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Community-Based Maternal Support Services: The Role of Doulas and Community Health Workers in Medicaid

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In 2018, Medicaid covered approximately 43 percent of all births in the United States.[1] As the largest single payer of maternity care, Medicaid plays a critical role in the health and wellbeing of pregnant individuals across the nation. As such, it is important to identify ways in which innovative models of maternity care and support services are being implemented in the Medicaid population. This report explores how community-based maternal support services provided by community-based doulas and maternity community health workers improve maternal health outcomes. It also highlights the results of a national environmental scan of organizations that are actively working toward eliminating maternal health disparities and building community connections through the community-based maternal support model. Finally, the report identifies common barriers to implementing this model and opportunities for Medicaid stakeholders to provide support and increased access to these services.

The community-based maternal model of care combines the specific pregnancy, labor, and postpartum expertise of doulas with the community and cultural connections of community health workers (CHWs). These two overarching professional models, doulas and CHWs, might overlap as their roles merge, resulting in community-based doulas and maternity community health workers. The nuances between these definitions are described in Table 1.

The mission of the Institute for Medicaid Innovation is to improve the lives of Medicaid enrollees through the development, implementation, and diffusion of innovative and evidence-based models of care that promote quality, value, equity and the engagement of patients, families, and communities.

Table 1. Key Terms and Definitions

Term	Definition
Doula	Non-clinical support worker who provides continuous emotional, informational, and physical support for individuals before, during, and after labor. This includes explanations and guidance on medical procedures, lactation support, physical comfort measures during labor, education on coping skills and infant care, and encouragement of bodily autonomy and personal advocacy in the medical institution.[2]
Community-based Doula	A doula who is a trusted member of the communities they serve and who often offers services at low to no cost to the recipient. Community-based doulas often provide an expanded set of services over the private-pay doula, including connecting individuals with community resources and increasing the number of home visits pre- and postpartum.[2, 3]
Community Health Worker	A community health worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A community health worker also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy.[4]
Maternity Community Health Worker	A maternity community health worker utilizes the general skills of a CHW as described above and combines them with specific expertise related to pregnancy, birth, and postpartum care. It is similar in scope to a community-based doula.[3]

Source: Institute for Medicaid Innovation (2020). *Community-based maternal care: The role of doulas and community health workers in Medicaid.*

Medicaid covered 43 percent of births in the United States in 2018, making it the largest single payer of maternity care.[1] As such, it is important to understand how the community-based maternity model of care may be implemented within the Medicaid program. Considering that pregnant Medicaid enrollees often face barriers to care including churn, unmet social needs, and racism, it is critical to explore innovative models of care that may promote health equity.[5-9] Community-based maternal care professionals provide valuable services, including home visiting during and after pregnancy, labor support, and encouragement of bodily autonomy.[8-11] This model of care combines the expertise of doulas with the community connections and cultural congruity of community health workers. It is common for doula care to be confused with midwifery care. Although doulas and midwives often work collaboratively in a variety of birth settings, each is very different with a distinct set of services. Certified nurse-midwives are licensed clinicians with advanced graduate training. Doulas and maternity CHWs complete vocational training to provide supportive, not clinical, services. This report explores how community-based doulas and maternity CHWs may provide high-value care that improves maternal health outcomes. For more information about nurse-midwives and birth settings, access IMI's report, *Improving Maternal Health Access, Coverage, and Outcomes in Medicaid: A Resource for State Medicaid Agencies and Medicaid Managed Care Organizations*.

Doula Services in Medicaid

Doulas are health care workers who provide continuous emotional, informational, and physical support for individuals before, during, and after labor.[2] For example, doula services include explanations of medical procedures, lactation support, physical comfort measures during labor, education on coping skills and infant care, and encouragement of bodily autonomy and personal advocacy in the medical institution.[2] There are two major types of doula models: the private-pay doula and the community-based doula. The private-pay doula model includes training and practicing as birth doulas and/or postpartum doulas. Private-pay doulas typically receive training related to the birth process, emotional support, labor coping mechanisms, postpartum care, newborn care, infant sleep, and lactation.[8] Upon completion of training, private-pay doulas typically establish a small business using an entrepreneurial, private practice framework in which doulas become their own practicing entity rather than working as part of a collective.[2]

The community-based doula model utilizes the community health worker (CHW) framework to provide culturally appropriate support to women in underserved communities.[2] Like CHWs, community-based doulas are trusted members of the communities they serve and offer services at low to no cost, relying on other funding mechanisms (e.g., community grants) to supplement their fees.[2,3] The services are often more expanded than those of a traditional private-pay doula and may include an increased number of home visits during the prenatal and postpartum period, referral services to relevant social programs, and care coordination between different health care providers.[3] Unlike the private-pay doula model in which doulas act as individual entrepreneurs, community-based doulas often work as part of an organization or collective.[2]

