

Science Disputes in Abortion Law

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I. Introduction

Disputes over science to justify law or policy are rife in bioethical settings, as they are in many areas of law. Abortion is an especially fertile ground for such disputes. The medical context makes science relevant, and both sides in the abortion debate are strongly motivated to seek scientific support for their positions. Abortion law provides yet another occasion to examine how legal institutions develop procedures for resolving differences among experts and determining the role of scientific claims in justifying law and policy.

Initially, the abortion debate concerned whether fetuses were living human beings. Opponents of abortion appealed to the science of biology, which showed that fetuses are indeed human, living, and individual. However, this biological fact did not mean that they are persons within the protection of the law.¹ Here the science is not in doubt—all agree that the fetus is individual, living, and human. What is contested is whether biological status in itself confers the moral and legal rights of human persons, a distinctively nonscientific question. The Supreme Court's answer since 1973 has been consistently “no.” Rights as persons do not attach until a live separation from the pregnant woman. A state may choose to protect fetuses after viability, but this accords them no constitutional status as persons.

Rather, the scientific disputes of concern arise from government efforts to restrict abortion in ways other than direct prohibition. These efforts arose after *Planned Parenthood of Southeastern Pennsylvania v. Casey*² reaffirmed the essence of *Roe v. Wade*³ but opened the door to a variety of other regulations. *Gonzales v. Carhart*,⁴ in upholding a federal ban on partial-birth abortions, gave further impetus to a restrictive regulatory strategy. The resulting laws, sometimes referred to as Targeted Regulation

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1. As Justice Blackmun famously said in *Roe v. Wade*, 410 U.S. 113 (1973), referring to when human life deserved protection, “We need not resolve the difficult question of when life begins. When those trained in . . . medicine, philosophy, and theology are unable to arrive at any consensus, the judiciary, at this point in the development of man’s knowledge, is not in a position to speculate as to the answer.” *Id.* at 159.

2. 505 U.S. 833 (1992).

3. 410 U.S. 113 (1973).

4. 550 U.S. 124 (2007).

of Abortion Providers (TRAP) laws, have used medical and social-science claims about the health effects of outpatient abortions, the need for fully informed consent, the effect on women who have to travel far to obtain abortions, the safety of medication abortions, the neurological development needed to experience pain, and the like to support their restrictions on abortion. Sometimes there are studies available, but they may report correlations, case reports, or observations rather than statistically significant scientific findings often used in environmental, criminal justice, or drug-approval contexts. Legislators and courts, however, may treat such data as if it had that authority.

Regardless of the reliability of the data, scientific disputes in abortion law involve conflicts about fact-based restrictions on abortion when there are different expert views of what that medical or social-science data show. Those desiring to restrict abortion must first persuade legislatures to accept their view of the relevancy of the “science” which they proffer. If strictures are passed, the battle usually shifts to the judicial arena, where courts are then pressed with determining the accuracy or relevancy of the science as presented by experts on either side.

The role of courts dealing with abortion challenges is not simply to act like a science court or peer advisory group to pronounce on what is the best or most accurate view of the facts. Rather, it is to answer the specific legal questions that frame and limit the judicial role in assessing those facts. The relevancy of the science will depend on the specific legal questions raised by the challenge. Depending on the statute at issue, the evidence presented, and the relevant legal standard, weak science may be sufficient to uphold a law that many expert observers believe is highly questionable on scientific grounds. Changing constitutional standards, such as a more precise elaboration of the undue burden test or rethinking the viability line, may shift the weight accorded to one set of experts and the standard of validity that the science must meet.

This Article will explore several representative scientific and factual disputes in abortion law. As I will argue, in the abortion arena, law drives science more than science drives law.⁵ I want to suggest that this may be true in other areas of law and science. Putting it this way—legal questions determine the relevancy of science—is almost too obvious to mention. Still, for cataloging and understanding the numerous ways that law and science interact, this insight may be useful in other legislative, judicial, and policy settings as well.

5. As Alta Charo put it, “Science doesn’t limit the scope of legal interventions. Rather, it is the nature of legal standards that limit the scope of relevant science.” Personal conversation (Jan. 30, 2015). As other Articles from this Symposium show, however, even that seemingly accurate statement has its own complexities. *See generally* Sheila Jasanoff, *Serviceable Truths: Science for Action in Law and Policy*, 93 TEXAS L. REV. 1721 (2015).

Part II lays out the undue burden test of *Casey*, which provides the standard for the relevancy and impact of scientific or medical evidence produced to justify post-*Roe* regulation of abortion.⁶ Part III deals with partial-birth abortion, and how *Carhart* established that when there is disagreement among physicians the state may side with a minority view.⁷ Part IV examines the role of science in assessing laws requiring that women be informed of risks to physical and mental health. Part V deals with medication abortions and how different views of the undue burden test allow courts to uphold or strike down restrictions on their use. Part VI looks at how statutes that ban abortion after twenty weeks based on the alleged capacity of fetuses to feel pain fare under existing precedents about viability and how those precedents bar the use of contested developments in fetal neuroanatomy to limit abortion. Parts VII and VIII show how different views of the undue burden test will determine whether states may require abortion providers to have hospital-staff privileges or that clinics be licensed as ambulatory surgery centers. Part IX concludes by suggesting that the legal question at issue may have equally determinative power in other science and law settings.

II. *Casey*'s Undue Burden Test

When we turn to questions of regulation within a legal regime of a woman's right to abort until viability, the question is not one of directly protecting fetuses, but one of protecting a woman's health, safety, and autonomy without interfering with her right to have a previability abortion.⁸ Answering that question will depend on the institution (legislature, court, medical licensing board, etc.) and the question it faces.

The main vehicle for assessing those disputes is the undue burden test of *Casey*.⁹ *Casey*, as is famously known, reaffirmed the core holding of *Roe* that a woman has a substantive due process right of abortion up until viability.¹⁰ It scrapped *Roe*'s trimester framework for assessing regulations and installed the undue burden test to play that role.¹¹ That test holds that "a provision of law is invalid, if its purpose or effect is to place substantial obstacles in the path of a woman seeking an abortion."¹² Under this standard, *Casey* upheld mandatory disclosures and waiting periods and even

6. 505 U.S. at 876.

7. See 550 U.S. at 163 (explaining that states have significant leeway to pass legislation where there is "medical and scientific uncertainty").

8. The state also has an interest in protecting or promoting prenatal life. *Casey*, 505 U.S. at 871–73.

9. 505 U.S. at 876.

10. *Id.* at 846.

11. *Id.* at 876.

12. *Id.* at 878.

the state's right to persuade women through truthful information about the importance of fetal life.¹³

Lower courts have considered many other restrictions, including the content of informed consent,¹⁴ mandatory viewing of ultrasounds,¹⁵ the off-label use of FDA-approved abortifacients,¹⁶ fetal-pain protections,¹⁷ provider privileges at local hospitals,¹⁸ and clinic licensing as ambulatory surgical centers.¹⁹ Medical science, social science, or both have been relevant in many of those cases, with their impact depending on the regulation at issue, the specific legal question before the courts, the evidence proffered, and the courts' understanding of the undue burden test.²⁰

To assess how science operates in this context, one needs to specify more precisely what an "undue burden" is. The first prong of the test—improper purpose²¹—is clear enough but difficult to meet in practice. Finding an improper purpose to stop abortion or burden women will be rare, given the legitimate fetal-protection, health, and autonomy concerns that might motivate legislators and the difficulty in unraveling the motive or ultimate purpose of individual votes.²² Unlike *Lawrence v. Texas*²³ and

13. *Id.* at 882, 886. For an example of how this standard upheld abortion restrictions in other cases, *Gonzales v. Carhart* upheld a ban on partial-birth abortion because it did not prevent women from having an abortion, just the use of a particular technique that was not necessary to protect her life or health in all circumstances. 550 U.S. 124, 164–67 (2007).

14. *Tex. Med. Providers Performing Abortion Servs. v. Lakey*, 667 F.3d 570, 576 (5th Cir. 2012).

15. *Stuart v. Camnitz*, 774 F.3d 238, 242 (4th Cir. 2014).

16. *Planned Parenthood Cincinnati Region v. Taft*, 444 F.3d 502, 505–06 (6th Cir. 2006).

17. *Isaacson v. Horne*, 716 F.3d 1213, 1217–18 (9th Cir. 2013).

18. *Jackson Women's Health Org. v. Currier*, 760 F.3d 448, 450 (5th Cir. 2014).

19. *Whole Woman's Health v. Lakey (Whole Woman's Health II)*, 769 F.3d 285, 289–90 (5th Cir. 2014), *vacated in part*, 135 S. Ct. 399 (2014).

20. *Compare Tex. Med. Providers Performing Abortion Servs. v. Lakey*, 667 F.3d 570, 573, 584 (5th Cir. 2012) (upholding an informed consent statute that required physicians to give patients a detailed explanation of the abortion procedure, provide auditory proof of fetal heartbeat, describe ultrasound images to the patient, and wait twenty-four hours before performing the procedure), *with Stuart*, 774 F.3d at 255–56 (striking down an informed consent statute that required physicians to show and describe ultrasound images to patients as violative of the physicians' First Amendment rights).

21. *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 878 (1992).

22. *See Edwards v. Aguillard*, 482 U.S. 578, 610–19 (1987) (Scalia, J., dissenting) (disagreeing with the premise that legislative motive is enough to invalidate a law under the Establishment Clause and disagreeing with the Court's determination of legislative motive); *Palmer v. Thompson*, 403 U.S. 217, 224–25 (1971) (asserting that it is "difficult or impossible" for a court to determine legislative motive). *But see* Paul Brest, *Palmer v. Thompson: An Approach to the Problem of Unconstitutional Legislative Motive*, 1971 SUP. CT. REV. 95, 119–24 (1971) (dissecting the Court's assertion that legislative motive is unascertainable and suggesting that it is not a legitimate reason to refuse to engage in judicial review of legislative motive).

23. 539 U.S. 558 (2003).

*United States v. Windsor*²⁴ which dealt with whether a right existed at all, in *Palmer v. Thompson*²⁵ a finding of animus rested on there being no rationally valid competing interest for the restrictions.²⁶ With abortion, there is usually a stated health or autonomy interest that may mask more invidious motives.²⁷

The second prong of the test—substantial obstacle to abortion access²⁸—is less clear. A division now exists among circuits about how to interpret and apply that standard when there is no illegitimate purpose and a rational basis for the legislation exists. The view that courts take about the second prong of the test will determine the role of experts and the weight given to scientific or data claims that challenge the constitutionality of an abortion regulation.

One view—the rational basis view, with no balancing to determine whether a burden is “undue”—is held by the Fourth, Fifth, Sixth, and Eighth Circuits.²⁹ Unless there is an improper purpose, a rational basis for thinking that health will be furthered is sufficient, no matter how speculative and unsupported by the evidence.³⁰ The courts have no role in determining how likely or effectively the rational basis for the legislation will be achieved—that is for the legislature alone.³¹ Nor is any balancing of the importance of that rational interest versus the burdens on women permissible.³² The only inquiry is whether pursuing that interest presents a substantial obstacle to women seeking access to an abortion, regardless of the importance or likelihood of the law actually achieving the state’s justification in light of the burdens it places on women.³³

24. 133 S. Ct. 2675 (2013).

25. 403 U.S. 217 (1971).

26. See *Palmer*, 403 U.S. at 225–26 (holding no equal protection violation where a swimming pool was closed because many considerations other than discrimination influenced a governmental decision to close swimming facilities).

27. See Priscilla J. Smith, *If the Purpose Fits: The Two Functions of Casey’s Purpose Inquiry*, 71 WASH. & LEE L. REV. 1135, 1145–46 (2014) (explaining that the purpose requirement set out in *Casey* functions to eliminate illegitimate purposes of abortion regulation).

