Report of the Virginia Medicaid Benefit for Community Doula Services Work Group

To the Governor and the Chairpersons of the House Committee on Appropriations and the Senate Committee on Finance and Appropriations

Pursuant to Chapter 1289, Item 291 (E) and Chapter 841 of the 2020 Virginia Acts of Assembly

December 1, 2020

| Table of Contents | 2 |
|-----------------------------------|----|
| Executive Summary | 3 |
| Background | 3 |
| Federal Requirements | 4 |
| Impact of State Regulation | 5 |
| Overview of State Strategies | 6 |
| Review of State Strategies | 8 |
| Analysis of Appropriate Rates | 9 |
| Recommended Benefit Design | 10 |
| Recommended Reimbursement Rates | 10 |
| Estimated Costs/Potential Savings | 12 |
| Conclusion | 14 |
| Appendices | 15 |
| Appendix I | 15 |
| Appendix II | 15 |
| Appendix III | 16 |
| Appendix IV | 17 |
| Appendix V | 18 |
| Appendix VI | 19 |
| | |

Executive Summary

Increasing access to Doula services is a cost-effective approach to improving maternal and child health among Virginia Medicaid members. Despite historical progress in technology and medicine, the U.S. maternal mortality rate remains elevated compared to countries of similar income levels, and wide racial and ethnic disparities persist. Doulas – community-based individuals who offer a broad set of non-clinical pregnancy-related services based on continuous support to pregnant women throughout pregnancy and in the postpartum period – have been shown to improve a variety of maternal and child health outcomes. Multiple studies indicate that Doula services can be cost-effective and cost-saving.

To address the study mandate¹, the Office of the Secretary of Health and Human Resources (OSHHR) facilitated five workgroup meetings with stakeholders including Doula practitioners, women with lived experience, licensed practitioners including Certified Nurse Midwives and Obstetrician/Gynecologists, state agencies including Virginia Medicaid, the Virginia Department of Health, the Virginia Department of Health Professions, and organizations including the Virginia Hospital and Healthcare Association, Managed Care Organizations, and the Medical Society of Virginia. The workgroup met to discuss recommendations for a Virginia Medicaid Doula benefit. A full list of stakeholders is available in Appendix III. The recommendations of this report are based on stakeholder input during workgroup meetings, data collected from practicing Doulas in Virginia, information collected on Doula reimbursement in other state Medicaid programs, reimbursement rates for maternal services in Virginia Medicaid for licensed providers, and industry reimbursement standards. It is recommended that a Virginia Medicaid Doula benefit include the following:

- A preventive service through a Medicaid State Plan Amendment;
- Reimburse \$859 for up to 8 prenatal/postpartum visits and attendance at delivery, as well as up to \$100 in linkage-to-care incentive payments;
- Contain flexibilities for providers that balance individualized, culturally sensitive, trauma-informed appropriate care with minimum requirements that promote delivery of a full package of services, continuity of care, and timeliness in care

Background

Despite reductions in maternal mortality over the last century, women in the U.S. experience poorer birth outcomes compared to those of other countries.² In Virginia, maternal and child health outcomes have plateaued: the maternal mortality in 2015 was the same as in 2004, and in recent years, preterm births have hovered around 9.5%, low birth rates around 8%, and the percentage of women with no or late prenatal care has increased from 3% to 4% from 2015 to 2017.³ Additionally, wide racial and ethnic disparities exist, with Black pregnant women

² Platt, T and Kaye, N. 2020. Four State Strategies to Employ Doulas to Improve Maternal Health and Birth Outcomes in Medicaid.

¹ See Appendix I and II.

³ http://jchc.virginia.gov/Virginia%20Maternal%20Mortality%20Data.pdf; https://www.vdh.virginia.gov/data/maternal-child-health/

experiencing pregnancy-associated mortality at 2.5 times the rate of white women and preterm births at 1.5 times the rate of white women.⁴

Doulas provide services that can address many of the drivers of poor maternal and child health outcomes. Doulas are individuals based in the community who offer a broad set of non-clinical pregnancy-related services centered on continuous support to pregnant women throughout pregnancy and in the postpartum period. Emotional, physical, and informational support provided by Doulas include childbirth education, lactation support, and referrals for health or social services. Like other community health workers, Doulas provide culturally-congruent support to pregnant and postpartum women through their grounding within the unique cultures, languages, and value systems of the populations they serve.

A well-developed body of literature has established positive relationships between Doula services and multiple maternal health outcomes. Doula support during pregnancy is associated with an increased likelihood of vaginal birth, reduction in delivery by cesarean sections, and reduced use of epidural pain relief and instrument-assisted births.⁵ Doula care is also associated with lower preterm birth rates, higher five-minute newborn Apgar scores, and increased likelihood of breastfeeding initiation.⁶ Of particular relevance to Virginia Medicaid, research among Minnesota Medicaid beneficiaries found that Doula support decreased the odds of cesarean delivery by 50% and preterm birth by more than 20%.⁷

Doula services have been found to be cost-effective and potentially cost-saving. One study found Doula services to be cost-effective up to \$1,360 per Doula – and potentially cost-saving up to \$884 – when costs were considered against reductions in maternal death, rates of cesarean births, and complications from delivery. A second multi-state study found potential savings of Doula support at an average reimbursement rate of \$986 (ranging from \$929 to \$1,047 across states) related to reduced incidence and costs of preterm birth and cesarean delivery.

Federal Requirements and Permissibility Associated with Providing a Medicaid Doula Benefit

A Medicaid Doula benefit is permissible under federal law. There are two pathways by which a Doula benefit could be provided by Virginia Medicaid and funded with both federal and state funds: a State Plan Amendment (SPA) or waiver. Table 1, below, summarizes key differences in federal requirements between services introduced via a SPA or waiver (Table 1 focuses on a Section 1115 Medicaid Demonstration waiver which is the most applicable waiver). While a waiver generally provides greater flexibility in the design of a service (e.g., the requirement that the service be available on a statewide basis to all eligible Medicaid members can be waived), it is time-limited, must demonstrate cost neutrality, and can often take much

⁶ Hodnett, E. D., Gates, S., Hofmeyr, G. J., & Sakala, C. "Continuous support for women during childbirth." The Cochrane database of systematic reviews, 10, CD003766. (2012); Gruber, Kenneth J., Susan H. Cupito, and Christina F. Dobson. "Impact of Doulas on Healthy Birth Outcomes." The Journal of Perinatal Education 22, no. 1 (2013): 49–58.

⁴ http://jchc.virginia.gov/JCHC%20MMRT%20Data%20Report%2011.13.19.%20MC%20EDITS%20(1).pdf; https://www.marchofdimes.org/Peristats/Peristats.aspx.

⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6153776/

⁷ Kozhimannil K, Hardeman R, et al. 2016. "Modeling the Cost-Effectiveness of Doula Care Associated with Reductions in Preterm Birth and Cesarean Delivery". Birth. 43(1):20-7.

⁸ Greiner K,Hersh A, et al. 2019. "The Cost-Effectiveness of Professional Doula Care for a Woman's First Two Births: A Decision Analysis Model". J Midwifery Womens Health. 64(4):410-420.

longer to receive Center for Medicare and Medicaid (CMS) approval compared to a SPA. In either the SPA or waiver case, CMS approval would allow federal funds to partially cover a Doula benefit's cost according to Virginia Medicaid's Federal Medical Assistance Percentage (FMAP). If the Virginia Department of Medical Assistance Services (DMAS) reimbursed for Doula services outside of the SPA or waiver pathways, such as through a pilot project, sources other than federal funds – such as General Funds – would have to cover all costs.

Table 1. Key Regulatory Differences Between a State Plan Amendment (SPA) and Section 1115 Waiver*

| 1110 | | | | | | | | | | | |
|-------------------------|--|---|--|--|--|--|--|--|--|--|--|
| Consideration | SPA | Section 1115 waiver | | | | | | | | | |
| State Plan Requirements | Statewideness, comparability, choice of providers* | Some/all requirements can be modified | | | | | | | | | |
| Approval period | Indefinite | Usually 5 years (initially) | | | | | | | | | |
| CMS budget requirements | No required budget or cost analysis | Demonstrates budget neutrality | | | | | | | | | |
| CMS review process | Negotiation (e.g., Doula ser | rvices supervised vs. referred) | | | | | | | | | |
| CMS review time frame | Approved within 90 days of CMS receipt | No less than 45 days after submission. | | | | | | | | | |
| Renewal period | No renewal needed | Usually up to 3 years | | | | | | | | | |
| Program documentation | Contained within overall CMS state plan | Terms/conditions negotiated between CMS and state | | | | | | | | | |

^{*}Adapted from: https://www.macpac.gov/features-of-federal-medicaid-managed-careauthorities/

Under the SPA pathway, there are additional federal requirements related to relationships that would need to be maintained between non-licensed providers, such as Doulas, and licensed providers. If Doula services were introduced as a preventive service, Doulas could provide and directly bill Virginia Medicaid for services as long as those services were provided at the "recommendation" of a physician or other licensed provider acting within their scope of practice. Conversely, if Doula services were not introduced as a preventive service, federal regulations would require Doula services to be supervised by a licensed provider, with the licensed provider – not the Doula – billing Virginia Medicaid. Under the waiver pathway, such as a Section 1115 Innovation waiver, federal requirements on the provision of services would depend on negotiations between Virginia Medicaid and CMS.

5

⁹ CMS-2334-F; CMCS Informational Bulletin, 2013. "Update on Preventive Services Initiatives" (https://www.medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-11-27-2013-Prevention.pdf)

Impact that State Regulation Would Have on Doula Practitioners

Although a Medicaid Doula benefit would not have a direct impact on regulation of Doula practitioners, the recommended benefit described in subsequent sections would rely on delivery of Doula services by state-certified community-based Doulas. At the time of the writing of this report, the Virginia Department of Health (VDH) is drafting regulations to provide a state certification and registration pathway for community-based Doulas. Doulas who had obtained state certification and been included in the state registry would be eligible to provide Doula services for Medicaid members.

Overview of Current State Strategies

Minnesota

Minnesota enacted a law to cover Doula services provided by a certified Doula beginning July 1, 2014. The law defines Doula services as "continuous emotional and physical support throughout labor and birth, and intermittently during the prenatal and postpartum periods." To qualify as a certified Doula, an individual must receive certification to perform Doula services from one of eight listed certifying non-governmental organizations. To receive Medicaid reimbursement for Doula services, a Doula must register with the Minnesota Commissioner of Health at a cost of \$200¹⁴ and perform services under the supervision of a physician, nurse practitioner, or certified nurse midwife. 15

Initially, Minnesota set the total reimbursement rate for all Doula services at \$411 per patient and many Doulas complained about the low rate. ¹⁶ In response to these concerns, Minnesota increased the rates by statute for services provided after July 1, 2019, and set the rates at \$47 for each prenatal or postpartum visit and \$488 for attending and providing Doula services at birth for a total of \$770. ¹⁷ This rate covers a total of six antepartum and postpartum sessions and the birth session. ¹⁸ One study conducted in 2016 indicated that the cost-neutral point for birth was \$986, so any rate below this level potentially saves states money. ¹⁹

¹⁰ 2020 See Acts of Assembly, Chapter 724.

¹¹ H.F. 1233 (2013) codified as Covered Services, Minn. Stat. § 256.0625 subd. 28b (2014).

¹² Definitions, Minn. Stat. § 148.995 (2014).

¹³ *Id.* at subd. 2 (listing the International Childbirth Education Association, the Doulas of North America (DONA), the Association of Labor Assistants and Childbirth Educators (ALACE), Birthworks, the Childbirth and Postpartum Professional Association (CAPPA), Childbirth International, the International Center for Traditional Childbearing, or Commonsense Childbirth, Inc.). The International Center for Traditional Childbearing changed its name in 2018 so it no longer qualifies as a certifying organization.

¹⁴ Fees, Minn. Stat. § 148.997 (2017). The application fee costs \$185 and the background check costs \$15.

¹⁵ Department of Human Services. (2020, July 7). *Doula Services*. https://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMetho d=LatestReleased&dDocName=DHS16_190890.

¹⁶ Quinn, Mattie. (2018, December 21). *To Reduce Fatal Pregnancies, Some States Look to Doulas*. Governing. https://www.governing.com/topics/health-human-services/gov-Doula-medicaid-new-york-2019-pregnant.html.

¹⁷ Reimbursement for Doula Services, Minn. Stat. § 256B.758 (2019).

¹⁸ Department of Human Services. (2020, July 7). *Doula Services*. https://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=DHS16 190890.

¹⁹ Kozhimannil, Katy B. et al., (2016). Modeling the Cost Effectiveness of Doula Care Associated with Reductions in Preterm Birth and Cesarean Delivery. *Birth*, 43(1), 20-27.

