

MIDWIFERY CARE & BIRTH CENTERS

PUBLISHED MAY 2020

As Mississippians cope with a lack of obstetric services in over half of counties in the state, an increasing number of women desire to have less-medicalized births outside of a typical hospital setting. The number of planned births that occurred outside of a hospital in Mississippi grew by 68 percent between 2007 and 2017 as did births attended by midwives. Midwifery care is being explored across the country as a way to alleviate workforce shortages and offer safe, community-based care in low-risk pregnancies.

A BRIEF HISTORY OF MIDWIFERY IN MISSISSIPPI

In 1927, more than 3,000 lay midwives were documented across Mississippi. The mostly black midwives served white women and black communities with no access to doctors. Many were recruited and trained as public health nurses by the Department of Health in response to poor public health and limited access to physicians. By 1975 only 217 lay midwives were active. Greater availability of physicians and hospital beds, improved education about medical care, and the availability of Medicaid funds for care contributed to a shift from home births to hospital-based, medicalized deliveries.

In response to limited capacity at local hospitals and high infant and maternal mortality rates, the Mississippi State Department of Health developed maternal and child health (MCH) clinics during the 1970s. The clinics employed certified nurse-midwives to provide prenatal care and hospital-based deliveries to low-income expectant mothers in several counties including Warren, Hinds, Bolivar, Washington, Holmes, and Jackson counties.

Nurse midwives practicing in the MCH clinics were trained in partnership with the University of Mississippi Medical Center. In 1978 nurse midwives conducted over 5,200 visits and delivered 376 infants in Jackson County alone.

There is currently no school of nurse-midwifery in the state, and prenatal care has not been provided in public health clinics since 2017.

Source: Beck, T. (2019). ; Mississippi State Board of Health. (1973-1983). Annual Reports.

Midwives are trained professionals who help healthy women during pregnancy, labor and delivery, and after birth. Research indicates that integration of midwifery care in a health system and better access to midwives are associated with higher rates of vaginal delivery, vaginal delivery after prior cesarean (c-section), and breastfeeding as well as lower rates of premature births, low birth-weights, and neonatal death. While most births that occur in Mississippi are uncomplicated, just over two percent of pregnancies and births are managed by midwives annually, and few women have access to safe, non-medicalized birth options.

Midwives have been instrumental in providing uncomplicated pregnancy-related care in previous times of provider shortages and poor birth outcomes in Mississippi. (See sidebar.) Mississippi is currently experiencing a shortage of obstetric providers; women in forty-six Mississippi counties must drive an hour or more to see an obstetrician (OB/GYN) for prenatal, delivery, and post-partum care. From 2015 to 2017 Mississippi had the highest rates of cesarean deliveries, pre-term births, and low birth weight in the nation. In response to similar shortages and poor birth outcomes, several states have broadened access to maternity care through midwives and birth centers for women with uncomplicated pregnancies.

KEY POINTS

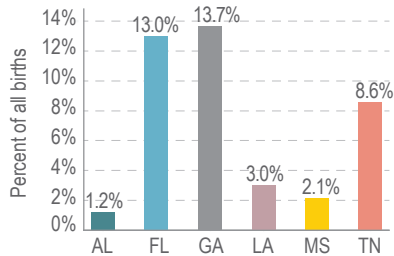
- Midwives and birth centers provide a model of maternity care that research shows can be appropriate for low-risk pregnancies and deliveries with similar or better outcomes as typical obstetric care with lower healthcare costs.
- Certified Nurse Midwives currently practice in Mississippi hospitals, while Certified Professional Midwives and Direct Entry Midwives legally practice unregulated in homes and community settings.
- Birth centers provide midwifery care and operate independently from hospitals. These providers are currently licensable, but none currently operate in Mississippi.

Midwives as Providers of Maternity Care

DOULAS

Doulas, often confused for midwives, act as part of a birth support team and provide non-clinical, emotional support and advocacy for pregnant and laboring women in any setting.

PERCENTAGE OF BIRTHS ATTENDED BY MIDWIVES IN SOUTHEASTERN STATES, 2018



Source: CDC. (2019). National Center for Health Statistics. *Nativity Reports (2016-2018)*.

MINIMUM STANDARDS OF OPERATION FOR BIRTHING CENTERS

Mississippi Code 41-77-1 thru 25 authorizes the licensure and regulation of "birthing centers" by the State Department of Health.

Services are limited to those typical in uncomplicated childbirth and do not include cesarean section. Labor in birthing centers is allowed to progress without medically unnecessary intervention.