28. *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 877 (1992).

29. See *Whole Woman’s Health II*, 769 F.3d 285, 297 (5th Cir. 2014) (comparing cases decided in the Fourth, Fifth, Sixth, and Eighth Circuits, where the rational basis view is employed, with cases decided in the Seventh and Ninth Circuits, where a balancing test is used instead).

30. See *Heller v. Doe*, 509 U.S. 312, 320 (1993) (explaining that legislation may be based on “rational speculation unsupported by evidence or empirical data” (quoting *FCC v. Beach Commc’ns, Inc.*, 508 U.S. 307, 315 (1993)) (internal quotation marks omitted)).

31. *Id.* at 319–21.

32. This is the loose, hands-off test of *Williamson v. Lee Optical Co.*, 348 U.S. 483, 486–87 (1955); *Heller v. Doe*, 509 U.S. 312, 319–20 (1993), and *FCC v. Beach Commc’ns, Inc.*, 508 U.S. 307, 313–15 (1993).

33. See *Whole Woman’s Health II*, 769 F.3d at 296–97 (discussing whether a law requiring abortion facilities to meet ambulatory-surgical-center standards placed an undue burden on women seeking an abortion).

By contrast, the Ninth and Seventh Circuits find that to determine whether a burden is “undue,” courts must balance the degree to which the health-and-safety interest is advanced by the regulation against the burden it places on women.³⁴ This balancing occurs under the undue burden part of the test and is not based on whether the state’s goal is irrational because of its slight advancement of its stated goal. Following its decision in *Tucson Woman’s Clinic v. Eden*,³⁵ the Ninth Circuit “compare[s] the extent of the burden a law imposes on a woman’s right to abortion with the strength of the state’s justification for the law.”³⁶ The more substantial the burden of health regulations, the stronger the state’s justification for the law must be to satisfy the undue burden test; conversely, the stronger the state’s justification, the greater the burden must be before it becomes undue. It justified that reading in part on the plurality’s statement in *Casey* that “[u]nnecessary health regulations that have the purpose or effect of presenting a substantial obstacle to a woman seeking an abortion impose an undue burden on the right.”³⁷ Whether a regulation is “necessary” depends on whether and how well a rationally based law serves the state’s interest.³⁸ Laws that purport to protect women’s health “must be calculated to advance woman’s health, not hinder it.”³⁹ If they do not do so sufficiently, then the burden they impose is undue.

The Seventh Circuit seems inclined to a similar view. In upholding a district court’s grant of a preliminary injunction against a Wisconsin law that required that abortion providers have hospital staff privileges in nearby hospitals, Judge Richard Posner’s decision turned ultimately on Wisconsin giving the plaintiffs only a weekend to comply with the hospital-privilege requirement.⁴⁰ He went on to say that the state would have to show actual need for the requirement and not simply a rational basis for thinking it might help.⁴¹ *Planned Parenthood Southeast, Inc. v. Strange*,⁴² a district

34. *Planned Parenthood Ariz., Inc. v. Humble*, 753 F.3d 905, 913–14 (9th Cir. 2014); *Planned Parenthood of Wis., Inc. v. Van Hollen*, 738 F.3d 786, 798 (7th Cir. 2013).

35. 379 F.3d 531 (9th Cir. 2004).

36. *Humble*, 753 F.3d at 912 (citing *Eden*, 379 F.3d at 542). *Eden* suggests that this balancing applies only with regard to health regulations and not those aimed at state efforts to noncoercively protect potential life of the fetus. 379 F.3d at 539.

37. *Humble*, 753 F.3d at 913 (citing *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 878 (1992)).

38. What is “necessary”—whether indispensable or conducive to—has been contested since *McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316, 336–37 (1819), which rejected an indispensable view of the Necessary and Proper Clause.

39. *Humble*, 753 F.3d at 913 (quoting *Casey*, 505 U.S. at 877) (internal quotation marks omitted).

40. *Planned Parenthood of Wis., Inc. v. Van Hollen*, 738 F.3d 786, 788–89 (7th Cir. 2013).

41. *See id.* at 795 (noting—in the context of analyzing the plaintiff’s likelihood of success on the merits—that the state has not shown any evidence of a health benefit to the hospital-privilege requirement); *id.* at 798 (“The feebler the medical grounds, the likelier the burden, even if slight,

court decision involving hospital admitting privileges, took a similar approach.⁴³

A balancing view of the undue burden test would still leave the courts to determine the weight and relevancy of medical and social-science evidence as presented by experts. To avoid the problem of biased experts, Judge Posner in *Van Hollen*⁴⁴ suggested that the trial judge should “reconsider appointing a neutral medical expert to testify at the trial, as authorized by [Federal Rule of Evidence] 706.”⁴⁵ The evidence presented at trial was likely to be technical, concerning both medical and statistical reports of the safety of abortions and their availability in Wisconsin.⁴⁶ The parties’ experts might “have strong biases, clouding their judgment.”⁴⁷ Even if the testimony of parties’ experts survive a *Daubert*⁴⁸ challenge, “a court-appointed expert may [still] help the judge to resolve the clash of the warring party experts.”⁴⁹ But even then, the weight of the neutral expert’s testimony will depend on the legal standard used to determine undue burden.

With a split in the circuits, the Supreme Court will ultimately have to decide which interpretation of the undue burden test will control. An undue burden test with balancing heft will limit state power to restrict legal abortion because the state will have to show actual health benefits that outweigh the burdens on women. It will also signal when and how scientific findings about health effects and impact on access to abortion have legal effect. On the other hand, if the undue burden test is satisfied by a rational basis, without balancing, legislatures will have wider leeway in regulating abortion, as long as they do not otherwise create a substantial burden on access to abortions. The courts will then be less demanding of the factual basis for alleged health effects.

Subsequent sections will show, with regard to particular controversies, how a rational basis view, without assessment of the importance of those goals in light of their impact on women, affects the import of the science and ultimately whether the regulation survives. They will contrast that approach with the very different view of the Seventh and Ninth Circuits,

to be ‘undue’ in the sense of disproportionate or gratuitous. It is not a matter of the number of women likely to be affected.”)

42. 9 F. Supp. 3d 1272 (M.D. Ala. 2014).

43. *Id.* at 1293.

44. *Planned Parenthood of Wis., Inc. v. Van Hollen*, 738 F.3d 786 (7th Cir. 2013).

45. *Van Hollen*, 738 F.3d at 798–99. The parties had earlier objected to such an expert. *Id.* at 798.

46. *See id.* at 797 (discussing statistical likelihood of abortion complications).

47. *Id.* at 798–99.

48. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993).

49. *Van Hollen*, 738 F.3d at 799.

which allow balancing state interests against the impact on women under the undue burden test and usually reach a different result.

III. Partial-Birth Abortion

An additional indicator of how the Supreme Court deals with contested medical or scientific data in abortion cases resulted from *Gonzales v. Carhart*, the 2007 case in which the Court upheld a federal ban on intact dilation and evacuation (D&E) or partial-birth abortions.⁵⁰ While suction aspiration or medication abortions are commonly used in the first trimester, the technique of choice in the second trimester is dilation and evacuation.⁵¹ The cervix is dilated and then the doctor uses an instrument to grab on to the fetus and remove it.⁵² The fetus is usually dismembered in the process, with several passes into the uterus *required* to pull out all the fetal tissue.⁵³

In the early 1990s, an Ohio physician publicized a technique he had developed for late-second-trimester abortions: the fetus was partially pulled out of the birth canal so that its brain could be punctured.⁵⁴ Aspirating the contents of the skull would then decompress the head and allow the whole fetus to be removed (hence the label of “partial birth” or intact D&E abortion).⁵⁵ The advantages were fewer passes into the uterus, less risk of infection or perforation of the uterus from bony fragments, and less time overall.⁵⁶

Antiabortion groups found the technique revolting and persuaded legislators in many states to pass bans on the practice.⁵⁷ The Supreme Court in *Stenberg v. Carhart*⁵⁸ held that Nebraska’s law, representative of other states, unconstitutionally burdened women by not having a health exception.⁵⁹ The losers then sought a federal ban, which twice passed

50. *Gonzalez v. Carhart*, 550 U.S. 124, 141, 168 (2007).

51. *Id.* at 134–35.

52. *Id.* at 135.

53. *Id.* at 135–36.

54. H.R. REP. NO. 107-604, at 2–3 (2002).

55. *Planned Parenthood Fed’n of Am. v. Ashcroft*, 320 F. Supp. 2d 957, 964 (N.D. Cal. 2004).

56. *Gonzales*, 550 U.S. at 178 (Ginsburg, J., dissenting).

57. See, e.g., *Public Hearing on LB1089, LB847, LB1043, and LB1103 Before the S. Judiciary Comm.*, 101st Leg., 2d Sess. 52 (Neb. 2010) (statement of Mary Spaulding Balch, director of the department of state legislation for the National Right to Life Committee).

58. 530 U.S. 914 (2000).

59. *Id.* at 931–32. Justice Kennedy, who joined the three-justice *Casey* joint opinion, dissented here. *Id.* at 956 (Kennedy, J., dissenting).

Congress and was vetoed by President Clinton.⁶⁰ When President George W. Bush took office, the bill passed again and he signed it.⁶¹

The Court then upheld the federal restriction in *Gonzales v. Carhart* in 2007.⁶² It found that the federal law clearly distinguished standard from intact D&E and thus was not vague.⁶³ It also served a valid state interest in respect for human life because intact D&E caused the death of the fetus in the middle of the birth process and thus was too close to infanticide.⁶⁴ The key question then was whether the federal ban imposed an undue burden on women because it did not contain a health exception.⁶⁵ This too was acceptable because the Court found that there was a difference of medical opinion as to whether there were circumstances in which intact D&E was essential to protect a woman's health.⁶⁶ Given this difference, a facial attack on the statute would not stand.⁶⁷ A claim that the procedure was necessary to protect a woman's health would have to be raised in individual cases on an as-applied basis.⁶⁸

The key part of the opinion for this Article is how the Court handled the different expert opinions about the need for intact D&E. The respondents had presented evidence that it was the safest method of abortion, especially for certain medical conditions or for women with fetuses that had severe anomalies such as hydrocephalus.⁶⁹ Indeed, all three of the district courts hearing challenges to the law found that the banned procedure was the safest or more safe than ordinary D&E in some circumstances.⁷⁰ These contentions, however, were contradicted by other doctors who testified in the district courts and before Congress. Those experts argued that the "alleged health advantages were based on speculation without scientific studies to support them," and that standard D&E was always a safe alternative.⁷¹

Based on that testimony, the Court found that "[t]here is documented medical disagreement whether the Act's prohibition would ever impose

60. Jarrett Murphy, *Bush Signs 'Partial Birth' Ban*, CBS NEWS (Sept. 18, 2003, 7:42 AM), <http://www.cbsnews.com/news/bush-signs-partial-birth-ban/>, archived at <http://perma.cc/9LPY-A3R2>.

61. *Id.*

62. *Gonzales v. Carhart*, 550 U.S. 124, 132–33 (2007).

63. *Id.* at 148–50.

64. *Id.* at 157–58.

65. *Id.* at 161.

66. *Id.* at 161–63.

67. *Id.* at 163.

68. *Id.* at 168.

69. *Id.* at 177–78 (Ginsburg, J., dissenting).

70. *See id.* at 162–63 (majority opinion) (noting that despite disagreements about intact D&E being the safest procedure, all three district courts ultimately ruled in favor of the medical evidence that intact D&E has safety advantages over ordinary D&E in certain circumstances).