New York

In 2019, New York announced a multi-pronged initiative to target maternal mortality and racial inequity in healthcare. ²⁰ This initiative included a pilot program covering Doula services for Medicaid fee-for-service and Managed Care members in Erie County. ²¹ Program designers initially geographically restricted the pilot to allow for a phased-in approach, focusing first on counties with the highest prevalence of maternal and infant mortality and Medicaid births. ²²

The covered scope of Doula services includes up to four prenatal and four postpartum visits, as well as labor and delivery services.²³ While Doulas in New York can register as fee-for-service and Managed Care providers, payment follows a fee-for-service schedule in order to comply with federal requirements.²⁴ The reimbursement rates are: \$30 per prenatal or postpartum visit, and \$360 for labor and delivery, totaling up to \$600 per birth.²⁵ State actors designed this reimbursement scheme to align with similar professional fees for physicians, nurse practitioners, and midwives.²⁶ Importantly, and to evaluate the program design and effectiveness, the New York plan includes follow-up surveys and monitoring of the rates of postpartum visit attendance.²⁷ The New York State Department of Health also organized webinars to maximize Doula outreach and education.²⁸

Though the executive branch designed and now administers the program, in 2019 State Senator Paulin introduced legislation to define Doula certification requirements in support of the pilot.²⁹ The legislation required, in particular, that a Doula "be of good moral character", a point which raised questions about who would make that decision and how that term would be defined. In particular, opponents of this requirement pointed to the fact that Black New Yorkers disproportionately face incarceration and the repercussions of having a criminal record,³⁰ and might be unfairly denied the opportunity to become Doulas. For this reason and their perceived lack of input in the process, Doulas in Brooklyn strongly opposed the proposed legislation, calling it inequitable and insufficient to address racial disparities in maternal mortality.³¹ Although the legislature passed the bill on June 18, 2019, Governor Andrew Cuomo vetoed it on December 13, 2019.³²

In addition to the vetoed legislation, New York has experienced other challenges in expanding Doula services. Specifically, because the state was unable to register a sufficient

²⁰ New York State, Governor Andrew Cuomo. (2018, April 23). *Governor Cuomo Announces Comprehensive Initiative to Target Maternal Mortality and Reduce Racial Disparities in Outcomes* [Press release]. https://www.governor.ny.gov/news/governor-cuomo-announces-comprehensive-initiative-target-maternal-mortality-and-reduce-racial

²¹ New York State, Department of Health. *New York State Medicaid Doula Pilot: Frequently Asked Questions*, 2. https://www.health.ny.gov/health_care/medicaid/redesign/Doulapilot/docs/faqs.pdf

²² Id. at 4.

²³ *Id.* at 6.

²⁴ *Id.* at 12.

²⁵ *Id.* at 15.

²⁶ *Id*.

²⁷ *Id.* at 17.

²⁸ Id at 18

²⁹ Cutler, Nancy. (2019, August 26). Doulas Improve Outcomes for Mother and Baby, but Ensuring Medicaid Coverage has Proven Tricky. *The Journal News*.

³⁰ *Id*.

³¹ *Id*.

³² A.B. A364B, 2019-2020 Legislative Session (as vetoed by Governor, N.Y. Dec. 13, 2019).

number of Doulas as providers in the pilot expansion sites of Brooklyn and Kings County, the state had to pause efforts to implement the pilot beyond Erie County.³³ When explaining the lack of registered Doulas, stakeholders cited the need for more representation in the decision-making process, a focused state effort on building a Doula registry for Medicaid participants, and a higher reimbursement rate.³⁴

New Jersey

On May 8, 2019, New Jersey passed legislation to include Doula coverage in its Medicaid services. The new law authorized the state to pursue either a State Plan Amendment or Section 1115 waiver under the Social Security Act to achieve this. ³⁵ The legislation built upon a pilot program funded by the Governor's office, which community organizations designed and implemented. ³⁶ Like Virginia, New Jersey policy-makers and stakeholders are in the process of implementing this legislation, and are currently studying program design, reimbursement rates, certification requirements, and other necessary components.

Oregon

Oregon covers Doulas through Medicaid as a preventive service in 2012. Doulas in Oregon complete certification requirements as outlined by the Oregon health Authority which includes at least 28 hours of education, six hours of cultural competency training, and six contact hours related to Doula care³⁷. To become Medicaid reimbursed for Doula services, Doulas must first register as a traditional health worker, become an Oregon Medicaid provider, then bill for Doula services covered by Oregon Medicaid which includes four maternity support benefits and up to four maternity support visits and Doula support provided on the day of delivery³⁸. Unique to Oregon is also the creation of Doula "hubs", which is where state certified Doulas have begun to form peer-support groups to make the billing process easier, provide referrals, and coordinate substitutes.³⁹

Review of State Strategies

As demonstrated above, only a handful of state Medicaid programs cover Doula services. Currently, Minnesota and Oregon are the only states to cover Doula services on a statewide basis as a Medicaid benefit. ⁴⁰ Both states cover Doula services through the SPA pathway: Minnesota covers services as an "extended service" for pregnant women, while Oregon covers services as a preventive service. As such – per federal requirements described in a previous section of this report – Doula services in Minnesota must be supervised by a licensed provider, while those in Oregon can be provided upon a licensed provider's recommendation. New York covers Doula

³³ Cutler, *supra* note 19.

³⁴ *Id*.

³⁵ S. 1784, 2018-2019 Regular Session (N.J. May 8, 2019).

³⁶ Lesser, Aron. (2020, August 27). Bringing Community-Based Doula Care to New Jersey. *Health Affairs*. https://www.healthaffairs.org/do/10.1377/hblog20200826.348190/full/

³⁷ https://www.nashp.org/wp-content/uploads/2020/07/Doula-Brief-7.6.2020.pdf

 $^{^{38}} https://www.oregon.gov/oha/HSD/OHP/Tools/Oregon\%20 Medicaid\%20 reimbursement\%20 for\%20 Doula\%20 services.pdf$

³⁹ https://healthlaw.org/wp-content/uploads/2018/12/NHeLP-PTBi-Doula-Care-Report.pdf

⁴⁰ At the time of this report, New Jersey was finalizing a SPA-based Doula benefit and Rhode Island had passed legislation to cover Doula services.

services as a pilot project in one county (Erie) which has among the highest maternal and infant mortality rates and the largest number of Medicaid births in the state. As a pilot project, no federal funds are involved. Indiana covers a limited set of Doula services, such as breathing and relaxation skills during pregnancy, as part of preventive services delivered by Community Health Workers (CHWs). In Nebraska, one Managed Care Organization (MCO) covers Doula services as an optional, "value-added" service (i.e., not a broader Medicaid covered service). Finally, New Jersey is in the process of introducing a Doula benefit through a SPA, and Rhode Island passed legislation in 2020 to introduce a Doula benefit for private insurance and Medicaid.

As described in Table 2, below, state Medicaid programs vary in terms of benefit packages and reimbursement rates. On the low end, Oregon reimburses for 5 touchpoints (4 prenatal/postpartum visits and attendance at delivery) at \$350. On the high end, New York reimburses for 9 touchpoints (8 prenatal/postpartum visits and attendance at delivery) at \$600.

