, Intervenors now claim they have made up their minds about the statute's penalties—conveniently, penalties that (they argue) do not trigger the stringent standard of review reserved for criminal statutes. *See* DE 98 at 18–19.

As this Court recognized, however, the Act at minimum imposes quasi-criminal penalties, triggering heightened vagueness review even absent criminal sanctions. DE 80 at 21. Physicians who violate the IUP Documentation Requirement are subject to discipline by the North Carolina Medical Board, including suspension or revocation of their medical licenses. *See* N.C. Gen. Stat. §§ 90-21.88A; 90-14(a)(2). Intervenors rely on *Plumer v. Maryland* to argue that medical license revocation proceedings "are *not* quasi-criminal," *see* DE 98 at 13, but *Plumer* is a case about driver's licenses, not professional licenses. *See* 915 F.2d 927, 931 (4th Cir. 1990). Revoking a provider's professional license, obtained only after many years of training and without which the provider is unemployable in their field, is a far more severe sanction than a driver's license revocation. Reflecting this, the Fourth Circuit has recently explicitly identified professional disciplinary proceedings as quasi-criminal, in line with Supreme Court precedent. *See In re Gillespie*, No. 23-1819, 2023 WL 7548181, at *1 (4th Cir. Nov. 14, 2023) (citing *In re Ruffalo*, 390 U.S. 544, 551 (1968)).

Further, the North Carolina Medical Board is empowered to "assess monetary redress" and "fine" any physician who "[p]roduc[es] or attempt[es] to produce an abortion contrary to law." *See* N.C. Gen. Stat. § 90-14(a)(2). The Fourth Circuit has held that civil

penalties, including monetary penalties, are "quasi-criminal" in nature, such that parties subject to such administrative sanctions are entitled to "clear notice." *United States v. Hoechst Celanese Corp.*, 128 F.3d 216, 224 (4th Cir. 1997) (quoting *First American Bank of Va. v. Dole*, 763 F.2d 644, 651 n.6 (4th Cir. 1985)).

Thus, even assuming the IUP Documentation Requirement does not contain criminal penalties triggering a stricter standard of vagueness review, this Court would still apply the "relatively strict standard when quasi-criminal sanctions are possible." DE 80 at 21.

2. Must the existence of an intrauterine pregnancy be "probable," or certain?

As to the merits, as this Court has already held, the IUP Documentation Requirement is vague because it is "unclear as to whether the provider must determine that the existence of an intrauterine pregnancy is 'probable' or whether some other standard of certainty is required." DE 80 at 18. Intervenors now suggest that they "would not oppose" reading the statute to require the determination of a *probable* intrauterine pregnancy, an interpretation suggested by the Court at the preliminary injunction hearing. DE 94-6, 9:23–10:14; 33:2–8; 84:14–85:15; DE 98 at 14 n.4, 16 (stating that "abortion-inducing drugs" may be given to patients who have "confirmed *or* probable intrauterine pregnancies" (emphasis added)). But as the Court subsequently noted in its preliminary injunction order, although this interpretation "seems more likely, it is not clear." DE 80 at 19.

Indeed, the IUP Documentation Requirement's ambiguity on this question is

obvious from Intervenors' equivocation over whether "probable" is synonymous with "certain." Previously, Intervenors repeatedly took the position that Plaintiffs must *definitively rule out* an ectopic pregnancy prior to providing a medication abortion.[11] The fact that Intervenors—two of the legislators who championed the bill in the General Assembly—have not been able to say with any consistency what the IUP Documentation Requirement demands of abortion providers only underscores its vagueness.

3. What does "probable" mean, and who decides?

Even if the Court adopted this construction, the meaning of "probable" would remain undefined and fatally vague. As the Court previously held, while "the common understanding of the word 'probable' means *likely but not certain* . . . . [t]he Act itself provides no standards for how certain the provider must be before documenting the probable existence of an intrauterine pregnancy." DE 80 at 19 (emphasis added), 20; *see also id.* at 22. And Intervenors have repeatedly argued that PPSAT's protocol does *not* establish the existence of an intrauterine pregnancy to the necessary degree of probability. *See, e.g.*, DE 98 at 15–16.

Additionally, it is unclear whether the statute requires the existence of a "probable intrauterine pregnancy" as a subjective or objective matter. Intervenors argue that Plaintiffs

[11] *See, e.g.*, DE 65 at 20 ("physician must use ultrasound *to determine* whether a pregnancy is intrauterine," (emphasis added)); DE 52, 49:5 (an abortion provider "*need[s] to know* that" the pregnancy "*is intrauterine*, not ectopic." (emphasis added)); *id.*, 49:1–4 (IUP Documentation Requirement obligates an abortion provider to "*mak[e] sure* it's not an ectopic pregnancy" (emphasis added)); *see also id.*, 49:11–12 (arguing that the requirement to "determine" whether the pregnancy is intrauterine is "not vague").

know what the word "probable" means, DE 98 at 15–16, because Plaintiffs use the term "probable intrauterine pregnancy" to describe one of the "[g]eneral categories of ultrasound findings." DE 94-2 ¶43.

Of course, the ultrasound-finding category "probable intrauterine pregnancy" is distinct from the category "definite intrauterine pregnancy," *id.*, and it would be nonsensical (and contrary to Intervenors' position throughout this litigation, *see supra* n.11) for the IUP Documentation Requirement to permit medication abortion for the former but not the latter. But more fundamentally, it is not clear from the text of the statute whether the IUP Documentation Requirement would be satisfied by a treating physician's *subjective belief* that a patient has a "probable intrauterine pregnancy," as *the physician* understands that term. *See Colautti v. Franklin*, 439 U.S. 379, 390–94 (1979) (declaring unconstitutionally vague a statute requiring an abortion provider to make a viability determination, where "it is unclear whether the statute imports a purely subjective standard, or whether it imposes a mixed subjective and objective standard"), *abrogated on other grounds by Dobbs v. Jackson Women's Health Org.*, 597 U.S. 215 (2022). And as the Court held, "there is nothing in the statute to indicate that the legislature meant to adopt PPSAT's understanding" of the word "probable." DE 80 at 20 n.12. Intervenors' proposed construction therefore does not cure the IUP Documentation Requirement's vagueness.

4. How to reconcile the conflicting provisions?

Finally, "enhanc[ing]" the statute's "vagueness problem" is the conflict between its explicit authorization of medication abortion through the first twelve weeks of pregnancy,

see N.C. Gen. Stat. § 90-21.81B(2), and Intervenors' interpretation of the documentation requirement, which, "as their counsel acknowledged at the September 25 hearing, would in fact ban medical abortion early in pregnancy." DE 80 at 20. As the Court explained, this conflict between the express text of the statute and Intervenors' urged interpretation leaves abortion providers without clarity as to the boundary between prohibited and permitted conduct. *See id.*

Because the IUP Documentation Requirement leaves "a person of ordinary intelligence" without "adequate notice of what conduct is prohibited" and lacks "sufficient standards to prevent arbitrary and discriminatory enforcement," *Manning*, 930 F.3d at 272, it is unconstitutionally vague. Plaintiffs are therefore entitled to summary judgment on this claim.

B. The IUP Documentation Requirement Has No Rational Relationship To Patient Safety.

If the IUP Documentation Requirement is interpreted to require *confirmation* of the existence of an intrauterine pregnancy, then it irrationally bans medication abortion in the earliest weeks of pregnancy, before ultrasound equipment can detect an intrauterine pregnancy.[12] There is no genuine dispute as to the material facts underlying Plaintiffs'

[12] In *Bryant v. Stein*, No. 1:23-cv-77, ECF No. 103 (M.D.N.C. April 30, 2024), this Court held that the FDA's regulatory judgments regarding mifepristone preempt North Carolina's medication-abortion restrictions requiring physician-only prescribing; in-person prescribing, dispensing, and administering; the scheduling of an in-person follow-up appointment; and non-fatal adverse event reporting to the FDA. But North Carolina's laws requiring an in-person 72-hour advance consultation, use of an ultrasound, an in-person examination, blood-type determination, and reporting non-fatal adverse events to

rational basis claim: first, that abortion is safest earliest in pregnancy; second, that some medication abortion patients will be delayed in receiving care under Intervenors' interpretation of the IUP Documentation Requirement, thereby increasing the risks associated with the abortion; and third, that the IUP Documentation Requirement does nothing to ensure prompt screening or treatment for ectopic pregnancy. DE 94 at 8–10, 21, 23. Plaintiffs are therefore entitled to summary judgment on their claim that the IUP Documentation Requirement is not rationally related to Intervenors' interest in "the protection of maternal health and safety." *See* DE 98 at 18; *Settle*, 24 F.4th at 953.

It is undisputed that abortion is safest earlier in pregnancy. *See, e.g.*, DE 94-1 ¶93; *accord* DE 94-6, 72:11–16; DE 74-3, 64:14–65:5; DE 65-1 (Wubbenhorst PI Decl.) ¶38; DE 65-3 (Bane PI Decl.) ¶35. It is similarly undisputed that Intervenors' interpretation of the IUP Documentation Requirement would nevertheless force providers to delay patients with pregnancies of unknown location from receiving medication abortions, as those patients would be required to return to the clinic for serial follow-up ultrasounds until they have a confirmed intrauterine pregnancy. *See* DE 98 at 26 ("[T]he requirement . . . requir[es] additional ultrasounds *before* abortion-inducing drugs may be administered."). Accordingly, Intervenors do not contest that some patients will be prevented from receiving medication abortion in the earliest weeks of pregnancy, when it is safest. *Id.*

Intervenors attempt to minimize the harm caused by this delay by arguing that these

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the state are not preempted. As of this brief's filing date, the preempted provisions remain in effect pending submission and entry of a judgment and injunction.

patients can simply have a procedural abortion instead. *Id*. But this argument ignores the unchallenged evidence demonstrating the multiple, significant reasons patients obtain medication abortions instead of procedural abortions. Dr. Farris testified that "[p]rocedural abortion is contraindicated for patients with certain medical conditions, such as intolerance of available sedation or analgesic medications or a history of seizure disorder," DE 94-1 ¶20. Similarly, "patients with some clinical conditions, such as fibroids or other uterine abnormalities such as bicornuate uterus" obtain medication abortions because these variations in their anatomy "can make it difficult to reach the contents of the uterus during a procedural abortion." *Id.* Additionally, "survivors of rape and people who have experienced sexual abuse, molestation, or other forms of trauma" seek medication abortions "to avoid further trauma from having instruments placed in their vaginas." *Id.*; *see also* DE 94-2 ¶44 (Dr. Boraas explaining that, because medication abortion is "less invasive than procedural abortion," it "may be preferable for . . . sexual assault survivors").

Intervenors ignore this evidence and cavalierly suggest that the decision to obtain a medication abortion rather than a procedural abortion is simply a question of what "some patients might prefer." DE 98 at 19. But this dismissiveness fails to create a genuine dispute regarding the important medical reasons underlying some patients' decision to have a medication abortion instead of a procedural abortion. *See* DE 94-1 ¶20; DE 94-2 ¶44. It also ignores that Plaintiffs' protocol ensures that patients with pregnancies of unknown location are able to obtain their chosen method of abortion at the safest point in pregnancy, while simultaneously obtaining ongoing evaluation for ectopic pregnancy. DE 94-1 ¶¶20,

62, 71, 73, 93; DE 94-2 ¶¶28, 44, 52. Under Intervenors' interpretation of the IUP Documentation Requirement, however, those patients would be forced to wait until an intrauterine pregnancy is visible on ultrasound before obtaining a medication abortion. While abortion is generally very safe throughout pregnancy, there is no rational justification for subjecting patients to the increased risk of an abortion later in pregnancy.

Furthermore, it is undisputed that "[t]he IUP documentation requirement neither commands nor prevents a physician from 'referring a patient for ectopic evaluation,'" DE 65 at 24, and that "Planned Parenthood's protocol might lead to an earlier diagnosis of ectopic pregnancy in some cases" as compared to sending the patient away to wait until an intrauterine pregnancy is visible by ultrasound. DE 98 at 21; *accord* Boraas MSJ Rebuttal Decl. ¶52. Indeed, unlike the medication abortion protocol that Plaintiffs would continue to use *absent* the IUP Documentation Requirement, Farris MSJ Rebuttal Decl. ¶¶58–63, the IUP Documentation Requirement itself does not mandate *any* follow-up care for patients with pregnancies of unknown location.

Rather than meaningfully dispute that Plaintiffs' medication abortion protocol leads to *more prompt* evaluation for ectopic pregnancy, Intervenors argue that the IUP Documentation Requirement nonetheless "facilitate[s] prompt screening for ectopic pregnancy by requiring additional ultrasounds" before a patient may receive abortion medications. DE 98 at 20. But that argument hinges on the belief that a patient will adhere to their *physician's directive* to seek such follow-up ultrasounds—not any process created or required by the IUP Documentation Requirement itself. And, again, Plaintiffs' practices

provide for this independent of the IUP Documentation Requirement.

Moreover, in an attempt to bolster their claims that the IUP Documentation Requirement is rational, Intervenors inaccurately describe mifepristone as "a contraindicated drug" in patients with "a pregnancy of unknown location," DE 98 at 20, in order to misleadingly suggest that patients are at higher risk of ectopic rupture as a result of the medication abortion regimen. In reality, the FDA label indicates that mifepristone is contraindicated in patients with "*confirmed or suspected* ectopic pregnancies," DE 65-2 at 4 (emphasis added), which is distinct from a pregnancy of unknown location. Intervenors elsewhere recognize this distinction. DE 98 at 21. And Intervenors concede, as they must, that mifepristone is contraindicated for patients with confirmed or suspected ectopic pregnancies because the medication does not terminate ectopic pregnancies—*not* because it increases the likelihood of a negative outcome from an ectopic. *See, e.g.*, DE 94-6, 88:7–15; DE 74-3, 143:15–18. As this Court acknowledged, the FDA label for mifepristone recognizes that "the medication can safely be administered even if an ectopic pregnancy cannot be definitively ruled out*, so long as the patient is appropriately monitored*"—which Plaintiffs do under their protocol. *See* DE 80 at 20 (emphasis added); Farris MSJ Rebuttal Decl. ¶¶58–63; Boraas MSJ Rebuttal Decl. ¶46.

Instead of engaging with the undisputed evidence, Intervenors ultimately resort to a chain of highly speculative hypotheticals to justify the IUP Documentation Requirement. None reveals a genuine dispute of material fact in the record. Specifically, Intervenors raise the possibility that a woman with a pregnancy of unknown location who obtains abortion

medications from Plaintiffs because she is at a low risk of ectopic pregnancy (1) will, nevertheless, have an ectopic pregnancy; (2) will begin to suffer from a *ruptured* ectopic pregnancy *at the same time* she expects to experience the symptoms of a medication abortion; (3) despite Plaintiffs' robust counseling as to the differences in symptoms, will confuse the ruptured ectopic with a medication abortion; (4) will disregard all of Plaintiffs' clear warnings as to the serious risks of untreated ectopic pregnancy, refuse to reach out to her health care provider, and ignore Plaintiffs' multiple follow-up phone calls; and (5) will then "fail[] to receive treatment until it is too late." *See* DE 98 at 18; *compare id.* (outlining Intervenors' irrational speculation) *with* Boraas MSJ Rebuttal Decl. ¶48 (Dr. Boraas explaining why it is unlikely that patients will confuse the symptoms of a ruptured ectopic pregnancy with the effects of medication abortion); DE 94-1 ¶¶63–69, 72 (detailing PPSAT's safe and effective protocol for administering medication abortion to patients with pregnancies of unknown location, including its extensive counseling as to the symptoms and risks of ectopic pregnancy); DE 74-15 (PPSAT patient education materials); DE 74-1, 140:12–16, 140:22–141:19; DE 74-2 (Farris Dep.), 129:8–11, 130:17–25. While a court employing rational basis review may uphold a legislative choice premised on "*rational* speculation," *F.C.C. v. Beach Commc'ns, Inc.*, 508 U.S. 307, 315 (1993) (emphasis added), this series of hypotheticals is *irrational* speculation and cannot provide a basis to withstand a rational basis challenge.

In sum, because the IUP Documentation Requirement is "so far removed from [its] particular justifications that . . . it [is] impossible to credit them," *Romer*, 517 U.S. at 635,

Plaintiffs have shouldered their burden "to negative every conceivable basis which might support" it, *Beach Commc'ns*, 508 U.S. at 314–15, and are therefore entitled to summary judgment on their claim that the requirement violates the Due Process Clause.

CONCLUSION

For these reasons, Plaintiffs respectfully request that this Court deny Intervenors' cross-motion for summary judgment and instead grant Plaintiffs' motion for summary judgment, declare the Hospitalization Requirement and IUP Documentation Requirement unconstitutional, and enter an order permanently enjoining enforcement of these restrictions.

Dated: May 1, 2024

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

Relying on the word count function of Microsoft Word, I hereby certify that this brief is 9,238 words in length and, therefore, complies with Local Rule 56.1(c) and the 9,375 word limitation prescribed the Court's text order of October 24, 2023, adopting the parties' Amended Joint Rule 26(f) Report.

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CERTIFICATE OF SERVICE

I hereby certify that, on May 1, 2024, I electronically filed the foregoing with the clerk of the court by using the CM/ECF system, which served notice of this electronic filing to all counsel of record.

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EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

PLANNED PARENTHOOD SOUTH ATLANTIC, *et al.*,	)	
Plaintiffs,	)	
v.	)	
JOSHUA STEIN, *et al.*,	)	Case No. 1:23-cv-00480-CCE-LPA
Defendants,	)	
and	)	
PHILIP E. BERGER, *et al.*,	)	
Intervenor-Defendants.	)	

REBUTTAL DECLARATION OF KATHERINE FARRIS, M.D., FAAFP, IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT

I, Katherine Farris, M.D., FAAFP, declare as follows:

1. I previously submitted a declaration in support of the Plaintiffs' motion for summary judgment. Decl. of Katherine Farris, M.D., FAAFP, in Supp. of Pls.' Mot. for Summ. J., DE 94-1. That declaration described my qualifications as a board-certified family medicine physician, a Fellow of the American Academy of Family Physicians, and the Chief Medical Officer for Planned Parenthood South Atlantic ("PPSAT"), one of the two plaintiffs in this case.

2. I submit this rebuttal declaration in further support of the Plaintiffs' motion for summary judgment regarding certain provisions of North Carolina Session Law 2023-

14 ("S.B. 20"), as amended by Session Law 2023-65 ("H.B. 190"), which is codified at Article 1I of Chapter 90 of the North Carolina General Statutes ("the Act").

3. Like the opinions in my original declaration, the opinions in this rebuttal declaration are based on my education, clinical training, years of medical practice, personal knowledge, participation at professional conferences, and familiarity with relevant medical literature and statistical data recognized as reliable in the medical profession. The literature considered in forming my opinions includes, but is not limited to, the sources cited in this declaration. All of my opinions are expressed to a reasonable degree of medical certainty.

4. I have reviewed the expert reports submitted by Monique Chireau Wubbenhorst, M.D., M.P.H. (Expert Report of Monique Chireau Wubbenhorst, M.D., M.P.H. ("Wubbenhorst), DE 97-2); Susan Bane, M.D., Ph.D. (Expert Report of Susan Bane, M.D., Ph.D. ("Bane"), DE 97-4); and Catherine J. Wheeler, M.D. (Expert Report of Catherine J. Wheeler, M.D. ("Wheeler"), DE 97-3), and I am submitting this rebuttal declaration to respond to certain of the statements and opinions expressed in their reports. Nothing in these reports alters the conclusions I reached or the opinions I expressed in my prior declaration. The fact that I do not address every statement or issue raised in the intervenors' witnesses' reports does not suggest that I agree with them.

I. Abortion Is Health Care

5. Abortion is health care—safe, common, and essential health care. It should be treated like all other comparably safe health care, not singled out for medically unnecessary restrictions.

6. Leading medical authorities agree that abortion is one of the safest procedures in medical practice,[1] and it is safely and routinely provided in outpatient settings both here in North Carolina and nationally. I know that abortion is safe not only because high-quality research confirms it,[2] but also because of my own experience providing abortions in an outpatient clinic setting for over 20 years.

7. The intervenors' witnesses cast aspersions on the published data demonstrating that abortion complication rates are very low. Wubbenhorst ¶¶ 14–28; Bane ¶¶ 35–37 ("The extremely low percentage of abortion-related events revealed *may or may not* be due to a truly low complication rate." (emphasis added)). But PPSAT's own complication rates are comparable, which is to say that they are extraordinarily low—indeed, our rates are even lower than the rates documented in the literature. DE 94-1 ¶ 53.

8. We instruct patients to call us if they have any concerns or complaints, or if they seek care in an emergency department, and patients do call us in these rare circumstances. Usually, the patient calls us first to raise a concern before going to the hospital on our advice, but occasionally a patient calls us after having decided to go to the

[1] Nat'l Acads. Scis., Eng'g, & Med. (NASEM), *The Safety and Quality of Abortion Care in the United States* 1, 77 (2018), (available at http://nap.edu/24950) ("The clinical evidence makes clear that legal abortions in the United States—whether by medication, aspiration, D&E, or induction—are safe and effective.").

[2] *Id*.; Ushma D. Upadhyay et al., *Incidence of Emergency Department Visits and Complications After Abortion*, 125 Obstetrics & Gynecology 175, 181 (2015); *see also* Ushma D. Upadhyay et al., *Abortion-Related Emergency Department Visits in the United States: An Analysis of a National Emergency Department Sample*, 16 BMC Med. 1, 1 (2018).

hospital. Less frequently, the hospital will contact us with questions about the patient's care. When a patient visits a hospital after receiving an abortion from us, we follow up with the hospital and request the records from the visit for internal review. It is illogical to assume that the patients we do *not* hear from have all experienced serious complications requiring hospital treatment. Wubbenhorst ¶ 130.

9. While the risks of abortion do rise with gestational age, abortion remains extremely safe overall—and, as discussed below, the risks of abortion at later gestational ages are no higher than the risks of D&E for miscarriage management. Moreover, restrictions on where abortion can be performed, like the Hospitalization Requirement, delay patients by adding logistical complexity and expense, which in turn requires patients to have abortions at later gestational ages when the risk of the procedure has risen.

10. Dr. Wubbenhorst's claim that abortion is "not health care," *id.* ¶¶ 32–34, is an ideological opinion, not a medical one. And it ignores that pregnancy is a health condition with serious and sometimes permanent consequences. Even when desired, pregnancy can lead to significant morbidity and mortality. Thus abortion—offering the option of ending an undesired or medically harmful pregnancy—is a critical component of health care. Notably, for all the intervenors' witnesses say about potential complications from abortion, they completely ignore the potential complications from pregnancy and childbirth.

11. Despite its proven safety, abortion is stigmatized like no other form of medical care, as I described in detail in my opening declaration. DE 94-1 ¶¶ 76–82. This

stigma is a significant reason why some health professionals do not provide abortion. Specifically, in my experience, clinicians are often discouraged from providing abortion by the lack of training available, by hospital or group practices that discourage or outright prohibit doctors from providing abortion, by the prevalence of provider harassment (sometimes violent) by protestors and anti-choice groups who directly target providers,[3] and by general societal stigma around abortion.

12. The study Dr. Wheeler cites[4] on why most OB-GYNs do not provide abortion, Wheeler ¶¶ 16–20, actually did not ask why the surveyed providers do not perform abortions. The study authors did, however, ask the smaller percent who neither perform nor refer patients for abortion care *why* they do not refer. And even within that subset of physicians who neither perform nor refer, only 16% reported not referring due to a personal moral or ethical objection to abortion. *See also* Bane ¶ 22 (discussing research finding that, among the surveyed sample of fellows who did not provide abortion, only 34% cited "personal, religious, or moral beliefs against abortion" as the reason they did not—meaning 66% had other reasons).[5]

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[3] *2022 Violence & Disruption Statistics*, Nat'l Abortion Fed'n 1, 2, 6–7 (2022), https://prochoice.org/wp-content/uploads/2022-VD-Report-FINAL.pdf (documenting threats against abortion providers and patients including, in 2022, 218 threats of death or other physical harm and 92 cases of stalking—up from 182 threats and 28 cases of stalking in 2021).

[4] Sheila Desai et al., *Estimating Abortion Provision and Abortion Referrals Among United States Obstetrician-Gynecologists in Private Practice*, 97 Contraception 297 (2018).

[5] Daniel Grossman et al., *Induced Abortion Provision Among a National Sample of Obstetrician-Gynecologists*, 133 Obstetrics & Gynecology 477 (2019).

13. So rather than moral opposition to abortion itself, the studies that Dr. Wheeler cites speak to lack of access to training and the fact that most abortions occur in free-standing clinics, as well as the stigma that contributes to these other factors. Specifically, because most abortions are performed in outpatient clinics rather than in hospitals, medical residents often cannot obtain abortion training opportunities at the hospitals where their residency is based, and instead must obtain access to elective training at independent non-hospital-based clinics to get the experience they need to perform abortion procedures.

14. Dr. Bane describes ways that physicians regard their responsibility to both the pregnant patient and the fetus when they are caring for patients with desired pregnancies. Bane ¶¶ 19–26. In the context of desired pregnancy, this approach is consistent with the pregnant patient's treatment goals. ACOG's Committee on Ethics is clear, however, that when circumstances "arise during pregnancy in which the interests of the pregnant woman and those of the fetus diverge," the "most suitable ethical approach for medical decision making in obstetrics . . . . recognizes that the obstetrician–gynecologist's primary duty is to the pregnant woman."[6]

15. While abortion care can be complex and nuanced, ultimately it is my job to work with patients who have identified that it is in their own best interests (and often in the

[6] Comm. on Ethics, *ACOG Committee Opinion No. 664: Refusal of Medically Recommended Treatment During Pregnancy*, 127 Obstetrics & Gynecology e175, e177 (2016).

best interest of their family, as 60% of abortion patients already have children[7]) to end an undesired pregnancy or a pregnancy that threatens their health. When a pregnant person identifies that abortion is the appropriate healthcare decision for them, then I must prioritize the life and needs of the pregnant person as my patient. I approach my work with abortion patients from a place of deep compassion, non-judgment, and respect for their own autonomy and self-awareness of what is best for them. It is a profound honor and privilege to be able to support and treat patients during what is often a vulnerable time, especially in the traumatizing setting of severe abortion bans and restrictions, high levels of protester activity, and vocal stigmatization of this care.

II. There Is No Medical Justification For The Hospitalization Requirement's Disparate Treatment of Abortion and Miscarriage Care

16. Procedural abortions are safely performed in outpatient clinics, and performing them in a hospital does not decrease the already very low odds of complications arising.[8] Wubbenhorst ¶ 12. Moreover, procedural abortions are as safe as, if not safer than, procedural management of miscarriage at the same gestational age and using similar

[7] *See* Katherine Kortsmit et al., *Abortion Surveillance - United States, 2021*, 72 CDC Morbidity & Mortality Wkly. Rep. Surveillance Summaries 1, 6 (2023) (reporting that in 2021, among the reporting areas that reported the number of previous live births, 60.7% of abortions reported were among women who had one or more previous live births).

[8] David K. Turok et al, *Second Trimester Termination of Pregnancy: A Review by Site and Procedure Type*, 77 Contraception 155, 155 (2008); Sarah C. M. Roberts et al., *Association of Facility Type with Procedural-Related Morbidities and Adverse Events Among Patients Undergoing Induced Abortions*, 319 JAMA 2497, 2502 (2018); Barbara S. Levy et al., *Consensus Guidelines for Facilities Performing Outpatient Procedures: Evidence Over Ideology*, 133 Obstetrics & Gynecology 255 (2019).

techniques. There is no medical reason to treat these two types of medical care differently by requiring a hospital setting for one but not the other.

A. The intervenors' witnesses mischaracterize D&E to suggest that it must be performed in a hospital to be safe.

17. As an initial matter, Dr. Wheeler seems to draw a line between aspiration and D&E at 13 weeks of pregnancy, but that is not consistent with my clinical practice. Wheeler ¶¶ 12–14. I and most of my colleagues at PPSAT do not typically use instruments in addition to suction until after 15 weeks of pregnancy.

18. Moreover, it is important to understand that early in the second trimester, aspiration and D&E are not a binary—rather, these procedures exist on a continuum, where the patient's individual medical characteristics and the abortion provider's individual training and practice determine whether instruments (and which instruments) are needed in a particular procedure, or whether suction alone will suffice.

19. Aspiration and D&E both use suction from a vacuum aspirator to empty the patient's uterus. The intervenors' witnesses take issue with my characterization of this suction as "gentle," *see* Bane ¶ 39, Wheeler ¶ 13. While Dr. Wheeler suggests that 400–500 mmHg is a great deal of suction, that is not true. I can (and regularly do when demonstrating suction to a trainee) attach the suction to the palm of my hand without causing pain, bruising, or harm of any kind. As a comparison, a typical breast pump has suction of 220–350 mmHg, and cupping therapy (an adjunctive therapy sometimes used to help with musculoskeletal pain, inflammation, and blood flow) can use pressures ranging

from 75–750 mmHg.[9] We are trained to, and do, use the suction cannula gently: Dr. Wheeler references using a curette, which is a sharp instrument rarely if ever used at PPSAT. And PPSAT routinely uses ultrasound guidance when performing D&Es after 14 weeks, just as Dr. Wheeler urges. Wheeler ¶ 28.

B. Most complications from D&E can be managed in an outpatient setting.

20. Even when complications do arise from procedural abortion, most of the time they can be safely treated at the clinic where the abortion was performed. And when a higher level of care is needed, abortion clinic staff are trained to stabilize the patient and facilitate their transfer. To make the transfer process as seamless as possible, PPSAT coordinates with OB-GYN groups at our local hospitals to figure out their preferred patient transfer process—for example, some hospitals prefer that we send patients to ER triage; others ask us to call the resident on call ahead of time. It is therefore not the case that abortion clinics "are not equipped to handle" serious complications, even if we do not *treat* certain serious complications at our health centers. Wubbenhorst ¶ 12; Bane ¶ 50; Wheeler ¶ 23.

21. We should not require all abortions past the twelfth week of pregnancy to be performed in a hospital setting because of the very low risk of complications requiring hospital treatment. Dr. Wheeler specifically lists a number of what she defines as "surgeries" (endometrial biopsy, suturing wounds, orthopedic manipulations, endoscopic

[9] Ku Weon Kim et al., *Pressure Levels in Cupping Therapy: A Systematic Review*, 37 J. Acupuncture Rsch. 28 (2020).

procedures), Wheeler ¶ 22; all of these procedures can and routinely do occur outside of a hospital operating room despite the fact that they can result in complications requiring hospitalization. It would be a terrible use of hospital resources to require all of those procedures to happen in a hospital. The features specific to an operating room (such as air-flow differentials, sterile corridors, and equipment for general anesthesia including intubation) are not needed to perform a procedural abortion safely because the procedure involves no incisions. *See* DE 94-1 ¶ 15. Using an operating room for abortion procedures would delay (or be delayed by) the scheduling of procedures that cannot be performed safely without a full sterile operating room setting and anesthesiologist support.

22. All patient-centered outpatient health care providers rely on hospital care for back-up; every clinic, regardless of the care they are providing, should have a system for transferring a patient to the hospital should they have a complication or adverse reaction. For example, primary care, internal medicine, pediatric, and allergy/immunology clinics that provide "allergy shots" must have a system to transfer patients who experience anaphylaxis after an injection.[10] The suggestion that abortion should be held to a different standard than all other medical care, without a safety reason for doing so, is the product of abortion stigma. *See* Wubbenhorst ¶ 135.

[10] Phil Lieberman, *The Risk and Management of Anaphylaxis in the Setting of Immunotherapy*, 26 Am. J. Rhinology & Allergy 469, fig.1 (2012) (algorithm for when to call 911).

23. As I explained in my earlier declaration, hospital providers' distaste for manual vacuum aspirators (MVAs) is another example of abortion stigma interfering with medical best practice. MVAs have been used in first-trimester abortion care for decades; at PPSAT, we use MVAs for abortion up to approximately 8 or 9 weeks of pregnancy, after which point we switch to electric vacuum aspirators (EVAs). Similarly, as Dr. Wubbenhorst acknowledges, MVAs can be used to manage miscarriage in the first trimester. *Id.* ¶ 79. Before 8 or 9 weeks, MVAs are preferable to EVAs because MVAs better facilitate examination of aspirated tissue at very early gestational stages and because EVAs are noisier, which can make patients feel nervous. But hospitals were historically hesitant to stock MVAs or to train physicians on how to use them for miscarriage management *because of* MVAs' association with abortion. While I disagree with Dr. Wubbenhorst's opinion that second-trimester D&Es—either for miscarriage management or for abortion—"should be" performed in a hospital, *id.* ¶ 80, the point of this MVA history is that abortion stigma leads to miscarriage management and abortion being provided differently even though they are clinically the same.

24. Hemorrhage is incredibly rare and occurs far less frequently as a complication of D&E than with full term delivery.[11] I disagree with Dr. Wheeler's

[11] *See* Comm. on Practice Bulletins—Obstetrics, *ACOG Practice Bulletin No. 183: Postpartum Hemorrhage*, 130 Obstetrics & Gynecology e168 (2017) (postpartum hemorrhage is the leading cause of severe maternal morbidity in the United States); William M. Callaghan et al., *Trends in Postpartum Hemorrhage: United States, 1994–2006*, 202 Am. J. Obstetrics & Gynecology 353.e1, 353.e2 (2010) (reporting that between 1994 and 2006, the percentage of delivery hospitalizations with a code for postpartum

suggestion that it is harder to treat hemorrhage arising from a second-trimester D&E than hemorrhage resulting from term childbirth. Wheeler ¶¶ 14, 31. While it was previously hypothesized that oxytocin might be a less effective uterotonic than other medications because the uterus has fewer oxytocin receptors in mid-trimester as compared with at term,[12] more recent clinical recommendations recognize that prophylactic oxytocin can be useful in decreasing bleeding in the second trimester.[13] For D&E procedures, PPSAT routinely adds prophylactic vasopressin to the paracervical block starting around 14 or 15 weeks of pregnancy, as this has been shown to reduce the risk of hemorrhage with D&E.[14] But more importantly, oxytocin is not considered a first-line therapy for hemorrhage—in the rare event of heavy bleeding following abortion, we prioritize other, more effective medications such as misoprostol, methergine, and TXA, which are not dependent on oxytocin receptors. Of course, for the vast majority of D&E patients, there is no heavy bleeding requiring additional treatment.

