The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

COMMITTEE OPINION

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Committee on Obstetric Practice

This Committee Opinion was developed by the American College of Obstetricians and Gynecologists' Committee on Obstetric Practice in collaboration with committee members Joseph R. Wax, MD, and William H. Barth Jr, MD.

This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

INTERIM UPDATE: This Committee Opinion is updated as highlighted to reflect a limited, focused change in the presentation of data regarding perinatal mortality in planned home births.

Planned Home Birth

ABSTRACT: In the United States, approximately 35,000 births (0.9%) per year occur in the home. Approximately one fourth of these births are unplanned or unattended. Although the American College of Obstetricians and Gynecologists believes that hospitals and accredited birth centers are the safest settings for birth, each woman has the right to make a medically informed decision about delivery. Importantly, women should be informed that several factors are critical to reducing perinatal mortality rates and achieving favorable home birth outcomes. These factors include the appropriate selection of candidates for home birth; the availability of a certified nurse–midwife, certified midwife or midwife whose education and licensure meet International Confederation of Midwives' Global Standards for Midwifery Education, or physician practicing obstetrics within an integrated and regulated health system; ready access to consultation; and access to safe and timely transport to nearby hospitals. The Committee on Obstetric Practice considers fetal malpresentation, multiple gestation, or prior cesarean delivery to be an absolute contraindication to planned home birth.

Recommendations

- Women inquiring about planned home birth should be informed of its risks and benefits based on recent evidence. Specifically, they should be informed that although planned home birth is associated with fewer maternal interventions than planned hospital birth, it also is associated with a more than twofold increased risk of perinatal death (1–2 in 1,000) and a threefold increased risk of neonatal seizures or serious neurologic dysfunction (0.4–0.6 in 1,000). These observations may reflect fewer obstetric risk factors among women planning home birth compared with those planning hospital birth. Although the American College of Obstetricians and Gynecologists (the College) believes that hospitals and accredited birth centers are the safest settings for birth, each woman has the right to make a medically informed decision about delivery.
- Women should be informed that several factors are critical to reducing perinatal mortality rates and achieving favorable home birth outcomes. These factors include the appropriate selection of candidates for home birth; the availability of a certified nurse–midwife, certified midwife or midwife whose education and licensure meet International Confederation of Midwives' Global Standards for Midwifery Education, or physician practicing obstetrics within an integrated and regulated health system; ready access to consultation; and access to safe and timely transport to nearby hospitals.
- The Committee on Obstetric Practice considers fetal malpresentation, multiple gestation, or prior cesarean delivery to be an absolute contraindication to planned home birth.

In the United States, approximately 35,000 births (0.9%) per year occur in the home (1). Approximately one fourth of these births are unplanned or unattended (2). Among women who originally intend to give birth in a hospital or those who make no provisions for professional care during childbirth, home births are associated with high rates of perinatal and neonatal mortality (3). The relative risk versus benefit of a planned home birth, however, remains the subject of debate.

High-quality evidence that can inform this debate is limited. To date, there have been no adequate randomized clinical trials of planned home birth (4). In developed

countries where home birth is more common than in the United States, attempts to conduct such studies have been unsuccessful, largely because pregnant women have been reluctant to participate in clinical trials that involve randomization to home or hospital birth (5, 6). Consequently, most information on planned home births comes from observational studies. Observational studies of planned home birth often are limited by methodological problems, including small sample sizes (7–10); lack of an appropriate control group (11–15); reliance on birth certificate data with inherent ascertainment problems (2, 16–18); reliance on voluntary submission of data or self-reporting (7, 12, 14, 15, 19); limited ability to distinguish accurately between planned and unplanned home births (16, 20); variation in the skill, training, and certification of the birth attendant (14–16, 21); and an inability to account for and accurately attribute adverse outcomes associated with antepartum or intrapartum transfers (8, 16, 22). Some recent observational studies overcome many of these limitations, describing planned home births within tightly regulated and integrated health care systems, attended by highly trained licensed midwives with ready access to consultation and safe, timely transport to nearby hospitals (7, 8, 10, 11, 16, 19, 23–28). However, these data may not be generalizable to many birth settings in the United States where such integrated services are lacking. For the same reasons, clinical guidelines for the intrapartum care of women in the United States that are based on these results and are supportive of planned home birth for low-risk term pregnancies also may not currently be generalizable (29). Furthermore, no studies are of sufficient size to compare maternal mortality between planned home and hospital birth and few, when considered alone, are large enough to compare perinatal and neonatal mortality rates. Despite these limitations, when viewed collectively, recent reports clarify a number of important issues regarding the maternal and newborn outcomes of planned home birth when compared with planned hospital births.