Table 2. Medicaid Reimbursement for Doula Services in Other States

| State | # Visits (prenatal / postpartum) | Reimbursement Rate(s) |
|-----------|--|---|
| Oregon | 4 | \$350 global payment OR \$50 / visit + \$150 for delivery |
| Minnesota | 6 | \$488 for delivery + \$47 / visit |
| New York | 8 | \$600 global payment (\$360 for delivery + \$30 / visit) |
| Indiana* | Up to 12 hours / month | \$3.43 / 30-minute unit (5-8 patients) to \$9.70 / 30-minute unit (1 patient) |

^{*}Doula services provided by Community Health Workers under supervision of a licensed provider

Analysis of the Appropriate Rates

Several criteria informed analysis of an appropriate reimbursement rate for Doula services. These criteria included:

- Market data on Doula services in Virginia. A survey of workgroup participants collected data on practices of Doulas currently offering services in Virginia. Fifteen responses were collected, representing at least 40 practicing Doulas (an estimated 700 Doulas provide Doula services in Virginia). Data were collected on: billing models used; reimbursement rates; scope of services provided; costs of services; client caseload; and certifications.
- Benefit package structure and reimbursement rates for Doula services in other Medicaid programs (described in the previous section).
- Virginia Medicaid reimbursement rates for maternal care by licensed providers. Doula
 services exist within a broader continuum of maternal and child health services delivered
 by licensed, clinical providers with pre-existing reimbursement rates. Given the generally
 more intense level of education, training and credentialing of clinical providers, data on

⁴¹https://www.health.ny.gov/health_care/medicaid/redesign/Doulapilot/index.htm#:~:text=The%20Doula%20pilot%20is%20a,racial%20disparities%20in%20health%20outcomes.&text=The%20pilot%20will%20focus%20on,births%20in%20New%20York%20State

- services by licensed providers comparable to those provided by Doulas such as prenatal/postpartum visits and labor/delivery served as a reference point.
- *Healthcare industry cost standards*. Common inputs into health care provider fees such as costs related to insurance, training and travel, were considered.

Recommended Benefit Design

Based on data collected in the survey of Doulas, benefit structures in other Medicaid programs, and feedback from workgroup participants, DMAS subject matter experts and Managed Care Organizations, Table 3 summarizes key features of a recommended Doula benefit for Virginia Medicaid members. A standard case would be composed of nine touchpoints: eight prenatal/postpartum visits and attendance at delivery. Minimum requirements for reimbursement for delivery would be built in to promote delivery of the full package of services, continuity of care, and timely care. Service flexibilities would emphasize individualized, culturally sensitive, and appropriate care for a given case while recognizing that not all services can be delivered in all cases. To ensure that Doulas and their services are integrated into the broader spectrum of maternal and child health available to Medicaid members, postpartum-focused incentive payments would be made based on successful referrals for the mother and/or newborn by Doulas to other providers of complementary maternal care.

Table 3. Recommended Virginia Medicaid Doula Benefit Design

| Table 3. Recommended virginia viculeard Bodia Benefit Besign | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|
| Feature | Description | | | | | | | | | |
| Minimum services included in episode of care | 8 prenatal/postpartum visits (60-90 minutes) Attendance at delivery | | | | | | | | | |
| Minimum requirements for reimbursement for delivery | 2 prenatal/1 postpartum visit required for reimbursement of delivery 1st postpartum visit performed within 7 days of delivery At least 1 prenatal and 1 postpartum visit performed by same Doula (continuity of care) | | | | | | | | | |
| Service flexibilities | Timing of majority of prenatal/postpartum visits jointly developed by Doula and Medicaid member through individualized/appropriate plan of care Reimbursement made on the basis of actual services rendered | | | | | | | | | |
| Linkage to care incentives* | Incentive payments for: Successful referral/linkage of mother to postpartum visit Successful referral/linkage of newborn to provider visit | | | | | | | | | |

^{*} Dependent on delivery of full episode of care

Recommended Reimbursement Rates

Taking into account Doula survey data and industry cost standards, the benefit design described above would be tied to the following reimbursement rates:

- Initial visit (90 minutes): \$89.92
- Subsequent visit (60 minutes): \$59.92
- Attendance at birth: \$350
- Case (eight visits; attendance at birth): \$859
- Linkage to care incentive payment mother postpartum visit: \$50
- Linkage to care incentive payment newborn visit: \$50

Based on these rates, a standard case would be reimbursed at \$859; a standard case + both incentive payments would be reimbursed at \$959. Additional details on inputs/assumptions built into these rates are provided in Appendix IV.

Considerations on Recommended Benefit design and Reimbursement Rates

As the previously cited analytic criteria indicated, the recommended benefit package and reimbursement rates were designed to fit within the context of Doula services currently being provided (largely in the private-pay market), Doula benefits of other Medicaid programs and Virginia Medicaid reimbursement for clinical maternal and child health services. Table 4, below, summarizes points of similarity and difference between the report's recommendations on Doula benefit design and reimbursement rates and data collected from the survey of Doula practices. Compared to data from the Doula survey, reimbursement for prenatal/postpartum visits would be approximately equivalent to average reported rates, while the minimum number of expected visits would be on the upper end of visits reported and reimbursement for attendance at birth would be lower than the reported average.

Recognizing that the Medicaid population is among the most vulnerable in Virginia, the relatively high number of touchpoints for the recommended benefit is intended to ensure that this population's particular needs are met with continuity of care. The lower reimbursement level for attendance at birth compared to reimbursement reported in the survey retains the benefit's emphasis on continuity of care while remaining within a total compensation amount that previous literature indicates is cost-effective (see Background section). Similarly, linkage-to-care incentive payments are intended to improve continuity of care for women and their newborns in the postpartum period. Nationally, one in three pregnancy-related deaths occurs after birth, and yet many women do not have adequate primary care follow-up. These incentive payments would likely represent a new type of service for Doulas and support critical transitions in care during the "fourth trimester." As such, they are an important component to ensuring access and improving health outcomes.