25. Patients who would benefit from a hospital setting are referred there for their abortion. Clinicians should, and do, assess in advance the safest setting for a given

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hemorrhage increased from 2.3% (85,954 deliveries) to 2.9% (124,708 deliveries)); Jennifer Kerns & Jody Steinauer, *Management of Postabortion Hemorrhage*, 87 Contraception 331, 331 (2013) (estimates for rate of hemorrhage after abortion in the second trimester range from 0.9 to 10 per 1,000 cases, or 0.09% to 1%).

[12] Kerns & Steinauer, *supra* note 11 at 333.

[13] Jennifer L. Kerns et al., *Society of Family Planning Clinical Recommendation: Management of Hemorrhage at the Time of Abortion*, 129 Contraception 1, 6, 7, 9 (2023) (prophylactic oxytocin is associated with lower blood loss in second-trimester abortions).

[14] Kenneth F. Schulz et al., *Vasopressin Reduced Blood Loss from Second-Trimester Dilation and Evacuation Abortion*, 326 Lancet 353 (1985).

procedure in light of a particular patient's medical circumstances. *See id.* ¶ 24. We screen patients and refer those at higher risk of complications to the hospital for their abortion. As with many other outpatient procedures, the fact that there is a small risk of complications does not mean we should *always* perform the procedure in a hospital.

C. Abortion clinics ensure that patients receive adequate pain management.

26. Abortion clinics provide adequate pain management for the vast majority of procedural abortion patients, and patients who request a higher level of sedation are referred for hospital procedures. At PPSAT, we offer moderate sedation with IV medications for all abortions over 15 weeks gestation, as measured from the first day of the patient's last menstrual period (LMP). All PPSAT clinicians who oversee moderate sedation are specifically privileged to do so after appropriate training. Having trained non-anesthesiologists administer this IV sedation is consistent with the standard of care, as reflected in the North Carolina Medical Board's position statement on office procedures and sedation: they do not require or recommend anesthesiologists for minimal/moderate sedation (level I or II procedures).[15] *See* Bane ¶ 52. Minimal sedation is routinely achieved through oral or inhaled treatments such as oral lorazepam or inhaled nitrous oxide; moderate sedation involves delivery of medication through an intravenous line, with the patient remaining conscious and responsive throughout the procedure. Unlike with deep

[15] N.C. Med. Bd., *5.1.1: Office-Based Procedures*, Position Statements (Sept. 2021), https://www.ncmedboard.org/resources-information/professional-resources/laws- rules-position-statements/position-statements/office-based_procedures.

sedation or general anesthesia, no intervention is required to maintain a patient's airway during moderate sedation.[16]

27. Dr. Wheeler implies (without citing any data on pain relief for second trimester procedures[17]) that general anesthesia is required to provide adequate pain relief for procedural abortion. Wheeler ¶¶ 39–41. This is completely inconsistent with the standard of care. General anesthesia requires intubation and significantly *increases* the patient's risk of adverse reactions (as does deep sedation relative to moderate sedation). Anesthesia itself carries risks for patients, and additionally, general anesthesia with inhaled volatile anesthetics has been associated with an increased risk of hemorrhage during D&E for either abortion or miscarriage.[18] Therefore, while general anesthesia may be appropriate for some specific patients, it is not advisable pain relief for most procedural abortion patients after the twelfth week of pregnancy, and certainly is not a reason to require all patients to obtain their procedural abortion in a hospital setting.

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[16] Comm. on Quality Mgmt. & Departmental Admin., *Statement on Continuum of Depth of Sedation: Definition of General Anesthesia and Levels of Sedation/Analgesia*, Am. Soc'y Anesthesiologists (last amended Oct. 23, 2019) https://www.asahq.org/standards-and-practice-parameters/statement-on-continuum-of-depth-of-sedation-definition-of-general-anesthesia-and-levels-of-sedation-analgesia.

[17] Regina M. Renner et al., *Pain Control in First-Trimester Surgical Abortion: A Systematic Review of Randomized Controlled Trials*, 81 Contraception 372 (2010).

[18] Hyun Ah Lee et al., *Impact of Anesthetic Agents on the Amount of Bleeding During Dilation and Evacuation: A Systematic Review and Meta-Analysis*, 16 PlosOne e0261494 (2021).

28. Moreover, in the study cited by Dr. Wubbenhorst, ¶ 83, n.74,[19] which surveyed patients obtaining abortion by D&E after 16 weeks gestation at an outpatient abortion clinic, the bulk of the pain reported arose during the passive cervical dilation process (when medications or osmotic dilators were in place in the patient's cervix), not during the D&E procedure itself (when patients had intravenous sedation). Because any difference in sedation level between a clinic and hospital would occur during the D&E procedure, not while passive cervical dilation is taking place, we would expect patients' experience of pain during the dilation process to be the same in both settings.

29. The point is that patients who desire deeper sedation, or those for whom the provider feels deeper sedation is medically indicated, can still be referred for an abortion in a hospital setting, and patients should *also* have the option of getting care in a dedicated, high-quality, less-expensive clinical site if they choose—as the vast majority of abortion patients currently do.

D. Hospitals are not more equipped than clinics to care for patients seeking abortion due to rape, incest, or life-limiting anomaly.

30. Hospitals are not better situated than clinics to treat patients in the specific contexts of rape, incest, or life-limiting anomaly. These cases are not necessarily more medically complex than other abortions at the same gestational age. Bane ¶ 46. Patients with life-limiting anomalies are referred to PPSAT by hospital physicians, so those patients

[19] Ilana G. Dzuba et al., *Pain, Side Effects, and Abortion Experience Among People Seeking Abortion Care in the Second Trimester*, 3 Women's Health Reps. 533 (2022).

have already been counseled on the availability of perinatal hospice and patient support services, and PPSAT sends tissue to a pathology lab as needed, just as a hospital would. *See id.* ¶ 58.

31. Dr. Bane suggests that hospitals are better equipped to "ensure the forensic chain of evidence is followed" when survivors of rape or incest wish to preserve pregnancy tissue for law enforcement. *Id.* ¶ 58. But Dr. Bane ignores (or is unaware) that PPSAT, too, has training and protocols in place for when a patient wishes to preserve pregnancy tissue for law enforcement. Indeed, I have been complimented by crime scene investigators on the rigor of our protocols.

32. Specifically, we ask every abortion patient who is a survivor of rape whether they want to use tissue for law enforcement; most do not. But for those who do, or where release of tissue is compelled by a court order, warrant, or grand jury subpoena, we follow the chain of custody guidelines provided by law enforcement for processing, packaging, and transmitting pregnancy tissue for genetic/DNA testing. The patient completes a form granting consent to release the tissue. The abortion provider notes in the patient's medical record that the pregnancy tissue has been kept under their control from the time of the procedure through processing and until securely placed in a specimen container and sealed with a tamper-evident label. If a chain of custody/evidence form is required by the relevant law enforcement official, the provider or their designee will complete that form and scan it into the patient's medical record. If this form is not required by law enforcement, the provider or their designee will document in the medical record the name of the law

enforcement representative to whom the pregnancy tissue has been released, as well as the date released.

33. While abortions in the case of rape or incest are not more technically complicated than other abortions, they can be more socially or psychologically complex, and as I explained in my first declaration, PPSAT physicians and staff are specially trained to care for these patients in a compassionate, trauma-informed way. DE 94-1 ¶¶ 95–98.

34. Dr. Wubbenhorst is wrong that abortion clinics are ill-equipped to screen for and support patients experiencing intimate partner violence, including reproductive coercion. *See* Wubbenhorst ¶¶ 165–68. PPSAT screens for abortion coercion and assesses decisional certainty as part of our informed consent and counseling process. We ask every patient a series of questions to assess their confidence and whether they have been pressured either to obtain an abortion or to remain pregnant. We ask them these questions without anyone else present in the room, even if a partner or other support person is present for all other parts of the visit. The purpose of these discussions is, among other things, to ensure the patient has considered their options; is confident in their decision to have an abortion; and is making an informed and voluntary decision. During this process, staff are trained to pay close attention to the patient's body language cues in addition to the patient's verbal responses. On the rare occasion a patient exhibits signs of ambivalence or suggests they are not firm in their decision, regardless of whether coercion is a factor, the staff member takes time to explore those feelings with the patient and discuss all their options, including continuing the pregnancy.

35. Dr. Bane's farfetched concern about abortion clinics' ability to treat a "live birth," Bane ¶ 51, is irrelevant to the abortions that PPSAT would provide under the rape, incest, and life-limiting anomaly exceptions—i.e., aspiration and D&E up to 20 weeks of pregnancy, when there is no reasonable possibility of a live birth.

E. Outpatient abortion providers provide excellent patient care.

36. The intervenors' witnesses suggest—both directly and through implication—that abortion providers at outpatient clinics lack necessary training and skill. This is a persistent stereotype about abortion providers that is grounded in abortion stigma, not fact.

37. For example, Dr. Bane suggests that the most highly trained abortion providers work in hospitals. *Id.* ¶¶ 46–47. While some experienced abortion providers do work in hospitals, many work in outpatient clinics (including PPSAT clinics)—either as full-time staff or in addition to their work at a hospital. Abortion providers who practice in outpatient clinics have more opportunity than hospital physicians to develop the experience necessary to provide the highest-quality care, simply because most abortions are provided in clinics, not hospitals.[20] And the converse is true, as well: patients seeking abortion in a hospital will not necessarily be treated by an experienced abortion provider, or by a physician with the Complex Family Planning or Maternal-Fetal Medicine specialist training that Dr. Bane describes. Bane ¶ 47.

[20] Turok et al., *supra* note 8.

38. Lastly, while Dr. Bane speculates baselessly about abortion providers exceeding their scope of practice, Bane ¶ 53, all PPSAT abortion providers who perform D&E—including myself—have procedure- and gestational-duration-specific privileges based on our training and demonstrated competence. It is standard practice in medicine for a clinician to continue to expand their skills after formal residency/fellowship training through peer training and proctoring.[21] Otherwise, no doctor would be able to perform any procedure that was developed after they graduated from residency or fellowship, including new standard-of-care surgical techniques. Lifelong learning is a trademark of medicine, and this includes learning new procedural skills. Here as elsewhere, abortion providers should not be held to a different standard than all other physicians.

39. In another illustration of abortion stigma, Dr. Wubbenhorst argues at length, but with only speculative anecdotal support, that PPSAT and abortion providers generally are unwilling to provide follow-up care for our abortion patients who experience complications. Wubbenhorst ¶¶ 130–48. As I have explained, DE 94-1 ¶¶ 47–52, and as PPSAT's complication data shows, *id.* Ex. 5; *id*. Ex. 6; *id*. Ex. 7, we manage the vast majority of abortion complications in our clinics. Dr. Wubbenhorst is therefore wrong to suggest that even though abortion complications are rare, *all* abortion complications are severe and require hospital treatment. Wubbenhorst ¶ 117. Only rare complications require

[21] Thomas E. Norris et al., *Teaching Procedural Skills*, 12 J. Gen. Internal Med. S64 (1997) ("Several studies . . . have demonstrated that primary care physicians are able to master complex procedures such as colposcopy, cesarean section, and ultrasound, with results that are indistinguishable from those of more narrowly trained specialists.").

referral for a higher level of care. All PPSAT health centers are equipped with emergency carts that include resuscitative medications, resuscitative devices, IV kits and fluid bags for volume resuscitation, oxygen with nasal cannula or mask, and automated external defibrillator (AED) devices. PPSAT staff are trained to stabilize patients using these supplies and to transfer them to the hospital.

40. This is how all medicine is practiced. Primary care providers and specialists alike will routinely treat patients even though some of the complications that could *possibly* arise, even if extremely unlikely, could not be treated on-site and would require transfer to another facility. No one would suggest that all IUD placements should happen in hospital operating rooms simply because there is a remote possibility of uterine perforation during that procedure. We should not apply a different standard to abortion.

F. Abortion clinics are subject to comprehensive oversight.

41. Dr. Wubbenhorst opines that abortion clinics are insufficiently regulated and that hospitals are therefore safer generally. *Id.* ¶¶ 150–57. To the contrary, abortion clinics are *highly* regulated and intensely scrutinized. All PPSAT health centers receive state oversight on their compliance with facility licensing regulations, including infection prevention standards and recordkeeping standards. State regulations dictate the contents of the emergency carts in all of our health centers. The North Carolina Department of Health and Human Services inspects our health centers' compliance with all applicable regulations as part of our routine facility license renewal process. While initial licensing visits are announced, all follow-up visits are unannounced. And as evident from the Department of

Health and Human Services archive Dr. Wubbenhorst cites,[22] all deficiencies identified at PPSAT health centers through those visits were minor, and all were corrected to DHHS's satisfaction. Indeed, our clinic licenses would not have been renewed otherwise. So while Dr. Wubbenhorst opines that North Carolina abortion clinics "cannot meet minimal state-mandated standards of safety and hygiene," *Id.* ¶ 153, the *exact opposite* is true: North Carolina's abortion clinics remain open to the public *because* they have met state-mandated safety and hygiene requirements. Identification of deficiencies—and of their correction—is evidence of appropriate PPSAT quality control systems and rigorous state oversight, not of insufficient regulation.

G. Abortions are just as safe in clinics as in hospitals.

42. Research demonstrates that second-trimester D&Es are just as safe in clinics as in hospitals, if not safer.[23] Dr. Wubbenhorst and Dr. Wheeler argue that the study conducted by Turok et al., comparing the safety of second-trimester D&Es in hospitals to those in clinics, "overestimated" this point because the patient population at the hospital was generally more high-risk than the patients at the outpatient clinics. *id.* ¶¶ 139–44, Wheeler ¶¶ 43–48. But this just reflects that high-risk patients are already referred to hospitals for their abortions, without a detrimental effect on the safety of second-trimester D&Es for medically uncomplicated patients in outpatient settings. The clinical setting of

[22] *Reports of Surveys for Abortion Clinics*, N.C. Div. Health Serv. Regul., (Mar. 2016), https://info.ncdhhs.gov/dhsr/ahc/sods/results.asp.

[23] Turok et al., *supra* note 8; Roberts et al., *supra* note 8.

the abortion should be determined based on the patient's clinical circumstances, not solely whether the patient is past the twelfth week of pregnancy.

43. Dr. Wubbenhorst similarly discounts the relevance of the consensus guidelines on facility requirements for abortion published by Levy et al.[24] and the study by Roberts et al.[25] comparing the safety of abortions in ambulatory surgical centers versus clinics. But both papers support the broader point that abortion is as safe as other outpatient procedures, and that the facility in which the abortion is provided does not change abortion's safety.

44. As an alternative to arguing that hospitals are safer than outpatient clinics, the intervenors' witnesses acknowledge that abortion safety is primarily a function of the abortion provider's experience, and suggest that experienced abortion providers should just get hospital privileges to continue providing abortion under the Hospitalization Requirement. Wheeler ¶ 48. First, this suggestion ignores the significant burden that the Requirement imposes on patients by requiring them to obtain abortions in hospitals rather than clinics without medical justification. But second, requiring our North Carolina abortion providers to obtain admitting privileges at hospitals would be prohibitively difficult. Hospital privileges are a costly and onerous business agreement based on the amount of business that a health care provider does with a hospital. Because abortion is so safe and hospital transfers are so rare, it would be incredibly difficult and time-consuming,

[24] Levy et al., *supra* note 8.
[25] Roberts et al., *supra* note 8.

and in some cases may be impossible, for me and other PPSAT providers to obtain hospital privileges. Based on my experience obtaining courtesy privileges at one hospital, I know that it is time-intensive to get those privileges and that maintaining them also takes time and adds cost. Many of our providers work in multiple locations across the state, so they would need to obtain privileges at many hospitals in order to continue providing care to our patients in a hospital setting. Furthermore, there are many reasons doctors prefer to provide abortion in a clinic setting, including that abortions are less expensive and onerous for patients in that setting, and staff are specifically trained in compassionate, non-judgmental care.

H. Procedural abortions are just as safe as procedural management of miscarriage.

45. As an initial matter, I note that the intervenors' witnesses focus primarily on the alleged risks and complexity of the D&E procedure to justify the Hospitalization Requirement for all abortions after the twelfth week of pregnancy. *E.g.* Wheeler ¶¶ 18–32; Wubbenhorst ¶¶ 44–48, 111–12; Bane ¶¶ 53, 57. They overstate these concerns, as I explain above. But even taking them at face value, the risk and complexity of a D&E is the same when used to manage *spontaneous* pregnancy loss as when used for abortion. Indeed, as I explained in my first declaration, DE 94-1 ¶ 29 & n.12, the risk of complications from D&Es to manage spontaneous pregnancy loss in the second trimester can be *higher* than

the risk of complications from D&Es for abortion at the same gestational age.[26] But the Hospitalization Requirement applies only to abortion.

46. Additionally, the intervenors' witnesses' focus on D&E ignores that PPSAT generally provides abortion using aspiration—not D&E—into the fourteenth or fifteenth week of pregnancy. The Hospitalization Requirement therefore forces patients to obtain first-trimester aspiration procedures as well as D&Es in the hospital setting. None of the intervenors' witnesses meaningfully attempts to justify this facility requirement for first-trimester aspiration procedures. *E.g.* Wheeler ¶¶ 23 ("[T]he safest location for patients to undergo *a D&E* is in the hospital setting." (emphasis added)), 50 ("[I]t is in the patient's best medical interest to perform *second trimester D&E procedures* in a hospital setting . . . ." (emphasis added)).

47. Focusing on D&Es, Dr. Bane describes physiological differences between patients with spontaneous fetal death and patients with ongoing pregnancies, but she does not give any reason why these differences would make *the D&E procedure* more dangerous when performed for abortion than when performed to manage miscarriage. Bane ¶¶ 54–57.

48. Rather than providing evidence that procedural abortion is riskier than procedural miscarriage management at the same gestational age, Dr. Wubbenhorst criticizes my reliance on an ANSIRH issue brief, Wubbenhorst ¶ 85. But the cited study on miscarriage complications does, in fact, "use[] a large national sample to compare the

[26] Kerns et al., *supra* note 13 at 1, 3.

safety of miscarriage treatment in different facilities,"[27] and in turn supports ANSIRH's (and my) conclusion that the rates of miscarriage-treatment-related complications are higher than documented rates of abortion-related complications. Specifically, the study examined whether miscarriage treatment-related morbidities and adverse events varied across hospitals, ASCs, and office-based settings: the researchers found no statistically significant differences in events after second-trimester procedures across hospitals (9.6%), ASCs (7.1%), and office-based settings (5.8%), and observed that "[t]he rates of miscarriage treatment–related events are notably higher than published rates of abortion-related events.[28]

49. Meanwhile, Dr. Wubbenhorst's reliance on complication rates for miscarriage management *using medications in the first trimester* is irrelevant to the Hospitalization Requirement, which applies only to abortions after the twelfth week of pregnancy. Wubbenhorst ¶¶ 89–90. Similarly, the 1999 study by Jensen and colleagues, which Dr. Wubbenhorst cites for complication rates from abortion, is not relevant to this question because it looked only at complications from abortions before 63 days (nine weeks) LMP. Wubbenhorst ¶ 90. Dr. Wubbenhorst also misstates the mortality ratios for miscarriage at various gestational ages by an order of magnitude, *see id.* ¶¶ 91–92 (presumably due to a mistake in converting a ratio of deaths per 1,000,000 miscarriages to

[27] Sarah C. M. Roberts et al., *Miscarriage Treatment-Related Morbidities and Adverse Events in Hospitals, Ambulatory Surgery Centers, and Office-Based Settings*, 16 J. Patient Safety e317 (2020).

[28] *Id.* at e320, e322.

a ratio of deaths per 100,000 miscarriages for ease of comparison with abortion). The 1985 study she cites by Berman et al.[29] lists the following mortality ratios:

Table 5.—Estimated Relative Risk of Death After Non-Intrauterine (Contraceptive) Device-Associated Spontaneous Abortion, by Gestational Age, United States, 1972 Through 1980

Gestational Age, Week From Last Menstrual Period	Percent Spontaneous Abortion by Week of Gestation*	No. of Spontaneous Abortions by Week of Gestation*	No. of Spontaneous Abortion Deaths Non-Intrauterine (Contraceptive) Device-Associated	Ratio†	Relative Risk‡
0-7	49	4,410,000	6	1.4	1.0
8-11	23	2,070,000	14	6.8	5
12-15	16	1,440,000	27	50.0	36
16-19	6	540,000	27	50.0	36
20-24	6	540,000	12	22.2	16
Total	100	9,000,000	86 (15 unknown)	. . .	. . .

*Assuming 9,000,000 spontaneous abortions for 1972 through 1980 and distribution of spontaneous abortions as per Harlaps et al.[6]
†Deaths per million spontaneous abortions.
‡Based on an index ratio of 1.4 for gestational age (0 through 7) weeks.

In any event, these mortality ratios for miscarriage are higher than the mortality ratios for abortion reported by Bartlett et al. up to 20 weeks (and PPSAT does not provide abortion past 20 weeks).[30]

50. Dr. Wheeler appears to agree that aspiration and D&E for abortion are clinically similar and similar in risk to those same procedures for miscarriage management. For example, Dr. Wheeler concedes that these procedures are technically "similar for management of miscarriage (spontaneous abortion), and induced abortion," and that "[i]t is the intentional taking of life"—not any medical or clinical difference—"that makes these completely different procedures." Wheeler ¶ 15. Later, while conceding that "technically the [aspiration or D&E] procedure is similar" when used for these two purposes, and that

[29] Stuart M. Berman et al., *Deaths From Spontaneous Abortion in the United States*, 253 J. Am. Med. Ass'n 3119, 3122 tbl.5 (1985).

[30] Linda A. Bartlett et al., *Risk Factors for Legal Induced Abortion–Related Mortality in the United States*, 103 Obstetrics & Gynecology 729, 733 tbl.2 (2004).

she is not aware of data comparing the safety of these procedures for abortion and for miscarriage care, Dr. Wheeler speculates that "underlying clinical conditions *may* alter the risks and difficulty of the procedure." *Id.* ¶ 50 (emphasis added). Based on her citation to the Turok study, I take her to mean that these procedures might be riskier when performed for medically complicated pregnancies—but a pregnant patient's underlying medical conditions increase the risk of abortion and miscarriage management procedures alike.

51. I cannot imagine what underlying clinical conditions would differentiate the safety of abortion from miscarriage, other than that the risk of disseminated intravascular coagulation (DIC) is heightened with spontaneous fetal demise later in the second trimester: in other words, D&E for miscarriage management can be riskier than D&E for abortion at the same gestational age.[31]

52. Dr. Wubbenhorst, too, appears to acknowledge this heightened risk of DIC from D&E for spontaneous fetal death as compared to D&E for abortion by agreeing that longer duration of fetal demise increases the risk of DIC. Wubbenhorst ¶¶ 86–88. While she states that "[w]ithout knowing the length of time a fetus had been dead, there is uncertainty about the conclusion that rates of DIC were higher in women undergoing D&E for miscarriage vs. abortion," her uncertainty is overstated: length of fetal demise may stratify DIC risk among miscarriage patients obtaining D&Es, but it would not make DIC

[31] Kerns et al., *supra* note 13 at 1, 3; Jennifer L. Kerns et al., *Disseminated Intravascular Coagulation and Hemorrhage After Dilation and Evacuation Abortion for Fetal Death*, 134 Obstetrics & Gynecology 708 (2019).

more likely or prevalent with D&E for abortion. Among all patients, however, DIC is quite rare, and could present hours or days after the D&E procedure is complete—so performing the D&E in a hospital rather than a clinic may not facilitate earlier diagnosis or treatment. *See id.* ¶ 40.

III. The IUP Documentation Requirement Bans A Safe, Evidence-Based Treatment Option That Patients Should Be Allowed To Choose

53. The IUP Documentation Requirement will not lead to ectopic pregnancies being detected or treated sooner. Instead, it limits patients' medical options and delays access to time-sensitive care.

54. The Requirement mandates no additional ectopic pregnancy screening, testing, or follow-up. For example, Dr. Wubbenhorst speculates that patients with undetected ectopic pregnancies will fail to return for follow-up after receiving a medication abortion using the protocol for pregnancies of unknown location, Wubbenhorst ¶ 229, but nothing in the IUP Documentation Requirement requires patients to return for follow-up or to seek care elsewhere, either. It simply requires us to deny them the option of medication abortion. The Requirement therefore will not protect people from complications of undetected ectopic pregnancy by promoting faster or more effective diagnosis of ectopic pregnancy, whereas our protocol will serve to diagnose ectopic pregnancy *without* delaying the patient's access to their strongly desired abortion care. *See id.* ¶¶ 12–13.

A. PPSAT follows the evidence-based standard of care in treating patients with pregnancies of unknown location.

55. PPSAT's protocol is already consistent with what the intervenors' witnesses assert is the standard of care for screening for ectopic pregnancy and treating patients with undesired pregnancies of unknown location.

56. As the Mifeprex label makes clear, Def.-Intervenors' Resp. in Opp. to Pls.' Am. Mot. for Prelim. Inj., Ex. 2, DE 65-2, mifepristone is contraindicated for "confirmed or suspected" ectopic pregnancy because it does not treat ectopic pregnancy. Mifepristone is not contraindicated for pregnancies of unknown location, so Dr. Wubbenhorst is wrong to assert that providing medication abortion to patients at *low risk of ectopic pregnancy*, but with pregnancies of unknown location, "are ignoring clear warnings associated with the use of this drug." Wubbenhorst ¶ 230.

57. What Dr. Wubbenhorst describes as reasons to "suspect" or "confirm" ectopic pregnancy, *id.* ¶¶ 203–15, is completely consistent with how PPSAT screens for risk of ectopic pregnancy in patients seeking abortion. As required by North Carolina law, all patients seeking abortion at PPSAT first obtain an ultrasound. If there is no evidence of intrauterine pregnancy on a transvaginal ultrasound, the patient is screened for risk of ectopic pregnancy. Visualization of an extraovarian adnexal mass on the ultrasound would be a reason to categorize this patient as having a "suspected" ectopic pregnancy, as would symptoms like abdominal pain and/or vaginal bleeding and other medical-history based risk factors for ectopic pregnancy. *Cf. id.* ¶ 203. If we saw a gestational sac with a yolk sac

or embryo outside the uterus, we would categorize the patient as having a "confirmed" ectopic pregnancy. *Cf. id.* ¶ 204. Patients in these categories would not be eligible for medication abortion.

58. Patients without these factors, however, would be categorized as having a "pregnancy of unknown location," or PUL, *not* a "confirmed or suspected" ectopic pregnancy. They would be given an hCG blood test to assess their pregnancy hormone level, and offered the choice between (1) postponing care and doing a repeat ultrasound and an additional hCG blood test to monitor the change in their hormone levels over the course of a few days (what we call "watch and wait"); (2) having an aspiration procedure for the dual purpose of terminating their pregnancy and assessing for ectopic pregnancy (by examining the aspirated tissue to see whether products of conception are present, confirming that pregnancy was intrauterine); or (3) initiating a medication abortion while *also* doing additional hCG blood tests and receiving close follow-up and symptom monitoring from PPSAT clinicians, including repeat ultrasound when the patient is able to return to the clinic.

59. This protocol is consistent with what the intervenors' witnesses describe as best practices for screening for ectopic pregnancy and treating patients without a visible intrauterine pregnancy on transvaginal ultrasound. *Id.* ¶¶ 203–05, 213–21; Wheeler ¶¶ 59–66; Bane ¶¶ 67–69. Since we are following the standard of care for evaluating the risk of ectopic pregnancy to determine whether patients are eligible for medication abortion, close

follow-up *concurrent* with medication abortion is a safe and appropriate course of treatment to offer to patients.

60. Importantly, patients who opt to initiate a medication abortion while continuing to test for ectopic pregnancy through serial hCG testing are closely monitored by PPSAT clinicians. We call the patient after they take the first abortion medication (mifepristone) to check on the patient's symptoms, and if the patient describes symptoms potentially indicating ectopic pregnancy, we send the patient to the nearest hospital for ectopic pregnancy evaluation. No patient in this category would be left to determine on their own, without clinical guidance, "what are normal symptoms of medical abortion and what symptoms require urgent attention for possible ectopic pregnancy." *See* Wheeler ¶ 54; Wubbenhorst ¶¶ 13, 228; Bane ¶ 66.

61. Additionally, our general practice is to provide a follow-up transvaginal ultrasound to all patients who return to the PPSAT health center 48-72 hours after taking the second abortion medication for their second round of hCG labs. In some circumstances—if a patient's initial hCG levels are reassuring, if they do not have concerning symptoms, and if it would be particularly burdensome for them to have their second blood test performed at the PPSAT health center—we refer that patient for their second blood test at a lab closer to their home.

62. Dr. Wubbenhorst's opinions on the standard of care for treatment of patients with pregnancy of unknown location includes guidance specific to patients with "a desired pregnancy." Wubbenhorst ¶ 222, *see also* Wheeler ¶ 66. The guidelines she cites by

Barnhart et al. state that the goal of treatment for patients with *desired* pregnancies of unknown location is to determine whether the patient has had a miscarriage or whether the pregnancy is ongoing, rather than determining whether the pregnancy is intrauterine or ectopic.[32] And these guidelines also recognize that "[f]or patients . . . in whom the pregnancy is undesired . . . management can be expedited, and subsequent testing may not be needed."

63. Similarly, the hCG levels that Dr. Wheeler cites, *see* Wheeler ¶ 66, are what you expect to see when following hormone level changes to diagnose ectopic pregnancy *where there has been no intervention*. By contrast, when we have intervened with medications to terminate the pregnancy, the expected trend of hCG levels would be different—namely, we would be looking for a clear pattern of decreasing hCG levels to confirm the pregnancy was disrupted. If we do not see that expected decrease, we either repeat the ultrasound (where the hormone level rise is suggestive of a normal growing intrauterine pregnancy) or refer the patient to a hospital for further ectopic evaluation (if there is an abnormal hormone level rise or drop suggestive of ectopic).

64. Because treatment of ectopic pregnancy requires specialized medications and equipment, including sometimes laparoscopic surgery, we do not treat patients for ectopic pregnancy in PPSAT's clinics and instead refer patients to a hospital for this care. It is routine in medicine to manage a large scope of practice in one's office but have a rare

[32] Kurt T. Barnhart & Kassie Bollig, *Approach to the Patient with Pregnancy of Unknown Location*, UpToDate 1, 6 (2023).

subset of care that requires referral to a more specialized provider or a higher level facility. The fact that some medical issues require referral does not mean that no care should be provided. If this were the case, then no one would be permitted to be a generalist in medicine (family physician, internist, pediatrician, or OB/GYN generalist for example) and only specialists would exist, which is demonstrably not the case nor in the best interest of patients.

65. Moreover, while we do not provide treatment for ectopic pregnancy at PPSAT's health centers, PPSAT staff are trained to screen for ectopic pregnancy, to counsel patients on the risks and symptoms, and to know when referral is required, so it is a mischaracterization to suggest that PPSAT providers "do not treat women with ectopic pregnancies." *Id.* ¶ 70.

66. Dr. Wubbenhorst invokes a 2020 paper from the *New England Journal of Medicine* that discusses a patient who took abortion medications without medical supervision and ultimately experienced a ruptured ectopic pregnancy. Wubbenhorst ¶¶ 255–56. Because this patient self-managed her medication abortion rather than receiving a medication abortion under PPSAT's protocol for pregnancies of unknown location, this case study does absolutely nothing to undermine the safety of our protocol. Indeed, it does precisely the opposite, as the central thesis of the article is that abortion restrictions that obstruct access to timely abortion care result in more patients self-managing their abortions

outside the medical system, potentially incurring greater risks of complications.[33] This is an argument *against* the prohibitive IUP Documentation Requirement, not for it.

B. The IUP Documentation Requirement would interfere with patient-centered medical care.

67. As the Barnhart guidelines reflect,[34] the goals of treatment for pregnancies of unknown location are different with desired as compared to undesired pregnancies. If the pregnancy is desired, then it is aligned with the patient's treatment goals to wait and absolutely confirm ectopic or failed pregnancy prior to initiating any interventional care. By contrast, when the pregnancy is undesired, the patient's treatment goal is to resolve the pregnancy as quickly as possible (especially in the setting of gestational limit bans and bans that require medically unnecessary repeated clinic visits, as we have here in North Carolina). Offering the patient all options is the most patient-centered approach—including waiting to determine the location of the pregnancy; diagnostic aspiration; *and* medication abortion using the protocol for pregnancy of unknown location. Patients should be permitted to make the decision that is best for them in consultation with their physician after being informed of the risks, benefits, and alternatives available to them.

68. Dr. Wheeler's statement that "[t]here is no clinical urgency nor clinical benefit" to expediting treatment of an undesired pregnancy of unknown location, Wheeler ¶ 64, is not only inconsistent with the Barnhart et al. practice guidelines discussed above;

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[33] Lisa H. Harris & Daniel Grossman, *Complications of Unsafe and Self-Managed Abortion*, 382 New Eng. J. Med. 1029 (2020).

[34] Kurt T. Barnhart & Kassie Bollig, *supra* note 32.

it also fails to account for the obstacles patients must overcome to obtain this care and their strong desire not to remain pregnant against their will any longer than necessary. *See also* Bane ¶¶ 67–69. In North Carolina, patients are already required to come in for two separate and redundant visits 72 hours apart, and each trip to the health center means another encounter with protestors—another product of abortion stigma. Denying patients access to abortion at the time of their visit and instead requiring more visits and tests prior to initiating abortion increases the financial burden on each patient. If abortion patients had free access to timely, affordable abortion, perhaps requiring them to wait would be less onerous. But in North Carolina today, where abortion is banned after the twelfth week of pregnancy and highly restricted up to that point, patients are terrified of missing the narrow window of access and desperate to get care as soon as they possibly can.

