
Joint Informational Bulletin

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FROM: Adam Boehler
Deputy Administrator and Director
Center for Medicare and Medicaid Innovation

Mary C. Mayhew
Deputy Administrator and Director
Center for Medicaid & CHIP Services

SUBJECT: Strong Start for Mothers and Newborns initiative (Strong Start)

This informational bulletin describes the improved outcomes and substantial savings associated with Birth Center care as reported in the final Strong Start for Mothers and Newborns (Strong Start) [evaluation](#). Strong Start was a Center for Medicare and Medicaid Innovation initiative for pregnant women enrolled in Medicaid or the Children's Health Insurance program (CHIP). The initiative intended to test psychosocial approaches to reducing preterm birth, improving overall pregnancy outcomes for mothers and infants, and reducing costs to Medicaid and CHIP during pregnancy and the year following birth.

From 2013-2017, model participants received care in one of three models: Maternity Care Homes, Group Prenatal Care, or Birth Centers, and found significantly improved outcomes among the Birth Center participants. Given these results, states may wish to consider studying the availability of Birth Center care in their states, and state Medicaid programs can use these evaluation results when considering how to improve care for pregnant women. Given the long-term repercussions of preterm births and the maternal morbidity and mortality risks associated with multiple cesareans, improved outcomes observed among Birth Center participants may offer health benefits and cost savings that are realized long past the infant's first year.

Background

Rates of preterm birth and low birth weight are high in the United States, especially among births to Medicaid beneficiaries. Research consistently shows that infants born preterm (before 37 completed weeks of gestation) have higher mortality risks and may endure a lifetime of developmental and health problems when compared to infants born at term. The Center for Medicare and Medicaid Innovation's Strong Start initiative tested three models of prenatal care to find successful ways to improve birth outcomes among Medicaid beneficiaries. Strong Start was designed to test which prenatal care models might improve maternal-infant health and reduce costs to Medicaid through pregnancy and the infant's first year.

Strong Start made 27 awards to organizations that operated more than 200 provider sites in 32 states, Washington, D.C., and Puerto Rico. From 2013-2017, the program provided enhanced prenatal care services to almost 46,000 women through three approaches:

- Maternity Care Homes, which offered standard clinical care enhanced with a consistent care coordinator and sometimes additional health education or other services;
- Group Care, which offered clinical care in a group setting, followed by extended health education and peer support; and
- Birth Centers, which offered the midwives' model of care, a time-intensive holistic approach, supplemented with peer counseling for additional education, referrals, and support.

Strong Start programs adjusted to meet needs of participants, who commonly faced issues such as unstable housing, unemployment, depression and anxiety, food insecurity, barriers to care (e.g. transportation), and a lack of social support.

Results showed particular promise in the Birth Center model. Birth Centers, which were all freestanding facilities that were members of the American Association of Birth Centers (AABC), employ certified nurse midwives and other state-licensed midwives who practice the midwifery model of care. These facilities follow standards for Birth Centers established by AABC (<https://www.birthcenters.org/page/Standards>). The midwifery model, a holistic and patient-centered model, is distinct from the medical model that is usually employed by both physicians and midwives in typical clinical settings. Best practices associated with the Birth Centers' midwifery model include prenatal care appointments that generally last at least 30 minutes, far longer than typical maternity care appointments, which usually last 15 minutes or less. These prenatal care appointments include extensive education on nutrition, exercise, childbirth preparation, breastfeeding, infant care and self-care. Most Birth Centers offer multiple postpartum visits, often including at least one home visit. During the Strong Start initiative, many Birth Centers offered classes on topics such as childbirth and breastfeeding free of charge to Medicaid patients. In addition, Strong Start Birth Centers employed peer counselors, who offered additional support and referrals prenatally and postpartum. Although the addition of peer counseling did not appear to impact outcomes, patients reported positive care experiences with the peer counselors, and many Birth Centers used their own funds to sustain them at the end of the Strong Start program.

The evaluation compared participants in Strong Start to other women enrolled in Medicaid, with similar demographic characteristics and medical risks (identified in birth certificates and Medicaid claims), and who lived in the same counties but received care in non-Strong Start practices. Regardless of where they gave birth (birth center or hospital) Birth Center participants had costs that were \$2,010 lower on average from birth through the first year for each mother-infant dyad. Birth Center participants had preterm birth rates that were 25% lower than those of comparators, along With better birth outcomes in other multiple areas, described in Table 1:

Table 1: Birth outcomes in Birth Center Participants and Comparison Group

Outcome	Birth Center Participants	Risk-matched Comparison Group	Statistically significant difference?
preterm birth rate	6.3%	8.5%	Yes (p < .01)
rate of low birth weight infants	5.9%	7.4%	Yes (p < .05)
average gestational age	39 weeks	38.6 weeks	Yes (p < .01)
average birth weight	3,342 grams	3,263 grams	Yes (p < .01)
Cesarean delivery rate	17.5%	29%	Yes (p < .01)
vaginal birth rate for women with a previous Cesarean	24.2%	12.5%	Yes (p < .01)
weekend delivery rate (indicates fewer scheduled inductions or Cesareans)	23.7%	19.8%	Yes (p < .01)
infant emergency department visits	0.86	0.99	Yes (p < .01)
post-birth hospitalizations among infants	0.07	0.08	Yes (p < .05)

All findings were robust to alternative specifications. Lower costs for Birth Center participants were likely driven by lower cesarean rates and shorter birth facility (birth center or hospital) stays, with added savings from reduced infant emergency department and hospital utilization in the year following birth.