71. *Id.* at 162.

significant health risks on women.”⁷² It relied especially on a New York case, in which the district judge had been much “more skeptical of the purported health benefits of intact D&E.”⁷³ He had found that the government’s expert witnesses had reasonably refuted the plaintiffs’ claim of safety advantages of intact D&E over other procedures, and that many of the claims of plaintiffs’ experts were either theoretical or false.⁷⁴ Despite the hypothetical and unsubstantiated nature of some claims, that court nevertheless invalidated the act because “a significant body of medical opinion . . . holds that [ordinary] D & E has [some] safety advantages over induction and that [intact D & E] has some safety advantages (however hypothetical and unsubstantiated by scientific evidence) over [ordinary] D & E for some women in some circumstances.”⁷⁵

Based on this division, the Court found that when there is medical uncertainty a law can withstand facial attacks.⁷⁶ Legislatures have wide discretion to pass legislation where there is medical and scientific disagreement. The Court stated: “The law need not give abortion doctors unfettered choice . . . nor should it elevate their status above other physicians in the medical community.”⁷⁷ Uncertainty about the health need for the procedure supported the Court’s rejection of a facial attack because the existence of alternatives, such as D&E itself or an injection that kills the fetus before the intact D&E occurs, meant that there was no block to access to abortion.⁷⁸

The Court’s handling of disputed science in *Gonzales* affects many other cases, as seen below. When there is a difference of expert opinion, the Court will not weigh the credibility of experts on either side but will simply defer to the legislature, thus, easily satisfying a rational basis for legislation.⁷⁹ With standard D&E available and the option of injecting a lethal drug into the fetus before intact D&E, there was no substantial interference with access to abortion.

IV. Science and Informed Consent Issues in Abortion

Informed consent has been a major source of post-*Roe* litigation. The early cases involved disclosures of undisputed facts, such as the risks of the procedure,⁸⁰ the likely age of the fetus,⁸¹ opportunities for adoption,⁸² and

72. *Id.*

73. *Id.*

74. *Id.* (citing *Nat’l Abortion Fed’n v. Ashcroft*, 330 F. Supp. 2d 436, 479, 480 (S.D.N.Y. 2004)).

75. *Nat’l Abortion Fed’n*, 330 F. Supp. 2d at 480.

76. *Gonzales*, 550 U.S. at 163.

77. *Id.*

78. *Id.* at 164.

79. At the same time, it would not automatically defer to specific legislative findings unless they were true or had substantial support. *Id.* at 165.

80. *Thornburgh v. Am. Coll. of Obstetricians & Gynecologists*, 476 U.S. 747, 760 (1986).

the father's financial liability for support.⁸³ More disputed was whether the state could require aborting doctors to inform their patients that the woman must notify her husband of her plan and whether a twenty-four-hour wait between consent and the abortion was permissible.⁸⁴ Except for spousal notification, *Casey* upheld all of those requirements.⁸⁵

Since then, legislators have sought to add to the required informed consent menu, including informing women that abortion plays a causative role in breast cancer, infertility, depression, mental illness, and suicide, and that fetuses may feel pain.⁸⁶ Whether such disclosures are permissible under *Casey* depends on whether "the information the State requires to be made available to the woman is truthful and not misleading . . ." ⁸⁷ Here the science becomes more relevant and more disputed. A strong case can be made that most of these requirements are not scientifically sound and thus not "truthful and nonmisleading."⁸⁸ However, due to costs and other factors, few of them have been litigated. Even then courts have strictly parsed the requirements and found ways to uphold them. For example, a law that required that women be informed that there is a higher risk of suicide after abortion was upheld in *Planned Parenthood Minnesota, North Dakota, South Dakota v. Rounds*,⁸⁹ despite very weak evidence to support that claim.⁹⁰ The court focused on the statutory requirement of what may be a "known risk" and found that the evidence did not establish that suicide

81. *Id.*

82. *Id.* at 761.

83. *Id.*

84. The requirement that doctors personally inform the patient was found not to violate the doctors' free speech rights, an issue of importance in other medical settings. See *infra* notes 98–103 and accompanying text.

85. *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 844–87, 893–94 (1992). Some of those same requirements had been struck down in *City of Akron v. Akron Center for Reproductive Health, Inc.*, 462 U.S. 416, 444–45 (1983), under the *Roe v. Wade* trimester approach, with Justice O'Connor dissenting. *Id.* at 452 (O'Connor, J., dissenting).

86. Chinué Turner Richardson & Elizabeth Nash, *Misinformed Consent: The Medical Accuracy of State-Developed Abortion Counseling Materials*, GUTTMACHER POL'Y REV. Fall 2006, at 6, 7–10.

87. *Casey*, 505 U.S. at 882.

88. Richardson & Nash, *supra* note 86, at 7. For weaknesses in required disclosure of fetuses feeling pain during abortion, see generally Harper Jean Tobin, *Confronting Misinformation on Abortion: Informed Consent, Deference, and Fetal Pain Laws*, 17 COLUM. J. GENDER & L. 111, 140–51 (2008).

89. 686 F.3d 889, 892 (8th Cir. 2012) (en banc).

90. The Eighth Circuit acknowledged that the record supported an inference that there is a *correlative* link between abortion and suicide. *Id.* at 898. However, the South Dakota law required only that women hear that abortion is associated with an increased risk of suicide, not that it causes it. *Id.* at 905. As used in its scientific sense, association does not imply causation. See *id.* at 905 ("It is a typical medical practice to inform patients of statistically significant risks that have been associated with a procedure . . . even if causation has not been proved definitively.").

could be definitively excluded as a known risk, despite data showing that that risk was very slight.⁹¹ This is a perfect example of how a precise and narrow legal question frames evaluation of the science. What most medical observers would agree is very weak evidence of suicide resulting from abortion did not matter because of the narrow legal question of whether it was clearly established that it was not “known.”

Another issue in the lengthy *Rounds* litigation was a requirement that the woman also be informed that the fertilized egg/fetus was a “living human being” that the woman would lose the right to rear by aborting.⁹² Since that claim conveys a value judgment and is not simply factual, it was heavily litigated. Only by careful parsing of the statute to show that the meaning of “embryo” in the disclosure section referred to a separate definitions section, which defined fetus in a clearly biological way, did the Eighth Circuit sitting en banc manage to avoid striking it down as inaccurate and thus ideological.⁹³

More recently, the greatest challenge in informed consent litigation has been mandatory sonogram laws. A requirement that women be informed that they could elect to have a sonogram of the fetus before termination would be acceptable. However, several states have gone further and required a woman to view or hear a description of the fetus from the doctor and hear its heartbeat.⁹⁴ These laws are less about the validity of the science than whether it is appropriate to impose that visual and auditory information on women who do not want it and on doctors who do not want to provide it.

There is nothing scientifically false about the information—it is an accurate sonogram and audition of the heartbeat. In addition, although one surmises that the ultimate purpose here is to cause fewer women to choose abortion, the stated purpose is to more fully inform women of the actual physical status of the fetus so that they can make a more informed choice.⁹⁵ District courts in Texas and North Carolina found such laws to be unconstitutional, but the Fifth and Fourth Circuits have split on their validity.⁹⁶ Assuming that the purpose of the law is not to stop abortions,

91. *Id.* at 899–901.

92. *Planned Parenthood Minn., N.D., S.D. v. Rounds*, 530 F.3d 724, 726 (8th Cir. 2008) (en banc).

93. *Id.* at 735–36.

94. *See, e.g., Tex. Med. Providers Performing Abortion Servs. v. Lakey*, 667 F.3d 570, 573 (5th Cir. 2012) (discussing a challenge to such a statute in Texas).

95. *See, e.g., id.* (“The amendments challenged here are intended to strengthen the informed consent of women who choose to undergo abortions.”).

96. *See Stuart v. Camnitz*, 774 F.3d 238, 256 (4th Cir. 2014) (affirming a North Carolina district court’s grant of a permanent injunction against enforcement of North Carolina’s law requiring display of the fetal sonogram before performing an abortion); *Tex. Med. Providers*, 667 F.3d at 584 (reversing a Texas district court’s grant of a preliminary injunction against

there is a rational connection with autonomy. On a non-balancing view of the undue burden test, mandating that women be exposed to fetal images and sounds is unlikely to deter a large fraction of women from having an abortion.⁹⁷ On the balancing view, one could argue that so little in autonomy is gained that the burden on women who find it distasteful to have to look at images and listen to sounds of the fetus whose death they are about to cause should invalidate the law.

Even if mandated sonograms do not impose an undue burden on access to abortion, there is still the question of whether physicians have a First Amendment right not to speak words that they find unnecessary or distasteful.⁹⁸ With regard to the Pennsylvania requirement that the physician doing the abortion make the required informed consent disclosures, *Casey* brushed aside these objections as a valid regulation of medicine,⁹⁹ an approach followed by the Fifth Circuit.¹⁰⁰ By contrast, the Fourth Circuit in *Stuart v. Camnitz*¹⁰¹ found that a North Carolina law that required the doctor to describe the ultrasound image of the fetus even if the woman averted her eyes and stopped her ears was so ideological that it violated a physician's First Amendment right against compelled speech.¹⁰² The state's power to regulate what doctors must or must not say during a medical encounter has become an important First Amendment issue.¹⁰³

V. Medication-Abortion Restrictions

Medical abortions, also known as medication abortions, have become a large part of abortion practice, constituting 40% of first-trimester abor-

enforcement of Texas' law requiring display of the fetal sonogram and fetal heartbeat before performing an abortion).

97. See Mary Gatter et al., *Relationship Between Ultrasound Viewing and Proceeding to Abortion*, 123 OBSTETRICS & GYNECOLOGY 81, 84 & tbl.1 (2014) (finding no relation between viewing ultrasound images and deciding not to terminate a pregnancy amongst women who already had a high degree of certainty about their decision to abort, a group that made up 85.4% of the sample population).

98. The district court in *Texas Medical Providers Performing Abortion Services v. Lakey* found such a right. 806 F. Supp. 2d 942, 975 (W.D. Tex. 2011), *vacated*, 667 F.3d 570 (5th Cir. 2012). After being reversed by the Fifth Circuit, the district judge "respectfully" restated his views about the illogic of the higher court's analysis. *Tex. Med. Providers Performing Abortion Servs. v. Lakey*, No. A-11-CA-486-SS, 2012 WL 373132, at *2 (W.D. Tex. Feb. 6, 2012).

99. *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 884 (1992) (plurality opinion).

100. See *Tex. Med. Providers*, 667 F.3d at 575, 580 ("[R]equiring disclosures and written consent [is] sustainable under *Casey*, [is] within the State's power to regulate the practice of medicine, and therefore do[es] not violate the First Amendment.").

101. 774 F.3d 238 (4th Cir. 2014).

102. *Id.* at 246.

103. See generally Robert Post, *Informed Consent to Abortion: A First Amendment Analysis of Compelled Physician Speech*, 2007 U. ILL. L. REV. 939 (examining First Amendment implications of compelled physician speech within the context of a North Dakota law requiring physicians to give specifically worded disclosures prior to performing an abortion).

tions.¹⁰⁴ Mifepristone (Mifiprex or RU-486) was developed by Roussel Uclaf in France in the 1980s as an abortifacient and quickly accepted throughout much of the world.¹⁰⁵ The drug acts by blocking progesterone, which is necessary for the embryo or fetus to stay attached to the walls of the uterus.¹⁰⁶ Twenty-four to forty-eight hours after a woman takes mifipristone, the woman takes a second drug, misopristol, a prostaglandin known as Cytotec, “which causes the uterus to contract and expel” the embryo/fetus and “other products of conception.”¹⁰⁷

It took until 2000 for the FDA to approve RU-486 in the United States.¹⁰⁸ It conditioned its approval on “restrictions on the use, dosage, and administration of mifepristone and misoprostol in mifepristone’s final printed label,” based on a clinical trial in the United States of fewer than 3,000 women.¹⁰⁹ The FDA protocol required a woman to take “600 milligrams of mifepristone orally at a clinic, return to the clinic two days later to take 400 micrograms of misopristol orally, and return again for a

104. See James Trussell et al., *Reduction in Infection-Related Mortality Since Modifications in the Regimen of Medical Abortion*, 89 *CONTRACEPTION* 193, 193 (2014) (“In 2012, 132,653 women received medical abortions, representing ~40% of first-trimester abortions in Planned Parenthood health centers.”).

