SAINT LOUIS UNIVERSITY SCHOOL OF LAW
Legal Studies Research Paper Series

No. 2024-08

PHYSICIAN DECISION MAKING UNDER UNCERTAINTY IN A POST-DOBBS AMERICA

Molly J. Walker Wilson
Saint Louis University-School of Law

Michael S. Sinha
Saint Louis University-School of Law

Working Paper
accepted for publication by Arizona Law Review

PHYSICIAN DECISION MAKING UNDER UNCERTAINTY IN A POST-DOBBS AMERICA

Molly J. Walker Wilson[1] & Michael Sinha[2]

Abstract

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, including our home state: Missouri. 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 paper will identify the characteristics of these treatment situations that interact 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.

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.*[3]

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 women and their doctors. *Dobbs v.*

[1] JD, PhD, Professor of Law, Associate Dean of Research, Saint Louis University School of Law
[2] MD, JD, MPH, Assistant Professor of Law, Saint Louis University School of Law
[3] Jack Resneck, Jr. M.D. President, American Medical Association AMA Press Release, *Ruling an Egregious Allowance of Government Intrusion into Medicine* (June 24, 2022)(https://www.ama-assn.org/press-center/press-releases/ruling-egregious-allowance-government-intrusion-medicine).

Jackson Women's Health Organization altered the legal landscape regarding abortion by reversing *Roe v. Wade* and *Planned Parenthood of Southeastern Pennsylvania v. Casey*, removing federal protection of the right to abortion. The *Dobbs* opinion endowed states with the authority to ban abortion at all stages of pregnancy without requiring states to demonstrate that such restrictions do not pose a risk of harm to pregnant women,[4] and to enforce bans with civil and criminal sanctions. The resulting patchwork of abortion laws across the country fundamentally altered how doctors may treat pregnant patients with high-risk pregnancy complications. 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.[5] While exceptions to bans exist in the fourteen abortion-ban states[6], the exceptions are vague and have not been tested or interpreted by courts. Meanwhile, penalties for violating the bans target physicians and are not limited to practitioners who willfully violate the laws. A doctor's mistake in interpreting an exception could result in subjecting her to penalties ranging from life in prison[7] to loss of medical licensure and fines of up to $10,000.[8]

Consideration of the decision-making treatment context makes it easy to understand why patients are suffering harms in states where *Dobbs* led to bans (hereinafter "*Dobbs*-relevant states"). Conditions that arise in pregnancy can range from fairly benign bleeding[9] to life-threatening hemorrhaging and sepsis.[10] The emergent cases can change rapidly from one in which abortion care would not meet an exception to one in which even immediate termination of the pregnancy may not assure full recovery.[11] Furthermore, the symptoms indicating the necessity of abortion care may not

---

[4] 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." Dobbs v. Jackson Women's Health Organization, 597 U. S. ____ 77 (2022).

[5] The Kaiser Family Foundation has reported that "In 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." https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/

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;
- physicians withholding care due to ambiguous and conflicting laws, even where exceptions to bans exist.

[6] Mabel Felix, Laurie Sobel, and Alina Salganicoff A Review of Exceptions in State Abortion Bans: Implications for the Provision of Abortion Services, Kaiser May 2023 (https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/) (summarizing abortion ban exceptions and the difficulty in their interpretation.)

[7] Tex. Health & Safety Code §§ 170A.001-7

[8] *See e.g.,* Ark. Code Ann. §5-61-304, 14, Tex. SB 8, 2017

[9] "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. "

[10] See Part II.

[11] As one OB/GYN wrote in the New England Journal of Medicine, "it'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 … will 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

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. 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 at which care can be life-saving. In other instances, the delay in care may leave lasting damage to an organ system, and particularly to a patient's future reproductive capacity.

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* moved 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. When human-beings are tasked with making choices under uncertainty, they engage in satisficing, a term coined by Herbert Simon in the 1940s[12] and refined in later papers.[13] Simon, and many others who followed,[14] 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.[15] Because imagining the potential for bad outcomes triggers strong negative emotions, actors tend to be risk-avoidant, even to the point of irrationality.[16] When avoiding personal risks puts others in danger, a need to maintain a positive self-image leads to motivated reasoning, during which

---

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*, NEW ENGL J MEDICINE 2061, 2061-2062 (2022).

[12] Simon, Herbert A. (1947). Administrative Behavior: a Study of Decision-Making Processes in Administrative Organization (1st ed.). New York: Macmillan. OCLC 356505. *See,* Reva Brown (2004), "Consideration of the origin of Herbert Simon's theory of "satisficing" (1933-1947)", Management Decision, Vol. 42 No. 10, pp. 1240-1256. https://doi.org/10.1108/00251740410568944

[13] See e.g., Simon, Herbert A. (1956). "Rational Choice and the Structure of the Environment" (PDF). Psychological Review. 63 (2): 129–138. CiteSeerX 10.1.1.545.5116. doi:10.1037/h0042769. PMID 13310708. S2CID 8503301. (page 129: "Evidently, organisms adapt well enough to 'satisfice'; they do not, in general, 'optimize'."; page 136, See also, Herbert A. Simon, "Invariants of Human Behavior." 41 Annual Review of Psychology, 1-19 (1990); Herbert Simon (1955). "A Behavioral Model of Rational Choice." The Quarterly Journal of Economics, 69(1), 99-118.

[14] Daniel Kahneman & Amos Tversky, "Prospect Theory: An Analysis of Decision under Risk." Econometrica, 47(2), 263-292 (1979). Gerd Gigerenzer & Goldstein, D.G. "Reasoning the Fast and Frugal Way: Models of Bounded Rationality." Psychological Review, 103(4), 650-669 (1996); Amos Tversky & Daniel Kahneman "The Framing of Decisions and the Psychology of Choice." Science, 211(4481), 453-458 (1981); Christine Jolls, Cass R. Sunstein, and Richard Thaler. "A behavioral approach to law and economics." 50 Stan. L. Rev. 1471 (1997); Richard H. Thaler & Cass R. Sunstein "Nudge: Improving Decisions About Health, Wealth, and Happiness." (2008). Kahneman, D. (2003). "Maps of Bounded Rationality: Psychology for Behavioral Economics." The American Economic Review, 93(5), 1449-1475. Thaler, R.H., & Sunstein, C.R. (2008). "Nudge: Improving Decisions About Health, Wealth, and Happiness." Yale University Press, New Haven, CT.

[15] The availability heuristic and availability cascades are discussed in Part II infra.

[16] *See id.*

an individual unconsciously constructs reasons for why preferred choices are justified.[17] And when faced with risky choices, humans prefer inaction to action.[18] In the abortion-care context, skilled, well-meaning physicians find themselves in positions where the evidence and best practices are at odds with the laws that governs their treatment decisions. Forced to decide between two risky options, behavioral research findings suggest that physicians will too often err on the side of withholding necessary treatment.

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 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 that 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 just such a protocol is the Advanced Cardiac Life Support (ACLS), used to diagnose and treat cardiac patients in emergency medicine settings. 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.[19] 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 administration, 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 providing 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. 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 abortion-ban (*Dobbs*-relevant) states. Part III introduces the concept of

[17] 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 the over-confidence bias in 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 Part __ infra.
[18] Inertia and the status quo bias are discussed in Part ___ infra.
[19] *See infra* Section IV

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.

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.[20] Patients took into consideration their overall health, the risks and benefits of the procedure, and their own values.[21] For example, in miscarriage management, abortion was medically indicated under certain circumstances.[22] These could include a pre-viable premature rupture of membranes or a first-trimester septic miscarriage.[23] Once a doctor examined his or 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.[24] The decision centered on informed consent and informed choice to ensure the patient knew all appropriate medical options.[25]

In a post-*Roe*, but pre-*Dobbs* world, doctors made their own risk and benefits calculus to determine what kind of abortion services, if at all, that they would provide.[26] 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 antiabortion movement.[27] "Continued commitment to providing abortion after legalization came at a considerable price."[28] Over the years, this harassment included fire bombings, death threats, stalking incidents, shootings, and murders.[29] Landlords feared physical damage to their buildings and at times refused to rent to doctors providing abortion care.[30] Hospitals closed their abortion services to avoid the controversy and threats.[31] But with the protection

[20] Maria Phillis, David N. Hackney & Tani Malhotra, *The urgent need for physician-led abortion advocacy*, AM. J. OF OBSTETRICS & GYNECOLOGY, 1, 3 (2023).
[21] *Id. See also,* Rubin, Rita. "How abortion bans could affect care for miscarriage and infertility." *JAMA* 328.4 (2022): 318-320.
[22] Lori Freedman, Uta Landy & Jody Steinauer, *When There's a Heartbeat: Miscarriage Management in Catholic-Owned Hospitals*, 98 AM. J. OF PUBLIC HEALTH, 1774, 1775 (2008).
[23] *Id.*
[24] *Id.*
[25] Lori Freedman, Uta Landy & Jody Steinauer, *When There's a Heartbeat: Miscarriage Management in Catholic-Owned Hospitals*, 98 AM. J. OF PUBLIC HEALTH, 1774, 1775 (2008).
[26] Carole Joffe, DOCTORS OF CONSCIENCE: THE STRUGGLE TO PROVIDE ABORTION BEFORE AND AFTER ROE V. WADE, ix-x, (Beacon Press, 1st ed, 1995).
[27] *Id.*
[28] Id.
[29] Id.
[30] Joffe, *supra* not 24 at 2.
[31] Id.

of *Roe,* doctors did not face the kind of criminal conundrum they face today in a post-*Dobbs* landscape.[32]

States immediately passed legislation regulating abortion following the *Dobbs* opinion.[33] Texas implemented Senate Bill 8, which outlawed abortions after roughly six weeks of pregnancy.[34] In the year after its passage, the birthrate in the state rose by 4.7%, while birthrates across the country only increased by 0.2%.[35] Research has shown, however, that legal abortions increased since 2020.[36] Data from the Guttmacher Institute found that thousands of women facing restrictions in their home states have crossed state lines to obtain abortions.[37] The rise in abortions was most apparent in states that border those with total abortion bans, such as Illinois, Kansas, and New Mexico.[38] 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.[39]

Abortion is currently banned in 14 states and others have severely restricted access to abortion.[40] 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.[41] All abortion bans contain exceptions to either "prevent the death" or "preserve the life" of the pregnant person.[42] These can create confusion for doctors without specific definitions or standards for determining how much risk of death is necessary.[43] Many bans also include exceptions to preserve the health of the pregnant

