

# Issue Brief

# **Doula Coverage to Help Minimize Arizona's Birth Woes**

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A doula is a trained professional who provides physical, emotional, and informational support to a woman throughout pregnancy, childbirth, and postpartum<sup>1</sup>. A doula serves as a facilitator between the laboring women and her physician by ensuring that the mother gets the required information to make informed decisions.

Studies have shown that mothers who have doula services during their pregnancy and delivery have fewer cesarean sections, reduced pre-term births, fewer epidural anesthesia, higher rates and longer durations of breastfeeding <sup>2-6</sup>.

When doula services are included throughout the pregnancy and birth process, births cost less. A recent study found that when a doula is included in the process, births cost an average of \$986 less, including the doula service fee<sup>2</sup>.

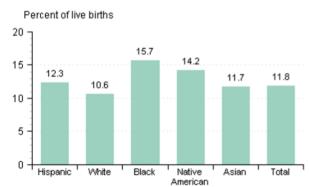
Typical doula services include 2-4 prenatal visits, support during labor and childbirth and 1-2 postpartum visits<sup>7</sup>. Costs for doula services can range from no payment to more than \$1,500 per birth<sup>8,9</sup>. Private doulas can cost between \$500 - \$750 per birth in Arizona<sup>9,10</sup>. While few states (Oregon and Minnesota) reimburse for doula care through Medicaid, it is often the patients who bears the cost.

#### Impetus for Change

Nine percent of births in Arizona are pre-term and 27% of all resident births were cesarean deliveries in 2013<sup>11,12</sup>. An Institute of Medicine report in 2005 estimated that the economic burden for one

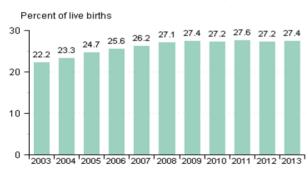
infant born pre-term is \$51,600<sup>13</sup>. Since pre-term infants are likely to incur 10 times the costs compared to a full-term infant, and cesarean deliveries cost twice as much as vaginal births, overall costs from pre-term and cesarean deliveries are significant to the state<sup>2,12</sup>. In 2012, Arizona's Medicaid program, AHCCCS, is estimated to have spent more than \$200 million covering 54% of all births in the state <sup>14</sup>.

## Preterm by race/ethnicity: Arizona, 2011-2013 Average



Source: March of Dimes Retreived from www.marchofdimes.org/peristats. Accessed on April 20, 2016

#### Total cesarean deliveries: Arizona, 2003-2013



Source: March of Dimes. Retrieved from www.marchofdimes.org/peristates. Accessed on April 20, 2016

Only 6 percent of U.S. women who give birth are estimated to have doula support<sup>5</sup>. Low income women and women of color, who are the most likely groups to report wanting a doula, may not be able to afford a doula. Additionally, most doulas are white upper middle-class women and have a clientele constituting largely of the same<sup>5</sup>.

Investments in prenatal care, including doulas, can help reduce birth-related costs in Arizona, especially for minority and rural populations who experience significant barriers to accessing prenatal care. Similar to community health workers, doulas are culturally trained and can help significantly increase access to prenatal care and improve birth outcomes for the state's minority and rural populations.

# **Evidence on Impact of Doulas**

A global independent network of researchers conducted an extensive study on the impact of continuous one-to-one support for pregnant women during child birth<sup>15</sup>. Based on the study of 22 trials from 16 countries involving 15,288 women, they found that continuous support classified as emotional support, physical comfort measures, information, and advocacy - could potentially enhance physiologic labor processes and women's feeling of control and competence, reducing the need for obstetric intervention. Women who had continuous support were more likely to have vaginal birth and shorter labor hours, and were less likely to use intrapartum analgesia (like epidural) or have a baby with low 5-minute Apgar score (a measure of physical condition).

In addition, several studies in the U.S. have associated doula support with lower cesarean rates, reduced pre-term births, fewer epidural anesthesia, higher rates of breastfeeding, and early initiation and longer duration of

breastfeeding<sup>2-6</sup>. Most of these studies were conducted in the Medicaid population or safety net hospitals which typically include a higher proportion of minority women. In March 2014, the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal medicine issued a consensus statement which explicitly stated that published data has indicated better labor and delivery outcomes when continuous support personnel such as doulas are used; and that these resources are probably underutilized "given that there are no associated measurable harms" <sup>16</sup>.

