

Midwifery Licensing: Medicalization of Birth and Special Interests

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Abstract

In this study we attempt to understand the relatively expensive and medicalized maternity care service industry in the United States by exploring the regulatory environment around alternatives to hospital births. We argue that a variety of existing regulations—restrictive licensing regulations, in particular—have raised the costs of providing these birthing alternatives and have thereby artificially reduced the supply. Such regulations exacerbate inappropriate medicalization of birth, escalate costs, create maternity deserts in rural and urban areas, and contribute to inequality by pricing diverse providers out of the maternity care market altogether. More troublingly, such regulations do little to increase the safety of maternity care but may actually make birth less safe by stymying integration and cooperation and preventing women from finding providers who can address their unique needs, contributing medical errors and racial disparities to maternity care outcomes. Safe alternatives exist to restrictive state licensing, alternatives that provide greater levels of freedom, more appropriate care, and reduced disparities for the most vulnerable birthing women.

JEL codes: H75

Keywords: Midwives, Doctors, Health, Medical Care, Medico Economic, maternity care, health disparities, maternity deserts, licensing, birth centers, community-based providers, certified nurse midwives, certified professional midwives

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Introduction

The birthing options available to American women present something of a puzzle. The most common experience is a highly medicalized hospital birth that is often very expensive and frequently depersonalized. Some women experience mistreatment, including serious physical or mental harm.¹ Alternatives to hospital births exist, and they are as safe, less expensive, less medicalized, and more personalized than hospital-based births for low-risk women.² Women also express greater satisfaction with nonhospital births, including reporting much lower rates of mistreatment during labor and delivery.³ Nonetheless, just 1.6 percent of all births in the United States occur outside hospitals.⁴ Maternity care seems to be a golden opportunity for entrepreneurial healthcare providers to increase the supply of these alternatives and offer

¹ Saraswathi Vedam, Kathrin Stoll, Tanya Khemet Taiwo, Nicholas Rubashkin, Melissa Gheyney, Nan Strauss, Monica McLemore, Micaela Cadena, Elizabeth Nethery, Elanor Rushton, Laura Schummers, Eugene Declercq, and GVTM-US Steering Council, “The Giving Voice to Mothers Study: Inequity and Mistreatment during Pregnancy and Childbirth in the United States,” *Reproductive Health* 16, no. 1 (June 11, 2019): 77, <https://doi.org/10.1186/s12978-019-0729-2>; E. R. Declercq, Carol Sakala, Maureen P. Corry, Sandra Applebaum, and Ariel Herrlich, “Listening to Mothers III: Pregnancy and Birth, Childbirth Connection, May 2013, http://transform.childbirthconnection.org/wp-content/uploads/2013/06/LTM-III_MajorSurveyFindings_PregnancyAndBirth.pdf. See also D. K. Creedy, I. M. Shochet, and J. Horsfall, “Childbirth and the Development of Acute Trauma Symptoms: Incidence and Contributing Factors,” *Birth* 27, no. 2 (June 2000): 104–11; Beth Greenfield, “Mom Who Sued Hospital for Traumatic Birth Wins \$16 Million,” *Yahoo News*, August 8, 2016, <https://www.yahoo.com/beauty/mom-who-sued-hospital-for-traumatic-birth-wins-16-million-173203800.html>; Sarah Yahr Tucker and Callie Beusman, “There Is a Hidden Epidemic of Doctors Abusing Women in Labor, Doula Say,” *Broadly*, May 8, 2018.

² Centers for Disease Control, “Births: Final Data for 2019,” National Vital Statistics Reports, March 23, 2021. See also Jill Alliman and Julia C. Phillippi, “Maternal Outcomes in Birth Centers: An Integrative Review of the Literature,” *Journal of Midwifery & Women’s Health* 61, no. 1 (January 2016): 21–51; Melissa Cheyney, Marit Bovbjerg, Courtney L. Everson, Wendy Gordon, Darcy Hannibal, and Saraswathi Vedam, “Outcomes of Care for 16,924 Planned Home Births in the United States: The Midwives Alliance of North America Statistics Project, 2004 to 2009,” *Journal of Midwifery & Women’s Health* 59, no. 1 (January 1, 2014): 17–27.

³ Vedam et al., “The Giving Voice to Mothers Study.” See also Declercq et al., “Listening to Mothers III”; Christopher Godfrey Fawsitt, Jane Bourke, Jennifer E. Lutomski, Sarah Meaney, Brendan McElroy, Rosemary Murphy, and Richard Anthony Greene, “What Women Want: Exploring Pregnant Women’s Preferences for Alternative Models of Maternity Care,” *Health Policy* 121, no. 1 (January 1, 2017): 66–74.

⁴ Marian MacDorman and Eugene Declercq, “Trends and State Variations in Out-of-Hospital Births in the United States, 2004–2017,” *Birth* 46, no. 2 (June 2019): 279–88.

women a lower-cost and more satisfying pregnancy and labor. What is preventing the market from providing these alternatives?

In this study, we attempt to answer this question by exploring the regulatory environment around alternatives to hospital births. We will argue that a variety of existing regulations, restrictive licensing regulations in particular, have raised the costs of providing these birthing alternatives and have thereby artificially reduced the supply. The lack of alternatives makes it harder for women to get the birthing experience they desire and harms poor women in particular by limiting the availability of choices that are potentially cheaper than the standard hospital birth. The regulation of midwives and other hospital alternatives is mostly the result of medical and hospital associations seeking to protect their monopoly power and corresponding higher incomes by raising the costs of their competition. Eliminating those regulations and allowing midwives to provide full pregnancy and birth care in nonhospital settings would provide women with a much broader range of options that would better meet their needs, and do so safely, while also generating competition that would reduce the costs of birth care across the board. The lack of birthing alternatives is not a failure of traditional market supply and demand but rather the consequence of a regulatory structure that protects incumbent providers, including hospitals and physicians, from the competition of midwives and others who can provide care of similar quality at lower cost.

Midwifery and Nonhospital Birth

In what follows, we focus on midwives for three reasons. First, midwifery has historically been the primary alternative to physician- and hospital-based maternity care, and midwives are primary maternity care providers in other countries, including Canada and the United Kingdom, Denmark,

and other European countries.⁵ Evidence from these countries demonstrates that midwives provide low-cost, high-quality, and less-medicalized maternity care for low-risk women.⁶ The second reason for focusing on midwives is that midwives provide the kind of care that prevents escalation of care and intervention in the first place, thus mitigating medicalization and controlling costs. The midwifery model of care emphasizes labor support, high-quality communication about goals and preferences for care, and managing risks to limit interventions.⁷ Numerous studies find that expanded access to midwifery care for low-risk women reduces rates of medical interventions such as cesarean section.⁸ In countries where midwives are integrated into the healthcare system, they operate as part of a maternity care triage structure, with midwives handling most low-risk pregnancies, while higher-risk categories—such as twins or multiples, gestational diabetes, hypertension, and other maternal characteristics that require ongoing medical monitoring—are managed by an integrated unit usually consisting of midwives and physicians, including

⁵ Nina Martin, “A Larger Role for Midwives Could Improve Deficient U.S. Care for Mothers and Babies,” ProPublica, February 22, 2018, <https://www.propublica.org/article/midwives-study-maternal-neonatal-care?token=jg6nGk6aRoymOqJmDTStjh1PIBKaGEW9>.

⁶ Jane Sandall, “Birthplace in England Research—Implications of New Evidence,” *Journal of Perinatal Education* 22, no. 2 (2013): 77–82; Jane Sandall, Hora Soltani, Simon Gates, Andrew Shennan, and Declan Devane, “Midwife-Led Continuity Models versus Other Models of Care for Childbearing Women,” in *Cochrane Database of Systematic Reviews*, ed. The Cochrane Collaboration (Chichester: John Wiley & Sons, 2015); Mary J. Renfrew, Alison McFadden, Maria Helena Bastos, James Campbell, Andrew Amos Channon, Ngai Fen Cheung, Deborah Rachel Audebert Delage Silva, Soo Downe, Holly Powell Kennedy, Address Malata, Felicia McCormick, Laura Wick, and Eugene Declercq, “Midwifery and Quality Care: Findings from a New Evidence-Informed Framework for Maternal and Newborn Care,” *The Lancet* 384, no. 9948 (September 20, 2014): 1129–45.

⁷ Julie Paul, Robin Jordan, Susan Duty, and Janet L. Engstrom, “Improving Satisfaction with Care and Reducing Length of Stay in an Obstetric Triage Unit Using a Nurse-Midwife-Managed Model of Care,” *Journal of Midwifery & Women’s Health* 58, no. 2 (2013): 175–81.

⁸ Angela Reitsma, Julia Simioni, Ginny Brunton, Karyn Kaufman, and Eileen K. Hutton, “Maternal Outcomes and Birth Interventions among Women Who Begin Labour Intending to Give Birth at Home Compared to Women of Low Obstetrical Risk Who Intend to Give Birth in Hospital: A Systematic Review and Meta-Analyses,” *EClinicalMedicine* 21 (April 1, 2020); Alliman and Phillippi, “Maternal Outcomes in Birth Centers”; Eileen K. Hutton, Angela Reitsma, Julia Simioni, Ginny Brunton, and Karyn Kaufman, “Perinatal or Neonatal Mortality among Women Who Intend at the Onset of Labour to Give Birth at Home Compared to Women of Low Obstetrical Risk Who Intend to Give Birth in Hospital: A Systematic Review and Meta-Analyses,” *EClinicalMedicine* 14 (July 25, 2019).

obstetricians.⁹ Such a system helps improve outcomes by limiting unnecessary interventions while ensuring coordinated care and access to medical interventions when needed. Finally, midwives are the primary providers for births in community settings—including birth centers and home births—meaning that licensing and regulation of midwives will have significant downstream effects on all nonhospital birthing options.

One benefit of midwifery care is that it reduces costs. Much of these cost savings come from reduced interventions; both in and outside hospitals, midwives reduce the likelihood of costly interventions such as cesarean section for low-risk mothers.¹⁰ These cost savings compound over time. Cesarean section for the first pregnancy for low-risk women is the primary driver of cesarean section in subsequent pregnancies. As a result, reducing first-pregnancy cesarean rates for low-risk mothers would save money and improve outcomes in later pregnancies as well.¹¹ Moreover, these cost savings do not include costs that are harder to measure, such as time off work recovering from surgical birth or the costs of neonatal ICU stays or later medical complications for both mothers and infants resulting from surgical delivery, which are more likely with physician-led and hospital-based births.¹² Even in hospitals, midwives reduce costs

⁹ Sandall et al., “Midwife-Led Continuity Models versus Other Models of Care for Childbearing Women”; Saraswathi Vedam, Kathrin Stoll, Marian MacDorman, Eugene Declercq, Renee Cramer, Melissa Cheyney, Timothy Fisher, Emma Butt, Y. Tony Yang, and Holly Powell Kennedy, “Mapping Integration of Midwives across the United States: Impact on Access, Equity, and Outcomes,” *PLoS ONE* 13, no. 2 (February 21, 2018); Roslyn E. Donnellan-Fernandez, Debra K. Creedy, and Emily J. Callander, “Cost-Effectiveness of Continuity of Midwifery Care for Women with Complex Pregnancy: A Structured Review of the Literature,” *Health Economics Review* 8 (December 5, 2018).