105. Steven Greenhouse, *A New Pill, A Fierce Battle*, N.Y. TIMES MAG., Feb. 12, 1989, at 22, 24, available at <http://www.nytimes.com/1989/02/12/magazine/a-new-pill-a-fierce-battle.html>, archived at <http://perma.cc/FEP6-9HVE> (noting that RU-486 was developed by Roussel Uclaf in 1980); Lars Noah, *A Miscarriage in the Drug Approval Process?: Mifepristone Embroils the FDA in Abortion Politics*, 36 *WAKE FOREST L. REV.* 571, 575 (2001) (noting that RU-486 was approved by France, China, the United Kingdom, Sweden, and twelve other European countries between 1988 and 1999).

106. *Planned Parenthood of Greater Tex. Surgical Health Servs. v. Abbott (Abbott I)*, 951 F. Supp. 2d 891, 902 (W.D. Tex. 2013). See *infra* note 124 for an explanation of the numerical designations this Article uses for the *Abbott* line of cases.

107. *Abbott I*, 951 F. Supp. 2d at 902.

108. For an account of the tortured history of this process, see Noah, *supra* note 105, at 574–86. It is an example of the FDA making a drug-approval decision initially on nonscientific grounds. See *id.* at 573–74 (suggesting that ideological considerations influenced the FDA’s approval of RU-486). A similar process occurred with over-the-counter access to Plan B and other postcoital forms of contraception. See, e.g., Roseann B. Termini & Miranda Lee, *Sex, Politics, and Lessons Learned from Plan B: A Review of the FDA’s Actions and Future Direction*, 36 *OKLA. CITY U. L. REV.* 351, 355–58 (2011) (describing the history of Plan B’s FDA approval process and concluding that it “illustrates a marked deviation by the FDA from the agency’s usual practices and procedures”). In the case of Plan B, the strong scientific evidence showed that drugs prevented fertilization, while opponents argued that they prevented attachment of fertilized eggs to the wall of the uterus or were abortifacients in that they interrupted pregnancies that had already begun. *Id.* at 353–54. See generally Jed Miller, *The Unconscionability of Conscience Clauses: Pharmacists’ Consciences and Women’s Access to Contraception*, 16 *HEALTH MATRIX* 237, 246–53 (2006) (explaining the difference between contraception and abortion and the arguments surrounding each).

109. *Abbott I*, 951 F. Supp. 2d at 902–03. The drug had been used extensively in other countries. *Id.* at 903.

follow-up visit.”¹¹⁰ This approval applied only to cases less than forty-nine days from the woman’s last menstrual period (LMP).¹¹¹

As doctors gained greater experience with medical abortions, they found that a lower dose of mifepristone (200 milligrams) was adequate, and a higher dose of misopristol (800 micrograms) could be taken at home buccally (between the cheek and gum).¹¹² Also, doctors found that medical abortions were safe and effective for an additional two weeks after the forty-nine-day initial approval, extending the time for medication abortions.¹¹³ This protocol had a “lower rate of ongoing pregnancies and fewer surgical interventions [were] necessary to complete the abortion procedure.”¹¹⁴ With lower dosages reducing drug effects on women and one less office visit needed, the cost, burden, and inconvenience on women was reduced.

Such an off-label use of drugs approved by the FDA for a particular use is perfectly legal without FDA approval, because the FDA has no authority to regulate medical practice; if a drug is already legally available for one purpose, it may be used as the doctor chooses for other purposes, subject only to malpractice and informed consent laws.¹¹⁵ Indeed, much of medical practice involves drugs approved for one indication used for others as doctors found other uses that met medical and ethical standards for use.¹¹⁶ With mifepristone, the American College of Obstetricians and Gynecologists (ACOG) issued professional guidelines for using the drug off-label that reduced the initial dosage, allowed administration buccally

110. *Planned Parenthood Ariz., Inc. v. Humble*, 753 F.3d 905, 907 (9th Cir. 2014).

111. *Planned Parenthood Cincinnati Region v. Taft*, 444 F.3d 502, 505 (6th Cir. 2006). As for all abortions performed in states requiring a twenty-four hour waiting period, yet another visit would be required before the procedure for the doctor to provide required disclosures and a sonogram and audition of fetal heartbeat, making four doctor visits necessary for a medical abortion, instead of two for a surgical one. *Humble*, 753 F.3d at 907. In addition, doctors performing medical abortions in states with requirements like those enacted in Texas would also have to have staff privileges at a hospital within thirty miles of their office and would be subject to the more expensive requirement that they be licensed as ambulatory surgical centers. *Whole Woman’s Health II*, 769 F.3d 285, 289–90 (5th Cir. 2014).

112. *Humble*, 753 F.3d at 907–08. The American College of Obstetricians and Gynecologists (ACOG) reviewed this experience and issued guidelines that deviated from the FDA protocol. *Abbott I*, 951 F. Supp. 2d at 903.

113. *Humble*, 753 F.3d at 907.

114. *Id.* at 908 (citing *Planned Parenthood Ariz., Inc. v. Humble*, 13 F. Supp. 3d 1017, 1022–23 (D. Ariz. 2014)).

115. *Cline v. Okla. Coal. for Reprod. Justice*, 313 P.3d 253, 258 (Okla. 2013) (per curiam). FDA approval imposed restrictions on mifepristone’s marketing and distribution, but its use under the FDA’s Subpart H regulations did not require doctors to administer mifepristone according to the on-label regimen. *Id.* at 261 n.17.

116. *Id.* at 258 n.10 (citing *Planned Parenthood Sw. Ohio Region v. DeWine*, 696 F.3d 490, 496 (6th Cir. 2012)).

rather than orally, allowed a woman to take the misopristol at home, and extended the period of use to sixty-three days after LMP.¹¹⁷

As part of the strategy of antiabortion groups to chip away at abortion rights, after *Gonzales* had breathed new life into the movement, legislation was passed in several states to permit medication abortions only if they complied with the FDA label.¹¹⁸ With so many other drugs used off-label, the claim of health and safety rang hollow. Indeed, following FDA standards would require women to be subjected to more costly and more dangerous higher doses of RU-486, make an unnecessary office visit for oral administration of misopristol, and limit women who preferred medical to surgical abortions to only the seventh week after the LMP. Those states appeared to be engaged in a form of “uncivil obedience” to the law, to use Jessica Bulman-Pozen and David E. Pozan’s evocative term.¹¹⁹ By strictly adhering to the regulatory conditions of the FDA, they are forcing doctors to use medical abortions in a way that they hope will deter or limit their use, thus deterring abortion (at least for those who would abort only medically). Such a purpose would of course violate *Casey*, unless it could be shown to have valid health and safety purposes.

The science strongly supports the off-label ACOG protocol.¹²⁰ Those guidelines are based on much wider experience with medication abortions than the original 3000-subject trial that backed FDA approval.¹²¹ Off-label uses form the standard of care in many areas of medicine, and there is no reason to think that the risks here are greater. Indeed, just the opposite is the case, since it imposes greater burdens on women receiving abortions with no corresponding benefit.

However, the courts dealing with challenges to these provisions have split on the basis of their view of the undue burden test. The Supreme Court of Oklahoma struck down such a provision,¹²² and the Ninth Circuit granted a preliminary injunction against the enforcement of Arizona’s

117. AM. COLL. OF OBSTETRICIANS & GYNECOLOGISTS, MEDICAL MANAGEMENT OF FIRST-TRIMESTER ABORTION 11–12 (2014), available at <http://www.acog.org/Resources-And-Publications/Practice-Bulletins/Committee-on-Practice-Bulletins-Gynecology/Medical-Management-of-First-Trimester-Abortion>, archived at <http://perma.cc/8U84-LN9H>.

118. See, e.g., *Okla. Coal. for Reprod. Justice*, 313 P.3d at 258 (discussing Oklahoma’s statute that restricted the prescription of RU-486 to its FDA-approved purpose).

119. Jessica Bulman-Pozen & David E. Pozen, *Uncivil Obedience*, 115 COLUM. L. REV. (forthcoming May 2015). The term refers to a punctilious adherence to law as a way to force legal authorities to change policy, such as when truck drivers band together to drive fifty-five miles per hour to change the official speed limit or union workers “work to rule” to gain leverage. *Id.* A law requiring adherence to the FDA protocol might both protect women’s safety and deter women who dislike or fear surgical abortions from having them.

120. AM. COLL. OF OBSTETRICIANS & GYNECOLOGISTS, *supra* note 117, at 7 tbl.2.

121. See *id.* at 2 & n.29 (citing at least one study conducting a meta-analysis and comparison of 59 different in-depth studies of various medical-abortion protocols).

122. *Okla. Coal. for Reprod. Justice*, 313 P.3d at 262.

version of the law.¹²³ A similar Texas law, by contrast, was upheld in *Planned Parenthood of Greater Texas Surgical Health Services v. Abbott*¹²⁴ against a facial challenge. The court did recognize that an as-applied challenge might succeed for women for whom a surgical abortion between forty-nine and sixty-three days after their LMP posed significant health risk.¹²⁵ The United States Supreme Court granted certiorari in the Oklahoma case, only later to withdraw it as improvidently granted, leaving consideration to another day.¹²⁶

A. *The Fifth Circuit and Medication Abortions*

The *Abbott* line of cases illustrates how a narrow view of the undue burden test trumps good medical practice. The district court had found that the risk of a significant adverse event was so low as to be hard to quantify.¹²⁷ Also, the “FDA protocol is assuredly more imposing and unpleasant for the woman,”¹²⁸ with its additional clinic visit, reduced control over the timing and convenience of the medically induced abortion, and greater demand on physician time.¹²⁹ Most importantly, it removed medication abortion as an option for women who discover their pregnancy or decide to abort more than forty-nine days after their LMP, some of whom might have physiological or other health reasons for avoiding surgical abortion.¹³⁰ “Taken as a whole,” the court found, “the FDA protocol is clearly more burdensome to a woman than the off-label protocol.”¹³¹

Yet that did not make the restriction to the FDA protocol unconstitutional.¹³² The district court found itself bound by *Casey* and its

123. *Planned Parenthood Ariz., Inc. v. Humble*, 753 F.3d 905, 918 (9th Cir. 2014).

124. *Planned Parenthood of Greater Tex. Surgical Health Servs. v. Abbott (Abbott III)*, 748 F.3d 583, 604 (5th Cir. 2014), *reh'g denied*, 769 F.3d 330 (5th Cir. 2014). The designation *Abbott III* refers to the second disposition of the case in the Fifth Circuit, which was based on the merits of the case. This Article also references the first disposition in the Fifth Circuit as *Abbott II*, *Planned Parenthood of Greater Tex. Surgical Health Servs. v. Abbott (Abbott II)*, 734 F.3d 406 (5th Cir. 2013), a decision granting Texas’s motion to stay the district court’s entry of a permanent injunction, pending the disposition of the appeal on the merits. Fifth Circuit opinions referencing these decisions refer to the decision of the Fifth Circuit’s preliminary injunction panel as *Abbott I* and the Fifth Circuit’s merits decision as *Abbott II* but do not give a numerical designation to the opinion of the district court.

125. *Abbott III*, 748 F.3d at 604–05.

