

# APPENDIX II

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## **I. Birth Outcomes and Maternity Care Management in Delaware Suffer from a Lack of Access to Midwifery.**

Delaware suffers from a lack of access to midwifery care in general, and to out-of-hospital midwife specialists like Certified Professional Midwives (CPMs), in particular. This is evidenced by the fact that Delaware reports rates of midwife-attended births that are lower than the national average. Midwives of all kinds attended 8.6% of all U.S. births in 2012. Joyce A. Martin et al., *Births: Final Data for 2012*, at 2, 62 Nat'l Vital Stat. Rep. (Dec. 30, 2013), [http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62\\_09.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_09.pdf) [hereinafter Martin, *Births 2012*]. Certified Nurse-Midwives (CNMs) attended 7.6% of all births, while CPMs and “other midwives” attended less than 1% (.7%) of births in 2012. *Id.*

In Delaware, however, midwives of all kinds attended just 6.5% of births in 2012. National Center for Health Statistics (NCHS), Division of Vital Statistics, *Natality public-use data 2007-2012, CDC WONDER Online Database*, November 2013, <http://wonder.cdc.gov/natality-current.html>. CNMs attended 6.2% of Delaware births in 2012. *Id.* CPMs and “other midwives” attended less than one-half of 1% (.3%) of the 11,005 births that occurred in Delaware in 2012. *Id.* According to data made available by the

Delaware Licensure Verification system, there are just forty practicing CNMs in Delaware in 2014. State of Delaware, *Verification*, <https://dpronline.delaware.gov/mylicense%20weblookup/Search.aspx>.

Currently, Delaware CPMs may practice only with a permit issued by the Department of Health and Social Services (DHSS). However, only one Delaware CPM has been granted a permit since 2002, and only on the condition that she work exclusively with Amish families. *See, e.g., Emily Crockett, Midwives Fight to Make Their Practice Legal Again in Delaware*, RH Reality Check (May 8, 2014, 1:36 PM), <http://rhrealitycheck.org/article/2014/05/08/midwives-fight-make-practice-legal-delaware/> [hereinafter Crockett]. The result is an out-of-hospital midwife community that is “essentially ‘underground.’” Cristen Pascucci, *Home Birth vs. Hospital Birth: YOU’RE MISSING THE POINT, PEOPLE*, Improving Birth (Feb. 17, 2014), <http://www.improvingbirth.org/2014/02/versus/>. Any Delaware family that seeks expert care for an out-of-hospital birth may find itself - with new baby in arms - confronted by state investigators pressing for the name of the CPM who attended that birth. Jennifer Antonik, *Freedom to Safe Birth Options Denied, Investigators Visit Delaware Families*, Momma Trauma (May 20, 2013), <http://webcache.googleusercontent.com/search?q=cache:R7HHDs10>

CRkJ:www.mommatraumablog.com/momma-trauma-blog/archives/05-2013+&cd=4&hl=en&ct=clnk&gl=us&client=safari.

The State's failure to increase access to midwives, ignores the fact that Delaware families seek alternatives to hospital birth, including CPMs and out-of-hospital birth options. *See, e.g.,* Crockett, *supra* (noting that pregnant women lobbied for increased access to midwives). Like their national counterparts, Delaware pregnant women and their families may not necessarily feel safe with the hospital model of care. Debora Boucher et al., *Staying home to give birth: Why women in the United States choose home birth*, 54 J. Midwifery & Women's Health 119, 121 (2009).

In addition to increasing the number of care providers, Delaware could improve its birth outcomes by promoting access to midwives. Delaware's infant mortality rate has consistently exceeded the U.S. average, even when the rates have fallen: in 2011, for example, the Delaware rate was 8.7 deaths per 1000 births, while the comparable U.S. rate was 6.1/1000. Kids Count Data Center, *Infant mortality*, <http://datacenter.kidscount.org/data/Tables/6051-infant-mortality>.

Although Delaware scores slightly better than the national average on maternal mortality (10.3 maternal deaths per 100,000 live births, as compared to 12.1/100,000, respectively), it nevertheless is far short of the

2010 Healthy People goal of 3.3/100,000. National Women's Law Center, *Maternal Mortality Rate (per 100,000) | Health Care Report Card*, <http://hrc.nwlc.org/status-indicators/maternal-mortality-rate-100000>.

Delaware also experiences more pre-term and low birthweight babies than the national average. Centers for Disease Control and Prevention, *Stats of the State of Delaware*,

[http://www.cdc.gov/nchs/pressroom/states/DE\\_2014.pdf](http://www.cdc.gov/nchs/pressroom/states/DE_2014.pdf).