¹⁰ Reitsma et al., “Maternal Outcomes and Birth Interventions among Women Who Begin Labour Intending to Give Birth at Home Compared to Women of Low Obstetrical Risk Who Intend to Give Birth in Hospital”; Hutton et al., “Perinatal or Neonatal Mortality among Women Who Intend at the Onset of Labour to Give Birth at Home Compared to Women of Low Obstetrical Risk Who Intend to Give Birth in Hospital.”

¹¹ Aaron B. Caughey, Alison G. Cahill, Jeanne-Marie Guise, and Dwight J. Rouse, “Safe Prevention of the Primary Cesarean Delivery,” *Obstetrical & Gynecological Survey* 69, no. 7 (2014): 381–83; Annelee Boyle, Uma M. Reddy, Helain J. Landy, Chun Chih Huang, Rita W. Driggers, and S. Katherine Laughon, “Primary Cesarean Delivery in the United States,” *Obstetrics and Gynecology* 122, no. 1 (July 2013): 33–40.

¹² Hutton et al., “Perinatal or Neonatal Mortality among Women Who Intend at the Onset of Labour to Give Birth at Home Compared to Women of Low Obstetrical Risk Who Intend to Give Birth in Hospital”; Neel Shah, “A NICE Delivery—the Cross-Atlantic Divide over Treatment Intensity in Childbirth,” *New England Journal of Medicine* 372, no. 23 (June 3, 2015): 2181–83.

by limiting unnecessary interventions, with one study estimating an average savings of \$2,262 per hospital birth for midwife-led care over traditional obstetrician-led care.¹³ More widespread midwifery care could also increase access to care generally, given the effects of hospital consolidation on rural health and the growing number of rural areas with inadequate access to maternity care.¹⁴ Better access would also likely reduce costs by increasing access to and compliance with prenatal appointments, a crucial intervention in reducing preterm birth and the need for medical interventions such as surgical birth.

While midwives are also lower-cost providers generally, some of this is the result of artificially low reimbursement rates set by insurers. Lower reimbursement rates are often justified on the basis that most midwives have fewer years of education than physicians, but midwifery care is also more time-intensive than the medical model, meaning that many midwives end up providing uncompensated care. It is precisely the time-intensiveness of midwifery care that reduces the need for interventions. Artificially low payments for midwives may then be counterproductive on multiple fronts.

While costs range widely depending on type of delivery, payer, and region, fees for planned home birth with a midwife average around \$4,000, compared to average costs for a traditional hospital-based birth of \$13,000.¹⁵ Assessing market cost savings between midwifery care and

¹³ Laura B. Attanasio, Fernando Alarid-Escudero, and Katy B. Kozhimannil, “Midwife-led Care and Obstetrician-led Care for Low-risk Pregnancies: A Cost Comparison,” *Birth* 47, no. 1 (March 2020): 57–66.

¹⁴ Brittany L. Ranchoff and Eugene R. Declercq, “The Scope of Midwifery Practice Regulations and the Availability of the Certified Nurse-Midwifery and Certified Midwifery Workforce, 2012–2016,” *Journal of Midwifery & Women’s Health* 65, no. 1 (2020): 119–30; Maeve Wallace, Lauren Dyer, Erica Felker-Kantor, Jia Benno, Dovile Vilda, Emily Harville, and Katherine Theall, “Maternity Care Deserts and Pregnancy-Associated Mortality in Louisiana,” *Women’s Health Issues*, October 14, 2020; March of Dimes, “Maternity Care Deserts Report” (2020), <https://www.marchofdimes.org/research/maternity-care-deserts-report.aspx>.

¹⁵ Truven Health Analytics, “The Cost of Having a Baby in the United States,” January 2013, <http://www.chqpr.org/downloads/CostofHavingaBaby.pdf>; William Johnson, Anna Milewski, Katie Martin, and Elianna Clayton, “Understanding Variation in Spending on Childbirth among the Commercially Insured,” Health Cost Institute, May 13, 2020, <https://healthcostinstitute.org/hcci-research/understanding-variation-in-spending-on-childbirth-among-the-commercially-insured>.

physician-led care is difficult because of the range of providers, locations of care, variety of payers, and geographic locations involved, but most scholars agree that midwifery holds potential for cost savings given the lower costs of midwifery education compared to medical school, the savings on unnecessary interventions, and downstream effects in terms of cascading interventions, such as cesarean section.

If cost is not the barrier to expanding midwifery care in the United States, what is? Perhaps midwifery is not widespread in the United States because, despite potential cost savings, it is less safe than the alternatives. In what follows, we will discuss the evidence for the safety of midwifery care broadly and then transition to a discussion of the ways in which regulations may actually reduce the safety of these alternatives.

The Context of US Midwifery

Before we begin, however, we should provide some preliminary background on midwifery in the United States, which differs substantially from midwifery in other countries. Some of the difficulty in assessing safety, cost, and access stems from the different types of midwives who attend births in the United States. Midwives in the United States fall into three broad categories: nurse-midwives (CNMs) and certified midwives (CMs), who have graduate-level training in midwifery; certified professional midwives (CPMs), who often enter midwifery directly via apprenticeship-based programs; and traditional midwives.¹⁶ CNMs and CMs have the highest level of formal education, starting with a nursing or science-related undergraduate degree and ending with a master's in midwifery. CNMs are licensed in all 50 states. CMs also have a

¹⁶ There are a range of different titles for midwives, depending on accreditation agencies, state licensing, and so on. For the purposes of this paper, we are grouping midwives roughly according to their level of formal postsecondary education, though we realize this categorization will not satisfy every reader. We avoid categorizing midwives primarily by whether they have been granted permission to practice by the state.

master's degree in midwifery, and they are licensed in nine states, with more likely.¹⁷ The scope of practice for CNMs and CMs is identical, and they usually practice in hospitals, though both are also found in community settings, particularly birth centers.

CPMs typically have no formal nursing education but complete either an apprenticeship-based program or an accredited program that consists of a combination of classwork and clinical work that culminates in an exam leading to the national CPM credential. Some CPM programs also result in a bachelor of science or master of science degree. These midwives are licensed, with varying levels of independence, in 35 states.¹⁸ They specialize in community-based birth and practice almost exclusively outside of hospitals, in either birth centers or clients' homes. The third group, traditional midwives, eschews all credentialing, often on principled grounds, and is educated through an informal apprenticeship-based model. These midwives more closely practice the traditional midwifery of the 18th and 19th centuries, based in part on mutual aid and voluntarism, but they may be the minority among midwives practicing today. Numbers are hard to come by because these providers must practice underground in many (though not all) states. Some states, such as Kansas, do not license direct-entry (including traditional) midwives at all, which frees them from state oversight but precludes them from reimbursement by most third-party payers.

Finally, direct-entry midwifery is the umbrella term for those midwives, such as CMs and CPMs, who enter the profession without a nursing background, which is another way to categorize midwifery broadly. Part of the historical movement to regulate midwifery that we will discuss involved state regulators' efforts, animated in part by physician and hospital associations,

¹⁷ American College of Nurse-Midwives, "Certified Midwife Credential," accessed August 4, 2021, <https://www.midwife.org/certified-midwife-credential>.

¹⁸ Midwives Alliance of North America, "Legal Status of U.S. Midwives," August 7, 2013, <https://mana.org/about-midwives/legal-status-of-us-midwives>.

to affiliate midwifery with nursing, thereby placing it under the medical model of care and under the supervision of physicians. Many midwives have resisted this approach for a variety of principled reasons, making the distinction between CNMs and direct-entry midwives a somewhat politicized one. This categorization is also less helpful in the US context because direct-entry midwives range from traditional midwives with no formal education to CMs with master's degrees. In other countries, such as the United Kingdom, Canada, and New Zealand, direct-entry midwives, regulated and licensed by the state, are the primary providers of midwifery services.

Regulatory Approaches and Tradeoffs

The practice of midwifery in the United States differs dramatically from that of other developed countries where midwifery is common, such as the United Kingdom and Canada. In these countries, midwifery education and practice are heavily regulated by government authorities, both provincial and national, but midwives are also autonomous providers who are integrated into the broader healthcare arena. Most midwives in the United Kingdom and Canada are direct-entry midwives and attend three- or four-year postsecondary programs in midwifery that are usually a mix of coursework and clinical work. Educationally, they are closer to CPMs than to CNMs. However, in terms of autonomy and scope of practice, they are treated more like CNMs are in the United States, allowed to practice in hospitals and prescribe medications.¹⁹ Despite this autonomy, both Canada and the United Kingdom face dramatic midwifery shortages, in part as a

¹⁹ Michelle M. Butler, Eileen K. Hutton, and Patricia S. McNiven, "Midwifery Education in Canada," *Midwifery* 33 (February 2016): 28–30; Penny R. Marzalik, Karen Johnson Feltham, Karen Jefferson, and Kim Pekin, "Midwifery Education in the U.S.—Certified Nurse-Midwife, Certified Midwife and Certified Professional Midwife," *Midwifery* 60 (May 2018): 9–12; Andrea Gilkison, Sally Pairman, Judith McAra-Couper, Mary Kensington, and Liz James, "Midwifery Education in New Zealand: Education, Practice and Autonomy," *Midwifery* 33 (February 2016): 31–33; American College of Obstetricians and Gynecologists (ACOG), "Midwifery Education and Certification: Statement of Policy," November 2020, <https://www.acog.org/clinical-information/policy-and-position-statements/statements-of-policy/2020/midwifery-education-and-certification>.

result of relatively low rates of reimbursement from government payers and relatively high levels of student debt.²⁰

As usual in the policy sphere, there are tradeoffs among various policy approaches. Given the complexity of the US healthcare system and the relatively decentralized nature of its healthcare regulations, the United States is unlikely to follow the UK or Canadian path of relatively uniform regulations and integration. The kind of nationally mandated education and integration of midwives possible in the United Kingdom or New Zealand is unlikely in the United States, barring dramatic changes to the Medicare and Medicaid framework. At the same time, the centrality of government payers in all these systems (Medicaid pays for more than 40 percent of all US births) leads to predictable problems of underpayment and restrictive requirements that may reduce maternal autonomy. When appropriate, regulation and licensing of midwives can improve safety and outcomes, as is seen in New Zealand, the United Kingdom, and elsewhere. Some regulations and licensing, however, may also reduce maternal autonomy by preventing mothers from accessing providers with whom they feel the most comfortable, while also making those women less safe, as is the case in New York, where Amish women living in a “maternity desert” (an area with a shortage of providers) find that their chosen providers, CPMs, lack licensure and face prosecution for attending their births. Licensing has complicated effects on maternal choice and options for care, particularly for women seeking vaginal birth after cesarean (VBAC) or breech birth at home. Such births are usually deemed “high risk” and therefore outside the scope of autonomous licensed midwives, leaving women who want this

²⁰ “Global Shortage of 900,000 Midwives Fuelling Preventable Deaths of Mothers and Babies, Report Warns,” *The Independent*, May 5, 2021, <https://www.independent.co.uk/news/uk/home-news/midwives-global-shortage-deaths-b1842667.html>; Butler, Hutton, and McNiven, “Midwifery Education in Canada.”

kind of care without licensed providers.²¹ Women have a range of reasons for choosing to give birth at home in these circumstances, and licensing restrictions can be a formidable barrier to safe birth for these women.²² On the supply side, in states and countries that heavily regulate midwifery education, both the expense of formal educational pathways and the limits on regulated clinical training sites are policy choke points that reduce the supply of midwives, even in the face of growing demand, as seen in Canada, the United Kingdom, and New Zealand, as well as some states in the United States.²³

At the same time, given the diversity of midwifery and the fragmented nature of healthcare policy in the United States, it is admittedly harder for women to access and understand the diverse landscape of midwifery qualifications and credentials and therefore harder for women to assess the safety, cost, and long-term consequences of any given choice.²⁴ Particularly because pregnancy and birth can be unpredictable, women's preferences and ranking of those preferences may change quickly. Midwifery may present a greater problem for informed consumers than other kinds of healthcare providers, though this fragmentation and diversity is certainly not unique to midwifery. At the same time, given the way states have regulated midwifery over the

²¹ Although licensure can provide autonomy for licensed midwifery providers, it usually comes with limits on the kinds of births midwives can attend, including vaginal births after cesarean (VBAC), breech births, multiple births, and others. For one CPM's take, see Joyce Kimball, "Midwifery Licensure Restricts Women's Birth Choices," Birth Services, accessed August 29, 2021, <https://www.birthservices.net/news/52-midwifery-licensure-restricts-women-s-birth-choices>.