### Cost Effectiveness of Doulas

One study comparing 65,147 Medicaid-funded singleton births in the West North Central region (Minnesota, North Dakota, Iowa, Missouri, Nebraska and Kansas) and East North Central region (Wisconsin, Michigan, Illinois, and Indiana) to 1,935 Medicaid-funded singleton births supported by a doula program in the upper Midwest region found that women with doula care had 22 percent lower odds of a pre-term birth<sup>2</sup>. This translated to an average savings of \$986 (ranging from \$929 to \$1047 across states in the study) per doula supported birth after considering doula reimbursement costs<sup>2</sup>. The average savings were calculated by comparing doula reimbursement rates to childbirth costs in each of the states included in the study and the potential for lower pre-term births associated with doula care. Optimal doula reimbursement rates ranged around \$1,000 per birth<sup>2</sup>. The authors also estimated that doula-supported deliveries among Medicaid beneficiaries regionally would avert 3,288 pre-term births annually and result in savings over \$58.4 million per year. Although the study was based on one doula support organization and did not consider the number of doula visits required to achieve

better birth outcomes, the findings are significant and may be applicable to other populations.

In 2011, the state of Oregon set up a committee to explore options for doula care under the state's Medicaid program<sup>3</sup>. Based on its analysis, the committee recommended that "publicly funded doula care resulted in cost savings to the payer when doula costs were below \$159.73 per delivery" (assuming 47,000 live births in Oregon per year). However, savings from birth outcomes such as breast feeding initiation/continuation and repeat C-section morbidity and mortality were not included in the analysis. The committee also mentioned that doula care resulted in other benefits such as lower NICU admissions, reduced cesarean births and increased spontaneous vaginal deliveries. In 2015, Oregon reimbursed doulas \$75 for face-to-face support during labor and delivery while reimbursement costs for prenatal visits were grouped under the case management fees paid to a licensed practitioner (physician, midwife, nurse practitioner, etc.)<sup>17</sup>.

These studies indicate the cost-effectiveness of doulas; however, more studies are needed to understand their potential impact in Arizona, given our unique population.

# What's Next

Limited data is available on the number of doulas in Arizona. A quick internet search lists more than 200 doulas who are both certified and noncertified in the state. The state does not have a licensing or certification process for doulas but certification can be obtained online or by attending workshops offered by various national and international doula organizations. A study conducted with 25 doulas in the southwestern U.S found that doulas would prefer to be certified in order to legitimize their role among medical

clinicians although their primary source of knowledge currently is through experience<sup>18</sup>.

Since there are no licensing guidelines, Arizona has to establish certification, licensing, registration and continuous education requirements for doulas before their services are reimbursed by the state. Various requirements such as background checks might also need to be established. Alternatively, the Arizona state health department should maintain a list of approved training programs for doulas working in the state and mandate certification in order to be reimbursed.

In addition to establishing licensing requirements, formal studies need to be conducted to explore options for utilizing doulas under Arizona's AHCCCS program. Given the wide range in reimbursement rates nationally and the range of services covered by doulas (support only during delivery vs. prenatal and postpartum visits), these studies can help derive a state-specific costeffective reimbursement rate for doula services.

#### References:

- What is a doula? DONA International. <a href="http://www.dona.org/mothers/">http://www.dona.org/mothers/</a>. Published n.d Accessed April, 2016
- Kozhimannil, K. B., Hardeman, R. R., Alarid-Escudero, F., Vogelsang, C. A., Blauer-Peterson, C., & Howell, E. A. Modeling the Cost-Effectiveness of Doula Care Associated with Reductions in Preterm Birth and Cesarean Delivery. Birth. 2016; 43:1
- 3. Tillman, T., Gilmer, R., & Foster, A. Utilizing doulas to improve birth outcomes among underserved women in Oregon. Oregon Health Authority; 2013.
- Mottl-Santiago, J., Walker, C., Ewan, J., Vragovic, O., Winder, S., & Stubblefield, P. A hospital-based doula program and childbirth outcomes in an urban, multicultural setting. Maternal and child health journal, 2007; 12(3), 372-377.
- Kozhimannil, K. B., Attanasio, L. B., Hardeman, R. R., & O'Brien, M. Doula Care Supports Near-Universal Breastfeeding Initiation among Diverse, Low-Income

