



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

# Potential for State Restrictions to Impact Critical Care of Pregnant Patients With Coronavirus Disease 2019



Erin Sullivan DeMartino, MD  
Rochester, MN  
Julie Chor, MD, MPH  
Chicago, IL

On my walk to work for my first labor and delivery shift after the governor of Illinois declared a shelter-in-place order, I (J. C.) thought about a patient for whom I cared years ago. In the winter of 2009, in my first year covering labor and delivery as an attending physician, I spent most of one overnight shift in the ICU helping to care for a patient who was 16 weeks pregnant and intubated due to the H1N1 virus. This patient had a complicated social history and family structure, and I made numerous phone calls that evening trying to identify who should be her surrogate decision-maker. I ultimately was able to find her adoptive mother, who came in several hours later to help make difficult decisions about her daughter's care.

Although initial reports appear to show that pregnant people fare better under the coronavirus disease 2019 (COVID-19) pandemic than under the H1N1 outbreak, the data are still limited.<sup>1</sup> Recent evidence from the Centers for Disease Control and Prevention suggests pregnant patients with COVID-19 are more likely to be admitted to an ICU and more likely to be intubated than nonpregnant people (Fig 1).<sup>2</sup> We will certainly learn a

great deal more in the coming months and years about the effects of COVID-19 on pregnant people, fetuses, and neonates as we care for more patients who have been exposed to the novel virus.

An important fact, unknown to me in 2009, must be considered as we care for pregnant people during the current pandemic. Many states regulate advance directives and decisions about life support differently for pregnant people than for the rest of the population.

Pregnancy restrictions on end-of-life care warrant new attention, given the current COVID-19 pandemic. Thirty states restrict the rights of pregnant people or surrogate decision-makers to make decisions about end-of-life care and life-sustaining therapies.<sup>3</sup> Last year, we documented that, when a pregnant person loses decisional capacity (the ability to make her own medical decisions) due to devastating illness or injury, 25 states nullify their advance directives. Nineteen states prevent a pregnant person's surrogate decision-makers from making decisions about end-of-life care. Of the 30 states with pregnancy restrictions, 18 apply if health-care providers believe the fetus could survive with continued application of life-sustaining therapies to the pregnant person. The remaining 12 states require that life-sustaining therapy be continued until the fetus can be safely delivered, regardless of its gestational age at the time the patient falls ill. This mandated care can occur in opposition to an individual's wishes as documented in an advance directive or over the strident objections of their loved ones. In forcing providers to go against patients' stated wishes for end-of-life care during pregnancy, these statutes undermine providers' responsibilities to respect patients' preferences and run in conflict with our obligation to do no harm.

As a critical care physician (E. S. D.) and an obstetrician-gynecologist (J. C.), we are now more conscious than ever of the prevalence and scope of these restrictions, cognizant that many of our colleagues in critical care and obstetrics and gynecology may not be aware of these restrictions, and concerned about how these restrictions may impact the care of pregnant people during the current pandemic. Variation in state laws could translate to markedly discrepant care, even in neighboring states. These so-called "pregnancy restrictions" are not widely

**AFFILIATIONS:** From the Division of Pulmonary and Critical Care (E. DeMartino), Mayo Clinic Ringgold; and Department of Obstetrics and Gynecology (J. Chor), University of Chicago Ringgold.

**FINANCIAL/NONFINANCIAL DISCLOSURES:** None declared.

**CORRESPONDENCE TO:** Julie Chor, MD, MPH; e-mail: [jchor@bsd.uchicago.edu](mailto:jchor@bsd.uchicago.edu)

Copyright © 2020 American College of Chest Physicians. Published by Elsevier Inc. All rights reserved.

**DOI:** <https://doi.org/10.1016/j.chest.2020.10.063>



Figure 1 – Critical care of pregnant patient.

known among patients, physicians, or ethicists, nor do states effectively communicate them to affected parties. Only 32% of states with a pregnancy restriction law disclose the restriction on their official advance directive forms. Fortunately, under normal circumstances pregnant people and their families rarely confront these laws, because pregnant people rarely experience life-threatening illness and decisional incapacity.<sup>4</sup> However, current circumstances may result in more pregnant patients requiring life-sustaining interventions and care teams and families facing difficult decisions about whether to continue, escalate, or discontinue such measures. When they do occur, these situations are medically, ethically, and emotionally fraught. The existence and heterogeneity of these pregnancy restrictions add another layer of complexity to navigating these anguishing cases.