²² Kim J. Cox, Marit L. Bovbjerg, Melissa Cheyney, and Lawrence M. Leeman, "Planned Home VBAC in the United States, 2004–2009: Outcomes, Maternity Care Practices, and Implications for Shared Decision Making," *Birth* 42, no. 4 (December 1, 2015): 299–308, <https://doi.org/10.1111/birt.12188>; Elizabeth Kukura, "Choice in Birth: Preserving Access to VBAC," *Penn State Law Review* 114, no. 3 (July 25, 2010): 955–1001. See also Rebecca Grant, "The Secret Baby Catchers of Alabama," *Huffington Post*, December 19, 2018, <https://highline.huffingtonpost.com/articles/en/alabama-midwives/>.

²³ Gilkison et al., "Midwifery Education in New Zealand"; Butler, Hutton, and McNiven, "Midwifery Education in Canada"; Marzalik et al., "Midwifery Education in the U.S."

²⁴ The same, of course, is true of the safety track records of individual hospitals and physicians as providers. See, for example, Rachel Rabkin Peachman, "What You Don't Know about Your Doctor Could Hurt You," *Consumer Reports*, April 20, 2016, <https://www.consumerreports.org/cro/health/doctors-and-hospitals/what-you-dont-know-about-your-doctor-could-hurt-you/index.htm>; "Hospital Survival Guide | Hospital Safety," *Consumer Reports*, November 2014, <https://www.consumerreports.org/cro/2012/10/your-hospital-survival-guide/index.htm>.

last century, as we'll discuss, it seems clear that states rarely regulate midwifery on evidence-based public health grounds, and many regulations are unlikely to result in policies that benefit birthing people as consumers or entrepreneurial midwives as providers.

As a result, we start our analysis from the perspective that women's autonomy to choose their preferred provider should be nearly absolute. However, we also recognize the limits that third-party payers legitimately impose, and we do not ask, for example, that third-party payers reimburse all midwives. Our position, in effect, is that anyone who identifies as a midwife should be able to voluntarily contract with another person for labor and delivery services, as long as the provider is clear about their educational background, qualifications, and what will happen should complications arise, but that no third party should be required to pay for the services of any particular kind of midwife (or any other provider).

We also recognize that third-party payers, including government payers, have the right to set relevant safety standards for the practitioners they reimburse. In general, we support standards associated with demonstrated improved safety and outcomes, including those supported by most midwives, such as a clear scope of practice focusing on low-risk births, ability and willingness to evaluate when low-risk pregnancies require more-complex medical care, and plans for how to transfer women and infants safely to hospitals. Such standards can be found in the professional standards for midwifery regulation and education developed by the International Confederation of Midwives (ICM), which are considered the standard by the World Health Organization (WHO) and many, if not most, midwifery associations in the United Kingdom, Canada, and United States.²⁵ The kinds of standards and regulations we are concerned with eliminating here are not those that directly impact maternal or infant safety (though we do object to those regulations

²⁵ International Confederation of Midwives, "Global Standards for Midwifery Regulation," 2011, <https://www.internationalmidwives.org/assets/files/general-files/2018/04/global-standards-for-midwifery-regulation-eng.pdf>.

being absolute—meaning they carry criminal penalties—because of their impact on women’s autonomy) but rather those that have little to no effect on safety and outcomes and instead stem from anticompetitive motives. These include a variety of state and payer requirements for physician oversight;²⁶ required transfer agreements with hostile hospitals; mandates for invasive and non-evidence-based testing such as cervical checks;²⁷ limitations on the ability to carry lifesaving medications such as Pitocin, which actually increase maternal risk;²⁸ and bans on home birth after cesarean;²⁹ as well as more indirect ways of eliminating competition, such as artificially low reimbursement rates for midwifery care, particularly by Medicaid.³⁰ All these regulations depart from global standards, stymie integration between medical and midwifery providers, and often make women and infants less safe across all birth contexts. State rules and regulations that exceed ICM standards should be subject to scrutiny for possible protectionist bias.³¹ As we will argue later, many of these regulations actually stymie integration and cooperation between providers, making women and infants less safe overall.

Safety of Nonhospital and Midwife-Led Births

Historically, the major official justification for regulating medical care has been safety. The asymmetry of information between providers and patients is seen as the source of the problem.

²⁶ Dana DiFilippo, “Midwives Ask State to End Physician Oversight as Home Births Rise,” *New Jersey Monitor* (blog), August 24, 2021, <https://newjerseymonitor.com/2021/08/24/midwives-ask-state-to-end-physician-oversight-as-home-births-rise/>.

²⁷ “Arkansas Midwife Appeals At-Home Birth Violation,” *AP News*, May 9, 2018, <https://apnews.com/7d90b8f13a37453382fc27802540946f>.

²⁸ Michelle Andrews, “States Vary on What They Allow Midwives to Do,” NPR.org, February 14, 2012, <http://www.npr.org/sections/health-shots/2012/02/14/146859861/states-vary-on-what-they-allow-midwives-to-do>.

²⁹ “The Legal Infrastructure of Childbirth, Chapter 3: Developments in the Law,” *Harvard Law Review* 134, no. 6 (April 2021): 2209–2232 .

³⁰ Nan Strauss, “Maximizing Midwifery to Achieve High-Value Maternity Care in New York,” *Choices in Childbirth and Every Mother Counts*, January 2018.

³¹ We are not arguing that ICM standards are our own preferred regulatory framework but merely that they are the accepted professional standard for midwives across the world and are a good starting point for state laws in the United States.

Because of it, some argue that patients would have no way of discerning the reliability of providers in the absence of some sort of regulation with respect to quality. Similar safety-based justifications exist for a wide variety of other government regulations. However, we know that, historically, the origins of many of these regulations came not from actual problems with the safety of unregulated industries but rather the desire of incumbent producers to prevent competition from lower-cost alternatives by using the regulatory state to raise those rivals' costs.³² While some evidence suggests that early licensing of midwives helped reduce maternal and infant deaths, there is no evidence supporting restrictive licensing of the kind that exists today, the incorporation of midwifery under the banner of nursing, or the need for physician control.³³ The safety argument was often a convenient public interest fiction covering the self-interest of producers with better access to the political process and its ability to provide various monopoly privileges.³⁴ In this section and the two that follow, we look at the regulatory environment facing midwives and then examine the evidence on the safety of midwife-provided births. As we will discuss, nonhospital births overall are as safe as hospital births for low-risk women. With that established, we offer a historical account of the regulation of midwifery that demonstrates the ways in which it had little to do with safety and much more to do with the interests of the medical profession and its understanding of childbirth.

³² See, for example, Morris M. Kleiner, "Battling over Jobs: Occupational Licensing in Health Care," *American Economic Review* 106, no. 5 (May 2016): 165–70, <https://doi.org/10.1257/aer.p20161000>; David A. Johnson and Humayun J. Chaudhry, *Medical Licensing and Discipline in America: A History of the Federation of State Medical Boards* (Lanham, MD: Lexington Books, 2012); Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry*, reprint edition (New York: Basic Books, 1984); R. Hamowy, "The Early Development of Medical Licensing Laws in the United States, 1875–1900," *Journal of Libertarian Studies* 3, no. 1 (1979): 73–119.

³³ D. Mark Anderson, Ryan Brown, Kerwin Kofi Charles, and Daniel I. Rees, "Occupational Licensing and Maternal Health: Evidence from Early Midwifery Laws," *Journal of Political Economy* 128, no. 11 (June 26, 2020): 4337–83, <https://doi.org/10.1086/710555>.

³⁴ See, for example, C. R. King, "The New York Maternal Mortality Study: A Conflict of Professionalization," *Bulletin of the History of Medicine* 65, no. 4 (1991): 476–502.

Assessing the relative safety of home birth, birth center birth, and hospital birth in the United States is difficult, given the complex policy environment, heterogeneous state reporting requirements, uneven hospital quality, medicalized culture, and poor integration of midwives into the medical system.³⁵ Evidence from Canada and the United Kingdom demonstrates that midwifery care is very safe for low-risk women and that midwives also play an important complementary role even for high-risk women who require specialized hospital-based or obstetrics interventions, though midwives in these countries are both more regulated and more integrated into the healthcare system, making comparison difficult.³⁶ In the United States, trained midwives of various sorts have the ability to respond to many of the most common complications that present in birth by using a range of techniques and interventions that enable them to stabilize women in time to get them to a hospital. A 2018 study finds that it is less the diversity of midwifery providers that creates unsafe conditions than it is the failure to integrate these diverse providers into the maternity care ecosystem.³⁷ Crucially, that same study found that it was not licensing itself that improved integration, suggesting that changes in both medical culture and reimbursement structures are needed. In what follows, we summarize the research on the safety of midwife-led birth before moving into a history of midwife licensing and policy recommendations.³⁸

³⁵ Shah, “A NICE Delivery.”

³⁶ Donnellan-Fernandez, Creedy, and Callander, “Cost-Effectiveness of Continuity of Midwifery Care for Women with Complex Pregnancy.”

³⁷ Vedam et al., “Mapping Integration of Midwives across the United States.”

³⁸ All studies we discuss control for various maternal characteristics, but we should also emphasize that these analyses focus on low-risk pregnancies, given that midwives, by definition, specialize in supporting low-risk birthing women with the goal of preventing complications and limiting interventions. While evidence suggests that midwives are valuable team members even for high-risk births in hospitals, our focus in what follows is on comparing the relative riskiness of nonhospital birth versus hospital birth for low-risk pregnancies only. We are *not* arguing (and indeed almost no one does) that nonhospital birth is safe or appropriate for high-risk pregnancies, though how one defines “high risk” is itself the source of much debate.

The fragmented nature of the healthcare system in the United States discourages coordination of care (an issue we address at more length later), and states have extremely variable reporting requirements for maternal mortality and morbidity, making it very difficult to assess safety across healthcare contexts. Moreover, hospitals themselves have extremely variable outcomes for mothers and infants. A 2013 study found that cesarean section rates for low-risk mothers vary tenfold between hospitals, indicating that a woman’s risk of surgical birth has much more to do with the hospital in which she delivers than with her individual risk profile.³⁹ Moreover, substantial incentives exist to escalate care.⁴⁰ Maternal morbidity in and out of hospitals—serious injuries sustained during labor and delivery—is unevenly tracked and sometimes not reported at all.⁴¹ Thus, any true comparison of the safety of birth in the community setting with midwives versus hospital birth in the United States will actually depend in large part on the safety record of the hospital available to a specific woman, a comparison that is obviously not possible and well beyond the scope of this paper.⁴² As we will argue later, regulations themselves may make birth in the community setting riskier than it would otherwise be, further skewing the data.