---

[32] Carole Joffe, DOCTORS OF CONSCIENCE: THE STRUGGLE TO PROVIDE ABORTION BEFORE AND AFTER ROE V. WADE, ix-x, (Beacon Press, 1st ed, 1995).
[33] Maria Phillis, David N. Hackney & Tani Malhotra, *The urgent need for physician-led abortion advocacy*, AM. J. OF OBSTETRICS & GYNECOLOGY, 1, 2 (2023).
[34] Caroline Kitchener, Rachel Roubein, Andrew Ba Tran, Caitlin Gilbert & Hannah Dormido, *A fragile new phase of abortion in America*, WASHINGTON POST (June 22, 2023). https://www.washingtonpost.com/politics/interactive/2023/roe-v-wade-ruling-one-year-anniversary
[35] Id.
[36] Amy Schoenfeld Walker & Allison McCann, *Abortions Rose in Most States this Year, New Data Shows*, NEW YORK TIMES (Sep. 7, 2023). https://www.nytimes.com/interactive/2023/09/07/us/abortion-data-bans-laws.html
[37] Guttmacher Institute, *New Data Show that Interstate Travel for Abortion Care in the United States Has Doubled Since 2020*, (Dec. 7, 2023). https://www.guttmacher.org/news-release/2023/new-data-show-interstate-travel-abortion-care-united-states-has-doubled-2020
[38] Id.
[39] Society of Family Planning, *#WeCount Report,* (June 15, 2023), https://societyfp.org/wp-content/uploads/2023/06/WeCountReport_6.12.23.pdf.
[40] Kaiser Family Foundation, *Overview of Exceptions in State Abortion Bans: Implications for the Provision of Abortion Services*, (May 18, 2023). https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/
[41] Id.
[42] Id.
[43] Maria Phillis, David N. Hackney & Tani Malhotra, *The urgent need for physician-led abortion advocacy*, AM. J. OF OBSTETRICS & GYNECOLOGY, 1, 3 (2023). *See also* https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/

person.[44] Some states ban abortion unless "there is a serious risk of substantial and irreversible impairment of a major bodily function."[45] However, only Arizona's ban defines the bodily functions that are considered "major."[46] Other states neglect to define that term or what a "substantial impairment" would include.[47] Health and life exceptions have generally found to be unworkable and prevent doctors from practicing evidence-based medicine.[48] The vague language puts physicians in a difficult place when they are working in an emergency situation, leaving the decision to lawyers for the institution, 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.[49] 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.[50] The vague terminology surrounding the laws makes it more dangerous.[51] 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.[52] A "detectable fetal heartbeat," included in many abortion statutes, is a disputed medical term.[53] 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.[54] 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—demonstrates the changed decision-making landscape between doctor and patient.[55]

---

[44] Kaiser Family Foundation, *Overview of Exceptions in State Abortion Bans: Implications for the Provision of Abortion Services*, (May 18, 2023). https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/

[45] *Id.*

[46] *Id.*

[47] *Id.*

[48] Kaiser Family Foundation, *Overview of Exceptions in State Abortion Bans: Implications for the Provision of Abortion Services*, (May 18, 2023). https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/

[49] Rubin, supra note 19 at 319-320.

[50] Maria Phillis, David N. Hackney & Tani Malhotra, *The urgent need for physician-led abortion advocacy*, AM. J. OF OBSTETRICS & GYNECOLOGY, 1, 2 (2023).

[51] *Id.*

[52] Kaiser Family Foundation, *Overview of Exceptions in State Abortion Bans: Implications for the Provision of Abortion Services*, (May 18, 2023). https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/

[53] Colbi Edmonds, *Iowa Judge Temporarily Suspends New Abortion Ban*, NEW YORK TIMES (July 17, 2023). https://www.nytimes.com/2023/07/17/us/iowa-abortion-ban-suspended.html

[54] *Id.*

[55] Caroline Kitchener, *Two Friends Were Denied Care After Florida Banned Abortion. One Almost Died*, THE WASHINGTON POST, (April 10, 2023). https://www.washingtonpost.com/politics/2023/04/10/pprom-florida-abortion-ban/

Some abortion bans also differentiate between exceptions and those that operate as affirmative defenses.[56] An affirmative defense allows someone who was charged with a crime to show that their conduct was permissible, even though the action was illegal.[57] This differs from an exception, where a prosecutor would be unable to bring a charge against a doctor who operated within the exception.[58] In an affirmative defense, the burden would be on the doctor to prove in court that his or her conduct was acceptable and within an exception.[59] 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."[60] By the time a doctor raises the defense, they have already been through a lengthy, expensive, and reputationally damaging litigation procedure.[61] "Bans that rely on an affirmative defense leave physicians more vulnerable to criminal prosecution and they make it riskier for physicians to provide abortion care in situations where the life or health of the pregnant person is at risk.[62] 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.[63] One in five OBGYNs reported that they felt personally constrained on their ability to provide care for miscarriages and other pregnancy-related medical emergencies.[64] In states where abortion is banned, that number rises to four in ten OBGYNs.[65] Many doctors also agreed in the survey that their decision-making 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.[66] "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-

[56] See e.g., RSMo sect. 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."
[57] Kaiser Family Foundation, *Overview of Exceptions in State Abortion Bans: Implications for the Provision of Abortion Services*, (May 18, 2023). https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/
[58] *Id.*
[59] *Id.*
[60] Maria Phillis, David N. Hackney & Tani Malhotra, *The urgent need for physician-led abortion advocacy*, AM. J. OF OBSTETRICS & GYNECOLOGY, 1, 3 (2023).
[61] Id.
[62] Kaiser Family Foundation, *Overview of Exceptions in State Abortion Bans: Implications for the Provision of Abortion Services*, (May 18, 2023). https://www.kff.org/womens-health-policy/issue-brief/a-review-of-exceptions-in-state-abortions-bans-implications-for-the-provision-of-abortion-services/
[63] Brittni Frederickson, Usha Ranji, Ivette Gomez & Alina Salganicoff, *A National Survey of OBGYNs' Experiences after Dobbs,* KAISER FAMILY FOUNDATION (June 21, 2023), https://www.kff.org/womens-health-policy/report/a-national-survey-of-obgyns-experiences-after-dobbs/.
[64] *Id.*
[65] *Id.*
[66] *Id.*

making, may worsen the already disparate rates of maternal mortality owing to physician implicit bias in making these decisions."[67]

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 a law on a Friday.[68] For three days, most abortions were illegal past six weeks of pregnancy.[69] On the following Monday afternoon, a judge suspended the ban and abortions were once again legal for up to 22 weeks of pregnancy.[70] Among OBGYNs in states where abortion is restricted by gestational limits, the Kaiser survey found that only 45% said they understood the circumstances under which abortion was legal in their state.[71] With the passage of abortion restrictions nationwide, "it is no longer clear whether physicians can intervene to prevent progression to critical scenarios, as is the standard in 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."[72] Withholding care is dangerous.[73] 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%.[74] Physicians must now weigh the legal risk to themselves and the medical risk to pregnant patients.[75] Criminal law violations are also not typically covered by malpractice insurance.[76]

II. Decisional Constraints & 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 decisionmaker is operating under constraints. Specifically, this type of processing occurs when there is limited time, incomplete data,

---

[67] Maria Phillis, David N. Hackney & Tani Malhotra, *The urgent need for physician-led abortion advocacy*, AM. J. OF OBSTETRICS & GYNECOLOGY, 1, 3 (2023).
[68] Colbi Edmonds, *Iowa Judge Temporarily Suspends New Abortion Ban*, NEW YORK TIMES (July 17, 2023). https://www.nytimes.com/2023/07/17/us/iowa-abortion-ban-suspended.html
[69] *Id.*
[70] *Id.*
[71] Brittni Frederickson, Usha Ranji, Ivette Gomez & Alina Salganicoff, *A National Survey of OBGYNs' Experiences after Dobbs,* KAISER FAMILY FOUNDATION (June 21, 2023), https://www.kff.org/womens-health-policy/report/a-national-survey-of-obgyns-experiences-after-dobbs/
[72] Andrea MacDonald, Hayley Gershengorn & Deepshikha Charan Ashana, *The Challenge of Emergency Abortion Care Following the Dobbs Ruling.* 328 J. OF THE AMERICAN MEDICAL ASSOC'N, 1691, 1691 (2022).
[73] *Id.*
[74] *Id.*
[75] Callie Cox Bauer, Anwar Jackson, Nimisha Kumar, Kayla Bauer & Nikki Zite, *Turning Rage into Action: Abortion Care and Residency Training in the United States*, J. GRAD. MED. EDUC. 291, (2023).
[76] *Id.*

and the situation is stressful or emotion-laden.[77] Because Type 1 information processing occurs when informational and cognitive resources are unavailable, it often reflects an "intuitive" or "automatic" response.[78] Type 1 processing is adaptive because it allows for decisions even when information is scarce and cognitive load is high.[79] However, it relies on mental shortcuts and quick-and-dirty judgments and is therefore subject to errors.[80]

Unlike Type 1 information processing, Type 2 processing is common in situations where data is available, time abundant, and conscious deliberation is possible.[81] Often characterized as "analytical" or "controlled," it involves logical thinking and systematic analysis of information.[82] Because this mode of processing is slower and more effortful than Type 1 processing, it is only possible in situations where the decisionmaker has time and resources to consider all or most of the relevant information in reaching her conclusion.[83] 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."[84] Simon challenged the traditional economic assumption of perfect rationality in decision-making and proposed a new concept of "bounded rationality" to explain human choice.[85] Simon noted that human beings face barriers to perfect information processing in most, if not all situations. One consistent barrier to ideal reasoning occurs because across all circumstances, humans have predictable cognitive limitations. 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.[86] Even

---

[77] *See* Shu Wen Tay, et al. *Systems 1 and 2 Thinking Processes and Cognitive Reflection Testing in Medical Students*, Canadian Medical Education Journal 7, No. 2 (2016): 97-103, 98. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5344059/#b10-cmej0797

[78] *See generally* Tsalatsanis, A. *et al.* (2015) *Dual processing model for medical decision-making: An extension to diagnostic testing*, PLOS ONE, 10(8). doi:10.1371/journal.pone.0134800.

[79] *See* Daniel Kahneman, Thinking, Fast and Slow. (2011).

[80] *See* Geoff Norman, *Dual Processing and Diagnostic Errors*, Advances in Health Sciences Education 14 (Suppl 1), 37–49 (2009). https://doi.org/10.1007/s10459-009-9179-x (discussing the role of Type 1 processing in diagnostic error)

[81] *See* Jonathan St. BT. Evans, *In Two Minds: Dual-process Accounts of Reasoning*, Trends in Cognitive Sciences 7, No. 10 (2003): 454-459. https://www.cell.com/trends/cognitive-sciences/fulltext/S1364-6613(03)00225-0?cc=y

[82] Dual-process model. (n.d.). Oxford Reference. https://www.oxfordreference.com/view/10.1093/oi/authority.20110803095732808

[83] *See* Jonathan St. B.T. Evans, *Dual-process Theories of Reasoning: Contemporary Issues and Developmental Applications*, Developmental Review 31, No. 2, 3 (2011): 86-102. https://doi.org/10.1016/j.dr.2011.07.007.

[84] *See* Herbert A. Simon. *A Behavioral Model of Rational Choice*. The Quarterly Journal of Economics 69, No. 1 (1955): 99–118. https://doi.org/10.2307/1884852. (Reprinted in Chapter 14 of his 1957 book *Models of Man*)

[85] *See* Herbert A. Simon, MODELS OF MAN: SOCIAL AND RATIONAL- MATHEMATICAL ESSAYS ON RATIONAL HUMAN BEHAVIOR IN A SOCIAL SETTING (1957).

[86] Kaitlin Luna, *Speaking of Psychology: How memory can be manipulated, with Elizabeth Loftus, PhD*, American Psychological Association (2018), https://www.apa.org/news/podcasts/speaking-of-psychology/memory-manipulated (last visited Feb. 20, 2024)("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

when more effortful Type 2 processing is possible, individuals remain influenced by their own particular goals, experiences and 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. Behavioral scientists call this form of bias "motivated reasoning." 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.

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 unchartered waters, walking the line between providing life-saving care and avoiding jailtime, fines, and loss of licensure.[87] 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. 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.[88] 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 of the health of the patient.*[89] Because good faith is not a safe harbor 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 it is very often made under significant time constraints. These are precisely the conditions that make biased decision-making most likely.

---

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.")

[87] *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

[88] Problematically, that threat is always there in states with severe bans, so that even if the physician is ultimately exonerated, she may still have to defend herself against frivolous charges.

[89] Stephan Voss, *Prosecutors in States where abortion is now illegal could begin building criminal charges against providers,* NBC News (June 24, 2022), https://www.nbcnews.com/news/us-news/prosecutors-states-abortion-now-illegal-begin-prosecute-abortion-provi-rcna35268. All of the media sources need to be supplemented with an article from a journal or Kaiser, Pew, or a government publication where available.

