

PHYSICIAN DECISION-MAKING UNDER UNCERTAINTY IN A POST-*DOBBS* AMERICA

Molly J. Walker Wilson* & Michael S. Sinha**

Following the Supreme Court's decision in Dobbs v. Jackson Women's Health Organization and a series of restrictive state laws post-Dobbs, physicians in many states now face difficult choices between evidence-based practice and criminal penalties. Previously, when deciding whether to provide abortion care, concern for the health of the patient was paramount. Now, fear of criminal penalties drives decision-making for physicians practicing in many areas of the country. For certain life-threatening complications, termination of pregnancy is warranted, but since Dobbs, physicians have been delaying these potentially lifesaving procedures for fear of criminal repercussions. Behavioral research on decision-making under constraints has revealed predictable patterns of human cognition, including motivated reasoning, risk aversion, and decision paralysis. These features of human reasoning lead physicians in abortion-restricted states to err on the side of inaction, delaying or eschewing vital abortion care rather than risking criminal charges. This Article will identify the characteristics of these treatment situations that interact with rational and biased patterns of human reasoning, making distorted decision-making all but inevitable. Exploring such difficult decisions through a behavioral lens allows us to offer a path forward: by targeting and minimizing the sources of uncertainty and anxiety for practitioners, we hope to clear the way for more predictable, evidence-based practices. To this end, we advocate reliance on clear and consistent protocols and workflows aimed at eliminating uncertainty on the part of both the physician and the institution.

TABLE OF CONTENTS

INTRODUCTION	194
I. THE ABORTION LANDSCAPE: PRE- <i>DOBBS</i> V. POST- <i>DOBBS</i>	199

* JD, PhD, Professor of Law, Associate Dean of Research, Saint Louis University School of Law.

** MD, JD, MPH, Assistant Professor of Law, Saint Louis University School of Law. The Authors would like to acknowledge the participants of the 2024 Charm City Colloquium on Law and Bioethics at the University of Maryland, the faculty workshop at Saint Louis University School of Law, and the Colloquium at Touro Law School for valuable feedback on this project. The Authors also recognize superb research support from SLU Law students Alison McCarthy, Sydney Gaughan, and Helen Webster.

II. DECISIONAL CONSTRAINTS AND RESULTING PSYCHOLOGICAL BIASES	203
A. Pre- to Post- <i>Dobbs</i> and an Evolving Risk Calculus	205
B. Social-Cognitive Inputs and Decision Distortion.....	206
1. Motivated Reasoning	207
2. Risk Aversion	208
3. Decision Paralysis	209
4. Status Quo Bias and Choice Inertia.....	210
5. Self-Serving Bias	211
6. Conformity and Obedience.....	212
7. Availability Heuristic and Cascades.....	214
III. CHECKLISTS AND PROTOCOLS	215
A. Keystone ICU Checklist.....	217
B. World Health Organization’s Surgical Safety Checklist.....	218
C. National Institutes of Health Stroke Scale.....	221
IV. PROVIDING ABORTION CARE: FROM CHECKLISTS AND PROTOCOLS TO CLINICAL WORKFLOWS.....	221
A. High-Risk Pregnancies: The Medical Decision Context.....	223
1. Ectopic Pregnancy	224
2. PPRM and Chorioamnionitis.....	225
3. Placental Abruption and Placenta Previa.....	227
4. Pulmonary Hypertension	228
5. Preeclampsia.....	229
6. Antepartum Sepsis.....	229
7. Cervical Insufficiency	229
8. Early Pregnancy Loss and Miscarriage	230
B. Implementing WEDGE	231
C. Applying the Protocols	232
D. Limitations and Considerations for WEDGE.....	233
1. EMTALA Protections Under Siege.....	233
2. Mifepristone Access	236
CONCLUSION	237

INTRODUCTION

*In alignment with our long-held position that the early termination of a pregnancy is a medical matter between the patient and physician, subject only to the physician’s clinical judgment and the patient’s informed consent, the AMA condemns the high court’s interpretation in this case. We . . . will fight to protect the patient-physician relationship, and we will oppose any law or regulation that compromises or criminalizes patient access to safe, evidence-based medical care, including abortion.*¹

1. Press Release, Jack Resneck, Jr., M.D., President, Am. Med. Ass’n, Ruling an Egregious Allowance of Government Intrusion into Medicine (June 24, 2022) (emphasis added), <https://www.ama-assn.org/press-center/press-releases/ruling-egregious-allowance-government-intrusion-medicine> [<https://perma.cc/UF9D-QBAG>].

America is facing a new public health crisis. On June 24, 2022, the Supreme Court overturned almost half a century of constitutional protection for pregnant persons and their doctors.² *Dobbs v. Jackson Women’s Health Organization* altered the legal landscape regarding abortion by reversing *Roe v. Wade* and *Planned Parenthood of Southeastern Pennsylvania v. Casey*, thereby removing federal protection of the right to abortion care.³ The *Dobbs* opinion endowed states with the authority to ban abortion at all stages of pregnancy without having to demonstrate that such restrictions do not pose a risk of harm to pregnant persons,⁴ and to enforce these bans with civil and criminal sanctions.⁵ The resulting patchwork of abortion laws across the country fundamentally altered how doctors may treat pregnant patients with high-risk pregnancy complications.⁶ According to the non-partisan Kaiser Family Foundation, health care for patients with serious risks due to pregnancy has been critically impacted by state restrictions.⁷ While exceptions to bans exist in the 12 abortion-ban states,⁸ the exceptions are vague and have largely not been tested or interpreted by courts. Meanwhile, penalties for violating the bans target physicians yet are not limited to practitioners who willfully violate the laws.⁹ A doctor’s mistake in interpreting an exception could result in

2. *Dobbs v. Jackson Women’s Health Org.*, 597 U.S. 215, 302 (2022).

3. Rebecca B. Reingold et al., *Legal Risks and Ethical Dilemmas for Clinicians in the Aftermath of Dobbs*, 328 J. AM. MED. ASS’N 1695, 1695 (2022).

4. *Dobbs*, 597 U.S. at 300–01. States may regulate abortion “for legitimate reasons” and if those laws are challenged under the Constitution, they are entitled to a “strong presumption of validity.” *Id.* (quoting *Heller v. Doe*, 509 U.S. 312, 319 (1993)).

5. See Reingold et al., *supra* note 3, at 1695.

6. David S. Cohen et al., *The New Abortion Battleground*, 123 COLUM. L. REV. 1, 2 (2023).

7. Mabel Felix et al., *A Review of Exceptions in State Abortion Bans: Implications for the Provision of Abortion Services*, KAISER FAM. FOUND. (June 6, 2024), <https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortion-bans-implications-for-the-provision-of-abortion-services> [<https://perma.cc/M874-5KRS>]. The Kaiser Family Foundation (“KFF”) has reported that “[i]n practice, health and life exceptions to bans have often proven to be unworkable, except in the most extreme circumstances, and have sometimes prevented physicians from practicing evidence-based medicine.” *Id.* KFF has found the following impacts to care delivery resulting from state bans: delays providing necessary miscarriage management care when there is still detectable fetal cardiac activity; denial of abortion care for mental health reasons, despite the fact that poor mental health accounts for 20% of pregnancy-related deaths; denial of abortion care for survivors of rape and incest in cases where documentation by law enforcement was delayed; and physicians withholding care due to ambiguous and conflicting laws, even where exceptions to bans exist. *Id.*

8. *State Bans on Abortion Throughout Pregnancy*, GUTTMACHER (Jan. 2, 2025), <https://www.guttmacher.org/state-policy/explore/state-policies-abortion-bans> [<https://perma.cc/34H5-6Z83>].

9. For instance, the Texas Heartbeat Act allows private citizens to bring claims against those who perform or induce abortions, as well as those who aid and abet the performance or inducement of an abortion. TEX. HEALTH & SAFETY CODE ANN. § 171.208.

penalties ranging from life in prison¹⁰ to loss of medical licensure and fines of up to \$100,000.¹¹

Consideration of the decision-making treatment context makes it easy to understand why patients are suffering harms in states where *Dobbs* has led to bans (“*Dobbs*-relevant states”). Conditions that arise in pregnancy can range from fairly benign bleeding¹² to life-threatening hemorrhaging and sepsis.¹³ The emergent cases can change rapidly from one where abortion care would not meet an exception to one that—by the time the health risk has become dire—even immediate termination of the pregnancy will not assure full recovery.¹⁴ Furthermore, the symptoms indicating the necessity of abortion care may not be clear or may occur away from a health care setting, where a patient cannot be treated immediately. For example, it is common for patients whose pregnancy is fated, but whose condition is not yet urgent, to be sent home to wait.¹⁵ In these instances, the health threats can become dire quickly. By the time doctors feel able to administer treatment, the patient’s condition may have progressed past the point where care can be lifesaving. In other instances, the delay in care may leave lasting damage to an organ system, and particularly to a patient’s future reproductive capacity.

10. See Megan Messerly & Alice Miranda, *Abortion Bans and Penalties Would Vary Widely by State*, POLITICO (May 6, 2022, 4:30 AM), <https://www.politico.com/news/2022/05/06/potential-abortion-bans-and-penalties-by-state-00030572> [https://perma.cc/WU4S-SX2P] (“But in Texas, anyone who performs, induces or attempts an abortion where ‘an unborn child dies as a result of the offense’ is guilty of a first-degree felony — punishable by up to life in prison and up to a \$10,000 fine — under the state’s trigger ban.”).

11. See, e.g., ARK. CODE ANN. § 5-61-304(b) (2025); TEX. HEALTH & SAFETY CODE ANN. §§ 170A.001–007; see generally S.B. 8, 85th Leg., Reg. Sess. (Tex. 2017).

12. S. Chandrakala & M. Gokul Reshmi, *Maternal and Fetal Outcome in Women Experiencing First Trimester Vaginal Bleed: A Multicentric Approach*, 13 INT’L J. REPROD., CONTRACEPTION, OBSTETRICS & GYNECOLOGY 2765, 2767–68 (2024) (reporting that of women who were observed as part of the study, “[t]he majority, over 70%, of individuals experiencing vaginal bleeding during the first trimester of pregnancy proceed without any complications”).

13. See *infra* Part IV.

14. As one OB/GYN wrote in the *New England Journal of Medicine*: [I]t’s unclear what, precisely, ‘lifesaving’ means. What does the risk of death have to be, and how imminent must it be? Might abortion be permissible in a patient with pulmonary hypertension, for whom we cite a 30-to-50% chance of dying with ongoing pregnancy? Or must it be 100%? When we diagnose a new cancer during pregnancy . . . [.] [w]ill abortion be permissible in these cases, or will patients have to delay treatment until after delivery? These patients’ increased risk of death may not manifest for years, when they have a recurrence that would have been averted by immediate cancer treatment. We’ve identified countless similar questions.

Lisa H. Harris, *Navigating Loss of Abortion Services — A Large Academic Medical Center Prepares for the Overturn of Roe v. Wade*, 386 NEW ENG. J. MEDICINE 2061, 2061–62 (2022).

15. See Pam Belluck, *They Had Miscarriages, and New Abortion Laws Obstructed Treatment*, N.Y. TIMES (July 17, 2022), <https://www.nytimes.com/2022/07/17/health/abortion-miscarriage-treatment.html> [https://perma.cc/UN96-APZ3]; see also Greer Donley & Caroline M. Kelly, *Abortion Disorientation*, 74 DUKE L.J. 1, 34–36 (2024).

Behavioral research findings provide insight into why, in the face of uncertainty and the potential for serious consequences, doctors in *Dobbs*-relevant states are likely to withhold care. First, a predisposition to eschew abortion care is rational. Criminal laws are designed to disincentivize certain behavior, and abortion bans are no exception. A doctor, who before *Dobbs* acted decisively when a pregnancy was not viable or posed a danger to the health of a patient, now has a very different risk calculus. But research on decision-making under uncertainty reveals that even when doctors should be advising abortion care because the patient's condition warrants it, they often will not because their choices are clouded by inertia, risk-aversion, the availability heuristic, and various forms of motivated reasoning.¹⁶ When human beings are tasked with making choices under uncertainty, they engage in satisficing, a term coined by Herbert Simon in the 1940s¹⁷ and refined in later papers.¹⁸ Simon, and many others who followed,¹⁹ argued that humans have adapted to manage choices in complex situations by developing a set of unconscious cognitive shortcuts. When making decisions when risks are present, people attempt to judge the potential for negative outcomes by searching their memories for examples.²⁰ Because imagining the potential for bad outcomes triggers strong negative emotions, actors tend to be risk-avoidant, even to the point of irrationality.²¹ When avoiding personal risks puts others in danger, a need to maintain a positive self-image leads to motivated reasoning, during which an individual unconsciously constructs reasons for why preferred choices are justified.²² And when faced with risky choices, humans prefer inaction to action.²³ In the abortion care context,

16. See *infra* Part II.

17. See generally HERBERT A. SIMON, ADMINISTRATIVE BEHAVIOR: A STUDY OF DECISION-MAKING PROCESSES IN ADMINISTRATIVE ORGANIZATION ADMINISTRATIVE BEHAVIOR: A STUDY OF DECISION-MAKING PROCESSES IN ADMINISTRATIVE ORGANIZATION (1st ed. 1947); Reva Brown, *Consideration of the Origin of Herbert Simon's Theory of "Satisficing" (1933-1947)*, 42 MGMT. DECISION 1240 (2004).

18. See, e.g., Herbert A. Simon, *Rational Choice and the Structure of the Environment*, 63 PSYCH. REV. 129, 129 (1956) ("Evidently, organisms adapt well enough to 'satisfice'; they do not, in general, 'optimize.'"); Herbert A. Simon, *Invariants of Human Behavior*, 41 ANN. REV. PSYCH. 1, 1-19 (1990); Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99, 99-118 (1955) [hereinafter Simon, *A Behavioral Model*].

19. See generally Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263 (1979); Gerd Gigerenzer & Daniel G. Goldstein, *Reasoning the Fast and Frugal Way: Models of Bounded Rationality*, 103 PSYCH. REV. 650 (1996); Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCI. 453 (1981); Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1473 (1997); RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS 5 (2008); Daniel Kahneman, *Maps of Bounded Rationality: Psychology for Behavioral Economics*, 93 AM. ECON. REV. 1449 (2003).

20. See *infra* Part II (discussing the availability heuristic and availability cascades).

21. See *infra* Part II.

22. Manifestations of motivated reasoning include self-serving bias, which causes actors to view situations in a way that paints them in a positive light, and over-confidence bias, which actors are overly confident in their own judgments. Both of these biases are unconsciously motivated by a drive to maintain a positive self-image. See *infra* Part II.

23. Inertia and the status quo bias are discussed in Part II. See *infra* Part II.

skilled, well-meaning physicians find themselves in positions where the evidence and best practices are at odds with the laws that govern their treatment decisions.²⁴ Forced to decide between two risky options, behavioral research findings suggest that physicians will too often err on the side of withholding necessary treatment.²⁵

Examining these difficult treatment decisions through a behavioral lens provides a potential path forward. Incentives to withhold lifesaving treatment are created by uncertainty in the decision context and the corresponding fear of risk. These factors also exacerbate psychological biases, making rational decisions especially challenging. Health care institutions can help minimize uncertainty and mitigate subjectivity by developing a step-by-step process for evaluating patients, which will clear the way for more predictable evidence-based practices. Developing protocols and workflows to guide high-risk pregnancy treatment decisions, particularly if they are widely adopted, will also provide cover for doctors who make good-faith treatment choices. One example of such a protocol is the Advanced Cardiovascular Life Support (“ACLS”), used to diagnose and treat cardiac patients in emergency medicine settings.²⁶ Other examples are acute stroke and myocardial infarction protocols and operating room checklists, which promote careful accounting of surgical equipment.

This Article argues that clinical workflows, developed by physicians with support from hospital administration and legal counsel, should be implemented in the setting of pregnancy-related medical emergencies.²⁷ Such workflows, drafted through a consensus-based process with input from evidence-based practice and society guidelines, have at least two significant benefits. First, they minimize uncertainty in the decision-making process, counteracting psychological biases and promoting legitimate patient-care efforts to improve patient outcomes. Second, collaborative development of such standards with input from physicians, ethicists, hospital administrators, and lawyers will increase buy-in from courts, increasing the likelihood that treatment choices will be deemed consistent with state laws. These twin objectives should operate to streamline treatment options and save lives, as well as provide *post facto* protection to physicians who have made good-faith decisions in emergency contexts. In sum, the adoption of clinical workflows will not only promote sound decision-making but will also mitigate impacts caused by delays in care by promoting consistent standardized practices for intervening when such situations arise.

This Article proceeds in four Parts. Part I discusses the impact of the Supreme Court’s *Dobbs* decision, which opened the door to abortion bans in more than a dozen states, resulting in a patchwork of laws and enforcement mechanisms.

24. See *infra* Part I.

25. See Rita Rubin, *How Abortion Bans Could Affect Care for Miscarriage and Infertility*, 328 J. AM. MED. ASS’N, 318, 318 (2022).

26. *ACLS Certification Online*, ACLS MED. TRAINING, <https://www.aclsmedicaltraining.com/acls-certification-online/> [<https://perma.cc/GN2G-PLKK>] (last visited Nov. 5, 2024) (“ACLS certification proves that a healthcare professional has proven their knowledge of not just Basic Life Support (BLS) techniques but also more advanced life support methods, including advanced airway management, emergency cardiovascular pharmacology, complex resuscitation algorithms, and post-cardiac arrest care.”).

27. See *infra* Part IV.

Part II draws on behavioral research on decision-making in complex circumstances to explain several cognitive biases likely to negatively impact doctors' decision-making in *Dobbs*-relevant states. Part III introduces the concept of protocols and workflows that can be used in medical decision-making to increase accuracy and certainty. This Part also provides several examples of established protocols in use in clinical settings today. Finally, Part IV describes how workflows could operate to reduce anxiety and increase confidence for doctors making decisions about when to recommend abortion care when health-threatening pregnancy complications arise. A brief conclusion follows.

