BIRTH DOULA SERVICES: WA STATE MEDICAID TRANSFORMATION PROJECT PROPOSAL

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Project Title	**Medicaid Coverage of Birth Doula Services**

Rationale for the Project

The Problem:

U.S. maternity care is the most expensive in the world, yet delivers outcomes that lag behind those of other developed countries.[i] Within the U.S., troubling health disparities yawn between women of color and white women.[ii] Numerous randomized controlled trials have shown that doula care improves birth outcomes across a variety of key metrics (see below). Despite its potential to effectuate both improved equity and better overall outcomes, doula services are currently unavailable to most low-income women, due to the lack of coverage in Medicaid and other programs for low income families.

Supporting Research:

Studies have found that increasing the use of doula care would support the Medicaid Initiative to **Promote Healthy Women, Infants, and Children through safe pregnancy and delivery** through:

- 28-47% **reduction in Cesarean delivery**[iii]
- 9-60% **decrease in epidural use**[iv]
- 31% **decrease in the need for Pitocin**[v]
- 11-25% **reduction in the length of labor**[vi]
- 12% **increase in spontaneous vaginal birth**[vii]
- 34% **reduction in women reporting a negative birth experience** [viii]
- 0.3-1.0 basis point **reduction in admission to the Neonatal ICU**[ix]
- **Increased rate of breastfeeding** (51% versus 29% in the control group)[x]
- Strong potential to achieve **cost savings for the Medicaid program.** [xi]

Because of these and other findings:

- The **Centers for Medicare and Medicaid Services (CMS)** Expert Panel on Improving Maternal and Infant Health Outcomes in Medicaid / CHIP recommended Medicaid coverage for doula services.[xii]
- The **Centers for Disease Control and Prevention (CDC)** has recommended doula care as a strategy to increase breastfeeding[xiii].
- A review of 41 birth practices utilizing the methodology of the **US Preventive Services Task Force (USPSTF)** found that doula care was one of the most effective preventive practices of all the ones it reviewed; doula care was 1 of only 3 services to receive an "A" grade.[xiv]

Medicaid Objectives:

This project would support and advance the federal objectives for Medicaid in the following ways:

- **Increase and strengthen coverage for Medicaid beneficiaries** by providing access to doula services offered within the community, making care geographically and financially accessible to low-income mothers and offer greater sensitivity to individual concerns related to religious and or cultural beliefs in the process of child birth. Low income women, and women of color in particular, report a strong desire for a doula as part of the support team for their birth, but a majority of them are not able to access doula care.[xv]
- **Improve health outcomes for Medicaid and low-income populations** by reducing birth complications and the need for obstetrics interventions such as Cesarean section, epidural anesthetic, synthetic oxytocin administration, and forceps and vacuum delivery, and by increasing positive outcomes such as breastfeeding rates, patient satisfaction with the birth experience, and parent-infant bonding.
- **Increase the efficiency and quality of care for Medicaid and other low-income populations through**

initiatives to transform service delivery networks by providing a workforce development pipeline, continuing education, and professional development for birth doulas.

Project Description

Which Medicaid Transformation Goals are supported by this project/intervention? Check box(es)

X Reduce avoidable use of intensive services
X Improve population health, focused on prevention
☐ Accelerate transition to value-based payment
X Ensure Medicaid per-capita growth is below national trends

Which Transformation Project Domain(s) are involved? Check box(es)

X Health Systems Capacity Building
X Care Delivery Redesign
X Population Health Improvement – prevention activities

The project would provide Birth Doula services to pregnant Medicaid beneficiaries in Washington State. Offering birth doula services more widely would advance three of Washington's Medicaid Transformation Goals:

- **Reduce avoidable use of intensive services.** As noted in the Supporting Research section above, doula services have been shown to significantly reduce the incidence of intensive services in obstetrics, including Cesarean section, epidural anesthetic, synthetic oxytocin administration, and forceps and vacuum delivery.
- **Improve population health, focused on prevention.** Preventing unnecessary Cesarean births has become a focus of public health and clinical facilities because Cesarean deliveries are associated with increased risk of both short-term and long-term complications and morbidity.[xvi] Increasing breastfeeding rates has similarly been a focus of public health specialists due to the many long-term health benefits associated with it, including: reduced risk of asthma, obesity, diabetes and ear infections in babies and reduction in heart disease, obesity, diabetes and breast and ovarian cancers in mothers.[xvii] Doula care has been shown in clinical trials to substantially decrease rates of Cesarean section and to increase breastfeeding rates, and thus have both short and long term benefits for women and infants.
- **Ensure Medicaid per-capita growth is below national trends.** Doula services can be an important component of bending the cost curve in Medicaid. Childbirth services currently account for a higher proportion of hospital charges than any other type of hospitalization.[xviii] Doula services reduce a variety of medical interventions and their associated costs. For example, a Cesarean delivery costs Medicaid about 50% more than a vaginal delivery. The costs of epidural analgesia include direct fees to administer the medication as well as for other interventions associated with epidurals. Because breastfeeding is linked to so many preventative health benefits for both mother and baby, research has found that increased breastfeeding rates could save as much as $31 billion nationwide.[xix]

The project would provide community-based, culturally sensitive doula services to Medicaid beneficiaries that would include: in-depth meetings with the patient during pregnancy to provide education, discuss birth options and preferences, and help prepare for delivery, attendance at the labor and delivery, in-home postpartum visit after the baby is born to discuss feeding, sleep issues, parent's emotional well-being and other questions, and 24/7 availability via phone and email throughout pregnancy and during the first weeks of the baby's life.

The project will assess impact across variety of metrics, with the following goals:

- **Increase patient satisfaction and enhance birth experiences**
- **Improve key medical outcomes in maternity care**
- **Reduce costs of maternity services by eliminating unnecessary and potentially harmful interventions**
- **Decrease health care disparities in maternity care**

The project will be carried out in collaboration with a variety of community organizations, including non-profit

organizations running community-based doula programs, national and regional doula trade organizations and certifying bodies, doula training institutes, and advanced doula training entities.

Core Investment Components

Proposed scope of the project is to provide doula services to 1500 Medicaid beneficiaries per year. The cost per patient served is $1500: $1200 for payment to the Doula and $300 in administrative costs. Swedish Medical Center has launched an in-house Doula program with 30 contracted doulas serving patients delivering at Swedish hospitals. Working with community-based doula programs that also have existing infrastructure, it would take about 2 months to ramp up the program to serve 1500 Medicaid patients.

A Washington State Institute for Public Policy analysis concluded that doula care would likely result in a moderate reduction of Cesarean sections, but was unlikely to return an ROI to the state. However, analyses in three other states and a national analysis contradict the WSIPP findings and find that doula care would likely result in savings to the Medicaid program.[xx]

The financial model for this project includes both short and long-term metrics, based on evidence cited earlier in this proposal. Overall calculated savings are $3425 per Medicaid beneficiary with a doula. Specifically, $353 of the savings is attributed to averted Cesarean sections, $97 to diversion from NICU stays, and $2976 in reduced infant asthma, diabetes, obesity and maternal cancer, hypertension and heart attack from increased breastfeeding. At a cost of $1500.00 per doula, the return on investment per Medicaid beneficiary is $1925.[xxi]

Project Metrics

Metric	Benchmarks
Birth & Infant Outcomes: Preterm Birth Rate, Cesarean Section Rate (Primary, Repeat), Use of synthetic oxytocin to speed labor, Request for pain medication, Instrumental Delivery (Forceps/Vacuum), Length of Labor, Birth Weight, Neonatal ICU Admission	Swedish Health System Data; Washington State Department of Health Vital Statistics; Centers for Disease Control and Prevention (CDC); Centers for Medicare and Medicaid Services
Public Health Promotion: First Trimester Care*; Breastfeeding Rate; Childhood Immunization Status*; Contraception Use	Swedish Health System Data; Washington State Department of Health Vital Statistics; Centers for Disease Control and Prevention (CDC); Centers for Medicare and Medicaid Services
Mental & Emotional: Patient Satisfaction with the Birth Experience and Labor Support; Parent/Infant Attachment and Bonding; Confidence & Fear at Intervals of Pregnancy and Birth; Understanding of Maternity Care Options; Confidence in Communicating with Care Providers; Perception of Mothering Abilities for First-Time Mothers; Postpartum Depression	Swedish Health System Data; Washington State Health Care Authority; Centers for Disease Control and Prevention (CDC); Listening to Mothers Survey II and III; Planned Benchmarking Study for Project
Resource Use: Readmission Rate*; Cost of Maternity Care Services	Swedish Health System Data; Centers for Medicare and Medicaid Services National Data

