# Utilizing Doula Support to Decrease Rates of Unnecessary Full Term Cesarean Section in Low-Income Women

# Background

Birth via cesarean section without medical indication is associated with several long-term risks for both women and their children. According to the CDC, 31.7% of nearly 3.7 million births registered in the United States in 2019 were via cesarean section. Low-income women are at greatest risk for c-section without medical indication.

# Risks Associated with Delivery via Cesarean Section

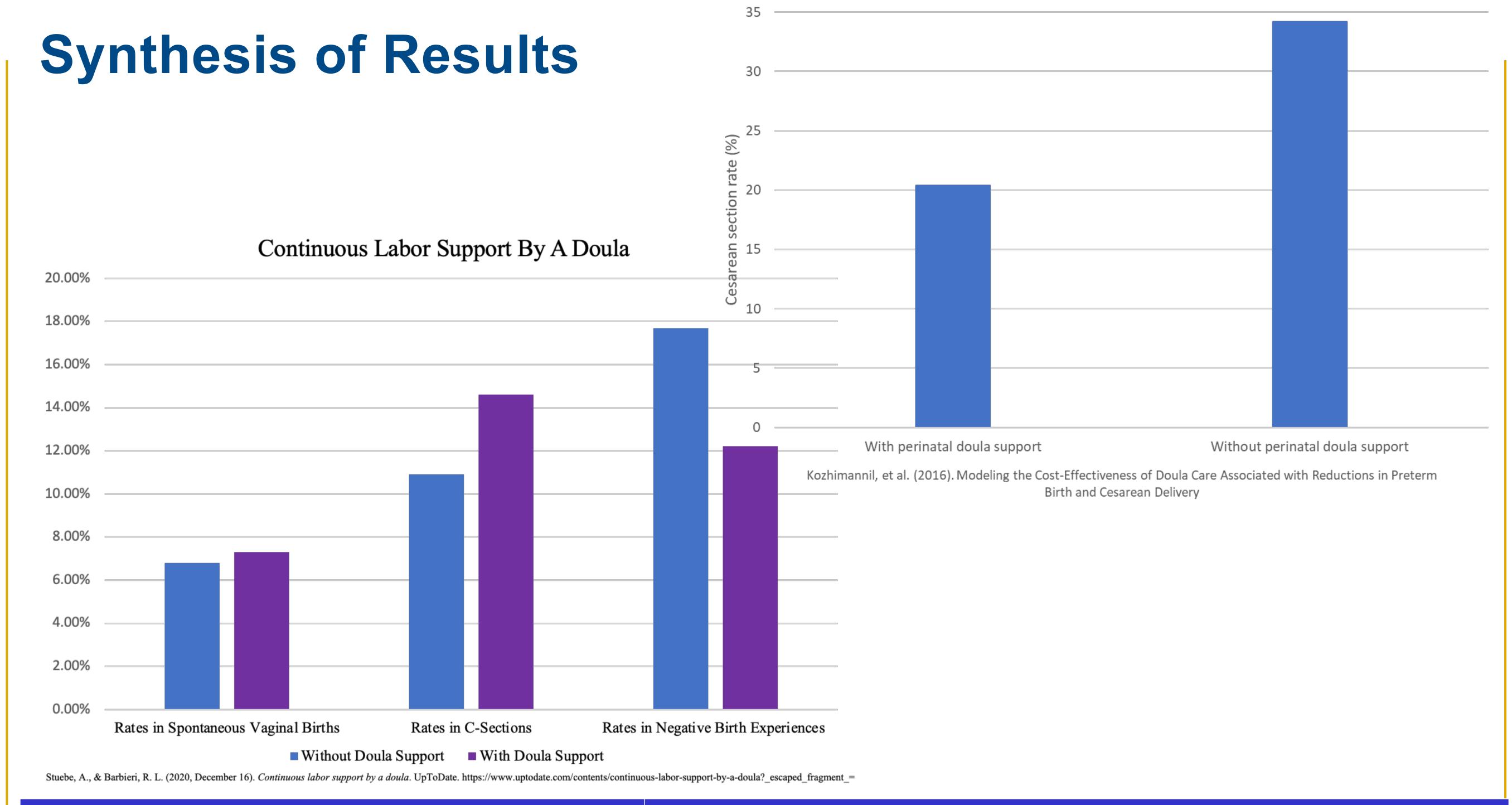
Birthing person	Increased risk of infection, bowel or bladder injury, thromboembolic events Increased blood loss compared to vaginal birth and length of hospitalization
Future Pregnancy	Increased risk for repeat cesarean section, uterine rupture, abnormal placental implantation, preterm birth, miscarriage, and still birth
Neonate	Altered immune development, breastfeeding difficulties Increased risk of dysbiosis, childhood obesity, asthma, and other allergic conditions