I. THE ABORTION LANDSCAPE: PRE-*DOBBS* V. POST-*DOBBS*

Prior to the *Dobbs* ruling, a doctor's decision on whether to perform an abortion was a patient-centered choice.²⁸ Patients took into consideration their overall health, the risks and benefits of the procedure, and their own values.²⁹ For example, in miscarriage management, abortion was "medically indicated under certain circumstances."³⁰ These could include a pre-viable premature rupture of membranes or a first-trimester septic miscarriage.³¹ Once a doctor examined her patient and determined an abortion may be necessary, the doctor and patient entered a decision-making process together—discussing the risk of continuing the pregnancy, the likelihood the fetus would survive, the potential use of expectant management, and the process for terminating the pregnancy.³² The decision centered on informed consent and informed choice to ensure the patient knew all appropriate medical options.³³

In a post-*Roe*, but pre-*Dobbs* world, doctors made their own risk and benefits calculus to determine what kind of abortion services, if any, that they would provide.³⁴ There was no fear of arrest or prosecution, but there was stigmatization in the medical community, a risk to a doctor's reputation, and widespread harassment by the anti-abortion movement.³⁵ "[C]ontinued commitment to providing abortion after legalization came at a considerable price."³⁶ Over the years, this harassment included fire bombings, death threats, stalking incidents, shootings, and murders.³⁷ Landlords feared physical damage to their buildings and at times refused to rent to doctors providing abortion care.³⁸ Hospitals closed their abortion services to avoid the controversy and threats.³⁹ But with the protection of *Roe*,

28. Maria Phillis et al., *The Urgent Need for Physician-Led Abortion Advocacy*, 5 AM. J. OBSTETRICS & GYNECOLOGY 1, 3 (2023).

29. *Id.*; see also Rubin, *supra* note 25, at 318.

30. Lori Freedman et al., *When There's a Heartbeat: Miscarriage Management in Catholic-Owned Hospitals*, 98 AM. J. PUB. HEALTH 1774, 1775 (2008).

31. *Id.*

32. *Id.*

33. *Id.*

34. CAROLE JOFFE, DOCTORS OF CONSCIENCE: THE STRUGGLE TO PROVIDE ABORTION BEFORE AND AFTER *ROE V. WADE*, at ix–x (Beacon Press, 1st ed. 1995).

35. *Id.*

36. *Id.* at x.

37. *Id.* at xii–xiii.

38. *Id.* at 2.

39. *Id.*

doctors did not face the kind of criminal conundrum they face today in a post-*Dobbs* landscape.⁴⁰

States immediately passed legislation regulating abortion following the *Dobbs* opinion.⁴¹ Texas implemented Senate Bill 8, which outlawed abortions after roughly six weeks of pregnancy.⁴² In the year after its passage, the birth rate in the state rose by 4.7%, while birth rates across the country only increased by 0.2%.⁴³ Research has shown, however, that legal abortions have increased since 2020.⁴⁴ Data from the Guttmacher Institute found that thousands of women facing restrictions in their home states have crossed state lines to obtain abortions.⁴⁵ The rise in abortions was most apparent in states that border those with total abortion bans, such as Illinois, Kansas, and New Mexico.⁴⁶ The greatest decline in the number of abortions occurred in states with greater structural and social inequities in maternal mortality and poverty—showing that the effect of the *Dobbs* ruling has had a greater impact on minorities and the poor.⁴⁷

Abortion is currently banned in 12 states, and others have severely restricted access to abortion.⁴⁸ Nearly all of the bans include exceptions, which the Kaiser Family Foundation has separated into four categories: rape or incest, preventing the death of the pregnant person, fetal anomalies, and where there is a risk to the health of the pregnant person.⁴⁹ All abortion bans contain exceptions to either “prevent the death” or preserve the life of the pregnant person.⁵⁰ Without specific definitions or standards for determining how much risk of death is necessary, however, these provisions can create confusion for doctors.⁵¹ Many bans also include exceptions to preserve the health of the pregnant person.⁵² Some states ban abortion unless “there is a serious risk of substantial and irreversible impairment of a major bodily function.”⁵³ Other states neglect to define that term or what a

40. *Id.* at ix–x.

41. *See* Phillis et al., *supra* note 28, at 2.

42. Caroline Kitchener et al., *A Fragile New Phase of Abortion in America*, WASH. POST (June 22, 2023, 6:00 AM), <https://www.washingtonpost.com/politics/interactive/2023/roe-v-wade-ruling-one-year-anniversary> [<https://perma.cc/2XU9-JY6U>].

43. *Id.*

44. Amy Schoenfeld Walker & Allison McCann, *Abortions Rose in Most States This Year, New Data Shows*, N.Y. TIMES (Sept. 7, 2023), <https://www.nytimes.com/interactive/2023/09/07/us/abortion-data-bans-laws.html> [<https://perma.cc/EKT3-DB59>].

45. *New Data Show That Interstate Travel for Abortion Care in the United States Has Doubled Since 2020*, GUTTMACHER (Dec. 7, 2023), <https://www.guttmacher.org/news-release/2023/new-data-show-interstate-travel-abortion-care-united-states-has-doubled-2020> [<https://perma.cc/3RQ9-NWPR>].

46. *Id.*

47. SOC’Y FAM. PLAN., #WECOUNT REPORT 8 (2023), https://societyfp.org/wp-content/uploads/2023/06/WeCountReport_6.12.23.pdf [<https://perma.cc/2XU9-JY6U>].

48. *State Bans on Abortion Throughout Pregnancy*, *supra* note 8.

49. Felix et al., *supra* note 7.

50. *See id.*

51. *See* Phillis et al., *supra* note 28, at 3; *see also* Felix et al., *supra* note 7.

52. Felix et al., *supra* note 7.

53. *Id.*

“substantial impairment” would include.⁵⁴ Health and life exceptions have generally been found to be unworkable and prevent doctors from practicing evidence-based medicine.⁵⁵ The vague language puts physicians in a difficult place when they are working in an emergency situation, leaving the decision to the institution’s lawyers, instead of giving deference to the clinician’s medical judgment.

The vague terms of abortion laws have led physicians to delay providing miscarriage management care.⁵⁶ As compared to the landscape before the *Dobbs* decision, physicians are in a more difficult place when it comes to calculating the risks and benefits of their choice to provide abortion care. The threat of large criminal fines, loss of licensure, and jail time are now affecting the judgment of doctors and are centering legal ramifications instead of informed patient choice.⁵⁷ The vague terminology surrounding the laws makes the provision of abortion care more dangerous.⁵⁸ While many states allow doctors to remove a dead fetus, for example, pregnant people who are miscarrying may have to wait until there is no detectable fetal cardiac activity.⁵⁹ A “detectable fetal heartbeat,” included in many abortion statutes, is a disputed medical term.⁶⁰ An embryo does not have a fully formed heart; however, there is cardiac cellular activity, which occurs six weeks into pregnancy when many women do not know they are pregnant.⁶¹ Reports of women with pre-viable premature rupture of membranes being denied access to abortion care—and doctors telling them to return to the hospital once they become septic—demonstrate the changed decision-making landscape between doctor and patient.⁶²

Some abortion bans also differentiate between exceptions and affirmative defenses.⁶³ An affirmative defense allows someone who was charged with a crime to show that their conduct was permissible, even though the action was illegal.⁶⁴ This differs from an exception, where a prosecutor would be unable to bring a charge against a doctor who operated within the exception.⁶⁵ In an affirmative defense, the burden would be on the doctor to prove in court that her conduct was acceptable and

54. *Id.*

55. *Id.*

56. Rubin, *supra* note 25, at 319–20.

57. Phillis et al., *supra* note 28, at 2–3.

58. *Id.* at 2.

59. Felix et al., *supra* note 7.

60. Colbi Edmonds, *Iowa Judge Temporarily Suspends New Abortion Ban*, N.Y. TIMES (July 17, 2023), <https://www.nytimes.com/2023/07/17/us/iowa-abortion-ban-suspended.html> [<https://perma.cc/LM8Z-8EM6>].

61. *Id.*

62. Caroline Kitchener, *Two Friends Were Denied Care After Florida Banned Abortion. One Almost Died*, WASH. POST (Apr. 10, 2023), <https://www.washingtonpost.com/politics/2023/04/10/pprom-florida-abortion-ban/> [<https://perma.cc/WAF5-2FD7>].

63. *See, e.g.*, MO. REV. STAT. § 188.056(2) (“It shall be an affirmative defense for any person alleged to have violated the provisions of subsection 1 of this section that the person performed or induced an abortion because of a medical emergency. The defendant shall have the burden of persuasion that the defense is more probably true than not.”).

64. Felix et al., *supra* note 7.

65. *Id.*

within an exception.⁶⁶ However, by making the life or health exception of the mother an affirmative defense, states are discouraging the exception in general “and rendering such provision as personally costly as possible to the physician.”⁶⁷ By the time a doctor raises the defense, they have already been through a lengthy, expensive, and reputationally damaging litigation procedure.⁶⁸ “Bans that rely on an affirmative defense leave physicians more vulnerable to criminal prosecution and they make it even riskier for physicians to provide abortion care in situations where the life or health of the pregnant person is at risk.”⁶⁹ Instead, doctors could and likely will make the choice to avoid it altogether.

A nationally representative survey by the Kaiser Family Foundation found that the *Dobbs* decision has affected doctors’ decision-making and practice.⁷⁰ One in five physicians trained in obstetrics and gynecology (“OB/GYNs”) reported that they felt personally constrained in their ability to provide care for miscarriages and other pregnancy-related medical emergencies.⁷¹ In states where abortion is banned, that number rises to four in ten OB/GYNs.⁷² Many doctors in the survey also agreed that their ability to facilitate patient autonomy has become worse since the *Dobbs* ruling, and more than four in ten report that they are concerned about their own legal risk when making decisions about patient care and abortion.⁷³

The current laws allow for no patient autonomy in weighing risks—a central tenet of ethical delivery of healthcare. Making physicians gatekeepers of abortion by demanding that they determine the appropriate level of threat to maternal life to warrant abortion, as opposed to not interfering with patient-centered decision-making, may worsen the already disparate rates of maternal mortality owing to physician implicit bias in making these decisions.⁷⁴

By shifting the burden of choice to physicians, the bans deprive them of the ability to empower patients and burden them with a choice that can have serious personal consequences. The resulting situation risks making a doctor an adversary of patient well-being when terminating a pregnancy is medically indicated, but legally fraught.

The concern over legal risk becomes especially acute when considering the pace at which abortion law changes. In Iowa, the governor signed a strict new abortion ban into law on a Friday.⁷⁵ For three days, most abortions were illegal past six weeks of pregnancy.⁷⁶ On the following Monday afternoon, a judge suspended

66. *Id.*

67. Phillis et al., *supra* note 28, at 3.

68. *Id.* at 2–3.

69. Felix et al., *supra* note 7.

70. Brittni Frederickson et al., *A National Survey of OBGYNs’ Experiences After Dobbs*, KAISER FAM. FOUND. (June 21, 2023), <https://www.kff.org/womens-health-policy/report/a-national-survey-of-obgyns-experiences-after-dobbs> [<https://perma.cc/7ZEC-WJZC>].

71. *Id.*

72. *Id.*

73. *Id.*

74. Phillis et al., *supra* note 28, at 3.

75. Edmonds, *supra* note 60.

76. *Id.*

the ban, and abortions were once again legal for up to 22 weeks of pregnancy.⁷⁷ Among OB/GYNs in states where abortion is restricted by gestational limits, the Kaiser Family Foundation survey found that only 45% said they understood the circumstances under which abortion was legal in their state.⁷⁸ With the passage of abortion restrictions nationwide, “[i]t is no longer clear whether physicians can intervene to prevent progression to critical scenarios, as is the standard in emergency and critical care medicine, or instead, if a physician must withhold evidence-based care until a patient develops an unambiguous emergency with significantly increased morbidity and mortality.”⁷⁹ Withholding care is dangerous.⁸⁰ Between 2% and 14% of critically ill patients die in the hospital, and each hour of delayed care increases a patient’s likelihood of dying by approximately 4%.⁸¹ Physicians must now weigh the legal risk to themselves and the medical risk to pregnant patients.⁸² Criminal law violations are also not typically covered by medical malpractice insurance.⁸³

II. DECISIONAL CONSTRAINTS AND RESULTING PSYCHOLOGICAL BIASES

Behavioral science reveals several features of human decision-making that can lead to information processing errors. As humans have evolved, they have adopted mechanisms for choice formation that are largely ego-protective, cooperative, and efficient. While the resulting cognitive patterns achieve some important ends, they also result in distortions in information processing, and ultimately, error.

In the context of medical decision-making, two types of information processing are relevant. Type 1 information processing occurs in contexts in which the decision-maker is operating under constraints.⁸⁴ Specifically, this type of processing occurs when there is limited time, incomplete data, and a situation that is stressful or emotion-laden.⁸⁵ Because Type 1 information processing occurs when informational and cognitive resources are unavailable, it often reflects an “intuitive” or “automatic” response.⁸⁶ Type 1 processing is adaptive because it allows for decisions even when information is scarce and cognitive load is high.⁸⁷ However, it

77. *Id.*

78. Frederickson et al., *supra* note 70.

79. Andrea MacDonald et al., *The Challenge of Emergency Abortion Care Following the Dobbs Ruling*, 328 J. AM. MED. ASS’N 1691, 1691 (2022).

80. *Id.*

81. *Id.*

82. Callie Cox Bauer et al., *Turning Rage into Action: Abortion Care and Residency Training in the United States*, 15 J. GRAD. MED. EDUC. 291, 291 (2023).

83. *Id.*

84. See Shu Wen Tay et al., *Systems 1 and 2 Thinking Processes and Cognitive Reflection Testing in Medical Students*, 7 CANADIAN MED. EDUC. J. 97, 98 (2016).

85. *Id.*

86. See Athanasios Tsalatsanis et al., *Dual Processing Model for Medical Decision-Making: An Extension to Diagnostic Testing*, PLOS ONE, Aug. 5, 2015, at 1, 2.

87. See DANIEL KAHNEMAN, THINKING, FAST AND SLOW 67 (2011).

relies on mental shortcuts and quick-and-dirty judgments and is therefore subject to errors.⁸⁸

Unlike Type 1 information processing, Type 2 processing is common in situations where data is available, time is abundant, and conscious deliberation is possible.⁸⁹ Often characterized as “analytical” or “controlled,” it involves logical thinking and systematic analysis of information.⁹⁰ Because this mode of processing is slower and more effortful than Type 1 processing, it is only possible in situations where the decision-maker has time and resources to consider all or most of the relevant information in reaching her conclusion.⁹¹ Type 2 processing is particularly likely in contexts that require planning and problem-solving.

Although mistakes and biases are most common in Type 1 situations, bias is a pervasive feature of human decision-making regardless of situational constraints. Decision researcher Herbert Simon introduced the notion of bounded rationality in his 1957 paper titled *A Behavioral Model of Rational Choice*.⁹² Simon challenged the traditional economic assumption of perfect rationality in decision-making and proposed a new concept of “bounded rationality” to explain human choice.⁹³ Simon noted that humans face barriers to perfect information processing in most, if not all, situations.⁹⁴ One consistent barrier to ideal reasoning occurs because across all circumstances, humans have predictable cognitive limitations.⁹⁵ Unlike machines, our capacity to store and retrieve information is severely limited. Not only is our memory limited, it is also subject to distortion through source confusion stemming from the fact that we tend to reconstruct the past, rather than simply recalling it.⁹⁶ Even when more effortful Type 2 processing is possible, individuals remain influenced by their own particular goals, experiences, and

88. See generally Geoff Norman, *Dual Processing and Diagnostic Errors*, 14 ADVANCES HEALTH SCIS. EDUC. 37 (2009) (discussing the role of Type 1 processing in diagnostic error).

89. See Jonathan St. B.T. Evans, *In Two Minds: Dual-Process Accounts of Reasoning*, 7 TRENDS COGNITIVE SCIS. 454, 454–59 (2003).

90. *Dual-Process Model*, OXFORD REFERENCE, <https://www.oxfordreference.com/view/10.1093/oi/authority.20110803095732808> [<https://perma.cc/MG4Z-WCNH>] (last visited Feb. 28, 2025).

91. See Jonathan St. B.T. Evans, *Dual-Process Theories of Reasoning: Contemporary Issues and Developmental Applications*, 31 DEV. REV. 86, 87 (2011).

92. See Simon, *A Behavioral Model*, *supra* note 18.

93. See HERBERT A. SIMON, *MODELS OF MAN: SOCIAL AND RATIONAL-MATHEMATICAL ESSAYS ON RATIONAL HUMAN BEHAVIOR IN A SOCIAL SETTING* 243 (1957).

94. *Id.* at 241.

95. See Kahneman & Tversky, *supra* note 19, at 263–65; see generally Gigerenzer & Goldstein, *supra* note 19.

96. Kaitlin Luna, *Speaking of Psychology: How Memory Can Be Manipulated*, with Elizabeth Loftus, *PhD*, AM. PSYCH. ASS'N, at 00:59 (2018), <https://www.apa.org/news/podcasts/speaking-of-psychology/memory-manipulated> [<https://perma.cc/FAX9-3XJT>] (“One of the things that I and other people who do similar work have shown is that once you have an experience and you record it in memory, it doesn’t just stick there in some pristine form you know waiting to be played back like a recording device. But rather, new information, new ideas, new thoughts, suggestive information, misinformation can enter people’s conscious awareness and cause a contamination, a distortion, an alteration in memory, and that’s the kind of thing that I’ve been studying for the past many decades.”).

preferences. The fact that individuals come into decision-making contexts with innate goals and preferences serves to undermine “perfect rationality” because human choice is affected by inputs that should be irrelevant to the decision task.⁹⁷ Behavioral scientists call this form of bias “motivated reasoning.”⁹⁸ Motivated reasoning occurs when ambiguous information is interpreted in a way that would tend to support a choice that serves the needs or desires of the decision-maker, while also allowing for that individual to maintain a positive self-image.⁹⁹

A. *Pre- to Post-Dobbs and an Evolving Risk Calculus*

The critical decision a doctor must make about whether she can safely provide abortion care leaves her in uncharted waters, walking the line between providing lifesaving care and avoiding jail time, fines, and loss of licensure.¹⁰⁰ Exceptions to the bans typically allow for termination to preserve the life or health of the patient, but provide virtually no workable definition of what this means in practice.¹⁰¹ Doctors are left trying to make treatment decisions when there is ambiguity in the law and (often) the prognosis of the patient, limited time to assess and act, and extraordinarily high stakes. This combination of factors makes the situation particularly ripe for biased and ultimately suboptimal decision-making.