69. The IUP Documentation Requirement would prevent us from continuing our current practice of providing evidence-based care that is responsive to our patients' urgency. By initiating medication abortion while concurrently conducting further testing for ectopic pregnancy through serial hCG tests and close monitoring, we have been able to confirm that the medications successfully ended the pregnancy in the same amount of time it would have taken to confirm an intrauterine pregnancy. Through concurrent serial hCG testing we can identify patients who need further evaluation for ectopic pregnancy, and patients who have a successful medication abortion can achieve their treatment goal

sooner.[35] Contrary to what the intervenors' witnesses assert, *see* Wheeler ¶¶ 73–78, the safety and efficacy of this medication abortion protocol is supported both by published research and by my own experience overseeing its use in PPSAT's clinical practice. And because this medication abortion protocol can allow us to exclude ectopic pregnancy *sooner* than if patients were denied medication abortion until their pregnancies were visible by ultrasound[36]—which is what the IUP Documentation Requirement mandates—it does *not* "place women at increased risk of complications from undiagnosed ectopic pregnancy, including a delay in diagnosis," as Dr. Wheeler speculates it "may" do. *Id.* ¶ 78.

70. Patients with pregnancies of unknown location are counseled on the possibility that they may be spontaneously miscarrying, such that their pregnancy would end even without medication abortion. Similarly, we educate patients who have been determined to be low-risk for ectopic pregnancy that it is still possible that they *may* have an ectopic pregnancy, and that if they do, the abortion medications may not end their pregnancy and we will need to refer them for further treatment. Many patients choose this option over the alternatives of "watch and wait" or aspiration. Providing a medication

[35] *See, e.g.*, Alisa B. Goldberg et al., *Mifepristone and Misoprostol for Undesired Pregnancy of Unknown Location*, 139 Obstetrics & Gynecology 771 (2022); Karen Borchert et al., *Medication Abortion and Uterine Aspiration for Undesired Pregnancy of Unknown Location: A Retrospective Cohort Study*, 122 Contraception 109980 (2023); I. Bizjak et al., *Efficacy and Safety of Very Early Medical Termination of Pregnancy: A Cohort Study*, 124 BJOG: Int'l J. Obstetrics & Gynaecology 1993 (2017); Philip Goldstone et al., *Effectiveness of Early Medical Abortion Using Low-Dose Mifepristone and Buccal Misoprostol in Women With No Defined Intrauterine Gestational Sac*, 87 Contraception 855 (2013).

[36] Goldberg et al., *supra* note 35.

abortion to those patients is not an "unnecessary medical interventio[n]," Wubbenhorst ¶¶ 224, 239, 241, 245, 258; it is voluntarily elected, evidence-based medical care.

C. Medication abortion is safe.

71. To justify banning this option for patients, the intervenors' witnesses indirectly argue that medication abortion is dangerous, *see id.* ¶ 13, Wheeler ¶ 55, but that is squarely contradicted by decades of medical evidence.[37] Dr. Wubbenhorst takes issue with my description of the FDA's 2019 report on post-marketing adverse events from mifepristone; the FDA reported 24 deaths following use of mifepristone for abortion (not 26, as Dr. Wubbenhorst's screenshot suggests) out of the approximately 3.7 million patients who took mifepristone for abortion between its FDA approval on September 28, 2000 and December 31, 2018.[38] Wubbenhorst ¶¶ 176–87. But even the screenshot of the FDA report included in Dr. Wubbenhorst's report likewise acknowledges that "fatal cases are included *regardless of causal attribution* to mifepristone," *id*. ¶ 176 (emphasis added),

[37] *See* Advancing New Standards in Reprod. Health, *Analysis of Medication Abortion Risk and the FDA Report, "Mifepristone U.S. Post-Marketing Adverse Events Summary Through 12/31/2018,"* Univ. Cal. S.F. (2019), https://www.ansirh.org/sites/default/files/publications/files/mifepristone_safety_4-23-2019.pdf; NASEM, *supra* note 1 at 7, 16 (explaining that in 2016, "based on extensive clinical research demonstrating the safety of the revised regimen," the FDA updated the approved protocol for medication abortion); *see also id.* at 55 ("Complications after medication abortion . . . are rare—occurring in no more than a fraction of a percent of patients.").

[38] FDA, *Mifepristone U.S. Post-Marketing Adverse Events Summary Through 12/31/2018*, https://www.fda.gov/downloads/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/UCM603000.pdf.

contradicting Dr. Wubbenhorst's insinuation that all 24 deaths were causally related to the abortion, *see id*. ¶ 177.

72. The most recent version of the FDA's report on post-marketing adverse events, which captures adverse events through December 31, 2022, lists 36 deaths following mifepristone use—out of approximately 5.9 million patients over the course of 22 years—and cautions that "[t]hese events cannot with certainty be causally attributed to mifepristone."[39]

73. Similarly, Dr. Bane and Dr. Wubbenhorst argue that mifepristone is more dangerous than Tylenol and Viagra, including because it "carries a black box warning." Wubbenhorst ¶¶ 180–87. In 2011, the FDA instructed manufacturers to include a "black box warning" on all *prescription* drugs containing acetaminophen, highlighting the possibility of severe liver injury.[40] The FDA explained that "OTC products containing acetaminophen (e.g., Tylenol) are not affected by this action," and that "[i]nformation about the potential for liver injury is already required on the label for OTC products containing acetaminophen."[41] But the more important point is that the FDA itself agrees

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[39] FDA, *Mifepristone U.S. Post-Marketing Adverse Events Summary Through 12/31/2022*, https://www.fda.gov/media/164331/download.

[40] FDA, *FDA Drug Safety Communication: Prescription Acetaminophen Products to Be Limited to 325 mg per Dosage Unit; Boxed Warning Will Highlight Potential for Severe Liver Failure*, (Jan. 13, 2011), https://www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-prescription-acetaminophen-products-be-limited-325-mg-dosage-unit#:~:text=In%20addition%2C%20a%20Boxed%20Warning,prescription%20drug%20products%20that%20contain.

[41] *Id*.

that medication abortion is safe and effective, as reflected by its January 2023 modifications to its mifepristone dispensing requirements in recognition of the ever-growing body of evidence demonstrating the safety and effectiveness of medication abortion.[42]

D. Prohibiting medication abortion in the earliest weeks of pregnancy does not protect patients.

74. The intervenors' witnesses attempt to repackage their ideological opposition to medication abortion as a concern about patients being charged for unnecessary medical procedures, but this is simply a further example of the anti-abortion stereotype that abortion providers are greedy and lack regard for patient safety. *See* Wubbenhorst ¶¶ 12, 235. For example, Dr. Wubbenhorst's suggestion that providing medication abortion to patients who may be in the process of miscarrying involves charging a "fee for no reason," Wubbenhorst ¶ 227, fails to acknowledge that the patient has voluntarily chosen this course of treatment, despite the possibility of miscarriage. (It further ignores that the medication abortion regimen is also a known and appropriate regimen for managing miscarriage.)

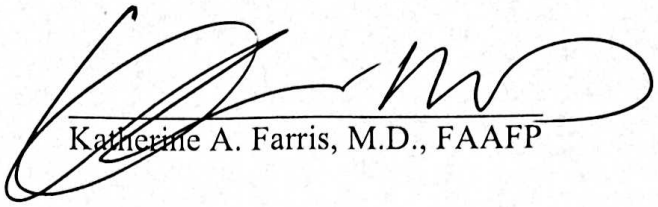
75. Finally, the intervenors' witnesses argue that it promotes patient safety to ban medication abortion for pregnancies of unknown location because aspiration abortion has a higher efficacy rate for ending pregnancies of unknown location. *See* Wheeler ¶ 64;

[42] FDA, *Information About Mifepristone for Medical Termination of Pregnancy Through Ten Weeks Gestation*, (Mar. 23, 2023), https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/information-about-mifepristone-medical-termination-pregnancy-through-ten-weeks-gestation.

Wubbenhorst ¶ 251. But efficacy is not a *safety* interest. And some patients strongly prefer medication abortion over aspiration abortion, even knowing that there is a small chance the medication abortion will fail to end their pregnancy and they will require a follow-up dose of medication or an aspiration procedure to do so. They should not be denied this option.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: 4/30/2024



Katherine A. Farris, M.D., FAAFP

EXHIBIT 2

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

PLANNED PARENTHOOD SOUTH ATLANTIC, *et al.*,	)	
Plaintiffs,	)	
v.	)	
JOSHUA STEIN, *et al.*,	)	Case No. 1:23-cv-00480-CCE-LPA
Defendants,	)	
and	)	
PHILIP E. BERGER, *et al.*,	)	
Intervenor-Defendants.	)	

REBUTTAL DECLARATION OF CHRISTY M. BORAAS ALSLEBEN, M.D., M.P.H. IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT AND RESPONSE IN OPPOSITION TO INTERVENORS' CROSS-MOTION FOR SUMMARY JUDGMENT

I, Christy M. Boraas Alsleben, M.D., M.P.H., declare as follows:

BACKGROUND AND QUALIFICATIONS

1. I submit this rebuttal declaration in further support of the litigation that Plaintiffs Planned Parenthood South Atlantic ("PPSAT") and Dr. Beverly Gray filed to block two components of North Carolina Session Law 2023-14 ("S.B. 20") (codified as amended by Session Law 2023-65 ("H.B. 190") at N.C. Gen. Stat. art. 1I, ch. 90 (the "Act")), which bans abortion after the twelfth week of pregnancy with narrow exceptions.

2. A summary of my qualifications and publications is contained within the March 1, 2024 expert declaration that I prepared for this litigation. Decl. of Christy M.

Boraas Alseben, M.D., M.P.H., in Supp. of Pls.' Mot. for Summ. J. ("Declaration"), DE 94-2. I have attached an updated CV as Exhibit A to this rebuttal declaration.

3. As with the Declaration, the opinions I state here are based on my education, clinical training, experience as a practicing physician, regular review of medical research in my field, and regular attendance and presentation at professional conferences, including conferences for abortion providers. The literature considered in forming my opinions includes, but is not limited to, the sources cited in this declaration.

4. Counsel for plaintiffs asked me to review and respond to the expert reports that Drs. Susan Bane, Catherine Wheeler, and Monique Chireau Wubbenhorst submitted in this litigation. I offer my opinion on certain assertions in those expert reports. The fact that I do not address a particular statement or assertion in the reports does not mean that I agree with the statement or assertion.

STATEMENT OF MY OPINIONS AND THE BASIS AND REASONS FOR THEM

The Obligations of Doctors to Patients

5. As a starting point, Dr. Bane's report discusses the obligations of doctors to our patients.[1] I consider it my responsibility and my honor to provide high-quality, evidence-based health care for all of my patients. Sometimes that care includes abortion. Sometimes it involves labor and delivery. I have an ethical obligation to honor my patients' decisional autonomy by respecting the values and preferences of each one. I support the right of my patients to decide whether to have children, the number and spacing of children, and to have full, evidence-based information and access to health

[1] *See* Expert Report of Susan Bane, M.D., Ph.D. ("Bane"), DE 97-4 ¶¶ 19–26.

services to meet their reproductive health goals. And I honor each patient as the best decision maker about their pregnancy. My medical practice and beliefs are consistent with those stated by the American College of Obstetricians and Gynecologists (ACOG), which recognizes that an obstetrician-gynecologist's "primary duty is to the pregnant woman. This duty most often also benefits the fetus. However, circumstances may arise during pregnancy in which the interests of the pregnant woman and those of the fetus diverge. These circumstances demonstrate the primacy of the obstetrician–gynecologist's duties to the pregnant woman."[2] The Intervenors' witnesses' lack of acknowledgment of abortion's importance as part of reproductive health care dishonors the lived experience of patients and their bodily autonomy; undermines the compassion, empathy, and humanity of abortion providers; and functions only to further stigmatize abortion care and alienate patients.

The Safety of Abortion

6. The Intervenors' witnesses characterize abortion as an unsafe, risky procedure, but the objective fact is that abortion is extremely safe. Leading, reputable, mainstream medical authorities agree, and an abundance of literature supports,[3] that both

[2] Comm. on Ethics, *Committee Opinion No. 664: Refusal of Medically Recommended Treatment During Pregnancy*, ACOG (June 2016), https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2016/06/refusal-of-medically-recommended-treatment-during-pregnancy.

[3] *See, e.g.*, Elizabeth G. Raymond & David A. Grimes, *The Comparative Safety of Legal Induced Abortion and Childbirth in the United States*, 119 Obstetrics & Gynecology 215, 217 (2012); Ushma D. Upadhyay et al., *Incidence of Emergency Department Visits and Complications After Abortion*, 125 Obstetrics & Gynecology 175, 181 (2015); Nat'l Acads. Scis., Eng'g, & Med., *The Safety and Quality of Abortion Care in the United States*, at 77-78 (2018), available at http://nap.edu/24950 [hereinafter "Nat'l Acads."].

medication abortion and procedural abortion are two of the safest procedures in medical practice,[4] carry a low risk of complications, and a very low risk of complications requiring hospitalization, "stand[ing] in contrast to the extensive regulatory requirements that state laws impose on the provision of abortion services."[5]

7. Intervenors' experts rely on a host of inappropriate conclusions from low quality and/or outdated research to support their conclusions. Much of this research (1) does not involve second trimester abortion; (2) studied patients in international contexts not generalizable to the United States[6]; (3) does not reflect contemporary abortion practice[7]; or (4) suffers from other limitations, such as organizational biases,[8] that renders it unreliable. The intervenors' experts' approach to summarizing these studies omits nationally representative, high quality, U.S.-based research. Their reports also draw conclusions based on conjecture, which is not an accepted practice in the field of medicine or in the provision of evidence-based medical care.

8. Dr. Wubbenhorst's and Dr. Bane's suggestions that complications related to medication abortion are underreported to the FDA demonstrates their lack of familiarity with the FDA's regulation of medication abortion and how it monitors prescription drug safety more broadly. Wubbenhorst ¶¶ 23–28, 178–79; Bane ¶ 36. They ignore that for

[4] Nat'l Acads., *supra* note 3 at 77 ("The clinical evidence makes clear that legal abortions in the United States—whether by medication, aspiration, D&E, or induction—are safe and effective.").
[5] *Id.*
[6] *See, e.g.*, Bane ¶ 48 (citing a study assessing medication abortion in Finland).
[7] *See, e.g.*, Expert Report of Monique Chireau Wubbenhorst, M.D., M.P.H. ("Wubbenhorst"), DE 97-2 ¶ 44 (citing study that reported on data from 1972–78).
[8] *See, e.g.*, Wubbenhorst ¶ 54 (citing the American Association of Pro-Life Obstetricians and Gynecologists' criticisms of credible studies).

fifteen years—from mifepristone's approval in 2000 until March 2016—the FDA specifically required that all mifepristone prescribers comprehensively report any serious adverse events associated with mifepristone to the drug manufacturer, and the manufacturer was then required to report all such events to the FDA. This mandatory reporting, imposed as part of the FDA's Risk Evaluation and Mitigation Strategy ("REMS") for mifepristone, included any hospitalizations, transfusions, serious infections, death, or "[o]ther serious and unexpected adverse events" associated with mifepristone, as well as ongoing pregnancies.[9]

9. In 2016, the FDA's scientific review team lifted the REMS mandate that all serious adverse events associated with mifepristone be reported, explaining that the "FDA has received such reports for 15 years, and it has determined that the safety profile of Mifeprex is well-characterized, that no new safety concerns have arisen in recent years, and that the known serious risks occur rarely."[10] And, after reviewing those 15 years of comprehensive data, the FDA concluded that serious adverse events associated with mifepristone are "exceedingly rare."[11] In other words, the FDA's rigorous data collection for mifepristone far exceeds its data collection for most prescription drugs and aligns with the extensive body of high-quality research confirming that mifepristone is extremely safe.

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[9] Ctr. for Drug Evaluation & Rsch., *Application Number 020687Orig1s020: Risk Assessment and Risk Mitigation Review(s)*, U.S. Food & Drug Admin. 1, 10 (2016).
[10] Ctr. for Drug Evaluation & Rsch., *Application Number 020687Orig1s020: Medical Review(s)*, U.S. Food & Drug Admin. 1, 8 (2016).
[11] *Id.* at 47.

10. The studies that Dr. Wubbenhorst and Dr. Bane reference in support of their claims that abortion has a high complication rate have serious limitations. For example, Dr. Wubbenhorst cites a study from Finland by Gissler, et al., to support the argument that death rates are higher after abortion compared to childbirth up to 1 year. Wubbenhorst ¶ 99. However, this old study reported on pregnancy-associated mortality, defined as death while pregnant or within one year from the end of pregnancy, regardless of cause. The conclusions reached by Gissler et al. are thus flawed and unreliable because they include "all-cause mortality," such as homicide and accidental deaths, for which abortion cannot logically be the "cause."[12] For example, it would be inappropriate to claim that abortion "caused" a patient's death if they died in a car accident months after the procedure. Additionally, the CDC has robust data on deaths attributable to abortion in the U.S. The CDC concluded that the "national case-fatality rate for legal induced abortion for 2013-2019 was 0.43 deaths … per 100,000 reported legal abortions."[13] In 2020, the most recent year for which the CDC has reviewed Pregnancy Mortality Surveillance System data for pregnancy-related deaths, six women *in total*—out of the

[12] Mika Gissler et al., *Pregnancy Associated Deaths in Finland 1987–1994: Definition Problems and Benefits of Record Linkage*, 76 Acta Obstetricia et Gynecologica Scandinavica 651 (1997); Mika Gissler et al., *Pregnancy-Associated Mortality After Birth, Spontaneous Abortion, or Induced Abortion in Finland 1987–2000*, 190 Am. J. Obstetrics & Gynecology 422 (2004).

[13] Katherine Kortsmit et al., *Abortion Surveillance—United States, 2020*, 71 CDC Morbidity & Mortality Wkly. Rep. Surveillance Summaries 1, 6 (2022).

620,327 abortions that year[14]—died as a result of complications from legal induced abortion.[15]

11. In addition, all of Intervenors' experts selectively cite a 2009 study by Niinimäki et al. to imply that medication abortion is unsafe, Wubbenhorst ¶ 254; Bane ¶ 48; Expert Report of Catherine J. Wheeler, M.D. ("Wheeler"), DE 97-3 ¶ 56, but that study included evaluations of medication abortion regimens that have never been used in the United States.[16] More critically, the Niinimäki study (1) was based on a Finnish health registry that coded all follow-up visits as "complications" regardless of the degree of concern; and (2) inappropriately reported as "hemorrhage" all patient reports of heavy bleeding, even if they were within the expected range for medication abortion and did not require treatment.[17] In response to criticism on these points, the authors themselves acknowledged that in the records they used, "many of the 'complications' are not really such, but rather concerns or adverse events that bring women back to the health care system. . . . [The] [r]ate of serious, 'real' complications is rare and rather similar between [procedural] and medical abortion."[18]

12. Dr. Bane criticizes PPSAT's off-label use of mifepristone through 77 days of pregnancy, Bane ¶ 60, but ignores the fact that the Act *permits* medication abortion

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[14] *Id.*
[15] Katherine Kortsmit et al., *Abortion Surveillance - United States, 2021*, 72 CDC Morbidity & Mortality Wkly. Rep. Surveillance Summaries 1, 1 (2023).
[16] Maarit Niinimäki et al., *Immediate Complications After Medical Compared with Surgical Termination of Pregnancy*, 114 Obstetrics & Gynecology 795, 796 (2009).
[17] Mary Fjerstad et al., *Letters to the Editor: Immediate Complications After Medical Compared with Surgical Termination of Pregnancy*, 115 Obstetrics & Gynecology 660 (2010); Niinimäki et al., *supra* note 16, at 799–800.
[18] Fjerstad, *supra* note 17.

"during the first 12 weeks [i.e., 84 days] of a woman's pregnancy." Section 90-21.81B(2). What's more, off-label medication use is common in the medical field, and the off-label use of mifepristone has been shown to be safe at more advanced gestations than that approved by the FDA.[19] I understand that Plaintiffs provide first-trimester medication abortion through 77 days, which is a safe and common evidence-based practice that I offer to my patients as well.[20]

13. Intervenors' experts state that Upadhyay et al.'s studies finding low complication rates are flawed. Bane ¶ 37, Wubbenhorst ¶¶ 55–57. While no study is perfect, these were high quality studies and their findings can and should be relied upon. The 2015 Upadhyay et al. study used a high-quality data set, examining billing data from California's state Medicaid program, particularly because California is one of the limited number of states whose Medicaid program covers abortion. The study started with identifying Healthcare Common Procedure Coding System codes for abortion and then searched for additional insurance claims for any visit in any setting (including the emergency department) for the 6 weeks subsequent to the abortion without loss to follow up. Because the billing codes used are specific to abortion type, there is no reason to think that inaccurate coding was any more of an issue in this study than it is in any study

[19] Comm. on Practice Bulletins–Gynecology & Soc'y of Family Planning, *Practice Bulletin No. 225: Medication Abortion Up to 70 Days of Gestation*, ACOG (reaffirmed 2023), https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2020/10/medication-abortion-up-to-70-days-of-gestation.

[20] *See, e.g.*, Ilana G. Dzuba et al., *A Repeat Dose of Misoprostol 800 mcg Following Mifepristone for Outpatient Medical Abortion at 64–70 and 71–77 Days of Gestation: A Retrospective Chart Review*, 102 Contraception 104 (2020); Ilana G. Dzuba et al., *A Non-Inferiority Study of Outpatient Mifepristone-Misoprostol Medical Abortion at 64–70 days and 71–77 Days of Gestation*, 101 Contraception 302 (2020).

that uses billing codes.[21] The 2018 Upadhyay study, while it used a different data set (from the Nationwide Emergency Department Sample), found a similarly low rate of complications.[22] Dr. Bane cites a 2021 study by Studnicki et al.[23] to support her claim that ER visits for abortions are growing in number, with medication abortions "associated with more postabortion ER visits." Bane ¶ 38. Because post-publication peer reviewers found "fundamental problems with the study design and methodology, unjustified or incorrect factual assumptions, material errors in the authors' analysis of the data, and misleading presentations of the data that, in their opinions, demonstrate[d] a lack of scientific rigor and invalidate the authors' conclusions in whole or in part," and all but one of the study's authors were affiliated with anti-abortion advocacy organizations, that study (and two others) were retracted.[24] By contrast, as the National Academies of Science, Engineering, and Medicine recognized and as I discussed in my Declaration, numerous high-quality studies—including Upadhyay's—exist on the incidence of complications, and those studies converge on a single conclusion: risks of complications from abortion are very low.[25]

14. Intervenors' experts highlight that the risks of abortion increase with gestational age, Wubbenhorst ¶¶ 43–51, Wheeler ¶¶ 34–36, but because they are very low

[21] Upadhyay et al. (2015), *supra* note 3.
[22] Upadhyay et al. (2018), *supra* note 3.
[23] James Studnicki et al., *A Longitudinal Cohort Study of Emergency Room Utilization Following Mifepristone Chemical and Surgical Abortions, 1999–2015*, 8 Health Servs. Rsch. & Managerial Epidemiology 1, 1–8 (2021).
[24] *Retraction Notice*, 11 Health Servs. Rsch. & Managerial Epidemiology 1 (2024).
[25] Nat'l Acads., *supra* note 3, at 10–11, 55–56, 60–65, 77–78 ("[s]erious complications are rare; in the vast majority of studies, they occur in fewer than 1 percent of abortions").

to begin with, abortion remains a very safe procedure even later in the second trimester.[26] Contrary to the Intervenors' experts' assertions, *see, e.g.*, Wubbenhorst ¶ 62, abortion is much safer than carrying a pregnancy to term and childbirth, including up to 20 weeks LMP.[27]

15. Intervenors' witnesses argue that abortion-related deaths and complications are subject to undercounting and underreporting, *see* Wubbenhorst ¶¶ 63–71, Bane ¶¶ 35–36, Wheeler ¶ 56, but this view is not supported by credible evidence. Further, they do not explain how underreporting of the kind they suggest, for abortion or for maternal mortality, *see* Bane ¶¶ 28–34, casts doubt on the consensus finding that abortion is less likely to end in complications and death than carrying a pregnancy to term.

16. The 2015 study by Upadhyay and colleagues, cited above and in my initial report, tracked any complications the study population experienced "without loss to follow-up, addressing a common methodologic limitation of other studies."[28] Because California's state Medicaid program covers abortion, the study authors were able to track each individual who had an abortion after their abortion using billing data, functionally eliminating loss to follow-up.

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[26] Suzanne Zane et al., *Abortion-Related Mortality in the United States, 1998–2010*, 126 Obstetrics & Gynecology 258, 262–63 (2015); Nat'l Acads., *supra* note 3, at 10–11, 65.
[27] Raymond & Grimes, *supra* note 3, at 217.
[28] Upadhyay et al. (2015), supra note 3, at 182 ("This study examines postabortion ED visits and complications up to 6 weeks and across multiple facilities without loss to follow-up, addressing a common methodologic limitation of other studies."). In fact, the authors noted that their study might overestimate abortion complication rates because it focused on a population with lower incomes and more overall health problems than the general population of abortion patients. *Id*.

17. Dr. Wubbenhorst's criticism of the Centers for Disease Control and Prevention's (CDC) data on abortion and abortion-related morbidity, on the theory that there is no comprehensive national data on the occurrence of complications from abortion, is misplaced. *See* Wubbenhorst ¶¶ 14–20. The CDC calculates the number of abortions and abortion-related deaths as part of its Pregnancy Mortality Surveillance System, which defines a pregnancy-related death as "a death while pregnant or within 1 year of the end of pregnancy from any cause related to or aggravated by the pregnancy"—a definition that includes both childbirth-related deaths and abortion-related deaths.[29]

18. Moreover, the CDC does not rely solely on voluntary reporting by states to generate this data, as Dr. Wubbenhorst suggests. *Id.* ¶ 19. Rather, it uses death records, linked birth records, fetal death records, and "additional available data from all fifty states, New York City, and Washington, DC."[30] And although the CDC does rely on

[29] CDC, *Pregnancy Mortality Surveillance System*,, (last reviewed Jan. 3, 2024), https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm. The CDC has monitored abortion-related deaths through its Pregnancy Mortality Surveillance System since 1987 using both voluntary reporting by states and other means including "state vital records; media reports, including computerized searches of full-text newspaper and other print media databases; and individual case reports by public health agencies, including maternal mortality review committees, health care providers and provider organizations, private citizens, and citizen groups. For each death that possibly is related to abortion, CDC requests clinical records and autopsy reports. Two medical epidemiologists independently review these reports to determine the cause of death and whether the death was abortion related. Discrepancies are discussed and resolved by consensus. Each death is categorized by abortion type as legal induced, illegal induced, spontaneous, or unknown type." Tara C. Jatlaoui et al., *Abortion Surveillance — United States, 2015*, 67 CDC Morbidity & Mortality Wkly. Rep. Surveillance Summaries 1, 5 (2018).

[30] CDC, *supra* note 29. Dr. Wubbenhorst is wrong to suggest that research based on Finnish death certificates is a more appropriate basis for calculating mortality rates in the

voluntary reporting to calculate the total number of abortions performed each year, the vast majority of the central health agencies asked to report this data do so.[31] For instance, in 2021, the CDC "request[ed] abortion data from the central health agencies for the 50 states, the District of Columbia, and New York City," and "a total of 48 reporting areas" agreed to provide it; of these, 47 reporting areas provided data each year during 2012–2021.[32]

The Hospitalization Requirement Impedes Access to Abortion Without Adding to Patient Health and Safety.

19. As I detailed in my Declaration, the vast majority of procedural abortions, including the vast majority of procedural abortions after the twelfth week of pregnancy, can be safely provided in an outpatient facility, and therefore there is no reason to categorically require that all abortions after the twelfth week of pregnancy in cases of rape, incest, or life-limiting fetal anomaly occur in a hospital. *See* Declaration ¶ 39.

20. In my Declaration, I highlighted the fact that throughout the country, legal abortions are safely and routinely performed in doctors' offices and outpatient health center settings, and only 3% of abortions are performed in hospitals in the U.S. annually.[33] *Id.* ¶ 32. There are many reasons that patients justifiably prefer abortions in outpatient centers including shorter appointments, lower costs, sedation options, and

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United States. *See* Wubbenhorst ¶ 66. As the National Academies of Sciences, Engineering, and Medicine concluded, "no clear conclusions regarding the association between abortion and long-term mortality can be drawn from" those studies. Nat'l Acads., *supra* note 3, at 152.

[31] Kortsmit et al., *supra* note 13, at 1.

[32] Kortsmit et al., *supra* note 15 at 2.

[33] Rachel K. Jones et al., *Abortion Incidence and Service Availability in the United States, 2020*, 54 Persps. on Sexual & Reprod. Health 128, 134 tbl. 3 (2022).

treatment from staff and medical professionals with more experience providing abortions. *See id.* ¶ 41.

21. I disagree with Dr. Bane's statement that "hospitals are more equipped than outpatient settings to handle major complications in our maternal patients." Bane ¶ 50. No medical procedure is entirely risk free. Intervenors' experts describe certain complications that can arise as a result of an abortion after 12 weeks. *See* Wubbenhorst ¶ 86; Wheeler ¶ 30; Bane ¶¶ 48, 50. For many patients, these complications—which are exceedingly rare, as described above—can be treated in the outpatient clinic where the abortion was performed. In my experience, outpatient facilities are well-equipped to treat cervical lacerations or tears, infections, and moderate bleeding. In the rare instance of moderate bleeding, most cases can be managed in the outpatient clinic setting with uterotonics, medications that cause uterine contractions and reduce bleeding. Dr. Wheeler cites literature that is over 30 years old for the proposition that the uterus does not respond to uterotonics during D&Es performed for abortion as well as it does for term induction. Wheeler ¶ 14. Her statement is out of date and does not reflect the fact that prophylactic oxytocin has been shown to decrease blood loss and frequency of hemorrhage when used in second trimester D&Es, which is why its use in second trimester D&Es has become common medical practice in modern times.[34]

[34] *See* Katherine Whitehouse et al., *Effects of Prophylactic Oxytocin on Bleeding Outcomes in Women Undergoing Dilation and Evacuation: A Randomized Controlled Trial*, 133 Obstetrics & Gynecology 484 (2019).

22. As with many other types of procedures performed in outpatient settings, outpatient abortion clinics have protocols to ensure safe transfer to an emergency department in the rare situation where that is necessary. I understand from Dr. Farris's report that PPSAT has such a protocol for safe transfer. Dr. Bane claims that performing abortions in a hospital "prevents the need for transfer from an outpatient clinic to the nearest hospital facility should complications arise during the surgery, reducing the time for women to receive life-saving interventions." Bane ¶ 50. But this is not necessarily the case. In my experience, transferring a patient between departments within the same hospital can vary greatly depending on the size of the hospital and where each department is located. For example, the operating room where patients are able to access abortion care may be in a different building on a medical campus than the desired unit for postoperative care, such as a surgical intensive care unit.

23. Dr. Bane also makes inflammatory and inaccurate statements about "live births" after abortions. *Id.* ¶ 51. My understanding is that PPSAT only provides abortions up to 20 weeks LMP, when no fetus is viable outside the uterus.

24. Dr. Bane's statements about anesthesia, *see id.* ¶ 52, are similarly misplaced. It is not unusual or unsafe for certain types of sedation to be administered by professionals who are not anesthesiologists, such as during a dental appointment. Aspiration abortion performed in the first trimester and early second trimester, regardless of setting, almost never requires the use of general anesthesia; similarly, minimal or moderate sedation with local anesthesia are sufficient for the majority of D&Es. *See* Declaration ¶ 36. The American Society of Anesthesiologists' "Statement on Granting

Privileges for Administration of Moderate Sedation to Practitioners Who are Not Anesthesia Professionals" cited by Dr. Bane, Bane ¶ 52, explicitly supports the idea that moderate sedation can be "used [in] any facility—hospital, ambulatory care or physician's, dentist's, or podiatrist's office," including by appropriately trained practitioners who are not anesthesiologists.[35]

25. It is my understanding that PPSAT does not use deep sedation medications such as propofol or general anesthesia. Practitioners are trained, both at PPSAT and the places where I practice, to assess levels of sedation in a manner consistent with the American Society of Anesthesiologists' guidelines. Under moderate sedation, "patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation," whereas under deep sedation, "patients cannot be easily aroused but respond purposefully following repeated or painful stimulation."[36] In my experience, the difference is extremely clear.

26. Dr. Wubbenhorst's statement that "pain control [for abortion] is often suboptimal and problematic," Wubbenhorst ¶ 83, is unrelated to any need for hospitalization related to abortion as compared to miscarriage. Any physical pain caused by second trimester aspiration or D&E is no different between miscarriage management and abortion, and patients undergoing both should be able to access any level of sedation

[35] Comm. on Ambulatory Surgical Care, *Statement on Granting Privileges for Administration of Moderate Sedation to Practitioners Who are Not Anesthesia Professionals*, Am. Soc'y Anesthesiologists (last amended Oct. 13, 2021), https://www.asahq.org/standards-and-practice-parameters/statement-on-granting-privileges-for-administration-of-moderate-sedation-to-practitioners-who-are-not-anesthesia-professionals.
[36] *Id.*

they desire that is safe for their particular circumstances. There is no clinical reason that hospitalization should be required for all abortion care after the twelfth week of pregnancy, but not for miscarriage management at equivalent gestational durations, simply because a small minority of patients may need or desire higher levels of sedation.

27. Intervenors' witnesses also attempt to distinguish miscarriage management from abortion care more generally. *See* Bane ¶¶ 54–57, Wheeler ¶¶ 15, 50. However, as even Dr. Wheeler acknowledges, from a clinical perspective, aspiration and D&E procedures are the same for abortion and for miscarriage management. *See* Wheeler ¶ 50 ("[T]echnically the procedure is similar"). In fact, in certain circumstances second-trimester miscarriage management can be riskier than second-trimester abortion at the same gestational duration due to the rare but real risk of disseminated intravascular coagulation ("DIC"). DIC occurs when abnormal blood clots form inside blood vessels and use up clotting factors, which can lead to severe bleeding in other places. DIC is one of the serious potential complications associated with spontaneous intrauterine fetal demise treated via D&E in the mid-second trimester or beyond. However, DIC is associated with the pregnancy loss, not the D&E procedure itself, and my experience and research both indicate that there is a greater risk of DIC when performing D&E for miscarriage management rather than for an abortion.