As clinical medical ethicists, we recognize that pregnancy restrictions threaten ethical principles foundational to the practice of medicine in our country.<sup>5</sup> Nullifying an individual's preferences as explicitly indicated in an advance directive is a violation of their autonomy. Disregarding a person's deeply held beliefs and values, as expressed by their surrogate decision-makers, similarly prevents delivery of values-concordant care. Mandating the continuation of life-sustaining therapy because an individual is pregnant, regardless of medical circumstances, can result in weeks or months of suffering, challenging physicians' professional oath to "do no harm." Finally, because individuals who are pregnant alone are subjected to having their advance directives nullified by the State, these restrictions violate

the principle of justice and may even be unconstitutional.

As physicians and individuals who have experienced pregnancy, we are troubled that our carefully considered wishes could have been cast aside had we faced life-threatening illness during our own pregnancies. However, we are encouraged by actions taken in Idaho and Connecticut challenging those states' restrictions on the rights of pregnant people and their families to direct their end-of-life care. In 2018, the state of Idaho faced a challenge to its restrictions on pregnant people's end-of-life decision-making.<sup>6</sup> Citing equal protections concerns under the Constitution, four individuals in Idaho sued the state in federal court, arguing that the state's invalidation of pregnant people's advance directives discriminates against them as women. Under pressure from advocacy groups and medical ethicists, Connecticut passed House Bill 5148, eliminating its pregnancy-based nullification of advance directives and restrictions on end-of-life decision-making of pregnant people.<sup>7</sup>

In facing the myriad and potentially unpredictable challenges that we will undoubtedly encounter as we care for pregnant people during the current COVID-19 pandemic, it is imperative that frontline providers who care for critically ill pregnant people are aware of these pregnancy restrictions. We recommend frontline providers familiarize themselves with nuances of their state's statutes should they encounter a critically ill pregnant person, such as whether restrictions apply solely to surrogate decision-making, whether they invalidate a person's advance directive, and at what gestational age the restrictions apply.<sup>3</sup>

By exposing pregnancy restriction laws, we hope to catalyze further debate about their constitutionality and whether they reflect our values as a society. Eventually, when we find ourselves on the other side of this pandemic, we hope to motivate health-care providers and the public to ensure that people's values, beliefs, and preferences for their health care are respected during pregnancy.

## References

1. Rasmussen SA, Smulian JC, Lednický JA, Wen TS, Jamieson DJ. Coronavirus disease 2019 (COVID-19) and pregnancy: what obstetricians need to know. *Am J Obstet Gynecol.* 2020;222(5):415-426.
2. Ellington S, Strid P, Tong VT, et al. Characteristics of women of reproductive age with laboratory-confirmed SARS-CoV-2 infection by pregnancy status: United States, January 22-June 7, 2020. *MMWR Morb Mortal Wkly Rep.* 2020;69(25):769-775.

3. DeMartino ES, Sperry BP, Doyle CK, et al. State regulations for pregnant women without decisional capacity. *JAMA*. 2019;321(16):1629-1631.
4. Pollock W, Rose L, Dennis CL. Pregnant and postpartum admissions to the intensive care unit: a systematic review. *Intensive Care Med*. 2010;36:1465-1474.
5. Beauchamp TL, Childress JF. *Principles of biomedical ethics*. 7th ed. New York: Oxford University Press; 2013.
6. *Almerico v. Idaho*, 1:18-cv-00239, (D. Idaho 2019).
7. Committee CPH. Joint Favorable Report: An Act Concerning Pregnant Patients Exercising Living Wills. 2018. <https://www.cga.ct.gov/2018/JFR/h/2018HB-05148-R00PH-JFR.htm>. Accessed November 19, 2020.