The Supreme Court’s decision substantially changed the constraints faced by doctors when treating pregnant patients in *Dobbs*-relevant states. Prior to *Dobbs*, a risk-averse doctor might be predisposed to recommend termination where continuing the pregnancy threatened the life or health of the patient. Abortion bans effectively pit the interests of the patient against those of her doctor. This leaves a physician who has a declining patient with the task of “correctly” detecting the moment the patient’s situation has become so life-threatening that the doctor is unlikely to later face criminal charges.¹⁰² Importantly, in many jurisdictions, a doctor can be charged *even when she had a good faith belief that termination was necessary to save the life or the health of the patient*.¹⁰³ Because good faith is not a safe harbor

97. For example, voters have been shown to act against their own self-interest when they are motivated to act in ways that are consistent with past behavior. See Charles S. Taber & Milton Lodge, *Motivated Skepticism in the Evaluation of Political Beliefs*, 50 AM. J. POL. SCI. 755, 767 (2006).

98. Ziva Kunda, *The Case for Motivated Reasoning*, 108 PSYCH. BULL. 480, 480 (1990).

99. Tom Pyszczynski & Jeff Greenberg, *Toward an Integration of Cognitive and Motivational Perspectives on Social Inference: A Biased Hypothesis-Testing Model*, in 20 ADVANCES EXPERIMENTAL SOC. PSYCH. 297, 302 (1987).

100. See Amy Schoenfeld Walker, *Most Abortion Bans Include Exceptions. In Practice, Few Are Granted.*, N.Y. TIMES (Jan. 21, 2023), <https://www.nytimes.com/interactive/2023/01/21/us/abortion-ban-exceptions.html> [<https://perma.cc/5YUN-E9DV>].

101. Felix et al., *supra* note 7.

102. Problematically, the threat of criminal prosecution is always there in states with severe bans. So even if the physician is ultimately exonerated, she may still have to defend herself against frivolous charges. See *id.*; see also Phillis et al., *supra* note 28, at 3.

103. Abortion ban statutes prohibit termination of a pregnancy unless, based upon a “reasonable” judgment, the abortion is necessary to prevent death or serious harm. For example, Alabama’s statute prohibits abortion unless “in reasonable medical judgment, the

in some jurisdictions, there is very little in the way of a safety net for the physician. This type of decision context is highly subjective, uncertain, fear-provoking, and often significantly time-constrained. These are precisely the conditions that make biased decision-making most likely.

Moreover, the laws in some jurisdictions require the consensus of multiple doctors, meaning that even if a treating physician is confident that a patient meets the criteria under the exception, a second or third doctor must sign off.¹⁰⁴ There is no corresponding requirement under the laws for additional opinions when a doctor believes that a patient with a serious complication does *not* yet qualify. Requiring consensus only for the treatment option tips the balance against lifesaving abortion care. The impact can be significant. For even the lowest-risk pregnancies, the potential for negative health outcomes from carrying to term is greater than the probability of harms from first-trimester abortion care.¹⁰⁵

B. Social-Cognitive Inputs and Decision Distortion

Empirical research on decision-making in professional contexts has revealed that even highly trained and experienced actors are subject to irrational patterns of thought and behavior. For example, studies of reasoning among judges suggest that they fall prey to a variety of biases.¹⁰⁶ Psychology graduate students exhibit errors when developing clinical diagnoses. Prosecutors are influenced by a range of biases related to motivated reasoning,¹⁰⁷ as are defense attorneys.¹⁰⁸

woman has a condition which so complicates her medical condition as to necessitate the abortion.” ALA. CODE § 26-23B-5. Because reasonableness is an objective standard, it does not leave room for good faith judgments. Stephan Voss, *Prosecutors in States Where Abortion Is Now Illegal Could Begin Building Criminal Charges Against Providers*, NBC NEWS (June 24, 2022, 4:17 PM), <https://www.nbcnews.com/news/us-news/prosecutors-states-abortion-now-illegal-begin-prosecute-abortion-provi-rcna35268> [<https://perma.cc/W43F-C98Y>].

104. *Abortion*, COMMONWEALTH OF PA., <https://www.health.pa.gov/topics/disease/Maternal-Health/Pages/Abortion.aspx> [<https://perma.cc/B7F7-EN4W>] (last visited Feb. 26, 2025) (“For abortions after 24 weeks of pregnancy, additional restrictions are imposed by law including two physicians certifying that the abortion is necessary to prevent either the death or substantial and irreversible impairment of a major bodily function of the pregnant person.”).

105. *Id.* This is particularly the case in the United States, which has the highest rate of maternal mortality in the developed world. According to statistics from the Centers for Disease Control and Prevention (“CDC”) (the latest figures available), more than 33 out of every 100,000 U.S. women who delivered a live baby in 2021 died during pregnancy or died up to a year after giving birth to a live baby because of an issue caused by or made worse by the pregnancy. That is nearly double the rate for 2019. *Pregnancy Mortality Surveillance System*, U.S. CTRS. FOR DISEASE CONTROL & PREVENTION (Nov. 14, 2024), <https://www.cdc.gov/maternal-mortality/php/pregnancy-mortality-surveillance/index.html> [<https://perma.cc/2GWT-J265>].

106. Jeffery Rachlinski & Andrew J. Wistrich, *Judging the Judiciary by the Numbers: Empirical Research on Judges*, 13 ANN. REV. L. & SOC. SCI. 203, 208, 212 (2017).

107. Alafair S. Burke, *Neutralizing Cognitive Bias: An Invitation to Prosecutors*, 2 N.Y.U. J.L. & LIBERTY 512, 519–20 (2007).

108. Molly J. Walker Wilson, *Defense Attorney Bias and the Rush to the Plea*, 65 U. KAN. L. REV. 271, 273–74 (2016) (discussing how priming, anchoring, belief

Physicians, like other skilled professionals, and human beings more generally, fall prey to social and cognitive biases and over-rely on heuristics when making decisions. And because these factors operate largely unconsciously, as one study put it, “[p]hysicians fail to recognize their vulnerability . . . due to self-serving bias, rationalization, and cognitive dissonance.”¹⁰⁹

1. *Motivated Reasoning*

People are rarely indifferent as to their choices and even their own attitudes and impressions. Instead, they are motivated to reach conclusions that support various conscious and unconscious goals.¹¹⁰ These goals include maintaining a positive self-impression; perceiving oneself as consistent and moral; and interpreting ambiguous information in a way that legitimizes behavior that leads to exogenous goals, “such as receiving financial rewards, attaining status, or fostering social connections.”¹¹¹ Moreover, adjustments based upon self-awareness are rare because the underlying mental processes that serve to support desired conclusions usually operate at the subconscious level.¹¹² Like other biases, such as self-serving and confirmation biases, motivated reasoning is self-reinforcing.¹¹³ Ambiguous information is interpreted in a way that supports a preferred view, leading that view to become stronger and the decision-maker to be more likely to perceive future evidence as consistent with the preferred belief.¹¹⁴

Motivated reasoning can stem from individuals’ efforts to avoid “cognitive dissonance,” a psychological term describing the psychic tension that results when a person’s beliefs are inconsistent with their behaviors.¹¹⁵ Resolving this tension involves discounting, justifying, or avoiding information that creates or exacerbates the uncomfortable feeling.¹¹⁶ When a pregnant patient is in a dire situation, a

perseverance, confirmation bias, over-confidence bias, and self-serving bias can impact a defense attorney’s advice to accept a plea).

109. Sunita Sah & Adriane Fugh-Berman, *Physicians Under the Influence: Social Psychology and Industry Marketing Strategies*, 41 J.L. MED. & ETHICS 665, 665 (2013).

110. See Kunda, *supra* note 98, at 483 (claiming that to avoid cognitive discomfort, people create an “illusion of objectivity,” avoiding the realization that their interpretation of the world has been tainted by their own preferences).

111. Tigran W. Eldred & Molly J. Walker Wilson, *Innovative Approaches to on Demand Continuing Legal Education Ethics Training: A Case Study*, 72 J. LEGAL EDUC. 502, 505 (2024); see also Alessandro Bessi, *Personality Traits and Echo Chambers on Facebook*, 65 COMPUTS. HUM. BEHAV. 319, 319–20 (2016) (explaining that existing views are selectively reinforced when individuals seek out information that confirms these notions).

112. Kunda, *supra* note 98, at 495.

113. See *supra* notes 109–12 and accompanying text; see *infra* notes 114–20 and accompanying text.

114. See generally Alexandra M. Rodman et al., *Development of Self-Protective Biases in Response to Social Evaluative Feedback*, 114 PROC. NAT’L ACAD. SCI. 13158 (2017).

115. Andrew J. Elliot & Patricia G. Devine, *On the Motivational Nature of Cognitive Dissonance: Dissonance as Psychological Discomfort*, 67 J. PERSONALITY & SOC. PSYCH. 382, 392 (1994).

116. Karl S. Coplan, *Climate Change, Political Truth, and the Marketplace of Ideas*, 2012 UTAH L. REV. 545, 553–54 (2012); Miriam J. Metzger et al., *Cognitive*

physician in an abortion-ban state holds beliefs that are in conflict. On the one hand, the physician sees the danger for the patient if abortion care is not provided. On the other hand, she understands the very real possibility that pursuing the best course of treatment could mean fines, revocation of licensure, and even prison. The doctor wants to save the patient, but she also wants to keep herself safe. She may not be able to accomplish both goals simultaneously, and her knowledge of this fact creates uncomfortable psychic tension. She can resolve the tension by either treating the patient according to best practices and convincing herself that the personal risk is less serious than she initially imagined, or she can interpret ambiguous evidence about the patient's condition as consistent with the personally safer choice. Adjusting her perception of the situation by downplaying the possibility of personal risk is the more difficult task because personal risks trigger significant negative emotions that are difficult to dispel.¹¹⁷ This means a doctor who experiences cognitive dissonance because of conflicting objectives is motivated to adopt an interpretation of the situation in a way that is consistent with minimizing her own risk.

2. Risk Aversion

Risk aversion is the tendency of actors to prefer to avoid risks more than they prefer to seek equivalent gains.¹¹⁸ Risk aversion is particularly prevalent in decisions made in medical contexts.¹¹⁹ Prior to *Dobbs*, doctors faced some measure of personal risk related to the potential for litigation.¹²⁰ Strong negative emotions, such as anger and fear, have been empirically linked to risk aversion. As one study noted, “[F]earful people expressed pessimistic risk estimates and risk-averse choices.”¹²¹ This connection may help explain why physicians have become increasingly eager to avoid personal risk even when doing so can endanger patients.¹²² For example, doctors' fear of liability often leads them to order testing that is not warranted and can lead to harm. Some scholars note that over-testing can result in “misdiagnosis, false positive results, false negative results and

Dissonance or Credibility? A Comparison of Two Theoretical Explanations for Selective Exposure to Partisan News, 47 COMM'N RSCH. 3, 4, 6 (2020).

117. Brenna M. Moreno & Molly J. Walker Wilson, *The Psychology of Science Denialism and Lessons for Public Health Authorities*, 91 UMKC L. REV. 545, 563 (2023).

118. Greg D. Sacks et al., *The Association Between Risk Aversion of Surgeons and Their Clinical Decision-Making*, 268 J. SURGICAL RSCH. 232, 232–43 (2021).

119. See generally Zeljka Buturovic, *Risk Aversion and Rational Choice Theory Do Not Adequately Capture Complexities of Medical Decision-Making*, 49 J. MED. ETHICS 761 (2023).

120. James Gibson, *Doctrinal Feedback and (Un)reasonable Care*, 94 VA. L. REV. 1641, 1641 (2008) (“[S]uppose a physician provides more than reasonable care—extra tests, unneeded procedures, etc.—so as to steer clear of tort liability’s considerable gray area. If other physicians follow suit, their precautions slowly but surely become the new legal norm, as the reasonable care standard dutifully absorbs the conduct of those it governs.”).

121. Jennifer S. Lerner & Dacher Keltner, *Fear, Anger, and Risk*, 81 J. PERSONALITY & SOC. PSYCH. 146, 146 (2001).

122. Gibson, *supra* note 120, at 1641 (“Instead of discouraging wasteful practices, then, the law feeds them back into doctrine, transforming overcompliance into mere compliance and ratcheting up the standard of care.”).

overdiagnosis” with corresponding impacts “physically, psychologically and financially.”¹²³

Following *Dobbs*, the greatest personal risk facing doctors who prescribe abortion care in *Dobbs*-relevant states is no longer the potential for litigation—it is now the more dire threat of criminal sanctions. Taking precautions to avoid personal risk now involves undertreating rather than overtreating patients. When acting appears to be the riskiest choice, actors tend to choose inaction, even when action is required to prevent a countervailing harm.¹²⁴ Inaction in the face of risk is particularly likely because of decision paralysis and the status quo bias, both of which are described in the following discussion.¹²⁵ Surveys of OB/GYNs reveal the effects of risk aversion in practice. Doctors report feeling significant fear and admit to erring on the side of withholding treatment, even when their medical judgment would otherwise lead them to recommend abortion care.¹²⁶ In fact, even when the risk to the patient is so grave that an exception would likely apply, physicians report that the desire to steer far clear of any suggestion of a criminal act is compelling.¹²⁷ The uncertainty and lack of consensus provides a particularly fertile context for risk aversion.¹²⁸

3. Decision Paralysis

Decision paralysis refers to the inability of an actor to make a decision when multiple options are available.¹²⁹ Indecision occurs when the act of making that decision creates significant anxiety or stress. Often, fear associated with the potential for making the wrong decision results in procrastination, or *no* action, which is itself a choice.¹³⁰ Sometimes decision paralysis results from having an extensive choice set.¹³¹ In other instances, decision paralysis occurs because of

123. Justin H. Lam et al., *Why Clinicians Overtreat: Development of a Thematic Framework*, BMC HEALTH SERVS. RSCH., Nov. 4, 2020, at 1, 2.

124. See *infra* Subsection II.B.4 for a discussion on status quo bias.

125. See *infra* Subsections II.B.3–4.

126. Whitney Arey et al., *A Preview of the Dangerous Future of Abortion Bans — Texas Senate Bill 8*, 387 NEW ENGL. J. MEDICINE 388, 389 (2022) (reporting that “[t]he climate of fear created by SB8 has resulted in patients receiving medically inappropriate care”).

127. Celine Castronuovo, *Texas High Court’s Abortion Denial Amplifies Medical Uncertainty*, BLOOMBERG L. (Dec. 13, 2023, 10:50 AM), <https://news.bloomberglaw.com/health-law-and-business/texas-high-courts-abortion-denial-amplifies-medical-uncertainty> [<https://perma.cc/DAF6-7V3R>].

128. See Phillis et al., *supra* note 28, at 1–2.

129. See Chris M. White & Ulrich Hoffrage, *Testing the Tyranny of Too Much Choice Against the Allure of More Choice*, 26 PSYCH. & MKTG. 280, 280 (2009).

130. See Ravi Dhar, *Consumer Preference for a No-Choice Option*, 24 J. CONSUMER RSCH. 215, 216 (1997) (finding that when individuals are facing indecision, they often opt for a no-choice option).

131. See *id.*; see also Sheena S. Iyengar & Mark R. Lepper, *When Choice is Demotivating: Can One Desire Too Much of a Good Thing?*, 79 J. PERSONALITY & SOC. PSYCH. 995, 995 (2000); Alexander Chernev et al., *Choice Overload: A Conceptual Review and Meta-Analysis*, 25 J. CONSUMER PSYCH. 333, 334–35 (2015).

strong emotions associated with the decision.¹³² Powerful affective reactions tend to be triggered when a decision implicates the actor's own future well-being,¹³³ meaning that these decision contexts are particularly subject to decision paralysis.¹³⁴ Decision research bears this out. Studies have shown that people avoid making choices about things like jobs, relationships, and apartments to avoid potential regret for a choice that yields a bad outcome.¹³⁵ "One study found extended deliberation times for decisions made under contexts in which personal accountability was high, leading the authors to conclude that 'analysis paralysis' results when an actor feels pressure from others to make the optimal choice."¹³⁶ Other research has found that when there is a delay in decision-making, due to the difficulty or importance of the decision task, that delay can compound the problem, making paralysis more likely.¹³⁷ Decision paralysis is so powerful that it shows up on magnetic resonance imaging scans as decreased prefrontal cortex activation.¹³⁸

Decision paralysis is mitigated by streamlining the choice process, focusing on key objectives, and accepting that no decision is without some level of risk or uncertainty.¹³⁹ For physicians making difficult choices in time-sensitive contexts, providing a clear path to a decision may help to offset the potential for indecision.

4. *Status Quo Bias and Choice Inertia*¹⁴⁰

Related to decision paralysis, inertia and the status quo bias create additional challenges for physicians in *Dobbs*-relevant states. The status quo bias is an unconscious preference for inaction over action.¹⁴¹ Although failing to change a situation is a choice in and of itself that can bring serious consequences, this reality is often at odds with how people experience choices.¹⁴² Status quo bias is a form of

132. See Christopher J. Anderson, *The Psychology of Doing Nothing: Forms of Decision Avoidance Result from Reason and Emotion*, 129 PSYCH. BULL. 139, 144–47 (2003).