28. Second-trimester abortion is safe, as are abortions overall. Procedural abortion via dilation and evacuation has "minimal rates of complications, ranging from 0.05 to 4 percent."[37] One study by Turok et al. that examined second-trimester abortions

[37] Nat'l Acads, *supra* note 3 at 63.

in Utah found that patients undergoing D&E or induction abortions in a hospital setting were more likely to experience major complications than those undergoing an in-clinic D&E.[38] Drs. Wubbenhorst and Wheeler critique the Turok study on the basis that because hospital D&E patients generally have more or greater pregnancy complications before the procedure, any difference in complication rate should be attributable to the patient population rather than the setting of the abortion. *See* Wubbenhorst ¶¶ 139–42; Wheeler ¶¶ 44–47. However, the study explicitly found that "the increase in complication rates for D&E and induction in the hospital groups persisted when controlling for maternal medical complications, preexisting infections, parity and gestational age in a multivariate regression model."[39] And even the critique underlines the point that there is no reason to require that all abortions after the twelfth week of pregnancy take place in hospitals; patients with particularly complicated cases would be treated in hospitals regardless, and other abortions can be performed safely in outpatient clinic settings. Further, the study also found that "[l]ow volume of second trimester D&E at the [hospital] likely contributed to a higher complication rate for patients,"[40] reinforcing that outpatient facilities—where 97% of abortions in the United States take place[41]—are a safe setting for the provision of abortion.

29. Drs. Bane and Wheeler both cite the creation of a two-year fellowship in complex family planning for the proposition that D&Es, specifically D&E abortions, are

[38] David K. Turok et al., *Second Trimester Termination of Pregnancy: A Review by Site and Procedure Type*, 77 Contraception 155 (2008).
[39] *Id.* at 160.
[40] *Id.* at 161.
[41] Jones et al., *supra* note 33.

complex and technically difficult. Bane ¶ 57; Wheeler ¶ 25. Their framing is an inaccurate oversimplification. While *some* D&Es may be medically or procedurally complex, it is not true that *all* D&Es are medically or procedurally complex, and there is no clinical difference between performing a D&E for abortion and performing one for miscarriage management. The completion of a *complex* family planning fellowship is not necessary for a medical provider to safely perform a D&E; rather, it simply provides specialized training for practitioners who treat the subset of family planning cases that are more complex.

30. Intervenors' experts claim that hospitals are better equipped than outpatient facilities to support patients who have experienced sexual violence, abuse, or trafficking, but in my experience, many times this is not the case. *See* Wubbenhorst ¶ 168; Bane ¶ 58; Wheeler ¶ 49. Many providers of reproductive care, including outpatient providers like PPSAT, as I understand from Dr. Farris's report, receive training in order to identify patients who are victims of abuse or trafficking who have been coerced into either seeking an abortion or continuing a pregnancy, and help direct them to resources where they can receive support. In my experience, not all physicians and staff employed at a hospital receive this type of training, and staff at the outpatient centers devoted to abortion care are often better trained to support patients who have experienced abuse.

31. Further, Dr. Wubbenhorst's statement that "many abortions are coerced" is mistaken and ignores the true role of coercion in reproductive decision making. *See* Wubbenhorst ¶ 165. Dr. Wubbenhorst assumes coercion is unidirectional—that people experience coercion only as an effort to force them to choose abortion. In reality,

reproductive coercion takes many other forms beyond pressure to have an abortion, including pressuring a person to become pregnant and carry a pregnancy to term, pressuring or coercing a person to have sex, and threatening to leave a relationship if someone does not get pregnant.[42] While most people seeking abortion do not experience coercion, all patients deserve support and a safe environment to discuss their experiences and options. I understand that PPSAT screens every patient for abortion coercion. *See* Decl. of Katherine Farris, M.D., FAAFP, in Supp. of Pls.' Mot. for Summ. J., DE 94-1 ¶ 94. Coercion screening is also required at the Planned Parenthood health center where I provide care.

32. The Turnaway Study examined patients' experiences with abortion and unintended pregnancy in the U.S., and researchers found that among 954 participants, only one respondent used language that indicated overt pressure from their partner to get an abortion.[43] On the other hand, patients reporting intimate partner violence were more than three times as likely to identify their partner as a reason for wanting an abortion compared to patients not reporting intimate partner violence.[44] But those identifying an abusive partner as a reason for seeking an abortion reported that they were choosing

[42] ACOG Comm. on Healthcare for Underserved Women, *Committee Opinion No. 554: Reproductive & Sexual Coercion*, 121 Obstetrics & Gynecology 411, 411 (2013).
[43] *See* Diana Greene Foster, *The Turnaway Study: Ten Years, a Thousand Women, and the Consequences of Having—or Being Denied—an Abortion* (2020). The Turnaway Study studied patients from 21 states over 5 years.
[44] *Id.*

abortion not because their partner was coercing them to do so. Rather, they perceived an abortion as their best option to end the abusive relationship.[45]

33. Contrary to Dr. Wheeler's assertion, Wheeler ¶ 49, there is no inherent procedural difference between an abortion performed for a patient who has survived rape and incest and one who has not. In fact, in my experience, some patients who have survived sexual violence prefer to avoid hospital settings, especially if procedures in those settings might involve a greater likelihood of the use of general anesthesia per an anesthesiologist's preference. *See* Declaration ¶ 36.

34. Intervenors' experts also claim that hospitals have more resources to support patients who have received fetal anomaly diagnoses. *See* Wubbenhorst ¶¶ 171–75; *see also* Bane ¶ 58. However, many times, the doctors providing the abortion are not the same doctors diagnosing the fetal anomaly. If the diagnosing doctor is not able to perform the abortion themselves, they may refer the patient to an outpatient provider like PPSAT. Normally, by the time I see a patient who is seeking an abortion due to a life-limiting fetal anomaly, the patient has already received detailed information about the fetal diagnosis, discussed their options with the provider who made the diagnosis and/or their obstetrician, and made the decision to have an abortion.

35. For instance, when I see patients seeking an abortion after receiving a fetal diagnosis from their perinatologist, their records reflect extensive patient education about the diagnosis, the prognosis, and options, including continuing the pregnancy, giving

[45] Karuna S. Chibber et al., *The Role of Intimate Partners in Women's Reasons For Seeking Abortion*, 24 Women's Health Issues e131 (2014).

birth, and seeking perinatal hospice care. These patients have already made the extremely personal decision to terminate their pregnancy, and for the majority of these patients, their abortion may be safely performed in an outpatient setting.

Medication Abortion is Safe and Effective in Terminating Pregnancies of Unknown Location.

36. The Protocol (as defined in my Declaration ¶ 48) that I, PPSAT, and many other medical institutions use to safely provide medication abortion to patients with early pregnancies of unknown location has been shown to be safe and effective, both in research studies and in my daily practice.

37. Intervenors' witnesses mischaracterize and oversimplify the Protocol. First, Dr. Bane implies that PPSAT is using "serum hCG values alone" to rule out ectopic pregnancy. Bane ¶ 67. This is inaccurate. I understand that North Carolina law requires all patients to receive an ultrasound before obtaining an abortion. Patients whose pregnancies are not visible by ultrasound are screened for level of risk for an ectopic pregnancy through a detailed conversation about medical history and current symptoms and often a physical examination. High-ectopic-risk patients are referred expeditiously for further ectopic pregnancy evaluation. Low-ectopic-risk patients who choose medication abortion receive serial hCG testing and close follow-up to rule out ectopic pregnancy while simultaneously receiving their medication abortion. Declaration ¶ 48. While serial hCG levels are certainly an important factor, they are not the only factor.

38. As stated in my Declaration, clinicians at both hospitals and outpatient health centers routinely provide detailed counseling and conduct a symptom assessment

to identify patients at risk for ectopic pregnancies, including by considering known risk factors, symptoms, and prior and current health history—all of which can be assessed by a detailed conversation with the patient.[46] *Id.* ¶ 50. Dr. Wubbenhorst's critique of a study that I co-authored, "Outcomes and Safety of History-Based Screening for Medication Abortion: A Retrospective Multicenter Cohort Study," Wubbenhorst ¶ 58, implies incorrectly that the study "disregard[ed]" caring for patients with ectopic pregnancies. Rather, because medication abortion does not harm patients who have ectopic pregnancies, it was not the focus of this study (and all patients were contacted for follow-up and had access to members of their care teams). Dr. Wubbenhorst's criticism does not negate the study's central finding that "screening for medication abortion eligibility by history alone was effective and safe."[47] Her critique is also irrelevant because PPSAT's Protocol is multi-faceted and does not rely only on history-based screening; taking a detailed patient history is one among multiple components that makes it effective and safe.

39. If a patient with a pregnancy of unknown location is not determined to be low risk, it would not be appropriate to go forward with a medication abortion, and the

[46] *See, e.g.*, Abigail R. Aiken et al., *Effectiveness, Safety and Acceptability of No-Test Medical Abortion (Termination of Pregnancy) Provided via Telemedicine: A National Cohort Study*, 128 BJOG: Int'l J. Obstetrics & Gynaecology 1464, 1466 (2021) (explaining that patients "were offered a consultation via phone or video call, during which an assessment of eligibility for treatment via telemedicine was made," which included assessing whether "they had a low risk of ectopic pregnancy"); *see also* Ushma D. Upadhyay, Christy M. Boraas et al., *Outcomes and Safety of History-Based Screening for Medication Abortion: A Retrospective Multicenter Cohort Study*, 182 J. Am. Med. Ass'n Internal Med. 482 (2022).

[47] Upadhyay, Boraas et al., *supra* note 46.

patient would be counseled to seek further assessment to determine whether they have an ectopic pregnancy. To be clear, if a patient is determined to be at high risk for an ectopic pregnancy, medication abortion is not prescribed, and Dr. Wubbenhorst's assertions about when an ectopic pregnancy should be considered suspected or confirmed is consistent with PPSAT's protocol. *See* Wubbenhorst ¶¶ 203–04. Dr. Wubbenhorst's discussion of the evaluation and treatment of pregnancies of unknown location, *Id.* ¶¶ 216–23, is similarly in line with PPSAT's practice.

40. Dr. Bane also criticizes the Protocol because "approximately one half of women accurately recall their last menstrual period (LMP)," Bane ¶ 61, implying that providers are making ectopic determinations based on incomplete information from the patients themselves. Similarly, Dr. Wheeler states that screening based on risk factors is "grossly ineffective," citing a study that "found that of the women who were ultimately diagnosed with an ectopic pregnancy, only 12.9% had a 'major ectopic risk factor,' defined by the authors as a history of ectopic pregnancy, history of tubal surgery, or in situ IUD." Wheeler ¶ 61. Both Dr. Bane's and Dr. Wheeler's criticisms ignore the multifaceted nature of the Protocol, which assesses current symptoms like unilateral pain or unusual bleeding in addition to medical-history-based risk factors, does not rely on LMP alone to assess a patient's risk for ectopic pregnancy, screens for more risk factors than the ones listed in the study cited by Dr. Wheeler, may include a physical examination, and also incorporates ultrasound and serial hCG testing. Declaration ¶ 48. Indeed, even as Dr. Wubbenhorst claims that "serial hCG levels and transvaginal

ultrasound are the standard of care for diagnosis of ectopic pregnancy," Wubbenhorst ¶ 213, she ignores that both are already part of PPSAT's Protocol.

41. Dr. Wubbenhorst criticizes the St. Paul Study[48] (as defined in my Report, Declaration ¶ 45), claiming that the rates of loss to follow up were "very high" and thus "no conclusions can be drawn related to risk for complications." Wubbenhorst ¶ 243; *see also* Wheeler ¶¶ 69–70. However, the loss-to-follow-up rates of the St. Paul Study are consistent with those documented in abortion care literature and a known general limitation of retrospective research studies. In my experience, patients who experience problems do return for care, making a successful, uncomplicated abortion the most likely outcome for those who do not follow up with their abortion provider. Furthermore, in my experience of using the Protocol to administer medication abortion in cases of pregnancies of unknown location, I have seen firsthand that it is a safe and patient-centered practice.

42. Dr. Wubbenhorst also criticizes the St. Paul Study on the basis that "the initially undiagnosed ectopic pregnancy rates were high in all [study] groups," "patients underwent unnecessary interventions," and that "the efficacy of abortions was higher" if clinicians waited to provide abortion until pregnancy location was ascertained. Wubbenhorst ¶¶ 240–46; *see also* Wheeler ¶ 72. These criticisms misunderstand the point of the Protocol and the population to whom it applies. First, it is neither surprising nor a negative reflection on the study that the initially undiagnosed ectopic pregnancy

[48] Karen Borchert, Christy M. Boraas et al., *Medication Abortion and Uterine Aspiration for Undesired Pregnancy of Unknown Location: A Retrospective Cohort Study*, 122 Contraception 109980 (2023).

rates were higher than the national average; the study subjects were patients *with pregnancies of unknown location*, and the rate of ectopic pregnancy in that population is higher than for pregnant people generally. Indeed, that is why this population was the focus of our research on the safety and efficacy of a method for simultaneously providing medication abortion and diagnosing and excluding ectopic pregnancy. Second, patients in the study were educated on both the risks of ectopic pregnancy and the slightly elevated risk that medication abortion may not be completely successful very early in pregnancy (thus necessitating follow-up care to complete the abortion), they were told all their options, and *they chose* to proceed. Supporting patients in making decisions that are in accordance with their wishes and medically safe is the hallmark of patient-centered care.

43. Dr. Wheeler also criticizes the St. Paul study's comparison of days to diagnosis for patients who received same-day medication abortion with patients who chose to delay for diagnosis, claiming that the two groups are "incomparable." Wheeler ¶ 73. Dr. Wheeler ignores that serial hCG testing was the main driver to determine days to diagnosis for both groups, rendering them comparable.

44. In the Goldberg study (discussed in my Declaration, Declaration ¶ 45), the patients were seen for care at earlier gestational duration than most pregnant are: people who intend to continue their pregnancies are not generally seen for an initial prenatal visit until the eighth week of pregnancy (or sometimes later), but people seeking abortion before their pregnancy is visible by ultrasound are necessarily less than five or six weeks into their pregnancy. Comparing the Goldberg study patients who chose medication abortion with those who chose to delay for diagnosis, the Protocol actually led to *earlier*

exclusion of ectopic pregnancy than waiting to see whether an intrauterine pregnancy could be diagnosed by ultrasound—directly refuting Dr. Wheeler's assertion that providing medication abortion to patients with pregnancies of unknown location "may place women at increased risk for complications from undiagnosed ectopic pregnancy, including a delay in diagnosis." *Id.* ¶ 47; Wheeler ¶ 78. Both the St. Paul Study and the Goldberg study showed that early medication abortion is safe for patients who have pregnancies of unknown location who have been screened and determined to be low risk for an ectopic pregnancy.

45. Dr. Wheeler cites a study by Bharadwa et al. for the proposition that "there is no quality published evidence … for differentiating ectopic pregnancy from effective chemical abortion." Wheeler ¶ 75. That misstates the central conclusion of the study, which was that "serial serum hCG testing is an effective means of confirming successful medication abortion and identifying patients who require further follow up due to either an unsuccessful medication abortion or ectopic pregnancy."[49] In other words, the study supports the safety and efficacy of providing medication abortion to patients with pregnancies of unknown location while simultaneously conducting serial hCG testing to exclude ectopic pregnancy, and *refutes* Dr. Wheeler's claims about the Protocol.

46. Dr. Bane incorrectly states that the Protocol is "contraindicated." Bane ¶ 68. Mifeprex is contraindicated for "*confirmed/suspected* ectopic pregnancy,"[50] not for patients who are eligible for medication abortion under the Protocol, who are patients

[49] Sonya Bharadwa et al., *hCG Trends After Mifepristone and Misoprostol for Undesired Pregnancy of Unknown Location*, Contraception (2023).
[50] Def.-Intervenors' Resp. in Opp. to Pls.' Am. Mot. for Prelim. Inj., Ex. 2, DE 65-2.

with pregnancies of unknown location who are deemed low risk for ectopic pregnancy—i.e., patients for whom ectopic pregnancy is *not suspected*. Similarly, Dr. Wubbenhorst incorrectly implies that mifepristone is harmful to patients who have an ectopic pregnancy or who are miscarrying. *See* Wubbenhorst ¶ 230 (stating that because ectopic pregnancy is listed as a contraindication on the mifepristone product labeling, it therefore must be ruled out before using mifepristone). However, although mifepristone is not FDA approved for the *treatment* of an ectopic pregnancy (which is why it is listed as a contraindication), there are no known harms for patients with an ectopic pregnancy that take mifepristone. Of course, it is still important to identify any medication abortion patient with a PUL who in follow up, may ultimately be diagnosed with either an ongoing intrauterine pregnancy or (less frequently) an ectopic pregnancy, which is why the Protocol includes a robust screening process and emphasizes close surveillance and follow up with each patient. Likewise, a patient who is experiencing a miscarriage will not be harmed by mifepristone; in fact, the medication regimen of mifepristone and misoprostol is evidence-based therapy and the standard of care for medical management of miscarriage in the first trimester.

47. Additionally, research has shown that the incidence of ectopic pregnancy diagnosis following medication abortion is extremely low (0.02 percent), indicating that pretreatment screening methods are highly successful.[51] Further, there is absolutely no

[51] Caitlin Shannon et al., *Ectopic Pregnancy and Medical Abortion*, 104 Obstetrics & Gynecology 161, 161 (2004).

evidence to suggest that medication abortion treatment increases the rates of complications for women with ectopic pregnancies.[52]

48. Intervenors' witnesses further criticize the Protocol, stating that patients may confuse the symptoms of a ruptured ectopic pregnancy with the effects of medication abortion. Bane ¶ 66; Wheeler ¶¶ 53–54; Wubbenhorst ¶ 212. In my experience, this is unlikely because generally patients with ectopic pregnancy experience sharp, severe, and typically unilateral lower abdominal pain that differs from the more midline cramping and discomfort that medication abortion patients often experience. Dr. Wubbenhorst also emphasizes a case in which a ruptured ectopic pregnancy took several days to detect in a patient who had self-managed a medication abortion. Wubbenhorst ¶¶ 255–56. Unlike the self-managed abortion scenario, the Protocol includes patient education about what to expect during a medication abortion, description of the signs and symptoms associated with ectopic pregnancy and detailed information about what signs or symptoms should prompt immediate evaluation in an emergency department, and close follow up with patients to ensure that the abortion was completed. It is my understanding that PPSAT also has an emergency helpline that patients can call if they have questions or are concerned about their symptoms.

49. Dr. Bane cites the 2018 ACOG Bulletin to support her position that ultrasounds are required for ectopic evaluation. Bane ¶ 65. My understanding is that PPSAT complies with North Carolina's legal requirement that abortion patients receive ultrasounds, *see supra* ¶ 37, but I nevertheless disagree with Dr. Bane's position. The

[52] *Id.*

Bulletin states that "the minimum diagnostic evaluation of a *suspected* ectopic pregnancy is a transvaginal ultrasound evaluation and confirmation of pregnancy."[53] I agree—if an ectopic pregnancy is suspected, ultrasonography is required to ultimately determine the location of the pregnancy. However, a pregnancy of unknown location is *not* a suspected ectopic. If a patient is determined to be low risk—i.e., an ectopic pregnancy is *not suspected*—then ultrasound confirmation of an intrauterine pregnancy is not required before administration of medication abortion.

50. The safety of my patients is my top priority. As research and my personal experience have shown, with the proper protocol, counseling, surveillance, and follow-up, medication abortion may be safely and effectively administered to low-ectopic-risk patients with pregnancies of unknown location who prefer that method of treatment. Thus, there is no medical reason to require the confirmation of an intrauterine pregnancy for all people before administering medication abortion.

51. In fact, the IUP Documentation Requirement actively causes harm to patients. Dr. Wubbenhorst downplays the negative impact that the IUP Documentation Requirement has on patients, stating that embryonic "cardiac activity…can be seen as early as 5 weeks gestation," that ultrasound imaging can confirm an IUP "at about 6 weeks, 2 days' gestation," and that "most intrauterine pregnancies are visible by 8 weeks." Wubbenhorst ¶¶ 196–98. Dr. Wubbenhorst ignores that patients might have physical, emotional, financial, and/or logistical reasons for wanting to have their

[53] Comm. on Practice Bulletins–Gynecology, *ACOG Practice Bulletin No. 191: Tubal Ectopic Pregnancy*, 131 Obstetrics & Gynecology e65, e66 (2018) (emphasis added).

abortions as soon as possible. She also ignores that early gestational limits on abortion make the need for prompt access to abortion care of the utmost importance.

52. Forcing PPSAT to deny medication abortion to low risk patients who have pregnancies of unknown location will not lead to the earlier detection of any ectopic pregnancy; in fact, it might delay it, since there is no way to guarantee that those patients will seek medical care elsewhere. Turning patients away is what causes "fragmented care," *id.* ¶ 237, not treating them and keeping them under medical supervision according to the Protocol. Further, Dr. Wheeler's statement that there is "no clinical urgency nor clinical benefit" to providing medication abortion according to the Protocol, Wheeler ¶ 64, is not patient-centered and ignores the lived experience of patients and the myriad of reasons they have for strongly preferring medication abortion without delay. *See* Declaration ¶ 44. Patients with pregnancies of unknown location are counseled on the risk, highlighted by Dr. Wheeler, that medication abortion may not successfully terminate a pregnancy and follow-up care might therefore be needed. Wheeler ¶ 79. Many of them still choose medication abortion, and since it is a safe and evidence-based care option, it should remain available to them without unnecessary delay.

***

I declare under penalty of perjury that the foregoing is true and correct.

Dated: May 1, 2024

Signed: 

Christy M. Boraas Alsleben, M.D., M.P.H.

EXHIBIT A

CURRICULUM VITAE FOR PROMOTION AND TENURE

CHRISTY M. BORAAS, M.D., M.P.H
United States

PROFESSIONAL ADDRESS

Address M Health Fairview Women's Clinic
606 24th Avenue South, Suite 300
Minneapolis, MN 55454
Telephone [redacted]
FAX [redacted]
Email [redacted]

Address Planned Parenthood North Central States
671 Vandalia Street 1200 Lagoon Avenue
St. Paul, MN 55114 Minneapolis, MN 55408
Telephone [redacted]
FAX [redacted]
Email [redacted]

IDENTIFYING INFORMATION

Education

Degree	Institution	Date Degree Granted
B.A.	St. Olaf College, Northfield, MN *Biology and English, magna cum laude*	2001
	University of Pittsburgh, Pittsburgh, PA *Semester at Sea Study Abroad Program*	Fall 2000
M.P.H.	University of Minnesota School of Public Health, Minneapolis, MN *Epidemiology*	2004
M.D.	University of Minnesota Medical School, Minneapolis, MN *With Honors*	2008
Residency in Obstetrics and Gynecology	The Ohio State University Medical Center, Columbus, OH	07/2008-06/2012
Fellowship in Family Planning	Magee-Womens Hospital, University of Pittsburgh, Pittsburgh, PA	07/2012-07/2014
Certificate in Clinical Research	Institute for Clinical Research Education, University of Pittsburgh, Pittsburgh, PA	07/2012-07/2014

Fellowship in Reproductive Health Advocacy	Leadership Training Academy, Physicians for Reproductive Health, New York, NY	07/2013-06/2014

Certifications

Fellow, American Board of Obstetrics and Gynecology (#9028922) 2017-present

Licenses

Medical Physician and Surgeon, Minnesota (#58304) 2014-present

Medical Physician and Surgeon, Pennsylvania (#MD445822) 2012-2014

Academic Appointments

University of Minnesota Minnesota Population Center
Faculty Member 2019-present

University of Minnesota Medical School, Twin Cities (2016-2022)
Center for Global Health and Social Responsibility
Associate Global Health Faculty 2016-present

University of Minnesota Medical School, Twin Cities (2015-2022)
Department of Obstetrics, Gynecology and Women's Health
Assistant Professor 2015-present

Department of Obstetrics, Gynecology and Reproductive Sciences
University of Pittsburgh School of Medicine, Pittsburgh, PA
Clinical Instructor 2012-2014

University of Pittsburgh School of Medicine, Pittsburgh, PA
Center for Family Planning Research
Investigator 2012-2014

Academic Administrative Appointments

University of Minnesota Medical School, Twin Cities
Ryan Residency Training Program in Abortion and Family Planning
Director 2015-present

University of Minnesota Medical School, Twin Cities
Fellowship in Family Planning (ACGME approval pending)
Director 2015-present

Planned Parenthood Minnesota, South Dakota, North Dakota, St. Paul, MN
Director of Obstetrics and Gynecology Resident Education 2014-present

The Ohio State University, Columbus, OH
Department of Obstetrics and Gynecology
Chief Administrative Resident 2011-2012

Clinical/Hospital Appointments

M Health Fairview Women's Clinic, Minneapolis, MN
Staff Physician 2015-present

University of Minnesota Medical Center, Minneapolis, MN
Staff Physician 2014-present

Planned Parenthood Minnesota, South Dakota, North Dakota, St. Paul, MN
Associate Medical Director 2014-present
Director of Research 2014-present

Whole Woman's Health Twin Cities, Minneapolis, MN
Staff Physician 2014-present

Planned Parenthood of Western Pennsylvania, Pittsburgh, PA
Staff Physician 2012-2014

Consulting Positions

ViiV Healthcare 2022-present

American College of Obstetricians and Gynecologists, Optimizing Care for Pregnancy Loss (OCPL) Program Trainer 2021-present

American College of Obstetricians and Gynecologists, Implementing Progress in Abortion Care and Training (IMPACT) Trainer 2021-present

University of Global Health Equity, Rwanda 2020-present

American College of Obstetricians and Gynecologists, Immediate Postpartum Long-Acting Reversible Contraception Trainer 2018-present

Minnesota Department of Health 2017-present

Basic Health International 2014-present

American Refugee Committee International 2013-present

Current Membership and Offices in Professional Organizations

Member, Consortium of Abortion Providers Abortion Equity Cohort 2021-2023

Member, Education Committee, Fellowship in Complex Family Planning 2020-present

Minnesota Public Health Association (MPHA)
Member 2018-present
Member, MPHA Global Health Committee 2018-present

Society of Family Planning (SFP) (2015-2022)
Member, Finance Committee 2021-present

Member, Research Implementation Special Interest Group	2021-present
Junior Fellow	2012-present
Member, Program Committee	2019-2020
Member, Annual Meeting Session Working Group	2019
Member, Audit Committee	2015-2018
Minnesota Medical Association (MMA) (2014-2022)	
Chair, Abortion Policy Work Group	2021-2023
Member, Policy Council	2017-2023
Member	2014-present
Member, Medical Practice and Quality Committee	2014-2018
Minnesota section of ACOG (MN ACOG) (2014-2022)	
Member, Annual Meeting Planning Committee	2021-present
Member, Advisory Council	2019-present
Member	2014-present
Member, Legislative Committee	2014-present
Member, Association of Professionals of Gynecology and Obstetrics (APGO)	2014-present
Member, Physicians for Reproductive Health	2010-present
American Congress of Obstetricians and Gynecologists (ACOG) (2008-2022)	
Fellow	2017-present
Junior Fellow	2008-2017
Member, Academy of Breastfeeding Medicine	2013-2016
Member, Association of Reproductive Health Professionals	2009-2016

Visiting Professorships or Visiting Scholar Positions

American Refugee Committee International	
Ban Don Yan Refugee Camp, Sangkhlaburi, Thailand	
Family Planning Specialist	2013
Kilimanjaro Christian Medical Center, Moshi, Tanzania	
Clinical Instructor in Obstetrics and Gynecology	2011
Pro-Link Organization, Accra, Ghana	
Reproductive Health Epidemiologist	2003

HONORS AND AWARDS FOR RESEARCH, TEACHING, PUBLIC ENGAGEMENT AND SERVICE

University of Minnesota

Gold Humanism Honor Society	2007-2008
Medical School Basic Science Overall Top Honors (Top 20%)	2006
Student Research Grant, Minnesota Medical Foundation	2005

Walter H. Judd Fellowship in Global Health	2003, 2007

External Sources

UMP Clinical Excellence Award	2022, 2023, 2024
Top Doctor, Minnesota Monthly Magazine	2018, 2021, 2022, 2023
Rising Star, Mpls St. Paul Magazine	2021
David E. Rogers Fellowship	2005
Phi Beta Kappa	2001
St. Olaf College Biological Honor Society	2001
Semester at Sea Dean's List	2000

RESEARCH AND SCHOLARSHIP

Grants and Contracts

External Sources

Current

1. Role: Co-Investigator
   Principal Investigator: David Turok, MD
   External Agency: University of Utah
   Grant Title: LNG 52 mg IUD for Emergency Contraception and Same-Day Start
   Project Dates: 06/01/2022-5/30/2024
   Total costs: $24,505
   Direct costs/year: $19,505
   Funded salary support: 1%

2. Role: Co-Investigator
   Principal Investigator: Alison Ojanen-Goldsmith
   External Agency: Male Contraceptive Initiative
   Grant Title: Acceptability, preferences, and values related to contraception for people who produce sperm
   Project Dates: 12/01/20-11/30/22
   Total costs: $150,000
   Direct costs/year: $71,442.50
   Funded salary support: 1%

Pending

1. Role: Site Principal Investigator
   External Agency: Gynuity Health Projects
   Grant Title: Extending outpatient medical abortion in the late first trimester of pregnancy
   Submitted: September 2020
   Project Dates: 10/01/22-TBD
   Total costs: TBD
   Direct costs/year: TBD
   Funded salary support: 1%

Completed

1. Role: Co-Investigator
   PI: Sharon Allen, MD, PhD
   Grant Number: 5R01DA047287
   External Agency: National Institutes of Health
   Grant Title: Bupropion for the Prevention of Postpartum Smoking Relapse
   Project Dates: 09/01/18-08/30/23
   Total costs: $2,372,039
   Direct costs/year: $440,350
   % Effort/salary support: 5%

2. Role: Site Principal Investigator
   External Agency: Gynuity Health Projects
   Grant Title: Medication Abortion with Autonomous Self-Assessment
   Submitted: November 2021
   Project Dates: 03/01/2022-02/28/2023
   Total costs: $34,345.84
   Direct costs/year: $25,759.38
   Funded salary support: 1%

3. Role: Site Principal Investigator
   External Agency: Mayo Clinic
   Grant Title: Validation study of self-collected rectal and pharyngeal swabs for Chlamydia and Gonorrhea testing
   Project Dates: 10/01/21 - 10/01/22
   Direct costs/year: $34,793.94
   Funded salary support: 1%

4. Role: Site Principal Investigator
   External Agency: University of Pennsylvania
   Grant Title: Development of an implementation strategy to integrate HIV pre-exposure prophylaxis into family planning care
   Project Dates: 11/01/21 - 11/01/22
   Total costs: not applicable
   Direct costs/year: not applicable
   Funded salary support: 1%

5. Role: Site Principal Investigator
   Principal Investigator: Elizabeth Raymond, MD
   External Agency: Gynuity Health Projects
   Grant Title: Feasibility of Medical Abortion by Direct-to-Consumer Telemedicine.
   Project Dates: 09/01/19-11/01/21
   Total costs: $85,000
   Direct costs/year: $63,750
   Funded salary support: 1%

6. Role: Co-Investigator

PI: Rebecca Shlafer, PhD
Grant Number: 5R03HD093961
External Agency: National Institutes of Health
Grant Title: Efficacy and Cost-Effectiveness of Doula Care for Incarcerated Pregnant Women
Project Dates: 07/01/17 - 06/30/20
Total cost: $154,000
Direct costs/year: $50,000
Funded salary support: 10%

7. Role: Co-investigator
Principal Investigator: Vivian Bardwell, PhD
Grant Number: 5R01HD084459
External Agency: National Institutes of Health
Grant Title: Control of Trophoblast Differentiation in Placental Development
Project Dates: 03/01/16-01/01/18
Total costs: $1,424,260
Direct costs/year: $215,463
Funded salary support: 0%

8. Role: Site Principal Investigator
Principal Investigator: Ilana Dzuba, MHSc
External Agency: Gynuity Health Projects
Grant Title: Non-surgical alternatives to treatment of failed medical abortion: A randomized controlled double-blind trial.
Project Dates: 03/01/17-01/31/18
Total costs: $24,000
Direct costs/year: $18,000
Funded salary support: 1%

9. Role: Principal Investigator
External Agency: William and Flora Hewlett Foundation
Grant Title: Quantifying contraceptive failure with unprotected intercourse 6-14 days prior to contraceptive initiation.
Project Dates: 11/01/16-08/30/18
Total costs: $63,000
Direct costs/year: $50,400
Funded salary support: 10%

10. Role: Site Principal Investigator
External Agency: Gynuity Health Projects
Grant Title: Simplified Medical Abortion Screening: A Pilot Demonstration Project
Project Dates: 08/01/16-01/31/17
Total: $24,000
Direct costs/year: $19,200
Funded salary support: 1%

11. Role: Principal Investigator
External Agency: Society of Family Planning Research Fund

Grant Title: Quick start levonorgestrel intrauterine contraceptive initiation in the setting of unprotected intercourse: a pilot study.
Project Dates: 02/01/14-12/31/15
Total costs: $30,000
Direct costs/year: $24,000
Funded salary support: 5%

12. Role: Principal Investigator
External Agency: Society of Family Planning Research Fund
Grant Title: Dilapan-S with Adjunctive Misoprostol for Same-day Second Trimester Dilation and Evacuation: A Randomized, Double-Blind, Placebo-Controlled Trial
Project Dates: 06/01/13-07/31/14
Total costs: $70,000
Direct costs/year: $56,000
Funded salary support: 10%

Business and Industry (Clinical) Trials

Current

1. Role: Site Principal Investigator
External Agency: Quidel Ortho Corporation
Title: Savanna HVT Validation Study
Submitted: May 2023
Project Dates: 11/01/2023-10/31/2024
Total cost: $198,373.50
Direct costs/year: $61,200
Funded salary support: 1%