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.[90] 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 life-saving 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.[91]

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.[92] Psychology graduate students exhibit errors when developing clinical diagnoses. Prosecutors are influenced by a range of biases related to motivated reasoning,[93]as are defense attorneys.[94] 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."[95]

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.[96] 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, maintaining social status, or avoiding unpleasant

---

[90] https://www.health.pa.gov/topics/disease/Maternal-Health/Pages/Abortion.aspx ("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.")

[91] 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 compiled in 2018 by the Centers for Disease Control and Prevention (CDC) (the latest figures available), more than 17 out of every 100,000 U.S. women who delivered a live baby 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. Pregnancy Mortality Surveillance System | Maternal and Infant Health | CDC

[92] Rachlinkski, Jeffrey J. and Wistrich, Andrew J.*, Judging the Judiciary by the Numbers: Empirical Research on Judges,* 13 Annual Review of Law and Social Science (2017).

[93] Alafair S. Burke, *Neutralizing Cognitive Bias: An Invitation to Prosecutors*, 2 N.Y.U. J.L. & Liberty 512 (2007).

[94] Molly J. Walker Wilson, *Defense Attorney Bias and the Rush to the Plea,* 65 U. Kan. L. Rev. 271, 277-291 (2016)(discussing how priming, anchoring, belief perseverance, confirmation bias, over confidence bias, and self-serving bias can impact a defense attorney's advice to accept a plea).

[95] Sah S, Fugh-Berman A. *Physicians under the influence: social psychology and industry marketing strategies.* J Law Med Ethics. 2013.

[96] Ziva Kunda, *The Case for Motivated Reasoning*, 108 PSYCHOL. BULL. 480, 483 (1990)(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.

consequences."[97] 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.[98] Like other biases such as the self-serving and confirmation bias, motivated reasoning is self-reinforcing.[99] Ambiguous information is interpreted in a way that supports a preferred view, leading that view to become stronger, leading the decision-maker to be more likely to perceive future evidence as consistent with the preferred belief.[154]

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.[100] Resolving this tension involves discounting, justifying, or avoiding information that creates or exacerbates the uncomfortable feeling.[101] When a pregnant patient is in a dire situation, a 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, he 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 he also wants to keep himself safe. He may not be able to accomplish both goals simultaneously, and his knowledge of this fact creates uncomfortable psychic tension. He can resolve the tension by either treating the patient according to best practices and convincing himself that the personal risk is less serious than he initially imagined or he can interpret ambiguous evidence about the patient's condition as consistent with the personally safer choice. Adjusting his 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.[102] 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 his own risk.

2. Risk Aversion

---

[97] Innovative Approaches to On Demand Continuing Legal Education Ethics Training: A Case Study ___ J. Legal Educ. ___ (forthcoming 2024)(with Tigran Eldred). *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.

[98] Ziva Kunda, *The Case for Motivated Reasoning*, 108 PSYCHOL. BULL. 480, 483 (1990).

[99] *See* notes 109-120 and accompanying text.

[100] Andrew J. Elliot & Patricia G. Devine. On the Motivational Nature of Cognitive Dissonance: Dissonance as Psychological Discomfort, 67 J. of Personality and Soc. Psych. 382 (1994).

[101] Karl S. Coplan, *Climate Change, Political Truth, and the Marketplace of Ideas*, 2012 UTAH L. REV. 545, 553-554; Miriam J. Metzger et al., *Cognitive Dissonance or Credibility? A Comparison of Two Theoretical Explanations for Selective Exposure to Partisan News*, 47 COMMC'N RSCH. 3, 6 (2015).

[102] Molly J. Walker Wilson, *The Psychology of Science Denialism and Lessons for Public Health Authorities*, 91 UMKC L. Rev. 545, 562 (2023).

Risk aversion is the tendency of actors to prefer to avoid risks more than they prefer to seek equivalent gains.[103] Risk aversion is particularly prevalent in decisions made in medical contexts.[104] Prior to *Dobbs,* doctors faced some measure of personal risk related to the potential for litigation.[105] Strong negative emotions, anger and fear have been empirically linked to risk aversion. As one study noted, "fearful people express pessimistic risk estimates and risk-averse choices."[106] This connection may help explain why physicians have become increasingly eager to avoid personal risk even when doing so can endanger patients.[107] For example, doctors' fear of liability often leads them to order testing that is not warranted and can lead to harm. The BMC notes that over testing can result in "misdiagnosis, false positive results, false negative results and overdiagnosis" with corresponding impacts "physically, psychologically and financially."[108]

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.[109] 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 discussion following.[110] Surveys of OBGYNs 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.[111] 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.[112] The uncertainty and lack of consensus provides a particularly fertile context for risk aversion. [113]

---

[103] Sacks, Greg D., et al. "The association between risk aversion of surgeons and their clinical decision-making." Journal of Surgical Research 268 (2021): 232-243.

[104] Buturovic, Zeljka. "Risk aversion and rational choice theory do not adequately capture complexities of medical decision-making." Journal of Medical Ethics 49.11 (2023): 761-762.

[105] James Gibson, Doctrinal Feedback and (Un)reasonable Care, 94 Va. L. Rev. 1641, 1670 (2008) ("suppose 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.")

[106] Jennifer S. Lerner & Dacher Keltner, Fear, Anger, and Risk, 81 *J. of Personality & Soc. Psych. 146* (2001).

[107] "Instead of discouraging wasteful practices, then, the law feeds them back into doctrine, transforming over compliance into mere compliance and ratcheting up the standard of care." (James Gibson, *Doctrinal Feedback and (Un)reasonable Care,* 94 Va. L. Rev. 1641, 1670 (2008))

[108] Justin H. Lam, Kristen Pickles, Fiona F. Stanaway & Katy J. L. Bell *Why Clinicians Overtest: Development of a Thematic Framework,* 20 BMC Health Serv. Research 10-11 (2020).

[109] See discussion of the status quo bias.

[110] See notes 112-132.

[111] Whitney Arey et. al. *A Preview of the Dangerous Future of Abortion Bans — Texas Senate Bill 8* N Engl J Med 387 (2022)(reporting that "The climate of fear created by SB8 has resulted in patients receiving medically inappropriate care.").

[112] Celine Castronuovo, Texas High Court's Abortion Denial Amplifies Medical Uncertainty, BLOOMBERG LAW (Dec. 13, 2023, 11:50 AM CST), https://news.bloomberglaw.com/health-law-and-business/texas-high-courts-abortion-denial-amplifies-medical-uncertainty (last visited, Feb. 13, 2024).

[113] Maria Phillis, David N. Hackney & Tani Malhotra, *The urgent need for physician-led abortion advocacy*, AM. J. OF OBSTETRICS & GYNECOLOGY, 1, 2 (2023).

3. Decision Paralysis

Decision paralysis refers to the inability of an actor to make a decision when multiple options are available.[114] 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.[115] Sometimes decision paralysis results from having an extensive choice set.[116] In other instances, decision paralysis occurs because of strong emotions associated with the decision.[117] Powerful affective reactions tend to be triggered when a decision implicates the actor's own future wellbeing, [118] meaning that these decision contexts are particularly subject to decision paralysis.[119] 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.[120] 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 from others to make the optimal choice.[121] 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.[122] Decision paralysis is so powerful that it shows up on MRIs as decreased prefrontal cortex activation.[123]

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.[124] For physicians making

---

[114] Marissa L. White & Ulrich Hoffrage, Testing the tyranny of too much choice against the allure of more choice, 44 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 160 (2009).
[115] Ravi Dhar, Consumer Preference for a No-Choice Option, 24 J. CONSUMER RES. 215 (1997)(finding that when individuals are facing indecision, they often opt for a no-choice option).
[116] Ravi Dhar, Consumer Preference for a No-Choice Option, 24 J. CONSUMER RES. 215 (1997), 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. PSYCHOL. 995 (2000), see also, Chernev, A., Böckenholt, U., & Goodman, J. (2015). Choice overload: A conceptual review and meta-analysis. Journal of Consumer Psychology, 25(2), 333-358.
[117] Christopher J. Anderson, The Psychology of Doing Nothing: Forms of Decision Avoidance Result from Reason and Emotion, 129 PSYCHOL. BULL. 139 (2003).
[118] *Id.* (2003)(studies on emotion and decision paralysis reveals high levels of emotion for decisions related to personal relationships, living situations and career choices).
[119] Gustav Tinghög et al., *Intuition and Cooperation Reconsidered*, 466 NATURE E1 (2010).
(finding that when choosing retirement plans, more time led to increased choice deferral and information seeking without deciding). See also, Gustav Tinghög et al., Intuition and Cooperation Reconsidered, 466 NATURE E1 (2010).
[120] Christopher J. Anderson, The Psychology of Doing Nothing: Forms of Decision Avoidance Result from Reason and Emotion, 129 PSYCHOL. BULL. 139 (2003).
[121] Marissa L. White & Ulrich Hoffrage, Testing the tyranny of too much choice against the allure of more choice, 44 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 160 (2009).
[122] Gustav Tinghög et al., *Intuition and Cooperation Reconsidered*, 466 NATURE E1 (2010).
[123] Erin N. Hartter et al., Decreased Prefrontal Cortex Activation During Complex Choice Under Informational Quantity Overload, 28 PSYCHONOMIC BULL. & REV. 76 (2021).
[124] Christopher J. Anderson, The Psychology of Doing Nothing: Forms of Decision Avoidance Result from Reason and Emotion, 129 PSYCHOL. BULL. 139 (2003).

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 & Choice Inertia

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.[125] Although failing to act is a choice that can come with serious consequences, this reality is often at odds with how people experience choices.[126] Status quo bias is a form of 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.[127] This bias leads people to resist change, particularly when that change is accompanied by situational features that are uncertain and poorly understood.[128] The status quo bias results in inertia when individuals fear playing a causal role in a resulting bad outcome.[129] 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,[130] are largely untested,[131] may be unevenly applied, and are subject to statutory interpretation.[132] 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 against which a decision can be tested and verified. Clear protocols and workflows that have been vetted and accepted by the

---

[125]Molly J. Walker Wilson, A Behavioral Critique of Command-and-Control Environmental Regulation, 16 Fordham Envtl. L. Rev. 223, 249 (2005).

[126] *See id.* (explaining that only once individuals recognize the "allure of inertia," they are better positioned to overcome it and to better understand the decision-making process). I'm not sure where I got this. (MSS: could this work (see last paragraph) https://www.psychologytoday.com/au/blog/after-service/201609/how-powerful-is-status-quo-bias) or EHR governance: A practical guide to user centric, consensus Driven Optimization" by Paula Scariati

[127] Daniel Kahneman, Jack L. Knetsch, and Richard H. Thaler Anomalies: *The Endowment Effect, Loss Aversion, and Status Quo Bias* 5 J. OF ECON. PERSPECTIVES 197-198 ("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").

[128] Ortoleva, Pietro. "Status quo bias, multiple priors and uncertainty aversion." *Games and Economic Behavior* 69, no. 2 (2010): 411, 413.

[129] A Regret-Induced Status Quo Bias Antoinette Nicolle, Stephen M. Fleming, Dominik R. Bach, Jon Driver and Raymond J. Dolan Journal of Neuroscience 2 March 2011, 31 (9) ("Status quo rejection may also be perceived as more directly causal of its outcome, enhancing a sense of accountability for an error.") See also Spranca, Mark, Elisa Minsk, and Jonathan Baron. "Omission and commission in judgment and choice." Journal of experimental social psychology 27.1 (1991): 76-105.