133. See *id.* at 139, 150, 152 (conveying that studies on emotion and decision paralysis reveal high levels of emotion for decisions related to personal relationships, living situations, and career choices).

134. Gustav Tinghög et al., *Intuition and Cooperation Reconsidered*, 498 NATURE E1, E1 (2013) (finding that when choosing retirement plans, more time led to increased choice deferral and information seeking without deciding).

135. See Anderson, *supra* note 132, at 139, 148–50.

136. Saleem Shah, Tansif Ur Rehman & Kashan Afridi, *Analysis Paralysis in the Legal Field*, 2 DIALOGUE SOC. SCI. REV. 440, 441 (2024).

137. See Tinghög et al., *supra* note 134, at E1.

138. Kilian Gloy et al., *Decision Making Under Uncertainty in a Quasi Realistic Binary Task – An fMRI Study*, 140 BRAIN & COGNITION 76, 76 (2021).

139. See Anderson, *supra* note 132, at 163.

140. See *supra* notes 129–39 and accompanying text.

141. See Molly J. Walker Wilson, Note, *A Behavioral Critique of Command-and-Control Environmental Regulation*, 16 FORDHAM ENV'T L. REV. 223, 249 (2005).

142. William Samuelson & Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 J. RISK & UNCERTAINTY 7, 9 (1988) (“[S]ubjects expressed surprise at the existence of the . . . [status quo] bias. . . . [They] seemed unaware (and slightly skeptical) that they personally would fall prey to this bias. . . . When they did recognize the framing [as between a choice to make a change or stick with the status quo], they stated that it should not make much of a difference.” (emphasis omitted)).

risk aversion—people are more fearful of risks than they are incentivized by gains, even when the chance of gain would suggest that the risk is a sensible gamble.¹⁴³ This bias leads people to resist change, particularly when that change is accompanied by situational features that are uncertain and poorly understood.¹⁴⁴ The status quo bias results in inertia when individuals fear playing a causal role in a resulting bad outcome.¹⁴⁵ Hence, the bias is motivated by a desire to avoid agency when there is a risk of a loss.

State laws criminalizing abortion care are plagued by ambiguity,¹⁴⁶ are largely untested,¹⁴⁷ are unevenly applied, and are subject to statutory interpretation.¹⁴⁸ These features of the decision-making context are ripe for inertia, particularly when the consequences for doctors can be life-changing. Overcoming the status quo bias under these circumstances requires a clear path forward with concrete checkpoints to create some level of certainty, and a yardstick that can test and verify a decision. Clear protocols and workflows that have been vetted and accepted by the medical profession and courts will also lessen the real or perceived threat involved in making the evidence-based choices necessary to preserve patients' lives and health.¹⁴⁹

5. *Self-Serving Bias*

The self-serving bias stems from an unconscious drive to maintain a positive self-image.¹⁵⁰ Individuals tend to unconsciously inflate the extent that they are responsible for positive outcomes while minimizing their own role in negative

143. Daniel Kahneman et al., *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias*, 5 J. ECON. PERSP. 193, 197–98 (1991) (“One implication of loss aversion is that individuals have a strong tendency to remain at the status quo, because the disadvantages of leaving it loom larger than advantages.”).

144. See Pietro Ortoleva, *Status Quo Bias, Multiple Priors and Uncertainty Aversion*, 69 GAMES & ECON. BEHAV. 411, 411–13 (2010).

145. Antoinette Nicolle et al., *A Regret-Induced Status Quo Bias*, 31 J. NEUROSCIENCE 3320, 3320 (2011) (“Status quo rejection may also be perceived as more directly causal of its outcome, enhancing a sense of accountability for an error.”); see also Mark Spranca et al., *Omission and Commission in Judgment and Choice*, 27 J. EXPERIMENTAL SOC. PSYCH. 76, 76 (1991).

146. For example, the Texas Supreme Court held that a doctor’s good-faith medical judgment was not sufficient to meet the standard under the law. In response to this ruling, Molly Meegan, chief legal officer and general counsel at the American College of Obstetricians and Gynecologists, remarked, “With even less clarity than before, this decision will have a profound and lasting chilling effect on both patients who need and clinicians that provide abortion care.” Castronuovo, *supra* note 127.

147. Adrienne R. Ghorashi & DeAnna Baumle, *Legal and Health Risks of Abortion Criminalization: State Policy Responses in the Immediate Aftermath of Dobbs*, 37 J.L. & HEALTH 1, 3–4 (2023).

148. *Id.* at 15–16.

149. See *infra* Part IV.

150. See Constantine Sedikides & Michael J. Strube, *Self-Evaluation: To Thine Own Self Be Good, To Thine Own Self Be Sure, To Thine Own Self Be True, and To Thine Own Self Be Better*, 29 ADVANCES EXPERIMENTAL SOC. PSYCH. 209, 216 (1997).

outcomes, particularly when they feel threatened.¹⁵¹ In a seminal study on the self-serving bias, participants were asked how much work they contributed toward reaching a common goal with another person. Respondents routinely overestimated their own contribution, so that the combined estimates of each member of the dyad added up to more than 100%.¹⁵² Not only do individuals take more credit for positive outcomes than they should, but they also eschew responsibility for poor outcomes.¹⁵³ Moreover, this bias is resistant to change. Asking participants to justify their high self-assessments by providing concrete evidence to support their evaluations has not been found to make these evaluations more accurate.¹⁵⁴ Because the self-serving bias is unconsciously motivated by the drive to maintain a positive self-image, it comes into play in professional settings where an actor's value is often tied to measurable successes.¹⁵⁵ Risk aversion and self-serving attributions can interact, causing physicians making decisions to delay treatment to downplay their own role in resulting complications.

6. Conformity and Obedience

The evolutionary success of human beings is largely attributable to social cooperation. “Cooperative living allowed early humans to harness the hunting, gathering, protecting, and childbearing skills of many members of the group in order to optimize the overall success of the species.”¹⁵⁶ The more traits members of a group share, the stronger the tendency to conform becomes.¹⁵⁷ The reason for this is

151. W. Keith Campbell & Constantine Sedikides, *Self-Threat Magnifies the Self-Serving Bias: A Meta-Analytic Integration*, 3 REV. GEN. PSYCH. 23, 35 (1999) (“[W]e demonstrated that the [self-serving bias] is not an invariant explanatory pattern. Instead, it fluctuates predictably based on level of threat to the self that a specific outcome poses.”); see also Richard Patterson et al., *Motivated Explanation*, FRONTIERS HUM. NEUROSCIENCE, Oct. 16, 2015, at 1–2.

152. See David Dunning et al., *Ambiguity and Self-Evaluation: The Role of Idiosyncratic Trait Definitions in Self-Serving Assessments of Ability*, 57 J. PERSONALITY & SOC. PSYCH. 1082, 1088–89 (1989).

153. James Shepperd et al., *Exploring Causes of the Self-Serving Bias*, 2 SOC. & PERSONALITY PSYCH. COMPASS 895, 895 (2008) (“[D]rivers . . . attribute accidents to external factors – the weather, the condition of their car, other drivers”); see also Alan E. Stewart, *Attributions of Responsibility for Motor Vehicle Crashes*, 37 ACCIDENT ANALYSIS & PREVENTION 681, 681 (2005).

154. See Dunning et al., *supra* note 152, at 1084.

155. See Herman Steensma & Lisette Otto, *Perception of Performance Appraisal by Employees and Supervisors: Self-Serving Bias and Procedural Justice*, 29 J. COLLECTIVE NEGOTS. 307, 307, 317 (2000); Martin D. Coleman, *Emotion and the Self-Serving Bias*, 30 CURRENT PSYCH. 345, 345 (2011).

156. See Molly J. Walker Wilson, *Retribution as Ancient Artifact and Modern Malady*, 24 LEWIS & CLARK L. REV. 1339, 1362–63 (2020) (arguing that certain modern traits are vestiges of early efforts to cooperate with increasingly larger social groups); see also Roy F. Baumeister & Mark R. Leary, *The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation*, 117 PSYCH. BULL. 497, 497–98 (1995) (discussing humans' innate desire to build and strengthen social bonds).

157. See Miguel Pina e Cunha et al., *Obedience and Evil: From Milgram and Kampuchea to Normal Organizations*, 97 J. BUS. ETHICS 291, 293, 303 (2010); see also JOHN C. TURNER ET AL., REDISCOVERING THE SOCIAL GROUP: A SELF-ORGANIZATION THEORY 142,

that so-called in-group members have particular power to influence the reputation of others in their group; they have special affinity for each other because they share common goals; and their opinions hold more weight, to the extent that they are based upon shared education, knowledge, or skill.¹⁵⁸

The instinct to conform is particularly powerful when risk is high.¹⁵⁹ Consensus is protective both for informational reasons and because “there is safety in numbers.”¹⁶⁰ Hence, practices that are adopted by a majority of physicians in a group are likely to be given deference, and deviations will be rare. In a workplace, shared practices and norms of behavior are reinforced, even if the group is limited in size, as it might be for physicians in a smaller sub-specialty or rural practice.¹⁶¹ As a result, physicians who might otherwise deviate from the norm and accept risks that made other physicians uncomfortable face additional obstacles stemming from pressures to conform to the practices of their peers.¹⁶² The more a practice becomes entrenched in a medical office or hospital setting and endorsed by hospital administrators—who also face scrutiny as a result of abortion bans—the more difficult it can be for physicians to deviate from those practices in order to follow their own independent judgment.¹⁶³

170 (1987) (discussing social comparison theory, which proposes that individuals adjust their views toward the consensus of others with whom they share identity traits in order to be perceived favorably by other in-group members).

158. See Pina e Cunha et al., *supra* note 157, at 293, 303; see also TURNER ET AL., *supra* note 157, at 170.

159. See Amrei M. Lahno & Marta Serra-Garcia, *Peer Effects in Risk Taking: Envy or Conformity?*, 50 J. RISK & UNCERTAINTY 73, 91 (2015); Michael A. Wallach & Jerome Mabli, *Information Versus Conformity in the Effects of Group Discussion on Risk Taking*, 14 J. PERSONALITY & SOC. PSYCH. 149, 155 (1970).

160. Kuran and Sunstein have written about how attempts to obtain information or to earn social approval can lead to distortions in attitude formation. See Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 STAN. L. REV. 683, 683 (1999); see also Molly J. Walker Wilson, *The Expansion of Criminal Registries and the Illusion of Control*, 73 LA. L. REV. 509, 553 (2013).

161. Fakhar Naveed, *Influence of Group Size, Unanimity, Cohesion and Status on Conformity*, MASS COMM’N TALK (Mar. 15, 2013), <https://www.masscommunicationtalk.com/influence-of-group-size-unanimity-cohesion-and-status-on-conformity.html> [https://perma.cc/AC5P-9BSC] (noting the research has found that individuals exhibit a tendency to conform even in smaller groups).

162. See *Group Behavior*, LUMEN LEARNING, <https://courses.lumenlearning.com/wmopen-psychology/chapter/conformity-compliance-and-obedience/> [https://perma.cc/PR3Z-658Z] (last visited Feb. 28, 2025) (explaining that once the majority in a group reaches seven individuals, conformity from the group’s other members levels off and even slightly decreases).

163. To avoid exclusion at work, people may feel obligated to conform their behavior to others in order to be accepted. Patricia Faison Hewlin, *Wearing the Cloak: Antecedents and Consequences of Creating Facades of Conformity*, 94 J. APPLIED PSYCH. 727, 727 (2009). Facades of conformity (“FOC”) are similar to, but different from, other constructs of conformity. When a person must act contrary to their own values in order to be accepted in the workplace, the person has engaged in “creating facades of conformity.” *Id.* Hewlin defined FOC as “the suppression of personal values in conjunction with the pretense

7. Availability Heuristic and Cascades

The availability heuristic operates when individuals assess the probability of an event or the frequency of a type of object based on how easily examples come to mind.¹⁶⁴ Events that are repeated, vivid, or emotionally charged are more easily remembered and thus can be disproportionately weighted in decision-making processes.¹⁶⁵ The reliance on readily recalled information can lead to misjudgments about the likelihood of events or the importance of issues.¹⁶⁶ Judgments that are influenced by the availability heuristic can affect personal decisions, risk assessments, and even policy preferences.¹⁶⁷

An availability cascade is a self-reinforcing process, where a collective belief gains more plausibility through increased public discourse and media coverage.¹⁶⁸ It starts with one or more triggering events that capture the attention of the public. Examples of such triggering incidents include plane crashes or shark attacks. Because these events trigger emotions and garner attention, they are widely reported and discussed. As the event becomes more prominent in public discourse, it seems more frequent or representative than it actually is, leading to heightened attention and sometimes public panic and corresponding policy responses.¹⁶⁹

Physicians, like other decision-makers, are influenced by reliable and unreliable sources of information when administering patient care.¹⁷⁰ Specifically, research on inputs for health care choices have found that doctors are influenced by availability cascades.¹⁷¹ An historical example of the impact of availability cascades on physicians in the United States can be seen in the attitudes of medical professionals during the early AIDS epidemic. One study from the 1980s reported that “sixty-three percent of (health care professional) respondents were skeptical of or did not believe assurances by experts that health care workers who observe safety guidelines are at minimal risk of contracting AIDS from patients.”¹⁷² Similarly, results of surveys of medical students from the 1980s and 1990s revealed that misconceptions of risks posed by HIV-infected patients persisted during medical

of embracing organizational values.” Patricia Faison Hewlin, *And the Award for the Best Actor Goes to . . . : Facades of Conformity in Organizational Settings*, 28 ACAD. MGMT. REV. 633, 639 (2003).

164. Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, 5 COGNITIVE PSYCH. 207, 207 (1973).

165. Molly J. Walker Wilson & Megan P. Fuchs, *Publicity, Pressure, and Environmental Legislation: The Untold Story of Availability Campaigns*, 30 CARDOZO L. REV. 2147, 2160 n.63 (2009).

166. *See id.*

167. Sarah Lichtenstein et al., *Judged Frequency of Lethal Events*, 4 J. EXPERIMENTAL PSYCH.: HUM. LEARNING & MEMORY 551, 577 (1978).

168. *See* Kuran & Sunstein, *supra* note 160, at 685, 687.

169. *See generally id.*

170. *See* Gustavo Saposnik et al., *Cognitive Biases Associated with Medical Decisions: A Systematic Review*, BMC MED. INFORMATICS DECISION MAKING, Nov. 3, 2016, at 1, 1.

171. *See* Dan P. Ly, *The Influence of the Availability Heuristic on Physicians in the Emergency Department*, 78 ANNALS EMERGENCY MED. 650, 650 (2021).

172. Joel J. Wallack, *AIDS Anxiety Among Health Care Professionals*, 40 PSYCH. SERVS. 507, 507 (1989).

training.¹⁷³ A closer look suggests that the mistaken beliefs about HIV and AIDS stemmed from availability cascades, which were fueled by fear, emotion, and exposure to public health and media messages.¹⁷⁴

In the wake of *Dobbs*, health care professionals who treat pregnant patients are particularly likely to encounter and attend to accounts of patients and professionals affected by abortion bans. Although arguably these bans can touch virtually every resident of a *Dobbs*-relevant state, directly or indirectly, doctors with pregnant patients are repeatedly impacted. Anecdotes from colleagues, professional exchanges—formal and informal—and clinic and hospital policies reiterate and expound the issue, including the personal and professional risks, making undistorted assessment of treatment options difficult.

III. CHECKLISTS AND PROTOCOLS

The use of safety checklists started as early as the 1930s, when the aviation industry adopted checklists for the operation of planes prior to World War II.¹⁷⁵ As a manufacturer of aircraft carriers, Boeing submitted their Model 299 for evaluation by the U.S. Army.¹⁷⁶ On the final test flight, the plane’s engine stalled, and the plane crashed shortly after takeoff.¹⁷⁷ Two of the five crew members died, including the pilot.¹⁷⁸ An investigation found that the cause of the crash was pilot error.¹⁷⁹ No mechanical failures were found, but the new plane required the pilot to monitor four engines, retractable landing gear, wing flaps, and constant speed propellers.¹⁸⁰ As one newspaper put it, the aircraft was “too much airplane for one man to fly.”¹⁸¹

Following the crash, a group of test pilots at Boeing gathered to discuss the issue and developed a checklist they could use during takeoff, in flight, and prior to landing.¹⁸² The checklist was short enough to fit on a single notecard and included simple tasks like checking that the brakes were released, the instruments were set,

173. See Jeffery A. Kelly et al., *Medical Students’ Attitudes Toward AIDS and Homosexual Patients*, 62 J. MED. EDUC. 549, 549 (1987) (“[F]inding . . . that many students have stigmatizing, negative attitudes toward homosexuals and patients with AIDS.”).

174. In 1991, Adams and Hardy reported that “the National Center for Health Statistics” estimated from their September 1990 National Health Interview Survey that 24% of the public thinks it is “very likely” or “somewhat likely” that someone would contract AIDS from “[e]ating in a restaurant where the cook has the AIDS virus,” while 19% believes it is “very” or “somewhat likely” that they would contract AIDS from “[u]sing public toilets.” PATRICIA F. ADAMS & ANN M. HARDY, U.S. DEP’T OF HEALTH & HUM. SERVS., AIDS KNOWLEDGE AND ATTITUDES FOR JULY–SEPTEMBER 1990: PROVISIONAL DATA FROM THE NATIONAL HEALTH INTERVIEW SURVEY 1, 7 (1991).

175. Kristen Elmezzzi & Shad Deering, *Checklists in Emergencies*, 43 SEMINARS PERINATOLOGY 18, 18 (2019).

176. *Id.*

177. *Id.*

178. ATUL GAWANDE, *THE CHECKLIST MANIFESTO: HOW TO GET THINGS RIGHT* 33 (2010).

179. Elmezzzi & Deering, *supra* note 175, at 18.

180. GAWANDE, *supra* note 178, at 33–34.

181. *Id.* at 34.