126. *Cline v. Okla. Coal. for Reprod. Justice*, 133 S. Ct. 2887, 2887 (2013), *cert. dismissed*, 134 S. Ct. 550 (2013).

127. *Abbott I*, 951 F. Supp. 2d 891, 906 (W.D. Tex. 2013).

128. *Id.*

129. *Id.*

130. *Id.* at 906–07, 906 n.20.

131. *Id.* at 906–07.

132. *Id.* at 907.

rule that the “fact that a law which serves a valid purpose, one not designed to strike at the right itself, has the incidental effect of making it more difficult or more expensive to procure an abortion cannot be enough to invalidate it,” as long as there is a rational basis for that law.¹³³ Even if that burden were great, as long as there was a reasonably safe and effective alternative procedure—such as the earlier FDA protocol or surgical abortion—it still would be constitutional.¹³⁴ Thus, as applied to most women, Texas’s restrictions on medical abortion “[did] not rise to the level of an undue burden on the right to seek a previability abortion.”¹³⁵

The district court, however, found that for women with particular physical abnormalities or preexisting conditions surgical abortion is not a medically sound or safe option. The forty-nine-day limit would place a substantial obstacle in their path without a reasonable alternative because of the health risk that it posed.¹³⁶ Under Supreme Court decisions going back to *Roe v. Wade*, a state may not restrict abortions that are “necessary, in appropriate medical judgment, for the preservation of the life or health of the mother.”¹³⁷ Restricting medication abortion to the FDA protocol thus placed an undue burden on women for whom a medication abortion was necessary for preservation of her life or health.¹³⁸ The district court’s final order treated the plaintiffs’ claim as a facial attack on the statute and issued an injunction against its application to all abortions forty-nine to sixty-three days after a woman’s LMP, where “such a procedure is necessary for the preservation of the life or health of the mother.”¹³⁹

The Fifth Circuit found even that limitation of the medication law unacceptable, because it found insufficient science or facts in the record supporting that claim.¹⁴⁰ Thus an injunction against applying the statute to ban medication abortions forty-nine to sixty-three days after LMP could not

133. *Id.* (citing *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 874 (1992)).

134. *Id.* (citing *Gonzales v. Carhart*, 550 U.S. 124, 163 (2006)). As *Gonzales* held, the government has broad discretion to regulate medical practice even if it subjugates physician or patient preference, so long as a safe, medically-accepted, and actual alternative exists. *See supra* notes 76–78 and accompanying text.

135. *Abbott I*, 951 F. Supp. 2d at 907.

136. *Id.* Note that the court is not saying that the FDA protocol in other respects is harmful to women, only the post-forty-nine-day restriction.

137. *Id.* at 908 (quoting *Roe v. Wade*, 410 U.S. 113, 165 (1973) (internal quotation marks omitted)).

138. *Id.* The court went on to find that the Texas medication-abortion law is not unconstitutional because another section of the law recognizes that the law does not “apply to abortions . . . to avert the death or substantial and irreversible physical impairment of a major bodily function of the pregnant woman.” *Id.*

139. *Id.* at 909.

140. *Abbott III*, 748 F.3d 583, 604 (5th Cir. 2014). Specifically, it found that the conditions said to require medication abortions from forty-nine to sixty-three days were vaguely stated and not supported by scientific findings in the record. *Id.*

apply to all women in that group.¹⁴¹ Instead, citing the holding in *Gonzales* that an as-applied challenge was the proper avenue for relief when medical experts disagreed about the need for a particular method, the circuit court found that women with conditions that necessitated a medication abortion forty-nine to sixty-three days after their LMP should proceed individually with as-applied challenges to the restriction.¹⁴²

The court reached this conclusion not only because of *Gonzales* but also because of its preference for the state's expert over that of the plaintiffs.¹⁴³ The plaintiffs' expert had testified that first-trimester surgical abortions are more difficult, if not impossible, for women who are extremely obese, have uterine fibroids, a uterus that is very flexed, anomalies involving a malformed uterus, or who are difficult to dilate because of a stenotic cervix or female genital mutilation.¹⁴⁴

On the other hand, the state's expert testified that

[M]edical research ha[d] shown that drug-induced abortions present more medical complications and adverse events than surgical abortions, with six percent of medication abortions . . . requiring surgery to complete the abortion, often on an emergency basis. With [that] statistic in mind, [she] opined that when surgery is already contraindicated . . . it would be medically irresponsible and contrary to her best interest for a physician to submit her to a medication abortion, for in the event an emergency surgical abortion is later needed, she will be placed at an even higher risk of adverse health results.¹⁴⁵

Based on these differences in expert testimony, the court found that the conditions that would supposedly require off-label protocols had not been clearly defined, e.g., the meaning of "extremely obese" or "certain uterine anomalies."¹⁴⁶ Granting an injunction "to this vague group would effectively give doctors wide latitude" to prescribe medication abortions in those cases.¹⁴⁷ Nor had the plaintiffs' expert pointed to "any evidence of scientific studies or research in the record showing this to be true."¹⁴⁸ Moreover, there was disagreement as to whether medication abortions are safer for this subset of women, at least when subsequent emergency

141. *Id.*

142. *Id.* at 604–05 (citing *Gonzales v. Carhart*, 550 U.S. 124, 167 (2006)).

143. *Id.* at 602, 605–06.

144. *Id.* at 602.

145. *Id.* It is unclear why this would be so. If surgical abortions are more risky for such women, then the fact that 94% of them will not have the need for surgical completion does not make it obvious why the 6% of them that will then also endure a surgical abortion poses unacceptable risk. One would have to know more about what those higher risks are, and the state's expert had not specified them.

146. *Id.* at 604.

147. *Id.*

148. *Id.*

surgical abortions are necessary.¹⁴⁹ Finally, there was no showing or evidence that this subgroup of women would not be able to determine that they are pregnant and thus obtain a medical abortion within the forty-nine-day window.¹⁵⁰

B. The Ninth Circuit Approach

The Ninth Circuit, taking a balancing approach under the “undue” language of the *Casey* test, ordered a preliminary injunction against enforcement of a similar Arizona law, finding a likelihood that plaintiffs would be successful in their suit on the merits.¹⁵¹ It assumed that the law passed rational basis review and moved directly to the application of the undue burden test.¹⁵² Under *Casey*, the question was whether “in a large fraction of the cases in which [the law] is relevant, it will operate as a substantial obstacle to a woman’s choice to undergo an abortion.”¹⁵³ It then limited its inquiry to “the group for whom the law is a restriction, not the group for whom the law is irrelevant.”¹⁵⁴ At issue, then, was the burden on women who, in the absence of the Arizona law, would receive medication abortions under the off-label protocol.

Turning first to the strength of Arizona’s justification of the law, Arizona had presented no evidence to counter the plaintiffs’ claim that the off-label use was safer.¹⁵⁵ Indeed, the district court had found “no ‘supporting evidence for any asserted legislative fact,’” and that the off-label protocol had clear advantages for women over the on-label regime.¹⁵⁶ A lesser dose of mifepristone was safer, and there was no evidence of other off-label medical-abortion regimens that might be more harmful.¹⁵⁷

The burden on women seeking medication abortions, however, was extensive. Women could not receive medication abortions more than seven weeks after their LMP, including those who did not discover that they were pregnant before forty-nine days after their LMP.¹⁵⁸ Before that period, they would have to take larger, more costly doses of the drug, and have an additional, unnecessary office visit with its own travel, cost, and privacy inconveniences.¹⁵⁹ Some women would not have a surgical abortion at

149. See *supra* note 69–71 and accompanying text.

150. *Abbott III*, 748 F.3d at 604.

151. *Planned Parenthood Ariz., Inc. v. Humble*, 753 F.3d 905, 914–15, 918 (9th Cir. 2014).

152. *Id.* at 914.

153. *Id.* at 914 (alteration in original) (quoting *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 895 (1992)) (internal quotation marks omitted).

154. *Id.* (quoting *Casey*, 505 U.S. at 894).

155. *Id.* at 914–15.

156. *Id.*

157. *Id.* at 915.

158. *Id.*

159. *Id.* at 915–16.

all.¹⁶⁰ In addition, the on-label law led to fewer medication abortions and fewer abortions altogether at a clinic in Flagstaff which was the sole provider for women in all of northern Arizona.¹⁶¹ The plaintiffs also introduced evidence that the law may delay abortions, thereby increasing health risks for rural women who would have to drive additional distances.¹⁶²

With uncontroverted evidence that the law substantially burdens women's access to abortion services, and no evidence that the law in any way advances women's health, plaintiffs' evidence showed that the Arizona law "'usurp[ed] . . . providers' ability to exercise medical judgment,' by requiring them to administer a less safe, less effective treatment regimen."¹⁶³ The court thus found that the burden imposed by the Arizona law was likely undue and reversed the district court's denial of preliminary injunctive relief.¹⁶⁴

Once again, the legal standard—the court's view of the undue burden test—determined the importance of the evidence presented and thus the outcome of the case. This account provides yet another reason for the Supreme Court to clarify the undue burden standard.

VI. Fetal Pain and Prohibitions on Abortion After Twenty Weeks

The post-*Gonzales* revitalization of antiabortionist efforts to weaken the right without attacking its central core also led to laws in sixteen states that ban abortion after twenty weeks, on the ground that medical science and neuroscience show that a fetus has the subcortical templates to feel pain prior to twenty weeks.¹⁶⁵ This claim is based on the rise of fetal hormonal stress level and reactive ultrasound imaging when the fetus is poked, prodded, or manipulated in ways that would be associated with pain in born

160. *Id.* at 915.

161. *Id.* at 916.

162. *Id.*

163. *Id.* (second alteration in original) (citation omitted) (quoting Tucson Women's Clinic v. Eden, 379 F.3d 531, 543 (9th Cir. 2004)).

164. *Id.* at 918. The court noted that under *Casey* and *Gonzales*, a burden need not be absolute to be undue. *Id.* at 917. Even if some women will still be able to get abortions, they will be burdened by higher costs, dosages, visits, and inconvenience for a very feeble or nonexistent medical justification. *Id.*

165. ALA. CODE § 26-23B-5 (Supp. 2012); ARIZ. REV. STAT. ANN. § 36-2159 (2014); ARK. CODE ANN. § 20-16-1405 (2014); DEL. CODE ANN. tit. 24, § 1790 (2011); GA. CODE ANN. § 16-12-141(c) (Supp. 2014); IDAHO CODE ANN. § 18-505 (Supp. 2014); IND. CODE ANN. § 16-34-2-1(a)(3) (Supp. 2014); LA. REV. STAT. ANN. § 40:1299.30.1.E (Supp. 2015); MISS. CODE ANN. § 41-41-137 (Supp. 2014); MO. ANN. STAT. § 188.030 (West Supp. 2015); NEB. REV. STAT. §§ 28-3,104, -3,106 (2010); N.C. GEN. STAT. §§ 14-44 to -45.1 (2013); N.D. CENT. CODE § 14-02.1-05.3 (Supp. 2013); OKLA. STAT. ANN. tit. 63, § 1-745.5 (West Supp. 2015); TEX. HEALTH & SAFETY CODE ANN. § 171.044 (West Supp. 2014). *See also* KAN. STAT. ANN. § 65-6703 (West 2014) (restricting the abortion of a viable fetus over twenty-two weeks).

infants.¹⁶⁶ Proponents of this view also rely on the work of K.J.S. Anand, who, almost alone among doctors and anatomists

thinks that fetuses may experience pain based on subsensory cortical and thalamic structures that develop before twenty weeks. . . . [The overwhelming weight of expert opinion is to the contrary.] A Commission of Inquiry into Fetal Sentience in the House of Lords in England found that there may be “‘some form of pain sensation or suffering’ when the cortex has begun forming connections with the nerves that transmit pain signals,” which is not until twenty-six weeks or later. The Royal College of Obstetricians and Gynecologists also determined that “‘a fetus can only feel pain after nerve connections become established between two parts of its brain: the cortex and the thalamus.’” As a result, the group found that “‘little sensory input’ reaches the brain of the developing fetus before 26 weeks[,] ‘[t]herefore reactions to noxious stimuli cannot be interpreted as feeling or perceiving pain.’” A meta-study of fetal pain studies [suggested] that a fetus’s neurological pathways that allow for the “conscious perception of pain” do not function until after twenty-eight weeks gestation. Professor Anand criticized this review on methodological and substantive grounds, including its failure to recognize the role of a subsensory cortex basis for feeling pain. The uncertainty about adequate cortical and neurological structure is compounded by different interpretations of the meaning of reaction to external stimuli and the effect of hormonal surges. In the end, pain is a subjective experience. Without someone telling us that they are experiencing pain we must rely on surrogate markers, some of which are reliable and others not.

