

MIDWIFERY IN ALASKA

Home birth and birth center births are on the rise in the US, with an 80% increase since 2004. Alaska consistently has the highest proportion of community births in the US at 7.1% in 2017 compared to 1.6% in the US overall. CDMs attend the majority (60%) of community births in Alaska

INDEPENDANT PROVIDERS

Certified direct-entry midwives (CDM) are independent providers and have been licensed and regulated by the State of Alaska since 1992. CDMs manage low-risk pregnancies and attend births at home and in licensed birth centers.



MIDWIFERY CARE INCLUDES

- + Monitoring physical, psychological, and social well-being
- + Individualized education, in-depth counseling and prenatal screening, care during labor and delivery, and intensive postpartum and lactation support
- + Minimizing technological interventions
- + Identifying and referring clients who require obstetrical attention



In 2016 the United States spent a total of \$3.2 trillion on healthcare, with an estimated \$111 billion of that spent on pregnancy and newborn care.

Despite these high rates of spending, the United States continues to experience some of the worst maternal and infant outcomes compared to similar countries, with among the highest rates of maternal and infant mortality.



OUTCOMES

- People receiving care with a midwife have :
- + Decreased risk of c-section
 - + No increased risk of maternal or neonatal injury or death
 - + Decreased incidence of preterm birth or low birth weight infants



COST SAVINGS

21% reduction in expenditures from birth through the infant's first birthday. This is due to:

- Lower rate of c-section and other high cost interventions during birth
- Reduction in the number infant emergency department visits and hospitalizations
- Lower reimbursement rates for professional fees and deliveries



“Overall, our results suggest that receiving prenatal care [with a midwife] is an effective and high-quality option for low-risk pregnancies served by the Medicaid program.”



Department of Health and Social Services

Adam Crum, MSPH, Commissioner
Anne Zink, MD, Chief Medical Officer
3601 C Street, Suite 540
Anchorage, Alaska 99503

<http://dhss.alaska.gov/dph/Epi>

Division of Public Health

Heidi Hedberg, Director
Local (907) 269-8000
24 Hour Emergency (800) 478-0084

Editors:

Joe McLaughlin, MD, MPH
Louisa Castrodale, DVM, MPH

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Out-of-Hospital Births in Alaska, 2013–2018

Background

A recent study indicated that out-of-hospital (OOH) births have increased nationally from 0.9% in 2004 to 1.6% in 2017.¹ Women may choose OOH births for many reasons, including feelings of comfort, control, safety, trust, and a desire for fewer medical interventions.^{1,2} This *Bulletin* describes Alaska's intended OOH births during 2013–2018.

Methods

We analyzed vital records birth certificate data for in-state births among Alaska residents during 2013–2018. We examined birth attendant and payment source for OOH births that occurred either at home or in a birth center. OOH births were considered to be *intended* if 1) the birth occurred at a birth center, 2) the birth certificate indicated it was an intended home birth, or 3) the birth occurred at a hospital subsequent to the mother being transferred from a birth center or home. Intended OOH and hospital births were compared by maternal and newborn characteristics (but not by health outcomes).

Results

Of the 65,030 in-state births to Alaska residents during 2013–2018, 60,318 (92.8%) occurred in a hospital, 3,420 (5.3%) occurred in a birth center, and 942 (1.4%) occurred in a planned home setting. Births that occurred in clinics, doctors' offices, "other" facilities, and unplanned home births were excluded (n=350, 0.5%). The annual proportion of OOH births in Alaska ranged from a low of 6.3% in 2013 to a high of 7.1% in 2017. Most OOH births were attended by a Certified Direct-Entry Midwife (60.4%) or a Certified Nurse Midwife (31.7%). Common payment sources for OOH births were private insurance (44%), Medicaid (31%) and self-payment (23%).

Intended OOH births were most prevalent among white, college-educated, multiparous women with no previous cesarean birth, and residents of the Matanuska-Susitna region (Table). Compared to multiparous women without a history of cesarean, women giving birth to their first baby (nulliparous) were 4.8 times as likely to transfer to a hospital from an intended OOH birth (27.5% vs. 5.8%; p<0.01). The percentage of cesarean births among nulliparous women with term (≥37 weeks gestation), singleton, vertex fetuses was 9.6% for intended OOH births compared to 20.2% for hospital births (p<0.01). Breastfeeding initiation was higher among intended OOH births than hospital births (98.9% vs. 90.9%; p<0.01).

