



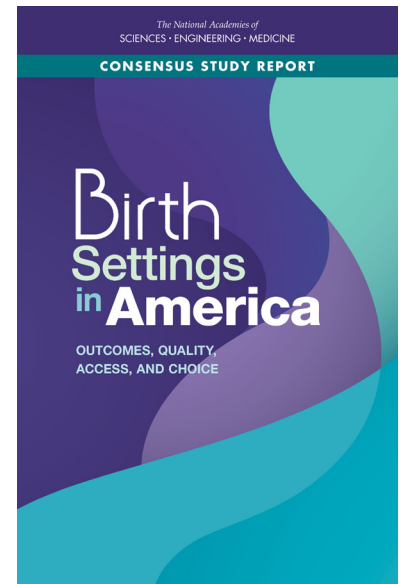
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## Birth Settings in America: Outcomes, Quality, Access, and Choice

Childbirth services play a critical role in the provision of American health care. Childbirth is the most common reason individuals in the U.S. are hospitalized. One of every four persons discharged from U.S. hospitals is either a childbearing person<sup>1</sup> or a newborn.

While the U.S. spends more on childbirth than any other country in the world, it has worse outcomes than other high-resource nations, in terms of maternal and infant deaths, illness, and injury. These negative outcomes are more frequent for Black and Native American individuals and their newborns.

*Birth Settings in America: Outcomes, Quality, Access, and Choice* (2020), a report from the National Academies of Sciences, Engineering, and Medicine, examines one crucial component of U.S. maternity care: the settings in which childbirth occurs. The report identifies ways to improve childbirth services in hospital settings—where the vast majority of pregnant people in the U.S. experience childbirth—and in birthing centers and for home births. Improving integration across birth settings and investing in the maternity care workforce can also make giving birth safer than it is today.



### INFORMED CHOICE AND BARRIERS TO ACCESS

There is a broad consensus that pregnant individuals have the right to informed choice of setting in which they give birth. To exercise that choice, they must have access to options and to clear, accurate information about the risks and benefits of those options; ongoing risk assessment; and recognition that those choices may change over the course of care.

Choices are often constrained by systemic factors that limit access. Economic barriers include lack of health insurance or delayed prenatal care while qualifying for insurance such as Medicaid and lack of funding for transportation, child care, medications, healthy food and sometimes even housing. Concerns about racism and other forms of disrespectful treatment from health care workers are also barriers, as is distrust of the health care

<sup>1</sup>Intersex people and people of various gender identities, including transgender, non-binary, and cisgender individuals, give birth and receive maternity care. Thus, we use the terms “pregnant people” or “pregnant individuals” in place of “pregnant women.”

system. These factors can influence the health outcomes of pregnant people and their infants, causing considerable racial and ethnic disparities in pregnancy-related outcomes.

In 2016, more than 5 million pregnant people lived in counties (rural or urban) with neither an obstetrician-gynecologist nor a nurse midwife, nor a hospital with a maternity unit. Pregnant people living in rural communities and underserved urban areas also have higher risks of poor outcomes such as preterm birth and maternal and infant mortality, in part because of lack of access to maternity and prenatal care in their local areas.

## MATERNAL AND NEWBORN OUTCOMES BY BIRTH SETTINGS

Regarding maternal and newborn outcomes by birth settings, the report found:

- Home and birth center births have lower rates of interventions than hospital births—such as cesarean birth or induction of labor—which means pregnant people giving birth at home or in birth centers have lower rates of intervention-related injuries and complications.
- Most U.S. studies show an increased risk of newborns dying in home births compared with births in a hospital setting. However, the precise magnitude of the difference is difficult to assess given flaws in the underlying data. For serious newborn injury, studies report a wide range of risk for low-risk home versus hospital birth and by provider type. Given the importance of understanding these outcomes, the differing results among studies are of concern and require further study.
- Most U.S. studies of low-risk births that occur in freestanding birth centers have an increased risk of poor outcomes for newborns, and similar-to-slightly-elevated rates of infant deaths, when compared to hospital births.
- International studies suggest that home and birth center births may be as safe as hospital births for low-risk pregnant individuals and infants when they are part of an integrated and regulated system; multiple provider options are covered by insurance; providers are well qualified and have the knowledge and training to manage complications; transfer to a different birth setting is seamless; and risk assessment occurs throughout pregnancy.
- Not enough data was available for the committee that wrote the report to evaluate how birth setting impacts maternal mortality and severe maternal morbidity.