182. *Id.* at 33–34; Elmezzzi & Deering, *supra* note 175, at 18.

the doors and windows were closed, and the elevator controls were unlocked.¹⁸³ After implementing the checklist, the Model 299 went on to fly 1.8 million miles without any further accidents.¹⁸⁴ Later, the U.S. Army accepted the plane, ordered nearly 13,000 aircraft, and renamed it the B-17.¹⁸⁵

In more recent years, the medical industry began to use checklists to standardize procedures and improve outcomes.¹⁸⁶ The famous Institute of Medicine report from 1999 estimated that medical errors were causing between 44,000 and 98,000 deaths annually in the United States.¹⁸⁷ As part of the push for patient safety that followed, checklists have helped lower those numbers and improve patient care.¹⁸⁸ Checklists can ensure that certain tasks are being completed and reduce ambiguity about next steps.¹⁸⁹ However, in a complex medical situation like a gestational emergency, determining the best path forward is not usually so straightforward that a simple checklist adequately covers all possibilities.¹⁹⁰ Once evidence is evaluated and synthesized, development of a checklist is one step toward translating that knowledge into practice.¹⁹¹ Moreover, people are more complex than airplanes: “A study of forty one thousand trauma patients in the state of Pennsylvania—just trauma patients—found that they had 1,224 different injury related diagnoses in 32,261 unique combinations. That’s like having 32,261 kinds of airplane to land.”¹⁹² Perhaps justifiably, then, “physicians have been skeptical that a piece of paper with a bunch of little boxes would improve matters.”¹⁹³

Three case examples discussed here demonstrate that when used properly, checklists can substantially improve outcomes in complex medical specialties like critical care, general surgery, and emergency neurology. Despite the resounding success of checklists in medicine, national and global implementation is often slower than expected. Dr. Lucian Leape—known in the medical profession as the “father of patient safety”—once described this as “The Checklist Conundrum.”¹⁹⁴ In an editorial accompanying a *New England Journal of Medicine* article finding no reduction in surgical mortality or complications despite the reported use of a checklist by 98% of hospitals,¹⁹⁵ Leape noted that checklists are only good when people use them. He identified five reasons why a system might not have seen improvements in patient safety: (1) “it is not the act of ticking off a checklist that

183. GAWANDE, *supra* note 178, at 34.

184. Elmezzi & Deering, *supra* note 175, at 18.

185. GAWANDE, *supra* note 178, at 34.

186. Elmezzi & Deering, *supra* note 175, at 18.

187. Brigitte M. Hales & Peter J. Pronovost, *The Checklist—a Tool for Error Management and Performance Improvement*, 21 J. CRITICAL CARE 231, 233 (2006).

188. See Elmezzi & Deering, *supra* note 175, at 18.

189. Charles L. Bosk et al., *Reality Check for Checklists*, 374 LANCET 444, 444 (2009).

190. *Id.*

191. *See id.*

192. GAWANDE, *supra* note 178, at 35.

193. *Id.*

194. Lucian L. Leape, *The Checklist Conundrum*, 370 NEW ENG. J. MEDICINE 1063, 1063 (2014).

195. David R. Urbach et al., *Introduction of Surgical Safety Checklists in Ontario, Canada*, 370 NEW ENGL. J. MEDICINE 1029, 1035 (2014).

reduces complications, but performance of the actions it calls for”; (2) “fully implementing the checklist is difficult”; (3) “hospitals need help to implement the checklist”; (4) “gaming is universal”; and (5) “full implementation takes time: time for the team to get it right and time for all units in an institution to get on board.”¹⁹⁶

A. *Keystone ICU Checklist*

One of the most widely publicized medical checklists was for the insertion of central venous catheters for patients in the intensive care unit (“ICU”)—the Keystone ICU Checklist.¹⁹⁷ In 2001, as a response to excess catheter-related bloodstream infections, Dr. Peter Pronovost and his research team identified key steps for reducing infections when inserting a central line, including washing hands with soap, cleaning the patient’s skin with chlorhexidine antiseptic, using sterile drapes over the entire patient, wearing a mask and surgical gown, and putting a sterile dress over the site once the catheter is in.¹⁹⁸ Nurses observed surgeons in the operating room and completed a checklist; in more than one-third of patients, the surgeon skipped at least one step.¹⁹⁹ Dr. Pronovost persuaded the administration at Johns Hopkins Hospital to allow him to authorize nurses to stop doctors if they observed them skip an item on the checklist.²⁰⁰ A year after implementation, the ten-day line infection rate dropped from 11% to 0%.²⁰¹ In just one hospital, the checklist had prevented 43 infections and 8 deaths while saving \$2 million in costs.²⁰²

In 2003, the Michigan Health and Hospital Association approached Pronovost about testing his checklist in the state’s ICUs.²⁰³ The infection rates for ICU patients in Michigan was higher than the national average, but after implementation of the checklist for three months, infections decreased by 66%.²⁰⁴ Michigan’s average ICU thereafter outperformed 90% of ICUs nationwide.²⁰⁵ The hospitals saved an estimated \$175 million in costs during the first 18 months.²⁰⁶ Led by Pronovost, the group published its findings in late 2006, and the successes have been sustained for several years now.²⁰⁷ A few years later, Pronovost advised about a dozen countries in the implementation of his checklist, including the U.K. National

196. Leape, *supra* note 194, at 1063–64.

197. Peter Pronovost et al., *An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU*, 355 *NEW ENG. J. MEDICINE* 2725, 2726 (2006).

198. See Sean M. Berenholtz et al., *Eliminating Catheter-Related Bloodstream Infections in the Intensive Care Unit*, 32 *CRITICAL CARE MED.* 2014, 2015 (2004).

199. See *id.* at 2017.

200. GAWANDE, *supra* note 178, at 38.

201. *Id.*

202. Atul Gawande, *A Life-Saving Checklist*, *NEW YORKER* (Dec. 2, 2007), <https://www.newyorker.com/magazine/2007/12/10/the-checklist> [perma.cc/6GH9-3QFB].

203. GAWANDE, *supra* note 178, at 40.

204. *Id.* at 43–44.

205. *Id.* at 44.

206. Gawande, *supra* note 202.

207. GAWANDE, *supra* note 178, at 44; see also Pronovost et al., *supra* note 197, at 2725.

Patient Safety Agency, which piloted the checklist in eight hospitals in northeast England.²⁰⁸

Pronovost noted that the success of the Keystone ICU Checklist was not necessarily due to its simplicity, but “[h]ow support was mobilised for coordinating work around infection control.”²⁰⁹ Health care workers in the Michigan hospitals were not simply given the checklist and told to follow it.²¹⁰ Implementation occurred over nine months; team leaders were assigned and required to meet monthly, listen to problems, and work to solve them; and feedback was garnered from the frontline caregivers.²¹¹ Importantly, nurses were empowered to stop procedures if the guidelines were not followed.²¹² Pronovost and colleagues also offered advice for achieving results elsewhere: “[R]ecruit advocates within the organisation, keep the team focused on goals, create an alliance with central administration to secure resources, shift power relations, create social and reputational incentives for cooperating, open channels of communications with units that face the same challenges, and use audit and feedback.”²¹³

B. World Health Organization’s Surgical Safety Checklist

Following on the success of the Keystone ICU Checklist, the World Health Organization (“WHO”) created its surgical safety checklist in 2007.²¹⁴ The checklist consists of 19 items²¹⁵ split into three parts; the course of administering anesthesia and surgery is interrupted at three points, so team members can communicate and check important information.²¹⁶ Those interruptions occur immediately before the administration of anesthesia, immediately before the skin incision, and immediately after the skin closure—referred to as “sign-in,” “time-out,” and “sign-out,” respectively.²¹⁷

The sign-in is carried out by the anesthetist, the anesthesia nurse, and the patient.²¹⁸ They confirm the patient’s identity, whether the incision site is marked, whether the anesthesia machine and medication have been checked, and whether the

208. Jeremy Laurance, *Peter Pronovost: Champion of Checklists in Critical Care*, 374 LANCET 443, 443 (2009).

209. Bosk et al., *supra* note 189, at 444.

210. *Id.*

211. *Id.* at 444–45.

212. *Id.* at 445.

213. *Id.*

214. See C. Vijayasekar & R. J. C. Steele, *The World Health Organization’s Surgical Safety Checklist*, 7 SURGEON 260, 260 (2009).

215. *Id.*

216. Axel Fudickar et al., *The Effect of the WHO Surgical Safety Checklist on Complication Rate and Communication*, 109 DEUTSCHES ARZTEBLATT INT’L 695, 695 (2012). The study included 3,733 patients before the checklist was introduced and 3,955 patients afterwards. See *id.* The checklist created a reduction in mortality in major surgery by 47%—from 56 in 3,733 cases to 32 in 3,955 cases. See *id.* The checklist also reduced major morbidity by 36%—from 411 in 3,733 cases to 288 in 3,955 cases. See *id.*

217. *Id.*

218. *Id.* at 695–97.

pulse oximeter is functioning.²¹⁹ Using the patient's medical chart, the teams confirm whether the patient has a known allergy, difficult airway or elevated risk of aspiration, and whether there is a high risk of blood loss during the procedure.²²⁰

In the time-out, all team members introduce themselves by name and role, and they confirm the patient's name, the procedure, and where the incision will be made.²²¹ They check whether antibiotic prophylaxis has been given within the last 60 minutes, and they ask the surgeon what the critical or non-routine steps of the surgery are, how long the surgery is expected to take, and what the anticipated blood loss is.²²² To the anesthetist, they ask whether there are any patient-specific concerns.²²³ To the nursing team, they ask whether sterility has been confirmed and if there are any equipment issues or concerns.²²⁴

At the final stage, the sign-out, the nurse verbally confirms the name of the procedure; the completion of instrument, sponge, and needle counts; specimen labeling; and whether there are any equipment problems that need to be addressed.²²⁵ The surgeon, anesthetist, and nurse also share any key concerns for recovery and management of the patient.²²⁶ At each phase, a checklist coordinator must confirm that the surgical team has completed the list of tasks before it proceeds with the next phase of the operation.²²⁷ The developers noted the following of the WHO surgical checklist:

Operations require many more than nineteen steps, of course. But like builders, we tried to encompass the simple to the complex, with several narrowly specified checks to ensure stupid stuff isn't missed (antibiotics, allergies, the wrong patient) and a few communication checks to ensure people work as a team to recognize the many other potential traps and subtleties.²²⁸

The WHO checklist was evaluated in a study of eight hospitals around the world—including leading hospitals in Seattle, Toronto, London, and Auckland and some of the busiest hospitals in the world in the Philippines, Jordan, India, and Tanzania.²²⁹ Surgical procedures varied widely among the eight hospitals: “On one end of the spectrum were those with state-of-the-art capabilities allowing them to do everything from robotic prostatectomies to liver transplants On the other end were hospitals forced by lack of staff and resources to prioritize urgent operations.”²³⁰ The checklist was a tremendous success—one study estimates that

219. *WHO Surgical Safety Checklist*, WORLD HEALTH ORG. (2009), <https://www.who.int/teams/integrated-health-services/patient-safety/research/safe-surgery/tool-and-resources> [<https://perma.cc/RGT9-T6WH>].

220. *Id.*

221. *Id.*

222. *Id.*

223. *Id.*

224. *Id.*

225. *Id.*

226. *Id.*

227. Vijayasekar & Steele, *supra* note 214, at 260.

228. GAWANDE, *supra* note 178, at 141.

229. *Id.* at 141–43.

230. *Id.* at 143.

should the surgical checklist be broadly implemented and guidelines adhered to strictly, roughly 1.6 million lives could be saved, and 9.36 million inpatient complications could be avoided worldwide.²³¹ The initial study was also accompanied by a questionnaire, in which 80% of the persons who used the checklist stated that they considered it simple and thought it would prevent errors.²³² About 90% said they would want the checklist used if they were to undergo surgery themselves.²³³

Despite this, some physicians were hesitant to implement the checklist.²³⁴ The fear was that introducing yet another checklist would add onto the burden of the operating room and lead to tick-box fatigue.²³⁵ Physicians and staff say the same items are checked even when the list is not used; however, the purpose of the checklist goes beyond just simply checking a list of items (although repeated checking has been shown to increase safety).²³⁶ The benefits also include orderly communication and improved teamwork.²³⁷ The culture of minimal communication in the operating room can be an impediment.²³⁸ On one hand, it could indicate that a team that is working well together, but on the other hand, it can heighten the risk that important information is lost.²³⁹ The implementation of the checklist sets a level of discipline in communication that goes beyond what was usual before its introduction.²⁴⁰

Like other checklists, implementation requires coordination and buy-in from the staff, particularly leaders in the operating room.²⁴¹ In the WHO checklist, one person is not supposed to go through all the items without communicating with other team members.²⁴² The list must be read aloud in its entirety.²⁴³ If team members, particularly ones in leadership roles, are not taking the list seriously, the checklist does not operate effectively.²⁴⁴ Faulty implementation can foster a dangerous false sense of security and thus convert the positive effect of the checklist into its opposite.²⁴⁵ Reading the list aloud also breaks down the hierarchical barriers to communication that enable an improvement in team cooperation.²⁴⁶

231. Vijayasekar & Steele, *supra* note 214, at 260.

232. Fudickar et al., *supra* note 216, at 697.

233. *Id.*

234. *Id.* at 699.

235. *See* Vijayasekar & Steele, *supra* note 214, at 260.

236. *See id.* at 261.

237. *See id.*

238. *See id.*

239. *See id.*

240. *See id.*

241. *See id.*

242. *See id.*

243. WORLD HEALTH ORG., SURGICAL SAFETY CHECKLIST 1 (1st ed. n.d.), <https://cdn.who.int/media/docs/default-source/patient-safety/safe-surgery/checklist-adaptation.pdf> [<https://perma.cc/XU7A-KXBS>] (“Reading the Checklist ‘out loud’ as a team exercise is critical to its success and it will (likely) be far less effective, if (effective) at all, if used solely as a written instrument.”).

244. *See* Vijayasekar & Steele, *supra* note 214, at 261.

245. *See id.*

246. *See id.*

C. National Institutes of Health Stroke Scale

The National Institutes of Health (“NIH”) have created a stroke scale checklist (“NIHSS”) that contains 11 diagnostic tests, which evaluate a patient’s level of consciousness, gaze, visual fields, facial palsy, motor skills, limb ataxia, language, and other responses.²⁴⁷ Each item has a corresponding score, and all are totaled at the end to help physicians determine the severity of a stroke.²⁴⁸ During the late 1980s, several stroke rating scales were in use.²⁴⁹ The NIH combined several of those scales to create its stroke scale for a research study focused on the use of naloxone for acute stroke.²⁵⁰ Eventually, the NIH made significant modifications to the scale to facilitate its use more broadly for a trial on acute strokes.²⁵¹ Now, it is the most widely used deficit rating scale, with more than 500,000 health care professionals trained to administer it.²⁵²

Compared to other stroke scales, the NIHSS was found to have “excellent specificity, sensitivity, and accuracy in forecasting outcomes.”²⁵³ In a study of stroke patients, NIHSS was a robust predictor of outcomes after the stroke, even after adjusting for variables like the patient’s age, race, gender, or stroke history.²⁵⁴ The NIHSS score also provides prognostic information that could be useful to physicians, patients, and families, as the score can “influence decisions about emergent management” or “be used as an exclusion or inclusion criterion for enrollment in clinical testing of new treatments or interventions for stroke.”²⁵⁵

IV. PROVIDING ABORTION CARE: FROM CHECKLISTS AND PROTOCOLS TO CLINICAL WORKFLOWS

The large success of checklists in the medical field, and the trend of creating more standardization, raise the question of whether checklists or guidelines could be used in the field of abortion care. As abortion restrictions are passed with vague, undefined terms, hospitals and medical teams could come together to define them as an institution and establish a protocol to guide doctors in their decision-making—leading to higher levels of care for pregnant patients in emergency situations and fewer situations of dangerous delayed care.

247. See NAT’L INST. NEUROLOGICAL DISORDERS & STROKE, NIH STROKE SCALE 3–8 (2024), https://www.ninds.nih.gov/sites/default/files/2024-05/KnowStroke_NIHStrokeScale_May2024_508c.pdf [https://perma.cc/3NBX-EF8Q].

248. See *id.* at 9.

249. Patrick Lyden, *Using the National Institutes of Health Stroke Scale: A Cautionary Tale*, 48 STROKE 513, 513 (2017).

250. *Id.*

251. *Id.*

252. *Id.*

253. H. P. Adams et al., *Baseline NIH Stroke Scale Score Strongly Predicts Outcome After Stroke (TOAST)*, 53 NEUROLOGY 126, 126 (1999).

254. *Id.*

255. *Id.* Data shows that patients who receive a stroke score of more than 15 have less than a 20% chance of achieving an excellent outcome; most patients in this category did not recover. See *id.* Patients with a score of 4 to 6 have a good or excellent outcome at three months, whereas only 40% of patients with a score of 16 to 22 had a similar rate of recovery. See *id.*

However, checklists and protocols may be too rigid a framework to accommodate the complex decision-making process required to provide abortion care in states that have restricted or banned it. Clinical workflows are complex and dynamic, defining the “who, what, when, where, for how long, and in what order” of each task.²⁵⁶ While preserving the structural frameworks of checklists and protocols, workflows would allow for the inclusion of non-clinical personnel in the process, such as clinical ethicists, lawyers, and hospital administrators. They may also allow for more robust iterative quality improvement over time.