Discussion

In 2017, the proportion of births that occurred OOH was more than four times higher in Alaska compared to the United States (7.1% vs. 1.6%, respectively). Alaska is one of a small number of states where Medicaid is an accessible payment method for women choosing OOH maternity care, which may contribute to Alaska's high proportion of OOH births.¹ Based on the regional distribution patterns presented here, geographic isolation does not appear to be a driving factor for Alaska's high frequency of OOH births. Low OOH birth rates in the Northern and Southwest Regions may be due in part to limited access to OOH midwifery services and the Alaska system of regionalization, in which women in isolated communities give birth in regional hospitals or Anchorage when higher level care is needed. It is unclear why rates are highest among residents in the Matanuska-Susitna and Southeast regions.

The higher risk of intrapartum transfer among nulliparous women is consistent with national studies of OOH births, which find that the majority of these transfers are for non-emergent reasons and should be considered appropriate escalation of care, rather than an adverse outcome.^{3,4} Safer and better care is

delivered when OOH providers are integrated into the mainstream system; this may include establishing collaborative agreements with hospitals that empower them to provide timely and seamless transfer of care to the hospital.^{1,5-7}

Limitations: First, birth certificate data do not consistently identify intended OOH births, which likely resulted in some under-ascertainment. Second, birth certificates often lack detailed/reliable clinical information, so we did not compare maternal or infant health outcomes by intended place of birth.

Table. Intended Home and Birth Center Births, by Maternal Characteristics, Alaska 2013–2018

Characteristic	% Intended OOH Birth	Prevalence Ratio (95% CI)*
Maternal Race		
Alaska Native	0.7	ref
Asian/Pacific Islander	1.8	2.6 (2.0, 3.5)
Black	3.3	4.8 (3.6, 6.6)
White	10.9	16.2 (13.2, 20.3)
Maternal Education		
< Bachelor's Degree	6.5	ref
≥ Bachelor's Degree	11.4	1.7 (1.6, 1.8)
Pregnancy History		
Multiparous, no history of cesarean	9.1	ref
Nulliparous	7.1	0.8 (0.7, 0.8)
Multiparous, with history of cesarean	1.0	0.1 (0.1, 0.1)
Region of Residence		
Anchorage	6.5	ref
Gulf Coast	6.5	1.0 (0.9, 1.1)
Interior	6.8	1.1 (1.0, 1.1)
Mat-Su	19.4	3.0 (2.8, 3.2)
Northern	0.8	0.1 (0.1, 0.2)
Southeast	9.9	1.5 (1.4, 1.7)
Southwest	0.9	0.1 (0.1, 0.2)

*CI = Confidence Interval

Recommendations

1. Providers should follow national guidelines for improving OOH birth outcomes, including appropriate low-risk patient selection, access to timely transport to hospitals, and staff training in neonatal resuscitation.^{6,7}
2. Providers in all settings should seek opportunities to strengthen communication and systems for transfer of care to improve outcomes for women choosing an OOH birth.
3. Hospitals should consider implementation of standardized transfer protocols and protected case reviews with the transferring provider for process improvement.

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Findings at a Glance

MODEL OVERVIEW

Strong Start funded 27 awardees from 2013 to 2017 to provide enhanced prenatal care to Medicaid and CHIP beneficiaries.

- Goal 1: Improve quality of care and reduce rates of preterm birth and low birthweight infants
- Goal 2: Reduce costs to Medicaid during pregnancy, birth, and the infant’s first year

PARTICIPATION

There were three models of care distributed across the nation.

ENROLLEE CHARACTERISTICS

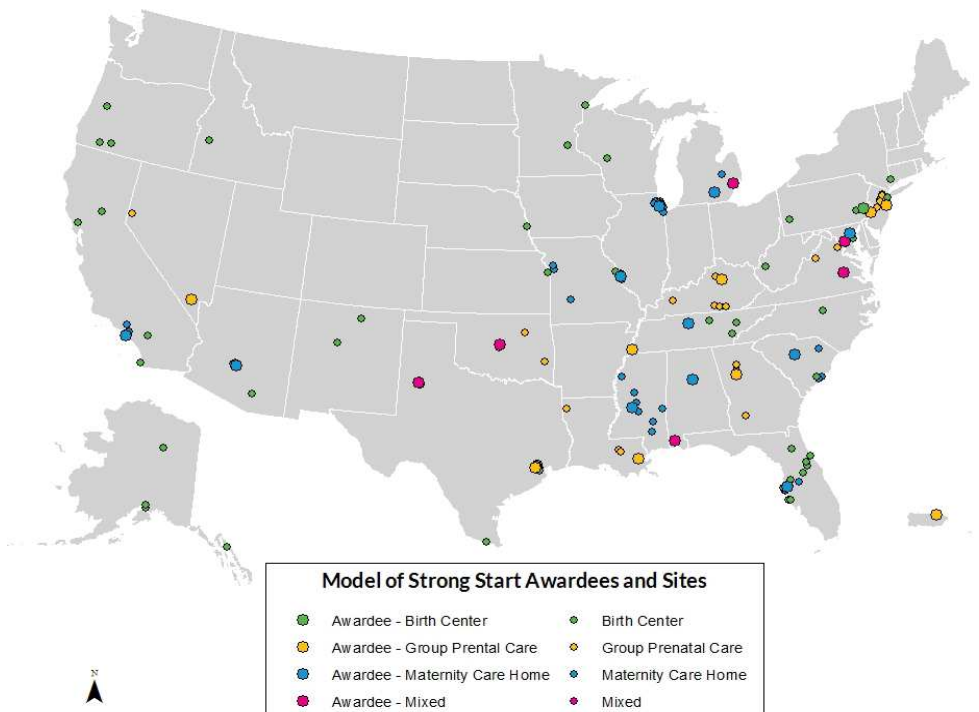
(varied by model and awardee)