[130] 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." Celine Castronuovo, Texas High Court's Abortion Denial Amplifies Medical Uncertainty, BLOOMBERG LAW (Dec. 13, 2023, 11:50 AM CST), https://news.bloomberglaw.com/health-law-and-business/texas-high-courts-abortion-denial-amplifies-medical-uncertainty (last visited, Feb. 13, 2024).

[131] Adrienne R. Ghorashi & DeAnna Baumle, *Legal and Health Risks of Abortion Criminalization: State Policy Responses in the Immediate Aftermath of Dobbs*, 37 J. of Law and Health 1, 3 (2023).

[132] Adrienne R. Ghorashi & DeAnna Baumle, *Legal and Health Risks of Abortion Criminalization: State Policy Responses in the Immediate Aftermath of Dobbs*, 37 J. of Law and Health 1, 15-16 (2023).

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.[133]

5. Self-serving Bias

The self-serving bias stems from an unconscious drive to maintain a positive self-image.[134] Individuals tend to unconsciously inflate the extent to which they are responsible for positive outcomes while minimizing their own role in negative outcomes.[135] 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%.[136] Not only do individuals take more credit for positive outcomes than they should, but they also eschew responsibility for poor outcomes.[137] 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.[138] 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.[139] 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/Obedience

The evolutionary success of human beings is largely attributable to social cooperation. Cooperative living allowed early humans to harness the hunting, gathering, protection, and childbearing skills of many members of the group in order to optimize the overall success of the species. [140] The more traits members of a group share, the stronger the tendency to conform

---

[133] See Part IV.

[134] Sedikides, C., and Strube, M. J. (1997). 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. *Adv. Exp. Soc. Psychol.* 29, 209–269.

[135] "Motivated thinking and social perception: Wanting to see favorable aspects of ourselves" by John M. Darley and Paget H. Gross (1983). See also, Richard Patterson, Joachim T. Operskalski & Aron K. Barbey, *Motivated Explanation,* 9 FRONTIERS HUM. NEUROSCIENCE, 1, 2 (2015)

[136] David Dunning, Judith A. Meyerowitz, and Amy D. Holzberg, Ambiguity and Self-Evaluation: The Role of Idiosyncratic Trait Definitions in Self-Serving Assessments of Ability, 57 J. of Personality and Soc. Psych. 1082, (1989)

[137] James Shepperd, Wendi Malone and Kate Sweeny Exploring Causes of the Self-serving Bias, 2 Soc. and Personality Psych. Compass, 895, 895 (2008)(" drivers … attribute accidents to external factors – the weather, the condition of their car, other drivers…"). *See also,* Stewart, A. E. (2005). Attributions of responsibility for motor vehicle crashes. Accident Analysis & Prevention, 37, 681–688.

[138] See Dunning note 6 at 1084.

[139] Herman Steensma & Lisette Otto. *Perception of performance appraisal by employees and supervisors: Self-serving bias and procedural justice.* 29 J. OF COLLECTIVE NEG. 345 (2000); Martin D. Coleman, *Emotion and the Self-Serving Bias.* CURRENT PSYCH. 30 (2011): 345-354.

[140] *See* Molly J. Walker Wilson*, Retribution as Ancient Artifact and Modern Malady,* 24 Lewis & Clark L. Rev. 1339, 1362-1363 (2020)(arguing that certain modern traits are vestiges of early efforts to cooperate with increasingly larger social groups). *See* also, *Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human*

becomes.[141] The reason for this is 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.[142]

The instinct to conform is particularly powerful when risk is high.[143] Consensus is protective both for informational reasons and because "there is safety in numbers."[144] 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.[145] 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.[146] The more a practice becomes entrenched in a medical practice 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.[147]

7. Availability Heuristic and Cascades

---

motivation. *Psychological Bulletin, 117, 497-529* (discussing humans' innate desire to build and strengthen social bonds.

[141]Miguel Pina e Cunha, Arménio Rego and Stewart R. Clegg, *Obedience and Evil: From Milgram and Kampuchea to Normal Organizations* 97 J. of Bus. Ethics, 291 (2010). *See also,* John Turner et al., REDISCOVERING THE SOCIAL GROUP: A SELF-CATEGORIZATION THEORY 142 (1987)(discussing social comparison theory, which proposes that individuals adjust their views toward the consensus of others with whom they share identity traits or who are in in order to be perceived favorably by other in-group members.[192]

[142] *Id.*

[143]Amrei M. Lahno & Marta Serra-Garcia, *Peer Effects in Risk Taking: Envy or Conformity?* 50 J. of Risk and Uncertainty 73 (2015); Michael A. Wallach & and Jerome Mabli, *Information Versus Conformity in the Effects of Group Discussion on Risk Taking,* 14 J. of Personality and Soc. Psych. 149 (1970).

[144] Kuran and Sunstein have written about how attempts to obtain information or to earn social approval can lead to distortions in attitude formation. Timur Kuran & Cass R. Sunstein, Availability Cascades and Risk Regulation, 51 Stan. L. Rev. 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).

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

[146] *Group Behavior*, LUMEN, https://courses.lumenlearning.com/wmopen-psychology/chapter/conformity-compliance-and-obedience/ (last visited Feb. 8, 2023) (once the majority in a group reaches seven individuals, conformity from the group's other members levels off and even slightly decreases).

[147] "To avoid exclusion at work, people may feel obligated to conform their behavior to others in order to be accepted." (Hewlin, 2009). Facades of conformity 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" Patricia Hewlin, *Wearing the Cloak: Antecedents and Consequences of Creating Facades of Conformity,* 94 J. of Applied Psych. 727, 727-738 (2009). Hewlin defined FOC as "the suppression of personal values in conjunction with the pretense of embracing organizational values that are not held by the individual"(Patricia Hewlin, *And the award for the best actor goes to…: Facades of conformity in organizational setting,* 28 Acad. Of Mgmt. Rev. 633, 639 (2003) (FOC is defined as "the suppression of personal values in conjunction with the pretense of embracing organizational values that are not held by the individual").

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.[148] Events that are repeated, vivid, or emotionally charged are more easily remembered and thus can be disproportionately weighted in decision-making processes.[149] The reliance on readily recalled information can lead to misjudgments about the likelihood of events or the importance of issues.[150] Judgments that are influenced by the availability heuristic can affect personal decisions, risk assessments, and even policy preferences.[151]

An availability cascade is a self-reinforcing process, where a collective belief gains more plausibility through increased public discourse and media coverage.[152] It starts with one or more triggering events that capture the attention of the public. Examples of such triggering incidents are 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.[153]

Physicians, like other decision-makers, are influenced by reliable and unreliable sources of information when administering patient care.[154] Specifically, research on inputs for healthcare choices have found that doctors are influenced by availability cascades.[155] 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."[156] 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 training.[157] A closer look suggests that the mistaken beliefs about HIV/AIDS stemmed from availability cascades, which were fueled by fear, emotion, and exposure to public health and media messages.[158]

---

148 Tversky, A., & Kahneman, D., *Availability: A heuristic for judging frequency and probability*, (1973).

149 Molly J. Walker Wilson & Megan P. Fuchs, *Publicity, Pressure, and Environmental Legislation: The Untold Story of Availability Campaigns*, 30 CARDOZO L. REV. 2147, 2151 n.21 (2009).

150 *Id.*

151 Lichtenstein, S., Slovic, P., Fischhoff, B., Layman, M., & Combs, B. (1978). Judged frequency of lethal events.

152 Sunstein, *supra* note 21.

153 Kahneman *supra* note 13, at 142.

154 Saposnik, G., Redelmeier, D., Ruff, C.C. *et al.* Cognitive biases associated with medical decisions: a systematic review. *BMC Med Inform Decis Mak* 16, 138 (2016).

155 Dan P. Ly *The Influence of the Availability Heuristic on Physicians in the Emergency Department* 78 Annals of Emergency Med. 650 (2021).

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

157 Kelly, Jeffrey A., et al. "Medical students' attitudes toward AIDS and homosexual patients." *Academic Medicine* 62.7 (1987): 549-56. "finding … that many students have stigmatizing, negative attitudes toward homosexuals and patients with AIDS."

158 In 1991, Adams and Hardy reported that "the National Center for Health Statistics estimated from their September 1990 National Health Interview Survey that 24 percent of the public thinks it is 'very likely' or 'somewhat likely' that someone would contract AIDS from eating in a restaurant where the cook has the AIDS virus, while 19 percent believes it is 'very' or 'somewhat likely' that they would contract AIDS from using public toilets (Adams, Patricia F., and Ann M. Hardy. AIDS knowledge and attitudes for July-September 1990: provisional data from the National Health Interview

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 & 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.[159] As a manufacturer of aircraft carriers, Boeing submitted their Model 299 for evaluation by the U.S. Army.[160] On the final test flight, the plane's engine stalled and the plane crashed shortly after takeoff.[161] Two of the five crew members died, including the pilot.[162] An investigation found the cause of the crash was pilot error.[163] 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.[164] As one newspaper put it, the aircraft was "too much airplane for one man to fly."[165]

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.[166] 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, the doors and windows were closed, and the elevator controls were unlocked.[167] After implementing the checklist, the Model 299 went on to fly 1.8 million miles without any further accidents.[168] Later, the U.S. Army accepted the plane, ordered nearly 13,000 of them, and renamed it the B-17.[169]

In more recent years, the medical industry began to use checklists to standardize procedures and improve outcomes.[170] The famous Institute of Medicine report from 1999 estimated that medical errors cause between 44,000 and 98,000 deaths annually in the United States.[171] As part of the push for patient safety that followed, checklists have helped lower those numbers and improved patient

---

Survey. No. 198. US Department of Health and Human Services, Public Health Service, Centers for Disease Control, National Center for Health Statistics, 1991.)

159 Kristen Elmezzi & Shad Deering, *Checklists in emergencies*, 43 SEMINARS IN PERINATOLOGY 18, 18 (2019).

160 *Id.*

161 Id.

162 ATUL GAWANDE, THE CHECKLIST MANIFESTO 33 (2011).

163 Elmezzi, *supra* note 155, at 18.

164 GAWANDE, *supra* note 158, at 33.

165 *Id.*

166 Id.; Elmezzi, *supra* note 155, at 18.

167 GAWANDE, *supra* note 158, at 34.

168 Elmezzi, *supra* note 155, at 18.

169 GAWANDE, *supra* note 158, at 34.

170 Elmezzi, *supra* note 155, at 18.

171 Hales, et al. The checklist—a tool for error management and performance improvement

care.[172] Checklists can ensure that certain tasks are being completed and reduce ambiguity about next steps.[173] However, in a complex medical situation like a gestational emergency, determining the best path forward is not usually so straightforward that a checklist adequately covers all possibilities.[174] Once research evidence is evaluated and synthesized, development of a checklist is one step toward translating that knowledge into practive.[175] Moreover, people may be even 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."[176] Perhaps justifiably, then, physicians have been skeptical that a piece of paper with a bunch of little boxes would improve matters."[177]

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."[178] In an Editorial accompanying a NEJM article finding no reduction in surgical mortality or complications despite reported use of a checklist by 98%of hospitals,[179] Leape noted that checklists are only good when people use them and identified 5 reasons why a system might not: (1) "it is not the act of ticking off a checklist that reduces complications, but performance of the acts 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".[180]

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).[181] 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 placing in 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 was in.[182] Nurses observe

