Homebirth Safety Briefing, compiled for the GORRC by Certified Professional Midwives of Georgia, 2019

"The methodological challenges of attempting to compare the safety of home and hospital birth in terms of the risk of perinatal death"

Multiple methodological challenges exist when attempting to compare safety between home and hospital birth.

- The most glaring is that Randomized Controlled Trials are impossible because women are unwilling to be randomly assigned a place of birth.
- Many variables confound results and even create additional variables. Choices become outcomes, such as place of birth, whether to receive anesthesia, elective induction, scheduled cesareans. One cannot overlook that patient autonomy plays a part regardless of location of birth.
- No single study justly compares safety
    - No uniform definition of "low risk"
    - No uniform definition of perinatal death or neonatal death
    - No uniform integration of midwives as part of the health care system
    - No large enough sample size to include only one demographic/country

It may be completely inappropriate to attempt to compare hospital and home birth due to too many variables:

- Care provider differences among place of birth (for example: nurse midwife and OB in hospital, midwife, nurse midwife, traditional provider or OB in home)
- We can assess the overall safety of planned homebirth and the overall safety of planned hospital birth without comparing the two.

Nonetheless, some subset of women will always choose out of hospital deliveries and there exists a care provider adequately trained in both skill and knowledge to assist them.

American College of Obstetrics and Gynecology Committee Opinion Number 697 (2017)

Because of this, the American College of Obstetrics and Gynecology (ACOG), recognized as the authority for women's health care providers in the United States, supports the woman's right to select her place of birth. Further, they state that women have the right to make a medically informed decision about delivery. The women of Georgia, specifically, should have the right to make a medically informed decision about delivery.

The terms that ACOG has deemed appropriate for home delivery are:

- Women should be informed of the risks and benefits based on recent evidence. Currently CPMs are required to disclose statistics related to the safety of homebirth and emergency situations that are rare but do have better outcomes if they occur in the hospital.
- Appropriate selection of homebirth candidates
- Appropriately trained providers, including midwives whose education and licensure meet the International Confederation of Midwives' Global Standards for Midwifery

Education (our bill contains this specific requirement- meaning achieving graduation from a MEAC-accredited midwifery school or obtaining the MEAC Bridge Certificate available to practicing CPMs who did not previously receive MEAC accredited education.)

The ACOG Committee Opinion reports a three-fold perinatal mortality rate for out of hospital delivery. However, the study used to ascertain these numbers experience many of the limitations listed above.
The primary problematic study used in this commonly quoted number is the Wax et al study, "Maternal and newborn outcomes in planned home birth vs planned hospital births: a meta-analysis" from 2010. There were mathematical errors as well as a glaring problems with the definition of perinatal death. The authors included a stillborn infant of at least 20 weeks or liveborn infant within 28 days of birth as a *perinatal death*. *Neonatal death* was defined as the death of a liveborn infant within 28 days of birth. However, the neonatal death rate was somehow much larger than the perinatal death rate, which should have included by definition the neonatal deaths. One of the studies included in this meta-analysis (de Jong, which contributed 95% of the data) did not even use the same definition for perinatal death as Wax did. If the de Jong study were excluded as it should have been, the data set would have been so small that any findings would have been insignificant. Had Wax and colleagues used de Jong's definition of perinatal death, the findings would have been completely different.

These concerns were addressed in a paper titled "**Planned Home vs Hospital Birth: A Meta-Analysis Gone Wrong**" authored by Carl A. Michal, PhD and colleagues (all with Doctorates, if that matters). This paper is included in this packet of information. Most imperative, the perinatal and neonatal death rates were incorrectly reported and in this paper you will see the correct rates are listed in the first chart and are very similar. Not only that, but the authors of the Wax study report that they used an online meta-analysis calculator when in fact it was a Microsoft Word document distributed as part of an online course in epidemiology. Every outcome generated using this document is incorrect. Even one of the authors of a study included in Wax's meta-analysis participated in this rebuttal to confirm that his study was not appropriately used in the Wax paper. While there are many other glaring mistakes in this study, the final noteworthy inconsistency is that the Wax paper attempts to classify planned home births while including data from a study that includes unplanned.

Lastly included in this section of your packet is a 2019 study "**Perinatal or neonatal mortality among women who intend at the onset of labour to give birth at home compared to women of low obstetrical risk who intend to give birth in hospital: A systematic review and meta-analysis**." This study has many of the pitfalls originally discussed in this briefing, but does seek to correct some of them. It includes 14 studies for around 500,000 intended home births and concludes:

"Women who are low risk and who intend to give birth at home do not appear to have a different risk of fetal or neonatal loss compared to a population of similarly low risk women

intending to give birth in hospital." (Hutton, E.K., Reitsma, A., Simioni, J., Brunton, G., Kaufman, K., 2019)

The final study we are sending you to review is one of our own, which we are proud of. **"Outcomes of Care for 16,924 Planned Home Births in the United States: The Midwives Alliance of North America Statistics Project, 2004 to 2009".** Essentially, it is a report on various birth outcomes with numbers generated through research by the Midwives Alliance of North America. As mentioned before, homebirth safety stands alone. The intrapartum, early neonatal, and late neonatal mortality rates were all very low (1.3, 0.41, and 0.35 respectively.) We have included this in your packet for your own review.

If you have any questions or desire more information, please do not hesitate to reach out. As Georgia's Certified Professional Midwives we care deeply about the safety of our mothers and babies and feel confident that the evidence is clear that out of hospital delivery with an appropriately trained Certified Professional Midwife is a reasonable option for Georgia and does not cause harm.