Table 4. Recommended Doula Benefit Compared to Doula Survey Data

| Component | Reported from Doula Survey | Report Recommendation |
|---|--|--|
| Rate for Prenatal / Postpartum visits (1-2 hours) | Range / visit: \$31 - \$150; (average*: \$50) Range / hour: \$20 - \$60 (average: \$35) | \$48 (60 minutes) - \$72 (90 minutes) |
| # prenatal/postpartum visits | 3 – 8 | 8 |
| Rate for attendance at delivery | Per service: \$325 - \$1,265 (average: \$750) | \$450 |

^{*} Excludes \$150 outlier

While the recommended rates would be significantly higher than those found in other Medicaid programs (see Table 2), available data suggest that rates offered by other programs may limit the financial viability of Doula providers in taking on significant Medicaid member caseloads. For example, Minnesota Medicaid representatives indicated that, in 2019, approximately 1% of pregnant Medicaid members received Doula services. A low Medicaid reimbursement rate compared to rates from alternative payers (e.g., private pay) was cited as a likely primary factor in low uptake of services. In Indiana, where Doula services are provided by Community Health Workers with reimbursement on an hourly basis, fewer than 100 claims have been submitted by supervising providers over the past 1.5 years.⁴²

Finally, the recommended reimbursement rates reflect the level of training and education of Doula providers compared to clinical providers of maternal and child health services. Table 5, below, compares the recommended reimbursement rates for Doula services with current Virginia Medicaid rates for analogous maternal health services provided by clinical providers. Compared to reimbursement rates for licensed clinical providers, a full episode of Doula care is approximately 45% of a package of routine obstetrical care;, attendance at birth is 48% of reimbursement for routine (vaginal) delivery;, and prenatal/postpartum visits range from 57% to 85% of a package of prenatal visits. With the emphasis of the Doula benefit on delivering a full episode of care, the recommended reimbursement rates reflect the relative training and education of Doula/clinical providers.

Table 5. Recommended Doula Reimbursement Rates Compared to Medicaid Reimbursement for Clinical Maternal Services

| Catagony | Do | ula: | Licensed Provider | r: | Doula reimbursement | | |
|--------------------|------------------------------------|-------|---|---------|---------------------------|--|--|
| Category | Services | Rate | Services, | Rate | as % licensed provider | | |
| Episode of care | 8 visits + attendance at birth | \$859 | Routine obstetric care (prenatal/postpartum care; vaginal delivery) (CPT 59400) | \$1,910 | 45% | | |
| Labor/deliver y | iver Attendance \$350 Vag at birth | | Vaginal delivery (CPT 59409) | \$730 | 48% | | |

-

⁴² Personal communication, Indiana Family and Social Services Administration.

| Visits | 8 visits (1 @ | \$408 (\$60 / | 4-6 prenatal visits (CPT 59425) | \$420 (equivalent | 57% - 85% |
|--------|---------------|---------------|---------------------------------|-------------------|-----------|
| | 90 minutes; | 60 minute | | to \$70 - \$105 | |
| | 7 @ 60 | visit) | | /visit) | |
| | minutes) | | | | |

Estimated Costs and Potential Savings Over the Next Six Years

Implementation of the recommended Doula benefit is estimated to save the Commonwealth between \$356,000 and \$1.77M over six years in labor and delivery costs (see Table 6). The following assumptions underpin the estimated analysis of costs and savings:

- Projected # annual births reimbursed by Virginia Medicaid: 23,599⁴³
- Projected # annual births receiving Doula support: 589 (Year 1) to 3,769 (Year 6)
- Reduced rate of cesarean section deliveries due to Doula services:14%⁶
- Reduced rate of pre-term births leading to high-cost NICU stays: 2%⁶
- 1.75% annual increase in costs per birth and NICU costs

Based on these assumptions, over a six year period, the total costs associated with labor and delivery in the absence of Doula services are estimated at \$1,008,199,763, while total costs including Doula services are estimated at \$1,006,442,300 – if no incentive payments were reimbursed – to \$1,007,844,000 – if all Doula services included incentive payments. These totals equate to estimated savings to the Commonwealth of \$355,763 to \$1,7567,463.

Table 6. Six-Year Cost-Savings Estimates of Recommended Doula Benefit

| | Without | Doula | Services | | | | | | |
|-------------------|-----------------|--------|-------------------|-------------|------------|-----------------------------|------------------------------------|--|-----------------------|
| Cost Component | Average Cost | O | | | | Average Cost | Total User s | | Net Savings / (Costs) |
| Delivery | | | | | | | | | |
| Vaginal | \$3,715 | 92,046 | \$341,99 6,151 | \$3,717 | 94,02 0 | \$349,433,468 | \$(7,437,316) | | |
| Cesarean | \$5,691 | 49,308 | \$280,61 0,525 | \$5,688 | 47,33 4 | \$269,218,878 | \$11,391,647 | | |
| NICU | \$54,555 | 7,068 | \$385,59 3,086 | \$54,535 | 6,890 | \$375,744,434 | \$9,848,653 | | |
| Doula | \$0 | 0 | \$0 | \$859-\$959 | 14,01 7 | \$12,045,520 - \$13,447,220 | \$(13,447,220) - \$(12,045,520) | | |

⁴³ State Fiscal Year (SFY) 2016 – SFY 2019 Medicaid managed care data were reviewed to estimate the proportion of vaginal and cesarean births. SFY2018 data were used as the baseline for the total number of births (data limitations precluded use of SFY 2019 data as the baseline). To be conservative in estimates, no trend was applied to the number of births per year.

| Total | \$1,008,1 | \$1,006,442,3- | -\$1,007,844,0 | \$355,763 - \$1,7567,483 |
|-------|-----------|----------------|----------------|--------------------------|
| | 99,763 | 00 | 00 | |

Importantly, the present model assumes 14,017 women would receive Doula services over a six-year period. Lower-than-expected utilization of Doula services would likely remain cost-saving but reduce the magnitude of savings. For example, if 50% of the projected 14,017 members anticipated to receive Doula services were actually served over six years, savings would range from \$280,000 to \$980,000. If 25% of the projected 14,017 members received Doula services, savings would range from \$271,000 to \$620,000.

There are additional areas for potential indirect and/or long-term savings that were not included in the savings estimate due to limited available data to support an estimate. These include potential savings from:

- Decreased treatment costs of postpartum depression (provider visits; pharmacological treatment);
- Improved maternal and child health outcomes for successful linkages by Doulas to maternal postpartum and newborn provider visits;
- Improved long-term child health from increased rates of breastfeeding and early attendance of wellness visits; and
- Decreased post-partum medical complications.

Appendix V and VI provides further detail on estimated cost savings, including projected savings on a year-by-year basis.

Conclusion

Doula services can be life-saving resources for pregnant women in Virginia. The recommendations offered by the Virginia Medicaid Doula Benefit Work Group include that the benefit be introduced as a preventive service through a Medicaid State Plan Amendment, reimburse \$850 for up to eight prenatal/postpartum visits, attendance at delivery plus up to \$100 in linkage-to-care incentive payments and contain flexibilities for providers that balance individualized, culturally sensitive, trauma-informed appropriate care with minimum requirements that promote delivery of a full package of services, continuity of care, and timeliness in care. These workgroup recommendations seek to ensure that all Doulas in Virginia are appropriately compensated for their critical work and that pregnant and postpartum Medicaid recipients receive high-quality maternity support without barriers to care.