---

[172] Elmezzi, *supra* note 155, at 18.
[173] Charles L. Bosk, Mary Dixon-Woods, Christine A. Goeschel & Peter J. Pronovost, *Reality check for checklists*, 374 THE LANCET 444, 444 (2009).
[174] *Id.*
[175] *Id.*
[176] GAWANDE, *supra* note 158, at 35.
[177] *Id.*
[178] Lucian L. Leape, *The checklist conundrum*, 370 New Engl. J. Med 1063, 1063 (2014).
[179] David R. Urbach, Anand Govindarajan, Refik Saskin, Andrew S. Wilton & Nancy N. Baxter, *Introduction of surgical safety checklists in Ontario, Canada*, 370 NEW ENGL. J. MED. 1029, 1029 (2014).
[180] Leape, *supra* note 174, at 1063-1064.
[181] Peter J. Pronovost, *et al.*, *An intervention to decrease catheter-related bloodstream infections in the ICU*, 355 NEW ENGL. J. MED. 2725, 2725 (2006).
[182] Sean M. Berenholtz, *et al.*, *Eliminating catheter-related bloodstream infections in the intensive care unit*, 32 CRITICAL CARE MED. 2014, 2014 (2004).

surgeons in the operating room and completed a checklist; in more than one-third of patients, the surgeon skipped at least one step.[183] 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.[184] A year after implementation, the ten-day line infection rate dropped from 11% to zero.[185] In just one hospital, the checklist had prevented 43 infections and eight deaths and it saved $2 million in costs.[186]

In 2003, the Michigan Health and Hospital Association approached Pronovost about testing his checklist in the state's intensive care units.[187] 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%.[188] Michigan's average ICU outperformed 90% of ICUs nationwide.[189] The hospitals saved an estimated $175 million in costs during the first 18 months.[190] Led by Pronovost, the group published its findings in late 2006 and the successes have been sustained for several years now.[191] A few years later, Pronovost advised about a dozen countries in implementation, including the UK National Patient Safety Agency that piloted the checklist in eight hospitals in the northeast.[192]

Pronovost noted that the success of the Keystone checklist was not necessarily due to its simplicity, but "how support was mobilised [sic] for coordinating work around infection control."[193] Units in the Michigan hospitals were not simply given the checklist and told to follow it.[194] Implementation occurred over nine months, team leaders were assigned and required to meet monthly, listen to problems, and work with the team to solve them, and feedback was garnered from the frontline caregivers.[195] Importantly, nurses were empowered to stop procedures if the guidelines were not followed.[196] The authors concluded with advice for achieving results elsewhere: "recruit advocates within the organization, 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."[197]

B. World Health Organization's Surgical Safety Checklist

---

[183] *Id.* at 2017.
[184] GAWANDE, *supra* note 158, at 38.
[185] *Id.*
[186] Atul Gawande, *A Life-Saving Checklist*, THE NEW YORKER (Dec. 2, 2007), https://www.newyorker.com/magazine/2007/12/10/the-checklist.
[187] GAWANDE, *supra* note 158, at 40.
[188] *Id.* at 44
[189] *Id.* at 44.
[190] Gawande, *supra* note 182.
[191] GAWANDE, *supra* note 158, at 44; see also Pronovost, *supra* note 177, at 2725.
[192] Jeremy Laurance, *Peter Pronovost: champion of checklists in critical care*, 374 THE LANCET 443, 443 (2009).
[193] Bosk, *supra* note 169, at 444.
[194] *Id.*
[195] *Id.*
[196] *Id.* at 445.
[197] *Id.*

Following on the success of the Keystone project, the World Health Organization created its surgical safety checklist in 2007.[198] The checklist consists of 19 items[199] split into three parts; the course of administering anesthesia and surgery is paused so team members can communicate and check important information.[200] 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.[201]

The sign-in is carried out by the anesthetist, the anesthesia nurse, and the patient.[202] They confirm the patient's identity, whether the site is marked, the anesthesia machine and medication have been checked, and the function of the pulse oximeter.[203] Using the patient's medical chart, the teams confirm whether the patient has a known allergy, difficult airway or aspiration risk, and whether there is a high risk of blood loss.[204] In the time-out, all team members introduce themselves by name and role, they confirm the patient's name, the procedure and where the incision will be made.[205] They check whether antibiotic prophylaxis has been given within the last 60 minutes and ask the surgeon what the critical or non-routine steps of the surgery are, how long the surgery is expected to take, and the anticipated blood loss.[206] To the anesthetist, they ask whether there are any patient-specific concerns.[207] To the nursing team, they ask whether sterility has been confirmed and if there are any equipment issues or concerns.[208]

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.[209] The surgeon, anesthetist, and nurse also share any key concerns for recovery and management of the patient.[210] 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.[211]

---

198 *Id.*

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

200 Axel Fudickar, Kim Hörle, Jörg Wiltfang & Berthold Bein, *The Effect of the WHO Surgical Safety Checklist on Complication Rate and Communication*, 109 DEUTSCHES ARZTEBLATT INTERNATIONAL 695, 695 (2012) (The study included 3,733 patients before the checklist was introduced and 3,955 patients afterwards. The checklist created a reduction in mortality in major surgery by 47%—from 56 in 3,733 cases to 32 in 3,955 cases. The checklist also reduced major morbidity by 36%—from 411 in 3,733 cases to 288 in 3,955 cases.)

201 *Id.*

202 *Id.*

203 World Health Organization, *WHO Surgical Safety Checklist*, https://www.who.int/teams/integrated-health-services/patient-safety/research/safe-surgery/tool-and-resources

204 *Id.*

205 *Id.*

206 *Id.*

207 World Health Organization, *WHO Surgical Safety Checklist*, https://www.who.int/teams/integrated-health-services/patient-safety/research/safe-surgery/tool-and-resources

208 *Id.*

209 *Id.*

210 *Id.*

211 Vijayasekar, *supra* note 195, at 260.

> The developers noted the following of the WHO Surgical Checklist: "[o]perations 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."[212]

The WHO checklist was evaluated in a study of eight hospitals around the world—including leading hospitals in Seattle, Toronto, London, and New Zealand and some of the busiest hospitals in the world in the Philippines, Jordan, New Delhi, and Tanzania.[213] Surgical procedures varied widely among the eight hospitals: "[o]n 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."[214] The checklist was a tremendous success, translating to roughly 1.6 million lives saved and 9.36 million inpatient complications avoided worldwide if the surgical checklist were to be broadly implemented and guidelines adhered to strictly.[215] The initial study was also accompanied by a questionnaire, in which 80% of the persons that used the checklist stated that they considered it simple and thought it would prevent errors.[216] About 90% said they would want the checklist used if they were to undergo surgery themselves.[217]

Despite this, some physicians were hesitant to implement the checklist.[218] The fear was that introducing yet another checklist would add onto the burden of the operating room and lead to tick box fatigue.[219] 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).[220] The benefits also include orderly communication and improved teamwork.[221] The culture of minimal communication in the operating room can be an impediment.[222] On one hand, it could indicate a team that is working well together, but on the other hand it can heighten the risk that important information is lost.[223] The implementation of the checklist sets a level of discipline in communication that goes beyond what was usual before its introduction.[224]

---

212 GAWANDE, *supra* note 158, at 141.
213 *Id.* at 143.
214 *Id.*
215 Vijayasekar, *supra* note 195, at 260.
216 Fudickar, supra note 196, at 697.
217 *Id.*
218 *Id.* at 699.
219 Vijayasekar, *supra* note 195, at 260.
220 *Id.* at 261.
221 *Id.*
222 *Id.*
223 Vijayasekar, *supra* note 195, at 261.
224 *Id.*

Like other checklists, implementation requires coordination and buy-in from the staff, particularly leaders in the operating room.[225] In the WHO checklist, one person is not supposed to go through all the items without communicating with other team members.[226] The list must be read aloud in its entirety.[227] If team members, particularly ones in leadership roles, are not taking the list seriously, the checklist does not operate effectively.[228] Faulty implementation can foster a dangerous false sense of security and thus convert the positive effect of the checklist into its opposite.[229] Reading the list aloud also breaks down the hierarchical barriers to communication that enable an improvement in team cooperation.[230]

C. National Institutes of Health (NIH) Stroke Scale

The NIH Stroke Scale (NIHSS) is a checklist that contains 11 diagnostic tests that evaluate a patient's level of consciousness, gaze, visual fields, facial palsy, motor skills, limb ataxia, language, and others.[231] Each item correlates with a score, which is totaled at the end and helps physicians determine the severity of a stroke.[232] During the late 1980s, several stroke rating scales were in use.[233] 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.[234] Eventually, significant modifications were made to facilitate its use more broadly for a trial on acute strokes.[235] Now, it is the most widely used deficit rating scale, with more than 500,000 health care professionals who have been trained to administer it.[236] Physicians administer the stroke scale items in the order listed.[237] Scores do not reflect what the physician thinks the patient can do, but what the patient does.[238] Clinicians are instructed not to coach the patient, such as making repeated requests or asking the patient to make a better effort.[239]

Compared to other stroke scales, the NIHSS was found to have "excellent specificity, sensitivity, and accuracy in forecasting outcomes."[240] 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.[241] The NIHSS score also provides prognostic information that could be useful to physicians, patients, and families, as it can influence decisions about emergent management

---

225 *Id.*
226 *Id.*
227 Vijayasekar, *supra* note 195, at 261.
228 *Id.*
229 *Id.*
230 *Id.*
231 National Institutes of Health, National Institute of Neurological Disorders and Stroke, *NIH Stroke Scale*, https://www.ninds.nih.gov/health-information/public-education/know-stroke/health-professionals/nih-stroke-scale.
232 *Id.*
233 Patrick Lyden, *Using the National Institutes of Health Stroke Scale: A Cautionary Tale*, 48 STROKE 513, 513 (2017).
234 *Id.*
235 *Id.*
236 *Id.*
237 National Institutes of Health, *supra* note 227.
238 *Id.*
239 *Id.*
240 H. P. Adams, Jr., P. H. Davis, E. C. Leira, K.-C. Chang, B. H. Bendixen, W. R. Clarke, R. F. Woolson & D. M. Hansen, *Baseline NIH Stroke Scale score strongly predicts outcome after stroke*, 53 NEUROLOGY 126-131 (1999).
241 *Id.*

or be used as an exclusion or inclusion criterion for enrollment in clinical testing of new treatments or interventions for stroke."[242]

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, raises the question of whether checklists or guidelines could be used in the field of abortion care. As laws 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.

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.[243] 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."[244] One hospital network in Indiana – despite performing less than 1% of abortions statewide prior to the *Dobbs* decision and the new Indiana state law banning abortions that followed – quickly realized it would be thrust into that role as the state's largest hospital system and a major safety-net hospital.[245] The state law, in particular, stipulated that medically necessary abortions could *only* be performed in hospitals or outpatient centers owned by hospitals.[246] In response, the hospital system established an incident command center and prepared protocols to aid its doctors in whether the patient met one of the exceptions for legal abortion under the state law.[247] Despite these efforts, one of its physicians was penalized by the state's licensing body for publicly discussing the abortion of a 10-year-old girl from Ohio, who allegedly had become pregnant

---

[242] *Id.* Data show 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. Patients with a score of 4 to 6 have a good or excellent outcome at 3 months, whereas only 40% of patients with a score of 16 to 22 had a similar rate of recovery.

[243] Tanzini M, Westbrook JI, Guidi S, et al. Measuring Clinical Workflow to Improve Quality and Safety. 2020 Dec 15. In: Donaldson L, Ricciardi W, Sheridan S, et al., editors. Textbook of Patient Safety and Clinical Risk Management [Internet]. Cham (CH): Springer; 2021. Chapter 28. Available from: https://www.ncbi.nlm.nih.gov/books/NBK585597/.

[244] Matthew K. Wynia, *Professional Civil Disobedience - Medical-Society Responsibilities after Dobbs*, 387 NEW ENGL. J. MED. 959, 961 (2022).

[245] Staff Reports, *IU Health setting up team to evaluate abortion protocols*, THE REPUBLIC (Sep. 4, 2022), https://www.therepublic.com/2022/09/04/iu-health-setting-up-team-to-evaluate-abortion-protocols/.