The immediate policy response to these studies has [been disclosure to women]. Laws in several states were passed requiring that women undergoing second trimester abortions be told that fetuses might experience pain and that they could have anesthesia delivered to the fetus before or during the procedure. A bill introduced in Congress would have required that all physicians read a federally written script to patients that at twenty weeks the fetus is pain-capable.

In April 2010, Nebraska went a step further and enacted a law banning, except for a narrow set of emergency situations, all abortions twenty weeks after fertilization because of fetal capacity to experience pain. It had held one hearing on the bill, with evidence from five physicians who were “experts” in pain management or fetal medicine, but heard from no physicians or scientists with a

166. Teresa S. Collett, *Previability Abortion and the Pain of the Unborn*, 70 WASH. & LEE L. REV. 1211, 1218–19, 1218 nn.30–32 (2014). See generally *id.* (discussing the development of and reasoning behind abortion bans after twenty weeks of gestation).

different view. The law made [findings of fact that tracked Dr. Anand's views].¹⁶⁷

The sixteen other states that have enacted twenty-week bans on abortion have essentially replicated the Nebraska statute and its findings of fact,¹⁶⁸ thus setting the stage for a constitutional challenge to a woman's right to abortion up until twenty-four weeks. Under existing precedents, however, twenty-week bans are unconstitutional because they limit abortion prior to viability. No lower court may legitimately rule otherwise because of the Court's repeated support for abortion up until viability. Unless the Court was to rethink that line, there would be no occasion to arbitrate the scientific dispute about when fetuses first feel pain.¹⁶⁹

In this case, then, the scientific data does not matter because legal precedents make the science of fetal pain irrelevant (except possibly for mandated disclosures). The Ninth Circuit's 2013 decision in *Isacson v. Horne*,¹⁷⁰ reversing a district court's validation of the Arizona twenty-week ban based on fetal pain, is illustrative of these points.¹⁷¹ It noted that from *Roe* to *Casey* to *Gonzales*, the Court has held to *Roe*'s central holding: "Before viability, the State's interests are not strong enough to support a prohibition of abortion or the imposition of a substantial obstacle to the woman's effective right to elect the procedure."¹⁷² That principle decided the case.¹⁷³

Nor did the fact that viability is a "flexible" rather than a fixed point mean that it was not still critical.¹⁷⁴ The Court has recognized that viability may vary among pregnancies and "that improvements in medical technology will both push later in pregnancy the point at which abortion is

167. John A. Robertson, *Abortion and Technology: Sonograms, Fetal Pain, Viability, and Early Prenatal Diagnosis*, 14 U. PA. J. CONST. L. 327, 365–67 (2011) (citations omitted).

168. Compare NEB. REV. STAT. §§ 28-3,102 to -3,111, with ALA. CODE § 26-23B; ARIZ. REV. STAT. ANN. § 36-2159; ARK. CODE ANN. §§ 20-16-1401 to -1410; DEL. CODE ANN. tit. 24, § 1790; GA. CODE ANN. § 16-12-141(c); IDAHO CODE ANN. §§ 18-501 to -510; IND. CODE ANN. § 16-34-2; KAN. STAT. ANN. § 65-6703; LA. REV. STAT. § 40:1299.30.1; MISS. CODE ANN. §§ 41-41-131 to -145; MO. ANN. STAT. § 188.030; N.C. GEN. STAT. ANN. §§ 14-44 to -46; N.D. CENT. CODE § 14-02.1-05.3; OKLA. STAT. ANN. tit. 63, § 1-745; TEX. HEALTH & SAFETY CODE ANN. §§ 171.044 to -048.

169. Although the Court in *Gonzales* has taken the position that the state's evaluation of the validity of scientific evidence will control when there is a difference of opinion among doctors and scientists, as long as its stance leaves reasonably safe and effective alternatives available, the issue of whether it will stick to that position with regard to fetal pain will not arise unless the Court is willing to reopen that now apparently firm line. Even if it did, however, the alternative would be to anesthetize the fetus prior to previability abortions.

170. 716 F.3d 1213 (9th Cir. 2013).

171. *Id.* at 1217–18.

172. *Id.* at 1222 (quoting *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 846 (1992)) (internal quotation marks omitted).

173. *Id.* at 1222.

174. *Id.* at 1224.

safer than childbirth and advance earlier in gestation the point of fetal viability.”¹⁷⁵ New facts may have prompted abandonment of *Roe*’s trimester framework, but “no changes of fact have rendered viability more or less appropriate as the point at which the balance of interests tips.”¹⁷⁶ Viability remained “a matter for the judgment of the responsible attending physician.”¹⁷⁷

With the parties agreeing that no fetus was viable at twenty-weeks’ gestation, Arizona’s law banning abortion from twenty weeks was, without more, invalid.¹⁷⁸ In reaching this uncontroversial conclusion, there was no reason to consider whether Arizona’s scientific claim concerning fetal capacity to experience pain from twenty-weeks’ gestation was correct. Once again the legal standard—the firmness of the viability line—prevented a judicial evaluation of the claim of new (though disputed) neuroscientific evidence that the fetus was pain capable at twenty weeks.

VII. Hospital-Staff-Privilege Requirement Cases

The energy imparted to the antiabortion movement by *Gonzales* has also led to legislation requiring that doctors performing abortions in freestanding clinics have hospital admitting privileges within thirty miles of the clinic where abortions are performed.¹⁷⁹ Here, both medical and social science play an important role because so much turns on the need for the requirement and its impact on women seeking an abortion. Also key here is the view taken of the undue burden test. If the purpose of a regulation is not to restrict abortion, is a law valid if a rational basis exists for its passage and it does not substantially block access to abortion? Or must the alleged health and safety benefits of the requirement be balanced against the resulting burden on women to determine whether the regulation is “necessary” and thus not undue?

175. *Id.*

176. *Id.* (quoting *Casey*, 505 U.S. at 860–61) (internal quotation marks omitted).

177. *Id.* at 1225 (quoting *Colautti v. Franklin*, 439 U.S. 379, 396 (1976)) (internal quotation marks omitted). *Colautti* also held that “neither the legislature nor the courts may proclaim one of the elements entering into the ascertainment of viability—be it weeks of gestation or fetal weight or any other single factor—as the determinant of when the State has a compelling interest in the life or health of the fetus.” *Colautti*, 439 U.S. at 388–89.

178. *Isaacson*, 716 F.3d at 1225. The court went on to find invalid the district court’s basis for upholding the twenty-week ban on the grounds that it was a regulation and not a ban, that it did not create an undue burden, and that an exception for the life and health of the mother, other state interests, and the rarity of such abortions validated it. *Id.* at 1225–31.

179. *See, e.g., Abbott III*, 748 F.3d 583, 587 (5th Cir. 2014) (discussing a challenge to a Texas law requiring hospital staff privileges for abortion providers).

A. *The Fifth Circuit Non-Balancing Approach to Undue Burden*

The Texas statute in *Planned Parenthood of Greater Texas Surgical Health Services v. Abbott* illustrates once again how legal tests determine the weight or decisive authority given to experts and their claims. In 2013, Texas required that abortion providers in Texas have staff privileges in a hospital within thirty miles of where they practice.¹⁸⁰ The abortion clinic plaintiffs won a district court injunction against that provision.¹⁸¹ A motions panel of the Fifth Circuit granted a stay pending appeal, which the Supreme Court refused to vacate.¹⁸²

At issue on appeal was the district court's finding that the law facially violated the plaintiffs' substantive due process rights because it "lacked a rational basis and imposed an undue burden on a woman's right to choose an abortion."¹⁸³ The plaintiffs' expert testified that "only 2.5 percent of women who have a first-trimester surgical abortion undergo minor complications, while fewer than 0.3 percent experience a complication that requires hospitalization."¹⁸⁴ Women needing hospital care could be safely referred to a nearby emergency room. Emergency-room physicians were qualified to treat most postabortion complications, "which are very similar to the symptoms of miscarriage, a condition commonly seen in ERs."¹⁸⁵ If not, they could "consult with the Ob/Gyn on-call in the event that they determine a specialist is required."¹⁸⁶ As a result, they argued that there was no health need for abortion practitioners themselves to have admitting privileges.¹⁸⁷

The state offered experts whose counterarguments focused on the need for continuity of care and credentialing to justify the admitting-privilege requirement.¹⁸⁸ One expert referred to an authoritative study which concluded that "80 percent of serious medical errors involve miscommunication between caregivers when patients are transferred or handed-off."¹⁸⁹ A second expert testified that "an abortion provider with admitting privileges is better suited than one [without] to know which

180. *Id.*

181. *Id.* at 587–88.

182. *Id.* at 588.

183. *Id.* at 590. The plaintiffs did not argue that the law was passed in order to limit abortions, one prong of the undue burden test. *Id.* at 597.

184. *Id.* at 591.

185. *Id.*

186. *Id.*

187. *Id.*

188. *Id.* at 592.

189. *Id.* The expert was referring to a study by the Joint Commission on Accreditation of Health Care Organizations that included several top hospitals. *See id.* (stating that the joint commission of hospitals that prepared the report he referred to included Johns Hopkins, Mayo Clinic, and New York Presbyterian). It is unknown how frequent such communication errors, if any, arose in the relatively few cases of abortion complications requiring hospitalization.

specialist at the hospital to consult in cases where an abortion patient presents herself at an ER with serious complications.”¹⁹⁰ Since 73% of emergency rooms nationwide lack adequate on-call coverage by specialist physicians, including ob-gyns, “requiring abortion providers to obtain admitting privileges [would] reduce the delay in treatment and decrease the health risk for abortion patients with critical complications.”¹⁹¹ It would also “assist in preventing patient abandonment by the physician who performed the abortion and then left the patient to her own devices to obtain care if complications developed.”¹⁹²

State experts further testified that “hospital credentialing acts as another layer of protection for patient safety.”¹⁹³ An admitting-privilege provision enlists hospitals to “screen out” untrained and incompetent providers, who might not be properly credentialed and board certified.¹⁹⁴ One expert, questioning the 0.3% estimate of women requiring postabortion hospitalization, cited a study indicating that one-third to one-half of abortion patients return to their clinic for follow-up care.¹⁹⁵

The court rejected the district court’s conclusion that the staff-privilege requirement failed the rational basis test due to the state’s “fail[ure] to show a valid purpose.”¹⁹⁶ Under standard rational basis analysis, the state “has no obligation to produce evidence to sustain the rationality of a statutory classification”¹⁹⁷ or “‘prove’ that the objective of the law would be fulfilled.”¹⁹⁸ Since any conceivable rationale will do, a law “‘based on rational speculation unsupported by evidence or empirical data’ satisfies rational basis review.”¹⁹⁹ In this case there was expert evidence that at least 210 women in Texas required hospitalization every year, and that some women who are hospitalized “have complications that require an Ob/Gyn specialist’s treatment,” which may not be available in emergency rooms.²⁰⁰

190. *Id.*

191. *Id.*

192. *Id.* at 595 (quoting *Abbott II*, 734 F.3d 406, 411 (5th Cir. 2013)).