Women planning a home birth may do so for a number of reasons, often out of a desire to avoid medical interventions and the hospital atmosphere (30). Recent studies have found that when compared with planned hospital births, planned home births are associated with fewer maternal interventions, including labor induction or augmentation, regional analgesia, electronic fetal heart rate monitoring, episiotomy, operative vaginal delivery, and cesarean delivery (Table 1). Planned home births also are associated with fewer vaginal, perineal, and third-degree or fourth-degree lacerations and less maternal infectious morbidity (18, 27, 31, 32). These observations may reflect fewer obstetric risk factors among women planning home births compared with those planning hospital births. Parous women comprise a larger proportion of those planning out-of-hospital births (27, 32). Compared with nulliparous women, parous women collectively experience significantly lower rates of obstetric intervention, maternal morbidity, and neonatal morbidity and mortality, regardless of birth location. Those planning home births also are more likely to deliver in that setting than nulliparous women (15, 27, 33). For these reasons, recommendations regarding the intrapartum care of healthy nulliparous and parous women may differ outside of the United States (29). Also, proportionately more home births are attended by midwives than planned hospital births, and randomized trials show that midwife-led care is associated with fewer intrapartum interventions (34).

Strict criteria are necessary to guide selection of appropriate candidates for planned home birth. In the United States, for example, where selection criteria may not be applied broadly, intrapartum (1.3 in 1,000) and neonatal (0.76 in 1,000) deaths among low-risk women planning home birth are more common than expected when compared with rates for low-risk women planning hospital delivery (0.4 in 1,000 and 0.17 in 1,000, respectively), consistent with the findings of an earlier meta-analysis (15, 31, 33). Additional evidence from the United States shows that planned home birth of a breech-presenting fetus is associated with an intrapartum mortality rate of 13.5 in 1,000 and neonatal mortality rate of 9.2 in 1,000 (15). United States data limited to

Table 1. Maternal Events Associated With U.S. Planned Out-of-Hospital Births Versus Hospital Births ⇦

Event	Planned Out-of-Hospital Birth (Events per 1,000 births)	Planned Hospital Birth (Events per 1,000 births)	Adjusted Odds Ratio	95% CI
Labor induction	48	304	0.11	0.09–0.12
Labor augmentation	75	263	0.21	0.19–0.24
Operative vaginal delivery	10	35	0.24	0.17–0.34
Cesarean delivery	53	247	0.18	0.16–0.22
Blood transfusion/hemorrhage	6	4	1.91	1.25–2.93
Severe perineal lacerations	9	13	0.69	0.49–0.98

Abbreviation: CI, confidence interval.

Data from Snowden JM, Tilden EL, Snyder J, Quigley B, Caughey AB, Cheng YW. Planned out-of-hospital birth and birth outcomes. N Engl J Med 2015;373:2642–53.

singleton-term pregnancies demonstrate a higher risk of 5-minute Apgar scores less than 7, less than 4, and 0; perinatal death; and neonatal seizures with planned home birth, although the absolute risks remain low (Table 2) (17, 18, 32).

Although patients with one prior cesarean delivery were considered candidates for home birth in two Canadian studies, details of the outcomes specific to patients attempting home vaginal birth after cesarean delivery were not provided (24, 25). In England, women planning a home trial of labor after cesarean delivery (TOLAC) exhibited fewer obstetric risk factors, were more likely to deliver vaginally, and experienced similar maternal and perinatal outcomes compared with those planning an in-hospital TOLAC (35). In contrast, a recent U.S. study showed that planned home TOLAC was associated with an intrapartum fetal death rate of 2.9 in 1,000, which is higher than the reported rate of 0.13 in 1,000 for planned hospital TOLAC (36, 37). This observation is of particular concern in light of the increasing number of home vaginal births after cesarean delivery (38). Because of the risks associated with TOLAC, and specifically considering that uterine rupture and other complications may be unpredictable, the College recommends that TOLAC be undertaken in facilities with trained staff and the ability to begin an emergency cesarean delivery within a time interval that best incorporates maternal and fetal risks and benefits with the provision of emergency care.

The decision to offer and pursue TOLAC in a setting in which the option of immediate cesarean delivery is more limited should be considered carefully by patients and their health care providers. In such situations, the best alternative may be to refer patients to facilities with available resources. Health care providers and insurers should do all they can to facilitate transfer of care or comanagement in support of a desired TOLAC, and such plans should be initiated early in the course of antenatal care (39).

Recent cohort studies reporting comparable perinatal mortality rates among planned home and hospital births describe the use of strict selection criteria for appropriate candidates (23–25). These criteria include the absence of any preexisting maternal disease, the absence of significant disease arising during the pregnancy, a singleton fetus, a cephalic presentation, gestational age greater than 36–37 completed weeks and less than 41–42 completed weeks of pregnancy, labor that is spontaneous or induced as an outpatient, and that the patient has not been transferred from another referring hospital. In the absence of such criteria, planned home birth is clearly associated with a higher risk of perinatal death (15, 26, 40). The Committee on Obstetric Practice considers fetal malpresentation, multiple gestation, or prior cesarean delivery to be an absolute contraindication to planned home birth.