State Minimum Standards require birthing centers to be operationally independent from hospital delivery units. They may operate under the direction of a nurse midwife or a physician, and are required to maintain a referral agreement with a hospital that has an organized obstetrical staff and 24-hour emergency care and cesarean section capability within 30 minutes. Patients stays in birth centers are limited to 24 hours.

Source: MSDH. (2016) *Health Facilities Regulation*.

RISK OF BIRTH INJURY

While research reflects decreased risk of birth injury due to less intervention, one study has shown an increased risk of shoulder dystocia associated with midwife-managed births among women with two or more previous deliveries.

Source: Souter, V., et al. (2019). *Comparison of Midwifery and Obstetric Care in Low-Risk Hospital Births*

Three types of midwives are known to practice in Mississippi. **Certified Nurse Midwives** (CNMs or nurse-midwives), 29 of whom are currently licensed to practice and attend over 800 births (or two percent) annually across the state. Other types of midwives in the state include **Certified Professional Midwives** (CPMs) and **Direct Entry Midwives** (or lay midwives). In Mississippi, CPMs and lay midwives practice legally but unregulated, and the number of these practitioners active in the state is unknown. These midwives are available for women who wish to give birth in home-like settings, but no state-level oversight exists.

TABLE 1. A COMPARISON OF TYPES OF MIDWIVES CURRENTLY PRACTICING IN MISSISSIPPI

	Certified Nurse Midwife	Certified Professional Midwife	Direct Entry Midwife
Currently Licensable	Licensed by State Board of Nursing	Not currently, but licensed in 35 states	No
Training	Registered nurse training with advanced practice degree in midwifery	National certification* after 3-5 years of apprenticeship including at least 2 years of clinical education and observing 55 or more births	None required
Site of Practice	Primarily hospitals and birth centers	Home and community settings	Home and Community
Payment	Reimbursable via Medicaid and commercial insurers	Mostly self-pay; reimbursable by some commercial insurance plans; Medishare	Self-pay; No known insurance coverage; Medishare

Source: The American College of Nurse-Midwives. (2017). * North American Registry of Midwives. (2020).

Nurse midwives practice in all 50 states, and CPMs are licensed to practice in 37 states including Tennessee, Louisiana, Arkansas, Alabama, and Florida. Lawmakers in Florida have formally recognized the role of midwives in reducing a shortage of providers of prenatal and delivery services and have provided for Medicaid reimbursement for CPMs in addition to nurse midwives.

Birth centers offer another option for uncomplicated deliveries.

Birth centers operate according to the midwife model of care and are an option for pregnant women at low risk of complications who want a non-medical delivery but not at home. Medicaid and commercial insurers cover birth center services, which have significantly lower costs due to fewer medical interventions and less expensive staff. Because midwife-managed care limits intervention and allows for normal progression of labor, data show the risk of some birth-related injuries is less, although risk of shoulder dystocia may be higher. (See sidebar.) Studies indicate that fewer than 10 percent of births initiated in birth centers require transfer to medical care during labor. State law requires that birth centers maintain written agreements with acute care facilities for transfer of laboring women in case of emergency. Birth centers currently operate in Tennessee, Arkansas, and Louisiana. *There are no birth centers that meet the state minimum standards currently providing this care in the state.*

Key Differences in Midwifery Model of Maternity Care

UNCOMPLICATED DELIVERY

An uncomplicated delivery involves a single baby delivered vaginally at full term and positioned head-down.

PRENATAL VISITS

An average prenatal visit with a physician in a medical setting lasts approximately 15 to 20 minutes while visits with certified nurse midwives in birth centers last at least 30 minutes.

Source: Urban Institute. (2016). *Strong Start for Mothers and Newborns*.

STRONG START FOR MOTHERS AND NEWBORNS

From 2013-2017 the Centers for Medicare and Medicaid Innovation studied alternate models of maternity care including birth centers. Birth centers demonstrated better outcomes compared to the national average for births in all settings including hospitals.

Some results included:

reduced induction of labor (16.4% v. 24.5%);

reduced primary c-section deliveries (8.7% v. 21.8%);

increased breastfeeding at discharge (92.9% v. 83.1%); and

lower rates of NICU admissions (2.8% v. 8.7%).

Source: Alliman, et al. (2019). *Strong Start in Birth Centers*.

COST OF CPM CARE FOR ONE YEAR

One year of care including prenatal, home-based delivery, and postpartum care, provided by a Certified Professional Midwife costs \$3000-\$4000 on average.

Source: Hillman, R. (2020).