Appendices

Appendix I: 2020 Acts of Assembly, Chapter 1289, Item 291(E):

"The Secretary of Health and Human Resources shall convene a workgroup to review and make recommendations regarding the state regulation of Doulas and establishing a community Doula benefit for pregnant women covered by Medicaid. The workgroup shall include representatives from the Department of Medical Assistance Services, the Virginia Department of Health, and the Department of Health Professions, as well as representatives from community Doula practitioners, stakeholder groups, and community organizations. The workgroup shall examine and report on the (i) federal requirements and permissibility associated with providing a Medicaid Doula benefit; (ii) impact that state regulation would have on Doula practitioners; (iii) a review of strategies other states have implemented; (iv) an analysis of the appropriate rates for such a benefit; and (v) the estimated costs and potential savings to the state and practitioners over the next six years. The workgroup shall report its findings and recommendations to the Governor and to the Chairs of the House Appropriations and Senate Finance and Appropriations Committees by December 1, 2020."

Appendix II: 2020 Acts of Assembly, Chapter 841:

"That the Department of Medical Assistance Services shall convene a work group to evaluate the potential costs and benefits, including potential reductions in maternal and infant mortality rates, of amending the state plan for medical assistance services to include a provision for the payment of medical assistance for antepartum, intrapartum, or postpartum services provided to a pregnant person or to a person who is up to one year postpartum for labor and delivery support by a certified Doula and at least four visits during the antenatal period and at least seven visits during the postpartum period with a certified Doula. Such work group shall also develop recommendations related to an appropriate reimbursement rate for such services provided by certified Doulas. The work group shall report its findings and recommendations to the Governor and the Chairmen of the House Committee on Appropriations and the Senate Committee on Finance and Appropriations by December 1, 2020

Appendix III: Workgroup Members

Families Forward Virginia

Managed Care Organizations

Medical Society of Virginia Motherhood Collective

Office of the Secretary of Health and Human Resources

RVA Birth in Color

University of Virginia School of Law

Urban Baby Beginnings

Virginia Department of Health

Virginia Department of Health Professions

Virginia Department of Medical Assistance Services

Virginia Department of Social Services

Virginia Hospital and Healthcare Association

Appendix IV: Doula Fee Development

| | Doula Fee Development | | | | | | | | | | | |
|---|---------------------------|---|------|-----------|--------|------------|--------|--|--|--|--|--|
| | | FTE | Lo | wer Bound | Up | pper Bound | | | | | | |
| Α | | Doula | 1.00 | \$ | 28,350 | \$ | 28,350 | | | | | |
| В | Employee Related | Percent of Staff Wages | | | 35.9% | | 35.9% | | | | | |
| С | Expenses (ERE) | Total ERE | | \$ | 10,191 | \$ | 10,191 | | | | | |
| D | Staff Wages and ERE (A | (i + C) | | \$ | 38,541 | \$ | 38,541 | | | | | |
| Ε | | Training and Certification Expense (Percent of Final Fee) | | | 0.3% | | 0.3% | | | | | |
| F | Additional Costs | Annual Training and Certification Expense | | \$ | 127 | \$ | 127 | | | | | |
| G | Additional Costs | Travel Expense (Percent of Final Fee) | | | 1.7% | | 1.7% | | | | | |
| Н | | Annual Travel Expense | | \$ | 776 | \$ | 776 | | | | | |
| | Administration | Administration (Percent of Final Fee) | | | 15% | | 15% | | | | | |
| J | Administration | Annual Administration Expenses | | \$ | 6,961 | \$ | 6,961 | | | | | |
| Κ | Total Salary and Expen | ses (D + F + H + J) | | \$ | 46,405 | \$ | 46,405 | | | | | |
| L | Total Direct Hours Per Ye | ear | | | 945 | | 945 | | | | | |
| Μ | Total Indirect Hours Per | /ear | | | 486 | | 486 | | | | | |
| Ν | Total Admin/Vacation/Tra | ining Hours Per Year | | | 436 | | 436 | | | | | |
| 0 | Incentive Payment (2 in- | centive payments at \$50 each) | | | | \$ | 100.00 | | | | | |
| Р | Final Individual Fee Per | | \$ | 859.35 | \$ | 959.35 | | | | | | |
| Q | Final Individual Fee Per | Birth | | \$ | 350.00 | \$ | 350.00 | | | | | |
| R | Final Individual Fee Per | Visit of Initial Visit | | \$ | 89.89 | \$ | 89.89 | | | | | |
| S | Final Individual Fee Per | Visit of Prenatal/Postpartum Care | | \$ | 59.92 | \$ | 59.92 | | | | | |

Notes

- 1. Staff wages calculation: Estimated cost per hour x Estimated hours per case x Estimated cases per year.
- 2. ERE includes: Health Insurance Premium, Federal and State Unemployment Tax Acts, Percent Worker's Compensation, FICA and other miscellaneous costs.
- 3. Additional Costs include annual Doula Certification training requirements and estimated travel expenses.
- 4. Final Individual Fee Per Doula Case estimates attendance at birth and 8 visits.

Appendix V: Year-by-Year Cost Savings Analysis (Without Incentive Payments)

| | | Year 1 (2022) | | | | | | | | | | | | |
|-------------------|-----|---------------|-----------------------|----|-------------|---------------------|--------------|-------------|------------------------|-------------|----|-------------------------|--|--|
| | | W | fithout Doula Service | es | | With Doula Services | | | | | | | | |
| Cost Component | Ave | erage Cost | rage Cost Total Users | | Total Cost | | Average Cost | Total Users | Total Users Total Cost | | | Net Savings/ (Costs) | | |
| Vaginal Delivery | \$ | 3,556 | 15,341 | \$ | 54,556,100 | \$ | 3,556 | 15,424 | \$ | 54,851,267 | \$ | (295,167) | | |
| Cesarean Delivery | \$ | 5,447 | 8,218 | \$ | 44,763,708 | \$ | 5,447 | 8,135 | \$ | 44,311,605 | \$ | 452,104 | | |
| NICU | \$ | 52,216 | 1,178 | \$ | 61,510,795 | \$ | 52,216 | 1,171 | \$ | 61,145,281 | \$ | 365,514 | | |
| Doula | \$ | 859 | 0 | \$ | - | \$ | 859 | 589 | \$ | 506,158 | \$ | (506,158) | | |
| Total | | | | \$ | 160,830,604 | | | | \$ | 160,814,311 | \$ | 16,293 | | |