In addition, Delaware's 2012 c-section rate (33.1%) is slightly higher than the comparable national average of 32.8%, *id.*, with a Vaginal Birth After Cesarean (VBAC) rate equivalent to the national average of 12%. March of Dimes, *PeriStats* (May 30, 2014),

<http://www.marchofdimes.org/peristats/Peristats.aspx>. However, these figures contrast sharply when compared to the 6% c-section rate and 87% VBAC rate achieved by out-of-hospital midwives. Melissa Cheyney et al., *Outcomes of Care for 16,924 Planned Home Births in the United States: The Midwives Alliance of North America Statistics Project, 2004 to 2009*, 59 J. Midwifery & Women's Health 17, 18 (2014) [hereinafter Cheyney, *Outcomes of Care*].

## II. Midwifery is Safe and Effective

The validity of midwifery has been contested in this country since the development of obstetrics. *See, e.g.*, Judith Pence Rooks, *Midwifery & Childbirth in America* 21 (1997). One of the recurrent themes of that debate is the notion that midwifery is risky and medicine is safe. *See, e.g.*, Crockett, *supra*. This false dichotomy obscures the fact that there are multiple ways to calculate risk and safety. In the midwifery model, the focus is on the relative effectiveness and inherent safety in physiologic birth, in contrast to medicine where the focus is on the pathology of birth. *See* Barbara Katz Rothman, *In Labor: Women and Power in the Birthplace* 134-40 (1982).

Physiologic birth is an “innate, mutually regulating, hormonally driven” process that facilitates “the period from the onset of labor through birth of the baby and placenta, as well as the establishment and continuation of breastfeeding and the development of mother-baby attachment.” *See* Carol Sakala & Maureen P. Corry, *Evidence-Based Maternity Care: What It Is and What It Can Achieve*, *Childbirth Connection*, 25 (2003), <http://www.milbank.org/uploads/documents/0809MaternityCare/0809MaternityCare.pdf>. The focus of safety in this model prioritizes data about “how mothers’ and babies’ bodies work, and work in concert,” while recognizing that “[w]hen facilitated, these autonomic nervous system functions

overwhelmingly succeed in conferring a cascade of physical, psychological and social benefits for the mother-baby dyad.” *Id.* This overwhelming success and “the remarkable competence of birthing women and newborns,” is what prioritizes the inherent safety of birth in the midwifery model, rather than its pathology. *Id.*

As it turns out, this focus on the inherent safety of birth has been proven to be very effective as, “[m]any historic and contemporary reports and studies confirm that the physiologic approach to childbirth, which has most consistently been provided by midwives... has succeeded remarkably well in achieving positive outcomes for mothers and babies in diverse contexts.” *Id.* at 26. This highlights the contrast between midwifery and medicine with regard to risk and safety. Although the medical model’s focus on pathology is oriented to decreasing risk, put into practice, it can actually increase risk: “[e]xternal, professional-directed management of childbirth in hospitals...typically interferes with these mother-and-baby-led capacities.” *Id.* By contrast, the midwifery model’s focus on physiology, oriented to safety, when put into practice has been proven to reduce risk and confer benefits. *See, e.g.,* Marie Hatem, *Midwife-led versus other models of care for childbearing women*, The Cochrane Collaboration (2009), <http://apps.who.int/rhl/reviews/CD004667.pdf> [hereinafter Hatem].

The gold standard for data on risk and safety with regard to maternity care is the Cochrane Review - a systematic review of the best studies conducted in the field. The first Cochrane Review was conducted in the 1980s and has been built upon by the Cochrane Collaborative in subsequent reports conducted as part of the Cochrane Pregnancy and Childbirth Group. Their 2009 report on midwifery-led models of care (cited above) found such models to confer better maternal and child health outcomes and result in fewer interventions during labor and childbirth. *See Hatem, supra*, at 1-2. These reviews are built on individual studies which vary in scope, quality, and focus. *Id.* at 1. While random controlled trials are considered particularly trustworthy, they are not always the best option for answering questions about uncommon phenomena or future outcomes, and they present ethical problems especially for pregnancy and birth.

In January 2014, the largest-ever study on planned home births was published by the Journal of Midwifery and Women's Health. *See Cheyney, Outcomes of Care, supra*. While it was not a random controlled trial, it did collect data prospectively for almost 17,000 families, and provides an indication of the relative safety and effectiveness of midwifery care as applied to the reporting population: the rate of various interventions was lower than average and outcomes were excellent. *Id.* at 17, 26. Even more

than demonstrating the relative safety of midwifery, this data demonstrates the relative safety of physiologic birth. *Id.* Based on the available data, midwifery care is a safe and effective model of care for a relatively safe and effective physiologic process. *Id.*; *see also* Hatem, *supra*, at 2.