2. Role: Site Principal Investigator
External Agency: BD
Title: IDS-QSCTGCClinical Study Clinical Validation of the BD Elience™ POC CT/GC Assay
Submitted: March 2023
Project Dates: 11/01/23-05/01/24
Total cost: $282,717.50
Direct costs/year: $241,540.00
Funded salary support: 1%

3. Role: Site Principal Investigator
External Agency: Visby Medical
Title: Clinical Evaluation of Visby Medical Personal PCR Women's Sexual Health Test for the Detection of Chlamydia trachomatis (CT), Neisseria gonorrhoeae (NG), and Trichomonas vaginalis (TV) Using Self-Collected Vaginal Swabs.
Submitted: Jan 2023
Project Dates: 03/01/23-03/01/24
Direct costs/year: $124,500
Funded salary support: 1%

4. Role: Site Principal Investigator
External Agency: Mylan Technologies Inc., A Viatris Company

Title: A Phase 3, Multicenter, Open-Label, Single Arm Study of MR-100A-01 in Women of Childbearing Potential to Evaluate Contraceptive Efficacy and Safety
Submitted: May 2023
Project Dates: 08/15/2023-01/01/25
Total cost: $228,750
Direct costs/year: $214,440
Funded salary support: 1%

5. Role: Site Principal Investigator
External Agency: Sebela, Inc.
Title: A Phase 3, Prospective, Multi-Center, Single-Arm, Open-Label Study to Evaluate VeraCept®, a Long-Acting Reversible Intrauterine Contraceptive for Contraceptive Efficacy, Safety, and Tolerability.
Submitted: March 2017
Project Dates: 10/01/18-06/01/24
Total cost: $1,165,751
Direct costs/year: $124,901.89
Funded salary support: 1%

6. Role: Site Principal Investigator
External Agency: Merck, Inc.
Title: A Phase 3, Open-Label, Multi-Center, Single Arm Study to Assess Contraceptive Efficacy and Safety of the Etonogestrel (MK-8415) Implant during Extended Use Beyond 36 months from Insertion in Premenopausal Females up to 35 years of age.
Submitted: June 2020
Project Dates: 12/01/20-11/30/22
Total costs: $761,364
Direct costs/year: $266,477.40
Funded salary support: 1%

Pending

1. Role: Site Principal Investigator
External Agency: PRA Health Sciences, Inc.
Title: A Phase 3, Prospective, Multi-Center, Single-Arm, Open-Label Study to Evaluate LevoCept™, a Long-Acting Reversible Intrauterine System (IUS) for Contraceptive Efficacy, Safety, and Tolerability.
Submitted: May 2020
Project Dates: 01/01/22-12/31/29
Total Costs: TBD
Direct costs/year: TBD
Funded salary support: TBD

Completed

1. Role: Site Principal Investigator
External Agency: Roche Molecular Systems, Inc.
Title: Prospective Women's Health Sample Collection_RMS_BAM
Submitted: Feb 2023
Project Dates: 01/01/23-10/31/23

Direct costs/year: $96,817
Funded salary support: 1%

2. Role: Site Principal Investigator
External Agency: Roche Molecular Systems, Inc.
Title: cobas® CT/NG/MG Nucleic acid test for use on the cobas® Liat® System: Clinical Performance Evaluation
Submitted: Nov 2022
Project Dates: 01/01/23-09/30/23
Direct costs/year: $229,687
Funded salary support: 1%

3. Role: Site Principal Investigator
External Agency: Cepheid
Title: 248C3: Clinical Evaluation of the Xpert Xpress CT/NG Test in Female Extragenital Specimens
Submitted: July 2022
Project Dates: 10/01/22-04/30/2023
Total costs: $149,349.50
Direct costs/year: $104,544.65
Funded salary support: 1%

4. Role: Site Principal Investigator
External Agency: Beckman Coulter, Inc.
Title: Access HBV Serological Markers Subject Enrollment US Protocol, Access HCV AB Assay Subject Enrollment US Protocol, Access HIV AG/AB Combo Assay US Enrollment Protocol
Submitted: October 2021
Project Dates: 11/01/21-11/01/22
Total Costs: $828,281.25
Direct costs/year: $621,210.94
Funded salary support: 1%

5. Role: Site Principal Investigator
External Agency: EvoFem Biosciences
Title: Phase 3 double-blind placebo-controlled efficacy trial of EVO100 vaginal gel for the prevention of urogenital Chlamydia trachomatis and Neisseria gonorrhea infection
Submitted: July 2020
Project Dates: 10/21/20-10/21/22
Total costs: $279,977.50
Direct costs/year: $193,692.50
Funded salary support: 1%

6. Role: Site Principal Investigator
External Agency: Abbott Molecular, Inc.
Title: Alinity m HR HPV Specimen Collection Study from Women Referred to Colposcopy
Submitted: May 2021
Project Dates: 05/01/21-05/01/22
Total costs: $240,000
Direct costs/year: $168,000

Funded salary support: 1%

7. Role: Site Principal Investigator
   External Agency: Cepheid
   Title: Clinical Evaluation of the Xpert Xpress CT/NG Test in Female Urogenital Specimens
   Submitted: April 2020
   Project Dates: 04/28/20-4/28/21
   Direct costs/year: $50,000
   Funded salary support: 1%

8. Role: Site Principal Investigator
   External Agency: Cepheid
   Title: Pre-Clinical Evaluation of the Xpert Xpress CT/NG Test
   Submitted: April 2019
   Project Dates: 07/08/19-10/30/19
   Direct costs/year: $28,475
   Funded salary support: 1%

9. Role: Site Principal Investigator
   External Agency: Visby Medical (Click Dx)
   Title: Clinical Evaluation of the Click Sexual Health Test for the Detection of Neisseria gonorrhoeae, Trichomonas vaginalis, and Chlamydia trachomatis in Women.
   Submitted: July 2019
   Project Dates: 09/19/19-12/30/19
   Direct costs/year: $28,650
   Funded salary support: 1%

10. Role: Site Principal Investigator
    External Agency: Abbott (Alere) San Diego
    Title: Alere hCG Test Method Comparison Study.
    Submitted: February 2019
    Project Dates: 03/15/19-07/30/19
    Direct costs/year: $55,050
    Funded salary support: 5%

11. Role: Site Principal Investigator
    External Agency: HRA Pharma
    Title: Multi-Center Study to Test the Comprehension of the Ovrette® OTC Drug Facts Label
    Project Dates: 10/01/16-01/31/17
    Direct costs/year: $8,450
    Funded salary support: 1%

12. Role: Site Principal Investigator
    External Agency: Hologic, Inc.
    Title: Prospective Collection and Testing of Lesion Specimens for the Development of a Herpes Simplex Virus Assay.
    Project Dates: 10/01/14-07/31/16
    Direct costs/year: $30,300

Funded salary support: 1%

University of Minnesota Sources

Current

1. Role: Co-Principal Investigator
   Principal Investigator: Karen Borchert, MD
   Internal Agency: University of Minnesota Medical School, Department of Family Medicine
   Title: Pregnancy of Unknown Location in Abortion Care: Management and Outcomes.
   Project Dates: 01/01/17-12/31/22
   Direct costs/year: non-applicable

Completed

1. Role: Principal Investigator
   Internal Agency: University of Minnesota Medical School, Department of Obstetrics, Gynecology and Women's Health Progressive Grant, Phase II
   Title: Identifying predictors of post-abortion contraceptive uptake using a comprehensive, multisite database
   Project Dates: 07/01/20-06/30/22
   Direct Costs/Year: $20,000
   Funded salary support: 0%

2. Role: Principal Investigator
   Internal Agency: University of Minnesota Medical School, Department of Obstetrics, Gynecology and Women's Health Research Support Grant
   Title: Quantifying contraceptive failure with unprotected intercourse 6-14 days prior to contraceptive initiation
   Project Dates:01/01/17-6/30/21
   Total Cost: $3,500
   Funded salary support: 0%

3. Role: Principal Investigator
   Internal Agency: University of Minnesota Medical School, Department of Obstetrics, Gynecology and Women's Health Research Support Grant
   Title: Contrasperm: the Future of Male Birth Control
   Project Dates: 08/01/19-07/31/20
   Total Cost: $4,500
   Funded salary support: 0%

4. Role: Principal Investigator
   Internal Agency: University of Minnesota Medical School, Department of Obstetrics, Gynecology and Women's Health Progressive Grant, Phase I
   Title: Identifying predictors of post-abortion contraceptive uptake using a comprehensive, multisite database
   Project Dates: 08/01/19-07/31/20
   Total cost: $10,000
   Funded salary support: 0%

Publications

Impact Analytics

h-Index	*h(fl)*-Index	Total Publications	First/Last Author Publications	Total Citations	First/Last Author Citations
8	**2**	**18**	**6**	**231**	**18**

Publication #1-2 not yet in Manifold

Peer-Reviewed Publications

1. Wise MK, Okuyemi O, Flint M, Biscaye EM, Tessier KM, Traxler SA, **Boraas CM**. Intrauterine Device Placement Success for Adolescents and Young Adults at Community-based Reproductive Health Clinics. J Pediatr Adolesc Gynecol. 2023 Dec 8:S1083-3188(23)00451-5. doi: 10.1016/j.jpac.2023.11.013. Online ahead of print.
   Impact Factor: 2.298; Times Cited: 0; Role: Developed study concept and design, defined intellectual content, conducted literature search, data acquisition, manuscript preparation, editing and review.

2. Raymond EG, Frye LJ, Tocce K, Gingras S, Almquist A, Firstenberg A, Ortega C, Blumenthal PD, Winikoff B, **Boraas C.** Evaluation of a "smart" screening tool for asynchronous assessment of medication abortion eligibility: A pilot study. Contraception. 2023 Nov 20:110340. doi: 10.1016/j.contraception.2023.110340. Online ahead of print.
   Impact Factor: 2.335; Times Cited: 0; Role: Developed study concept and design, defined intellectual content, conducted literature search, data acquisition, manuscript preparation, editing and review.

3. Hassan A, Ojanen-Goldsmith A, Hing A, Mahoney M, Traxler SA, **Boraas CM**. More than tears: associations between exposure to chemical agents used by law enforcement and adverse reproductive health outcomes. Front. Epidemiol. Sec. Occupational and Environmental Epidemiology. 2023 Aug 23:3 - 2023. https://doi.org/10.3389/fepid.2023.1177874 https://www.frontiersin.org/articles/10.3389/fepid.2023.1177874/full
   Impact Factor: n/a; Times Cited: 0; Role: Developed study concept and design, defined intellectual content, conducted literature search, data acquisition, manuscript preparation, editing and review.

4. Martins SL, **Boraas CM.** Willingness to use novel reversible methods of male birth control: a community-based survey of cisgender men in the United States. Contracept Reprod Med. 2023 Aug 10;8(1):41. doi: 10.1186/s40834-023-00242-y.
   Impact Factor: 2.9; Times Cited: 0; Role: Developed study concept and design, defined intellectual content, conducted literature search, data acquisition, manuscript preparation, editing and review.

5. Borchert K, Thibodeau C, Varin P, Wipf H, Traxler S, **Boraas CM.** Medication Abortion and Uterine Aspiration for Undesired Pregnancy of Unknown Location: A Retrospective Cohort Study. Contraception. 2023 Jun;122:109980. doi:10.1016/j.contraception.2023.109980.
   Impact Factor: 2.335; Times Cited: 0; Role: Developed study concept and design, defined intellectual content, conducted literature search, data acquisition, manuscript preparation, editing and review.

6. Koenig LR, Raymond EG, Gold M, **Boraas CM**, Kaneshiro B, Winikoff B, Coplon L, Upadhyay UD. Mailing abortion Pills does not delay care: a cohort study comparing mailed to in-person dispensing of abortion medications in the United States. Contraception. 2023 Jun;122:109962. doi: 10.1016/j.contraception.2023.109962.
Impact Factor: 2.335; Times Cited: 0; Role: Protocol editing, site administration of multicenter trial, data acquisition, manuscript preparation, editing and review.

7. Groene EA*, **Boraas CM**, Smith MK, Lofgren SM, Rothenberger MK, Enns EA. Evaluation of Strategies to Improve Uptake of Expedited Partner Therapy for *Chlamydia trachomatis* Treatment in Minnesota: A Decision Analytic Model. MDM Policy Pract. 2023 Jan 22;8(1):23814683221150446. doi: 10.1177/23814683221150446. eCollection 2023 Jan-Jun.
Impact Factor: 1.54; Times Cited: 0; Role: Developed study concept and design, defined intellectual content, conducted data acquisition, manuscript preparation, editing and review.

8. Groene EA*, **Boraas CM**, Smith MK, Lofgren SM, Rothenberger MK, Enns EA. A statewide mixed-methods study of provider knowledge and behavior administering Expedited Partner Therapy for chlamydia and gonorrhea. Sex Transm Dis. 2022 Jul 3. doi: 10.1097/OLQ.0000000000001668.
Impact factor: 3.686; *Times Cited: 0; Role: Protocol creation, manuscript preparation, editing and review.*

9. Ralph JA, Westberg SM, **Boraas CM**, Terrell CA, Fischer JR. PrEP-aring the General Gynecologist to Offer HIV Pre-exposure Prophylaxis. Clin Obstet Gynecol. 2022 Jun 16. doi: 10.1097/GRF.0000000000000713. Online ahead of print.
Impact factor: 1.619; Times Cited: 0; Role: manuscript preparation, editing and review.

10. Henke L*, Martins S*, **Boraas CM**. Associations Between Income Status and Perceived Barriers to Using Long-Acting Reversible Contraception: An Exploratory Study. Front Reprod Health, 12 April 2022. https://doi.org/10.3389/frph.2022.856866
Impact factor: NA; Times Cited: 0: Role: Protocol creation, data acquisition, manuscript preparation, editing and review.

11. Upadhyay UD, Raymond EG, Koenig LR, Coplon L, Gold M, Kaneshiro B, **Boraas CM**, Winikoff B. Outcomes and Safety of History-Based Screening for Medication Abortion: A Retrospective Multicenter Cohort Study. JAMA Intern Med. 2022 Mar 21. Online ahead of print.
impact factor: 44.41; Times Cited: 26; Role: Protocol editing, site administration of multicenter trial, data acquisition, manuscript preparation, editing and review.

12. Anger HA, Raymond EG, Grant M, Haskell S, **Boraas C**, Tocee K, Banks J, Coplon L, Shochet T, Platais I, Winikoff B. Clinical and service delivery implications of omitting ultrasound before medication provided abortion via direct-to-patient telemedicine and mail. Contraception. 2021 Dec;104(6):659-665. doi: 10.1016/j.contraception.2021.07.108. Epub 2021 Jul 28.
Journal Impact Factor: 2.335; Times Cited: 8; Role: Protocol editing, site administration of multicenter trial, data acquisition, manuscript preparation, editing and review.

13. Chong E, Shochet T, Raymond E, Platais I, Anger HA, Raidoo S, Soon R, Grant MS, Haskell S, Tocce K, Baldwin MK, **Boraas CM**, Bednarek PH, Banks J, Coplon L, Thompson F, Priegue E,

Winikoff B. Expansion of a direct-to-patient telemedicine abortion service in the United States and experience during the COVID-19 pandemic. Contraception. 2021 Jul;104(1):43-48. doi: 10.1016/j.contraception.2021.03.019. Epub 2021 Mar 27.
Journal Impact Factor: 2.335; Times Cited: 50; Role: Protocol review and editing, site administration of multicenter trial, data acquisition, manuscript preparation, editing and review.

14. **Boraas CM**, Sanders JN, Schwarz EB, Thompson I, Turok DK. Risk of Pregnancy With Levonorgestrel-Releasing Intrauterine System Placement 6-14 Days After Unprotected Sexual Intercourse. Obstet Gynecol. 2021 Apr 1;137(4):623-625.
Journal Impact Factor: 4.982; Times Cited: 0; Role: Protocol review and editing, grant writing and submission, site administration of multicenter trial, data acquisition, manuscript preparation, editing and review.

15. Raymond EG, Anger HA, Chong E, Haskell S, Grant M, **Boraas C**, Tocce K, Banks J, Kaneshiro B, Baldwin MK, Coplon L, Bednarek P, Shochet T, Platais I. "False positive" urine pregnancy test reults after successful medication abortion. Contraception. 2021 Jun;103(6):400-403. doi: 10.1016/j.contraception.2021.02.004. Epub 2021 Feb 14.
Journal Impact Factor: 2.335; Times Cited: 0; Role: Protocol review and editing, site administration of multicenter trial, data acquisition, manuscript preparation, editing and review.

16. Schlafer R, Saunders JB, **Boraas CM**, Kozhimannil KB, Mazumder N, Freese R. Maternal and neonatal among incarcerated women who gave birth in custody. Birth. 2021 Mar;48(1):122-131. doi: 10.1111/birt.12524. Epub 2020 Dec 27.
Impact factor 3.689; Times cited 6; Role: Developed study concept and design, defined intellectual content, manuscript preparation, editing and review.

17. Thompson I, Sanders JN, Schwarz EB, **Boraas C,** Turok DK. Copper intrauterine device placement 6-14 days after unprotected sex. Contraception. 2019 Sep;100(3):219-221. doi: 10.1016/j.contraception.2019.05.015. Epub 2019 Jun 7.
Impact factor 2.335; Times cited 10; Role: Protocol review and editing, grant writing and submission, site administration of multicenter trial, data acquisition, manuscript preparation, editing and review.

18. Raymond EG, Tan YL, Comendant R, Sagaidac I, Hodorogea S, Grant M, Sanhueza P, Van Pratt E, Gillespie G, **Boraas C**, Weaver MA, Platais I, Bousieguez M, Winikoff B. Simplified medical abortion screening: a demonstration project. Contraception. 2018 Apr;97(4):292-296. doi: 10.1016/j.contraception.2017.11.005. Epub 2017 Nov 21. PMID: 29170088
Impact factor 2.335; Times cited 27; Role: Protocol review and editing, site administration of multicenter trial, data acquisition, manuscript preparation, editing and review.

19. **Boraas CM**, Chappell CA, Krajewski CM. Use of an Endotracheal Tube for Surgical Abortion Complicated by a Leiomyomatous Uterus: A Case Report. J Med Case Rep. 2017 August 25;11(1):236. doi: 10.1186/s13256-017-1408-y. PMID: 28838323.
Impact factor 1.07; *Times cited 1; Role: Developed case report design, defined intellectual content, conducted literature search, data acquisition, manuscript preparation, editing and*

review.

20. Paul J*, **Boraas CM**, Duvet M*, Chang JC. YouTube and the single-rod contraceptive implant: a content analysis. J Fam Plann Reprod Health Care. 2017 Jul;43(3):195-200. doi: 10.1136/jfprhc-2016-101593. Epub 2017 Jan 20. PMID: 28108504. *Impact factor 2.151, Times cited 15; Role: Developed study concept and design, defined intellectual content, manuscript preparation, editing and review.*

21. **Boraas CM**, Achilles SL, Cremer ML, Chappell CA, Lim SE, Chen BA. Synthetic osmotic dilators with adjunctive misoprostol for same-day dilation and evacuation: a randomized controlled trial. Contraception. 2016 Nov;94(5):467-472. PMID: 27241895.
Impact factor 2.335; Times cited 11; Role: Developed study concept and design, defined intellectual content, conducted literature search, data acquisition, manuscript preparation, editing and review.

22. Rapkin RB, Achilles SL, Schwarz EB, Meyn L, Cremer M, **Boraas CM**, Chen BA. Self-Administered Lidocaine Gel for Intrauterine Device Insertion in Nulliparous Women: A Randomized Controlled Trial. Obstet Gynecol. 2016 Sep;128(3):621-8. doi: 10.1097/ACOG.0000000000001596. PMID: 27500351. *Impact factor 4.982; Times cited 30; Role: Defined intellectual content, data acquisition, manuscript preparation, editing and review.*

23. Akinsete OO, Sides T, Hirigoyen D, Cartwright C, **Boraas C**, Davey C, Pessoa-Brandao L, McLaughlin M, Kane E, Hall J, Henry K. Demographic, clinical, and virologic characteristics of African-born persons with HIV/AIDS in a Minnesota hospital. AIDS Patient Care STDS. 2007 May;21(5):356-65. PMID: 17518528.
Impact factor 5.944; Times cited 37; Role: Data acquisition, manuscript preparation, editing and review.

Non-Peer-Reviewed Publications

1. Martins SL*, **Boraas CM.** Contraceptive counseling: an essential travel medicine service. J Travel Med. 2020 Jul 14;27(4):taaa023. doi: 10.1093/jtm/taaa023
Role: Commentary preparation, editing and review.

2. Miller KK*, Gewirtz O'Brien JR*, Sajady M, Argo T*, Chaisson N, **Boraas C.** Long Acting Reversible Contraception (LARCs): Beyond Birth Control. Minnesota Pediatrician monthly newsletter, February 2020. Available at: http://www.mnaap.org/long-acting-reversible-contraceptives-larcs-beyond-birth-control/
Role: Manuscript preparation, editing and review.

3. **Boraas CM**, Schwarz EB. Contraceptive Choice for Women with Obesity. Gynecology Forum. 2012 May;17(4):20-3.
Role: Developed review design, conducted literature search, manuscript preparation, editing and review.

Chapters in Books

1. Ralph JA and **Boraas CM.** Surgical Abortion Complications. In Press. Major Complications of Female Pelvic Surgery: A Multidisciplinary Approach. Hoffman M, Bochner B, and Hull T, eds., Springer Nature Publishing, Berlin, Germany.
   Role: Author

2. **Boraas CM.** A 32-Year-Old HIV-positive woman requesting IUD. 2019. *Office Gynecology: A Case-Based Approach, First Edition;* Chelmow D, Karjane N, Ricciotti H, Young A, eds., Cambridge University Press, New York, NY.
   Role: Author

3. **Boraas CM** and Keder LM. Intrauterine Contraception Insertion and Removal. In Press. *Atlas of Pelvic Surgery and Anatomy, First Edition*; Huh W and Kim K, eds., McGraw Hill Professional, New York, NY.
   Role: Author

4. **Boraas CM** and Keder LM. Contraceptive Implant Insertion and Removal. In Press. *Atlas of Pelvic Surgery and Anatomy, First Edition*; Huh, W. and Kim, K., eds, McGraw Hill Professional, New York, NY.
   Role: Author

5. **Boraas CM** and Keder LM. Female Sterilization. In Press. *Atlas of Pelvic Surgery and Anatomy, First Edition*; Huh, W. and Kim, K., eds, McGraw Hill Professional, New York, NY.
   Role: Author

Presentations

Invited Oral Presentations at International Professional Meetings, Conferences, etc.

1. **Boraas CM,** Nardos R, Ghebre R, Pace S, Chojnacki M. Obstetrics and Gynecology Medicine Panel. University of Minnesota Global Health Course. May 6, 2021. Virtual.
2. **Boraas CM.** Current Contraception Overview. American Refugee Committee Staff Development Conference. March 18-26, 2013. Sangkhlaburi, Thailand.
3. **Boraas CM.** Long-Acting Reversible Contraception – Implants. American Refugee Committee Staff Development Conference. March 18-26, 2013. Sangkhlaburi, Thailand.
4. **Boraas CM.** Long-Acting Reversible Contraception - Intrauterine Devices. American Refugee Committee Staff Development Conference. March 18-26, 2013. Sangkhlaburi, Thailand.

Invited Oral Presentations at National Professional Meetings, Conferences, etc.

1. **Boraas CM.** Asynchronous Medication Abortion: The MA-ASAP Research Study. Planned Parenthood Federation of America Maximizing Abortion Access Meeting. April 4, 2023. Minneapolis, MN.

2. **Boraas CM.** Asynchronous Medication Abortion: The MA-ASAP Research Study. Planned Parenthood Federation of America Medical Directors Council Annual Meeting. November 11, 2022. Tuscon, AZ.

3. **Boraas CM**, Ojanen-Goldsmith A, Torgrimson-Rojerio B, Hassan A*. Time for Action: The

impact of tear gas used by law enforcement on reproductive health. Society of Family Planning Annual Meeting. October 12, 2021. Virtual.

4. **Boraas CM**. Merck Nexplanon Extension Trial, Site Tips and Tricks. MK-8415-060 Lessons Learned – Recruitment and Retention Meeting. May 5, 2021. Virtual.

5. **Boraas CM** and Rapkin RB. Surgical Miscarriage Management in the Office: You Can Do It. ACOG Annual Clinical Meeting. April 30-May 2, 2021. Virtual.

6. **Boraas CM**, Kaneshiro B, Raymond E, Grant M. No Test Medical Abortion. Society of Family Planning Webinar. January 6, 2021. Virtual.

7. Borchert K, Wipf H*, Roeske E*, Clure C*, Traxler S, **Boraas CM.** Pregnancy of Unknown Location in Abortion Care: Management and Outcomes. National Abortion Federation Conference. April 2018. Seattle, WA.

8. **Boraas CM.** Interviewing Basics. Fellowship in Family Planning Career Development Workshop. July 23-24, 2017. Chicago, IL.

9. **Boraas CM.** Searching for a Position. Fellowship in Family Planning Career Development Workshop. July 23-24, 2017. Chicago, IL.

10. **Boraas CM** and Rapkin RB. Surgical Miscarriage Management in the Office: You Can Do It. ACOG Annual Clinical Meeting. May 7, 2017. San Diego, CA.

Invited Oral Presentations at Local and Regional Professional Meetings, Conferences, etc.

1. **Boraas CM, Flynn R, Felman J.** Controversial Care Panel. University of Minnesota Law School Health and Bioethics Association Seminar. April 11, 2024. Virtual.

2. **Boraas, CM.** Induced Abortion for Genetic Counselors. University of Minnesota Genetic Counselor Graduate Student Education Presentation. November 13, 2023. Minneapolis, MN.

3. **Boraas, CM.** Satin, D. Janoski, E. Clinician responsibilities and vulnerabilities in the face of ethical and legal controversy. University of Minnesota Law 6854 Law, Biomedicine & Bioethics course. November 7, 2023. Minneapolis, MN.

4. **Boraas CM,** Hutto SL**.** Reproductive Health Skills Workshop. Simulation. University of Minnesota Medical School Obstetrics and Gynecology and Family Medicine Interest Groups Skills Night. March 20, 2023. Minneapolis, MN.

5. **Boraas CM,** Ruud M, Hassan A. Navigating and Innovating Women's Health Services, Policies and Access Issues. 17th Annual University of Minnesota Women's Health Research Conference. February 23, 2023. Virtual.

6. **Boraas CM** and Ralph JA. Post-Roe Implications for Reproductive Health Care and Beyond. University of Minnesota Department of Medicine Grand Rounds. December 8, 2022. Virtual.

7. **Boraas CM,** Hasday J, Walker S. Abortion Access After Dobbs. University of Minnesota Center on Women, Gender and Public Policy Hybrid Event. November 8, 2022. Minneapolis, MN.

8. **Boraas, CM.** Satin, D. Janoski, E. Clinician responsibilities and vulnerabilities in the face of ethical and legal controversy. University of Minnesota Law 6854 Law, Biomedicine & Bioethics course. November 8, 2022. Minneapolis, MN.

9. **Boraas, CM.** Trauma-informed Gyn and Pregnancy Care: How we use Language in the Exam Room. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. February 14, 2022. Minneapolis, MN.

10. **Boraas, CM.** Contraception for the Medically Complex Patient. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference, February 14, 2022. Minneapolis, MN.

11. **Boraas, CM.** Induced Abortion for Genetic Counselors. University of Minnesota Genetic Counselor Graduate Student Education Presentation. December 13, 2021. Minneapolis, MN.

12. **Boraas, CM.** Ectopic pregnancy and induced abortion. University of Minnesota Womens' Health Nurse Practitioner and Nurse Midwifery Education Presentation. September 17, 2021. Minneapolis, MN

13. **Boraas CM.** Dilation and Curettage Papaya Workshop. Simulation. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Bootcamp. June 21, 2021. St. Paul, MN.

14. **Boraas, CM.** Induced Abortion for Genetic Counselors. University of Minnesota Genetic Counselor Graduate Student Education Presentation. December 14, 2020. Minneapolis, MN.

15. **Boraas, CM.** Breastfeeding Basics for the Ob/Gyn Resident. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. December 28, 2020. Minneapolis, MN.

16. **Boraas CM.** Introduction to Family Planning. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Bootcamp. June 22, 2020. St. Paul, MN.

17. **Boraas CM.** Dilation and Curettage Papaya Workshop. Simulation. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Bootcamp. June 22, 2020. St. Paul, MN.

18. **Boraas CM.** Ectopic Pregnancy. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. June 22, 2020. Minneapolis, MN.

19. **Boraas CM.** Pregnancy of Unknown Location and Early Pregnancy Loss. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. May 4, 2020. Minneapolis, MN.

20. Wise M*, **Boraas CM.** Veracept Phase II Trial. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Journal Club. May 4, 2020. Minneapolis, MN.

21. **Boraas CM.** Breech Vaginal Delivery. Simulation. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. February 24, 2020. Minneapolis, MN.

22. **Boraas, CM.** Global Maternal Mortality. University of Minnesota Global Pediatrics Education Presentation. February 6, 2020. Minneapolis, MN.

23. **Boraas CM.** Important Conversations – Challenging Patients, Language, Race and Racism. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. February 27, 2020. Minneapolis, MN.

24. **Boraas CM,** Pacala K**.** Dilation and Curettage Papaya Workshop. Simulation. University of Minnesota Medical School Obstetrics and Gynecology Interest Group Skills Night. February 27, 2020. Minneapolis, MN.

25. **Boraas CM**, Finn K, McKegney C, Ball C. Highlighting work as an abortion provider. Lunch Lecture. Medical Students for Choice. University of Minnesota Medical School. January 13, 2020. Minneapolis, MN.

26. Gerwitz-O'Brien J*, Donlon T*, **Boraas, CM.** Advocacy in Action. Becoming a Doctor Course. University of Minnesota Medical School. January 8, 2020. Minneapolis, MN.

27. **Boraas, CM.** Contraception for Endocrine Fellows. University of Minnesota Endocrinology Fellows Education Presentation. November 21, 2019. Minneapolis, MN.

28. **Boraas, CM.** Induced Abortion for Genetic Counselors. University of Minnesota Genetic Counselor Graduate Student Education Presentation. November 18, 2019. Minneapolis, MN.

29. **Boraas, CM.** Ectopic pregnancy and induced abortion. University of Minnesota Womens' Health Nurse Practitioner and Nurse Midwifery Education Presentation. September 13, 2019. Minneapolis, MN.

30. **Boraas CM.** Adolescent Gynecology. University of Minnesota Department of Pediatrics Resident Block Education Conference. August 9, 2019. Minneapolis, MN.

31. **Boraas CM.** Breech Vaginal Delivery. Simulation. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. February 18, 2019. Minneapolis, MN.

32. **Boraas CM.** LARC Tips and Tricks. University of Minnesota Department of Obstetrics. Gynecology and Women's Health Resident Curriculum Conference. February 11, 2019. Minneapolis, MN.

33. Kummer L, **Boraas CM**, Chomilo N. Making an Impact through Advocacy. Becoming a Doctor Course. University of Minnesota Medical School. January 9, 2019. Minneapolis, MN.

34. **Boraas CM** and Flanagan S**.** Uterine Artery Embolization in Obstetric Hemorrhage. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Grand Rounds. December 18, 2018. Minneapolis, MN.

35. **Boraas CM.** Termination of Pregnancy in the Second Trimester. Fetal Diagnosis and Treatment Center. University of Minnesota Medical School. December 6, 2018. Minneapolis, MN.

36. **Boraas CM.** Contraception Overview. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Bootcamp. June 19, 2018. Minneapolis, MN.

37. **Boraas CM.** Introduction to Abortion. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Bootcamp. June 19, 2018. Minneapolis, MN.

38. **Boraas CM.** Cesarean Scar Pregnancy. Fairview Infusion Center Continuing Medical Education. May 25, 2018. Minneapolis, MN.

39. **Boraas CM.** Abortion Cervical Preparation. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. February 26, 2018. Minneapolis, MN.

40. **Boraas CM.** Dilation and Evacuation versus Induction of Labor for Termination of Pregnancy. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. February 26, 2018. Minneapolis, MN.

41. **Boraas, CM.** Ectopic pregnancy and induced abortion. University of Minnesota Womens' Health Nurse Practitioner and Nurse Midwifery Education Presentation. December 1, 2017. Minneapolis, MN.

42. **Boraas, CM.** Global Maternal Mortality: Focus on Delivery. University of Minnesota Department of Pediatrics Residency Block Education Presentation. Hennepin County Medical Center. November 17, 2017. Minneapolis, MN.

43. **Boraas CM.** Challenging Patient Encounters. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. October 30, 2017. Minneapolis, MN.

44. **Boraas, CM,** Terrell, CA, Hutto, SL. Abortion Care at UMMC. University of Minnesota Medical Center ER Department Grand Rounds. September 28, 2017. Minneapolis, MN.

45. **Boraas, CM.** Contraception for Patients with Medical Conditions. Continuing Education Presentation. Planned Parenthood MN-ND-SD. August 8 and 12, 2017. St. Paul, MN.

46. **Boraas, CM**, Terrell, CA, Hutto, SL. Abortion Care at UMMC. UMMC Peri-operative Education Meeting. April 11, 2017. Minneapolis, MN.

47. **Boraas CM.** Mifepristone: Politics and Science in Practice, University of Minnesota Department of Obstetrics, Gynecology and Women's Health Grand Rounds. February 21, 2017. Minneapolis, MN.

48. **Boraas CM.** Breech Vaginal Delivery. Simulation. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. February 6, 2017. Minneapolis, MN.

49. **Boraas CM** and Ball CE**.** Family Planning Questions and Answers, Planned Parenthood MN-ND-SD Clinician Days. January 6, 2017. St. Paul, MN.

50. **Boraas CM.** Abortion Policy. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. September 12, 2016. Minneapolis, MN.

51. **Boraas CM.** Abortion Cervical Preparation. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. September 12, 2016. Minneapolis, MN.

52. **Boraas CM.** Dilation and Evacuation versus Induction of Labor for Termination of Pregnancy. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. September 12, 2016. Minneapolis, MN.

53. **Boraas CM.** Challenging Patient Encounters. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. August 29, 2016. Minneapolis, MN.