193. *Id.* at 592.

194. *Id.*

195. *Id.* at 593. This study, however, does not show how many abortion patients then require referral to a hospital and then admission. Daniel Grossman et al., *Routine Follow-Up Visits After First-Trimester Induced Abortion*, 103 AM. COLL. OBSTETRICIANS & GYNECOLOGISTS 738 (2004).

196. *Abbott III*, 748 F.3d at 593–94 (5th Cir. 2014).

197. *Id.* at 594 (quoting *Heller v. Doe*, 509 U.S. 312, 320 (1993)) (internal quotation marks omitted).

198. *Id.* at 594 (citing *FCC v. Beach Commc’ns, Inc.*, 508 U.S. 307, 315 (1993)).

199. *Id.* (quoting *Beach Commc’ns*, 508 U.S. at 315).

200. *Id.* at 595. It is commonly recognized that about 70,000 abortions occur annually in Texas. *Id.* at 591 n.10. No data, however, was provided as to the number of abortions in Texas or the number of women seeking hospitalization after abortion who required specialist care beyond the emergency-room doctor. *See id.* at 590–95 (recounting the evidence provided to the trial court by the parties).

The state's experts had also cited the need for continuity of care to reduce errors and protect patients and to maintain the standard of care within abortion practice.²⁰¹

The court then turned to the district court's claim that the staff-privileges requirement, even if rationally based as a protection of women's health, imposed an undue burden on women seeking an abortion.²⁰² It found that the district court's "findings [were] vague and imprecise, fail[ed] to correlate with the evidence, and even if credited, fail[ed] to establish an undue burden according to the Supreme Court's decisions."²⁰³

First, the lower court had facially invalidated the law as it pertains to the entire state of Texas, but the record contained evidence that only one of the two clinics in the Rio Grande Valley would be left without an abortion provider.²⁰⁴ Even if both closed, that in itself would not create an undue burden because they are within 150 miles or less (an estimated three-hour drive) of an abortion provider with hospital privileges in Corpus Christi.²⁰⁵ The Fifth Circuit noted that in *Casey*, the Court had upheld an informed consent requirement that required women to travel for at least an hour and sometimes longer than three hours to obtain an abortion from the nearest provider as not being an undue burden.²⁰⁶

Second, the district court opinion had made no "baseline" finding as to precisely how many abortion doctors . . . lack[ed] admitting privileges.²⁰⁷ Nor was the plaintiffs' assertion that one-third of the state's clinics would close and 22,000 women would be denied abortion each year established.²⁰⁸ There was no showing that just because some clinics would close that any woman in Texas would lack reasonable access to a clinic

201. *Id.* at 592. The court referenced the specter of Dr. Kermit Gosnell. *Id.* at 595. Gosnell was a notorious Philadelphia abortion provider who had been convicted of murder and other crimes for his shoddy and incompetent practices. Jon Hurdle & Trip Gabriel, *Philadelphia Abortion Doctor Guilty of Murder in Late-Term Procedures*, N.Y. TIMES, May 13, 2013, http://www.nytimes.com/2013/05/14/us/kermit-gosnell-abortion-doctor-found-guilty-of-murder.html?_r=0, archived at <http://perma.cc/VFP8-Y9WL>. The court cited Eighth and Fourth Circuit cases upholding staff-privilege requirements and distinguished the Seventh Circuit decision upholding a preliminary injunction against a Wisconsin law on the ground that it only permitted three days for a clinic doctor to comply. *Abbott III*, 748 F.3d at 595 & n.11, 596.

202. *Abbott III*, 748 F.3d at 597.

203. *Id.*

204. *Id.*

205. *Id.* In addition, Texas exempts from the twenty-four-hour waiting period after informed consent women who must travel more than 100 miles to an abortion facility. TEX. HEALTH & SAFETY CODE ANN. § 171.012(a)(4) (West Supp. 2014).

206. *Abbott III*, 748 F.3d at 598 (citing *Planned Parenthood of Se. Pa. v. Casey*, 744 F. Supp. 1323, 1352 (E.D. Pa. 1990)).

207. *Id.*

208. *Id.*

within Texas.²⁰⁹ All of the major Texas cities would continue to have multiple clinics where many doctors would still have or could obtain staff privileges.²¹⁰ The plaintiffs' own evidence showed that "more than ninety percent of the women seeking an abortion in Texas would be able to obtain the procedure within 100 miles of their [home]."²¹¹ As the Fifth Circuit motions panel ruled when granting a stay of the district court's injunction, "[t]his does not constitute an undue burden in a large fraction of the relevant cases."²¹²

Third, the record did not show that abortion providers would "likely be unable to comply with the privileges requirement."²¹³ Some already had them.²¹⁴ Also, both state and federal law prohibit hospitals from discriminating against physicians who perform abortions.²¹⁵ The inability to obtain privileges at hospitals with minimum admission requirements was explainable by the rarity with which abortions yield any hospital admission because it is the practice of abortion providers "to instruct their patients to seek care from an emergency room if complications arise."²¹⁶

In sum, the district court applied the wrong legal standards on the rational basis and purpose tests and erred in finding that twenty-four counties in the Valley would be left without a provider.²¹⁷ With regard to the rest of the state, there was no evidence that the law imposed an undue burden "in a large fraction of the cases."²¹⁸ Even if it diminished the number of clinics and meant that many, often poor, women would have to travel farther, the burden does not fall on the vast majority of Texas women seeking abortions. Put another way, the regulation "will not affect a significant (much less 'large') fraction of such women, and it imposes on other women in Texas less of a burden than the waiting-period provision

209. *Id.*

210. *Id.*

211. *Id.*

212. *Id.* (alteration in original) (quoting *Abbott II*, 734 F.3d 406, 415 (5th Cir. 2013)).

213. *Id.*

214. *Id.*

215. *Id.* at 598 n.13.

216. *Id.* at 599 (quoting *Abbott II*, 734 F.3d at 416). Plaintiff Hagstrom-Miller's testimony about the difficulties that she had in retaining current physicians or recruiting new ones was explained by factors other than the staff-privileges requirement. *Id.*

217. *Id.* at 599–600.

218. *Id.* An undue burden on "a large fraction" of women seeking an abortion is arguably the standard required by *Casey* and confirmed in *Gonzales* to uphold a facial attack. *Planned Parenthood of Se. Pa. v. Casey*, 505 U.S. 833, 895 (1992); *Gonzales v. Carhart*, 550 U.S. 124, 167–68 (2007). If that is the standard, it is less demanding than the usual "no set of circumstances" requirement for a facial attack held by *United States v. Salerno*, 481 U.S. 739, 745 (1987).

upheld in *Casey*.²¹⁹ This sufficed to sustain facially the admitting-privileges requirement.²²⁰

B. Admitting Privileges Under a Balancing Approach to Undue Burden

A different result might have been found if the court had taken a balancing approach to the undue burden test, as Judge Richard Posner suggested in his opinion in *Planned Parenthood of Wisconsin, Inc. v. Van Hollen*, which challenged a Wisconsin law requiring that abortion providers have hospital staff privileges in nearby hospitals.²²¹ While the court's preliminary injunction turned ultimately on Wisconsin giving the plaintiffs only a weekend to comply with the hospital-privilege requirement,²²² Judge Posner's opinion in *Van Hollen* did say that the state would have to show actual need for the requirement and not simply a rational basis for thinking it might help.²²³ He thought that the injunction against enforcement of the Wisconsin law was justified because "the medical grounds thus far presented . . . [were] feeble, yet the burden great."²²⁴ *Planned Parenthood Southeast, Inc. v. Strange*, a district court decision in Alabama, took a similar approach.²²⁵

In the admitting-privileges context, both sides may have had reasonable points, but the burden was on the plaintiffs to show that the law served no rational purpose or that protecting women's health in this way was an undue burden by limiting access to a significant or large fraction of such women. The Texas plaintiffs simply lacked the data to show that there was no rational basis or that enough women would be affected that it met *Casey*'s standard for an undue burden in a facial attack.²²⁶ Under that standard, the plaintiffs' science was not strong enough to establish an undue burden because the state's bar was so high. In contrast, under the balancing approach of the Seventh Circuit, the evidence appears to be sufficient to show few health benefits and enough burden on women to invalidate the statute.²²⁷ Once again, law determines the weight accorded to the science.

219. *Abbott III*, 748 F.3d at 600.

220. *Id.*

221. *Planned Parenthood of Wis., Inc. v. Van Hollen*, 738 F.3d 786, 787 (7th Cir. 2013).

222. *Id.* at 788.

223. *Id.* at 798.

224. *Id.*

225. *Planned Parenthood Se., Inc. v. Strange*, 9 F. Supp. 3d 1272, 1287 (M.D. Ala. 2014).

226. *Abbott III*, 748 F.3d 583, 594–99 (5th Cir. 2014).

227. This appears to be the case, at least on an as-applied basis. *Van Hollen*, 738 F.3d at 791, 798.

VIII. Ambulatory Surgery Center Standards

A final area of allegedly fact-driven restrictions on abortion is laws that require abortion clinics to be licensed as ambulatory surgery centers (ASC), ostensibly to protect women's health. Again, we focus on the Texas legislation and how the Fifth Circuit has responded to claims that such a law was an undue burden on women seeking an abortion.

The Texas ASC requirement was part of House Bill 2, passed in 2013, two provisions of which were previously upheld in *Abbott II* in 2014.²²⁸ It required that all abortion clinics existing on or after September 1, 2014 comply with the same minimum standards required of ambulatory surgery centers for physical plant (architectural, electrical, plumbing, and HVAC requirements) and for operations (medical records system, training, staffing, and cleanliness).²²⁹ The district court issued declaratory and injunctive relief against these provisions taking effect on August 29, 2014.²³⁰ The Fifth Circuit issued a stay of the injunctions on October 2, 2014, finding that the state had shown a likelihood of success on the merits.²³¹ The U.S. Supreme Court vacated the stay pending a review of the merits of the case.²³²

The motions panel treated the district court opinion as upholding a facial attack on the ASC provisions.²³³ While recognizing the ambiguity in *Casey* and *Gonzales* as to whether a facial attack need show “no set of circumstances” or only “a large fraction” of cases in which a constitutional application was not possible, it applied the “large fraction” nomenclature as it had in *Abbott I* and *Abbott II*.²³⁴ Both parties agreed that six abortion centers in Austin, Fort Worth, Dallas, Houston, and San Antonio would still be able to offer abortions, with licenses issued for two others, but that all other clinics in the state would be closed,²³⁵ reducing the number of clinics in Texas from about twenty to eight.²³⁶ The district court found that the reduction in supply of abortion clinics would require “a significant number

228. See *supra* subpart V(A). The medication-abortion and hospital staff-privileges requirements had gone into effect on October 31, 2013, when the Fifth Circuit motions panel granted a stay of the district court's order enjoining enforcement of the law. *Abbott III*, 748 F.3d at 588.

229. *Whole Woman's Health v. Lakey (Whole Woman's Health I)*, 46 F. Supp. 3d 673, 677, 682 (W.D. Tex. 2014).

230. *Id.* at 676–77.

231. *Whole Woman's Health II*, 769 F.3d 285, 305 (5th Cir. 2014).

232. *Whole Woman's Health v. Lakey*, 135 S. Ct. 399 (2014).

233. See *Whole Woman's Health II*, 769 F.3d at 291–92 (noting confusion over the basis of the district court's opinion, but deciding to address the injunction against the ASC requirements from both a facial and an as-applied perspective).