[246] *Id.*

[247] *Id.*

through child abuse and rape.[248] The patient had crossed state lines from Ohio because abortion had not yet become 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.[249]

The approach taken by Indiana's hospital network provides a promising way forward. Setting up a crisis management team that can develop protocols for managing pregnant patients who may need termination of pregnancy can aid physicians in defending themselves against improper abortion care in violation of state laws. Because many physicians are now employed by hospitals, the hospital often covers medical malpractice insurance and 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 the next section, 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.[250] 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."[251] Importantly, Pronovost notes that "guideline developers could rely on systems, rather than the actions of individual clinicians, to ensure patients receive recommended therapies."[252] 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."[253] 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. The "Workflow for Evaluating and Diagnosing Gestational Emergencies" (WEDGE) would assist physicians in evaluating conditions that may require a therapeutic abortion. Examples include ectopic

---

[248] Aria Bendix & Phil Helsel, *Indiana board reprimands Dr. Caitlin Bernard over 10-year-old's abortion case*, NBC NEWS (May 25, 2023), https://www.nbcnews.com/health/health-news/indiana-doctor-gave-10-year-old-girl-abortion-disciplinary-hearing-rcna86214.

[249] *Id.*

[250] See *supra* Part III.

[251] Peter J. Pronovost, *Enhancing physicians' use of clinical guidelines*, 310 J. AM. MED. ASS'N 2501, 2501 (2013).

[252] *Id.* at 2502.

[253] Justin R. Lappen, Leilah Zahedi-Spung & Ashley R. Brant, *Corporate Citizenship and Institutional Responses Post-Dobbs - Critical Lessons from Two Restrictive States*, 388 NEW ENGL. J. MED. 1732, 1734 (2023).

pregnancy; preterm prelabor rupture of membranes (PPROM); placental abruption and placenta previa; pulmonary hypertension; preeclampsia; antepartum sepsis, and cervical insufficiency/incompetency. Use of the same medical procedure (a dilation and curettage, or D&C) is indicated for removal of a nonviable fetus after miscarriage.

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.[254] Most often, when this occurs, the egg implants in a fallopian tube, although an ectopic pregnancy can also occur in the ovary, abdominal cavity, or a different part of the uterus.[255] 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.[256] Physicians can end an ectopic pregnancy through medication called methotrexate, which stops cells from growing, resulting in tissue reabsorption over a period of weeks.[257] In other cases, surgical removal of the tissue is required in order to protect the patient.[258]

Salpingostomy and salpingectomy are two laparoscopic surgeries used to treat some ectopic pregnancies. In these procedures, a small incision is made in the abdomen, near or in the navel. The surgeon uses a thin tube equipped with a camera lens and light (laparoscope) to view the tubal area.[259] The preferred treatment for ectopic pregnancy depends upon the amount of bleeding and uterine damage, as well as whether the tube has ruptured. The condition of the non-involved fallopian tube is another factor used in determining standard of care.[260] In a salpingostomy, the ectopic pregnancy is removed, and the tube left to heal on its own. In a salpingectomy, the ectopic pregnancy and the tube are both removed.[261] When possible, the affected fallopian tube will be saved. In practice, however, a ruptured tube is often removed.[262]

Many state laws with new restrictions on abortion make exceptions for ectopic pregnancies, but uncertainties can arise if a fetus implants on uterine scar tissue from a previous Cesarean section

---

[254] Davor Jurkovic, & Helen Wilkinson. "Diagnosis and management of ectopic pregnancy." *Bmj* 342 (2011); Sivalingam, Vanitha N., et al. "Diagnosis and management of ectopic pregnancy." *J. of Family planning and reproductive health care* 37.4 (2011): 231-240; see also, https://www.mayoclinic.org/diseases-conditions/ectopic-pregnancy/symptoms-causes/syc-20372088

[255] Rana, Poonam, et al. Ectopic Pregnancy: a Review. Archives of gynecology and obstetrics 288 (2013): 747-757; see also, https://www.plannedparenthood.org/learn/pregnancy/ectopic-pregnancy

[256] See Jurkovic & Wilksinson, supra note 252; see also, https://www.mayoclinic.org/diseases-conditions/ectopic-pregnancy/symptoms-causes/syc-20372088

[257] See https://www.shape.com/health/sexual-health/medical-reasons-for-abortion

[258] Id., see also, https://www.hopkinsmedicine.org/health/conditions-and-diseases/ectopic-pregnancy

[259] Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/ectopic-pregnancy/diagnosis-treatment/drc-20372093.

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

[261] *Id.*

[262] *Id.*

or if the fetal tissue cannot be located. One OB/GYN noted that she 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.[263]

In response to an Ohio bill ordering doctors to "reimplant ectopic pregnancy," Dr. Chris Zahn, vice-president of practice activities at ACOG, notes: "[t]here 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."[264] In spite of this, fewer than half (five) of the fourteen states that have abortion bans explicitly exclude ectopic pregnancies from their statutory definition of "abortion."[265] 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. Uncertainly and anxiety over legal requirements can delay care.[266] 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. Preterm Prelabor Rupture of Membranes (PPROM) 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. When the rupture takes place early, it can threaten the life and health of the pregnant patient and the fetus.[267] During pregnancy, if the amniotic sac or "water" breaks prior to 37 weeks of gestation, this is considered Preterm Prelabor Rupture of Membranes

---

[263] Frances Steed Sellers & Fenit Nirappi, *Confusion post-Roe spurs delays, denials for some lifesaving pregnancy care*, THE WASHINGTON POST (Jul. 16, 2022), https://www.washingtonpost.com/health/2022/07/16/abortion-miscarriage-ectopic-pregnancy-care/.

[264] Jessica Glenza, *Ohio bill orders doctors to 'reimplant ectopic pregnancy' or face 'abortion murder' charges*, THE GUARDIAN (Nov. 29, 2019), https://www.theguardian.com/us-news/2019/nov/29/ohio-extreme-abortion-bill-reimplant-ectopic-pregnancy.

[265] Nicole Dube, *Ectopic Pregnancies and State Abortions Laws*, CONNECTICUT GENERAL ASSEMBLY, OFFICE OF LEGISLATIVE RESEARCH (Oct. 31, 2022), https://www.cga.ct.gov/2022/rpt/pdf/2022-R-0250.pdf.

[266] For example, one doctor recounts a situation in which another physician in her practice contacted her the week after the Supreme Court 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." Confusion post-Roe spurs delays, denials for some lifesaving pregnancy care. https://www.washingtonpost.com/health/2022/07/16/abortion-miscarriage-ectopic-pregnancy-care/

[267] Thomas McElrath, *Prelabor rupture of membranes before and at the limit of viability*, UPTODATE (Apr. 28, 2023), https://www.uptodate.com/contents/prelabor-rupture-of-membranes-before-and-at-the-limit-of-viability. ("Risk factors for PROM before or at the limit of viability are similar to those for preterm labor. The major risk factors appear to be a prior history of preterm labor, PROM before or at the limit of viability, cervical insufficiency, or a current pregnancy complicated by multiple gestation or antepartum bleeding.")

(PPROM).[268] 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.[269]

PPROM is responsible for 30-40 percent of preterm births and impacts 150,000 women in the U.S. every year.[270] Between 0.1 and 0.7% of all pregnancies are complicated by PPROM before or at the limit of viability.[271] In the United States, viability varies from state to state. However, most physicians and hospitals use an indicator of 23 weeks' gestation and weight of 500 grams to establish the "viability" of the pregnancy.[272] The safest option for the pregnant patient in the case of PPROM is delivery, often through induction or Cesarean section). This option becomes problematic when PPROM occurs prior to the viability of the fetus. Viability refers to the gestational age and birth weight below which infants are too immature to survive.

Chorioamnionitis complicates between 30-40% of PPROM cases before or at the limit of viability and is caused by bacterial infection of the fetal amniotic and chorionic membranes.[273] The clinical signs for chorioamnionitis include a maternal fever greater than 100.4°F, maternal tachycardia (>100 beats/min), fetal tachycardia (>160 beats/min), foul-smelling amniotic fluid or vaginal discharge, uterine tenderness, and maternal leukocytosis (white blood cell count >15,000 cells/μL).[274] Unfortunately, chorioamnionitis is tricky to diagnose. Typically, the physician seeks two or more of the symptoms above when making a diagnosis but may seek additional laboratory tests or clinical signs to confirm; bacteria in the bloodstream may be identifiable in 5-10% of cases.[275] Full-fledged infection due to chorioamnionitis can present in a matter of hours, so along with broad spectrum antibiotics, expedient delivery is necessary.[276] 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.[277]

A pre-viability PPROM patient may choose expectant management over abortion care but 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. Regular ultrasounds and tests may be necessary to ensure 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 PPROM case. Particularly

---

[268] 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.
[269] McElrath, *supra* note 264.
[270] Ramakumar Menon & Lauren S. Richardson, *Preterm prelabor rupture of the membranes: A disease of the fetal membranes*, 41 SEMINARS IN HEMATOLOGY 409, 409 (2017).
[271] McElrath, *supra* note 264.
[272] I. Seri & J. Evans, *Limits of viability: definition of the grey zone*, 28 J. PERINATOLOGY S4, S6 (2008).
[273] McElrath, *supra* note 264.
[274] Alan T. N. Vita, *Clinical chorioamnionitis*, UPTODATE (Feb. 7, 2024), https://www.uptodate.com/contents/clinical-chorioamnionitis.
[275] *Id.*
[276] *Id.*
[277] McElrath, *supra* note 264.

when the fetus is not viable, many patients opted to terminate the pregnancy.[278] Termination is the standard of care according to ACOG.[279] However, post-*Dobbs,* depending upon the laws in a given jurisdiction, a doctor might have either to postpone delivery while risking the health of the pregnant patient or deliver the baby early, attempting to treat it in the neonatal intensive care unit (NICU).

3. Placental Abruption and Placenta Previa

Placental abruption occurs in pregnancy when the placenta, which delivers nutrients to the fetus and carries waste away from the fetus, completely or partially detaches from the uterine wall.[280] If the abruption is partial and if the pregnancy is close to term, effects may be mild, including some bleeding for the pregnant patient.[281] Severe placental abruption may cause extensive bleeding, uterine 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;[282] 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).[283] It often results in severe bleeding (both antepartum and postpartum), and in extreme conditions, the need for blood transfusions or postpartum hysterectomy.[284] 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%.[285]

4. Pulmonary Hypertension

In pregnant persons with pulmonary hypertension, 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 of between 12-50% if pregnancy occurs under this condition.[286] According to a study on outcomes

---

[278] Elizabeth G. Clement, et al. *The Language of First-trimester Nonviable Pregnancy: Patient-reported Preferences and Clarity,* OBSTETRICS & GYNECOLOGY 133.1 (2019): 149-154.

[279] Caroline Kitchener, *Two friends were denied care after Florida banned abortion. One almost died.*, THE WASHINGTON POST (Apr. 10, 2023), https://www.washingtonpost.com/politics/2023/04/10/pprom-florida-abortion-ban/; *see also* Prelabor Rupture of Membranes: ACOG Practice Bulletin, 135 OBSTETRICS & GYNECOLOGY e80 (2020).

[280] Cande V. Ananth & Wendy L. Kinzler, *Acute placental abruption: Pathophysiology, clinical features, diagnosis, and consequences*, UPTODATE (Jul. 12, 2022), https://www.uptodate.com/contents/acute-placental-abruption-pathophysiology-clinical-features-diagnosis-and-consequences.