Outcomes for Doula Services

The evidence on doula services demonstrates an associated reduction in overall rates of maternal and infant mortality and morbidity. A Cochrane systematic review found that women with continuous support during labor were more likely to have spontaneous vaginal birth and less likely to report negative feelings about their childbirth experience.[10] The report also noted that while having support through various roles reduced relative risk of cesarean birth by 25 percent, the presence of a doula decreased this risk by 39 percent.[10,12] Furthermore, the report found that during labor, individuals provided with continuous support were less likely to use pain medication or epidural anesthesia and had a lower rate of vacuum- or forceps-assisted birth.[9] Evidence also suggests that doulas are associated with shorter births, on average about a 40-minute reduction, and higher Apgar scores for infants at birth.[10] Finally, observational studies of "extended" doula models inclusive of pregnancy and postpartum periods (similar in scope to community-based doulas) have found that doula services are associated with higher rates of breastfeeding initiation, particularly among low-income and racially/ethnically diverse individuals.[13, 14] The American College of Obstetricians and Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine (SMFM), the preeminent professional associations for obstetric care, report that continuous labor support by a doula is "one of the most effective tools to improve labor and delivery outcomes."[15]

In an attempt to systematically monitor and evaluate community-based doula programs, HealthConnect One, a leading community-based doula organization, launched Doula Data in 2008. The online platform captured data from eight community-based doula organizations, six of which receive federal support. During the 2008-2012 period, of the 592 women served by community-based doulas, the vast majority were low income (i.e., 87% were WIC eligible), 33 percent were black, and 47 percent were Hispanic.[3] Almost half (42%) of the recipients of community-based doula services had one or more health conditions associated with adverse pregnancy and birth outcomes, such as overweight, diabetes, and heart disease. When comparing the outcomes of this population with the CDC Pregnancy Risk Assessment Monitoring System (PRAMS) data, women served by community-based doulas were found to breastfeed longer (74.49% at six weeks compared to 53.43%) and were more likely to engage in exclusive breastfeeding (37.14% at six months compared to 16.81%).[3] These differences were even more pronounced for black (39.13% compared to 7.39%) and Hispanic (64.86% compared to 32.72%) women. In addition, analysis of the Doula Data found lower cesarean birth rates for those enrolled in community-based doula programs compared to a sample of participants from the PRAMS dataset (24% compared to 30%).[3] However, limitations exist in comparing outcomes between the two data sets. Currently, the Doula Data platform is no longer active. Future research should continue to explore the impact of community-based doula care for the Medicaid population, including developing effective, user-friendly ways to collect evaluative data from various community-based doula organizations.

The following case study from HealthConnect One demonstrates the replicability and successful implementation of a community-based doula model. HealthConnect One's program has been implemented across the nation and is recognized as an Association of Maternal and Child Health Programs (AMCHP) Innovation Practice. In 2014, the organization released *The Perinatal Revolution*, which shared and contextualized recommendations from an expert panel regarding the HealthConnect One Community-Based Doula Home Visiting Program. Among the various sites, a key barrier to sustainability has been challenges with Medicaid reimbursement and contracting with managed care organizations (MCOs).

Leveraging Community-Based Doulas for the Medicaid Population

Initiative: HealthConnect One Community Based-Doula Home Visiting Program
Organization: HealthConnect One
Location: Various locations across the United States.
Phase of Initiative: Implementation and Evaluation Stage

HealthConnect One's (HC One's) community-based doula program improves infant health, strengthens families, and establishes supports to ensure ongoing family success. Across the nation, HC One connects underserved women to women in their community who are specially trained to provide support during the critical months of pregnancy, birth, and the immediate postpartum period for a period of at least six months.

Each community-based doula spends up to 100 hours with each family they serve, providing services such as pregnancy and childbirth education; early linkage to health care and other services, including prenatal, post-partum, and infant care services, with case management; encouraging parental attachment such as talking, reading, and playing with the baby before and after birth; labor coaching, including breathing and relaxation techniques; pain management; support for decision-making; problem-solving; and explaining hospital procedures; breastfeeding promotion and counseling, before and after birth; and parenting anticipatory guidance, including realistic expectations for infant development and care.

Depending on location, the Community-Based Doula Home Visiting Program has been financed in different ways, utilizing both public and private funds. It was found that most of their doula programs (96%) serve women insured by Medicaid but less than 5 percent of programs are currently funded by Medicaid.

The team at HealthConnect One identified the following challenge to implementation:

HC One has had difficulty establishing contracts with managed care organizations, having stalled at the negotiation stage. Financial security is essential for program stability; therefore Medicaid reimbursement requires both direct reimbursement and support from Medicaid managed care as part of a blended funding approach.