At the same time, we do have evidence on the broad safety of community settings for birth with midwives that suggests that, when controlling for maternal characteristics and risk factors,

³⁹ Katy Backes Kozhimannil, Michael R. Law, and Beth A. Virnig, “Cesarean Delivery Rates Vary Tenfold among US Hospitals; Reducing Variation May Address Quality and Cost Issues,” *Health Affairs* 32, no. 3 (March 2013): 527–35.

⁴⁰ Emily Oster and W. Spencer McClelland, “Why the C-Section Rate Is So High,” *The Atlantic*, October 17, 2019, <https://www.theatlantic.com/ideas/archive/2019/10/c-section-rate-high/600172/>.

⁴¹ Declercq et al., “Listening to Mothers III”; Nina Martin, “The New U.S. Maternal Mortality Rate Fails to Capture Many Deaths,” *ProPublica*, February 13, 2020, https://www.propublica.org/article/the-new-us-maternal-mortality-rate-fails-to-capture-many-deaths?token=xbvF5KLcDIV6vr6B2AF9D0LIUK_IwLni; Centers for Disease Control, “Severe Maternal Morbidity in the United States,” November 27, 2017, <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html>.

⁴² See, as one example, Elizabeth A. Howell, Natalia Egorova, Amy Balbierz, Jennifer Zeitlin, and Paul L. Hebert, “Black-White Differences in Severe Maternal Morbidity and Site of Care,” *American Journal of Obstetrics and Gynecology* 214, no. 1 (January 2016): 122.e1–122.e7.

planned home birth and birth center birth with trained midwives are very safe for both women and infants in low-risk pregnancies.⁴³ A widely cited 2010 study found that home birth was associated with fewer interventions, fewer maternal injuries, and lower rates of preterm birth than hospital birth but also found that infant deaths almost tripled in the home birth context.⁴⁴ This study was later criticized on multiple methodological grounds, including for not excluding unplanned home births where no attendant was present at all; other researchers found no significant difference between neonatal mortality in hospitals and home births for low-risk women.⁴⁵ A 2020 meta-analysis of the literature on home birth confirmed these criticisms, again finding no significant increase in neonatal mortality for planned home births of low-risk women attended by trained midwives but finding significant benefits for both mothers and babies, including fewer interventions, fewer injuries, and lower rates of premature birth, among others.⁴⁶ These studies, however, included data from Europe and Canada, where midwives are better integrated into the healthcare system than they are in the United States. While disagreement within the medical community remains, most researchers agree that whatever the relative risks of either option, the absolute risk of infant and maternal mortality either within or outside hospitals

⁴³ Cheyney et al., “Outcomes of Care for 16,924 Planned Home Births in the United States”; K. C. Johnson, “Outcomes of Planned Home Births with Certified Professional Midwives: Large Prospective Study in North America,” *BMJ* 330, no. 7505 (June 18, 2005); Alliman and Phillippi, “Maternal Outcomes in Birth Centers”; Sarah Benatar, A. Bowen Garrett, Embry Howell, and Ashley Palmer, “Midwifery Care at a Freestanding Birth Center: A Safe and Effective Alternative to Conventional Maternity Care,” *Health Services Research* 48, no. 5 (October 2013): 1750–1768.

⁴⁴ Joseph R. Wax, F. Lee Lucas, Maryanne Lamont, Michael G. Pinette, Angelina Cartin, and Jacquelyn Blackstone, “Maternal and Newborn Outcomes in Planned Home Birth vs Planned Hospital Births: A Metaanalysis,” *American Journal of Obstetrics and Gynecology* 203, no. 3 (September 2010): e1–8.

⁴⁵ Russell S. Kirby and Jordana Frost, “Response: Maternal and Newborn Outcomes in Planned Home Birth vs Planned Hospital Births: A Metaanalysis,” *American Journal of Obstetrics and Gynecology* 204, no. 4 (April 2011): e16, <https://doi.org/10.1016/j.ajog.2011.01.031>; Kenneth C. Johnson and Betty-Anne Daviss, “International Data Demonstrate Home Birth Safety,” *American Journal of Obstetrics and Gynecology* 204, no. 4 (April 2011): e16–17, author reply at e18–20, discussion at e20.

⁴⁶ Reitsma et al., “Maternal Outcomes and Birth Interventions among Women Who Begin Labour Intending to Give Birth at Home Compared to Women of Low Obstetrical Risk Who Intend to Give Birth in Hospital.”

is very low, even in the United States, where the fragmented healthcare system results in higher maternal and infant mortality than in comparable countries.⁴⁷

Birth centers also have positive outcomes for both mothers and infants, with very low rates of medical interventions and the same or similar rates of maternal and infant mortality, even when controlling for maternal characteristics.⁴⁸ Variation in outcomes depends in part on whether birth centers follow the American Association of Birth Centers (AABC) standards and evidence-based guidelines on the care of low-risk women.⁴⁹ Cases of apparently preventable infant deaths at centers not following the evidence-based AABC standards have increased concerns about oversight.⁵⁰ Because state laws regarding requirements for midwife training, birth center accreditation, and integration into the medical system vary dramatically, quality and outcomes are more uneven in the United States than in Canada and the United Kingdom, where a more uniform regulatory system and better integration between locations of care and different providers make both home births and birth center births safer.⁵¹

Some of the difficulty in assessing safety stems from the different types of midwives who attend births in the United States. As discussed earlier, midwives differ in their length and type of education (master's vs. apprenticeship-based programs) and location of care (home, birth center, or hospital). As one might expect, different kinds of midwives are found in different contexts. CPMs and traditional midwives are found most commonly in home births and birth

⁴⁷ Martin, "The New U.S. Maternal Mortality Rate Fails to Capture Many Deaths."

⁴⁸ Alliman and Phillippi, "Maternal Outcomes in Birth Centers."

⁴⁹ Alliman and Phillippi, "Maternal Outcomes in Birth Centers." Thanks to Jill Alliman for clarifying that nonaccredited centers may still follow AABC standards, for example.

⁵⁰ Teddy Kulmala, "Jury: Death of Baby at Fort Mill Birthing Center Was Homicide," *Charlotte Observer*, June 4, 2015, <http://www.charlotteobserver.com/news/local/crime/article23132913.html>; Lori Tobias, "Baby's Death in Coos County Helps Lead to Review of Oregon Midwife Regulations," *OregonLive.com*, July 5, 2013, http://www.oregonlive.com/pacific-northwest-news/index.ssf/2013/07/babys_death_in_coos_county_hel.html.

⁵¹ Susan Rutledge Stapleton, Cara Osborne, and Jessica Illuzzi, "Outcomes of Care in Birth Centers: Demonstration of a Durable Model," *Journal of Midwifery & Women's Health* 58, no. 1 (January 2013): 3–14, <https://doi.org/10.1111/jmwh.12003>.

centers, while CNMs and CMs practice largely in hospitals, though they also attend the majority of birth center births as well.⁵² Restrictive licensing of CPMs in particular has the largest effect on women’s community setting options for birth, because CPMs are the most common kind of midwife to provide care outside hospitals, particularly for home birth. Unfortunately, CPMs are not well integrated into the broader medical system. In most states, they are not allowed to follow clients into hospitals after transfer, and many CPMs report antagonistic relationships with local medical providers. That antagonism fragments care and may prevent women from being transferred to hospitals in a timely manner.⁵³

This lack of integration is itself linked to the most restrictive forms of licensing, which create perverse incentives and stymie cooperation between midwives and physicians. The way states license midwives may in fact prevent integration, making birth less safe for both mothers and infants. A 2018 study found that greater access to midwifery care and better integration of midwives into the broader healthcare system resulted in better outcomes for women and infants, including lower intervention rates and better outcomes for infants.⁵⁴ States with fewer regulatory limitations on midwives along with better integration into the healthcare system have better outcomes for both mothers and babies, demonstrating that it is not restrictive licensing regulations that keep women and infants safe but rather an integrated approach to maternity care.⁵⁵ In states such as Washington, where midwives do not need nursing degrees to practice but where direct-entry midwives are better integrated into the system than in other states, outcomes

⁵² Centers for Disease Control, “Births: Final Data for 2019,” National Vital Statistics Reports, March 23, 2021.

⁵³ Vedam et al., “The Giving Voice to Mothers Study”; Vedam et al., “Mapping Integration of Midwives across the United States.”

⁵⁴ Vedam et al., “Mapping Integration of Midwives across the United States.”

⁵⁵ Ranchoff and Declercq, “The Scope of Midwifery Practice Regulations and the Availability of the Certified Nurse-Midwifery and Certified Midwifery Workforce, 2012–2016”; Y. Tony Yang, Laura B. Attanasio, and Katy B. Kozhimannil, “State Scope of Practice Laws, Nurse-Midwifery Workforce, and Childbirth Procedures and Outcomes,” *Women’s Health Issues* 26, no. 3 (June 2016): 262–67.

for mothers and infants are still higher than in states with more restrictive educational requirements. Integration improves outcomes by speeding transfers, providing continuity of care, and increasing trust between different kinds of providers.⁵⁶ In fact, states with fewer restrictions on CNMs have lower rates of medicalization and, according to one study, *better* health and safety outcomes for low-risk mothers and infants.⁵⁷

As discussed earlier, the use of midwives for home birth and in birthing centers is no less safe on average than medicalized hospital birth.⁵⁸ A number of large studies have found that both planned home birth and birth center birth are very safe for both low-risk mothers and infants and significantly less expensive than hospital-based care.⁵⁹ Overall, in the United States, hospital birth may be slightly safer for the child, but alternatives such as midwifery and birthing centers lead to somewhat better outcomes for mothers. There may be a small tradeoff between women's outcomes and infants' outcomes, but the overall level of safety in community-based settings such as home birth and birth centers are still excellent.

One challenge we do not think is adequately addressed in the literature is that existing regulations create poor incentives for practices that would improve outcomes, particularly coordination between locations of care. Observed outcomes reflect a comparison between hospital births and inappropriately regulated midwifery births, in the context of a fragmented system with disincentives for cooperation and coordination of care between different locations

⁵⁶ Vedam et al., "Mapping Integration of Midwives across the United States."

⁵⁷ Sara Markowitz, E. Kathleen Adams, Mary Jane Lewitt, and Anne L. Dunlop, "Competitive Effects of Scope of Practice Restrictions: Public Health or Public Harm?," *Journal of Health Economics* 55 (September 1, 2017): 201–18; Vedam et al., "Mapping Integration of Midwives across the United States."

⁵⁸ Cheyney et al., "Outcomes of Care for 16,924 Planned Home Births in the United States"; Alliman and Phillippi, "Maternal Outcomes in Birth Centers"; Stapleton, Osborne, and Illuzzi, "Outcomes of Care in Birth Centers"; Judith P. Rooks, "Safety and Risks of Nitrous Oxide Labor Analgesia: A Review," *Journal of Midwifery & Women's Health* 56, no. 6 (November 2011): 557–65; Johnson, "Outcomes of Planned Home Births with Certified Professional Midwives."

⁵⁹ Stapleton, Osborne, and Illuzzi, "Outcomes of Care in Birth Centers."

of care and different providers. If those regulations make midwifery less safe than it would otherwise be, the safety argument for regulation is that much weaker. That midwives and birthing centers are essentially as safe as hospitals *under a safety-reducing regulatory regime* suggests that they might well be safer in the absence of those regulations.