| | | Year 2 (2023) | | | | | | | | | | | | |
|-------------------|----|---------------|----------------------|----|-------------|---------------------|--------|-------------|------------|-------------|----|-------------------------|--|--|
| | | W | ithout Doula Service | es | | With Doula Services | | | | | | | | |
| Cost Component | Av | verage Cost | Total Users | | Total Cost | Average Cost | | Total Users | Total Cost | | | Net Savings/ (Costs) | | |
| Vaginal Delivery | \$ | 3,618 | 15,341 | \$ | 55,510,832 | \$ | 3,618 | 15,507 | \$ | 56,111,497 | \$ | (600,665) | | |
| Cesarean Delivery | \$ | 5,542 | 8,218 | \$ | 45,547,073 | \$ | 5,542 | 8,052 | \$ | 44,627,042 | \$ | 920,031 | | |
| NICU | \$ | 53,130 | 1,178 | \$ | 62,587,234 | \$ | 53,130 | 1,163 | \$ | 61,790,283 | \$ | 796,951 | | |
| Doula | \$ | 859 | 0 | \$ | - | \$ | 859 | 1,178 | \$ | 1,012,315 | \$ | (1,012,315) | | |
| Total | | | | \$ | 163,645,139 | | | | \$ | 163,541,137 | \$ | 104,002 | | |

| | | | | | | Year 3 (2024) | | | | | | | | | |
|-------------------|----|-------------|-----------------------|----|-------------|---------------------|--------------|-------------|----|-------------|----|-------------------------|--|--|--|
| | | W | fithout Doula Service | 25 | | With Doula Services | | | | | | | | | |
| Cost Component | Av | verage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | | |
| Vaginal Delivery | \$ | 3,682 | 15,341 | \$ | 56,482,272 | \$ | 3,682 | 15,673 | \$ | 57,704,625 | \$ | (1,222,353) | | | |
| Cesarean Delivery | \$ | 5,639 | 8,218 | \$ | 46,344,147 | \$ | 5,639 | 7,886 | \$ | 44,471,884 | \$ | 1,872,263 | | | |
| NICU | \$ | 54,060 | 1,178 | \$ | 63,682,510 | \$ | 54,060 | 1,148 | \$ | 62,060,715 | \$ | 1,621,796 | | | |
| Doula | \$ | 859 | 0 | \$ | - | \$ | 859 | 2,356 | \$ | 2,024,630 | \$ | (2,024,630) | | | |
| Total | | | | \$ | 166,508,929 | | | | \$ | 166,261,854 | \$ | 247,075 | | | |

| | | | | | | | Year 4 (2025) | | | | | | | |
|-------------------|----|-------------|----------------------|----|-------------|---------------------|---------------|-------------|----|-------------|----|-------------------------|--|--|
| | | V | ithout Doula Service | es | | With Doula Services | | | | | | | | |
| Cost Component | Av | verage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | |
| Vaginal Delivery | \$ | 3,746 | 15,341 | \$ | 57,470,711 | \$ | 3,746 | 15,739 | \$ | 58,961,706 | \$ | (1,490,994) | | |
| Cesarean Delivery | \$ | 5,738 | 8,218 | \$ | 47,155,170 | \$ | 5,738 | 7,820 | \$ | 44,871,432 | \$ | 2,283,738 | | |
| NICU | \$ | 55,006 | 1,178 | \$ | 64,796,954 | \$ | 55,006 | 1,142 | \$ | 62,816,742 | \$ | 1,980,213 | | |
| Doula | \$ | 859 | 0 | \$ | - | \$ | 859 | 2,827 | \$ | 2,429,385 | \$ | (2,429,385) | | |
| Total | | | | \$ | 169,422,835 | | | | \$ | 169,079,264 | \$ | 343,571 | | |

| | | | | | | | Year 5 (2026) | | | | | | | | |
|-------------------|----|------------|----------------------|----|-------------|---------------------|---------------|-------------|----|-------------|----|-------------------------|--|--|--|
| | | W | ithout Doula Service | es | | With Doula Services | | | | | | | | | |
| Cost Component | Av | erage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | | |
| Vaginal Delivery | \$ | 3,812 | 15,341 | \$ | 58,476,449 | \$ | 3,812 | 15,805 | \$ | 60,245,113 | \$ | (1,768,664) | | | |
| Cesarean Delivery | \$ | 5,838 | 8,218 | \$ | 47,980,385 | \$ | 5,838 | 7,754 | \$ | 45,271,344 | \$ | 2,709,041 | | | |
| NICU | \$ | 55,969 | 1,178 | \$ | 65,930,901 | \$ | 55,969 | 1,136 | \$ | 63,580,224 | \$ | 2,350,677 | | | |
| Doula | \$ | 859 | 0 | \$ | | \$ | 859 | 3,298 | \$ | 2,834,139 | \$ | (2,834,139) | | | |
| Total | | | | \$ | 172,387,735 | | | | \$ | 171,930,820 | \$ | 456,915 | | | |

| | | | | | | Year 6 (2027) | | | | | | | | | |
|-------------------|-----|------------|----------------------|----|-------------|---------------------|--------------|-------------|----|-------------|----|-------------------------|--|--|--|
| | | W | Vithout Doula Servic | es | | With Doula Services | | | | | | | | | |
| Cost Component | Ave | erage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | | |
| Vaginal Delivery | \$ | 3,878 | 15,341 | \$ | 59,499,787 | \$ | 3,878 | 15,872 | \$ | 61,559,261 | \$ | (2,059,474) | | | |
| Cesarean Delivery | \$ | 5,941 | 8,218 | \$ | 48,820,042 | \$ | 5,941 | 7,687 | \$ | 45,665,571 | \$ | 3,154,471 | | | |
| NICU | \$ | 56,948 | 1,178 | \$ | 67,084,692 | \$ | 56,948 | 1,130 | \$ | 64,351,190 | \$ | 2,733,502 | | | |
| Doula | \$ | 859 | - | \$ | | \$ | 859 | 3,769 | \$ | 3,238,893 | \$ | (3,238,893) | | | |
| Total | | | | \$ | 175,404,520 | | | | \$ | 174,814,914 | \$ | 589,606 | | | |