# **PICO Question**

How does doula support in labor compared to a lack of doula support affect rates of medically unnecessary full-term c-section in low-income women?

#### Methods

A literature review was conducted using CINAHL, PubMed, and PMC databases using terms including "doula", "doula care", "continuous labor support", "doula birth outcomes" "cesarean section" "primary cesarean section" "risk of cesarean section" "medical indication cesarean section" and "low income".



#### **Study Title and Author**

Modeling the Cost Effectiveness of Doula Care Associated with Reductions in Preterm Birth and Cesarean Delivery Kozhimannil, K. B., et al. (2016).

Disrupting the Pathways of Social Determinants of Health: Doula Support during Pregnancy and Childbirth Kozhimannil, K. B., et al. (2016).

Predictors of Fear of Childbirth and Normal Vaginal Birth Among Iranian Postpartum Women: A Cross-Sectional Study Mortazavi, F., & Mehrabadi, M. (2021).

Continuous Labor Support by a Doula Stuebe, A., & Barbieri, R. L. (2020).

Improving Birth and Breastfeeding Outcomes Among Low Resource Women in Alabama by Including Doulas in the Interprofessional Birth Care TeamThurston, L. A. F., Abrams, D., Dreher, A., Ostrowski, S. R., & Wright, J. C. (2019).

#### Significant Findings

Quantitative study (n=65,417)

Women who received doula support had lower cesarean section rates than non-doula support Medicaid beneficiaries (20.4% vs. 34.2%).

#### Qualitative study (n=13)

Doula care supported accessibility, quality of care, improvement of health literacy, social support, and facilitation of clinical interaction. Improved patient's feelings of agency, security, knowledge, and connection of services, in a cost-effective way to improve quality of care, health literacy, and facilitate communication between clinician and patient.

Qualitative and Quantitative, (n=662 postpartum women)

Presence of a doula at birth reduces fear of childbirth, increase the pregnant women's understanding of her pregnancy, and increase the rate of normal vaginal births.

#### Quantitative study

Comparing the effects of continuous one-to-one intrapartum support showed increase in spontaneous vaginal births by 7.3% from 6.8%, reduction in c-sections from 10.9% to 14.6%, reduction in analgesia/anesthesia from 75% to 72%, and reduction in negative birth experiences from 17.7% to 12.2% with doula support.

Quantitative (n=120 pregnant women and 124 newborn neonates) Women in doula support group were 1.8 less likely to have a cesarean section birth compared to the reference group.

## Conclusions/Further Study

Increasing access to doula support can lower rates of medically unnecessary cesarean sections in low-income women. Doula support can also improve maternal and neonatal morbidity and mortality, increase maternal satisfaction with perinatal experience, and decrease healthcare costs associated cesarean section. Further studies should be done with greater control for variables and to strengthen data driven decisions regarding perinatal doula support.

# **Next Steps**

On October 4, 2021, Gov. Gavin Newsom signed SB 65, the "Momnibus" Act in California. SB 65 increases access to postpartum healthcare, doula services, and midwives for families- particularly Black families and patients on Medi-cal. Evidence supports efforts towards increasing accessibility to perinatal support, including doula services, and should

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continue to be supported both at a local and federal level.

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