For example, restrictive licensing requirements in many states actually create adversarial relationships, or what the authors of the 2018 study call an “environment of interprofessional hostility,” between midwives and physicians, which hampers care and increases the rate of medical errors.⁶⁰ Midwives report that physicians resist supervision agreements out of fear that such agreements may impact malpractice insurance coverage, despite evidence that such agreements have little to no such impact. Fear of vicarious liability, even if unfounded, may limit the supply of doctors willing to take on supervisory relationships.⁶¹ As a result, midwives may be forced to transfer women unnecessarily because physicians will not collaborate before transfer to assess risk. Similarly, hospitals have a long history of refusing transfer agreements for home birth and birth center midwives, transfer agreements that may be required for midwifery or birth center licensure.⁶² In effect, mandatory supervisory and transfer agreements place full veto power over midwifery and birth center licensure firmly in the hands of their direct competitors: physicians and hospitals.

Lack of integration creates perverse incentives in other ways as well. Women who fear discrimination in the hospital context, either because of their decision to home birth, race or immigration status, or other factors, may pressure their home birth midwives to delay

⁶⁰ Vedam et al., “Mapping Integration of Midwives across the United States.”

⁶¹ Lesley Rathbun, “Letter to Donald Clark, Secretary of the Federal Trade Commission,” American Association of Birth Centers, April 30, 2014, https://c.yimcdn.com/sites/aabc.site-ym.com/resource/collection/dcbda72a-41ea-4afe-a8d1-112542f4a0bc/FTC_Letter_-_4.30.14_with_appendices.pdf?hhSearchTerms=%22burdensome%22.

⁶² Rathbun, “Letter to Donald Clark, Secretary of the Federal Trade Commission”; Federal Trade Commission and Department of Justice, “Improving Health Care: A Dose of Competition,” July 2004, <https://www.justice.gov/sites/default/files/atr/legacy/2006/04/27/204694.pdf>.

transferring them to a hospital, even when their midwife recommends such a transfer. Because in many situations home birth midwives cannot accompany birthing mothers into the hospital, the process of transferring is much more fragmented and potentially traumatic than it is in other countries, where direct-entry midwives are able to accompany patients during transfers between locations. Such fragmentation and displacement of providers increases the risks of poor communication, medical errors, and distrust between patients and providers.⁶³

Evidence suggests that discrimination against home birthing mothers during transfers is a serious issue and may impede care.⁶⁴ Risk of mistreatment in hospitals is higher for racial and ethnic minorities, women of low socioeconomic status, and those struggling with substance abuse issues, indicating a further regressive effect of the fragmentation caused by restrictive licensing.⁶⁵ Though far from conclusive, the overall evidence suggests that it is not restrictive licensing of midwives and formal educational requirements that improve outcomes but instead better integration, which comes as a result of reconfiguring the perverse incentives that many regulations create. The contrast between a state such as Washington, which lightly regulates midwives, and North Carolina, which has numerous burdensome requirements, illustrates this point. Washington ranks highly in avoiding birth interventions such as cesarean section and on infant mortality outcomes while promoting a variety of collaborations between midwives and doctors. North Carolina's outcomes are notably worse even though it requires that midwives be registered nurses and have a physician approve their application for a license.⁶⁶ It should be clear that the primary limitations on nonhospital birthing options are not cost, demand, or safety

⁶³ Vedam et al., "Mapping Integration of Midwives across the United States"; Vedam et al., "The Giving Voice to Mothers Study."

⁶⁴ Vedam et al., "The Giving Voice to Mothers Study."

⁶⁵ Vedam et al., "The Giving Voice to Mothers Study."

⁶⁶ This is true even when controlling for the percentage of black births, which drives up infant and maternal mortality rates. See Vedam et al., "Mapping Integration of Midwives across the United States."

concerns but rather licensing itself. Midwifery licensure that requires graduate-level education or physician supervision actually makes birth less safe while reducing women's options and inflating costs by prioritizing high-cost providers (obstetricians) and high-cost locations for care (hospitals) over lower-cost community providers.

Finally, we can make a point that is often made in the more general literature on occupational licensure. If safety were in fact the primary justification for regulating midwives, we would expect to see a much more uniform set of regulations across the 50 states. The fact that some regulate midwifery more and others less suggests that there is some other explanation at work. After all, if midwifery posed serious safety concerns, there is no reason to think those would differ by state. States with licensing regulations requiring physician oversight and limited autonomy in fact have fewer midwives.⁶⁷ If safety is not the issue, what explains the lack of options for community-setting birth?

In what follows, we will argue that several regulations that emerged from the medicalization of childbirth, especially the licensing requirements for nonphysician providers, explain why birthing alternatives are unable to compete effectively with hospital birth. The broad story of those regulations is that the professionalization of medicine in the late 1800s and early 1900s led to treating childbirth as a medical process that required the care of physicians with specific qualifications. Those physicians quickly moved to erect barriers to entry by competing care providers, who they claimed were not qualified and would therefore be dangerous to women and

⁶⁷ Ranchoff and Declercq, "The Scope of Midwifery Practice Regulations and the Availability of the Certified Nurse-Midwifery and Certified Midwifery Workforce, 2012–2016"; Yang, Attanasio, and Kozhimannil, "State Scope of Practice Laws, Nurse-Midwifery Workforce, and Childbirth Procedures and Outcomes"; Vedam et al., "Mapping Integration of Midwives across the United States"; Peiyin Hung, Carrie E. Henning-Smith, Michelle M. Casey, and Katy B. Kozhimannil, "Access to Obstetric Services In Rural Counties Still Declining, with 9 Percent Losing Services, 2004–14," *Health Affairs* 36, no. 9 (September 1, 2017): 1663–71.

infants.⁶⁸ State restrictions on community-based providers led to a prioritization of hospital-based childbirth in subsequent federal policy, including the Hill-Burton Act and Medicaid, both of which emphasized resources for hospital care over community-based care. Because hospital births benefit physicians both in terms of reimbursement and in efficiencies in obtaining malpractice coverage, there is a strong incentive for obstetrician/gynecologists (OB/GYNs) to encourage women to choose hospital birth and for those births to be highly interventionist.⁶⁹ Given that most OB/GYNs receive very little training in normal low-risk physiological birth during medical school, the financial incentives line up with their professional competency to reinforce medicalization.

But the most important regulation is the licensing of alternative providers, particularly midwives, who have always been the primary alternative to physician-led maternity care. These regulations stretch back to the early 1900s and create a range of limitations on practice, including supervisory requirements by physicians themselves. These licensing requirements serve as a kind of policy choke point that prevents alternative models of care, such as birth centers, from entering the marketplace, precisely because midwives are (usually) the primary owners and operators under this model of care.⁷⁰ Eliminating the regulations that protect physicians' monopoly privileges and reducing or repealing the licensing burden on midwives and other alternative birthing service providers would enable more meaningful competition in the birthing

⁶⁸ Barbara Ehrenreich and Deirdre English, *For Her Own Good: Two Centuries of the Experts' Advice to Women* (New York: Anchor Books, 2005), 103–8; Eugene R. Declercq, "The Trials of Hanna Porn: The Campaign to Abolish Midwifery in Massachusetts," *American Journal of Public Health* 84, no. 6 (1994): 1022–28.

⁶⁹ Oster and McClelland, "Why the C-Section Rate Is So High."

⁷⁰ Midwives Alliance of North America, "Midwifery Laws State-by-State," accessed March 23, 2016, <http://mana.org/about-midwives/state-by-state>; Midwives Alliance of North America, "Legal Status of U.S. Midwives"; American College of Nurse-Midwives and American College of Obstetricians and Gynecologists, "Joint Statement of Practice Relations between Obstetrician-Gynecologists and Certified Nurse-Midwives/Certified Midwives," American College of Obstetricians and Gynecologists, April 2018, <https://www.acog.org/-/media/Statements-of-Policy/Public/87ACNM-CollegePolicy-Statement—June-2018.pdf?dmc=1&ts=20190126T1701076020>; Michelle Andrews, "States Vary on What They Allow Midwives to Do," NPR.org, February 14, 2012, <http://www.npr.org/sections/health-shots/2012/02/14/146859861/states-vary-on-what-they-allow-midwives-to-do>.

industry. Greater competition would lead to reduced costs, increase the opportunities for rural providers and providers of color, and bring about a wider range of services that better match women's varied preferences.

The History of Midwife Licensing: Regulations and Medicalization

The end of the 1880s through the early 1920s was a period of dramatic change in the practice of healthcare and medicine in the United States. It saw increased standardization of medical practices as well as the growth of state licensing, in a process of consolidation led by the American Medical Association and the state medical associations it controlled. The result was that medical practices became more standardized, but there was also a significantly less diverse pool of providers. The Flexner Report of 1910, for example, standardized and improved medical education but also reduced the diversity of providers, as standardization resulted in the closure of all but two of the black medical colleges in the United States.⁷¹ These closures, combined with segregation of most medical facilities, effectively cut off black Americans from medical training and practice for the greater part of a generation. Well into the 1960s, black physicians remained limited because few medical schools would admit black medical students and the American Medical Association did not require desegregation of local affiliates until the late 1960s, which limited admitting privileges for black physicians at nonblack hospitals. Lack of training and admitting privileges also cut them off from most elite specialty training and academic positions.⁷² By the 1960s, black physicians made up just 2 percent of all physicians, despite black Americans comprising 10 percent of the general population.⁷³ At the same time, state licensing laws in all

⁷¹ Institute of Medicine, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, ed. Brian Smedley, Adrienne Stith, and Alan Nelson (Washington, DC: National Academies Press, 2003); Starr, *The Social Transformation of American Medicine*, 124.

⁷² Smedley, Stith, and Nelson, *Unequal Treatment*, 108.

⁷³ Smedley, Stith, and Nelson, *Unequal Treatment*, 107.

states, animated by the increasing power of state medical associations, limited the scope of practice of traditional providers such as midwives and eliminated most female physicians.⁷⁴ Most medical schools maintained quotas limiting female candidates to 5 percent of admissions. The Sheppard-Towner Act of 1921 furthered this standardization, improving education among nurses but also professionalizing nursing and midwifery via stringent licensing laws that required formal nursing education and subservience to physicians, leaving traditional midwives without a path to legal practice and placing midwifery firmly under physician control.

Protectionism and the “Midwife Problem”

The protectionist motive of these regulations is clear from numerous articles in the *Journal of the American Medical Association* from the early 1910s through the 1930s, the height of midwifery prosecutions and medical association lobbying for restrictive licensing. Midwifery represented two distinct threats to medical providers. The first was the immediate threat of competition and lack of access to paying patients. The second was a long-term threat, referred to broadly as “the midwife problem” in the medical literature. Midwives threatened the long-term viability of obstetrics as a field, since obstetrics could not advance as quickly as other medical sciences without the bodies of women on which to practice.

A 1913 article in the *Journal of the American Medical Association* makes this point explicitly, arguing that “it is at present impossible to secure cases sufficient for the proper training in obstetrics, since 75% of the material otherwise available for clinical purposes is utilized in providing a livelihood for midwives.”⁷⁵ The author continues, “My own feeling is that the great danger lies in the possibility of attempting to educate the midwife and in

⁷⁴ Starr, *The Social Transformation of American Medicine*, 124; Ehrenreich and English, *For Her Own Good*, 72–73.