42.1% of women exhibited symptoms of depression, anxiety, or both.

21.1% of women with a prior birth had a prior preterm birth.

A wide range of demographic groups were represented.

- 39.8% of women were black; 29.7% were Hispanic; 25.6% were white.
- 15.2% of women were teens (under age 20); 9.0% were 35 years or older.



Maternity Care Homes

Care coordination, sometimes with other enhanced services, in addition to clinical prenatal care

26,007 enrollees

112 sites

Group Prenatal Care

Prenatal care provided in a group, enhanced with health education and facilitated discussion

10,508 enrollees

60 sites

Birth Centers

Midwives’ model of care enhanced with peer counseling for additional support and referrals

8,806 enrollees




47 sites

This document summarizes the evaluation report prepared by an independent contractor. To learn more about the Strong Start Model and to download the full evaluation report, visit: <https://innovation.cms.gov/initiatives/strong-start/>

Findings at a Glance

FINDINGS RELATIVE TO SIMILAR MEDICAID BENEFICIARIES




Strong Start participants in Birth Centers and Group Prenatal Care had better outcomes at lower cost relative to other Medicaid participants with similar characteristics.

	Maternity Care Homes 	Group Prenatal Care 	Birth Centers 
Costs	<ul style="list-style-type: none"> Higher costs through delivery period and following year. 	<ul style="list-style-type: none"> Costs \$427 lower per woman during 8 months before birth. 	<ul style="list-style-type: none"> Costs \$2,010 lower through birth and year following for each mother-infant pair.
Utilization	<ul style="list-style-type: none"> Fewer prenatal hospitalizations More infant emergency department visits and hospitalizations 	<ul style="list-style-type: none"> Fewer emergency department visits and hospitalizations for women and infants 	<ul style="list-style-type: none"> Fewer infant emergency department visits and hospitalizations
Quality	<ul style="list-style-type: none"> Higher rate of low birthweight More weekend deliveries[^] 	<ul style="list-style-type: none"> Lower very low birthweight rate More weekend deliveries[^] More VBACs⁺ 	<ul style="list-style-type: none"> Lower low birthweight rate Lower preterm birth rate More weekend deliveries[^] More VBACs⁺ Fewer C-sections

[^]weekend deliveries indicate fewer scheduled inductions and scheduled C-sections
⁺VBAC=vaginal birth after cesarean

FINDINGS AMONG CARE MODELS (Relative to Maternity Care Homes)

Birth Center participants have better outcomes relative to Maternity Care Home participants after controlling for demographic, medical, and social risks.

	Maternity Care Homes 	Group Prenatal Care 	Birth Centers 
Quality	This mode experienced: Preterm birth: 13% Low birthweight: 11% C-section: 31%	After controlling for risks, no significant differences in outcomes between Group Prenatal Care and Maternity Care Homes.	After controlling for risks, <ul style="list-style-type: none"> Lower rates of preterm birth Lower rates of low birthweight Lower rates of C-section Higher rates of VBAC

KEY TAKEAWAYS

Women who received prenatal care in Strong Start Birth Centers had better birth outcomes and lower costs relative to similar Medicaid beneficiaries not enrolled in Strong Start. In particular, rates of preterm birth, low birthweight, and cesarean section were lower among Birth Center participants, and costs were more than \$2,000 lower per mother-infant pair during birth and the following year.

These promising Birth Center results may be useful to state Medicaid programs seeking to improve the health outcomes of their covered populations.