54. **Boraas CM.** Introduction to Abortion. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Bootcamp. June 20, 2016. Minneapolis, MN.

55. **Boraas CM.** Family Planning Update. University of Minnesota Department of Obstetrics, Gynecology and Women's Health and MN ACOG Autumn Seminar. November 20, 2015. Minneapolis, MN.

56. **Boraas CM.** Introduction to Abortion. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Bootcamp. June 23, 2015. Minneapolis, MN.

57. **Boraas CM** and Ball CE**.** Family Planning Questions and Answers. Planned Parenthood MN-ND-SD Clinician Days. October 1, 2014. St. Paul, MN.

58. **Boraas CM** and Eggleston K**.** Family Planning Questions and Answers. Planned Parenthood MN-ND-SD Clinician Days. September 30, 2014. St. Paul, MN.

59. **Boraas CM.** Family Planning in Conflict Settings. University of Pittsburgh Global Health and Underserved Lecture Series. February 10, 2014. Pittsburgh, PA.

60. **Boraas CM.** Why Women 'Wait': Abortion in the Second Trimester. University of Illinois at Chicago Department of Obstetrics and Gynecology Grand Rounds. January 31, 2014. Chicago, IL.

61. **Boraas CM.** Abortion and Long-Term Health Outcomes: Examining the Evidence. University of Pittsburgh Department of Obstetrics, Gynecology and Reproductive Sciences Gynecology Conference. January 6, 2014. Pittsburgh, PA.

62. **Boraas CM.** Misoprostol in Gynecologic Practice. Magee-Womens Hospital Gynecology Conference. University of Pittsburgh. November 11, 2013. Pittsburgh, PA.

63. **Boraas CM.** Towards Equity: Reproductive Health along the Thai-Burma Border. University of Pittsburgh Department of Obstetrics, Gynecology and Reproductive Sciences Gynecology Conference. July 8, 2013. Pittsburgh, PA.

64. **Boraas CM.** Fit to be Tied: Sterilization in the USA. University of Pittsburgh Department of Obstetrics, Gynecology and Reproductive Sciences Gynecology Conference. February 22, 2013. Pittsburgh, PA.

65. **Boraas CM.** Health Reform 101: What's in it for Women? University of Pittsburgh Medical School Medical Students for Choice Lecture Series. November 2, 2012. Pittsburgh, PA.

66. **Boraas CM.** Health Reform 101: What's in it for Women? University of Pittsburgh Department of Obstetrics, Gynecology and Reproductive Sciences Gynecology Conference. October 22, 2012. Pittsburgh, PA.

67. **Boraas CM.** Maternal Mortality: The Promise of Progress. The Ohio State University Department of Obstetrics and Gynecology Grand Rounds. May 17, 2012. Columbus, OH.

68. **Boraas CM.** Current Contraception Overview. Kilimanjaro Christian Medical College Department of Obstetrics and Gynecology Grand Rounds. March 10, 2011. Moshi, Tanzania.

69. **Boraas CM.** Morbidity and Mortality Report – Case of the Lost IUD. The Ohio State University Department of Obstetrics and Gynecology Grand Rounds. September 2, 2010. Columbus, OH.

70. **Boraas CM.** Malaria in Pregnancy. University of Minnesota Department of Obstetrics, Gynecology and Women's Health Resident Curriculum Conference. August 27, 2010. Minneapolis, MN.

Peer-Reviewed Oral Presentations at National Professional Meetings, Conferences, etc.

1. Gawron LM, Roe AH, **Boraas CM,** Bernard C, Westhoff CL, Culwell K, Turok DK. Bleeding and pain over time with a novel low-dose copper intrauterine device with a flexible nitinol frame. Society of Family Planning Meeting. October 28-30, 2023.

2. Faherty E*, Smith K, **Boraas C**, Lofgren S, Rothenberger M, and Enns E. Using mixed methods to identify and evaluate strategies to improve uptake of Expedited Partner Therapy for *chlamydia trachomatis* infection in Minnesota. Society for Medical Decision Making Virtual Meeting, October 18-20, 2021.

3. Martins SL* and **Boraas CM**. Willingness to use the 'male' birth control pill: Demographic and reproductive health correlates among a community-based sample of U.S. men. Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. June 21-22, 2021. Virtual.

4. Upadhyay U, Raymond E, Koenig L, Coplon L, Gold M, Kaneshiro B, **Boraas C**, Winikoff B. Safety and Efficacy of No-test Medication Abortion: A Retrospective Multi-Site Study. National Abortion Federation Meeting. May 11-12, 2021. Virtual.

5. Anger H, Raymond E, Chong E, Haskell S, Grant M, **Boraas C**, Tocce K, Banks J, Coplon L, Shochet T, Platais I. Comparison of clinical outcomes among patients who did and did not have a screening ultrasound or pelvic exam prior to obtaining medciaion abortion services via direct-to-patient telemedicine. National Abortion Federation Meeting, May 11-12, 2021. Virtual

6. Sayarath M*, Gerwitz O'Brien J*, Shramko M*, Argo T*, Brown E, Mishra P, **Boraas CM** McRee, A. Assessing the Gap in Sexual and Reproductive Health Services among Hospitalized Adolescents. Works in Progress Session. Society of Adolescent Medicine Conference, March 11, 2020. San Diego, CA. Due to COVID-19 related conference cancellation, this invited presentation was not given.

7. Borchert K, Wipf K*, Roeske E*, Clure C*, Traxler S, **Boraas CM**. Pregnancy of Unknown Location in Abortion Care: Management and Outcomes. National Abortion Federation Conference, April 23, 2018. Seattle, WA.

8. **Boraas CM**, Thompson I, Turok DK, Baldauf E, Borrero S, Schwarz EB, Sanders JN. Extending the window for insertion of the intrauterine device. American Society for Reproductive Medicine Scientific Congress, October 19, 2016. Salt Lake City, UT.

9. **Boraas CM**, Isley MM. Chlamydia and gonococcal infections and screening in women receiving intrauterine devices in a resident obstetrics and gynecology clinic. The Ohio State Department of Obstetrics and Gynecology Resident Research Day. October 2011. Columbus, OH.

Poster Abstract Presentations at National Professional Meetings, Conferences, etc.

1. Van Der Pol B, Arcenas R, **Boraas C**, Chavoustie S, Crane LL, d'Empaire N, Ermel AC, G. Harnett G, Hinestrosa F, House S, Lillis R, Miller J, A. Mills A, R. Poblete R, S. Young A. Clinical Performance Evaluation of the Polymerase Chain Reaction (PCR)-Based cobas CT/NG/MG Test for Use on the cobas liat System in a Clinical Laboratory Setting and Point-of-Care (POC) Location. Association for Diagnostics and Laboratory Medicine Annual Scientific Meeting. July 28-August 4, 2024.

2. Carroll AL, Strauss AM, Philipps, NM, Kaczmarczik KD, Shakur Z, Ramirez G, Klc TR, Tessier KM, **Boraas CM.** Concurrent administration of depot medroxyprogesterone acetate with mifepristone may decrease medication abortion efficacy: A retrospective cohort study. Society of Family Planning Meeting. October 28-30, 2023.

3. Carroll AL, Strauss AM, Philipps, NM, Kaczmarczik KD, Shakur Z, Ramirez G, Klc TR, Tessier KM, **Boraas CM.** Concurrent placement of an etonogestrel implant with mifepristone does not decrease medication abortion efficacy: A retrospective cohort study. Society of Family Planning Meeting. October 28-30, 2023.

4. Mahoney M, Ojanen-Goldsmith A, Hassan A, **Boraas CM**. I waited years for an option other than vasectomy": Interest in new contraceptive methods for sperm among people with vasectomies. 2023 IAPHS Annual Meeting. October 2-5, 2023. Baltimore, MD.

5. Raymond EG, Frye LJ, **Boraas CM**, Tocce K, Gingras S, Firstenberg BS, Almquist A, ORtega C, Mahoney M, Hernandez K, Blumenthal P, Winikoff B. "MA-ASAP": Asynchronous, Web-Based Provision of Medication Abortion. National Abortion Federation Annual Meeting. April 30-May 2, 2023. Denver, CO.

6. **Boraas CM**, Wise M, Miller J, Jafari N, Martins S. New male contraception: Yea or Nay? Correlates of supportive attitudes in a community-based sample of men and women. University of Minnesota Annual Women's Health Research Conference. February 23, 2023. Virtual.

7. Groene E*, **Boraas C**, Smith K, Lofgren S, Rothenberger M, Enns E. Offering Expedited Partner Therapy: a mixed methods study of Minnesota health providers. 2022 STD Prevention Conference. September 19-22, 2022. Virtual.

8. Keonig LR, Raymond EG, Gold M, **Boraas C**, Kaneshiro B, Winikoff B, Coplon L, Upadhyay UD. Time to Care Among Patients Who Receive Medication Abortion with History-Based Screening in the United States. Population Association of America Annual Meeting. April 6-9, 2022. Atlanta, GA.

9. Creinin M, Gawron L, Westhoff C, **Boraas CM,** Blumenthal P, Turok D. Phase 3 data of a novel low-dose copper intrauterine device with a nitinol frame: 1-year outcomes. ACOG Annual Clinical Meeting. April 30-May 2, 2021. Virtual.

10. Martins S*, Miller JJ*, Wise M*, Jafari N*, **Boraas CM.** Willingness to Use Novel Reversible Male-Controlled Contraceptive Methods in a Community-Based Sample of Adult Men. ACOG Annual Clinical Meeting. April 30-May 2, 2021. Virtual.

11. Wise M*, Martins S*, Tessier K, Traxler SA, **Boraas CM.** Success of Intrauterine Device Placement in Adolescents at Planned Parenthood. ACOG Annual Clinical Meeting. April 30-May 2, 2021. Virtual.

12. Miller JJ*, Martins S*, Mahoney MA*, Tessier K, Traxler SA, **Boraas CM**. Correlates of long acting reversible contraception uptake at 30 days following medication abortion. ACOG Annual Clinical Meeting. April 30-May 2, 2021. Virtual.

13. Faherty E*, **Boraas CM,** Smith K, Lofgren S, Rothenberger M, and Enns E. Expedited Partner Therapy for Sexually Transmitted Infections in Minnesota: A Mixed-Methods Review of Current Practices and Barriers to Implementation. ISPOR 2021, May 17-20, 2021. Virtual.

14. Gerwitz O'Brien J*, Shramko M*, Sayarath M*, Brown E, Argo T*, **Boraas CM,** McRee A. Missed Opportunities to Provide Comprehensive Sexual and Reproductive Healthcare among Hospitalized Adolescents. Society for Adolescent Health and Medicine Annual Meeting. March 10-12, 2021. Due to COVID-19 related conference cancellation, this peer-reviewed poster was presented in electronic format.

15. Henke L*, Martins S*, Bangdiwala A, **Boraas CM**. Barriers to Obtaining Long-Acting Reversible Contraception Among Low-Income Women. ACOG Annual Clinical Meeting, April 24-27, 2020, Seattle, WA. Due to COVID-19 related conference cancellation, this peer-reviewed poster was presented in electronic format.

16. Gerwitz O'Brien J*, Shramko M*, Sayarath M*, Argo T*, Brown E, Mishra P, **Boraas CM** McRee A. Missed Opportunities to Provide Comprehensive Sexual and Reproductive Healthcare among Hospitalized Adolescents. Pediatric Research, Education and Scholarship Symposium. April 24, 2020. Minneapolis, MN.

17. Argo T*, Gerwitz O'Brien J*, Miller KK*, Prince A, Bahr T*, **Boraas CM**, Chaisson N, Borman-Shoap E. No Missed Opportunities: A trainee-driven long acting reversible contraceptive workshop for pediatric primary care clinicians. Society of Adolescent Medicine Conference. March 11, 2020. San Diego, CA.

18. Argo T*, Miller KK*, Bahr T*, Prince A, **Boraas CM**, Chaisson N, Borman-Shoap E, Gerwitz O'Brien J*. No Missed Opportunities: A trainee-driven long acting reversible contraceptive workshop for pediatric primary care clinicians. Minnesota American Academy of Pediatrics Conference. May 3, 2019. Minneapolis, MN.

19. Borchert K, Wipf K*, Roeske E*, Clure C*, Traxler S, **Boraas CM**. Pregnancy of Unknown Location in Abortion Care: Expectant Management and Ectopic Pregnancy Outcomes. National Abortion Federation Conference. May 6, 2019. Chicago, IL.

20. Raymond E, Tan Y, Comendant R, Sagaidac I, Platais I, Grant M, Sanhueza P, Van Pratt E, Bousiequez M, Gillespie G, **Boraas CM**, Weaver M. Simplified Medical Abortion Screening: A Pilot Study. National Abortion Federation Conference. April 23, 2017. Montreal, Canada.

21. Paul J*, Duvet M, **Boraas CM**. YouTube and the contraceptive implant: a content analysis. North American Forum on Family Planning. October 11, 2014. Miami, FL.

22. Lewis L*, **Boraas CM**, Dunn SA, Krans EE. Postpartum contraceptive intention and initiation among opioid dependent women. North American Forum on Family Planning. October 11, 2014. Miami, FL.

23. **Boraas CM**, Achilles SL, Cremer ML, Chappell CA, Chen BA. Dilapan-S with adjunctive misoprostol for same-day dilation and evacuation: a randomized controlled trial. North American Forum on Family Planning. October 11, 2014. Miami, FL.

24. Rapkin RB, Achilles SL, **Boraas C**, Cremer M, Schwarz EB, Chen BA. Self-administered lidocaine gel for intrauterine device insertion in nulliparous women: a randomized controlled trial. ACOG Annual Clinical Meeting. April 28, 2014. Chicago, IL.

25. **Boraas CM**, Isley MM. Chlamydia and gonococcal infections and screening in women receiving intrauterine devices in a resident obstetrics and gynecology clinic. North American Forum on Family Planning. October 23, 2012. Denver, CO.

26. **Boraas CM**. Emergency contraception knowledge, attitudes and practices – A survey of future providers in Minnesota and Guatemala. Global Health Council Conference. 2006. Washington, DC.

27. **Boraas CM**, Asante L, Heloo B. Female condom knowledge, attitudes and practices in Ghana's highest HIV prevalence regions. Global Health Education Consortium.

TEACHING AND CURRICULUM DEVELOPMENT

University of Minnesota

Course List

Undergraduate Courses

Annual speaker, The Future Physician II: The Life and Work of a Physician 2016-2020

Professional Medical Courses

Becoming a Doctor II: Making an Impact Through Advocacy Facilitator 2019-present

Obstetrics and Gynecology Core Clerkship Problem-Based Learning Facilitator 2018-present

Obstetrics and Gynecology Preceptor, Rural Physicians Associate Program 2017-present

Obstetrics and Gynecology Core Clerkship Attending Physician 2017-present

Participation two times per academic year (4 week rotation) as a faculty problem-based learning mentor for the third-year students during the clerkship in Obstetrics and Gynecology. I also present a one-hour lecture on the clinical aspects of abortion and contraception approximately four times per year to the entire clerkship. Additionally, students can spend one day with me at Planned Parenthood MN-ND-SD or Whole Woman's Health learning about reproductive choice and counseling, medical and surgical abortion, and contraceptive counseling.

Advanced Family Planning Elective Attending Physician 2015-present

The purpose of this elective is to learn more about the subspecialty of family planning. During the two-four week elective, students will be present in several clinical settings,

including Planned Parenthood MN-ND-SD, Whole Woman's Health, Women's Health Specialists clinic, and the operating room for D&E procedures. The student also makes a presentation on a topic from the current medical literature to the family planning faculty and staff.

Curriculum Development

Post Graduate Medical Education

Global Pediatrics Curriculum 2019-present

Developed lectures for pediatrics providers about maternal morbidity and mortality.

Global Obstetrics Simulation for Pediatrics Residents 2017-present

Developed a yearly simulation curriculum for delivery of a baby in the case of emergency for Pediatrics residents.

Fellowship in Family Planning, Director 2016-present

I serve as the future director of the family planning fellowship for graduated obstetrics and gynecology residents. This position has involved developing clinical, research and advocacy curriculum, which was approved by the University of Minnesota Board of Regents in Fall 2016. Application is currently under review by the national office of the Fellowship in Family Planning.

Ryan Residency in Abortion and Family Planning, Director 2015-present

I serve as the director of the family planning rotation for second year residents. This involves teaching and supervising the resident at Planned Parenthood in performing surgical abortions up to 23 6/7 weeks and medical abortions up to 10 0/7 weeks and in the operating room for D&E procedures up to 23 6/7 weeks. I also supervise office hysteroscopic sterilization and OR laparoscopic and hysteroscopic sterilization procedures. For residents who choose not to perform abortions, their education includes learning about early pregnancy counseling and decision making as well as performing ultrasounds for pregnancy dating.

Undergraduate Medical Education

Consultant, Endocrine and Reproductive Health Course 2021-present

Consultant, Diversity, Equity and Inclusion Thread 2021-present

Nationally Available Published Curricula

Boraas, CM. Invited Lecturer *Obstetric Emergencies: Focus on Delivery.* Clinical Tropical Medicine & Online Global Health Curriculum. Editors Kristina Krohn, Brett Hendel-Paterson, and William Stauffer. Available at https://med.umn.edu/dom/education/global-medicine/courses-certificates/online/global-health-curriculum. The entire curriculum consists of 7 modules with over 180 hours of online material, including reviews and assessments. Pair with the in-person course, the curriculum qualifies participants to sit for the CTropMed and DTMH. With over 1300 unique enrollees from 47 states and over 28 countries, this curriculum helps providers learn how to address health disparities across the globe. Curriculum originally launched 2006, converted to online in 2010, and last updated in 2021.

Boraas, CM. *Maternal Mortality.* GPEDS (Global Pediatric Education Series) for Medical Students. Clerkship Directors: Winter J, Danich E, Howard C. This Virtual Medical Student Clerkship consists of 4 modules (approximately 25 hours) of online content covering topics in global child health. Available for enrollment September 2020.

Boraas, CM. *Maternal Mortality.* GPEDS 2.0 (Global Pediatric Education Series). Editors Winter J, Danich E, Howard C. Available at globalpeds.umn.edu/gpeds. Curriculum consists of 4 modules (approximately 25 hours) of online content on global child health that serves as the primary global health curriculum for pediatric residents at multiple institutions. The content is also available to individual subscribers for CME credit. Curriculum originally launched May 2014, Updated November 1, 2019.

ADVISING AND MENTORING

Undergraduate Student Activities

Research Mentor, B.A. Candidate	01/2021-06/2023

Graduate Student Activities

PhD Candidate	06/2022-present
MPH Candidate	06/2022-6/2023
MPH Candidate	06/2022-6/2023
TRACT TL1 Program Mentor, PhD Candidate	07/2020-06/2022
Master's Theses Directed	
MS in Medical Device Innovation Candidate	06/2022-12/2022
MPH Candidate	09/2015-12/2015

Professional Student Activities

Twin Cities Medical Society Public Health Advocacy Fellowship Mentee	Jun 2020-2021
Medical student research advisees	Jul 2015-2018
Medical student advisees	Jul 2015-2018

Clinical Supervision

3rd year medical students on Education in Pediatrics Along the Curriculum, 2017-present
3rd and 4th year medical students on OB/GYN clerkship rotations at Women's Health Specialists, 2015 – present
3rd and 4th year medical students on family planning elective rotations at Women's Health Specialists and community sites, 2015 – present

Residents Supervised

Clinical Supervision, 1st year residents on general gynecology rotations at Women's Health Specialists, 2015 – present

Clinical Supervision, 4th year residents on general gynecology rotations at Women's Health Specialists, 2015 – present

Clinical Supervision, 2nd year residents on general obstetrics rotations at UMMC L&D (The Birthplace), 2015 – present

Clinical Supervision, 3rd year residents on general obstetrics rotations at UMMC L&D (The Birthplace), 2015 – present

Clinical Supervision, 2nd year residents on family planning rotation at Planned Parenthood Minnesota, North Dakota, South Dakota, 2014 – present

Post Doctoral Fellows Supervised

Adolescent Health Fellowship	September 2018 - June 2021
Post-doctoral Fellowship	May 2019 - May 2020

Other Mentoring Activities

Faculty Advisor 2016-present
University of Minnesota Obstetrics and Gynecology Interest Group
Faculty Advisor 2016-present
University of Minnesota Medical Students for Choice

CLINICAL SERVICE

Clinical Leadership Accomplishments

Associate Medical Director, Planned Parenthood MN-ND-SD 2014-present

Clinical Service Responsibilities

Obstetrics, Gynecology, Midwifery and Family Planning Division 2015-present
Attending Physician
Consulting Physician
Clinics: 2 half days per week, 2015-present
OR: 1 half day per week, 2015-present
Planned Parenthood MN-ND-SD 2014-present
Clinics: 2 half days per week, 2016-present; 3 half days per week, 2015-2016; 4 half days per week 2014-2015
Whole Woman's Health 2014-present
Clinics: 2 half days per week, 2016-present; 1 half day per week, 2015-2016; 3 half days per week, 2014-2015

PROFESSIONAL SERVICE AND PUBLIC OUTREACH

Service To The Discipline/Profession/Interdisciplinary Area(s)

Editorships/Journal Reviewer Experience

Journal Reviewer, Obstetrics and Gynecology 2017-present
Recognized as Top 10% Peer Reviewer 2020
Journal Reviewer, Contraception 2013-present

Organization of conferences, workshops, panels, symposia

Member, University of Minnesota Department of Obstetrics, Gynecology and Women's Health and MN ACOG Joint Autumn Seminar Planning Committee 2016
Role: Organized educational themes and curricula, recruited speakers.

Member, University of Minnesota Department of Obstetrics, Gynecology and Women's Health and MN ACOG Joint Autumn Seminar Planning Committee 2015

Role: Organized educational themes and curricula, recruited speakers.

National Committee Memberships

Member, Society of Family Planning Finance Committee	2021-present
Member, Society of Family Planning Research Implementation Interest Group	2021-present
Member, M-POWER Advisory Committee	2021-present
Member, No Test Medication Abortion Safety and Outcomes Working Group	2021-2023
Member, Complex Family Planning Fellowship Core Education Working Group	2021-2023
Member, Complex Family Planning Fellowship Education Committee	2020-2021
Member, Society of Family Planning Program Committee	2019-2020
Member, North American Forum on Family Planning Scientific Committee	2018-2020
Member, Society of Family Planning Audit Committee	2016-2018
Member, ACOG Online Learning in Ob-Gyn Advisory Committee	2014-2022
Member, ACOG Global Health Committee	2015-present

Member, Fellowship in Family Planning Guide to Learning Revision Subcommittee, 2016-2018

State Committee Memberships

Member, Minnesota Medical Association Health Equity Task Force	2020
Member, Minnesota PRAMS Advisory Committee	2017-present
Member, Reproductive Health Access Project, MN cluster	2017-present
Member, MN ACOG Advisory Council	2016-present
Member, MN ACOG Legislative Committee	2015-present

Public Advocacy

Physician Advocate, Minnesota ACOG Day at the Capitol	3/8/2022
Physician Advocate, Minnesota Medical Association Day at the Capitol	3/4/2020
Member, Minnesota Doctors for Health Equity	2018-present
Physician Advocate, Minnesota Medical Association Day at the Capitol	2/13/2019
Physician Advocate, Minnesota Medical Association Day at the Capitol	3/14/2018
Physician Advocate, Minnesota Medical Association Day at the Capitol	2/15/2017
Speaker, Press Conference on MN H.F. 411/S.F. 281, Physician's Integrity Act	1/23/2017
Physician Advocate, Minnesota Medical Association Day at the Capitol	3/23/2016

Service to the University/Medical School/Department

University of Minnesota

University-wide Service

Member, Medical School Faculty Advisory Committee	2022-present
Judge, Global Health Case Competition	2022
Faculty, Walter H. Judd Fellowships Selection Committee	2018
Faculty, Center for Global Health and Social Responsibility	2016-present
Chair, Students' International Health Committee	2002-2008
Representative, Center for Health Interprofessional Programs	2002-2004

Vice President, Student Senate, University of Minnesota School of Public Health, 2003

Medical School Service and Intercollegiate Service

Participant, Master Mentor Program	2017-2020
Member, Medical School Admissions Committee	2007-2008,

	2018-2020
Member, Learning Environment Rounds	2017-2019
Member, Essentials of Modern Medicine Curriculum Initiative	2007-2008
Member, Med2010 Education Initiative	2007-2008
Representative, Student Council	2004-2008
Representative, Education Council	2004-2008

Department/Unit Service

Member, ARTS Committee	2020-present
Member, Residency Program Evaluation Committee	2016-present
Member, Clinical Competency Committee	2016-present
Member, Education Council	2016-present
Member, Residency Interview Committee	2016-present
Moderator, Research Day	2016, 2019

M Health Fairview Service

Member, UMMC Obstetric Case Review Committee	2022-present
Member, Perinatal Loss Policy Committee	2021-present
Member, Termination of Pregnancy Policy Committee	2020-present

University of Pittsburgh

Medical School Service and Intercollegiate Service

Fellow Advisor, Medical Students for Choice	2012-2014

The Ohio State University

Department/Unit Service

Resident Supervisor, Columbus Free Clinic	2010-2012
Resident Advisor, Obstetrics and Gynecology Interest Group	2009-2012

St. Olaf College, Northfield, MN

University-wide service

Co-Founder, Helping Overcome Poverty through Education (H.O.P.E.)	2000-2001

Community Outreach Activities

Family Planning Consultant, Teen Annex Clinic	2021-present
Family Planning Consultant, Alight	2019-present
Mentor, Upward Bound, St. Paul, MN	2004-2008
Global Health Volunteer, Mano a Mano Organization, St. Paul, MN	2004-2008

EXHIBIT 3

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

PLANNED PARENTHOOD SOUTH ATLANTIC, *et al.*,	)	
Plaintiffs,	)	
v.	)	
JOSHUA STEIN, *et al.*,	)	Case No. 1:23-cv-00480-CCE-LPA
Defendants,	)	
and	)	
PHILIP E. BERGER, *et al.*,	)	
Intervenor-Defendants.	)	

DECLARATION OF TIMOTHY R.B. JOHNSON, M.D., IN SUPPORT OF PLAINTIFFS' REPLY REGARDING MOTION FOR SUMMARY JUDGMENT AND RESPONSE IN OPPOSITION TO INTERVENORS' CROSS-MOTION FOR SUMMARY JUDGMENT

I, Timothy R.B. Johnson, M.D., declare as follows:

1. I am a Michigan-licensed physician board-certified in Maternal Fetal Medicine and Obstetrics & Gynecology. For nearly five decades, I have treated patients with high-risk pregnancy and general obstetric and gynecologic conditions.

2. Until my retirement effective December 31, 2023, I held the position of Professor of Obstetrics and Gynecology at the University of Michigan Medical School. I served as the chair of the Department of Obstetrics and Gynecology at the University of Michigan from 1993 to 2017. I was also the Arthur F. Thurnau Professor of Women's and

Gender Studies and a Faculty Affiliate at the Institute for Research on Women and Gender at the University of Michigan.

3. Before coming to the University of Michigan in 1993, I was an associate professor in the Department of Gynecology and Obstetrics at the Johns Hopkins University School of Medicine. I served as the director of the Division of Maternal Fetal Medicine in that department from 1988 to 1993.

4. In these capacities, I taught courses for medical students in obstetrics and gynecology for almost four decades, including in the management of abortion, as well as women's studies courses at the undergraduate college level on women's reproductive health, including on contemporary issues in women's health and men's health.

5. I am a Fellow of the American College of Obstetricians and Gynecologists ("ACOG"); a Fellow of the American Institute of Ultrasound in Medicine; an honorary Fellow of the West African College of Surgeons and the Ghana College of Physicians and Surgeons; and Fellow *ad eundem* of the Royal College of Obstetricians and Gynaecologists (London). I was elected a member of the National Academy of Medicine of the National Academy of Science in 2003. I have been awarded ACOG's highest honor, the Distinguished Service Award; the highest honor of the International Federation of Gynecology and Obstetrics ("FIGO"), the Distinguished Merit Award; and the Society of Family Planning's Alan Rosenfield Award for Lifetime Contributions to International Family Planning.

6. I have authored over 250 articles, chapters, and books on topics including prenatal care, fetal assessment, and global women's health issues, and have served on numerous editorial boards, study sections, professional committees, societies, and boards. I have served as President of the Association of Professors of Gynecology and Obstetrics and am currently Past Editor (previously Editor-in-Chief) of the International Journal of Gynecology and Obstetrics, the official publication of FIGO.

7. My *curriculum vitae* is attached as **Exhibit A.**

8. The opinions I state here are based on my education, clinical training, experience as a practicing physician providing obstetrical and gynecological care to thousands of patients, regular review of medical research in my field, my teaching experience, regular attendance and presentation at professional conferences (including conferences for abortion providers), other professional experiences (including various leadership positions I have held), my knowledge of standard medical practice, and my knowledge of the relevant literature. The literature considered in forming my opinions includes, but is not limited to, the sources cited in this declaration.

SUMMARY OF OPINIONS

9. I submit this declaration in support of Plaintifs' Reply in Further Support of Motion for Summary Judgment and Plaintiffs' Response in Opposition to Intervenors' Cross-Motion for Summary Judgment. I understand that Plaintiffs Planned Parenthood South Atlantic ("PPSAT") and Dr. Beverly Gray are seeking to block two components of North Carolina Session Law 2023-14 ("S.B. 20") (codified as amended by Session Law

2023-65 ("H.B. 190") at N.C. Gen. Stat. art. 1I, ch. 90 (the "Act")), which bans abortion after the twelfth week of pregnancy in all but a few circumstances.

10. Specifically, I understand that the Act allows abortions in the case of rape or incest through 20 weeks of pregnancy, and abortions in the case of a "life-limiting anomaly" through 24 weeks of pregnancy. However, I also understand that the Act requires that an abortion provided after the twelfth week of pregnancy in cases of rape, incest, or "life-limiting anomaly" be provided in a hospital, not an outpatient clinic (the "Hospitalization Requirement"). I understand that this requirement does not apply to the same medical procedures if they are being used to manage spontaneous pregnancy loss[1] rather than for induced abortion.

11. I previously submitted a rebuttal expert report in this case, which Plaintiffs' disclosed during discovery and Intervenors filed as an exhibit to their Cross-Motion for Summary Judgment. Rebuttal Expert Report of Timothy R.B. Johnson, M.D., DE 97-5. I have not previously submitted a declaration in this case. Counsel for Plaintiffs asked me to review and respond to the expert reports that Drs. Susan Bane, Catherine Wheeler, and Monique Chireau Wubbenhorst submitted in support of the intervenors' motion for summary judgment and opposition to the Plaintiffs' motion for summary judgment. In this declaration, I offer my opinions on certain assertions in those reports. The fact that I do not

[1] Although common in colloquial speech, "miscarriage" is not a medical term. The medical terms "spontaneous pregnancy loss" and "spontaneous abortion" describe what is commonly referred to as a miscarriage.

address a particular statement or assertion in their reports does not mean that I agree with the statement or assertion. I understand that, although I have been asked to respond to the opinions identified below, it does not necessarily mean that the Plaintiffs believe the opinions to which I have been asked to respond are relevant to the case.

12. After reviewing their reports, I can conclude that Drs. Bane, Wheeler, and Wubbenhorst are wrong that there is any medical justification for a requirement that manual or electric vacuum aspiration procedures (a method using syringe suction to remove the contents of the uterus) and dilation and evacuation (D&E) procedures (a method using suction aspiration equipment, surgical instruments, or a combination of the two), be performed in a hospital if those procedures are being done for abortion, but not if they are being done to empty a patient's uterus after spontaneous pregnancy loss. In my opinion, there is no medical justification for this distinction. Instead, it reflects the views—clearly held by all three witnesses, and presumably also held by proponents of the Hospitalization Requirement generally—that abortion is distasteful, that contemporary abortion providers provide substandard medical care, and that women with undesired pregnancies are less deserving of compassionate and holistic care than women undergoing spontaneous pregnancy loss. This reflects abortion stigma, not evidence-based medical practice.

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Abortion Stigma & Stigma-Leveraging Language Choices

13. Precision in word choice is important to me.[2] In addition to providing accuracy (or revealing its absence), word choice reveals much about the biases and beliefs of the speaker or writer. For these reasons, I want to begin this declaration by discussing the nature of abortion stigma, the language we use to talk about abortion, and the ways this language can reflect and reinforce abortion stigma.

14. People in many areas across this country have extremely limited access to safe abortion. This was true even before the Supreme Court overruled *Roe v. Wade* in *Dobbs v. Jackson Women's Health Organization*, but accessing safe abortion has become exponentially more difficult in many states since that decision—with abortion being severely restricted or entirely unavailable to people living in many states, including North Carolina[3] and two of three states with which it shares borders.[4] This public health crisis is the direct result of laws banning or restricting abortion. The crisis is exacerbated by the abortion stigma that these laws codify and reinforce, because stigma reduces the pool of

[2] Timothy R. B. Johnson et al., *Language Matters: Legislation, Medical Practice, and the Classification of Abortion Procedures*, 105 Obstetrics & Gynecology 201 (2005).

[3] Lynn Bonner, *Abortion Restrictions, Attacks on DEI Threaten Black Maternal Health, Roundtable Participants Say*, NC Newsline (April 19, 2024), https://ncnewsline.com/2024/04/19/abortion-restrictions-attacks-on-dei-threaten-black-maternal-health-roundtable-participants-say/.

[4] South Carolina and Tennessee have banned abortion once cardiac activity is detected with very limited exceptions. S.C. Code Ann. § 44-41-610; Tenn. Code Ann. § 39-15-216.

clinicians who are willing and able to provide abortions—not only in states where abortion is criminalized, but also in states where it remains legal.