⁷⁵ Charles Edward Ziegler, “The Elimination of the Midwife,” *Journal of the American Medical Association* 60, no. 1 (January 4, 1913): 32–38, <https://doi.org/10.1001/jama.1913.04340010034013>.

licensing her to practice midwifery, giving her thereby a legal status which later cannot perhaps be altered. If she once becomes a fixed element in our social and economic system, as she now is in the British Isles and on the Continent, we may never be able to get rid of her.” He concludes that, “It thus seems the sensible thing to do is to train the physician until he is capable of doing good obstetrics, and then make it financially possible for him to do it, by eliminating the midwife and giving him such other support as may be necessary.”⁷⁶

Another article, from 1912, discussing a survey of fellow practitioners found that the majority of physicians surveyed admitted that they believed more women died at the hands of physicians than at the hands of midwives. Despite these beliefs about the relative safety of midwifery, the author, a professor of obstetrics at Johns Hopkins, concludes with a series of recommendations, the last of which is “gradual abolition of midwives in large cities and their replacement by obstetric charities.”⁷⁷ The solution to “the midwife problem” was not better education for midwives or more cooperation between midwives and physicians but rather the eradication of the midwife altogether.

Unsurprisingly, licensing targeted the most vulnerable populations, including women who had few other legitimate professions open to them, and their clients, who were frequently immigrants or racial minorities and therefore particularly vulnerable in the medical context of the time. The period of intensive lobbying for licensing and regulation coincided with the eugenics movement, with widespread forcible sterilization of poor, immigrant, and black Americans in many states. It was also a period in which limits on women’s labor force participation in general were becoming more common, which limited the alternatives available to women who were shut

⁷⁶ Ziegler, “The Elimination of the Midwife,” 33.

⁷⁷ J. Whitridge Williams, “Medical Education and the Midwife Problem in the United States,” *Journal of the American Medical Association* 58, no. 1 (January 6, 1912): 1–7, <https://doi.org/10.1001/jama.1912.04260010003001>.

out of midwifery. The removal of the midwife did not simply replace one provider with another but instead put women's bodies under the authority of medical professionals who frequently abused that trust. Nowhere was this more obvious than in the Jim Crow South, where black midwives served as a crucial buffer between pregnant black women and the hospitals staffed entirely by white providers. As one example of the dangers black women faced during labor and delivery, coerced sterilizations of black women in hospitals were so common in some parts of the South that they had a nickname: the "Mississippi Appendectomy."⁷⁸

Yet, at the same time that state medical associations were imposing greater restrictions on midwives, rural providers recognized that midwives were a crucial component of rural healthcare, particularly for black Americans, who, because of the elimination of black medical colleges and extreme poverty, had few options for providers. One Georgia physician writing in 1928 noted that black midwives were delivering as many as 31 percent of total births, largely in areas where physicians and hospitals were rare and where white physicians had little incentive to practice. As he noted, "She is doing business and under present conditions, she is indispensable."⁷⁹ Thus, calls to eliminate midwives competed directly with the needs of rural communities and communities of color, who depended on these providers precisely because physicians had little incentive to work with poor communities where birth services were frequently paid by barter. According to historians, restrictive licensing accelerated throughout the 1930s and 1940s and effectively eradicated black midwifery in the South. White nurse midwives practicing under physician supervision replaced traditional independent black midwives because the educational requirements of licensing priced black midwives out of the

⁷⁸ Harriet Washington, *Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present* (New York: Anchor Books, 2008), 202–5.

⁷⁹ Joe P. Bowdoin, "The Midwife Problem," *Journal of the American Medical Association* 91, no. 7 (August 18, 1928): 460–62.

market. This change happened relatively quickly. Black midwives still delivered 60 percent of births by black women in South Carolina in 1949, but by 1969 that number had dropped to just 10 percent, a decline that continued.⁸⁰

Protectionism and Regressive Effects

The harmful effects of licensing and the resulting prosecutions for unlicensed practice were not limited by race and affected both providers and their clients. Many midwives targeted for prosecution from 1900 on attended primarily immigrant and low-income populations. At the same time, midwifery was one of the few legitimate occupations open to unmarried women. These prosecutions, some of which ended in imprisonment, represented serious economic blows not only to midwives themselves but also to the clients they served, who were then limited to local physicians who charged higher rates, had worse outcomes, and often had racist and xenophobic attitudes toward lower-income immigrant populations. Not only were hospitals and physicians potentially abusive, but their safety records were not good either. In one early prosecution detailed by historians, the four physicians who testified against a midwife named Hanna Porn at her trial for practicing medicine without a license had infant mortality rates twice Porn's own, which was not unusual given the range of interventions physicians practiced at the time.⁸¹ The disconnect between calls to eliminate midwifery and the actual safety of physician-led care continued into the 1930s, when researchers in New York found that home birth was significantly safer than hospital-based birth and that two-thirds of deaths in hospitals were preventable.⁸² Medical researchers were concluding that home birth with midwives was the safest place for low-risk women at the same

⁸⁰ Jenny M. Luke, *Delivered by Midwives: African American Midwifery in the Twentieth-Century South* (Jackson: University Press of Mississippi, 2018), 117.

⁸¹ Declercq, "The Trials of Hanna Porn."

⁸² Carrie Schram, "Maternal History," *Canadian Family Physician* 55, no. 8 (August 2009): 787–88; King, "The New York Maternal Mortality Study."

time that state medical associations were solidifying licensing and regulations to eliminate midwifery altogether.

As a result of increasing licensing requirements and prosecutions, both medical and maternity care providers, who had previously been a relatively diverse group in terms of race, class, and gender, became increasingly homogeneous over this period, with white male physicians taking over obstetrics and white female nurses taking over midwifery. Moreover, as the medical model became increasingly powerful at the state level, midwife licensing laws frequently placed CNMs under the supervision of male physicians, usually working in hospitals.⁸³ The traditional model of independent midwives who cared for birthing women in their own communities was almost entirely destroyed. One result of this consolidation and professionalization was an increase in the number of maternity deserts in low-income rural and urban locations as the costs of getting the formal medical education now required by law concentrated providers in suburban and wealthier urban areas, effects we still see today.⁸⁴ These regulatory interventions disproportionately affected both people of color and the poor.

These dramatic changes to the providers of maternity care in the first half of the 20th century coincided with increasing trust in the medical community and broader access to hospitals as a result of federal investment in hospital infrastructure under the Hill-Burton Act of 1946.⁸⁵ This cultural shift was solidified as hospitals began providing “twilight sleep” (usually a combination of morphine and scopolamine) and other pharmaceutical pain relief during labor and delivery, none of which was available in midwife-led care. As a result, middle-class women turned almost entirely to physicians and hospitals for maternity care. While the promise of pain relief was fulfilled and

⁸³ Luke, *Delivered by Midwives*, 134–37.

⁸⁴ Wallace et al., “Maternity Care Deserts and Pregnancy-Associated Mortality in Louisiana”; March of Dimes, “Maternity Care Deserts Report.”

⁸⁵ Starr, *The Social Transformation of American Medicine*.

hospital-based care provided good outcomes for many high-risk conditions, hospital-based care was heavily interventionist even for low-risk births, with high rates of use of forceps, episiotomies, and other invasive procedures that had long-term effects on women's health. Medicalization of birth therefore created clear tradeoffs. Medicalization provided convenience, pharmaceutical pain relief, and better outcomes for high-risk patients but also brought with it standardization, violations of autonomy, and unnecessary interventions for low-risk women. The interventionist model persisted until the 1970s, when greater interest in low-intervention birth coincided with greater interest in women's autonomy more broadly, though intervention rates for low-risk women remain high today.⁸⁶

Protectionism, Standardization, and Medicalization

While licensing in the early part of the 20th century focused almost entirely on providers, the second half of the century saw the same standardization processes applied to facilities. Starting with the Hill-Burton Act of 1946 and then Medicare and other federal reimbursement policies, policymakers concentrated resources into hospital-based care and, largely as a result of medical lobbying much like that of the early 20th century, focused their resources on medical procedures over other kinds of care, such as that traditionally provided by midwives. Reimbursement policies now focused on a fee-for-service payment system where watchful waiting and high-quality communication were nonreimbursable activities but where a variety of distinct and definable procedures and interventions were fully reimbursable, even if unnecessary.⁸⁷

The primacy of reimbursement policies was not a mere bureaucratic issue. It both resulted from and accelerated the centrality of hospital-based maternity care that grew out of the

⁸⁶ Richard W. Wertz and Dorothy C. Wertz, *Lying-In: A History of Childbirth in America* (New York: Free Press, 1977).

⁸⁷ American College of Nurse-Midwives, "Midwives and Medicare after Health Care Reform," accessed January 25, 2021, <http://www.midwife.org/Midwives-and-Medicare-after-Health-Care-Reform>.

regulations that the medical profession had successfully lobbied for earlier in the century.⁸⁸ The combination of restrictions on entry for alternative forms of birth care and a cultural shift that valorized the scientific aura that came with professionalized and standardized hospital care both pushed more women onto that path and contributed to the often unnecessary use of procedures and interventions. This process nicely illustrates the dynamic process that describes the unintended consequences of government intervention. Attempts to solve one set of problems with regulations create new incentives that often lead to more and different problematic behavior that was not foreseen in the original regulation. This behavior often leads to calls for yet more regulation, setting off a destructive spiral.⁸⁹ The interventions into entry in the provider market and the reimbursement market through federal policies created new sets of incentives that led to changes in behavior that reflected the preferences of those who were politically powerful and not the patient.

One result of both these parallel policy paths is an oversupply of specialist providers and hospitals—the most medicalized kind of care—and an undersupply of primary care physicians and nonhospital options for birth.⁹⁰ Nonmedical providers are heavily restricted in their scope of practice and, depending on the state, require physician oversight of their activities. As the policy paths of provider professionalization and facility concentration crossed, increasingly

⁸⁸ Starr, *The Social Transformation of American Medicine*, 375.

⁸⁹ On this interventionist dynamic, see Ludwig von Mises, *Interventionism: An Economic Analysis* (Indianapolis: Liberty Fund, 2011 [1940]); Sanford Ikeda, *The Dynamics of the Mixed Economy* (New York: Routledge, 1997).

⁹⁰ While there is often discussion of an obstetrician shortage, the reality is that supply is highly geographic in nature. Obstetrics students are increasingly choosing more lucrative specialist training and choosing to live in urban areas. The result is an oversupply of obstetrics specialists, particularly in cities, with an undersupply of general obstetrics practitioners in rural areas. See, for example, “Labor Pains: The OB-GYN Shortage,” Association of American Medical Colleges, November 15, 2018, <https://www.aamc.org/news-insights/labor-pains-ob-gyn-shortage>; March of Dimes, “Maternity Care Deserts Report”; William F. Rayburn, Norman F. Gant, Larry C. Gilstrap, Erika C. Elwell, and Sterling B. Williams, “Pursuit of Accredited Subspecialties by Graduating Residents in Obstetrics and Gynecology, 2000–2012,” *Obstetrics & Gynecology* 120, no. 3 (September 2012): 619–25.

tangled regulations made independent nonmedical practice even more difficult. For example, many states link midwifery licensure to requirements for transfer agreements with hospitals or collaboration agreements with physicians.⁹¹ These agreements are rarely forthcoming precisely because midwives and birth centers are in direct competition with these providers and facilities.