Appendix VI: Year-by-Year Cost-Savings Analysis (With Incentive Payments)

| | | | | | | | Year 1 (2022) | | | | | | | |
|-------------------|----|-------------|-----------------------|----|-------------|---------------------|---------------|-------------|----|-------------|----|-------------------------|--|--|
| | | V | fithout Doula Service | es | | With Doula Services | | | | | | | | |
| Cost Component | A | verage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | |
| Vaginal Delivery | \$ | 3,556 | 15,341 | \$ | 54,556,100 | \$ | 3,556 | 15,424 | \$ | 54,851,267 | \$ | (295,167) | | |
| Cesarean Delivery | \$ | 5,447 | 8,218 | \$ | 44,763,708 | \$ | 5,447 | 8,135 | \$ | 44,311,605 | \$ | 452,104 | | |
| NICU | \$ | 52,216 | 1,178 | \$ | 61,510,795 | \$ | 52,216 | 1,171 | \$ | 61,145,281 | \$ | 365,514 | | |
| Doula | \$ | 959 | 0 | \$ | - | \$ | 959 | 589 | \$ | 565,058 | \$ | (565,058) | | |
| Total | | | | \$ | 160,830,604 | | | | \$ | 160,873,211 | \$ | (42,607) | | |

| | | | | | | Year 2 (2023) | | | | | | | | | | |
|-------------------|----|-------------|-----------------------|-----|-------------|---------------|--------------|-------------|------|-------------|----|-------------------------|--|--|--|--|
| | | W | fithout Doula Service | es. | | | | With Doul | a Se | ervices | | | | | | |
| Cost Component | A | verage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | | | |
| Vaginal Delivery | \$ | 3,618 | 15,341 | \$ | 55,510,832 | \$ | 3,618 | 15,507 | \$ | 56,111,497 | \$ | (600,665) | | | | |
| Cesarean Delivery | \$ | 5,542 | 8,218 | \$ | 45,547,073 | \$ | 5,542 | 8,052 | \$ | 44,627,042 | \$ | 920,031 | | | | |
| NICU | \$ | 53,130 | 1,178 | \$ | 62,587,234 | \$ | 53,130 | 1,163 | \$ | 61,790,283 | \$ | 796,951 | | | | |
| Doula | \$ | 959 | 0 | \$ | - | \$ | 959 | 1,178 | \$ | 1,130,115 | \$ | (1,130,115) | | | | |
| Total | | | | \$ | 163,645,139 | | | | \$ | 163,658,937 | \$ | (13,798) | | | | |

| | | | | | | | Year 3 (2024) | | | | | | | |
|-------------------|----|-------------|----------------------|----|-------------|---------------------|---------------|-------------|----|-------------|----|-------------------------|--|--|
| | | V | ithout Doula Service | es | | With Doula Services | | | | | | | | |
| Cost Component | A | verage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | |
| Vaginal Delivery | \$ | 3,682 | 15,341 | \$ | 56,482,272 | \$ | 3,682 | 15,673 | \$ | 57,704,625 | \$ | (1,222,353) | | |
| Cesarean Delivery | \$ | 5,639 | 8,218 | \$ | 46,344,147 | \$ | 5,639 | 7,886 | \$ | 44,471,884 | \$ | 1,872,263 | | |
| NICU | \$ | 54,060 | 1,178 | \$ | 63,682,510 | \$ | 54,060 | 1,148 | \$ | 62,060,715 | \$ | 1,621,796 | | |
| Doula | \$ | 959 | 0 | \$ | - | \$ | 959 | 2,356 | \$ | 2,260,230 | \$ | (2,260,230) | | |
| Total | | | | \$ | 166,508,929 | | | | \$ | 166,497,454 | \$ | 11,475 | | |

| | | | | | | | Year 4 (2025) | | | | | | | |
|-------------------|----|-------------|----------------------|----|-------------|---------------------|---------------|-------------|----|-------------|----|-------------------------|--|--|
| | | W | ithout Doula Service | es | | With Doula Services | | | | | | | | |
| Cost Component | A۱ | verage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | |
| Vaginal Delivery | \$ | 3,746 | 15,341 | \$ | 57,470,711 | \$ | 3,746 | 15,739 | \$ | 58,961,706 | \$ | (1,490,994) | | |
| Cesarean Delivery | \$ | 5,738 | 8,218 | \$ | 47,155,170 | \$ | 5,738 | 7,820 | \$ | 44,871,432 | \$ | 2,283,738 | | |
| NICU | \$ | 55,006 | 1,178 | \$ | 64,796,954 | \$ | 55,006 | 1,142 | \$ | 62,816,742 | \$ | 1,980,213 | | |
| Doula | \$ | 959 | 0 | \$ | - | \$ | 959 | 2,827 | \$ | 2,712,085 | \$ | (2,712,085) | | |
| Total | | | | \$ | 169,422,835 | | | | \$ | 169,361,964 | \$ | 60,871 | | |

| | | | | | | | Year 5 (2026) | | | | | | | | |
|-------------------|----|------------|----------------------|----|-------------|---------------------|---------------|-------------|----|-------------|----|-------------------------|--|--|--|
| | | W | ithout Doula Service | 15 | | With Doula Services | | | | | | | | | |
| Cost Component | Av | erage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | | |
| Vaginal Delivery | \$ | 3,812 | 15,341 | \$ | 58,476,449 | \$ | 3,812 | 15,805 | \$ | 60,245,113 | \$ | (1,768,664) | | | |
| Cesarean Delivery | \$ | 5,838 | 8,218 | \$ | 47,980,385 | \$ | 5,838 | 7,754 | \$ | 45,271,344 | \$ | 2,709,041 | | | |
| NICU | \$ | 55,969 | 1,178 | \$ | 65,930,901 | \$ | 55,969 | 1,136 | \$ | 63,580,224 | \$ | 2,350,677 | | | |
| Doula | \$ | 959 | 0 | \$ | | \$ | 959 | 3,298 | \$ | 3,163,939 | \$ | (3,163,939) | | | |
| Total | | | | \$ | 172,387,735 | | | | \$ | 172,260,620 | \$ | 127,115 | | | |

| | | | | | | Year 6 (2027) | | | | | | | | |
|-------------------|----|------------|---------------------|----|-------------|---------------------|--------------|-------------|----|-------------|----|-------------------------|--|--|
| | | W | ithout Doula Servic | es | | With Doula Services | | | | | | | | |
| Cost Component | Av | erage Cost | Total Users | | Total Cost | | Average Cost | Total Users | | Total Cost | | Net Savings/ (Costs) | | |
| Vaginal Delivery | \$ | 3,878 | 15,341 | \$ | 59,499,787 | \$ | 3,878 | 15,872 | \$ | 61,559,261 | \$ | (2,059,474) | | |
| Cesarean Delivery | \$ | 5,941 | 8,218 | \$ | 48,820,042 | \$ | 5,941 | 7,687 | \$ | 45,665,571 | \$ | 3,154,471 | | |
| NICU | \$ | 56,948 | 1,178 | \$ | 67,084,692 | \$ | 56,948 | 1,130 | \$ | 64,351,190 | \$ | 2,733,502 | | |
| Doula | \$ | 959 | - | \$ | - | \$ | 959 | 3,769 | \$ | 3,615,793 | \$ | (3,615,793) | | |
| Total | | | | \$ | 175,404,520 | | | | \$ | 175,191,814 | \$ | 212,706 | | |