Another factor influencing the safety of planned home birth is the availability of safe and timely intrapartum transfer of the laboring patient. The reported risk of needing an intrapartum transport to a hospital is 23–37% for nulliparous women and 4–9% for multiparous women. Most of these intrapartum transports are

Table 2. Adverse Perinatal Events Associated With U.S. Planned Home Births Versus Hospital Births ⇦

Event	Planned Home Birth (Events per 1,000 Births)	Hospital Birth (Events per 1,000 Births)	Odds Ratio	95% CI
5-minute Apgar score				
<7	24.2*	11.7*	2.42*	2.13–2.74*
	23†§	18†	1.31†	1.04–1.66†
<4	3.7*	2.43*	1.87*	1.36–2.58*
	6†§	4†	1.56†	0.98–2.47*
0	1.63‡	0.16‡	10.55‡	8.62–12.93‡
Neonatal seizures (or serious neurologic dysfunction‡)	0.58*	0.22*	3.08*	1.44–6.58*
	0.86‡	0.22‡	3.80‡	2.80–5.16‡
	1.3†§	0.4†	3.60†	1.36–9.50†
Perinatal mortality (fetal death and neonatal mortality)	3.9†§	1.8†	2.43†	1.37–4.30†

Abbreviation: CI, confidence interval.

*Cheng YW, Snowden JM, King TL, Caughey AB. Selected perinatal outcomes associated with planned home births in the United States. Am J Obstet Gynecol 2013;209:325.e1–8.

†Snowden JM, Tilden EL, Snyder J, Quigley B, Caughey AB, Cheng YW. Planned out-of-hospital birth and birth outcomes. N Engl J Med 2015;373:2642–53.

‡Grunebaum A, McCullough LB, Sapra KJ, Brent RL, Levene MI, Arabin B, et al. Apgar score of 0 at 5 minutes and neonatal seizures or serious neurologic dysfunction in relation to birth setting. Am J Obstet Gynecol 2013;209:323.e1–6.

§Includes planned birth center and home births.

for lack of progress in labor, nonreassuring fetal status, need for pain relief, hypertension, bleeding, and fetal malposition (27, 41, 42). The relatively low perinatal and newborn mortality rates reported for planned home births from Ontario, British Columbia, and the Netherlands were from highly integrated health care systems with established criteria and provisions for emergency intrapartum transport (23–25). Cohort studies conducted in areas without such integrated systems and those where the receiving hospital may be remote, with the potential for delayed or prolonged intrapartum transport, generally report higher rates of intrapartum and neonatal death (6, 9, 11, 15, 22). Even in regions with integrated care systems, increasing distance from the hospital is associated with longer transfer times and the potential for increased adverse outcomes. However, no specific thresholds for time or distance have been identified (43, 44). The College believes that the availability of timely transfer and an existing arrangement with a hospital for such transfers is a requirement for consideration of a home birth. When antepartum, intrapartum, or postpartum transfer of a woman from home to a hospital occurs, the receiving health care provider should maintain a nonjudgmental demeanor with regard to the woman and those individuals accompanying her to the hospital.

A characteristic common to those cohort studies reporting comparable rates of perinatal mortality is the provision of care by uniformly highly educated and trained certified midwives who are well integrated into the health care system (23–25, 27). In the United States, certified nurse–midwives and certified midwives are certified by the American Midwifery Certification Board. This certification depends on the completion of an accredited educational program and meeting standards set by the American Midwifery Certification Board. In comparison with planned out-of-hospital births attended by American Midwifery Certification Board-certified midwives, planned out-of-hospital births by midwives who do not hold this certification have higher perinatal morbidity and mortality rates (18). At this time, for quality and safety reasons, the College specifically supports the provision of care by midwives who are certified by the American Midwifery Certification Board (or its predecessor organizations) or whose education and licensure meet the International Confederation of Midwives Global Standards for Midwifery Education. The College does not support provision of care by midwives who do not meet these standards.

Although the College believes that hospitals and accredited birth centers are the safest settings for birth, each woman has the right to make a medically informed decision about delivery (45). Importantly, women should be informed that several factors are critical to reducing perinatal mortality rates and achieving favorable home birth outcomes. These factors include the appropriate selection of candidates for home birth; the availability of a certified nurse–midwife, certified midwife or midwife whose education and licensure meet International Confederation of Midwives' Global Standards for Midwifery Education, or physician practicing obstetrics within an integrated and regulated health system; ready access to consultation; and access to safe and timely transport to nearby hospitals.

For More Information

The American College of Obstetricians and Gynecologists has identified additional resources on topics related to this document that may be helpful for ob-gyns, other health care providers, and patients. You may view these resources at www.acog.org/More-Info/PlannedHomeBirth.

These resources are for information only and are not meant to be comprehensive. Referral to these resources does not imply the American College of Obstetricians and Gynecologists' endorsement of the organization, the organization's website, or the content of the resource. The resources may change without notice.

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The American College of Obstetricians and Gynecologists
409 12th Street, SW, PO Box 96920, Washington, DC 20090-6920

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