### **III. Midwifery in the Context of U.S. Maternity Care in the 21st Century**

Midwifery as practiced by CPMs constitutes a relatively small but rapidly-growing model of maternity care. As described below, the midwifery model of care contrasts significantly with the prevailing medical hospital-based model, the model that is almost entirely responsible for the state of maternity care in the United States today. *See, e.g.*, Hatem, *supra*, 3-4. This section provides basic statistical data regarding that prevailing model, as well as new data that describe the growth and projected trajectory for out-of-hospital midwifery as practiced by CPMs.

CPMs have been shown to improve outcomes for mothers and babies for various reasons. *See, e.g.*, Mary J. Renfrew et al., *Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care*, 384 *Lancet* 1129, 1136 (2014). First, CPMs provide culturally competent care. Saraswathi Vedam et al., *Closing the Theory–Practice Gap: Intrapartum Midwifery Management of Planned Homebirths*,

52 J. Midwifery & Women's Health 291 (2007). CPMs also address access to care problems on a low-cost, localized model that large institutions cannot begin to attempt. See Melissa Cheyney, *Born at Home: The Biological, Cultural, and Political Dimensions of Maternity Care in the United States* 2 (2010). Even as public health and health care professional organizations are calling for a reduction in the excessively high rate of cesarean section, CPMs have been quietly achieving c-section rates of well under 10%. See, e.g., Cheyney, *Outcomes, supra*, at 18 (noting a 6% c-section rate); see also James Deline et al., *Low Primary Cesarean Rate and High VBAC Rate With Good Outcomes in an Amish Birthing Center*, 10 *Annals Fam. Med.* 530 (2012) (noting a 4% c-section rate). The low rates of interventions reported by midwives contrast sharply with national averages of c-sections in comparable low-risk mothers, which range from 18-28% over the last fifteen years. Michelle J. K. Osterman & Joyce A. Martin, *Trends in Low-risk Cesarean Delivery in the United States, 1990–2013*, 63 *Nat'l Vital Stat. Rep.*, Table A (Nov. 5, 2014), [http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63\\_06.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_06.pdf), [hereinafter Osterman].

CPMs also compare favorably on costs. With CPMs fees for an entire prenatal, labor, birth, and postpartum package roughly equivalent to an

obstetrician's fee, both public and private payers stand to realize considerable savings. Marian F. MacDorman et al., *Trends in Out-of-Hospital Births in the United States, 1990-2012*, at 1, 144 Nat'l Ctr. Health Stat. Data Brief (March 2014), <http://www.cdc.gov/nchs/data/databriefs/db144.pdf>, [hereinafter MacDorman, *Out-of-Hospital Births*].

States that have fully integrated CPMs into their health care systems have found that autonomous practice enables practitioners to offer service to the full extent of their education and training. The key is substituting consultation for collaboration. Wisconsin's model, for example, specifically exempts other health care providers from vicarious liability and addresses the need for consultation and referral. *Wisc. Stat.* § 440.988 (2005). Patients, CPMs, and physicians alike desire an integrated system of care that promotes autonomous practice to the benefit of patients.

According to data released by the U.S. Centers for Disease Control and Prevention (CDC), just under four million births (3,952,841) occurred in the United States in 2012, the last year for which the CDC provides complete data. Martin, *Births 2012, supra*, at 1. The overwhelming majority (98.6%) of these births occurred in hospitals, and doctors attended 91.8% of all recorded births. *Id.* at 10. Of the 1.4% (over 50,000) are were out-of-

hospital births, roughly two-thirds (65.6%) occurred in a residence, and 29.0% occurred in a freestanding birth center. *Id.*

Over 35,000 births occurred at home in 2012, the highest level since reporting began for this item in 1989. *Id.* at 10. Though relatively low as a percentage of overall births in the U.S., the rate of out-of-hospital birth has grown significantly over the past ten years. According to data reviewed by the CDC, researchers reported in January 2012 that “after a decline from 1990 to 2004, the percentage of U.S. births that occurred at home increased by 29%, from 0.56% of births in 2004 to 0.72% in 2009.” Marian F.

MacDorman et al., *Home Births in the United States, 1990-2009*, 84 Nat’l Ctr. Health Stat. Data Brief (Jan. 2012),

<http://www.cdc.gov/nchs/data/databriefs/db84.pdf>.

The most recent National Center for Health Statistics Data Brief on home births, published in 2014, reports that the increase in out-of-hospital birth has continued. MacDorman, *Out-of-Hospital Births, supra*, at 1. In 2012, 1.35% of all births were outside a hospital, up from 1.26 in 2011. *Id.*

In some states, the percentage was even higher. Delaware, for example, saw an 2-3% increase in homebirths. *Id.* at 3. Overall, “45 states had statistically significant increases in the percentage of out-of-hospital

births from 2004–2012, and for 27 states, the percent increase was 50% or more. No states had statistically significant declines.” *Id.* at 4.