At the same time, Medicaid only reimburses licensed providers, and in many states even licensed midwives and birth centers are reimbursed by Medicaid and private insurers at much lower rates for doing the same work as physicians and hospitals, limiting the viability of these models.⁹² Most state Medicaid programs also pay based on location of birth rather than on who provided the bulk of care, meaning that when a home birth midwife transfers care to a hospital for pain relief or medical intervention, she loses all Medicaid reimbursement for that birth, despite providing months of prenatal care and whatever care was provided during labor. This failure to split fees between providers is symptomatic of the broader fragmented system and further disincentivizes cooperation between midwives and physicians. Local attempts to “bundle” payments between physicians and midwives to encourage increased integration of care cite Medicaid’s significant structural barriers to better integration.⁹³ Many home birth midwives avoid insurance or Medicaid reimbursement altogether because of the low reimbursement rates and increased bureaucratic load, preferring to operate on a concierge model of direct payment from their patient, where that payment more accurately reflects the midwife’s costs. Finally, states with certificate of need (CON) laws frequently ask local hospitals to weigh in on whether

⁹¹ American Association of Birth Centers, “Birth Center Regulations,” November 25, 2019, http://www.birthcenters.org/?page=bc_regulations.

⁹² American College of Nurse-Midwives, “Review of State Medicaid Fee Schedules,” n.d.

⁹³ Steve Calvin, “A Bundled Clinical Care and Payment Model for Maternity and Newborn Care” [presentation], n.d., Minnesota Birth Center, <https://aspe.hhs.gov/sites/default/files/pdf/208761/ExamplesHealthCarePaymentModels.pdf>.

potential competitors can enter the marketplace, further limiting access to birth centers and nonhospital facilities.⁹⁴

All these pieces together create a complex policy framework where restrictive licensing laws at the state level interact with Medicaid policies to limit the supply of midwives and birth centers throughout the United States. These policies were made possible in part precisely because midwifery was and remains a heterogeneous profession, with regional, class, educational, and racial divisions that prevented a unified approach to fighting restrictive legislation. The demand by medical providers for the professionalization of midwifery, traditionally apprenticeship-based education, has created maternity deserts, as in some state's licensure requires a master's degree in midwifery, which few traditional providers can access.

Modern Midwifery and Regressive Effects of Licensing

The regressive effects of licensing in the early 20th century are still fully apparent today, seen most clearly in the differences in regulation of CPMs. To become a CPM is the most common path for home birth midwifery because these midwives are trained and apprenticed in home-based care, unlike CNMs, whose training tends to focus on hospital care. Becoming a CPM is also the path most open to low-income applicants, since the training itself takes two to three years, much of which is spent in the community assisting at births with a trained midwife, which also provides

⁹⁴ Christopher J. Conover and James Bailey, "Certificate of Need Laws: A Systematic Review and Cost-Effectiveness Analysis," *BMC Health Services Research* 20 (August 14, 2020); Christopher Koopman and Anne Philpot, "The State of Certificate-of-Need Laws in 2016," Mercatus Center at George Mason University, September 26, 2016; Thomas Stratmann and Christopher Koopman, "Entry Regulation and Rural Health Care: Certificate-of-Need Laws, Ambulatory Surgical Centers, and Community Hospitals," Mercatus Working Paper, Mercatus Center at George Mason University, February 17, 2016; Thomas Stratmann and Steven Monaghan, "The Effect of Interest Group Pressure on Favorable Regulatory Decisions," Mercatus Working Paper, Mercatus Center at George Mason University, August 28, 2017; Thomas Stratmann, Matthew C. Baker, and Elise Amez-Droz, "Public Health in Rural States: The Case against Certificate-of-Need Laws," Mercatus Policy Brief, Mercatus Center at George Mason University, September 1, 2020.

apprentices with a source of income during the program itself.⁹⁵ In contrast, CNMs and CMs require up to six years of formal postsecondary education, which includes a bachelor of science in nursing and a master of science in midwifery.⁹⁶ On the other hand, unaccredited traditional midwifery programs cannot be paid for with federal student loans, which could limit some lower-income applicants from applying at all.

Of the accredited CPM programs in the United States, the costs of training range from \$2,000 (total) for a three-year apprenticeship to \$27,000 per year (plus supplies) for a three-year program resulting in a master's, but even these numbers do not capture the full difference between the two kinds of midwifery training, since most CPM programs typically do not require a bachelor's degree. A direct-entry option exists, known as the portfolio evaluation process (PEP), which is a traditional apprenticeship approach with fees of just \$2,000.⁹⁷ The average yearly cost of CNM training is significantly higher than for CPM training, ranging from \$20,000 to \$65,000. Although averages are difficult to pinpoint given the ranges in financial aid and costs of auxiliary equipment and supplies, CNM education starts at \$39,000 for the least expensive online programs, not including an estimated \$80,000 for the required undergraduate degree.⁹⁸ Someone could become a certified CPM in two to three years for as little as \$2,000, while the lowest estimated total cost for a CNM is around \$120,000.⁹⁹ Given these comparative costs, it seems likely that CPM

⁹⁵ Midwifery Education and Accreditation Council, "Becoming a Midwife," MEAC Schools, accessed February 13, 2017, <http://meacschools.org/becoming-a-midwife/>.

⁹⁶ American College of Nurse-Midwives, "Midwifery Programs," accessed May 25, 2021, <https://www.midwife.org/midwifery-programs>; Midwifery Education and Accreditation Council, "Compare MEAC Schools," MEAC Schools, accessed May 25, 2021, <https://www.meacschools.org/midwifery-schools/compare/>.

⁹⁷ North American Registry of Midwives, "Entry Level (PEP) Applicants," accessed May 25, 2021, <https://narm.org/entry-level-applicants/>.

⁹⁸ "See the Average College Tuition in 2021–2022," *U.S. News & World Report*, September 13, 2021, <https://www.usnews.com/education/best-colleges/paying-for-college/articles/paying-for-college-infographic>; American College of Nurse-Midwives, "Midwifery Programs."

⁹⁹ Though it is worth noting, as above, that some CPM programs do not qualify for federal loans, which may pose a barrier in the opposite direction.

certification would be the most accessible to low-income and minority communities, including those in urban and rural areas, though distance education midwifery programs such as Frontier Nursing University are working to close that gap. It also seems likely, though we do not have data on this point, that restrictive and costly CNM licensing restricts low-income and minority providers from entering the profession.

Anecdotal evidence supports this contention in that CNMs are overwhelmingly white (87 percent),¹⁰⁰ tend to practice in hospitals,¹⁰¹ and are more likely to live and practice in suburban areas.¹⁰² The demographics of CNMs strongly suggest that women who pursue this path are more likely to be middle class or higher, though as far as we know no data on the socioeconomic background of entrants to the field exist. On the other hand, CPMs are more likely to be racial or ethnic minorities (21 percent as of 2011, with the number likely higher now) and live and practice in rural and low-income areas. They practice almost exclusively outside hospitals.¹⁰³ These providers also tend to be of lower cost than CNMs and offer more flexible payment options for clients. Because of the diversity of training approaches, quality may be more variable among CPMs than with CNMs, but it is hard to assess quality and outcomes given the fragmentation of the system as a whole.

¹⁰⁰ American Midwifery Certification Board, “2020 Demographic Report,” August 19, 2020, [https://www.amcbmidwife.org/docs/default-source/reports/demographic-report-2019.pdf?sfvrsn=23f30668_2#:~:text=General%20Demographic%20Data&text=Not%20surprisingly%2C%20approximately%2099%25%20of,m0st%20common%20group%20\(6.31%25\).](https://www.amcbmidwife.org/docs/default-source/reports/demographic-report-2019.pdf?sfvrsn=23f30668_2#:~:text=General%20Demographic%20Data&text=Not%20surprisingly%2C%20approximately%2099%25%20of,m0st%20common%20group%20(6.31%25).)

¹⁰¹ American College of Nurse-Midwives, “Essential Facts about Midwives,” accessed February 13, 2017, <http://www.midwife.org/Essential-Facts-about-Midwives>.

¹⁰² Health Resources and Services Administration, “Area Health Resources Files,” July 31, 2020, <https://data.hrsa.gov/topics/health-workforce/ahrf>; March of Dimes, “Maternity Care Deserts Report.”

¹⁰³ Melissa Cheyney, Christine Olsen, Marit Bovbjerg, Courtney Everson, Ida Darragh, and Brynne Potter, “Practitioner and Practice Characteristics of Certified Professional Midwives in the United States: Results of the 2011 North American Registry of Midwives Survey,” *Journal of Midwifery & Women’s Health* 60, no. 5 (October 2015): 534–45.

The relative racial diversity of CPMs is particularly important given that racial disparities in maternity outcomes in the United States are dramatic, and evidence suggests that providers from similar backgrounds can improve outcomes for both mothers and infants.¹⁰⁴ Evidence also suggests that nonhospital birth options can help reduce complications for women of color and their infants, perhaps by reducing stress. Research supports the efficacy of midwives of color, doulas of color, birth centers, and home births in reducing disparities in maternity care outcomes, suggesting that to some degree restrictive licensing contributes to these racial disparities. There is a growing grassroots effort to train more midwives of color, but as we will see, restrictive licensing in states such as New York limits the efficacy of these providers.¹⁰⁵

The Effects of Regulation: New York as a Case Study

Given the variation in policy between the federal and state levels, it is helpful to see how all these regulations work together in a specific state. New York works well as a case study since it has restrictive licensing laws, a very restrictive CON process, relatively low reimbursement rates for midwives, and limited educational options for midwives, particularly in the upstate region.¹⁰⁶ It also has large rural areas upstate that are effectively maternity care deserts, with little to no access to midwives or obstetricians. The March of Dimes characterizes eight counties in New York, all upstate, as maternity deserts with no access to a hospital, birth center, obstetrician, or nurse

¹⁰⁴ Smedley, Stith, and Nelson, *Unequal Treatment*; Heather H. Burris and Michele R. Hacker, “Birth Outcome Racial Disparities: A Result of Intersecting Social and Environmental Factors,” *Seminars in Perinatology* 41, no. 6 (October 2017): 360–66; Brad N. Greenwood, Rachel R. Hardeman, Laura Huang, and Aaron Sojourner, “Physician–Patient Racial Concordance and Disparities in Birthing Mortality for Newborns,” *Proceedings of the National Academy of Sciences* 117, no. 35 (September 1, 2020): 21194–200; Lucia Guerra-Reyes and Lydia J. Hamilton, “Racial Disparities in Birth Care: Exploring the Perceived Role of African-American Women Providing Midwifery Care and Birth Support in the United States,” *Women and Birth* 30, no. 1 (February 2017): e9–16.

¹⁰⁵ See, for example, Jennie Joseph’s school to train black midwives, who would not be licensable in New York State, at <https://savinglives.biz/>.

¹⁰⁶ American College of Nurse-Midwives, “Review of State Medicaid Fee Schedules”; New York State Department of Health, “Certificate of Need,” accessed May 24, 2021, <https://www.health.ny.gov/facilities/cons/>; American College of Nurse-Midwives, “Midwifery Programs.”

midwife or with extremely limited access to maternity care.¹⁰⁷ Close to 400,000 people live in these eight counties, many of which are next to counties with just one or two obstetricians for the entire population. In six of these counties, there are no obstetricians and just four nurse midwives.¹⁰⁸ These numbers do not include downstate or urban populations, who may lack access to transportation to access providers, or areas whose maternity care options consist of a single hospital with no available alternative providers.

Currently, New York State only licenses CNMs and CMs, both of whom require a master's degree. New York also has a restrictive CON process for birth centers, requiring as much as \$250,000 in upfront costs and two years to complete the application process before opening doors and actually negotiating with insurers.¹⁰⁹ Given that most midwives have limited access to capital, these requirements create serious barriers to community settings for birth in the state, seen most clearly in the fact that for a population of 19 million, New York has only two independent birth centers in the entire state.