One physician recently called for medical societies to support civil disobedience among their members, but stopped short of recommending “strategies involving professional groups trying to help members work around unethical laws.”²⁵⁷ One hospital network in Indiana—despite performing less than 1% of abortions statewide prior to the *Dobbs* decision and the subsequent Indiana state law banning abortions—quickly realized it would be thrust into that role as the state’s largest hospital system and a major safety-net hospital.²⁵⁸ The state law, in particular, stipulated that medically necessary abortions could *only* be performed in hospitals or outpatient centers owned by hospitals.²⁵⁹ In response, the hospital system established an incident command center and prepared protocols to aid its doctors in determining whether a patient met one of the exceptions for legal abortion under the state law.²⁶⁰ Despite these efforts, one of its physicians was penalized by the state’s licensing body for publicly discussing the abortion of a ten-year-old girl from Ohio, who allegedly had become pregnant through child abuse and rape.²⁶¹ The patient had crossed state lines from Ohio because abortion was not yet illegal in Indiana; despite sanctioning the physician for privacy violations, no further action could be taken because the more restrictive law had not taken effect.²⁶²

The approach taken by Indiana’s hospital network provides a promising path forward. Setting up a crisis management team that can develop protocols for managing pregnant patients who may require abortion care can aid physicians in defending themselves against allegations of improper abortion care in violation of state laws. Because most physicians are now employed by hospitals or corporate

256. Michela Tanzini et al., *Measuring Clinical Workflow to Improve Quality and Safety*, in TEXTBOOK OF PATIENT SAFETY AND CLINICAL RISK MANAGEMENT 393, 393 (2021).

257. Matthew K. Wynia, *Professional Civil Disobedience — Medical-Society Responsibilities After Dobbs*, 387 NEW ENGL. J. MEDICINE 959, 961 (2022).

258. Staff Reports, *IU Health Setting Up Team to Evaluate Abortion Protocols*, REPUBLIC (Sept. 4, 2022), <https://www.therepublic.com/2022/09/04/iu-health-setting-up-team-to-evaluate-abortion-protocols/> [<https://perma.cc/42M8-LDE3>].

259. *Id.*

260. *Id.*

261. Aria Bendix & Phil Helsel, *Indiana Board Reprimands Dr. Caitlin Bernard Over 10-Year-Old’s Abortion Case*, NBC NEWS (May 26, 2023, 9:26 AM), <https://www.nbcnews.com/health/health-news/indiana-doctor-gave-10-year-old-girl-abortion-disciplinary-hearing-rcna86214> [<https://perma.cc/6QQJ-6YYZ>].

262. *Id.*

entities,²⁶³ the hospital often covers medical malpractice insurance, and it therefore has a stake in whether the physician provides evidence-based care and whether that care aligns with professional standards. Given the newly created risk of criminal liability, hospitals should do what is necessary as employers to protect their employees from unwarranted threats to their medical licensure, or worse yet, incarceration. Health care systems can be safe havens in this frightening new frontier of abortion care post-*Dobbs*, where physicians must balance risk to patients with personal risk of harm to their own careers.

In this Part, we describe the Workflow for Evaluating and Diagnosing Gestational Emergencies (“WEDGE”). Putting a WEDGE in place would provide tangible benefits to hospital systems, physicians, and patients alike—a metaphorical “wedge” between the physician and criminal liability. For physicians in particular, it would address some of the concerns associated with motivated reasoning, risk aversion, and decision paralysis that lead to delayed care and poor outcomes.²⁶⁴ Pronovost highlights the importance of guidelines that “include an unambiguous checklist with interventions linked in time and space,” developed by clinicians and implementation scientists who “could help clinicians identify and mitigate barriers to guideline use and share successful implementation strategies.”²⁶⁵ Importantly, Pronovost notes that “guideline developers could rely on systems, rather than the actions of individual clinicians, to ensure patients receive recommended therapies.”²⁶⁶ Physicians working in two restrictive states post-*Dobbs* argue that “a comprehensive and sustained institutional response to restrictive abortion laws is integral to maintaining access to legally permissible reproductive health care.”²⁶⁷ The development and use of protocols and workflows within hospital systems can serve as essential tools in this regard.

A. High-Risk Pregnancies: The Medical Decision Context

There are a host of conditions that can pose a threat to the life and health of a pregnant patient. WEDGE would assist physicians in evaluating conditions that may require a therapeutic abortion. Examples of these conditions include ectopic pregnancy, preterm premature rupture of membranes (“PPROM”), placental abruption and placenta previa, pulmonary hypertension, preeclampsia, antepartum sepsis, and cervical insufficiency or incompetency. Use of the same medical procedure, a dilation and curettage (“D&C”), is indicated for removal of a nonviable fetus after miscarriage.

263. Dave Muoio, *Nearly 80% of Docs Employed By Hospitals, Corporate Entities in Continued Shift Away From Independent Practice*, FIERCE HEALTHCARE (Apr. 12, 2024, 7:55 AM), <https://www.fiercehealthcare.com/providers/more-and-more-physicians-are-working-under-hospitals-corporate-entities-report-finds> [https://perma.cc/7DH3-PW9X].

264. See *supra* Part III.

265. Peter J. Pronovost, *Enhancing Physicians’ Use of Clinical Guidelines*, 310 J. AM. MED. ASS’N 2501, 2501 (2013).

266. *Id.* at 2502.

267. Justin R. Lappen et al., *Corporate Citizenship and Institutional Responses Post-Dobbs — Critical Lessons from Two Restrictive States*, 388 NEW ENGL. J. MEDICINE 1732, 1734 (2023).

1. Ectopic Pregnancy

An ectopic pregnancy occurs when a fertilized egg, rather than attaching to the main body (corpus) of the uterus, implants and grows elsewhere.²⁶⁸ Most often, when this occurs, the egg implants in a fallopian tube, although an ectopic pregnancy can also occur in an ovary, a different part of the uterus, or the abdominal cavity.²⁶⁹ An ectopic pregnancy means that the pregnancy is not viable if carried to term; further, if the fertilized egg is left intact, the growing tissue can rupture the fallopian tube, which can lead to severe bleeding and possibly death.²⁷⁰ Physicians can end an ectopic pregnancy through medication called methotrexate, which stops cells from growing, resulting in tissue reabsorption over a period of weeks.²⁷¹ In other cases, surgical removal of the tissue is required in order to protect the patient.²⁷²

Salpingostomy and salpingectomy are two laparoscopic surgical procedures used to treat some ectopic pregnancies. The preferred treatment for ectopic pregnancy depends upon the amount of bleeding and uterine damage, as well as whether the tube has ruptured.²⁷³ The condition of the non-involved fallopian tube is another factor used in determining the standard of care.²⁷⁴ In a salpingostomy, the ectopic pregnancy is removed, and the tube is left to heal on its own.²⁷⁵ In a salpingectomy, the ectopic pregnancy and the tube are both removed.²⁷⁶ When possible, the affected fallopian tube will be saved. In practice, however, a ruptured tube is often removed.²⁷⁷

Many state laws with new restrictions on abortion make exceptions for ectopic pregnancies,²⁷⁸ but uncertainties can arise if a fetus implants on uterine scar tissue from a previous cesarean section or if the fetal tissue cannot be located. One OB/GYN noted that:

268. Davor Jurkovic & Helen Wilkinson, *Diagnosis and Management of Ectopic Pregnancy*, 342 BRITISH MED. J. 1353, 1353 (2011); Vanitha N. Sivalingam et al., *Diagnosis and Management of Ectopic Pregnancy*, 37 J. FAM. PLAN. & REPROD. HEALTH CARE 231, 231 (2011).

269. Poonam Rana et al., *Ectopic Pregnancy: A Review*, 288 ARCHIVES GYNECOLOGY & OBSTETRICS 747, 747–48 (2013); see also *Ectopic Pregnancy*, PLANNED PARENTHOOD, <https://www.plannedparenthood.org/learn/pregnancy/ectopic-pregnancy> [<https://perma.cc/SX9E-7TEH>] (last visited Feb. 28, 2025).

270. See Jurkovic & Wilkinson, *supra* note 268, at 1354.

271. Togas Tulandi, *Ectopic Pregnancy: Methotrexate Therapy*, UPTODATE (Sept. 4, 2024), <https://www.uptodate.com/contents/ectopic-pregnancy-methotrexate-therapy> [<https://perma.cc/SU3P-658A>].

272. Togas Tulandi, *Tubal Ectopic Pregnancy: Surgical Treatment*, UPTODATE (May 7, 2024), <https://www.uptodate.com/contents/tubal-ectopic-pregnancy-surgical-treatment> [<https://perma.cc/MM76-YJYG>].

273. *Id.*

274. *Id.* If the other fallopian tube is damaged, surgeons may prefer salpingostomy rather than salpingectomy in an effort to preserve fertility.

275. *Id.*

276. *Id.*

277. *Id.*

278. NICOLE DUBE, CONN. GEN. ASSEMB., OFF. OF LEGIS. RSCH., ECTOPIC PREGNANCIES AND STATE ABORTIONS LAWS 2 (2022), <https://www.cga.ct.gov/2022/rpt/pdf/2022-R-0250.pdf> [<https://perma.cc/3587-JQ95>].

[S]he recently had a patient displaying signs of an ectopic pregnancy, including abdominal pain. But because this was not a clear-cut case in which an ultrasound showed the fetus developing outside the uterus, [the physician] faced the potential of terminating a fetus that was in the uterus and violating Wisconsin’s abortion ban. Instead of prescribing medication to terminate the pregnancy in the safest manner, . . . she was forced to perform a riskier, invasive surgical procedure to confirm the location of the ectopic pregnancy before ending it.²⁷⁹

In response to an Ohio bill ordering doctors to “reimplant ectopic pregnanc[ies],” Dr. Chris Zahn, vice president of practice activities at the American College of Obstetricians and Gynecologists (“ACOG”), notes, “There is no procedure to reimplant an ectopic pregnancy It is not possible to move an ectopic pregnancy from a fallopian tube, or anywhere else it might have implanted, to the uterus.”²⁸⁰ In spite of this, five states that have abortion bans explicitly exclude ectopic pregnancies from their statutory definition of “abortion.”²⁸¹ Those states include Alabama, Arkansas, Georgia, Louisiana, and Texas. Even in cases in which treatment of an ectopic pregnancy requires immediate abortion care, doctors face real concerns about what the law requires of them. Uncertainty and anxiety over legal requirements can delay care.²⁸² Because an ectopic pregnancy is incapable of ever resulting in a viable fetus and poses very serious threats to the life of the patient, doctors should be able to treat them under the medical emergency exception, where available. If doctors are still hesitant, a workflow including ectopic pregnancy should provide reassurance.

2. PPRM and Chorioamnionitis

The rupture of the amniotic sac that holds the fetus and amniotic fluid is a normal part of a routine labor and delivery process. However, when the rupture takes place early, it can threaten the life and health of the pregnant patient and the fetus.²⁸³

279. Frances Steed Sellers & Fenit Nirappil, *Confusion Post-Roe Spurs Delays, Denials for Dome Lifesaving Pregnancy Care*, WASH. POST (July 16, 2022), <https://www.washingtonpost.com/health/2022/07/16/abortion-miscarriage-ectopic-pregnancy-care/> [<https://perma.cc/GRS5-R8BQ>].

280. Jessica Glenza, *Ohio Bill Orders Doctors to ‘Reimplant Ectopic Pregnancy’ or Face ‘Abortion Murder’ Charges*, GUARDIAN (Nov. 29, 2019) (internal quotations omitted), <https://www.theguardian.com/us-news/2019/nov/29/ohio-extreme-abortion-bill-reimplant-ectopic-pregnancy> [<https://perma.cc/GXZ5-H7M5>].

281. DUBE, *supra* note 278.

282. For example, one doctor recounted a situation where another physician in her practice contacted her the week after the Supreme Court’s *Dobbs* decision as she treated a patient with a ruptured ectopic pregnancy. “She knew exactly what she had to do because [the woman] was bleeding and was clearly going to die if nothing was done But she wasn’t sure what she needed to document to be sure she wouldn’t be charged with a felony.” Sellers & Nirappil, *supra* note 279.

283. See Thomas McElrath, *Prelabor Rupture of Membranes Before and at the Limit of Viability*, UPTODATE (Apr. 4, 2024), <https://www.uptodate.com/contents/prelabor-rupture-of-membranes-before-and-at-the-limit-of-viability> [<https://perma.cc/YBN4-55TN>] (“Risk factors [for PPRM before or at the limit of viability] are similar to those for preterm

Preterm premature rupture of membranes occurs when the amniotic sac or “water” breaks prior to 37 weeks of gestation.²⁸⁴ When this occurs, the amniotic fluid around the fetus travels out of the body, putting the pregnant patient at risk of infection and sepsis if untreated.²⁸⁵

PPROM is responsible for 40%–50% of preterm births and affects 150,000 women in the United States every year.²⁸⁶ Between 0.1% and 0.7% of all pregnancies are complicated by PPRM before or at the limit of viability.²⁸⁷ Viability refers to the gestational age and birth weight at levels where infants are too immature to survive. In the United States, viability varies from state to state; however, most physicians and hospitals use an indicator of less than 23 weeks gestation and weight of 500 grams to establish the “viability” of the pregnancy.²⁸⁸ PPRM management is among the more controversial issues in perinatal medicine given the associated risks; the decision is between induction of labor or cesarean birth versus expectant management.²⁸⁹

Management changes when PPRM occurs prior to the viability of the fetus.²⁹⁰ Chorioamnionitis complicates between 30%–40% of PPRM cases before or at the limit of viability and is caused by bacterial infection of the fetal amniotic and chorionic membranes.²⁹¹ The clinical signs for chorioamnionitis include a maternal fever greater than 100.4°F, maternal tachycardia (>100 heart beats/minute), fetal tachycardia (>160 heart beats/minute), foul-smelling amniotic fluid or vaginal discharge, uterine tenderness, and maternal leukocytosis (white blood cell count >15,000 cells/microliter).²⁹² Unfortunately, chorioamnionitis is tricky to diagnose. Typically, the physician seeks two or more of the symptoms

labor. The major risk factors appear to be a prior history of preterm labor, [PPROM] before or at the limit of neonatal viability, cervical insufficiency, or a current pregnancy complicated by multiple gestation or antepartum bleeding.”).

284. Patrick Duff, *Preterm Prelabor Rupture of Membranes: Clinical Manifestations and Diagnosis*, UPtODATE (Jan. 16, 2024), <https://www.uptodate.com/contents/preterm-prelabor-rupture-of-membranes-clinical-manifestations-and-diagnosis> [<https://perma.cc/PD8L-EX97>].

285. McElrath, *supra* note 283.

286. Ramakumar Menon & Lauren S. Richardson, *Preterm Prelabor Rupture of the Membranes: A Disease of the Fetal Membranes*, 41 SEMINARS PERINATOLOGY 409, 409 (2017).

287. McElrath, *supra* note 283.

288. I Seri & J Evans, *Limits of Viability: Definition of the Grey Zone*, 28 J. PERINATOLOGY S4, S6 (2008).

289. Patrick Duff, *Preterm Prelabor Rupture of Membranes: Management and Outcome*, UPtODATE (May 9, 2024), <https://www.uptodate.com/contents/preterm-prelabor-rupture-of-membranes-management-and-outcome> [<https://perma.cc/P3JG-MHJ9>].

290. *See id.* (Viability in this context refers to between “23+0 to 36+6 weeks of gestation”); *see also* McElrath, *supra* note 283 (“The lower limit of neonatal viability can be defined as the earliest stage of fetal maturity when there is a reasonable chance, although not a high likelihood, of extrauterine survival. Currently, this is considered to be approximately 22 to 23 weeks of gestation in facilities with a neonatal intensive care unit.”).

291. McElrath, *supra* note 283; *see also* Alan Thevenet N. Tita, *Clinical Chorioamnionitis*, UPtODATE (July 3, 2024), <https://www.uptodate.com/contents/clinical-chorioamnionitis> [<https://perma.cc/P5UC-WDT5>].

292. Tita, *supra* note 291.

above when making a diagnosis but may seek additional laboratory tests or clinical signs to confirm; for example, bacteria in the bloodstream may be identifiable in 5%–10% of cases.²⁹³ Full-fledged infection due to chorioamnionitis can present in a matter of hours, so along with broad-spectrum antibiotics, expedient delivery is necessary.²⁹⁴ If the pregnancy is pre-viability, abortion care may be indicated in certain situations. Maternal sepsis is rare if abortion is provided along with intravenous antibiotics.²⁹⁵

A pre-viability PPRM patient may choose expectant management over abortion care, but they also may need to be admitted to an antepartum hospital unit, where a physician will regularly monitor for infection, labor, placental abruption, growth restriction, and other complications of pregnancy.²⁹⁶ Regular ultrasounds and tests may be necessary to ensure that the pregnant person and baby are not in distress. When abortion access was legal across the country, doctors in all states would typically offer to induce or perform a surgical abortion when faced with a pre-viability PPRM case.²⁹⁷ Particularly when the fetus is not viable, many patients opt to terminate the pregnancy.²⁹⁸ Termination is the standard of care according to ACOG.²⁹⁹ However, post-*Dobbs*, depending upon the laws in a given jurisdiction, a doctor might have to either postpone delivery while risking the health of the pregnant patient or deliver the baby early, attempting to treat the neonate in the neonatal intensive care unit.

3. Placental Abruption and Placenta Previa

Placental abruption occurs in pregnancy when the placenta, which delivers nutrients to and carries waste away from the fetus, completely or partially detaches from the uterine wall.³⁰⁰ If the abruption is partial and if the pregnancy is close to term, effects may be mild, including some bleeding for the pregnant patient.³⁰¹ However, severe placental abruption may cause extensive bleeding, uterine

293. *Id.*

294. *See id.*

295. McElrath, *supra* note 283.

296. *See id.* (“Management of these pregnancies [at the limit of neonatal viability] depends on patient-specific factors and preferences. These patients are admitted to the hospital for usual management of [PPROM] at the gestational age when they would want aggressive neonatal intervention.”).