A comparison of participants in the three models allowed controls for psychosocial risks (e.g. intimate partner violence, depression, food insecurity) in addition to medical risks and demographics. This comparison showed that relative to similar Maternity Care Home participants, Birth Center participants had lower rates of preterm birth, low birth weight infants, and cesarean sections. All findings were statistically significant at $p < .01$. Birth Centers also showed a higher VBAC rate ($p < .05$).

Interviews with Birth Center staff and providers and with Medicaid officials in 20 states indicated that, in many cases, Birth Centers face barriers to serving Medicaid beneficiaries. State Medicaid officials in many states reported paying lower rates to midwives than to physicians for the same services (reported rates ranged from 70-92%). Birth Center facility fees for uncomplicated vaginal birth were also reported to be less than those paid to hospitals in many

states, with reported rates from 15% to 70% lower. Many Birth Centers reported having difficulties in contracting with Managed Care Organizations (MCOs) providing Medicaid coverage because of inadequate reimbursement, state licensure requirements connected to inclusion in the contract, burdensome paperwork, or lack of interest on the part of the MCO.

Laws regulating the scope of practice for midwives and licensure of Birth Centers differ among states. Regulations, such as those requiring a hospital-affiliated physician to serve as a Birth Center's medical director or requiring that midwives practice under direct supervision of physicians, can make it difficult to establish and operate a Birth Center.

For states wishing to use these results to consider changes or enhancements to their prenatal care benefits and networks, a summary of federally mandated and optional coverage for midwifery and birth center care for Medicaid and CHIP programs is summarized below.

Medicaid and CHIP Coverage of Midwives

Nurse-midwife Services are a mandatory benefit described in regulations at 42 CFR 440.165. These are services furnished by a nurse midwife within the scope of practice authorized by state law or regulation and, in the case of inpatient or outpatient hospital services or clinic services, are furnished by or under the direction of a nurse-midwife to the extent permitted by the facility. These services are reimbursed without regard to whether the nurse-midwife is under the supervision of, or associated with, a physician or other healthcare provider, unless such supervision is required by state law or regulations. Furthermore, to the extent nurse-midwives are authorized to practice independently under state law or regulation, Federal regulations at 42 CFR 441.21 require that the plan must provide that the nurse-midwife may enter into an independent provider agreement, without regard to whether the nurse-midwife is under the supervision of, or associated with, a physician or other health care provider. In CHIP, nurse midwife services are an optional benefit that may be provided as child health assistance as a component of nursing care services as described in regulations at 42 CFR 457.402(o).

Licensed midwives are another type of practitioner that may be covered in the Medicaid program based upon regulations for Other Licensed Practitioner Services at 42 CFR 440.60. This optional benefit allows coverage of midwives who are not registered professional nurses, but are otherwise licensed by the state to furnish midwifery services. Additionally, there may be other Medicaid benefits a state may use to cover services should a practitioner possess other state established qualifications. There is also flexibility to provide coverage of licensed midwives in CHIP if they are recognized to practice under state law and meet the additional requirements at 42 CFR 457.402(x). Decisions regarding the inclusion of other licensed practitioners in the Medicaid benefit are left up to states, and CMS is not making any specific recommendations about the inclusion of a particular provider type in the State Plan.

Medicaid Coverage of Freestanding Birth Center Services

Section 2301 of the Affordable Care Act requires states that recognize freestanding birth centers in their state to provide coverage and separate payments under Medicaid for freestanding birth center facility services and services rendered by certain professionals providing services in a freestanding birth center, to the extent the state licenses or otherwise recognizes such providers under state law. This authority gives specific reference to birth attendant services, which is interpreted to mean any non-licensed practitioner (such as lactation consultants, doulas, etc.) recognized by the state to provide prenatal, labor, and delivery or postpartum care in a freestanding birth center. In general and specifically for freestanding birth centers, states have considerable discretion in setting provider payment rates that are reasonable, economic and efficient, and sufficient to encourage provider participation in the program. CMS issued a [State Health Official's letter \(SHO#16-006\)](#) on April 26, 2016 clarifying (in part) how freestanding birth centers are incorporated in managed care contracts. Unlike Medicaid, coverage of free standing birth centers under CHIP is not required, but states may provide coverage of services provided in these facilities to the extent the state licenses or otherwise recognizes such providers under state law.

Full results of the Strong Start evaluation, including a state-by-state assessment of outcomes, are available in the final evaluation report, which can be accessed at <https://innovation.cms.gov/initiatives/strong-start/>