Moreover, New York aggressively prosecutes unlicensed midwives. Elizabeth Catlin, Melissa Carman, and Lissa Horning were all arrested since 2019 as unlicensed midwives. Catlin has been charged with more than 90 felonies, including multiple counts of practicing medicine without a license. Catlin's charges stemmed from the death of an infant at a hospital after she transferred the mother for care. Ironically, the mother whose infant died did not want Catlin prosecuted, and Catlin was reported to authorities by the local hospital where the mother and infant were transferred, not by the mother. All three women provide midwifery care in a maternity

¹⁰⁷ March of Dimes, "Maternity Care Deserts Report."

¹⁰⁸ Health Resources and Services Administration, "Area Health Resources Files."

¹⁰⁹ New York State Department of Health, "Certificate of Need"; Lauren K. Hall, *The Medicalization of Birth and Death* (Baltimore: Johns Hopkins University Press, 2019), 118–19; Federal Trade Commission and Department of Justice, "Improving Health Care: A Dose of Competition," Department of Justice, July 2004, <https://www.justice.gov/sites/default/files/atr/legacy/2006/04/27/204694.pdf>.

desert in New York State and serve Amish and Mennonite women who, for a variety of economic and religious reasons, prefer home birth over hospital-based care. All three women carry the CPM credential that is recognized in 35 other states but not in New York. These prosecutions and others like them point to a regulatory double standard in safety. Physicians are rarely if ever held criminally liable for infant mortality and morbidity even when such mortality is the direct effect of malpractice, while unlicensed midwives, even when they hold accreditations and licenses recognized by other states, are subject to prosecution even in cases where no malpractice is apparent and where the parents of the infant do not want criminal charges filed. It is one thing to hold midwives responsible for damages they cause, but it is another to arrest them for simply practicing without a license despite a long record of safety and against the wishes of the patients, who welcome their services. The latter suggests that the prosecutions are much more about protecting the privileges of licensed caregivers than concern over the safety of women and children.

As anecdotal evidence of regulatory capture, the 1992 New York Midwifery Practice Act includes a range of educational paths toward licensure, including the CPM, but the commissioner and the resulting New York Midwifery Board interpreted these educational paths significantly more narrowly, excluding CPMs and requiring a graduate degree rather than the more traditional apprenticeship-based programs available elsewhere for licensure. The New York Midwifery Board requires that one-third of its membership be practicing physicians, with the rest licensed midwives. There are no consumer representatives, no CPMs, and no other stakeholders who might challenge the board's interpretation of the educational requirements for licensing in the state.¹¹⁰ These licensing limitations became even more problematic during the COVID-19

¹¹⁰ See the New York State midwifery code, misinterpreted by regulators, at <http://www.op.nysed.gov/prof/midwife/article140.htm>.

pandemic, when hospitals in New York were overwhelmed and when women who already had concerns about hospital-based birth were even less likely to be comfortable in a hospital environment. Restrictions on birthing women, including required masking during labor, prohibitions on support people, and removal of infants from mothers who were COVID-19 positive, increased maternal anxiety about giving birth in hospitals, but largely because of the restrictive licensing situation, women had few other choices in New York State. As evidence that CPM licensure itself was not tied to safety considerations, Governor Andrew Cuomo issued emergency authorization for licensed midwives from other states, including CPMs, to practice in New York during the pandemic at the same time that CPMs based in New York were being prosecuted for practicing without a license.¹¹¹

While we do not have comprehensive data from the pandemic at this point, preliminary data demonstrate that the quality and outcomes of maternity care were predictably and negatively affected by it. Preliminary studies found worse outcomes for mothers and infants as well as significant effects on maternal mental health, including dramatic increases in maternal anxiety.¹¹² The evidence we have, however, does suggest that licensing restrictions seriously affected the supply of birth workers, such that increased demand for community setting providers could not

¹¹¹ Andrew Cuomo, “No. 202.18: Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency,” April 7, 2020; Tyler Pager, “She Helped Deliver Hundreds of Babies. Then She Was Arrested,” *New York Times*, March 5, 2019, sec. New York, <https://www.nytimes.com/2019/03/05/nyregion/mennonite-midwife-arrest.html>; National Advocates for Pregnant Women, “New York State Midwifery Licensure and the Prosecutions of Midwives Elizabeth Catlin and Melissa Carman,” August 2020, <https://advocatesforpregnantwomen.org/wp-content/uploads/2020/08/NAPW-Fact-Sheet-New-York-State-Midwifery-Licensure-and-the-Prosecutions-.pdf>.

¹¹² Bethany Kotlar, Emily Gerson, Sophia Petrillo, Ana Langer, and Henning Tiemeier, “The Impact of the COVID-19 Pandemic on Maternal and Perinatal Health: A Scoping Review,” *Reproductive Health* 18 (January 18, 2021), <https://doi.org/10.1186/s12978-021-01070-6>; Manu Goyal, Pratibha Singh, Kuldeep Singh, Shashank Shekhar, Neha Agrawal, and Sanjeev Misra, “The Effect of the COVID-19 Pandemic on Maternal Health Due to Delay in Seeking Health Care: Experience from a Tertiary Center,” *International Journal of Gynecology & Obstetrics* 152, no. 2 (2021): 231–35; Miranda J. Delahoy, “Characteristics and Maternal and Birth Outcomes of Hospitalized Pregnant Women with Laboratory-Confirmed COVID-19 — COVID-NET, 13 States, March 1–August 22, 2020,” *Morbidity and Mortality Weekly Report* 69, no. 38 (September 25, 2020): 1347–1354; “Maternal Health Inequity During the COVID-19 Pandemic,” Robert Wood Johnson Foundation, October 26, 2020, <https://www.rwjf.org/en/library/research/2020/10/maternal-health-inequity-during-the-covid-19-pandemic.html>.

be adequately met. Anecdotally, home birth practices and birth centers in New York experienced a much higher volume of calls during the pandemic, as women became increasingly fearful of giving birth in hospitals with a range of restrictions on birth support, forced masking, and separation from their infants.¹¹³ Yet most women who sought out-of-hospital births during this period were unable to find providers, given how few nonhospital providers exist. As further evidence of the failure of supply, the Centers for Disease Control found large increases in the number of women from New York City leaving to give birth elsewhere.¹¹⁴ Predictably, white women were the most likely to leave the city to find alternative locations to give birth; black and Hispanic women left at much lower rates, likely because of less flexible employment and fewer financial resources to support a move.

Recommendations for Regulatory Change

Given the regressive, cost-escalating, and other negative effects of licensing discussed, we offer the following recommendations for reforming regulations on maternity providers.

First, the evidence clearly suggests that greater autonomous practice and better integration of both CNMs and CPMs into standard maternity care lowers costs, improves maternal and infant outcomes, and supports a greater number and diversity of providers. Therefore, we recommend that states eliminate regulations that require supervision by, or formal agreements with, physicians or require standing agreements (such as transfer agreements) with hospitals, since such requirements place midwives entirely at the mercy of their direct competitors for entry into the marketplace. States can use the ICM standards, accepted throughout continental Europe,

¹¹³ Kimiko de Freytas-Tamura, “Pregnant and Scared of ‘Covid Hospitals,’ They’re Giving Birth at Home,” *New York Times*, April 21, 2020, sec. New York, <https://www.nytimes.com/2020/04/21/nyregion/coronavirus-home-births.html>; Theresa E. Gildner and Zaneta M. Thayer, “Maternity Care Preferences for Future Pregnancies among United States Childbearers: The Impacts of COVID-19,” *Frontiers in Sociology* 6 (2021).

¹¹⁴ Elizabeth Gregory, Michelle Osterman, and Claudia Valenzuela, “Changes in Births to New York City Residents Occurring Outside New York City, by Race and Hispanic Origins of the Mother: 2018–2019 and 2019–2020,” Vital Statistics Rapid Release, Centers for Disease Control, May 2021, <https://www.cdc.gov/nchs/data/vsrr/vsrr013-508.pdf>.

the United Kingdom, and Canada, as the standard for safe practice of midwifery, and regulations that exceed the ICM standards should be subject to scrutiny for protectionist biases.¹¹⁵ Midwives should be able to practice autonomously within their scope of practice, including prescriptive and admitting privileges where such privileges are consistent with the scope of practice outlined by the relevant midwife certification bodies.

Second, where appropriate, state regulators should encourage integration of midwives into the existing healthcare system, allowing home birth and birth center midwives to accompany clients upon transfer, regardless of licensure status. Hospitals and physicians who receive state Medicaid funds should be required to cooperate with community-based midwives who transfer patients into their care and should be penalized for refusing to accept such patients or for treating such patients in a punitive manner, including by isolating them from their previous care providers. Hospitals should also be required to participate in emergency drills and other planning and communication with community-based providers, as is the norm in other countries.

Third, states should work to eliminate the perverse incentives within Medicaid that reimburse home birth and birth center midwives at rates that are unsustainable or close them out of reimbursement altogether upon patient transfer. Some of the cost savings of midwifery care have been exaggerated by artificially low reimbursement rates that, ironically, prevent midwives from entering the market or serving Medicaid patients. Increasing Medicaid reimbursement to more accurately reflect market rates for midwives and allowing bundled payments between cooperating providers would increase the number of working midwives who accept Medicaid and would reduce more generously reimbursed hospital use in turn, both of which would save money over the long term without distorting the supply of providers.

¹¹⁵ International Confederation of Midwives, “Global Standards for Midwifery Regulation.”

Fourth, states should work to identify and eliminate extraneous state regulations, such as regulations that treat birth centers as ambulatory surgery centers, a gross distortion of the birth center model. States can instead rely on private accrediting and certification bodies that are more familiar with, and whose regulations are more tailored to, the work midwives do and the locations where they provide care. Accrediting and certification organizations include the Accreditation Commission for Midwifery Education (ACME) for CNM programs, Midwifery Education Accreditation Council (MEAC) for CPM programs, American Midwifery Certification Board (AMCB) for CNM certification, North American Registry of Midwives (NARM) for CPM certification, and Commission on the Accreditation of Birth Centers (CABC) for birth center accreditation. Official recognition of these organizations would enhance their role in creating quality assurance and make it easier for women who want nonhospital births to feel comfortable doing so.

Finally, states should eliminate the CON for birth centers where it exists. Birth centers, one of the primary locations where CPMs and CNMs practice outside hospitals, are a crucial community resource that lowers costs and improves outcomes for mothers and infants. In states that require CON, the birth center model is unsustainable, given the large startup costs involved and opposition from hospitals and physician groups. Since CON laws were originally intended to limit spending on high-intensity and corporatized medical care, they should certainly not be aimed at low-cost community clinics, particularly given the way their usual structure allows hospitals to protect their monopoly privileges by effectively vetoing the entry of lower-cost options into the maternity market.

These five recommendations together would work to build a more pluralistic and more dynamic maternity care market where lowered costs, improved outcomes, cultural competence,

integrated care, and maternal autonomy come together and where the regressive effects and perverse incentives of protectionist regulations are reduced or eliminated.

Conclusion

Overall, the evidence suggests that restrictive licensing for midwives not only increases the cost of maternity care but also reduces safety by fragmenting care and thereby disincentivizing the coordination of care needed to assure the health of both women and infants. Evidence further suggests that such licensing is regressive on both the supply and demand sides. On the supply side, restrictive licensing prices out of the market those with limited incomes, especially providers of color, and those willing to work in low-income communities. On the demand side, restrictive licensing eliminates low-cost options for populations who are underinsured or uncomfortable with hospital birth generally. Fortunately, there are clear paths for reform that states can begin implementing immediately, none of which require complex federal reforms. Unlike in other areas of healthcare, the path to better, lower-cost, and more pluralist maternity care is quite clear.