CESAREAN SECTIONS AND RISK

C-section is a surgical procedure, and women who undergo them are at increased risk of blood clots, post-partum hemorrhage, infection, internal organ injury, and need for blood transfusion. Subsequent deliveries become more risky, too. Risks to newborns include surgical injury and breathing problems.

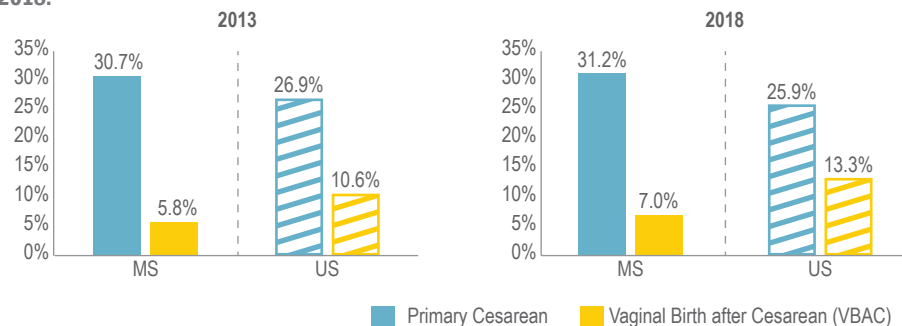
Midwives in any setting practice what is known as the Midwifery Model of Care, which views pregnancy and birth as normal, healthy physiologic processes. Midwives support women throughout pregnancy, delivery, and post-partum periods. Midwife-managed prenatal care includes pregnancy assessment as well as lifestyle and behavioral interventions, and emotional support. In case of complications at any point in the pregnancy or delivery, women are referred to a physician's care. Induction, artificially accelerated labor, c-section deliveries, anesthesia, and intensive electronic monitoring are avoided under midwives' care but may be provided by medical clinicians as necessary. Midwives may order lab tests and medication as credentials allow and medical necessity requires.

Midwifery offers comparable or better outcomes and cost savings.

Research shows that in any setting of care, midwife-managed births result in significantly lower rates of induced labor and c-sections which negatively impact maternal health, and poor outcomes like pre-term births and low birth weight that endanger infant health. Prenatal and postnatal care are more comprehensive than typical medical maternity care and supports improved outcomes like breastfeeding and postpartum contraception use, both of which contribute to long-term health of mothers and infants.

Research also shows that costs improve under a model of care that promotes minimal intervention and the natural progression of labor and birth via vaginal delivery. In 2018, the average total charge to Mississippi Medicaid for an uncomplicated cesarean delivery was \$27,510 while the average total charge for an uncomplicated vaginal delivery was \$15,854 (inclusive of pre-and postnatal care and infant care). Approximately 70 percent of Medicaid deliveries billed that year were uncomplicated.

FIGURE 1. LOW RISK CESAREAN AND VBAC BIRTH RATES IN MISSISSIPPI COMPARED WITH THE U.S., 2013 & 2018.



Source: Maternal Safety Foundation. (2018).

Mississippi may benefit from greater integration of midwifery.

Mississippi mothers with low risk for complications deliver via c-section at the highest rate in the country (Figure 1.). They also attempt vaginal delivery after prior c-section at half the national rate. Rates of uncomplicated c-sections can vary widely across hospital systems (from 15 to 37 percent in Mississippi hospitals) which suggests clinical practice patterns and limitations on time, staffing, and labor rooms may play a role rather than population-level health risks. Births initiated under midwifery care are very likely to be delivered vaginally (as many as 93 percent of births in one study). Greater utilization of midwifery would reduce unnecessary c-sections, as well as risk to maternal and infant health and costs of care.

Discussion

The United States is grappling with a host of reversals in decades-long health and public health gains in maternal and child health. Avoidable pregnancy-related deaths and illnesses have increased for all mothers and infants, but especially black women and their children. The burden is heaviest among states in the Southeast, including Mississippi where obstetric providers are in short supply. It is unlikely that Mississippi will attract enough OBGYNs to meet recommended coverage levels in the near future. However, as many states and other highly developed nations have demonstrated in numerous studies, midwifery care is sufficient and beneficial for many pregnancies. The midwifery model of care has been integrated into national and state-level initiatives to reduce perinatal death and illness as well as racial health disparities in maternal and child health.