297. *See* Kimberly Chernoby & Brian Acunto, *Pregnancy Complications After Dobbs: The Role of EMTALA*, 25 W.J. EMERGENCY MED. 79, 81 (2024).

298. *See generally* Elizabeth G. Clement, et al., *The Language of First-Trimester Nonviable Pregnancy: Patient-reported Preferences and Clarity*, 133 OBSTETRICS & GYNECOLOGY 149 (2019); *see also* *Facts are Important: Understanding and Navigating Viability*, ACOG, <https://www.acog.org/advocacy/facts-are-important/understanding-and-navigating-viability> [<https://perma.cc/82H4-UD3W>] (last visited Feb. 28, 2025).

299. *See* Kitchener, *supra* note 62; *see also* Am. Coll. of Obstetricians & Gynecologists, *Prelabor Rupture of Membranes: ACOG Practice Bulletin*, 135 OBSTETRICS & GYNECOLOGY e80, e88 (2020).

300. *See* Cande V. Ananth & Wendy L. Kinzler, *Acute Placental Abruption: Pathophysiology, Clinical Features, Diagnosis, and Consequences*, UP2DATE (July 3, 2024), <https://www.uptodate.com/contents/acute-placental-abruption-pathophysiology-clinical-features-diagnosis-and-consequences> [<https://perma.cc/U65U-X6RB>].

301. *See id.*

tenderness, and a non-reassuring fetal heart rate; two-thirds of abruptions are severe. Failure to deliver the fetus after severe abruption can cause significant maternal and fetal morbidity and mortality;³⁰² if the fetus is pre-viable, abortion care is therefore indicated.

Placenta previa is another condition in pregnancy that occurs when the placenta, rather than attaching to the upper portion or side of the uterus, attaches low in the uterus, covering the opening to the cervix (the internal cervical os).³⁰³ It often results in severe bleeding (both antepartum and postpartum) and, in extreme conditions, the need for blood transfusions or postpartum hysterectomy.³⁰⁴ In cases where bleeding is severe, a surgical abortion is necessary to save the patient's life regardless of the viability status of the fetus; neonatal mortality associated with preterm placenta previa is close to 50%.³⁰⁵

4. Pulmonary Hypertension

In pregnant persons with pulmonary hypertension (“PAH”), elevated pressure in the blood vessels connecting the heart and lungs puts immense strain on the body. During pregnancy, the heart is already working harder, and pulmonary hypertension can lead to severe heart failure, with a mortality rate between 12%–50% if pregnancy occurs under this condition.³⁰⁶ According to a study on outcomes for pregnant patients with PAH, even with treatment, mortality rates reached almost 16% within three months of labor. Accordingly, the study's authors conclude that “patients with PAH should . . . be advised against pregnancy.”³⁰⁷ In fact, many physicians will recommend contraceptives as a condition of treating PAH.³⁰⁸ Importantly, even when managed using modern medicine, the diagnosis of PAH in pregnancy is associated with high rates of maternal morbidity and mortality.³⁰⁹ When it comes to this condition, termination is often the only available option to save the life of the pregnant person.³¹⁰

302. *See id.*

303. *See* Charles J. Lockwood & Karen Russo-Stieglitz, *Placenta Previa: Epidemiology, Clinical Features, Diagnosis, Morbidity and Mortality*, UPTODATE (May 13, 2024), <https://www.uptodate.com/contents/placenta-previa-epidemiology-clinical-features-diagnosis-morbidity-and-mortality> [<https://perma.cc/9XHZ-CBDT>].

304. *Id.*

305. *See id.*

306. Wendy Hill et al., *Intimacy, Contraception, and Pregnancy Prevention in Patients with Pulmonary Arterial Hypertension: Are We Counseling Our Patients?*, PULMONARY CIRCULATION, Oct. 1, 2020, at 1, 2 (“Contraception is essential in patients with PAH to prevent pregnancy and potential teratogenicity related to specific PAH medications.”).

307. Jun Luo et al., *Pregnancy Outcomes in Patients with Pulmonary Arterial Hypertension: A Retrospective Study*, MEDICINE, June 5, 2020, at 1, 1.

308. Hill et al., *supra* note 306.

309. Stephanie R. Martin & Alexandra Edwards, *Pulmonary Hypertension and Pregnancy*, 134 OBSTETRICS & GYNECOLOGY 974, 974 (2019).

310. *See id.* at 979.

5. Preeclampsia

Preeclampsia is a particular form of high blood pressure that occurs in pregnancy, typically developing after 20 weeks of gestation.³¹¹ Preeclampsia poses a danger to the mother and the fetus because it raises blood pressure—this, in turn, restricts blood supply to the placenta, which supports the fetus.³¹² The only definitive treatment for preeclampsia is delivery.³¹³ If the onset of preeclampsia occurs pre-viability, continuing with the pregnancy may not be advisable due to high maternal morbidity and mortality rates and a high chance of fetal demise.³¹⁴ If the mother's life is at risk due to preeclampsia, surgical and medical abortion are typically offered, depending on the gestational age of the fetus and a patient's preference. In fact, delivery is the only way to resolve preeclampsia, and even then, there may already be some end-organ damage.³¹⁵

6. Antepartum Sepsis

Antepartum sepsis (sepsis during pregnancy) occurs when there is an infection in the gastrointestinal tract, lungs, urinary tract, or somewhere else in the body.³¹⁶ Sepsis is rare but is a significant cause of maternal morbidity and mortality.³¹⁷ Rapid administration of antibiotics and control of blood pressure using vasopressors (monitored in an ICU) may be necessary.³¹⁸ Sepsis of any origin during pregnancy can cause organ and placental dysfunction—it is one of the biggest contributors to maternal and fetal mortality.³¹⁹

7. Cervical Insufficiency

In a small percentage of pregnancies, there is a painless cervical dilation that can cause the amniotic sac to prolapse past the cervix.³²⁰ This places the pregnant person at risk of early fetal expulsion (either miscarriage or preterm birth)

311. Phyllis August & Baha M. Sibai, *Preeclampsia: Clinical Features and Diagnosis*, UPtODATE (July 29, 2024), <https://www.uptodate.com/contents/preeclampsia-clinical-features-and-diagnosis> [<https://perma.cc/6V6P-4A8P>].

312. *See id.*

313. Rachael Fox et al., *Preeclampsia: Risk Factors, Diagnosis, Management, and the Cardiovascular Impact on the Offspring*, 8 J. CLINICAL MED. 1625, 1633 (2019).

314. *Id.*

315. Errol R. Norwitz, *Preeclampsia: Antepartum Management and Timing of Delivery*, UPtODATE (May 31, 2024), <https://www.uptodate.com/contents/preeclampsia-antepartum-management-and-timing-of-delivery> [<https://perma.cc/SG3Z-45UT>].

316. *See* Christine C. Reardon & Felicia Chen, *Critical Illness During Pregnancy and the Peripartum Period*, UPtODATE (Dec. 5, 2024), <https://www.uptodate.com/contents/critical-illness-during-pregnancy-and-the-peripartum-period> [<https://perma.cc/E2FJ-7VPZ>].

317. *Id.*

318. *See id.*

319. *See id.*

320. *See* Vincenzo Berghella, *Cervical Insufficiency*, UPtODATE (July 15, 2024), <https://www.uptodate.com/contents/cervical-insufficiency> [<https://perma.cc/2RR8-7PNG>]; *see also* Megan Carpentier, “You Can’t Just Tell Someone to Go Home and Pass an 18-Week Fetus. That’s Not Safe.”, METEOR, <https://wearethemeteor.com/incompetent-cervix-obstetricians-for-reproductive-justice/> [<https://perma.cc/39PB-3BPV>] (last visited Feb. 28, 2025).

if not addressed.³²¹ If the cervix is just shortened and not open, the physician can perform a transvaginal cervical cerclage, which involves the placement of a synthetic suture or tape to mechanically strengthen the cervical os.³²² In some cases, because of the extent of surgical dilation, there is not much that can be done to close the cervix or prevent it from dilating more; sometimes part of the fetus is in the vagina, which limits efforts at closure.³²³ In other circumstances, the patient is showing signs of infection; the risk of infection is high in cervical insufficiency given that there is an “exposed membrane and bag of water in the vagina.”³²⁴ Typical treatment options for pre-viability cervical insufficiency that is not amenable to cerclage include medication abortion or D&C.³²⁵ The longer the person with cervical insufficiency or cervical incompetence remains pregnant, the higher the risk becomes of bad outcomes due to “infection, sepsis, bleeding, and hemorrhage.”³²⁶

8. *Early Pregnancy Loss and Miscarriage*

Early pregnancy loss is common, occurring in 10% of all clinically recognized pregnancies; most cases of pregnancy loss occur within the first trimester.³²⁷ Common symptoms of pregnancy loss are nonspecific and may include vaginal bleeding and uterine cramping.³²⁸ Before initiating treatment, it is important to distinguish early pregnancy loss from other early pregnancy complications—a thorough medical history, physical examination, transvaginal ultrasound, and serum β -hCG level quantification can be helpful in making a highly certain diagnosis.³²⁹

Expectant management is generally limited to gestations within the first trimester, and it is successful in achieving complete expulsion in 70%–80% of women.³³⁰ Medical management for early pregnancy loss (i.e., treatment with mifepristone and misoprostol) can be considered for women without infection, hemorrhage, severe anemia, or bleeding disorders who want to shorten the time to complete expulsion but who prefer to avoid surgical evacuation.³³¹ One challenge

321. Berghella, *supra* note 320.

322. Errol R. Norwitz, *Transvaginal Cervical Cerclage*, UPTODATE (Dec. 11, 2024), <https://www.uptodate.com/contents/transvaginal-cervical-cerclage> [<https://perma.cc/K2DW-XBN9>].

323. Carpentier, *supra* note 320.

324. *Id.*

325. *Id.*

326. *Id.*

327. Sarah Prager et al., *Pregnancy Loss (Miscarriage): Terminology, Risk Factors, and Etiology*, UPTODATE (Jan. 2, 2024), <https://www.uptodate.com/contents/pregnancy-loss-miscarriage-terminology-risk-factors-and-etiology> [<https://perma.cc/9X64-EY3Y>].

328. Sarah Prager et al., *Pregnancy Loss (Miscarriage): Clinical Presentations, Diagnosis, and Initial Evaluation*, UPTODATE (Nov. 15, 2024), <https://www.uptodate.com/contents/pregnancy-loss-miscarriage-clinical-presentations-diagnosis-and-initial-evaluation> [<https://perma.cc/W7AR-M39N>].

329. *Id.*

330. Sarah Prager et al., *Pregnancy Loss (Miscarriage): Description of Management Techniques*, UPTODATE (Nov. 12, 2024), <https://www.uptodate.com/contents/pregnancy-loss-miscarriage-description-of-management-techniques> [<https://perma.cc/TK95-E87H>].

331. *See id.*

with anti-abortion policies is that they will inevitably affect women who miscarry.³³² Women have already been denied access to miscarriage treatment as a result of state laws outlawing abortion.³³³

B. Implementing WEDGE

In *Dobbs*-relevant states, a workflow comprised of a dynamic protocol that incorporates a flowchart or other streamlined process to guide complex decision-making may be particularly useful in the setting of gestational emergencies for which abortion is the standard of care. Even in gestational emergencies, there are typically multiple treatment options to choose from, and the care team must identify an optimal course following an algorithm.³³⁴ Because “[m]any pregnant individuals are young and healthy,” they are often “able to compensate for severe physiological derangements and might not appear ill until very late in their course of critical illness.”³³⁵ With this in mind, hospitals in *Dobbs*-relevant states must support rapid and standardized decision-making about how and when to provide abortion care. “This could help physicians offer evidence-based care without concerns about legal jeopardy, thereby reducing delays and variation in patient care.”³³⁶

“All abortion bans include exceptions for the pregnant person’s life, but [most] states do not include nonfatal health risks.”³³⁷ Advocates in several of these states are taking action. A group of doctors and lawyers in Wisconsin is grappling with a newly revived 173-year-old law that prohibits abortion except to save the life of a pregnant person, attempting to define all the emergencies and conditions that might result in a pregnant person’s death.³³⁸ An Arizona hospital convened a similar task force, which recommends having a lawyer on call to aid doctors in determining whether a pregnant patient’s condition is sufficiently life threatening to justify an abortion.³³⁹ The hospital incorporated questions into its electronic medical forms to make the case in court that “patients who had abortions would have died without them.”³⁴⁰ The Louisiana Department of Health issued a declaration of emergency and an emergency rule after the passage of its abortion restriction, listing 25 different conditions that shall deem an unborn child “medically futile.”³⁴¹

Even when workflows are in place, physician autonomy must be protected, “both to determine what constitutes a medical emergency and to engage in shared decision-making with patients.”³⁴² “ACOG strongly reaffirms that it is critical for clinicians to be able to use and rely upon their expertise and medical judgment to

332. Belluck, *supra* note 15.

333. *Id.*

334. Bradford D. Winters et al., *Clinical Review: Checklists—Translating Evidence into Practice*, 13 *CRITICAL CARE* 210, 211 (2009).

335. MacDonald et al., *supra* note 79, at 1691.

336. *Id.* at 1692.

337. Reingold et al., *supra* note 3, at 1695.

338. Kate Zernike, *Medical Impact of Roe Reversal Goes Well Beyond Abortion Clinics, Doctors Say*, *N.Y. TIMES* (Sept. 10, 2022), <https://www.nytimes.com/2022/09/10/us/abortion-bans-medical-care-women.html> [<https://perma.cc/P9KB-DV87>].

339. *Id.*

340. *Id.*

341. 49 La. Reg. 218 (Feb. 20, 2023).

342. MacDonald et al., *supra* note 79, at 1692.

determine the treatments indicated for each clinical situation and level of care.”³⁴³ Therefore, any workflow or protocol:

[T]hat does not center a clinician’s ability to make and act upon appropriate medical judgments in each unique situation will almost certainly result in refusal and denial of care ACOG asserts that doctors and other health care professionals must be able to intervene when they feel it is medically necessary and [to] provide abortion care before a patient is critically ill. Hospitals and other medical institutions should not require [a patient to] meet[] particular criteria (e.g., admission to the ICU or [presentation with] unstable vital signs) before allowing clinicians to proceed with abortion care.³⁴⁴

There is also a need for cooperation and varied checklists. The Keystone ICU Checklist highlights the importance of advocates within the organization, sustained focus on goals, buy-in from central administration, incentives for cooperation, open channels of communication, audit, and feedback.³⁴⁵ Bosk and colleagues have noted the variability in checklists implemented in ICUs, pointing out that “it would be a mistake to say there was one ‘Keystone checklist’ Each ICU, informed by evidence and a prototype, was encouraged to develop their own checklist to fit their unique barriers and culture.”³⁴⁶

ACOG recommends that hospitals and health care systems help clinicians make decisions during gestational emergencies and designate a representative who can be on call as questions arise in real time.³⁴⁷ When possible, a lawyer, a clinician with family planning expertise, and a maternal–fetal medicine specialist should be included as part of a hospital’s emergency consultation service for clinicians.³⁴⁸ Hospitals should, to the extent possible, provide legal protection for those serving in such an advisory capacity, similar to that provided for credentialing committees, ethics committees, and maternal mortality review committees.

C. Applying the Protocols

How would WEDGE work in practice? ACOG offers several practice bulletins that may provide initial frameworks for the workflows, with additional input from physicians, hospital administrators, lawyers, ethicists, case managers, and other personnel involved in clinical care coordination. Take early pregnancy

343. *Understanding and Navigating Medical Emergency Exceptions in Abortion Bans and Restrictions*, AM. COLL. OF OBSTETRICIANS & GYNECOLOGISTS (Aug. 15, 2022), <https://www.acog.org/news/news-articles/2022/08/understanding-medical-emergency-exceptions-in-abortion-bans-restrictions> [<https://perma.cc/KWV6-V296>].

344. *Id.*

345. Bosk et al., *supra* note 189, at 445.

346. *Id.*

347. *See Questions to Help Hospital Systems Prepare for the Widespread and Devastating Impacts of a Post-Roe Legal Landscape*, AM. COLL. OF OBSTETRICIANS & GYNECOLOGISTS (Nov. 9, 2023), <https://www.acog.org/news/news-articles/2022/06/questions-to-help-hospital-systems-prepare-for-the-widespread-and-devastating-impacts-of-a-post-roe-legal-landscape> [<https://perma.cc/NLL4-J696>].

348. *Id.*

loss, for example.³⁴⁹ Thorough documentation may require ultrasound and clear documentation of other criteria justifying the diagnosis.

Once the diagnosis of early pregnancy loss or miscarriage is made, a treatment decision tree is put in place. The ACOG *Protocol for the Medical Management of Early Pregnancy Loss* provides a strong starting point.³⁵⁰ If medical management fails, the patient may continue to opt for expectant management or may need to undergo a D&C procedure.³⁵¹ Because D&C often falls under the definition of “abortion,” careful documentation of need may be needed to justify its use in these patients.³⁵²

D. Limitations and Considerations for WEDGE

One clear limitation of WEDGE is that it is not meant to be a rigid protocol. “At the outset, the [WHO] stated very clearly that [its surgical] checklist should not be comprehensive, [thus] encouraging modifications and additions to make it fit into local practice.”³⁵³ The Keystone ICU Checklist team noted that adaptability and variation are keys to success.³⁵⁴ Though more a feature than a bug, the ever-changing nature of the workflow may not provide the sense of security a physician needs to avoid unnecessary delays in care because of decision paralysis or other factors. Other important limitations exist that could affect the viability of WEDGE.

1. EMTALA Protections Under Siege

The U.S. Department of Health and Human Services (“HHS”) requires hospitals and physicians in all states to provide necessary emergency abortion services to comply with the 1986 Emergency Medical Treatment and Active Labor Act (“EMTALA”).³⁵⁵ This legislation stipulates:

If a physician believes that a pregnant patient presenting at an emergency department is experiencing an emergency medical condition . . . and that abortion is the stabilizing treatment . . . the physician must provide that treatment. When a state law prohibits abortion . . . that state law is preempted.³⁵⁶

349. See generally *Early Pregnancy Loss Practice Bulletin*, AM. COLL. OF OBSTETRICIANS & GYNECOLOGISTS (2021), <https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2018/11/early-pregnancy-loss> [<https://perma.cc/AH76-7GK9>].