15. Moreover, laws restricting and prohibiting abortion are leading to a net exodus of well-trained obstetricians and gynecologists from the states with such laws in place. These laws also negatively impact medical training in states that restrict or prohibit abortion, since residency programs in those states cannot provide training in the full range of obstetric and gynecological care. One recent study observed that 29% of family medicine programs in the United States are located in states that ban or severely restrict abortion.[5] It is essential that physicians develop the knowledge and skills necessary to provide comprehensive, evidence-based care to their patients. If prospective medical residents know that a state's abortion laws will limit their clinical training, they may look elsewhere for training. This negatively impacts medical care, since residency programs are a pipeline for future practitioners in the state. States with laws that ban or severely restrict abortion are already experiencing a decrease in the number of applicants for residency training programs located within their borders.[6]

16. A brief history of abortion practice is helpful to understand the current stigmatization and targeting of abortion providers. Prior to abortion's national legalization

[5] Sarah Wulf et al., *Implications of Overturning Roe v Wade on Abortion Training in US Family Medicine Residency Programs*, 21 Annals Fam. Med. 545 (2023).

[6] Arielle Dreher & Oriana Gonzalez, *Change in U.S. M.D. Seniors Applying to Medical Residency Programs, 2022 to 2023*, Axios (Apr. 18, 2023), https://www.axios.com/2023/04/18/abortion-ban-states-drop-student-residents.

in 1973, illegal abortions were quite common in states where abortion was banned, and regularly performed by people without professional medical training, whom mainstream physicians labeled "criminal abortionists." These individuals were considered medically untrained, lacking in ethics, and seeking personal financial gain through illegal activity. Unsafe, illegal abortions from such individuals often resulted in injury or death. Accordingly, during the pre-1973 period of criminalization, physicians distanced themselves from the "greedy back-alley butchers" they regarded as demeaning the medical profession.

17. After the United States Supreme Court recognized a federal right to abortion in 1973, in *Roe v. Wade*, many interested professional medical bodies were inconsistent or silent on how abortion should be practiced. This institutional passivity and ambivalence often led to a failure to incorporate abortion into mainstream medicine. Freestanding abortion clinics proliferated to meet patients' needs. These specialized clinics provide evidence-based, safe, competent, and compassionate care. And together with non-specialized outpatient clinics and physician's offices, they currently provide over 96% of all abortions performed in the United States, with hospitals providing just 3% of abortions overall.[7]

[7] Rachel K. Jones et al., *Abortion Incidence and Service Availability in the United States, 2020*, 54 Persps. Sexual & Reprod. Health 128, 134 & tbl.3 (2022) (3% of abortions provided in hospitals); Jeff Diamant & Besheer Mohamed, *What the Data Says About Abortion in the U.S.*, Pew Research Center (Jan. 11, 2023), https://www.pewresearch.org/short-reads/2023/01/11/what-the-data-says-about-abortion-in-the-u-s-2/ ("While clinics make up half of the facilities that provide abortions, they are

18. Despite the high-quality care specialized clinics provide, their existence contributed to the historical stigmatization of abortion and the doctors who provide it. This stigma does not reflect the medical reality that specialized clinics provide safe, evidence-based, compassionate care. Moreover, isolating these freestanding clinics has made them easy targets for anti-abortion intimidation through protests and violence, as well as targeted regulation from hostile state legislatures. These abortion-clinic-specific regulations frequently rely on the trope that abortion providers are greedy, unsanitary, and reckless with patient safety, even though this stereotype is a historical artifact with no basis in modern medical practice.

19. The very word "abortionist"—used in place of "doctors," "physicians," or "medical providers"—evokes this baseless stereotype about abortion providers.[8] It conjures deeply embedded connotations of greedy, "dirty old men" preying on women with back-alley, non-sterile, unconsented procedures.[9] Historically, this stereotype also had

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the sites where the vast majority (96%) of abortions are administered, either through procedures or the distribution of pills, according to Guttmacher's 2020 data.").

[8] Jenny O'Donnell et al., *Resistance and Vulnerability to Stigmatization in Abortion Work*, 73 Soc. Sci. & Med. 1357, 1358 (2011) (describing how Carol Joffe, in *Doctors of conscience: The struggle to provide abortion before and after Roe v. Wade* (1995), "specifically examines how the label 'abortionist' is sometimes derogatorily applied to those who perform abortions, invoking pre-legalization notions of morally deficient, profit-motivated, and/or technically incompetent 'back-alley' physicians").

[9] *Id.*; *cf. also* Emma L. Jones & Neil Pemberton, *Ten Rillington Place and the Changing Politics of Abortion in Modern Britain*, 57 Hist. J. 1085, 1088 (2014) ("[I]n representations of the abortion experience, male abortionists are presented as unsavoury and untrustworthy figures. The anxiety was that, in Allen's words, 'men abortionists read the abortion situation as sexualized or erotically exploitable.'"); Gillian Frank, *The*

antisemitic dimensions, with "abortionists" often portrayed as greedy, "dirty old *Jewish* men."[10] "Abortionist" is therefore an extremely inflammatory, pejorative, and inappropriate term to use.

20. Using stigmatizing language around abortion care, and medical professionals who provide that care, is harmful.[11] Like the term "abortionist," the phrase "chemical abortion" evokes dangerous, back-alley activity—e.g., lye, bleach, and other caustic substances rather than FDA-approved medications. It is not a medical term (the commonly used medical term is "medication abortion") and it is not recognized by or commonly used in the medical community. Rather, this language plays upon negative, baseless historical stereotypes and tropes around abortion and abortion providers. Stigmatizing language nefariously mischaracterizes what is, in reality, safe, essential medical care.

Abortionist, Am. Hist. Ass'n (Nov. 29, 2021), https://www.historians.org/research-and-publications/perspectives-on-history/december-2021/emthe-abortionist/em.

[10] Susan Weidman Schneider, *The Anti-Choice Movement: Bad News for Jews*, Lilith (June 12, 1990), https://lilith.org/articles/the-anti-choice-movement-bad-news-for-jews/ (describing how the "leader of the anti-choice group called PL.A.N. (Pro-Life Action Network), revealed to an interviewer . . . that, in his opinion . . . 'the majority of abortionists are Jewish,'" and citing postcards sent to abortion clinics in Massachusetts that read "Rich murdering Jewish doctors are dedicated to baby butchering"); *see also* Jessica Winter, *The Link Between the Capitol Riot and Anti-Abortion Extremism*, The New Yorker (Mar. 11, 2021), https://www.newyorker.com/news/daily-comment/the-link-between-the-capitol-riot-and-anti-abortion-extremism ("For a half century, a conspiracy-minded brand of anti-abortion extremism has been part and parcel of white-supremacist movements. . . . Anti-abortion leaders such as Randall Terry, of Operation Rescue, and Robert Cooley, of the Pro-Life Action Network, frequently alleged that most abortion providers were Jewish.").

[11] Johnson et al., *supra* note 2.

21. I believe that using accurate, precise language in this area is critical. The expert reports that Drs. Susan Bane, Catherine Wheeler, and Monique Chireau Wubbenhorst submitted in this litigation fail to do so and are replete with stigmatizing language that has no medical use or significance. The three reports also use imprecise and incorrect language, such as where Dr. Bane confuses "maternal mortality *rate*" and "maternal mortality *ratio*"[12] despite them being well-defined terms that refer to different measurements.[13] The fact that I do not address a particular term in the reports does not mean that I agree with its use.

22. Today, abortion providers are trained and licensed gynecologists, family-medicine doctors, or maternal fetal medicine specialists. In many states, advanced practice clinicians like certified nurse-midwives and physician assistants can also provide abortion with appropriate training. Most of the medical professionals providing abortion in 2024, like most obstetrician-gynecologists today, are women.[14] Their comprehensive, holistic practices often include family-planning services, and comprehensive family-planning care

[12] Expert Report of Susan Bane, M.D., Ph.D ("Bane"), DE 97-4 ¶¶ 28, 32–33.

[13] Maternal mortality "rate" refers to the number of pregnancy-related deaths per total reproductive age women: a denominator that is difficult if not impossible to identify. Maternal mortality "ratio" refers to the number of pregnancy-related deaths per 100,000 live births: a far more verifiable denominator, and therefore a far more reliable way of capturing maternal mortality data.

[14] *See* Daniel Grossman et al., *Induced Abortion Provision Among a National Sample of Obstetrician-Gynecologists*, 133 Obstetrics & Gynecology 477, 479–480 tbl.1 (2019); William F. Rayburn, *The Obstetrician-Gynecologist Workforce in the United States: Facts, Figures, and Implications,* Am. Cong. Obstetricians & Gynecologists, 3–4 (2017).

includes induced termination of pregnancy. These clinicians provide abortion out of a deep sense of responsibility, compassion, and justice.[15] Given the intense stigma they encounter, abortion providers are some of the bravest, most dedicated, and most patient-centered medical professionals working today.

23. Even though it is baseless, abortion stigma forces clinicians to weigh severe personal and professional consequences and economic concerns when deciding whether to provide abortion, either by working as full- or part-time staff at a specialized abortion clinic or by incorporating abortion into their gynecological practice at a hospital or other outpatient setting.[16] Physicians often rely on referrals from other physicians. In some communities, it is impossible to maintain a financially viable practice without such referrals. When a physician at a medical practice provides abortions, however, it frequently results in a loss of referrals from other medical providers who oppose abortion. As a result, many physicians—even those who would otherwise seek to provide abortions—are unable to do so because it would put their practices in jeopardy. Even physicians who are not opposed to abortion may be prevented by colleagues from providing abortions because the colleagues are unwilling and/or unable to risk the financial damage to the practice that a resultant loss of referrals would cause.

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[15] *See, e.g.*, Lisa Harris, *Perspective: Recognizing Conscience In Abortion Provision*, 367 New Eng. J. Med. 981 (2012).

[16] Lori Freedman et al., *Obstacles to the Integration of Abortion Into Obstetrics and Gynecology Practice*, 42 Persps. Sexual & Reprod. Health 146 (2010).

24. Moreover, even if a practice can subsist without referrals, doctors worry that they may lose their own patients who are opposed to abortion should those patients learn that the doctor provides abortion services. Some medical practices also forbid employed or associated doctors from providing abortions *outside* the practice—either due to an institutional opposition to abortion, or due to a fear that simply employing a physician who provides abortion elsewhere will draw picketers or drive away existing patients who oppose abortion. This further reduces the number of providers in a given area.

25. In addition to these professional consequences, abortion providers worry about potential violence and threats against themselves and their families.[17] Providers are routinely stigmatized and ostracized in their communities—by neighbors, by members of their religious congregations, and by parents and teachers at their children's schools. Research has found that such isolation manifests in a number of ways, e.g., receiving harassing or threatening messages on social media, providers' children being bullied at school or excluded from social events, and frayed relationships with colleagues.[18] Some physicians cite the effect of picketing on their children and families as a reason they decided not to provide abortions.

[17] Diane J. Horvath-Cosper, *Being a Doctor Who Performs Abortions Means You Always Fear Your Life Is in Danger*, Washington Post (Oct. 29, 2015), https://www.washingtonpost.com/posteverything/wp/2015/10/29/being-a-doctor-who-performs-abortions-means-you-always-fear-your-life-is-in-danger/

[18] *Id.*; Freedman et al., *supra* note 16.

26. All of these factors take a toll on abortion providers' personal, family, and professional lives and contribute to other doctors' unwillingness to provide abortions. Moreover, regardless of a potential provider's personal desire to provide abortions, their partners, parents, and friends are often persuasive voices against doing so because of the attendant risks and stigmatization.

27. I myself have been targeted by anti-abortion groups and listed on websites targeting obstetrician-gynecologists who provide abortion services to varying extents.[19] Being listed on this type of website carries particular concerns for providers in today's era of information proliferation—where one's personal information, like home address, can be easily located and posted online. When I served as a court's expert in a case related to abortion,[20] not only were all involved given United States Marshals Service protection, but my children received protection at school from the county sheriff's department.

28. The murder of Dr. Barnett Slepian is an example of the type of violence providers fear and face. Dr. Slepian was a general obstetrician-gynecologist who delivered babies. He also did routine gynecologic surgeries in his practice and provided reproductive health care, including abortion, only a few days a month at Buffalo Women's Services clinic in Buffalo, New York. He was killed by a long-range rifle—shot in his home while

[19] *Timothy Robert B. Johnson*, AbortionDocs.org, https://abortiondocs.org/abortionists/timothy-robert-b-johnson/.

[20] *Evans v. Kelley*, 977 F. Supp. 1283 (E.D. Mich. 1997).

preparing a meal with his family present in 1998.[21] Dr. Slepian shared call and deliveries with other fully trained and qualified obstetrician-gynecologists who provided abortion as part of their practice.[22] These types of violence have a chilling effect on the willingness of doctors and other medical professionals to provide abortion.

29. Abortion stigma weighs particularly heavily on clinicians who practice in parts of the country where social and political environments are more hostile to abortion. Providers who do choose to provide abortions employ a variety of coping mechanisms to deal with the violence, harassment, and isolation they experience.[23] These coping mechanisms themselves illustrate how much more challenging it is for providers to practice in states where abortion stigma is expressed and codified through laws banning or severely restricting abortion.

30. For example, in one study where researchers conducted interviews of health care professionals in "a Western state," respondents acknowledged that their individual successes in deflecting abortion stigma were bolstered by a supportive political environment and the strength of their local abortion-providing community.[24] They explained that having a professional community that normalizes abortion seems to make the work more attractive and sustainable for those engaged in providing abortions. By

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[21] *Murder of New York Abortion Doctor Denounced as Terrorism*, CNN.com (Oct. 24, 1998), http://www.cnn.com/US/9810/24/doctor.killed.02/.

[22] Eyal Press, *My Father's Abortion War*, N.Y. Times Mag. (Jan. 22, 2006), https://www.nytimes.com/2006/01/22/magazine/my-fathers-abortion-war.html.

[23] Jenny O'Donnell et al., *supra* note 8.

[24] *Id.*

contrast, many areas of the country without such a supportive political and professional environment, and which already lack abortion providers, often do not have the sort of community necessary to support abortion providers and help defray stigma.[25]

31. Research has shown that even physicians who valued the abortion training they received during residency, whose political and moral ideologies strongly support access to safe abortion, and who planned to provide abortions as part of their practice face numerous obstacles in doing so. The constraints encountered by physicians who are considering whether to provide abortion differ by geographic location, structure of medical practice, and the political climate, but all of these constraints flow from the stigma and political controversy surrounding abortion.

32. Abortion stigma creates obstacles to care that patients do not encounter when seeking any other type of medical treatment. To attend their appointments, patients may be forced to cross picket lines in front of abortion clinics or hospitals that provide abortions. Patients may also fear that their abortion history or efforts to obtain an abortion will be publicized or made available to family members, friends, or other community members from whom they would prefer to keep this medical information confidential.

33. Abortion stigma also means that patients can be treated with less compassion when they are seeking abortion than when they are seeking management of spontaneous pregnancy loss. As I discuss in more detail below, one example of this is that hospital

[25] *Id.*

patients receiving procedures to manage spontaneous pregnancy loss are usually offered deeper levels of sedation than patients receiving procedures for induced abortion at the same gestational age, based on a conscious or subconscious view that women experiencing spontaneous (but not induced) pregnancy loss should be "shielded" from the experience.

Procedural Management of Induced & Spontaneous Abortion

34. There is no safety difference between procedural (also known as "surgical") induced abortion and procedural management of spontaneous pregnancy loss that would justify imposing a hospitalization requirement on induced abortion but not on management of spontaneous abortion. While Drs. Wubbenhorst, Wheeler, and Bane list potential complications that could arise from induced abortion using aspiration with manual vacuum aspirators, dilation and curettage (D&C), or dilation and evacuation (D&E), all the same risks apply to the use of manual vacuum aspirators, D&C, and D&E for management of spontaneous pregnancy loss. *See* Expert Report of Monique Chireau Wubbenhorst, M.D., M.P.H. ("Wubbenhorst"), DE 97-2 ¶¶ 74–88; Expert Report of Catherine J. Wheeler, M.D. ("Wheeler"), DE 97-3 ¶¶ 30–38; Bane ¶¶ 48–50.

35. More specifically, while there may be physiological differences in the cervix between some subset of patients presenting for management of spontaneous abortion and patients presenting for induced abortion, these differences do not make aspiration or D&E *riskier* for induced abortion than for management of spontaneous abortion. *See* Bane ¶¶ 55–57.

36. First, there is no difference between the clinical management of missed abortion (when the pregnancy has spontaneously terminated but has not been spontaneously expelled from the patient's uterus) and induced abortion in the second trimester, as in both circumstances the patient's cervix is closed before medical intervention. In both circumstances, cervical ripening with medical agents or laminaria may therefore be used to prepare the cervix for dilation before using suction and possibly instruments to empty the uterus.

37. Second, the difference between incomplete abortion (when the pregnancy has spontaneously terminated and *has* been partially expelled from the patient's uterus) and induced abortion after 14 weeks is the status of the cervix: in an incomplete abortion after 14 weeks, the patient's cervix is already partially dilated, while in an induced abortion at that gestational age, the cervix is closed, and the patient may need cervical ripening as described above.

38. But this distinction in the degree of advance cervical preparation required does not mean that D&E for induced abortion is *riskier* than D&E for incomplete abortion: evidence-based methods for cervical ripening such as laminaria (osmotic devices placed in the cervix) and cervical-ripening medications are safely and appropriately used routinely in this setting. And the cervical preparation itself certainly need not occur in a hospital setting, as there is nothing about inserting laminaria or administering cervical-ripening medication that requires an operating room. Even when a patient is a candidate for receiving an abortion in an operating room rather than an outpatient clinic due to their

individual medical circumstances, we could initiate the patient's cervical ripening in an outpatient setting rather than in a hospital operating room.

39. And while risks of morbidity and mortality from aspiration and D&E increase with advancing gestational age, there is no substantial difference between risks for spontaneous and induced abortion by gestational age. *Contra* Wubbenhorst ¶¶ 91–95.

40. Because Dr. Wheeler appears to suggest that it is routine to begin using instruments in addition to suction starting at 13 weeks' gestation, Wheeler ¶¶ 13–14, 29, I would note that generally instruments are used to supplement suction at 15 weeks gestation and later, though different practitioners begin using instruments at different points in gestation based on their individual training and experience.

The Hospitalization Requirement Does Not Improve Safety

41. For most patients, including patients seeking abortion due to rape, incest, or fetal anomaly, D&E is just as safe in an outpatient clinic as in a hospital. Indeed, procedures in a hospital setting may carry *more* risk than the same procedures in an outpatient setting.

42. D&E is now commonly performed safely and with evidence-based protocols in the outpatient setting up to 24 weeks gestation. Robust evidence demonstrates that "[m]ost abortions can be provided safely in office-based settings," and that for procedural abortion methods, "the minimum facility characteristics depend on the level of sedation that is used."[26] I therefore disagree with Dr. Wheeler's assertion that the hospital setting is

[26] Nat'l Acads. Scis., Eng'g, & Med., *The Safety and Quality of Abortion Care in the United States* 1, 10 (2018), (available at http://nap.edu/24950); *see id.* at 65 ("The

"the safest location for patients to undergo a D&E," Wheeler ¶ 23, *see also id*. ¶¶ 49–50. The risks associated with D&E are rare and can be managed by evidence-based protocols and by referral and transfer from outpatient settings when needed. There is no reason to require *all* D&Es for induced abortion to occur in a hospital setting simply because complications are theoretically *possible*. We do not apply that standard to any other type of medical treatment. There is no reason to do so only for abortion.

43. Procedural abortion safety is primarily a function of the abortion provider's experience. For patients obtaining a D&E at a hospital, there is no guarantee that they will be treated by an experienced abortion provider. D&Es at hospitals therefore are *not* categorically "safer" than D&Es in outpatient clinics. Wheeler ¶¶ 23, 49–50. The vast majority of second-trimester abortion patients would be safer in an outpatient clinic with an experienced abortion provider than in a hospital operating room with a physician—even a highly trained and credentialed physician—who has not performed many D&Es.

44. It is simply not true that outpatient abortion clinics lack oversight. *See* Wubbenhorst ¶¶ 150–56. Clinics are overseen and regulated both by government agencies and by professional accrediting institutions. And health department deficiencies are routine for health care facilities: even the best hospitals are cited for deficiencies by health

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facility requirements that are appropriate for D&Es depend on the level of sedation and anesthesia that is used.").

departments all of the time. Moreover, exposure to infections and infection-inducing procedures is more frequent in the hospital setting than in outpatient clinics.[27]

45. Experienced clinicians are usually better equipped to have trauma-informed discussions with patients. For example, it may be challenging for a patient who is pregnant as the result of rape or incest to discuss care options that can include inserting instruments through the vagina. For patients in this situation, being able to discuss the full range of options with a provider trained in trauma-informed care is essential. Compassionate, trauma-informed care can be provided just as well, if not better, in a specialized reproductive health care center as compared to in a hospital. Bane ¶ 58. Clinics, like hospitals, can provide psychosocial support services to patients seeking abortion in complicated circumstances like rape, incest, or fetal anomaly. And trained abortion clinic staff are more likely than general hospital staff to treat each abortion patient with respect, compassion, and non-judgmentally, given that they have chosen to work in a setting specifically devoted to caring for abortion patients. Patients seeking abortion would rather not be in the situation of having an undesired pregnancy and needing to seek medical care. But they have come to the conclusion that they are certain that an abortion is the right decision for them. It is important to see the nuance in each patient's circumstances and to

[27] *See, e.g.*, Centers for Disease Control and Prevention, *Healthcare-Associated Infections (HAIs)*, HAI Data, https://www.cdc.gov/hai/data/index.html (last accessed April 22, 2024) (reporting that "[o]n any given day, about one in 31 hospital patients has at least one healthcare-associated infection").

care for them individually with compassion. Abortion clinic staff are trained to provide this compassionate care that meets each patient where they are.

46. Additionally, the experience of receiving treatment in a hospital is likely to be worse for many patients than receiving the same treatment in an outpatient clinic. This results in part from challenges in getting to a hospital for care and the likelihood of being treated by hospital-based physicians and other care providers with less experience providing abortions and care to pregnant people. Obtaining an abortion at a hospital can cost thousands of dollars more than obtaining an abortion in an outpatient clinic, such that people may be forced to delay their care while they collect the money needed to pay for their procedure and associated expenses (travel, lodging, childcare, lost wages due to time away from work in addition to hospital and physician charges and costs). This delay in turn exposes patients to the increased risk of complications that comes with increased gestational age.

47. Moreover, hospitals can be deeply impersonal places, particularly when they do not have established abortion care practices. Some patients receiving an abortion for a wanted pregnancy, such as those obtaining abortion due to life-limiting fetal anomaly, express discomfort about being treated in a facility where they may receive care in rooms with newborn babies in view around them. And given the legacy of Black patients' mistreatment by the medical system as well as personal experiences of systematic disregard

and discrimination by medical professionals,[28] many Black patients and other patients of color experience understandable anxiety when receiving care in highly medicalized settings. These are all reasons why outpatient clinics are not only comparable, but actually *preferable* to hospitals for many patients seeking abortion.

48. The hospital setting is not the norm for aspiration and D&E after the twelfth week of pregnancy. Nor is it common practice for all second-trimester abortions to be performed in hospital settings. Outpatient clinics are the most common site for management of second-trimester abortions in most of those states where induced abortion remains legal and available.[29] Contrary to Dr. Wheeler's suggestion, it is not the "traditional norm" for second-trimester D&Cs and D&Es to be performed "in a surgical suite in a hospital." Wheeler ¶ 23. And as I explain below, evidence supports moving the management of spontaneous abortion *out* of the operating room and into an outpatient setting, despite the historical practice of managing pregnancy loss in operating rooms.

The Hospitalization Requirement Actually *Increases* Patient Risk

49. Abortion stigma means that people are treated with less compassion and fewer options when they are seeking induced abortion than when they are seeking spontaneous pregnancy loss management. Everyone experiencing any type of abortion—

[28] Martha Hostetter & Sarah Klein, *Understanding and Ameliorating Medical Mistrust Among Black Americans*, Commonwealth Fund (Jan. 14, 2021) https://www.commonwealthfund.org/publications/newsletter-article/2021/jan/medical-mistrust-among-black-americans.

[29] Jones et al., *supra* note 7.

whether spontaneous or induced—should receive evidence-based, compassionate care from all of the health care professionals they come into contact with throughout their medical treatment. But because abortion is stigmatized, women with spontaneous pregnancy loss have long received different care—and have encountered fewer obstacles to care—than those obtaining induced abortion.

50. Notably, women experiencing spontaneous pregnancy loss are more likely than women seeking induced abortion to be offered general anesthesia, taken to operating rooms, and offered counseling and follow-up care for their reproductive loss.[30] But while this higher intensity of care is likely intended to be compassionate—grounded in a belief that patients experiencing spontaneous pregnancy loss should be "shielded" from the experience, including by rendering them unconscious for their procedure—it actually *increases* the patient's risk of complications. One study that examined early pregnancy failure care observed that "hemorrhage-related complications were 4 times more common" in study participants who received care in an operating room compared to study participants who received office-based care.[31] And many patients preferred to have their procedures in an office-based setting rather than in the operating room.[32] Deeper levels of sedation

[30] *See* Lisa H. Harris et al., *Surgical Management of Early Pregnancy Failure: History, Politics, and Safe, Cost-Effective Care*, 196 Am. J. Obstetrics & Gynecology 445.e1 (2007).

[31] Vanessa K. Dalton et al., *Patient Preferences, Satisfaction, and Resource Use in Office Evacuation of Early Pregnancy Failure*, 108 Obstetrics & Gynecology 103, 108 (2006).

[32] *Id*. at 108 ("Overall, our institution's experience has been that about half of women choose to have their procedures completed in the office. In the study group, only

actually increase the risk of morbidity,[33] such that providing abortion in an operating room under general anesthesia is riskier than providing abortion in a clinic setting with conscious IV sedation.

51. Deep sedation and general anesthesia are not necessary for adequate pain management for induced abortion and management of pregnancy loss. Rather, evidence-based pain management can include analgesia with oral medication, local anesthesia and conscious sedation, and even guided meditation and abortion doula care. Conscious IV sedation is more than adequate pain relief for most second-trimester abortion patients.

52. For these reasons, at the University of Michigan, we started managing pregnancy loss *more like* induced abortion. Previously, if a person came in with a spontaneous abortion, they would go to an operating room for curettage and receive a major anesthetic, even general anesthesia. That led to increased blood loss compared to people who received treatment using a manual vacuum aspirator in the emergency room, under conscious sedation. We changed our practice so that physicians managing spontaneous abortion now use manual vacuum aspirators with conscious sedation in the emergency room or outpatient clinic.[34] This change allowed us to expedite intervention to reduce

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25% of study participants reported that being asleep for the procedure was highly important. Instead many participants opted for an office procedure that better meets other needs such as privacy and efficiency.").

[33] *See id.* at 104.

[34] *See* Harris et al., *supra* note 30.

bleeding and risks of infections. It also allows patients to return home after a shorter stay rather than waiting for hours for an operating room to become available.

53. Understanding the appropriate level and type of pain management to use for abortion is another reason why specialized outpatient clinics can be safer settings for this care than hospitals. Here, again, a provider's level of experience is important. When administering sedation for pain management during a procedure for abortion (either spontaneous or induced), it is important not to give the patient a form of sedation that will interfere with their uterus's ability to contract—because after the uterus is emptied, its contractions are what stops the flow of blood. Inhaled anesthetic, however, causes the uterus to relax, interfering with its ability to contract and stop bleeding.

54. In a hospital operating room setting, a patient may be given general anesthesia at all hours by whatever doctors are on staff at the time, who may not normally care for pregnant patients, and who may therefore give the patient excessive sedation, or a form of sedation that relaxes the uterus, thereby increasing the risk of complications from the abortion procedure.

55. Allowing abortions in specialized clinics does not, however, preclude patients from seeking treatment at a hospital if they desire a higher level of sedation than can be provided in-clinic. If, after being counseled about their options, a patient decides they want to receive deep sedation or general anesthesia, they can be referred for an in-hospital procedure. But there is no medical reason to require *all* abortion patients after the twelfth week of pregnancy to receive their abortion in a hospital.

* * *

56. In sum, the Hospitalization Requirement reflects abortion stigma rather than a legitimate health and safety measure. The Hospitalization Requirement also increases risk to patients. It will move medicine backwards.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: 5/1/24

Timothy R.B. Johnson, M.D.

EXHIBIT A

CURRICULUM VITAE

PERSONAL DATA

Name: **Timothy Robert Bradley Johnson, M.D.**

EDUCATION

1965	L'Ecole Française, Cours Saint Louis, Stockholm, Sweden; B.E.P.C.
1967-1970	A.B. University of Michigan, Ann Arbor, Michigan; Romance Languages and Literature: French (with distinction and high honors) Honors thesis: Le temps racinien ("Time" in the theatrical work of Jean Racine)
1970-1971	A.M. University of Michigan Rackham School of Graduate Studies, Ann Arbor, Michigan; Romance Languages and Literature: French; Thesis: Le médicin comme personage dans le roman: Les Thibaults de Roger Martin du Gard (The physician as a character in the novel: The Thibaults by Roger Martin du Gard)
1971-1975	M.D. University of Virginia School of Medicine, Charlottesville, Virginia

POSTDOCTORAL TRAINING

1975-1979	House Officer I-IV, University of Michigan Hospitals, Department of Obstetrics and Gynecology
1979-1981	Fellow, Maternal-Fetal Medicine, The Johns Hopkins University School of Medicine

ACADEMIC APPOINTMENTS

1979-1981	Instructor, Department of Gynecology & Obstetrics, The Johns Hopkins University School of Medicine
1980-1981	Director, Outpatient Obstetric Clinics, The Johns Hopkins University School of Medicine
1981-1983	Chief of Obstetrics and Staff Perinatologist, USAF Medical Center, Keesler, Biloxi, Mississippi
1982-1983	Training Officer, Department of Obstetrics & Gynecology, USAF Medical Center, Keesler, Biloxi, Mississippi
1983-1985	Assistant Professor, Department of Obstetrics & Gynecology, Uniformed Services University of the Health Sciences (USUHS), Bethesda, Maryland

1983-1985	Uniformed Services University of the Health Sciences Medical Student Coordinator for Obstetrics and Gynecology, Malcolm Grow USAF Medical Center, Andrews AFB
1984-1985	Director, Maternal-Fetal Medicine Fellowship Program, Uniformed Services University of the Health Sciences, Bethesda Naval Hospital; Walter Reed Army Medical Center; Malcolm Grow USAF Medical Center
1985-1988	Assistant Professor, Department of Gynecology & Obstetrics, The Johns Hopkins Medical Institutions
1985-1993	Director, Fetal Assessment Center, The Johns Hopkins University School of Medicine
1986-1993	Director, Residency Training Program, Department of Gynecology & Obstetrics, The Johns Hopkins University School of Medicine
1988-1993	Associate Professor, Department of Gynecology & Obstetrics, The Johns Hopkins University School of Medicine
1988-1993	Director, Maternal Fetal Medicine Fellowship Program Department of Gynecology & Obstetrics, The Johns Hopkins University School of Medicine
1988-1993	Director, Division of Maternal Fetal Medicine, Department of Gynecology & Obstetrics, The Johns Hopkins University School of Medicine
1989-1993	Associate Professor, Department of Pediatrics, The Johns Hopkins University School of Medicine
1990-1993	Joint Appointment, Department of Maternal and Child Health, The Johns Hopkins University School of Hygiene and Public Health
1993 -1995	Adjunct Professor, Department of Maternal and Child Health, The Johns Hopkins University School of Hygiene and Public Health
1993-2018	Bates Professor of the Diseases of Women and Children, Department of Obstetrics and Gynecology, University of Michigan
1993-2017	Chair, Department of Obstetrics & Gynecology, University of Michigan Medical School
1993-	Professor, Department of Obstetrics and Gynecology, University of Michigan
1993-2020	Research Professor, Center for Human Growth and Development, University of Michigan
1995-	Professor, Women's Studies, College of Literature, Science and the Arts, University of Michigan
1997-2017	Director, National Center of Excellence in Women's Health

2003- Arthur F. Thurnau Professor, University of Michigan (Appointed in recognition of outstanding contributions to undergraduate education)

2009-2012 Faculty Associate, Center for Global Health, University of Michigan

2013- Faculty Associate, Global REACH, University of Michigan

2013- Academy for Educational Excellence and Scholarship, University of Michigan

2018- Faculty Affiliate, Institute for Research on Women and Gender (IRWG), University of Michigan

CONSULTING POSITIONS

1984-1989 Consulting Perinatologist, Naval Hospital, National Naval Medical Center

1986-1993 Medical Consultant, Nurse Midwife Service, The Johns Hopkins University School of Medicine

1986-1993 Francis Scott Key Medical Center, Baltimore, Maryland

1986-1995 Johns Hopkins Program for International Education in Gynecology and Obstetrics

1993-1995 Board of Trustees, Johns Hopkins Program for International Education in Gynecology and Obstetrics

1991-1993 Maryland General Hospital, Baltimore, Maryland

1993-2001 Maternal-Fetal Medicine, Catherine McAuley Health Center/St. Joseph Mercy Hospital, Ann Arbor, Michigan

1994-1998 Maternal-Fetal Medicine, Oakwood Hospital
Dearborn, Michigan

1995-1998 Board of Consultants, Lamaze Association
Ann Arbor, Michigan

SCIENTIFIC ACTIVITIES

Editorial Boards and Editorial Positions

1988-1993 Editorial Board: Current Opinion in Obstetrics & Gynecology
1991-1992 Editorial Board: Medical Aspects of Human Sexuality
1991-2000 Editorial Board: The Female Patient

1991-1993 Co-Editor with George Huggins, MD: "Primary Gyn-Ob Rounds at the Johns Hopkins Medical Institutions" in The Female Patient

1993-1998 Co-Editor: "Women's Primary Health Rounds at the University of Michigan" in The Female Patient

1994-1997 Editor: "Practice Maps: The Female Patient" in he Female Patient

1993 Task Force Member: PROLOG, Obstetrics, 3rd Edition, American College of Obstetricians & Gynecologists

1995- International Journal of Gynecology and Obstetrics (the official FIGO Journal)
1995-2006 Associate Editor
2002-2007 Section Co-Editor, (with S. Arulkumaran; Richard Adanu), Contemporary Issues in Women's Health
2007-2014 Editor (in-Chief)
2015-2021 Editor Emeritus
2021- Past Editor

1996-2000 Member at Large, Advisory Committee on Policy, American Journal of Obstetrics and Gynecology

1997-2000 Editorial Board, Obstetrics & Gynecology

1997-2005 Editorial Board, Postgraduate Obstetrics and Gynecology

2001 Guest Editor, "The Health of Africans", Archives of Ibadan Medicine, Volume 2, January 2001

2001-2007 Editorial Board, Journal of Midwifery & Women's Health

2007-2012 Editorial Board, Maternal Child Health Journal

2022 External Advisor, the Journal of Family Health University College (JFHUC)

Ad Hoc Reviewer

American Journal of Obstetrics & Gynecology
Obstetrics & Gynecology
American Journal of Perinatology
International Journal of Gynecology & Obstetrics
Journal of Psychosomatic Obstetrics & Gynecology
Medicine
Journal of Perinatology
Journal of Maternal-Fetal Medicine
Journal of Women's Health
Gynecologic Oncology
Annals of Internal Medicine
Epidemiology Reviews
Journal of Maternal-Fetal Investigation
New England Journal of Medicine
Fertility & Sterility
Journal of the American Medical Women's Association
Journal of Maternal Child Health
Journal of Obstetrics and Gynaecology
PNAS
International Journal of Women's Dermatology

Study Sections, other NIH activities

NIH/NICHD Special Emphasis Panel ZHD1 DSR-H 05. "Health Disparity in Preterm Birth: The role of infectious and inflammatory processes", July 2001.