[281] *Id.*

[282] *Id.*

[283] Charles J. Lockwood & Karen Russo-Stieglitz, *Placenta previa: Epidemiology, clinical features, diagnosis, morbidity and mortality*, UPTODATE (May 3, 2023), https://www.uptodate.com/contents/placenta-previa-epidemiology-clinical-features-diagnosis-morbidity-and-mortality.

[284] *Id.*

[285] *Id.*

[286] Wendy Hill, Royanne Holy & Glenna Traiger, *Intimacy, contraception, and pregnancy prevention in patients with pulmonary arterial hypertension: are we counseling our patients?*, 10 PULMONARY CIRCULATION 2045894018785259 (2020) ("Contraception is essential in patients with PAH to prevent pregnancy and potential teratogenicity related to specific PAH medications.")

for pregnant patients with PAH, even with treatment, morbidity rates reached almost 6%. Accordingly, the study's authors conclude that "patients with PAH should …be advised against pregnancy.[287] In fact, many physicians will recommend contraceptives as a condition of treating PAH.[288] Importantly, even when managed using modern medicine, the diagnosis of pulmonary hypertension in pregnancy is associated with high rates of maternal morbidity and mortality. [289] When it comes to this condition, termination is often the only available option to save the life of the pregnant person.[290]

5. Preeclampsia

Preeclampsia is a particular form of high blood pressure that occurs in pregnancy, typically developing after 20 weeks of gestation.[291] Preeclampsia poses a danger to the mother and the fetus because it raises blood pressure, which restricts blood supply to the placenta that supports the fetus. The only definitive treatment for preeclampsia is delivery.[292] If the onset of preeclampsia is 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.[293] If the mother's life is at risk due to pre-eclampsia, 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.[294]

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.[295] Sepsis is rare but is a significant cause of maternal morbidity and mortality.[296] Rapid administration of antibiotics and control of blood pressure using vasopressors (monitored in an ICU) may be necessary.[297] Sepsis of

---

[287] Jun Luo, Huafang Shi, Li Xu, Wei Su & Jiang Li, *Pregnancy outcomes in patients with pulmonary arterial hypertension: A retrospective study*, 99 MEDICINE e20285 (2020).
[288] Hill, *supra* note 283.
[289] Stephanie R. Martin & Alexandra Edwards, *Pulmonary Hypertension and Pregnancy*, 134 OBSTETRICS & GYNECOLOGY 974 (2019).
[290] *Id.*
[291] Phyllis August & Baha M. ibai, *Preeclampsia: Clinical features and diagnosis*, UPTODATE (Feb. 9, 2024), https://www.uptodate.com/contents/preeclampsia-clinical-features-and-diagnosis
[292] Rachael Fox, Jamie Kitt, Paul Leeson, Christina Y. L. Aye & Adan J. Lewandowski, *Preeclampsia: Risk Factors, Diagnosis, Management, and The Cardiovascular Impact on the Offspring*, 8 J. CLINICAL MED. 1625 (2019).
[293] *Id.*
[294] Errol R. Norwitz, *Preeclampsia: Antepartum management and timing of delivery*, UPTODATE (Oct. 25, 2023), https://www.uptodate.com/contents/preeclampsia-antepartum-management-and-timing-of-delivery.
[295] Christine C. Reardon & Felicia Chen, *Critical illness during pregnancy and the peripartum period*, UPTODATE (Nov. 20, 2023), https://www.uptodate.com/contents/critical-illness-during-pregnancy-and-the-peripartum-period.
[296] *Id.*
[297] *Id.*

any origin during pregnancy can cause organ and placental dysfunction and is one of the biggest contributors to maternal and fetal mortality.[298]

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.[299] This places the pregnant person at risk of early fetal expulsion (either miscarriage or preterm birth) if not addressed.[300] 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.[301] In some cases, due to the extent of surgical dilation there is not much that can be done to close it or prevent it from dilating more; sometimes part of the fetus is in the vagina, which limits efforts at closure.[302] 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.[303] Typical treatment options for pre-viability cervical insufficiency that is not amenable to cerclage includes medication abortion or D&C.[304] The longer the person with cervical insufficiency or cervical incompetence remains pregnant, the risk of bad outcomes due to infection, sepsis, bleeding and hemorrhage increases.[305]

8. Early Pregnancy Loss / Miscarriage

Early pregnancy loss is common, occurring in 10% of all clinically recognized pregnancies; most cases of pregnancy loss occur within the first trimester.[306] Common symptoms of pregnancy loss are nonspecific and may include vaginal bleeding and uterine cramping.[307] Before initiating treatment, it is important to distinguish early pregnancy loss from other early pregnancy complications with a thorough medical history and physical examination, transvaginal ultrasound and serum b-hcG level can be helpful in making a highly certain diagnosis.[308]

---

[298] *Id.*

[299] Vincenzo Berghella, *Cervical insufficiency*, UPTODATE (Jan 23, 2024), https://www.uptodate.com/contents/cervical-insufficiency; *see also* Megan Carpentier, *"You Can't Just Tell Someone to Go Home and Pass an 18-Week Fetus. That's Not Safe"*, The Meteor (Oct. 18, 2022), https://wearethemeteor.com/incompetent-cervix-obstetricians-for-reproductive-justice/.

[300] Berghella, *supra* note 296.

[301] Errol R. Norwitz, *Transvaginal cervical cerclage*, UPTODATE (Sep. 15, 2023), https://www.uptodate.com/contents/transvaginal-cervical-cerclage.

[302] Vito Leanza, Valentina D'Urso, Marianna Gulisano, Giosuè G. Incognito & Marco Palumbo, *Bulging of both membranas and fetal lower limbs: conservative management*, 73 MINERVA OBSTETRICS & GYNECOLOGY 654, 654 (2021).

[303] Berghella, *supra* note 296.

[304] *Id.*

[305] *Id.*

[306] Sarah Prager, Elizabeth Micks & Vanessa K. Dalton, *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.

[307] Sarah Prager, Elizabeth Micks & Vanessa K. Dalton, *Pregnancy loss (miscarriage): Clinical presentations, diagnosis, and initial evaluation*, UPTODATE (Mar. 15, 2023), https://www.uptodate.com/contents/pregnancy-loss-miscarriage-clinical-presentations-diagnosis-and-initial-evaluation.

[308] *Id.*

Expectant management is generally limited to gestations within the first trimester and is successful in achieving complete expulsion in 70-80% of women.[309] Medical management for early pregnancy loss (i.e., treatment with mifepristone/misoprostol) can be considered in women without infection, hemorrhage, severe anemia, or bleeding disorders who want to shorten the time to complete expulsion but prefer to avoid surgical evacuation.[310] One challenge with anti-abortion policies is that they will inevitably affect women who miscarry.[311] Women have already been denied access to miscarriage treatment as a result of state laws outlawing abortion.[312]

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.[313] Because many pregnant individuals are young and healthy, they are often able to compensate for severe physiologic derangements and might not appear ill until very late in their course of critical illness.[314] 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 while mitigating concerns about legal jeopardy, thereby reducing delays and variation in patient care.[315]

All abortion bans include exceptions for the pregnant person's life, but 9 states do not include nonfatal health risks.[316] Advocates in these states are taking action. In Wisconsin, a group of doctors and lawyers is trying to come up with guidelines on how to comply with a newly revived 173-year-old law that prohibits abortion except to save the life of a pregnant woman. They face the daunting task of defining all the emergencies and conditions that might result in a pregnant woman's death.[317] A similar task force at an Arizona hospital recommends having a lawyer on call to help doctors determine whether a woman's condition threatens her life enough to justify an abortion. Already, the hospital has added questions to its electronic medical forms so they can be used to argue that patients who had

---

309 Sarah Prager, Elizabeth Micks & Vanessa K. Dalton, *Pregnancy loss (miscarriage): Description of management techniques*, UPTODATE (Oct. 13, 2023), https://www.uptodate.com/contents/pregnancy-loss-miscarriage-description-of-management-techniques.

310 *Id.*

311 Pam Belluck, *They Had Miscarriages, and New Abortion Laws Obstructed Treatment*, THE NEW YORK TIMES (Jul 17, 2022), https://www.nytimes.com/2022/07/17/health/abortion-miscarriage-treatment.html.

312 Id.

313 Bradford D. Winters, Ayse P. Gurses, Harold Lehmann, J. Bryan Sexton, Carlyle Jai Rampersad & Peter J. Pronovost, *Clinical review: Checklists—translating evidence into practice*, 13 CRITICAL CARE 210 (2009).

314 MacDonald, *supra* note 68, at 1691.

315 *Id.*

316 Rebecca B. Reingold, Lawrence O. Gostin & Michele Bratcher Goodwin, *Legal Risks and Ethical Dilemmas for Clinicians in the Aftermath of Dobbs*, 328 J. AM. MED. ASS'N 1695 (2022).

317 Kate Zernike, *Medical Impact of Roe Reversal Goes Well Beyond Abortion Clinics, Doctors Say*, THE NEW YORK TIMES (Sep. 10, 2022), https://www.nytimes.com/2022/09/10/us/abortion-bans-medical-care-women.html.

abortions would have died without them.[318] The Louisiana Department of Health issued a declaration of emergency and an emergency rule after the passage of their abortion restriction. It lists 25 different conditions that shall deem an unborn child "medically futile."[319]

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.[320] ACOG strongly reaffirms that it is critical for clinicians to be able to use and rely upon their expertise and medical judgment to determine the treatments indicated for each clinical situation and level of care.[321] Therefore, any such workflow or protocol that 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.[322] ACOG asserts that doctors and other health care professionals must be able to intervene when they feel its medically necessary and 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 unstable vital signs) before allowing clinicians to proceed with abortion care.[323]

There is also a need for cooperation and varied checklists. The Keystone study 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.[324] Bosk et al. note, "it would be a mistake to say there was one 'Keystone checklist': there was not a uniform instrument, but rather, more than 100 versions. Each ICU, informed by evidence and a prototype, was encouraged to develop their own checklist to fit their unique barriers and culture.[325]

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.[326] 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.[327] Hospitals should, to the extent possible, provide legal protection for those serving in such

---

[318] *Id.*

[319] Emergency Rules, Office of Public Health—Conditions that Shall Deem an Unborn Child "Medically Futile", LAC 48:I.401), https://www.doa.la.gov/media/u5lccp23/2302.pdf.

[320] MacDonald, *supra* note 68, at 1692.

[321] Press Release, Understanding and Navigating Medical Emergency Exceptions in Abortion Bans and Restrictions, AM. COLLEGE. OBSTETRICIANS & GYNECOLOGISTS (Aug. 15, 2022), https://www.acog.org/news/news-articles/2022/08/understanding-medical-emergency-exceptions-in-abortion-bans-restrictions.

[322] *Id.*

[323] *Id.*

[324] Bosk, *supra* note 169, at 445.

[325] *Id.*

[326] American College of Obstetricians and Gynecologists, *Questions to help hospital systems prepare for the widespread and devastating impacts of a post-roe legal landscape* (Jun. 24, 2022, updated 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.

[327] *Id.*

an advisory capacity, similar to that provided for credentialing committees, ethics committees, and maternal mortality review committees.

C. Applying the Protocols

How would the 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 loss as an example.[328] 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. In patients with nonemergent miscarriage—particularly during the first trimester—watchful waiting may be the best course of action despite the safety of abortifacients mifepristone and misoprostol. For medical management of miscarriage, there are clear instructions for mifepristone and misoprostol dosing and timing, as outlined in the labels for the respective drugs. The workflow would likely include a misoprostol-only dosing option, which may be required if mifepristone is not available.[329]

In either case, pain management would be provided. Women who are Rh(D) negative and unsensitized should receive Rh(D)-immune globulin within 72 hours of the first misoprostol dose to prevent against a condition known as rhesus disease, which, if the fetus is Rh(D)-positive, could lead severe immune thrombocytopenic purpura (ITP) that may result in fetal death if left untreated. Regardless of the availability of abortifacients, Rh(D)-immune globulin should be available and noncontroversial to administer. Follow-up is required to document the complete passage of tissue and can be accomplished by a repeat ultrasound examination, typically within 7–14 days. As an alternative, serial serum β-hCG measurements may be used in settings where ultrasonography is unavailable. Patient-reported symptoms also should be considered when determining whether complete expulsion has occurred.