- Women. Journal of Midwifery & Women's Health, 2013; 58(4), 378-382.
- Kozhimannil, K. B., Hardeman, R. R., Attanasio, L. B., Blauer-Peterson, C., & O'Brien, M. Doula care, birth outcomes, and costs among Medicaid beneficiaries. American journal of public health, 2013; 103(4), e113-e121.
- Simkin P. Position Paper: The Birth Doula's Contribution to Modern Maternity Care. New York, NY 2012. <a href="http://www.dona.org/PDF/Birth%20Position%20Paper">http://www.dona.org/PDF/Birth%20Position%20Paper</a> <a href="rev%200912.pdf">rev%200912.pdf</a> Accessed March, 2016.
- Remmer, J. Reimbursement for Doula Care: An overview of Processes and potentials for Oregon State Association. Oregon Doula Association. May 2015
- Kozhimannil, K. B., Hardeman, R. R. How Medicaid Coverage for Doula Care Could Improve Birth Outcomes, Reduce Costs, and Improve Equity. Health Affairs Blog. <a href="http://healthaffairs.org/blog/2015/07/01/how-medicaid-coverage-for-doula-care-could-improve-birth-outcomes-reduce-costs-and-improve-equity/">http://healthaffairs.org/blog/2015/07/01/how-medicaid-coverage-for-doula-care-could-improve-birth-outcomes-reduce-costs-and-improve-equity/</a> Published July 2015, Accessed March 2016
- Gottesdiener, L. Doulas provide support, encouragement during childbirth. The Arizona Republic. <a href="http://archive.azcentral.com/arizonarepublic/arizonaliving/articles/20100822doulas0822.html">http://archive.azcentral.com/arizonarepublic/arizonaliving/articles/20100822doulas0822.html</a> Published August 2010, Accessed March 2016
- The Impact of premature birth on society. March of Dimes. <a href="http://www.marchofdimes.org/mission/the-economic-and-societal-costs.aspx">http://www.marchofdimes.org/mission/the-economic-and-societal-costs.aspx</a> Published October 2015, Accessed march 2016
- Natality: Maternal Characteristics and New Born's
   Health. Arizona Department of Health Services.
   http://www.azdhs.gov/plan/report/ahs/ahs2013/pdf/text1b.pdf Published 2013, Accessed march 2016
- 13. Butler, A. S., & Behrman, R. E. (Eds.). (2007). Preterm Birth:: Causes, Consequences, and Prevention. National Academies Press.
- 14. Rau, A.B., Arizona tax payers pay for 53% of births. The Arizona Republic. <a href="http://archive.azcentral.com/arizonarepublic/news/articles/20120923arizona-taxpayers-births.html">http://archive.azcentral.com/arizonarepublic/news/articles/20120923arizona-taxpayers-births.html</a> Published September 2012, Accessed March 2016
- Hodnett, E. D., Gates, S., Hofmeyr, G. J., & Sakala, C. Continuous support for women during childbirth (Review). The Cochrane database of systematic reviews, 2013.
- 16. Obstetric Care Consensus: Safe Prevention of Primary Cesarean Delivery. The American Congress of

- Obstetrics and Gynecologists.

  http://www.acog.org/Resources-AndPublications/Obstetric-Care-Consensus-Series/SafePrevention-of-the-Primary-Cesarean-Delivery Published
  March, 2014 Accessed March 2016
- Oregon Medicaid Reimbursement for Doula Services
   Oregon Health Authority.
   https://www.oregon.gov/oha/healthplan/tools/Oregon
   %20Medicaid%20reimbursement%20for%20doula%20s
   ervices.pdf Published October 2015, Accessed March 2016.
- 18. Henley, M. M. Alternative and Authoritative Knowledge The Role of Certification for Defining Expertise among Doulas. Social Currents, 2015; 2(3), 260-279