Use of birth centers and midwifery care in Mississippi has lagged behind other states despite existing enabling policies, such as Medicaid reimbursement for nurse-midwives and licensure of birth centers. Additional policy options that would foster greater integration of midwifery into the existing maternity care system in Mississippi include:

- Licensure and regulation of Certified Professional Midwives currently practicing without regulation in the state
- Promoting collaboration between medical and non-clinical maternity care providers within medical systems, including both midwives and birth centers
- Creation of in-state training programs for Certified Nurse Midwives to expand the maternity care workforce for low risk pregnancies

Studies have shown that integration of midwifery in medical settings yields more favorable outcomes for low-risk pregnancies than medical settings that do not include midwifery—even in deliveries that are not ultimately managed by a midwife. Greater inclusion of midwifery would benefit the uncomplicated pregnancies midwives manage as well as relieve strain on obstetric providers to care for high risk pregnancies

Sources

- Stapleton, S., Osborne, C., and Illuzzi, J. (2013). Outcomes of Care in Birth Centers: Demonstration of a Durable Model. *Journal of Midwifery & Women's Health*, 58: 3-14. doi:10.1111/jmwh.12003.
- Vedam, S., Stoll, K., MacDorman, M., Declercq E., Cramer, R., Cheyne, y M. et al. (2018). Mapping integration of midwives across the United States: Imp. act on access, equity, and outcomes. *PLoS ONE* 13(2): e0192523.
- Souter, V., Nethery, E., Kopas, M., Wurz, H., Sitcov, K., and Caughey, A. Comparison of Midwifery and Obstetric Care in Low-Risk Hospital Births, *Obstetrics & Gynecology*: November 2019 - Volume 134 - Issue 5 - p 1056-1065 doi: 10.1097/AOG.0000000000003521
- Alliman, J, Stapleton, S., Wright, J., Bauer, K., Slider, K., Jolles D. (2019). Strong Start in birth centers: Socio-demographic characteristics, care processes, and outcomes for mothers and newborns. *Birth*. 2019;46:234-243.
- American College of Nurse-Midwives. Comparison of Certified Nurse-Midwives, Certified Midwives, Certified Professional Midwives Clarifying the Distinctions Among Professional Midwifery Credentials in the US. (2017). <https://www.midwife.org/acnm/files/ccLibrary-Files/FILENAME/00000006807/FINAL-ComparisonChart-Oct2017.pdf>
- American College of Obstetricians and Gynecologists, Society for Maternal-Fetal Medicine. (2014). Safe prevention of the primary cesarean delivery. *Obstetric care consensus no. 1. Am J Obstet Gynecol*, 210 (2014).
- Maternal Safety Foundation. (2018). Mississippi State Dashboard. www.cesareanrates.org
- Mississippi State Department of Health. (2017). Hospital discharge data cesarean and vaginal deliveries, 2017.
- North American Registry of Midwives. (2020). Certified Professional Midwives (CPM) Candidate Information Booklet. <http://narm.org/pdf/files/CIB.pdf>
- Centers for Disease Control and Prevention. (2017). Infant Mortality Rates by State. https://www.cdc.gov/nchs/pressroom/sosmap/infant_mortality_rates/infant_mortality.htm
- Centers for Disease Control and Prevention (CDC). (2019). National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2016-2018, on CDC WONDER Online Database. <http://wonder.cdc.gov/natality-expanded-current.html>
- The Big Push for Midwives. (2019). Licensure for CPMs: State Chart. <http://PushforMidwives.org>.
- The Birth Place Lab. (2018). Midwifery Integration State Scoring System Report Card. <https://www.birthplacelab.org/how-does-your-state-rank/>
- Urban Institute. (2016). Strong Start for Mothers and Newborns Evaluation: Year 2 Report. https://downloads.cms.gov/files/cmml/strongstart-enhancedprenatalcare_evalrptyr2v1.pdf
- Beck, T. (2019, September). Phone interview.
- Mississippi State Department of Health. (2016). Minimum Standards of Operation for Birthing Centers. www.msdc.state.ms.us.
- Mississippi State Board of Health. Annual Reports. (1973-1983). Mississippi Department of Archives.
- Hillman, R. (2020, January). Email interview.

MISSISSIPPI MATERNAL AND CHILD HEALTH OUTCOMES

Mississippi has one of the highest rates of preterm birth and low birth weight infants in the country, particularly among black infants.

ALLIANCE FOR INNOVATION ON MATERNAL HEALTH (AIM)

AIM is a federally funded, national collaboration of healthcare associations working to reduce severe maternal morbidity and mortality through maternal and non-obstetric safety bundles including a reduction in primary cesarean sections, a key contribution of midwifery.

Center for Mississippi Health Policy

Plaza Building, Suite 700
120 N. Congress Street
Jackson, MS 39201

Phone 601.709.2133
Fax 601.709.2134

www.mshealthpolicy.com
 @mshealthpolicy