If medical management fails, the patient may continue to opt for expectant management or may need to pursue D&C procedure. Surgical uterine evacuation has long been the traditional approach for women presenting with early pregnancy loss and retained tissue. Women who present with hemorrhage, hemodynamic instability, or signs of infection should be treated urgently with surgical uterine evacuation. Surgical evacuation also might be preferable in other situations, including the presence of medical comorbidities such as severe anemia, bleeding disorders, or cardiovascular disease.[330] Because a D&C often falls under the definition of "abortion," careful definition of need may need to be documented to justify its use in these patients.

---

[328] Early Pregnancy Loss Practice Bulletin. ACOG. https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2018/11/early-pregnancy-loss?utm_source=redirect&utm_medium=web&utm_campaign=otn

[329] See infra ___ (section on mifepristone)

[330] Early Pregnancy Loss Practice Bulletin. ACOG. https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2018/11/early-pregnancy-loss?utm_source=redirect&utm_medium=web&utm_campaign=otn

D. Limitations and Considerations for WEDGE

One clear limitation of the WEDGE is that is not meant to be a rigid protocol. At the outset, the World Health Organization stated very clearly that its surgical checklist should not be comprehensive, encouraging modifications and additions to make it fit into local practice.[331] The Keystone Checklist team noted that adaptability and variation are key to success.[332] 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 due to decision paralysis or other factors. Other important limitations exist that could affect the viability of WEDGE.

1. EMTALA protections under siege

The US Department of Health and Human Services requires hospitals and physicians in all states to provide necessary emergency abortion services to comply with separate federal legislation enacted in 1986, the Emergency Medical Treatment and Labor Act (EMTALA).[333] This legislation stipulates that "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."[334] Stabilizing the patient involves providing such medical treatment of the condition as may be 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.

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.[335]

On July 11, 2022, the Department of Health and Human Services sent a letter assuring physicians that EMTALA will be enforced.[336] Therefore, if you live in a state with no health exception to a ban on abortion provision or one with a health exception that is narrower than the EMTALA

---

[331] Haugen, Sevdalis, Softeland, Impact of the World Health Organization Surgical Safety Checklist on Patient Safety

[332] Bosk, supra note 169, at 445.

[333] An "emergency medical condition" is "a medical condition manifesting itself by acute symptoms of sufficient severity (including sever 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).

[334] MacDonald, *supra* note 68, at 1691 (citing *Department of Health and Human Services, Reinforcement of EMTALA obligations specific to patients who are pregnant or are experiencing pregnancy loss (Updated July 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.)

[335] *See* Emergency Medical Care Letter to Health Care Providers, Secretary of Health and Human Services, Department of Health and Human Services, July 11, 2022, https://www.hhs.gov/sites/default/files/emergency-medical-care-letter-to-health-care-providers.pdf.

[336] *Id.*

language (arguably all the others), legally your emergency department or emergency obstetrics service should follow EMTALA.[337] 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."[338] In August 2022, a federal court in Texas issued a preliminary injunction against EMTALA enforcement in Texas; that decision was affirmed by the 5th Circuit Court of Appeals in January 2024.[339] A subsequent case challenging an Idaho state law that conflicted with EMTALA has now worked its way up to the U.S. Supreme Court, which is slated to hear oral argument in April 2024.[340] Watson notes that for the time being, civil penalties under EMTALA are unlikely to be imposed because "a prochoice administration is in the White House."[341]

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 truly create an inclusive list of conditions that qualify as "medical emergencies." In addition, it would be dangerous to attempt to create a finite list of conditions to guide the practice of clinicians attempting to navigate their state's abortion restrictions. Reasons this type of exhaustive list is neither feasible nor advisable include: (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.[342]

Another consideration is that statutory construction and interpretation could render this process moot. Watson asserts that "providing 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."[343]

Legislative intent and rules of statutory construction may also support standard-of-care treatment decisions in many cases.[344] Many statutes intended give physicians case-by-case discretion,

---

[337] Katie Watson, *Dark-Alley Ethics—How to Interpret Medical Exceptions to Bans on Abortion Provision*, 388 NEW ENGL. J. MED. 1240, 1240 (2023).
[338] Id. at 1242.
[339] Texas v. Becerra, 623 F. Supp. 3d 696 (N.D. Tex. 2022); Texas v. Becerra, 89 F.4d 529 (5th Cir. 2024).
[340] Watson, *supra* note 334, at 1242; *see also* Moyle v. United States, 2024 WL 61828 (2024); Idaho v. United States, 2024 WL 61829 (2024).
[341] Watson, *supra* note 334, at 1242.
[342] ACOG, *supra* note 318.
[343] Watson, *supra* note 334, at 1240.
[344] *Id.* at 1243.

and some states explicitly included that discretion in the statute.[345] 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."[346] 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.[347] Yet in Arizona, the statute allows physicians to make determinations based on "good faith clinical judgment."[348]

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/choices Workflows—endorsed by hospital administration and backed by promises of legal representation for physicians who made 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.[349] 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 5 days later).[350] 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.[351] 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).[352] After granting cert in January 2024, the Supreme Court will hear oral argument in March, with a decision expected by May or June.[353]

Given that the Supreme Court may invalidate mifepristone's approval, 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

---

[345] *Id.*; *see also* Laurie Sobel, Mabel Felix & Alina Salganicoff, *Who Decides When a Patient Qualifies for an Abortion Ban Exception? Doctors vs. the Courts*, KAISER FAMILY FOUNDATION (Dec. 14, 2023), https://www.kff.org/policy-watch/who-decides-when-patient-qualifies-for-abortion-ban-exception/.

[346] Watson, *supra* note 336, at 1243.

[347] Sobel, *supra* note 342.

[348] *Id.*

[349] Daniel G. Aaron, Teneille R. Brown & Michael S. Sinha, *Court Intrusion Into Science and Medicine—The Mifepristone Decisions*, 329 J. AM. MED. ASS'N 1735, 1735 (2023).

[350] *Id.*

[351] *Id.* at 1736.

[352] Daniel G. Aaron, Teneille R. Brown & Michael S. Sinha, *Fifth Circuit Second-Guesses The FDA's Scientific Judgment: A Dangerous Precedent*, HEALTH AFFAIRS FOREFRONT (Oct. 6, 2023), https://www.healthaffairs.org/content/forefront/fifth-circuit-second-guesses-fda-s-scientific-judgment-dangerous-precedent.

[353] Amy Howe, *Court schedules abortion pill case for March argument session*, SCOTUSBLOG (Jan. 29, 2024), https://www.scotusblog.com/2024/01/court-schedules-abortion-pill-case-for-march-argument-session/.

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 life-saving care, the need for protocols and workflows will become increasingly urgent. The stories of women who have been irreparably harmed make it clear that such measures are already overdue.[354]

Conclusion

Jack Resneck, 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."[355] The governmental intrusion is more than incidental. The very professionals best quipped to make patient treatment choices are not only explicitly distrusted but are criminalized by abortion-ban laws.[356] Doctors who had been free to concern themselves with patient welfare must worry about their *own* welfare in a post-*Dobbs* regime.[357] The direct result is that patients who require abortion care are deprived that care until their lives hang in the balance.[358] Meanwhile, medical professionals are grappling with how to fulfill their hypocritic oath in contexts in which their hands are metaphorically bound.[359]

The untenable position providers face in abortion-ban states has forced many doctors to reconsider their careers or relocate to more progressive regions where they can practice medicine without fear of prosecution. [360] This, in turn, has decreased the availability and accessibility of comprehensive reproductive healthcare, creating reproductive-care deserts and further endangering the health of women in these states. [361] The fear-induced scarcity of abortion providers exacerbates

---

354 NPR Staff New abortion laws changed their lives. 8 very personal stories NPR (June 23, 2023)(https://www.npr.org/sections/health-shots/2023/06/23/1183878942/abortion-bans-personal-stories-dobbs-anniversary).

355 Jack Resneck, Jr. M.D. President, American Medical Association AMA Press Release, *Ruling an Egregious Allowance of Government Intrusion into Medicine* (June 24, 2022)(https://www.ama-assn.org/press-center/press-releases/ruling-egregious-allowance-government-intrusion-medicine).

356 *Id.*

357 Whitney Arey et. al. *A Preview of the Dangerous Future of Abortion Bans — Texas Senate Bill 8* N Engl J Med 387 (2022)(reporting that "The climate of fear created by SB8 has resulted in patients receiving medically inappropriate care.").

358 Whitney Arey et. al. *A Preview of the Dangerous Future of Abortion Bans — Texas Senate Bill 8* N Engl J Med 387 (2022)((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.")(https://www.nejm.org/doi/full/10.1056/NEJMp2207423)

359 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?" (Professional Civil Disobedience — Medical-Society Responsibilities after Dobbs 387 N Engl J Med 959 (2022).

360 Alice Miranda Ollstein, *Abortion doctors' post-Roe dilemma: Move, stay or straddle state lines,* Politico (June 29, 2022), https://www.politico.com/news/2022/06/29/abortion-doctors-post-roe-dilemma-move-stay-or-straddle-state-lines-00040660. See also Laura Ungar, *Why some doctors stay in US states with restrictive abortion laws and others leave,* ABC News (June 22, 2023), https://abcnews.go.com/US/wireStory/doctors-stay-us-states-restrictive-abortion-laws-leave-100329326.

361 *Id.*

health inequalities, as marginalized communities and individuals with limited resources bear the brunt of the restrictions.[362]

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.[363] 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.[364] Today, in abortion-ban states where research is most needed, robust data collection is hampered by doctor and patient concern over potential prosecution.[365] The protections afforded by HIPPA can be circumvented by laws and court decisions that make a fetus or even an embryo a "child," creating reporting obligations and privacy exceptions.[366]

Considering existing realities, developing practice protocols and workflows is an efficient and effective solution. Guidelines modeled on established protocols with proven track records are likely to be well received, particularly by physicians in high-risk OBGYN 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."[367] The creation of consistent external decision tools will allow for heuristical decision-making that optimizes, rather than hindering 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.

---

[362] Michael Berger, *Overturning Roe disproportionately burdens marginalized groups,* Penn Today (June 30, 2022), https://penntoday.upenn.edu/news/overturning-Roe-abortion-bans-disproportionately-burden-traditionally-marginalized-groups. The U.S. Department of Health and Human Services (HHS) has stated that federal law, and specifically, the Emergency Medical Treatment and Active Labor Act, protecting preempts state abortion laws, rendering them void when a patient's life is at risk, citing the Emergency Medical Treatment and Active Labor Act, which protects the right to emergency medical care. CITATION This means that providers are protected "when offering legally-mandated, life- or health-saving abortion services in emergency situations," according to the HHS statement.

[363] Jeffrey A. Claridge & Timothy C. Fabian, *History and Development of Evidence-Based Medicine* 95 WORLD J SURG. 547 (2005).

[364] Anya E. R. Prince, *Reproductive Health Surveillance* 64 BOSTON COLLEGE L. REV. 3 (2023).

[365] *Id.*.

[366] State mandates requiring healthcare providers to disclose instances of suspected child abuse permitted by HIPAA could, under state law, include conduct during pregnancy. U.S. Dept. of Health and Human Services, HIPPA Guildeines (https://www.hhs.gov/hipaa/index.html).

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