** Medicaid Priority Measures*

i International Federation of Health Plans. (2014). 2013 Comparative Price Report: Variation in Medical and Hospital Prices by Country. Washington, DC. World Health Organization. World Health Statistics 2014. Geneva, Switzerland: WHO, 2014.

[ii] A few examples: The infant mortality rate for African-Americans is 2.4 times the rate of non-Hispanic/Latino white women. (The Office of Minority Health. "Infant Mortality and African Americans.") Low-income minority women experience higher rates of maternal depression than affluent non-Hispanic/Latino white women. Maternal depression in this population may reach as high as 40 percent. (National Center for Children in Poverty. "Reducing Disparities Beginning in Early Childhood." 2007.) An estimated 54.4 percent of African-American women breastfed after giving birth compared to 74.3 percent of white women and 80.4 percent of Hispanic/Latino women. Disparities in breastfeeding rates were also present among less educated women. Mothers who had not completed college were less likely to breastfeed (65.2%) when compared to mothers with a college degree (85.4%). (CDC. "Racial and Ethnic Differences in Breastfeeding Initiation and Duration." Morbidity and Mortality Weekly Report. 2010.)

[iii] Hodnett, E.D., Gates, S., Hofmeyr, G.J., & Sakala, C. (2013). Continuous support for women during childbirth. Cochrane Database of Systematic Reviews, (7), doi:10.1002/14651858.CD003766.pub5; McGrath SK[1], Kennell JH. A randomized controlled trial of continuous labor support for middle-class couples: effect on cesarean delivery rates. Birth. 2008 Jun;35(2):92-7. doi: 10.1111/j.1523-536X.2008.00221.x.

[iv] Hodnett, E.D., Gates, S., Hofmeyr, G.J., & Sakala, C. (2013). Continuous support for women during childbirth. Cochrane Database of Systematic Reviews, (7), doi:10.1002/14651858.CD003766.pub5; Stein, M, Kennell, JH, and Fulcher, A. Benefits of a Doula Present at the Birth of a Child. Pediatrics 2004;114;1488-1491

[v] Hodnett, E.D., Gates, S., Hofmeyr, G.J., & Sakala, C. (2013). Continuous support for women during childbirth. Cochrane Database of Systematic Reviews, (7), doi:10.1002/14651858.CD003766.pub5

[vi] Campbell, Della A., Lake, Marian F., Falk, Michele, Backstrand, Jeffrey R. (2006). A Randomized Control Trial of Continuous Support in Labor by a Lay Doula. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*

[vii] Hodnett, E.D., Gates, S., Hofmeyr, G.J., & Sakala, C. (2013). Continuous support for women during childbirth. Cochrane Database of Systematic Reviews, (7), doi:10.1002/14651858.CD003766.pub5

[viii] Hodnett, E.D., Gates, S., Hofmeyr, G.J., & Sakala, C. (2013). Continuous support for women during childbirth. Cochrane Database of Systematic Reviews, (7), doi:10.1002/14651858.CD003766.pub5

[ix] UPMC New Beginning Doula Program, 2011. As cited in Tillman, T., Gilmer, R., & Foster, A. (2012). Utilizing Doulas to Improve Birth Outcomes for Underserved Women in Oregon. Oregon Health Authority. http://www.oregon.gov/oha/legactivity/2012/hb3311report-doulas.pdf

[x] Stein, M, Kennell, JH, and Fulcher, A. Benefits of a Doula Present at the Birth of a Child. Pediatrics 2004;114;1488-1491