The National Birth Center Study II

“Outcomes of Care in Birth Centers: Demonstration of a Durable Model”

Susan R Stapleton, CNM, DNP, Cara Osborne, SD, CNM, Jessica Illuzzi, MD, MS

published in the *Journal of Midwifery & Women's Health* (Volume 58, No. 1, January/February 2013)

About the Study

- The birth center study included 15,574 women who received care in 79 midwife-led birth centers in 33 U.S. states from 2007 through 2010.
- 13,030 (84%) of the women planning a birth center birth at the onset of labor gave birth at birth centers. 2,544 (16%) women gave birth at a hospital.
- Results were collected using the American Association of Birth Centers (AABC) Uniform Data Set, an online data registry developed by AABC with a task force of maternity care and research experts.
- Federal or state government programs (Medicaid, Medicare, Children's Health Insurance Program, or TRICARE) were the primary payers for nearly a third of births recorded in the study.

Key Findings

Midwife-led birth centers are a strong model for decreasing the high rate of cesarean birth in the U. S., while maintaining the highest safety standards.

- Fewer than 1 in 16 (6%) of the study participants had a cesarean birth, while the U.S. cesarean rate reached 32.8% in 2010. For similar low-risk women receiving care in the hospital setting, the current rate is estimated to be almost 1 in 4 (24%).¹
- The state of U.S. maternity care is of concern to care providers across specialties. Professional associations of midwives, nurses, and physicians have prioritized efforts to decrease the cesarean rate.^{2,3,4,5,6,7}
- While cesarean birth is sometimes necessary due to the condition of the mother or baby, the procedure has many short- and long-term implications for women, their newborns, and future pregnancies.^{8,9,10,11,12,13,14,15}
- Fetal and newborn mortality rates in the study were low (0.47/1000 births and 0.40/1000 births, respectively) and were comparable to those in low-risk births in hospital settings. There were no maternal deaths.
- Most transfers from birth center to hospital were not emergencies, with only 1.9% of women or their newborns experiencing a complication during labor or after birth that required urgent transfer to a hospital.

Increased use of birth centers would lower direct and indirect costs to the American health care system.

- Payments for care are approximately 50% more for cesarean birth than for vaginal birth and, for both mother and newborn, are concentrated (76-80% of all payments)

in the intrapartum and early postpartum and neonatal phase of care.¹⁶

- Given lower costs in the birth center setting as well as low rates of cesarean birth, the 15,574 births in this study may have saved more than \$30 million in facility costs alone based on Medicare/Medicaid rates, not including additional savings in costs of other providers, anesthesia, and newborn care in hospital settings.
- If even 10% of the approximately 4 million U.S. births each year occurred in birth centers, the potential savings in facility service fees alone could reach \$1 billion per year. In addition, U.S. spending on maternity care could decline by more than \$5 billion if only 15% of pregnant women gave birth via cesarean.^{17,18}
- Midwife-led birth centers deliver high-quality, patient-centered care with improved outcomes at lower cost. The birth center model should receive timely and fair reimbursement from private and public payers in order to ensure its sustainability. The net result will be healthier moms and babies and fewer dollars spent.

Background

Childbirth Information

- Childbirth is a normal, physiologic process for the majority of healthy, pregnant women and their babies. Approximately 85% of pregnancies are generally considered at low risk for complications¹⁹, yet routine maternity care in the U.S. is technology-intensive and expensive.^{20,21}
- In 2008, care of childbearing women and their newborns was the most common reason for hospitalization in the U.S. resulting in total hospital charges of \$97.4 billion, making it the single-largest contributor as a health condition to the national hospital bill.²²
- Nearly half of all births in the U.S. are funded by federal and state government programs.²³
- The cesarean birth rate has steadily increased since 1996 when the rate was 21%.^{24,25} With more than 4 million births per year and a current cesarean rate of 1 in 3 women (33%)²⁶, cesarean birth is the most common inpatient surgical procedure performed in the U.S. today.²⁷

Birth Centers and Midwives

- A birth center is "a homelike facility existing within the health care system with a program of care designed in the wellness model of pregnancy and birth. Birth centers provide family centered care for healthy women before, during, and after normal pregnancy, labor, and birth."²⁸

- An infrastructure of Standards for Birth Centers from the AABC, an accreditation mechanism by the CABC, and licensure in 41 states provides the foundation for U.S. birth centers.²⁹
- Most birth centers have midwives as the primary care providers, working collaboratively with physicians, hospitals, and other maternity care professionals in a team approach to maternity care.
- Midwives are health care professionals responsible for the pregnancy, labor, and childbirth care of the women they serve.
- Women who have no serious health issues, want to be actively involved in their pregnancy care, and are anticipating an uncomplicated labor and birth are ideal candidates for birth center care.³⁰
- Birth center care begins with the first prenatal visit, and includes education for pregnancy, nutrition, labor and birth, breastfeeding, parenting, and general women's health.³¹
- Although most women planning a birth center birth successfully give birth at their chosen birth center, all birth centers have a system for providing access to hospital care should a complication arise and transfer become necessary.³²

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