234. *Id.* at 296. See *supra* note 124 for an explanation of the numerical designations this Article uses for the *Abbott* line of cases, as compared with the Fifth Circuit's numerical designations.

235. *Whole Woman's Health II*, 769 F.3d at 296.

236. *Whole Woman's Health I*, 46 F. Supp. 3d 673, 681 (W.D. Tex. 2014).

of the reproductive-age female population of Texas . . . to travel considerably further in order to exercise [their] right to a legal previability abortion.”²³⁷ It viewed that additional travel as being as drastic as a complete ban on abortion.²³⁸ However, under the Fifth Circuit precedents and *Casey*, “a significant number” is insufficient for a facial invalidation unless it is also “a large fraction.”²³⁹

The motions panel also found that the district court erred when it balanced the ASC provisions against the burdens the provisions imposed.²⁴⁰ This too contravened Fifth Circuit precedent, which does not “balance the wisdom or effectiveness of a law against the burdens the law imposes.”²⁴¹ As it noted in *Abbott III*, second-guessing the legislature through rational basis review prevents the legislature from legislating in this area without a constitutional change. It also “ratchets up rational basis review into a pseudo-strict-scrutiny approach by examining whether the law advances the State’s asserted purpose.”²⁴²

The panel then found that the evidence presented at the district court trial was insufficient to show that a “large fraction” of women would face an undue burden on account of the ASC provision.²⁴³ Though the plaintiffs’ expert testified that 900,000 women in Texas live at least 150 miles from a clinic, he did not testify specifically as to how many women *seeking an abortion* would have to drive more than 150 miles to the nearest clinic or whether that would amount to a large fraction.²⁴⁴ The court noted, however, that if one assumes that women seeking abortion are proportionally distributed across the state, the plaintiffs’ evidence suggested that one in six women (16.7%) seeking an abortion would live more than 150 miles from an approved clinic.²⁴⁵ If the *Casey* plurality had in fact changed the threshold for a facial challenge from 100% to a large fraction, the panel declined to interpret *Casey* as recognizing a large threshold to be 17%.²⁴⁶ Even though the ASC provisions might pose special problems for the poor not within 150 miles of an approved center, the panel found that was insufficient to sustain a facial challenge that the law was an undue burden on at least a large fraction of women.²⁴⁷

237. *Id.* at 681–82.

238. *Id.* at 682.

239. *Whole Woman’s Health II*, 769 F.3d at 296.

240. *Id.*

241. *Id.* at 297.

242. *Id.*

243. *Id.* at 299.

244. *Id.* at 298.

245. *Id.*

246. *Id.*

247. *Id.* at 299.

The district court had failed to make findings that the seven or eight ASC-compatible clinics would not be able to manage, on average, 7,500–10,000 new cases per month, as the plaintiffs’ expert testified.²⁴⁸ The plaintiffs’ expert simply assumed, without evidence, that these clinics were operating at full capacity and would not be able to accommodate any increased demand, such as by hiring physicians with admitting privileges from clinics that did not meet the ASC standards; building new clinics; or demand for abortions dropping, as it had been in Texas in recent years.²⁴⁹ Without any evidence on these points, the plaintiffs had not met their burden of showing that insufficient clinic capacity would impose an undue burden on women seeking abortions.²⁵⁰ True, the overall cost of accessing an abortion provider will likely increase, but the fact that “a law which serves a valid purpose, one not designed to strike at the right itself, has the incidental effect of making it more difficult or more expensive to procure an abortion cannot be enough to invalidate it.”²⁵¹

The merits panel decision in *Whole Woman’s Health II* shows once again the importance of how *Casey*’s undue burden test is read and how thorough and specific the experts attacking an abortion law need to be. Under the balancing approach to the undue burden test, the plaintiffs would still have to adduce evidence concerning how little the ASC provisions would improve women’s health and safety and how great the burden would be for many of them. Even then, the evidence might not be sufficient to sustain a facial attack even under the less rigorous “large fraction” test because 90% of Texas women of reproductive age lived within 150 miles or so of clinics that met ASC standards. For women farther away, such as those in McAllen and El Paso, an as-applied challenge might succeed. In oral argument, the Texas State Solicitor did not even concede that point.²⁵²

IX. Conclusion and Relevance to Other Law–Science Conflicts

The account provided here locates an important subset of law and science interactions. The question highlighted is not the epistemic one that arises in vetting the reliability of a scientific study’s methodology and results, as occurs in *Daubert* hearings before admissibility.²⁵³ Nor is the

248. *Id.* at 300.

249. *Id.*

250. *Id.*

251. *Id.*

252. Oral Argument at 6:54, *Whole Woman’s Health II*, 769 F.3d 285 (5th Cir. 2014) (No. 14-50928), available at http://www.ca5.uscourts.gov/OralArgRecordings/14/14-50928_1-7-2015.mp3.

253. David Faigman’s Article for the Symposium is helpful. See David L. Faigman, *Where Law and Science (and Religion?) Meet*, 93 TEXAS L. REV. 1660, 1673–76 (2015) (examining the Court’s *Daubert* jurisprudence and the ways in which *Daubert* forces courts to grapple with the validity and reliability of expert scientific evidence).

question one of realigning legal decisions to new science that undercuts the scientific basis for previous law.²⁵⁴ Also different are questions of judicial capacity to oversee agency reliance on scientific claims, as Fisher, Pascual, and Wagner show regarding the evolution of judicial review of agency decisions.²⁵⁵ Rather, the role of science in abortion disputes depends on a prior normative choice of how much leeway the courts have when balancing the social benefits achieved by a regulation relative to the individual costs which that regulation imposes on women seeking abortions. That choice determines the scrutiny that judges will then give to laws based on science.

This claim is clear with regard to prohibitions on abortion prior to viability, such as bans on abortion after twenty weeks because of fetal pain. Because the Supreme Court has consistently stuck to the viability line (roughly twenty-four weeks), there is no room for a judge who respects precedent to even consider scientific claims that a fetus is pain-capable earlier and thus that the viability should be scrapped.

The normative nature of the judicial role is also clear with regulations affecting abortion within the viability framework. As shown above, the undue burden test purports to identify a rule, rather than a standard, but it is a rule/standard with two very different possible interpretations. The Fifth Circuit rational basis/non-balancing approach essentially replicates the hands-off approach of the rational basis test, when it determines that there is no substantial burden on actual access to abortion. In contrast, the Ninth and Seventh Circuits allow balancing to determine whether a regulatory burden is undue, which is more akin to the rational basis with bite approach that Professor Gerald Gunther first identified in 1972.²⁵⁶ Although Gunther applied his term to gender and illegitimacy, balancing within the undue burden test is similar.²⁵⁷ It involves a stricter scrutiny than the conceivable-interest test of *Williamson v. Lee Optical Co.*,²⁵⁸ but not the strict scrutiny that arises with fundamental rights.²⁵⁹

254. Jennifer Laurin and Robert Truog explore this issue in different subject areas. See Jennifer E. Laurin, *Criminal Law's Science Lag: How Criminal Justice Meets Changed Scientific Understanding*, 93 TEXAS L. REV. 1749, 1751–54 (2015) (examining the way in which the criminal justice system “grapple[s] with the implications of scientific change for its truth-finding functions”); Robert D. Truog, *Defining Death: Getting It Wrong for All the Right Reasons*, 93 TEXAS L. REV. 1891, 1891–92 (2015) (arguing that legal standards for organ donation no longer comport with medical knowledge about the nature and definition of death).

255. Elizabeth Fisher, Pasky Pascual & Wendy Wagner, *Rethinking Judicial Review of Expert Agencies*, 93 TEXAS L. REV. 1679, 1679–82 (2015); Wendy Wagner, *Assessing Asymmetries*, 93 TEXAS L. REV. 91, 92 (2015).

256. Gerald Gunther, *Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection*, 86 HARV. L. REV. 1, 20–21 (1972).

257. See *id.* at 21 (“[Rational basis with bite] would have the Court assess the means in terms of legislative purposes that have substantial basis in actuality, not merely in conjecture.”).

258. See 348 U.S. 483, 487–88 (1955) (“[T]he law need not be in every respect logically consistent with its aims to be constitutional. It is enough that there is an evil at hand for

Ultimately, the Supreme Court will have to resolve the normative question of which version of undue burden to use, which in turn will determine how closely judges examine the expert testimony put forward by litigants. There is much to say for the Seventh and Ninth Circuit approaches if one wishes to take abortion rights seriously while giving due regard to valid state interests. How can a burden be “due” if it contributes so little to a woman’s health that it seems unnecessary? On the other hand, the Fifth Circuit approach cabins judicial discretion by preventing courts from reweighing the balance that the legislature first struck. Still, such a deferential approach to legislation can be justified only if constitutional rights are not substantially burdened, and they are not, under this view, if they do not prevent actual access to abortion, despite the incidental costs and inconvenience that *Casey* tolerates.²⁶⁰

So the question for the Supreme Court is both epistemic and institutional, but in a different sense than epistemic and institutional concerns arise in other law–science contexts. Here it involves the expertise of legislatures versus courts in assessing data and acting on it. Since *Carolene Products*, the Court has recognized that legislatures are better than courts at determining the reliability and relative weight to give to legislative findings and so has opted for a very loose, deferential, hands-off approach to social and economic matters.²⁶¹ This, in turn, leads to presumptive deference to agency findings when the agency’s actions fall within its statutory mandate and are not arbitrary and capricious.²⁶²

The comparative institutional analysis preference for legislatures over courts, however, breaks down when fundamental rights are involved, with abortion being a perfect example. While this is true with outright prohibitions, the question is muddier with regulations within the protected-right framework. Regulations of the right may come to operate as prohibitions in making it very difficult for women to access abortions or

correction, and that it might be thought that the particular legislative measure was a rational way to correct it.”).

259. See *United States v. Carolene Prods. Co.*, 304 U.S. 144, 152 n.4 (1938) (suggesting that legislation which “appears on its face to be within a specific prohibition of the Constitution” may be subject to stricter judicial scrutiny).

260. I say “can be justified” because that proposition is not inconsistent with assessing whether there are real health benefits that make the law a “necessary” regulation despite incidental burdens. If there is so little contribution to health or other valid state interests, then burdens that do not substantially block access to abortion may still be “undue.” See *supra* notes 33–43 and accompanying text.

261. *Carolene Prods. Co.*, 304 U.S. at 154.

262. *Chevron U.S.A. Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 865–66 (1984). See also Thomas O. McGarity, *Science and Policy in Setting National Ambient Air Quality Standards: Resolving the Ozone Enigma*, 93 TEXAS L. REV. 1781, 1794–95 (2015) (discussing *Mississippi v. EPA*, 744 F.3d 1334, 1342 (D.C. Cir. 2013), in which the D.C. Circuit deferred to the Environmental Protection Agency’s 2008 National Ambient Air Quality Standard, finding that the standard was neither arbitrary nor capricious).

stigmatizing abortion by setting up hoops to jump through that may not actually prevent abortion, but certainly make it more costly and inconvenient. The epistemic and institutional deficits of courts versus legislatures may be much less in the confined space of undue burden assessment. To be sure, there are value judgments to be made in choosing and applying any regime, but that is the nature of law. Those judgments are not beyond the capacity of courts that are following Supreme Court rules/standards confining those judgments within strictures of the factors to be balanced under undue burden analysis.

Beyond abortion, the relevance and weight of science in many other law–science controversies may turn on the precise legal question at hand. That insight, though not startling in itself, may cast new light on law–science interactions in many other areas. The allocation of authority between legislatures, agencies, and courts, however, is as much a question of values as it is simply a matter of institutional competence. In abortion law and elsewhere, it will take the Supreme Court to say how much driving of science the law will do.