[xi] Kozhimannil, K. B., Hardeman, R. R., Attanasio, L. B., Blauer-Peterson, C., & O'Brien, M. (2013). Doula care, birth outcomes, and costs among Medicaid beneficiaries. American Journal of Public Health, 103(4), e113-e121; Tillman, T., Gilmer, R., & Foster, A. (2012). Utilizing Doulas to Improve Birth Outcomes for Underserved Women in Oregon. Oregon Health Authority. Retrieved 22 September 2015; Chapple, W., Gilliland, A., Li, D., Shier, E., & Wright, E. (2013). An economic model of the benefits of professional doula labor support in Wisconsin births. WMJ, 112(2), 58-64.

[xii] Medicaid and Private Insurance Coverage of Doula Care. (2016) National Partnership for Women and Families, Childbirth Connection, Choices in Childbirth

[xiii] Shealy, K. R., Li, Rl, Benton-Davis, S., & Grummer-Straum, L.M.. (2005) *The CDC guide to breastfeeding interventions.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

[xiv] Berghella, V., Baxter, J., & Chauhan, S. (200). Evidence-based labor and delivery management. *American Journal of Obsetrics & Gynecology, 199(5),* 445-454

[xv] Declercq, E.R., Sakala, C., Corry, M.P., Applebaum, S., & Herrlich, A. (2013) *Listening to Mothers III: Pregnancy and Birth.* New York: Childbirth Connection.

[xvi] Childbirth Connection. (2012). Vaginal or cesarean birth: What is at stake for women and babies? A best evidence review. New York, NY.

[xvii] Bartick, M. C., Stuebe, A. M., Schwarz, E. B., Luongo, C., Reinhold, A. G., & Foster, E. M. (2013). Cost analysis of maternal disease associated with suboptimal breastfeeding. Obstetrics & Gynecology, 122(1), 111-119; Stuebe, A. (2009). The risks of not breastfeeding for mothers and infants. Reviews in Obstetrics and Gynecology, 2(4), 222.

[xviii] Wier, L.M., & Andrews, R.M. (2011). The National Hospital Bill: The Most Expensive Conditions by Payer, 2008. HCUP Statistical Brief #107. Rockville, MD; Agency for Healthcare Research and Quality.

[xix] Bartick, M., & Reinhold, A. (2010). The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. Pediatrics, 125(5), e1048-e1056; Bartick, M. C., Stuebe, A. M., Schwarz, E. B., Luongo, C., Reinhold, A. G., & Foster, E. M. (2013). Cost analysis of maternal disease associated with suboptimal breastfeeding. Obstetrics & Gynecology, 122(1), 111-119

[xx] Kozhimannil, K. B., Hardeman, R. R., Attanasio, L. B., Blauer-Peterson, C., & O'Brien, M. (2013). Doula care, birth outcomes, and costs among Medicaid beneficiaries. American Journal of Public Health, 103(4), e113-e121; Tillman, T., Gilmer, R., & Foster, A. (2012). Utilizing Doulas to Improve Birth Outcomes for Underserved Women in Oregon. Oregon Health Authority; Chapple, W., Gilliland, A., Li, D., Shier, E., & Wright, E. (2013). An economic model of the benefits of professional doula labor support in Wisconsin births. WMJ, 112(2), 58-64.

[xxi] Swedish Health System Analysis, based on 2014 WA State Medicaid payments. Details available upon request; Centers for Disease Control and Prevention. Accessed January 15, 2016. http://www.cdc.gov/breastfeeding/data/nis_data/rates-any-exclusive-bf-socio-dem-2012.htm; HealthConnect One. (2014). The Perinatal Revolution. Chicago, IL; Bartick, M., & Reinhold, A. (2010). The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. Pediatrics, 125(5), e1048-e1056; Bartick, M. C., Stuebe, A. M., Schwarz, E. B., Luongo, C., Reinhold, A. G., & Foster, E. M. (2013). Cost analysis of maternal disease associated with suboptimal breastfeeding. Obstetrics & Gynecology, 122(1), 111-119