NIH Research Enhancement Awards Program (REAP) Review Committee, June 2004.

NIH Research Enhancement Awards Program (REAP) Review Committee, June 2005.

NICHD Maternal Fetal Medicine Units Network (ZHD1 MCH-B 23 R), October 26, 2005

BIRCWH IV Training Program (ZRG1 HOP B 50 R), March 2007.

National Heart, Lung, and Blood Institute Special Emphasis Panel/Scientific Review Group 2009/10 CLTR (OA) meeting, "Antenatal corticosteroid therapy for reduction of respiratory morbidity in newborn infants born in the late pre-term period." June 29-30, 2009

National Institutes of Health, Office of the Director, Office of Disease Prevention, and the *Eunice Kennedy Shriver* National Institute of Child Health & Human Development, Panel Member for the Evidence-based Methodology Workshop on Polycystic Ovary Syndrome (PCOS), December 3-5, 2012.

Chair, NICHD Global Network Steering Committee (NIH), 2016-2017

NIH/NICHD Special Review Panel ZRG1 EMNR A 52. "BIRCWH – K12", Nov 2019

NIH: 2023/05 CIDH Clinical Informatics and Digital Health Study Section, 2/9/2023-2/10/2023

National Academy of Medicine

Committee on Addressing the Impact of Sexual Harassment in Academia on the Career Choices of Women in Science, Engineering and Medicine, National Academies of Science (NAS, NAE, NAM), 2016-2018

Proceedings reviewer: National Academies of Sciences, Engineering and Medicine, 2021. *Evaluating the Effectiveness of interventions to prevent and address sexual harassment: Proceedings of a workshop*. Washington DC: The National Academies Press.

GRANT SUPPORT

Recent

Medical Research Council (Britain): "International Multicenter Fetal Movement Trial", P.I.: Adrian Grant, M.D.; Site Coordinator: Timothy R.B. Johnson, M.D.; 06/1986-06/1988 (total direct cost: $3,000)

NIH Maternal-Fetal Medicine Network; P.I.: Frank R. Witter, M.D., Co-investigator: Timothy R.B. Johnson, M.D.; 1986-1992 (total direct cost: $845,000, 5% Effort)

Controlled Therapeutics Corporation, CR#AA1-003, "Clinical Investigation of the Safety and Efficacy of the ContRx Infusette-V PGE_2 Pessary for Cervical Ripening in the Induction of Labor"; P.I.: Frank R. Witter, M.D., Co-investigator: Timothy R.B. Johnson, M.D.; 1988-1989 (amount of grant: $91,773.00, 10% Effort)

"Physiologic Diagnostic Service Randomized Clinical Trial of a Home Uterine Contraction Monitor"; P.I.: Timothy R.B. Johnson, M.D.; 1989-1990 (total direct cost: $28,796, 5% Effort)

ACOG Syntex Issue of the Year Award, "Nutrition in Pregnancy"; P.I.: Timothy R.B. Johnson, M.D.; 1990-1991 (total direct cost: $10,000)

NICHD "Evaluation of the Guidelines for Maternal Transport"; P.I.: Donna M. Strobino, Ph.D., Co-investigator: Timothy R.B. Johnson, M.D.; 1989-1992 (total direct cost: $229,655, 10% Effort)

NIH-NICHD-NRSA Primary Care Fellowship in Ob/Gyn; P.I.: Timothy R.B. Johnson, M.D.; 1988-1993 (total direct cost: $484,328, 10% Effort)

NIH-R01, "Fetal Neuro-behavioral Development"; P.I.: Janet DiPietro, Ph.D., Co-investigator: Timothy R.B. Johnson, M.D.;1991-1996 (total direct cost: $136,467, 10% Effort)

Public Health Service/Office on Women's Health, National Centers of Excellence in Women's Health. Program Director: Timothy R.B. Johnson; 1997-2001 ($801,506) Continued 2001-2002 ($153,000) Continued 2002-2006 ($1,023,818)

National Heart Lung and Blood Institute, "Effect of self-regulatory education on women with asthma"; (#R18HL060884) Project Director: Noreen Clark, Ph.D., Co-I: Timothy R.B. Johnson; 2000-2007 ($3,424,135, 5% Effort).

NICHHD Obstetrics and Gynecology Health Services Research Training Program (1 T32 HD049340-01A1) Principal Investigator: Timothy R.B. Johnson, 2006-2011 ($1,400,836)

Bill and Melinda Gates Foundation, "Human Resources for Health: A learning grant for capacity strengthening in Ghana" (50786), 2008-2011 ($2,967,722)

NIH (R18HL094272), "Women of color and asthma control", Project Director: Noreen Clark, Ph.D., Co-I: Timothy R.B. Johnson, 2009-2014 ($3,781,501)

U.S. HHS PHS-National Institutes of Health, BIRCWH Career Development Program. (K12 HD01438-01) Principal Investigator and Program Director:

Timothy R.B. Johnson, 2000-2005 ($2,434,083); Continued 2005-2010 ($2,499,797); Continued 2010-2015 ($2,322,716)

NIH University of Michigan WRHR Career Development Program (K12HD065257)
Principal Investigator: Timothy R.B. Johnson, 2010-2015 ($2,375,575); Continued 2015-2017 ($1,681,222)

Current

CERTIFICATION AND LICENSURE

1976	National Board of Medical Examiners
1982	American Board of Obstetrics & Gynecology Recertification 2001
1983	Maternal Fetal Medicine Recertification 2001
1978	Maryland License (D-22889) - Inactive, 1994
1993-	Michigan License (4301060938)

MILITARY SERVICE

1981-1985	Major, Medical Corps, United States Air Force

HONORS AND AWARDS

1978	Bronze Beeper Award, Galen's Medical Society, University of Michigan Medical School
1982, 1983	Resident's Award for Teaching, Department of Obstetrics & Gynecology, USAF Medical Center, Keesler
1983	U.S. Air Force Commendation Medal
1983-1984	Department of Obstetrics & Gynecology USUHS, Award for Outstanding Performance in Medical Student Education and Training, Malcolm Grow USAF Medical Center
1983-1984	Outstanding Attending Physician, House Staff Council, Malcolm Grow USAF Medical Center
1985	"Honorary Nurse Midwife", USAF Nurse Midwifery Program, Andrews AFB, Washington, DC
1985	Merriweather Award: Best Scientific Paper in AFD/NAACOG on Obstetrics & gynecology, "Auscultated Fetal Heart Rate Accelerations II. An Alternative to the Non-Stress Test"
1989	Gemini Award, Center for the Study of Multiple Birth
1990	ACOG-Syntex Issue of the Year Award, "Nutrition and Pregnancy"

1990	Service Citation - Presidential Societies, University of Michigan
1991	J. Donald Woodruff Teaching Award, Department of Gynecology and Obstetrics, Johns Hopkins Hospital
1992	Best Scientific Paper on Obstetrics (from a teaching hospital), Armed Forces District ACOG. Wax JR et al: The Effect of Fetal Movement on the Amniotic Fluid Index. Am J Obstet Gynecol 1993;168:188-189
1994	APGO/Wyeth-Ayerst Academic Leadership Skills Program (organized by the Harvard Business School)
1996	Gold Star Management Award (Recognition of incorporating total quality management tools and techniques into practice) University of Michigan Health System
1997	Program of the Year Award, Women's Health Program, University of Michigan Hospitals and Health Centers
1997	Inclusion in "The 400 Best Doctors for Women", Good Housekeeping Magazine
1998-2013	Inclusion in "The Best Doctors in America", Woodward/White, Inc.
2001	Volunteer of the Year March of Dimes, Southeastern Michigan Chapter
2001	Honorary Member, Golden Key International Honour Society
2002-2010	Who's Who Among American Teachers
2002	Doctor of Science (Honorary), Central Michigan University
2003	Fellow, West African College of Surgeons (Honorary) Abuja, Nigeria
2003	Honorary Fellow, Ghana College of Physicians and Surgeons (conferred Nov 2007)
2004-2010	Who's Who in Medicine and Healthcare
2004-2005	America's Top Obstetricians and Gynecologists, Consumers' Research Council of America
2004	Helen W. and William G. Milliken Award of Freedom, Planned Parenthood Affiliates of Michigan
2004	"Defender of Choice", MARAL Pro-Choice Michigan
2005	Who's Who in Medical Sciences Education
2005	Who's Who in Humanities Higher Education
2005	"Detroit's Top Doctors", HOUR Detroit

2005	Distinguished Service Award, American College of Obstetricians and Gynecologists
2005	Sarah Goddard Power Award, Academic Women's Caucus, University of Michigan
2006	American Medical Women's Association Gender Equity Award, University of Michigan Medical School
2006-2023	Inclusion in: "America's Top Doctors", Castle Connolly Medical Ltd.
2007	Fellow *ad eundem*, Royal College of Obstetricians and Gynaecologists (London)
2010	Honorary Fellow, International College of Surgeons
2010	Man of the Year in Medicine and Healthcare, American Biographical Institute, Inc.
2010	*HOUR Detroit's* "Top Docs"
2011	Louis M. Hellman Midwifery Partnership Award Presented by the American College of Nurse Midwives, ACNM Foundation, and Midwifery Business Network
2012	Lifetime Achievement Award, Association of Professors of Gynecology and Obstetrics
2012	Doctor of Public Service *honoris causa*, University of North Texas Health Science Center, Fort Worth, Texas
2013	Harold R. Johnson Diversity Service Award, University of Michigan
2014	Society of Scholars, Johns Hopkins University
2015	Distinguished Merit Award, International Federation of Gynecology and Obstetrics (FIGO)
2016	University of Michigan's *Rudi Ansbacher Leadership Award for Support of Women in Healthcare*
2016	Distinguished Service Award, Rotary Club of Ann Arbor
2018	Katie (Katharine Dexter McCormick) Award, Planned Parenthood of Michigan
2018	Allan Rosenfield Award for Lifetime Contributions to International Family Planning, Society of Family Planning, North American Forum on Family Planning.
2022	University of Michigan President's Award for Distinguished Service in International Education

MEMBERSHIPS AND OFFICES IN PROFESSIONAL SOCIETIES

Alpha Omega Alpha, University of Virginia, Alumnus

Norman F. Miller Gynecologic Society
1979- Member
1986-1990 Council
1990-1991 President-Elect
1991-1993 President

The Johns Hopkins Medical and Surgical Association

American College of Obstetricians & Gynecologists
1979-1983 Junior Fellow
1983- Fellow
2005 Distinguished Service Award

J. Robert Willson Society

American Institute of Ultrasound in Medicine
1981-1986 Member
1986- 2004 Senior Member
2004- Fellow (elected)

Southern Perinatal Association
1982-1986

International Childbirth Education Association
1981-1993

National Perinatal Association
1982-1990

Society for Maternal Fetal Medicine (Society of Perinatal Obstetricians)
1983-1984 Associate Member
1984- Member
1995-1998 Board of Directors
1996-1998 Chair, Editorial and Publication Committee
1998-2003 Foundation Fellowship Committee
2015-2018 Global Health Committee
2018 Chair, Global Health Committee
2018- Queenan Scholar Mentor

Society for Health and Human Values
1980-1992

Association of Professors of Gynecology and Obstetrics
2007 President-Elect
2008 President
2012 Lifetime Achievement Award

Maryland Ob-Gyn Society
1979-1993

Maryland Perinatal Association
1986 Charter Member
1986-1993 Board of Directors

1986-1987 Program Chairman
1989 Program Chairman
1988-1990 President-Elect
1990-1992 President

National Eagle Scout Association
Life Member, Legacy Society

Baltimore City Medical Society, Medical and Chirurgical Faculty of the State of Maryland
1985-1993

American Association of Maternal and Neonatal Health
1989-1992 Vice President
1992-1994 President
1992-1995 Executive Board, Mother and Child International, Geneva

Society of Paediatric & Perinatal Epidemiology
1986-1992

International Society of Perinatal Obstetricians

International Society of Ultrasound in Obstetrics and Gynecology
1991 Founding Member

Association of Teachers of Maternal and Child Health
1991-2001

Howard A. Kelly Gynecologic & Obstetric Society
1991 Founding Member
1991-1993 Council

Society of Obstetricians and Gynecologists of Ghana
1986 Honorary Member

John E. Savage Obstetrical Society, Greater Baltimore Medical Center
1990 Honorary Member

Southwest Obstetrical and Gynecological Society
1991 Honorary Member

Central Association of Obstetricians and Gynecologists
1994-2000

Society for Gynecologic Investigation (now Society for Reproductive Investigation)
2000-

National Academy of Medicine (formerly Institute of Medicine), National Academy of Science
2003-

Ghana Physician and Surgeons Foundation (US)
2014-

TEACHING ACTIVITIES

National

1988-00 External Advisory Board, Postgraduate Training Program in Obstetrics & Gynecology, Ghana; Carnegie Corporation of NY

1989-93 Doctoral Student Adviser/Thesis Committee, The Johns Hopkins University School of Medicine:

Mimi Obendorfer	ScD	MCH*
Lisa L. Paine	DrPH	MCH (degree granted 1990)
Patricia DeHart	ScD	MCH (degree granted 1994)
Elisabeth Brach	DrPH	HPM**(degree granted 1995)
Judith Weiss	ScD	HPM (degree granted 1992)
Barbara Luke	ScD	MCH (degree granted 1991)
Elizabeth Jordon	PhD	Epid (degree granted 1991)
Sara Scholle	DrPH	HPM
Katherine Achuff	PhD	HPM
Nancy Fronczak	DrPH	International Health
Michael Fox	ScD	HPM (degree granted 1992)

*MCH = Maternal and Child Health
**HPM = Health Policy and Management

University of Michigan
1993-1999 Preceptor, Longitudinal Primary Care Clerkship

Undergraduate Honors Thesis Advisor (LS&A Honors Program)

Mona Kumar, 1996
Ami Shah, 1996
Aarin Benson, 1999
Samuel Bauer, 1999
Kyle Yanachura, 2000
Rachel Lappin, 2007
Adam Eichmeyer 2014
Carly Marten 2019
Anna Morgan 2019
Stephanie Johnson 2022
Isabelle Fisher 2022

Doctoral Student Advisor/Thesis Committee

S. Chipiro Mupepi	Ph.D.	Nursing (2001)
Shingairai Feresu	Ph.D.	Epidemiology (2001)
Juliet Rogers MPH	Ph.D.	Health Management and Policy (2002)
Daniela Deman	Ph.D.	Kinesiology (2005)
Lisa H. Harris MD	Ph.D.	American Culture (2006)
Cheryl A. Moyer MPH	Ph.D	Health Mgt & Policy, SPH, Chair (2012)
Amir Sabet	Ph.D	Design Science/Mechanical-Biomed. Engineering (2014)
Sue Anne Bell	Ph.D.	Nursing (2014)
Kelly Kean	Ph.D.	Nursing (2016)

INVITED/NAMED PRESENTATIONS OR LECTURES

Preston T. Brown Memorial Lecture, Southwestern Ob/Gyn Society, 1984

D. Frank Kaltreider Lecture
John Hopkins Bayview Medical Center, Baltimore, Maryland
"Prenatal Care as a Model for Women's Primary Health Care", 1994

19th Annual Graham G. Hawks Lecture
Department of Obstetrics and Gynecology
Cornell Medical Center/New York Hospital
"Fetal Assessment Update", June 1995

14th Annual Charles A. Hunter, Jr., M.D. Lecture
Department of Obstetrics and Gynecology
Indiana University
"Women's Primary Health: Lessons from Prenatal Care", June 1995

26th Annual Emil Novak Lecture, Obstetrical and Gynecologic
Society of Maryland
"There is a Future for Academic Obstetrics and Gynecology",
October, 1996

15th Annual W. Newton Long Lecture
Department of Gynecology and Obstetrics, Emory University School
of Medicine
"The Globalization of Obstetrics and Gynecology – Transnational issues
in Women's Health", April 1998.

Jean Claude Remy Lecture
Department of Obstetrics and Gynecology, SUNY Health Science Center
at Brooklyn, Kings County General Hospital
"Traditions and Change", June 1999

Thomas E. Elkins Memorial Lecture
29th Annual Emil Novak Symposium
OB/GYN Society of Maryland
"The Globalization of Women's Health-In tribute to Tom Elkins", October 1999

13th Leon Steiner McGoogan Lecture
Department of Obstetrics and Gynecology, University of Nebraska
"Global Issues in Women's Health", June 2000

21st Annual John Rudolph Memorial Lecture
Department of Obstetrics and Gynecology, University of Rochester
"Global Issues in Women's Health", June 2001

Keynote Address, 47th Annual Meeting of the American College of Nurse-
Midwives, Atlanta, Georgia
"Collaboration in Leadership", May 2002

Visiting Professor, Chief Residents' Day
Department of Obstetrics and Gynecology, Cornell University
"Transnational Issues in women's health: In the shadow of September 11"
June 2002
Nicholson J. Eastman Visiting Professor

Department of Gynecology and Obstetrics, Johns Hopkins University
"Capacity Building and Infrastructure Development in Global Women's Health", April 2003

Resident and Alumni Day Visiting Professor, Department of Obstetrics and Gynecology, Northwestern University Medical School
"Translational and Transcultural Issues in Women's Health", May 2003

Wayne Johnson Memorial Lecture
APGO/CREOG Annual Meeting
"Steadfastly forward", March 2005

Keynote Address, History of Women's Health: From Benjamin Franklin's Era to the Present, Department of Obstetrics and Gynecology, Pennsylvania Hospital
"Women's Health: 300 Years after Benjamin Franklin" April 2006

Guest Faculty, 11th Annual Robert C. Park Uniformed Services Residency in Obstetrics and Gynecology Resident Research Day, Uniformed Services University of the Health Sciences
"Global Issues in Women's Health" May 2006

Keynote Speaker, Annual Utah BIRCWH Day, University of Utah
"Promoting women's health research in a University setting: Obstacles or opportunities" June 2006

Fritz Fuchs Visiting Professor, Cornell University
"Clinical simulation and team training: Research base and clinical applications" September 2010

Carl M. Huber Memorial Lecture, Indiana Section, ACOG Scientific Session
"Maternal mortality as an exemplar of global issues in Women's Health"
April 2011

Alpha Omega Alpha Visiting Professor, Johns Hopkins University
"Global issues in Women's Health", May 2011

Fourth Annual Theodore M King, M.D., Ph.D. Lecture, Department of Gynecology and Obstetrics Johns Hopkins University
"Implementation Science: Evidence based practices to improve women's health"
March 2012

Seventh Annual Paul Harper Lecture, Division of Population and Family Health, Johns Hopkins Bloomberg School of Public Health
"Implementing maternal and child health globally", April 2012

Donald F. Richardson Memorial Lecture, ACOG Annual Clinical Meeting, San Diego, "Implementing Global Women's Health" May 2012

Inaugural Class Keynote Address, Gold Humanism Honor Society, University of Michigan, February 2017: "Ethics of engaged academic Global Health"

Therese Dondero Memorial Lecture, American College of Nurse Midwives, Chicago, May, 2017: "Collaboration, collaboration, collaboration"

John A. Krieger, M.D. Lectureship(s): "Engaged Academic Global (Women's)

Health"; "Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine"; "Clinical Implications of Fetal Behavior: 2018", University of Hawaii, Department of Obstetrics and Gynecology, August 29-31, 2018

Charles Vincent MD Memorial Lecture: "Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering and Medicine", Wayne State University School of Medicine, April 2019

Iffath Hoskins Lecture: "Global Women's Health: Issues, Opportunities and Responsibilities", ACOG District II annual mtg., Oct 18-20, 2019, NYC

Propelling Cedars-Sinai to the Next Level, the Langham Huntington Hotel, Pasadena: Sexual Harassment of Women: Climate, Culture and Consequences in Academic Sciences, Engineering and Medicine. A Consensus Study from the National Academies, Nov 3-4, 2019

John T. Repke Maternal Fetal Medicine Lecture, Penn State College of Medicine, Hershey: "Maternal-Fetal Medicine in low-income countries: the case of Ghana", April 2022

COMMITTEE AND ADMINISTRATIVE SERVICES

National and International

1988-2000	External Advisory Board, Postgraduate Training Program in Obstetrics & Gynecology, Ghana; Carnegie Corporation of New York
1989-1993	Medical Committee, Planned Parenthood of Maryland
1989-2002	Examiner, The American Board of Obstetrics and Gynecology and ABOG Division of Maternal-Fetal Medicine
1989-1993	Associate Professor Reappointment Review Committee, The Johns Hopkins University School of Medicine
1991	External Examiner, Faculty of Obstetrics and Gynecology, West African College of Surgeons, Ibadan, Nigeria
1992-1993	Joint Committee on House Staff and Postdoctoral Programs, The Johns Hopkins University School of Medicine
1992-1994	Representative, American College of Obstetricians & Gynecologists, Council of Academic Societies, American Association of Medical Colleges
1994-2000	Board of Directors, American College of Nurse-Midwives Foundation
1995-2000	Committee on International Affairs, American College of Obstetricians and Gynecologists Chair, 1996-2000
1996-2001	Increasing Women's Leadership in Academic Medicine Implementation Committee, Association of American Medical Colleges
2001-2003	American College of Obstetricians and Gynecologists Representative, ACGME Residency Review Committee for Obstetrics and Gynecology
2002	External Examiner, Faculty of Obstetrics and Gynecology, West African College of Surgeons, Accra, Ghana
2002- 2005	Advisory Board, Herbert H. and Grace A. Dow College of Health Professions, Central Michigan University

2003-2007 Advisory Committee on Research on Women's Health (ACRWH), NIH Office of Research on Women's Health (ORWH)
2003-2006 Board of Governors, Jacobs Institute of Women's Health (JIWH)
2008-2012 Chair, External Advisory Board, University of North Texas, Health Sciences Center, Fort Worth, Texas
2012- Board of Directors, Academy of Women's Health
2015-2016 FIGO (London) Working Group on Safe Abortion
2016- Board of Directors, American College of Nurse-Midwives Foundation
2016-2018 Committee on Addressing the Impact of Sexual Harassment in Academia on the Career Choices of Women in Science, Engineering and Medicine, National Academies of Science (NAS, NAE, NAM)
2016-2017 Chair, NICHD Global Network Steering Committee (NIH)
2018-2020 Nominating Committee, Association of Professors of Gynecology and Obstetrics (APGO)
2018- FIGO Safe Abortion Committee

Other (including Johns Hopkins University)

1979-1981 OB Inpatient Committee, The Johns Hopkins University School of Medicine
1980-1981 OB Clinic Committee, The Johns Hopkins University School of Medicine
1980-1981 Perinatal Mortality Committee, Baltimore City Medical Society
1982-1983 Pharmacy & Therapeutics Committee, USAF Medical Center, Keesler
1983-1993 Subcommittee on Maternal Welfare, Medical & Chirurgical Faculty of The State of Maryland
1985-1993 Joint Committee on Fetal Research, The Johns Hopkins University School of Medicine
1986-1989 Fetus and Newborn Committee, Maryland Chapter, American Academy of Pediatrics
1986-1988 Joint Committee on Ethics, The Johns Hopkins University School of Medicine
1988-1993 Joint Committee on Nurse Midwives, Maryland Board of Nursing
1988-1989 Search Committee, Chairman, Department of Maternal Child Health, School of Hygiene and Public Health, The Johns Hopkins University School of Medicine
1988-1993 Executive Committee, Department of Gynecology and Obstetrics, The Johns Hopkins University Hospital & School of Medicine
1988-1993 Board of Student Advisors, The Johns Hopkins University School of Medicine

University of Michigan

1975-1979 House Officer Committee, Department of Obstetrics & Gynecology, University of Michigan Hospitals
1987-1989 Co-Chair, J. Robert Willson Professorship Campaign, University of Michigan Medical Center (endowed 1989)
1989-1991 Co-Chair, John R.G. Gosling Lectureship Campaign, University of Michigan Medical Center (endowed 1991)
1990-1993 LS&A Visiting Committee, University of Michigan
1991-1994, 1999 Honors College Advisory Council, College of Literature Science and the Arts, University of Michigan

1993-2007	Institutional Advisory Committee, Robert Woods Johnson Clinical Scholars Program
1993-2017	Executive Director's Advisory Council, University of Michigan
1993-2017	Dean's Advisory Committee, University of Michigan
1993-2017	Clinical Council, University of Michigan
1993-1998	Michigan Initiative for Women's Health Executive Committee
1993-2017	Primary Care Executive Committee
1994-2010	Advisory Board to the North Campus Nursing Center, University of Michigan School of Nursing
1994-1996	Medical Service Plan Executive Committee
1994-1995	Chair, Pediatric Chair Search Committee
1994-1995	Chair, Medical School Review Committee
1994-1996	Patient Acquisition Task Force
1995-2001	Faculty Affairs Advisory Committee
1995-1998	Steering Committee for UMMC Primary Care Education Update
1995-1997	Executive Committee, Institute for Research on Women and Gender
1995-1997	Search Advisory Committee for Director of Family Planning and Reproductive Health, School of Public Health
1996	Search Advisory Committee for the Dean of the Medical School
1996-1997	Chair, Alternative Work Force Committee
1996-1998	Faculty Group Practice Board of Directors
1996-1998	Chair, Clinical Standards Subcommittee, Faculty Group Practice Board of Directors
1997-	Governing Member, Institute for Research on Women and Gender
1997-2009	Advisory Committee, Interdepartmental Concentration: Women's and Reproductive Health, School of Public Health
1997-2001	Sesquicentennial Committee, Medical School
1998-2001	Historical Center for the Health Sciences Steering/Advisory Committee
1998-1999	Chair, Clinical Redesign Committee, University of Michigan Health System
1998-2000	Children and Women's Center Facility Planning Steering Committee
1998-2001	University of Michigan Health System Strategic Planning Process (with The Lewin Group), Steering Committee
1999-2002	Advisor, Alpha Omega Alpha Chapter, University of Michigan
1999-2002	Reproductive Sciences Program Executive Committee
1998-2001	Operations Improvement Committee, University of Michigan Health System
2000-2001	Clinical Executive Committee, University of Michigan Health System
1999-2000	President's Commission on the Undergraduate Curriculum
2000-2004	Medical Staff Representative, University of Michigan Hospitals and Health Centers Executive Board
2001-2001	Search Committee, Director for Institute for Research on Women and Gender
2002-2012	Advisory Board of the Historical Center for the Health Sciences
2001-2004	Chair, Department of Medical Education Chair Search Committee
2001-2005	Chair, Executive Vice President for Medical Affairs Search Committee
2002-2017	University Advisory Board, Depression Center
2002-2007	Chair, Institutional Advisory Committee, Robert Woods Johnson Clinical Scholars Program
2004	Search Committee, Dean of the School of Public Health
2005-2009	Multidisciplinary Learning and Team-Teaching Steering Committee

(campus wide)
2006-2020 Training Advisory Committee, Minority Health and Health Disparities International Research Training (MHIRT) Program, Center for Human Growth and Development
2006-2008 President's Advisory Commission on Women's Issues (PACWI)
2009- 2011 Chair, Institutional Advisory Committee, Center for Global Health
2010-2011 Chair, Search Committee for the Chair of the Department of Ophthalmology and Visual Sciences
2012-2013 President's Africa Advisory Committee
2012-2015 Clinical and Educational Conflict of Interest (CECOI) Committee, Medical School
2012-2013 Search Committee, Executive Director, C S Mott Children's and Von Voigtlander Women's Hospitals, UMHS
2013-2015 Henry Russel Awards and Lecture selection committee, Rackham School of Graduate Studies
2013 Member, Search Committee, Chief Communication Officer, UMHS
2013- Advisory Committee, Academy for Educational Excellence and Scholarship, Medical School
2013 Presidential Search Advisory Committee, University of Michigan
2014-2015 National Advisory Board, UMHS Office for Health Equity and Inclusion (OHEI)
2016-2020 Board of Directors, University Musical Society
2016-2017 Search Advisory Committee, UM Museum of Art Director

External Reviewer- Department of Obstetrics and Gynecology (at request of Dean or higher authority)

2000 Emory University
2000 University of California, San Francisco
2003 UMDNJ-Robert Wood Johnson, New Brunswick
2004 University of North Carolina
2004 University of Texas Medical Branch, Galveston
2005 University of Iowa
2005 University of Virginia
2006 University of Cincinnati
2006 Harvard: Beth Israel Deaconess
2006 University of Wisconsin
2006 University of Toledo
2014 University of Pittsburg (OBGYN / Family Medicine)
2015 Washington University in Saint Louis
2017 University of Nevada
2018 University of Arizona, Tucson/Banner Health Care

Community Activities/Service

Ann Arbor Art Center
1995-2001 Board of Directors
1995-1998 Development Chair

March of Dimes – Southeastern Michigan Chapter
2000-2005 Board of Directors
2000-2019 Founder, MOD HealthWalk at Michigan Medicine

Friends of Nichols Arboretum/Mattaei Botanical Gardens

2001-2005 Board

Greenhills School, Ann Arbor, Mi
2001-2004 Board of Trustees
Admissions Committee
Trusteeship Committee
2003-2005 Chair, Science Curriculum and Space Advisory Task Force
2019- Judge Fellow

Rotary Club of Ann Arbor
2009-
2016 Distinguished Service Award, Rotary Club of Ann Arbor

Safehouse Inc Domestic Violence Center (Ann Arbor)
2013-2016 Board Member

University Musical Society, Board of Directors
2016-2021
2017-2018 Chair, Program Committee
2018-2019 Chair, Artistic Advisory Committee
2019-2021 Co-Chair, Artistic Advisory Committee

Southern Shores Field Service Council (Michigan Crossroads Council, Boy Scout of America) (National Eagle Scout Association Life Member)
2018-2020 Board President

Michigan Crossroads Council
Membership Development Committee, Washtenaw County
2020- Chair

NESA Michigan Crossroads Council
2020- President, MCC Board Representative

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Safe Motherhood Newsletter "is back"
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Maternity Center Association reports the first national U.S. survey of women's childbearing experiences

Int J Gynecol Obstet 83:1-4, 2003.
FDA Public Health Notification: PVC Devices Containing the Plasticizer DEHP
Progesterone and preterm birth
Meconium aspiration
Assessment of guidelines for good practice in psychosocial care of mothers after stillbirth: A Cohort

Int J Gynecol Obstet 86: 4-6, 2004
More (data), more (implications), more (reactions) from the Women's Health Initiative and other fronts regarding hormone therapy (HT)

New insights into preeclampsia/toxemia

Int J Gynecol Obstet 87: 111-113, 2004
Emergency Contraception in the United States
WHO Reproductive Health Library Number 7, 2004
Teaching Safe Sex in Schools
A Leap Toward Cloning

Int J Gynecol Obstet 88:104-107, 2005.
Family Planning/Reproductive Health Research
World Health Organization (WHO) Medical Eligibility Criteria for Contraceptive Use
Reproductive Health Initiatives (RHI) of the American Women's Health Association Priorities for Women's Health
WHO/ICM/FIGO Joint Statement on Making Pregnancy Safer: The Critical Role of the Skilled Attendant

Int J Gynecol Obstet 89:2-6, 2005.
WHO Launches Maternal Mortality Campaign
Gynecologists at Benin Conference Discuss High Maternal Mortality Rate in Africa
Towards Unity for Health's (TUFH) Women and Health Taskforce
HIV/AIDS and STI Curriculum Materials for Program Managers, Trainers, and Providers
What's New from IRH MedEd?
What's New from the Office of Women's Health at the Center for Disease Control
What's New from the Society for Women's Health Research

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Cervical cancer screening in developing countries
Cervical caner prevention and HPV DNA testing
New Publications from WHO
Effects of contraception on obstetric outcomes
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New contraceptive choices
Use of alternative medicine in female sexual dysfunction
Use of emergency contraception in the Arab World
New findings about urinary incontinence and pelvic floor dysfunction
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Carcinogenicity of combined hormonal contraceptives and combined menopausal treatment
WHO launches global patient safety challenge; Issues guidelines on hand hygiene in health care
The WHO Reproductive Health Library
Reproductive health strategy to accelerate progress towards the attainment of international development goals and targets

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Unexpected results again from the Women's Health Initiatives – Low fat diet study results
Contraception website wins United Nations award
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Breast cancer survival 'soars'
Misoprostol use in obstetrics and gynecology

Int J Gynecol Obstet 93:205-206, 2006.
Finding work in global health
Nutrition and osteoporosis
New family planning counseling resource
New documentary on cervical cancer screening
Focused ultrasound surgery for uterine fibroids

Int J Gynecol Obstet 95:100-103, 2006.
Postgraduate duty hour restriction: 48 hours in Europe by 2009
Abortion ruling in Colombia
What's new from the Society for Women's Health Research
Summary of the Women's Health and Education Center (WHEC)
Scientists will gather to discuss safety of abortion pill
Possible link between prenatal estrogen and prostate cancer
Oral contraceptives do not increase fracture risk in women

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