## IMPROVING CARE ACROSS BIRTH SETTINGS

Home, birth center, and hospital birth settings each offer risks and benefits to pregnant people and newborns. While no setting is risk free, these risks may be modifiable within each setting and across settings.

**Improving hospital settings.** There are promising strategies for lowering rates of non-medically indicated interventions, such as the primary cesarean rate. Hospital participation in quality improvement initiatives, such as the Alliance on Innovation in Maternal Health or the National Network of Perinatal Quality Collaboratives, and adoption of national standards and guidelines have been shown to improve outcomes for pregnant individuals and newborns in hospital settings.

Hospitals can ensure that pregnant people receive respectful, appropriate, timely, and responsive care by providing nonsurgical maternity care services if requested, such as vaginal birth after a prior cesarean birth. Hospitals can also consider developing midwifery-led units for low-risk births and enabling greater collaboration between midwives, doctors, and nurses.

**Improving home and birth center settings.** Integrating home and birth center settings into a regulated maternity and newborn care system—providing shared care, continuous risk assessment, access to consultation, seamless transfer between birth settings, written birth plans, and well-qualified and trained maternity care providers—can improve maternal and infant outcomes.

Key to this integration is the appropriate education and training of all maternal and newborn care providers, reflecting the setting and the risk level of those they serve. Appropriate education, training, and certification coupled with licensing statutes can ensure that planned home and birth center births are

limited, to the extent feasible, to healthy, low-risk pregnant individuals, and that midwives and other providers working in those settings continually assess and monitor risks and complications so they can be properly and promptly addressed. Such risk assessment would need to consider not only medical and obstetric risk, but also the social circumstances and influences on the lives of pregnant people.

**Supporting risk assessment and informed choices.** Ongoing risk assessment to ensure that a pregnant person is an appropriate candidate for home or birth center birth is integral to safety and optimal outcomes. Mechanisms for monitoring adherence to best practice guidelines for risk assessment, as well as associated birth outcomes by provider type and setting, are needed. In addition, to inform pregnant people’s decision-making about birth setting, high-quality, evidence-based online decision aids are needed.

**Improving access to care and birth settings.** Models for increasing access to birth settings have been implemented at the state level include expanding Medicare, Medicaid, and commercial payer coverage to cover care that is:

- provided at home and birth centers within their accreditation and licensure guidelines;
- provided by certified nurse midwives, certified midwives, and certified professional midwives whose education meets ICM Global Standards, who have completed an accredited midwifery education program, and who are nationally certified; and
- provided by community-based doulas.

Additional research and evaluation to determine the potential impact of these state-level models is needed to inform consideration of nationwide expansion, particularly with regard to effects on reduction of racial and ethnic disparities in access, quality, and outcomes of care. Research is also needed to study and develop models for safe, effective, and adequately resourced maternal care in underserved rural and urban areas.

**Strengthening the maternity care workforce.** Currently there is a mismatch between the care needs of the population and the proportion of providers best equipped to meet those needs. While the system at present relies primarily on a surgical specialty to provide front-line care, most childbearing people are largely healthy and do not need that type of care in first-line providers. To improve access and reduce racial and ethnic disparities in the quality of care, investments are needed to expand the pipeline for the maternity and newborn care workforce—including community health workers, doulas, maternity nurses, nurse practitioners and physicians’ assistants, midwives, obstetricians, and others. Greater opportunities for interprofessional education, collaboration, and research across all birth settings are also critical to improving quality of care.

## THE NEED FOR GREATER INTEGRATION

Evidence shows that a lack of integration and coordination and unreliable collaboration across birth settings and maternity care providers is associated with poor birth outcomes for pregnant people and infants in the U.S.

A highly integrated maternity and newborn care system requires the existence of respectful, collaborative relationships across settings and types of providers. However, in the current fragmented system, collaboration is often hampered by systems or policies, such as legal liability coverage that does not permit collaboration with other providers such as midwives.

An integrated system offers pregnant people who are planning home and birth center births the safety of ready access to safe and timely consultation, shared care, and transfer of care and seamless transport when additional risk-appropriate care is needed. Such a system recognizes that all maternity care providers need places to turn when circumstances exceed their scope of practice and areas of competence.

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**For More Information . . .** This Consensus Study Report Highlights was prepared by the Board on Children, Youth, and Families based on the Consensus Study Report, *Birth Settings in America: Outcomes, Quality, Access, and Choice* (2020). The study was sponsored by the National Institutes of Health. Any opinions, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect the views of any organization or agency that provided support for the project. Copies of the Consensus Study Report are available from the National Academies Press, (800) 624-6242; <http://www.nationalacademies.org/birthsettings>.

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