Furthermore, the data demonstrate that out-of-hospital births generally had a lower risk profile than hospital births. *Id.* at 1, 4. Approximately 4.4% of out-of-hospital births were born preterm (37 weeks gestation or fewer) as compared to 11.6% of in-hospital births. *Id.* at 4. Likewise, 3.2% of home and birth center births with midwives were low birthweight in 2012, compared with 8.1% of hospital-born babies. *Id.*

The authors of the 2014 Report, noting the continued upward trajectory of the U.S. health care system, commented, “If this increase continues, it has the potential to affect facility usage, clinician training, as well as resource allocation, as well as health care costs.” *Id.* at 1.

Approximately 23% of all hospitalizations in 2009 were for women giving birth and their newborns. Childbirth Connection, *United States Maternity Care Facts and Figures* (Dec. 2012),

[http://transform.childbirthconnection.org/wp-](http://transform.childbirthconnection.org/wp-content/uploads/2012/12/maternity_care_in_US_health_care_system.pdf)

[content/uploads/2012/12/maternity\\_care\\_in\\_US\\_health\\_care\\_system.pdf](http://transform.childbirthconnection.org/wp-content/uploads/2012/12/maternity_care_in_US_health_care_system.pdf)

[hereinafter *Facts and Figures*]. Maternity care is the single most common reason for hospitalization in the U.S., and six of the ten most common hospital procedures in 2009 were maternity-related. *Id.*

Cesarean section, the most common operating room procedure in the country represented 32.8% of all births in 2012. Martin, *Births 2012, supra*, at 2. The rate of cesarean births has continued to rise over the past several decades, *see Osterman, supra*, at Figure 1, despite a World Health Organization recommendation that overall C-section rates should be no higher than 15%. Luz Gibbons et al., *The Global Numbers and Costs of Additionally Needed and Unnecessary Caesarean Sections Performed per Year: Overuse as a Barrier to Universal Coverage*, World Health Organization, at 4 (2010), <http://www.who.int/healthsystems/topics/financing/healthreport/30C-sectioncosts.pdf>. With respect to maternity outcomes, “the rate of preterm birth hit an all-time high of 12.8% in 2006, and has since declined to 11.7% in 2011. . . . The rate of low birth weight has risen steadily over a quarter of a century from 6.7% in 1984 to 8.1% in 2011.” *Facts and Figures, supra*, at 1.

Maternity care consumes a major percentage of health care costs in the United States. Facility charges billed by hospitals for labor and delivery combined with charges for newborn infants reached a total of \$111 billion in 2010. *Id.* at 2. During that year, “45% of all maternal childbirth-related hospital stays were billed to Medicaid” . . . and 48% to private insurers. *Id.*

“Mothers pregnancy and delivery” and “newborn infants” were the two most expensive conditions billed to private insurers, adding up to \$49 billion.” *Id.* These account for only facility charges and do not include the accompanying professional fees for obstetricians and hospital-based CNMs. Fees for providers of out-of-hospital maternity care are considerably lower than hospital or physician fees; birth at home eliminates the need for a facility fee, while midwife professional fees and birth center charges tend to be as low as one-third to one-half of obstetrician and hospital charges. *See, e.g.,* Childbirth Connection, *Average Facility Labor and Birth Charge By Site and Method of Birth, United States, 2007-2009* (2011), <http://transform.childbirthconnection.org/wp-content/uploads/2011/03/Charges-chart-2007-20091.pdf>. Additionally, since the Midwives Model of Care emphasizes the avoidance of technology and unnecessary interventions, and midwives have far lower c-section rates than physicians even for low-risk women, the potential cost savings that might result from a further shift to midwife and out-of-hospital maternity services could have a significant impact in lowering maternity care costs for both government and private insurance. *See, e.g.,* Hatem, *supra*, at 1, 3, 15. The federal Medicaid program covers home birth and birth centers. *See* 42 U.S.C. §1396d (a)(6), (17), (28) (2010).

Eleven state Medicaid programs expressly include coverage for CPMs or other licensed midwives: Alaska, Arizona, California, Florida, Idaho, New Hampshire, New Mexico, Oregon, South Carolina, Vermont, and Washington. See North American Registry of Midwives, *Direct-Entry Midwifery State-by-State Legal Status* (Aug. 14, 2014), <http://narm.org/pdf/Statechart.pdf>. Under federal Medicaid law and rules, midwives are generally not required to collaborate with a physician in order to be eligible for Medicaid provider status. See 42 U.S.C. § 1396d(a)(17), (28) (2014); 42 C.F.R. §§ 440.165, 441.21 (2012). Securing federal government recognition as a provider category eligible for Medicare and/or Medicaid payment is often the first step toward more general acceptance by private health insurance plans. These developments, along with the projected growth statistics for out-of-hospital birth discussed above, strongly indicate that midwifery and out-of-hospital birth have entered the mainstream in the United States, with their role in the maternity care market projected to have continued growth.