350. See *id.* (referencing Box 1).

351. *Id.*

352. See Chernoby & Acunto, *supra* note 297, at 81.

353. Arvid S. Haugen et al., *Impact of the World Health Organization Surgical Safety Checklist on Patient Safety*, 131 ANESTHESIOLOGY 420, 420 (2019).

354. See Bosk et al., *supra* note 189, at 445.

355. An “emergency medical condition” is “a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that . . . the absence of immediate medical attention [could reasonably be expected] to result in—(i) placing the health of the individual in serious jeopardy, (ii) serious impairment to bodily functions, or (iii) serious dysfunction of any bodily organ or part.” 42 U.S.C. § 1395w-22(d)(3)(B).

356. MacDonald et al., *supra* note 79, at 1691 (quoting DEP’T HEALTH & HUMAN SERVS., *Reinforcement of EMTALA Obligations Specific to Patients Who Are Pregnant or Are Experiencing Pregnancy Loss (Updated July 2022)*, CTRS. FOR MEDICARE & MEDICAID

Stabilizing the patient's condition involves providing the medical treatment that is necessary to assure, within reasonable medical probability, that no material deterioration of the condition is likely to result from or occur during the transfer of the individual.³⁵⁷

EMTALA's preemption of state law could also be enforced by individual physicians in a variety of ways, potentially including as a defense to a state enforcement action, in a federal suit seeking to enjoin threatened enforcement, or, when a physician has been disciplined for refusing to transfer an individual who had not received the stabilizing care the physician determined was appropriate, under the statute's retaliation provision[.]³⁵⁸

On July 11, 2022, HHS sent a letter assuring physicians that EMTALA will continue to be enforced.³⁵⁹ "Therefore, if you live in a state with no health exception to a ban on abortion . . . or [in] one with a health exception that is narrower than the EMTALA language (arguably all the others), legally your emergency department or emergency obstetrics service should follow EMTALA."³⁶⁰ Katie Watson advises physicians in states with no exceptions or narrow exceptions to "us[e] the discretion that Congress and state legislatures have given you to interpret the vague parts of EMTALA or states' life and health exceptions in a way that maximizes patient benefit."³⁶¹ In August 2022, a federal district court in Texas issued a preliminary injunction against EMTALA enforcement in Texas: that decision was affirmed by the Fifth Circuit Court of Appeals in January 2024.³⁶² A subsequent case challenging an Idaho state law that conflicted with EMTALA worked its way up to the U.S. Supreme Court, where the case was dismissed as improvidently granted.³⁶³ Notably, the decision does not preclude a future challenge. Watson notes that civil penalties under EMTALA are unlikely to be imposed while "a prochoice administration is in the White House,"³⁶⁴ though that is likely to change under President Donald J. Trump's administration.

Another limiting consideration is that it may be impossible to create a fully-fledged checklist that could account for every possibility and protect doctors in every situation. "ACOG asserts that it is impossible to create an inclusive list of

SERVS. (July 11, 2022), <https://www.cms.gov/medicareprovider-enrollment-and-certificationsurveycertificationgeninfopolicy-and-memos-states-and/reinforcement-emtala-obligations-specific-patients-who-are-pregnant-or-are-experiencing-pregnancy-0> [<https://perma.cc/J2BV-WAC2>].

357. See Chernoby & Acunto, *supra* note 297, at 82.

358. See Letter from Xavier Becerra, Sec'y, Dep't Health & Hum. Servs., to Health Care Providers (July 11, 2022), <https://www.hhs.gov/sites/default/files/emergency-medical-care-letter-to-health-care-providers.pdf> [<https://perma.cc/J2BV-WAC2>].

359. See generally *id.*

360. Katie Watson, *Dark-Alley Ethics—How to Interpret Medical Exceptions to Bans on Abortion Provision*, 388 NEW ENG. J. MEDICINE 1240, 1242 (2023).

361. *Id.*

362. See generally *Texas v. Becerra*, 623 F. Supp. 3d 696 (N.D. Tex. 2022), *aff'd*, 89 F.4d 529 (5th Cir. 2024).

363. See *Moyle v. United States*, 603 U.S. 324, 325 (2024).

364. Watson, *supra* note 360, at 1242.

conditions that qualify as ‘medical emergencies.’ In addition, it is dangerous to attempt to create a finite list of conditions to guide the practice of clinicians attempting to navigate their state’s abortion restrictions.”³⁶⁵

An exhaustive list of this type is neither feasible nor advisable for various reasons:

[(1)] The practice of medicine is complex and requires individualization—it cannot be distilled down to a one-page document or list that is generalizable for every situation[; (2)] no single patient’s condition progresses at the same pace[; (3)] a patient may experience a combination of medical conditions or symptoms that, together, become life-threatening[; (4)] pregnancy often exacerbates conditions or symptoms that are stable in nonpregnant individuals[; (5)] there is no uniform set of signs or symptoms that constitute an “emergency”[; and (6)] patients may be lucid and appear to be in stable condition but demonstrate deteriorating health[.]³⁶⁶

Another consideration is that statutory construction and interpretation could render this process moot. With regard to this consideration, Watson asserts:

[P]roviding standard medical care to people whose health or life is threatened by their pregnancy is neither civil disobedience nor covert lawbreaking; it isn’t even resistance. It is wise interpretation of existing law as applied to specific facts, fidelity to clinicians’ fiduciary duty to stay focused on patients in medical need, and acceptance that choices of historic consequence rarely come with zero risk.³⁶⁷

Legislative intent and rules of statutory construction may also support standard-of-care treatment decisions in many cases.³⁶⁸ Many statutes intend to give physicians case-by-case discretion, and some states explicitly include that discretion in the statute.³⁶⁹ For instance, Missouri’s law defines “medical emergency” as “a condition which *based on reasonable medical judgment*, so complicates the condition of a pregnant woman.”³⁷⁰ In the case of *Kate Cox*, the Texas Supreme Court held that the “reasonable patient standard” could not be met by a physician’s “good faith belief” that abortion was necessary.³⁷¹

With this in mind, sound medical decision-making could come down to the promise of legal representation by the hospital if the concern is a doctor’s confidence in their medical opinion and choices. Therefore, workflows—endorsed by hospital

365. *Understanding and Navigating Medical Emergency Exceptions in Abortion Bans and Restrictions*, *supra* note 343.

366. *Id.*

367. Watson, *supra* note 360, at 1240.

368. *Id.* at 1243.

369. *Id.*; see also Laurie Sobel et al., *Who Decides When a Patient Qualifies for an Abortion Ban Exception? Doctors vs. the Courts*, KAISER FAM. FOUND. (Dec. 14, 2023), <https://www.kff.org/policy-watch/who-decides-when-patient-qualifies-for-abortion-ban-exception/> [<https://perma.cc/DV8B-8VVD>].

370. Watson, *supra* note 360, at 1243 (emphasis added).

371. Sobel et al., *supra* note 369.

administration and backed by promises of legal representation for physicians who make good faith efforts to follow the established workflow—may be the best path forward.

2. Mifepristone Access

Another recent wrinkle in the status of abortion care, even in states that have pro-choice policies in place, is the tenuous legal status of mifepristone.³⁷² In April 2023, a Texas judge issued a temporary stay on both the drug's FDA approval and the FDA's relaxing of the drug's risk evaluation and mitigation strategies ("REMS") programs (a decision upheld by the Fifth Circuit Court of Appeals five days later).³⁷³ The Supreme Court, seeking to avoid the chaos that may ensue from abrupt disruption in access to mifepristone, blocked the injunction to allow the case to proceed through the appeals process.³⁷⁴ On appeal, the Fifth Circuit doubled down, returning mifepristone dosing to its previously higher dose (despite demonstrations of efficacy at lower doses) while restoring REMS restrictions that the agency deemed unnecessary to assure safety (requiring supervised administration of the drug at a physician's office).³⁷⁵ After granting certiorari in January 2024, the Supreme Court dismissed the case in June for lack of standing.³⁷⁶ By October 2024, three states—Missouri, Kansas, and Idaho—had filed an amended suit to revive the case.³⁷⁷

Given that the Supreme Court may still invalidate mifepristone's approval status,³⁷⁸ hospitals and health care systems must have workflows in place that provide suitable alternative care models when mifepristone would have otherwise been indicated. Health education efforts should also include counseling patients on appropriate care during gestational emergencies, with full disclosure that the preferred method of treatment is no longer available. As state legislators and courts continue to restrict the avenues available to doctors to administer lifesaving care, the need for protocols and workflows will become increasingly urgent. The stories of

372. Daniel G. Aaron et al., *Court Intrusion into Science and Medicine—the Mifepristone Decisions*, 329 J. AM. MED. ASS'N 1735, 1735–36 (2023).

373. *Id.* at 1735.

374. *Id.* at 1736.

375. Daniel G. Aaron et al., *Fifth Circuit Second-Guesses the FDA's Scientific Judgment: A Dangerous Precedent*, HEALTH AFFS. FOREFRONT (Oct. 6, 2023), <https://www.healthaffairs.org/content/forefront/fifth-circuit-second-guesses-fda-s-scientific-judgment-dangerous-precedent> [<https://perma.cc/WNM6-SNPX>].

376. *FDA v. All. for Hippocratic Med.*, 602 U.S. 367, 374 (2024).

377. John Fritze, *Conservative States Kick Off New Fight to Limit Access to Abortion Pill Mifepristone Despite Supreme Court Decision*, CNN (Oct. 16, 2024, 6:18 PM), <https://www.cnn.com/2024/10/16/politics/mifepristone-abortion-lawsuit-idaho-missouri-kansas-supreme-court/index.html> [<https://perma.cc/YMQ7-GBHE>].

378. Dismissal on standing grounds does not preclude other plaintiffs from bringing suit. States are hoping that their role as health care payers might merit standing to challenge mifepristone's approval. *See id.*

women who have been irreparably harmed make it clear that such measures are already overdue.³⁷⁹

CONCLUSION

Dr. Jack Resneck, physician and president of the American Medical Association, called the *Dobbs* decision “an egregious allowance of government intrusion into the medical examination room, a direct attack on the practice of medicine and the patient-physician relationship.”³⁸⁰ The governmental intrusion is more than incidental. The very professionals best equipped to make patient treatment choices are not only explicitly distrusted but are criminalized by abortion-ban laws.³⁸¹ Doctors who had been free to concern themselves with patient welfare must worry about their *own* welfare in a post-*Dobbs* regime.³⁸² The direct result is that patients who require abortion care are deprived of that care until their lives hang in the balance.³⁸³ Meanwhile, medical professionals are grappling with how to fulfill their Hippocratic Oath in contexts where their hands are metaphorically bound.³⁸⁴

The untenable position providers face in *Dobbs*-relevant states has forced many doctors to reconsider their careers or to relocate to more progressive regions of the country where they can practice medicine without fear of prosecution.³⁸⁵ This,

379. See *New Abortion Laws Changed Their Lives. 8 Very Personal Stories*, NPR (June 23, 2023, 5:00 AM), <https://www.npr.org/sections/health-shots/2023/06/23/1183878942/abortion-bans-personal-stories-dobbs-anniversary> [https://perma.cc/C4B6-XT7F].

380. Resneck, *supra* note 1.

381. See *id.*

382. See Whitney Arey et al., *A Preview of the Dangerous Future of Abortion Bans — Texas Senate Bill 8*, *NEW ENG. J. MEDICINE* 388, 389 (2022) (“The climate of fear created by SB8 has resulted in patients receiving medically inappropriate care.”).

383. See *id.* at 388 (discussing a study of 25 providers who said, “SB8 has had a chilling effect on a broad range of health care professionals, adversely affecting patient care and endangering people’s lives”).

384. Doctor Matthew Wynia writes that physicians wonder:

Should they support establishing committees to decide when a pregnant person’s life is in sufficient danger to warrant an abortion? Should they advocate for allowing patients to travel elsewhere for care? Or should they encourage their members to provide evidence-based medical care, even if doing so means accepting — *en masse* — fines, suspensions of licensure, and potential imprisonment? How long could a dangerous state law survive if the medical profession, as a whole, refused to be intimidated into harming patients, even if such a refusal meant that many physicians might go to jail?

Matthew K. Wynia, *Professional Civil Disobedience — Medical-Society Responsibilities After Dobbs*, 387 *NEW ENG. J. MEDICINE* 959, 960 (2022) (emphasis added).

385. Alice Miranda Ollstein, *Abortion Doctors’ Post-Roe Dilemma: Move, Stay or Straddle State Lines*, *POLITICO* (June 29, 2022, 4:30 AM), <https://www.politico.com/news/2022/06/29/abortion-doctors-post-roe-dilemma-move-stay-or-straddle-state-lines-00040660> [https://perma.cc/9SH3-PWRF]; see also Laura Ungar, *Why Some Doctors Stay in US States With Restrictive Abortion Laws and Others Leave*, *AP NEWS* (June 22, 2023, 4:16 PM), <https://apnews.com/article/dobbs-anniversary-roe-v-wade-abortion-obgyn-699263284cced4bd421bc83207678816> [https://perma.cc/QH8U-KXJF].

in turn, has decreased the availability and accessibility of comprehensive reproductive health care, creating reproductive care deserts and further endangering the health of women in these states.³⁸⁶ The fear-induced scarcity of abortion providers exacerbates health inequalities, as marginalized communities and individuals with limited resources bear the brunt of the restrictions.³⁸⁷

For those who worry about the impact of ambiguous laws on patient care, one theoretical solution is to push to refine laws using findings based upon health data collection and analysis. After all, doctors and public health officials have long relied on evidence-based health care delivery.³⁸⁸ But data that was already scant is increasingly elusive. Abortion, even when medically necessary to preserve the life or health of a woman, has long been stigmatized, resulting in a certain level of secrecy around the procedure.³⁸⁹ Today, in *Dobbs*-relevant states where research is most needed, robust data collection is hampered by doctor and patient concern over potential prosecution.³⁹⁰ The protections afforded by the Health Insurance Portability and Accountability Act (“HIPAA”) can be circumvented by laws and court decisions that make a fetus or even an embryo a “child,” creating reporting obligations and privacy exceptions.³⁹¹

Considering existing realities, developing practice protocols and workflows is an efficient and effective solution. Guidelines modeled on established

386. Ollstein, *supra* note 385; *see also* Ungar, *supra* note 385.

387. *See* Michele W. Berger, *Overturing Roe Disproportionately Burdens Marginalized Groups*, PENN TODAY (June 30, 2022), <https://penntoday.upenn.edu/news/overturing-roe-abortion-bans-disproportionately-burden-traditionally-marginalized-groups> [<https://perma.cc/65BD-DEHL>]. HHS has stated that federal law—and specifically EMTALA, which protects the right to emergency medical care—preempts state abortion laws, rendering them void when a patient’s life is at risk. *See* DEP’T HEALTH & HUM. SERVS., CTRS. FOR MEDICARE & MEDICAID SERVS., REINFORCEMENT OF EMTALA OBLIGATIONS SPECIFIC TO PATIENTS WHO ARE PREGNANT OR ARE EXPERIENCING PREGNANCY LOSS (QSO-21-22-HOSPITALS- UPDATED JULY 2022) (2022), <https://www.cms.gov/medicareprovider-enrollment-and-certificationsurveycertificationgeninfopolicy-and-memos-states-and/reinforcement-emtala-obligations-specific-patients-who-are-pregnant-or-are-experiencing-pregnancy-0> [<https://perma.cc/J2BV-WAC2>]. This means that providers are protected “when offering legally-mandated, life-or health-saving abortion services in emergency situations,” according to the HHS statement. *See Following President Biden’s Executive Order to Protect Access to Reproductive Health Care, HHS Announces Guidance to Clarify that Emergency Medical Care Includes Abortion Services*, NEWSROOM (July 11, 2022), <https://www.cms.gov/newsroom/press-releases/following-president-bidens-executive-order-protect-access-reproductive-health-care-hhs-announces> [<https://perma.cc/ZK6A-4LCB>].

388. *See generally* Jeffrey A. Claridge & Timothy C. Fabian, *History and Development of Evidence-Based Medicine*, 95 WORLD J. SURGERY 547 (2005).

389. Anya E. R. Prince, *Reproductive Health Surveillance*, 64 B.C. L. REV. 1077, 1079–80 (2023).

390. *See id.* at 1117.

391. State mandates requiring health care providers to disclose instances of suspected child abuse permitted by HIPAA could, under state law, include conduct during pregnancy. *See Summary of the HIPAA Privacy Rule*, U.S. DEP’T. HEALTH & HUM. SERVS., <https://www.hhs.gov/hipaa/for-professionals/privacy/laws-regulations/index.html> [<https://perma.cc/F33Z-NV3R>] (Oct. 19, 2022).

protocols with proven track records are likely to be well received, particularly by physicians in high-risk OB/GYN practices who are most likely to experience hurdles in administering appropriate patient care. Adoption of clear protocols is not only likely to ease the concerns of individual practitioners in specific cases, but the practice is also likely to gain momentum as it is increasingly widely adopted. As law professor James Gibson notes, “[M]edicine is subject to informational cascades: the more physicians that adopt a new procedure, the greater the chance that other physicians will discount any individual misgivings and follow the herd.”³⁹² The creation of consistent external decision tools will allow for heuristic decision-making that optimizes, rather than hinders, the administration of care. Ultimately, relieving physicians from the burden of untethered choice in these risk-laden contexts is the most promising avenue for minimizing harms to both patients and their doctors.

392. James Gibson, *Doctrinal Feedback and (Un)reasonable Care*, 94 VA. L. REV. 1641, 1670 (2008).