The team at HealthConnect One identified the following recommendations for state Medicaid agencies and managed care organizations to consider:

- Consider the overlap of services with those of community-based doulas and CHWs and reimburse accordingly.
- Establish reimbursement rates within a range that does not change significantly from year to year. Collaborate with the Department of Labor on the development of an algorithm that estimates the percentage of living wage by geography.
- Explore value-based care approaches where part of the projected savings is used for sustainability of perinatal services.

Value Proposition of Doulas in the Medicaid Population

Doula services are associated with improved health outcomes that result in increased cost savings. A recent study compared rates of preterm and cesarean birth among Medicaid recipients with prenatal access to doula services (non-medical maternal support) with similar women regionally and modeled the potential cost-effectiveness of Medicaid coverage of doula services.[16] The study found that women who received doula support had lower preterm and cesarean birth rates than did Medicaid members regionally (4.7% vs. 6.3%, and 20.4% vs. 34.2%). After adjustment for covariates, women with doula services had 22 percent lower odds of preterm birth. Cost-effectiveness analyses indicated potential savings associated with doula support reimbursed at an average of $986 (ranging from $929 to $1,047 across states).[16] Of note, these savings were limited to the variables of preterm birth and cesarean birth hospital charge savings. In addition, the study was conducted in a single state, which limited the generalizability of the findings to other state Medicaid programs. However, the potential cost savings associated with doula interventions cannot be ignored.

There are potential cost-savings in reducing the overall cesarean birth rate. Vaginal birth after cesarean birth (VBAC) rates hover at 10 percent, with most women experiencing a repeat cesarean birth.[17] The savings associated with avoiding the first cesarean section can also be compounded over a person's entire childbearing years. The same is true for reduction in preterm birth and the long-term costs associated with infant care, particularly in the first year of life. In a theoretical model of 1.8 million women, the approximate number of nulliparous women giving birth annually, it was postulated that if professional doulas attended all first births, there would be markedly improved outcomes in the first and second births of this theoretical cohort. Each professional doula was potentially cost saving up to $884. A cost-effectiveness analysis (measured in quality-adjusted life years, or QALYs) included the costs of deciding to have a doula and the health effectiveness of that decision and found that doulas were cost-effective up to $1,360 per doula.[19] In a similar analysis, researchers found that if every low-risk birth in Wisconsin were attended by a doula, there would be nearly $29 million in savings, based on 2010 data.[20]

Medicaid Reimbursement of Doula Services

As states begin to consider coverage for doula services under Medicaid, payment is often tied to the standard number of engagements of a private-pay doula. This typically includes one to two prenatal home visits, ongoing communication via email/texting/and phone calls, support during birth, and one to two postpartum visits. In contrast, community-based doula services may be more expansive, including a greater number of home visits, care coordination, and connection to community supports.[2,3] Medicaid reimbursement that does not encapsulate the full range of services provided by community-based doulas might present a barrier to the sustainability of community-based doula programs and collectives. As mentioned previously, one study evaluating sustainable funding streams for community-based doula services found that 96 percent of the 98 programs surveyed serve women who are insured by Medicaid, with 32 percent of those patients covered by managed care organizations (MCOs).[21] Most of these programs were funded by private organization grants, with less than 5 percent being reimbursed directly by Medicaid. All respondents in the study reported funding barriers as their greatest challenge, with 67 percent of respondents identifying Medicaid reimbursement for doula services as their top policy priority.[21]

State Plan Amendments

One option available to state Medicaid agencies, through the revised CMS preventive service rule (2334-F), is to amend their state plans to cover doula services. This rule gives states the option to reimburse non-licensed providers and preventive services when recommended by a physician or other licensed medical provider. To be approved to cover non-licensed preventive services, states must submit an amendment of their state Medicaid plan that includes the scope of services and who may provide those services. The amendment must define the qualifications, education, credentialing, and any registration that the state will require of the non-licensed individuals. Minnesota and Oregon have utilized state plan amendments to provide coverage of doula services.[22, 23] These states have developed infrastructure to support doula services, including certification requirements, registration procedures, core competencies, scope of services, supervision requirements, and reimbursement procedures. This high bureaucratic load might present a barrier to community-based doulas, who would be required to bill independently, rather than the community doula collective billing on their behalf. For low-income, community-based doulas, this means that they must wait to be paid by Medicaid rather than receive a more consistent paycheck from their organization. In addition, community-based doulas often provide extended services, including an increased number of visits before and after birth that may exceed the number of visits eligible for reimbursement. As a result, community-based doulas may experience unique barriers to Medicaid reimbursement for their services.

Minnesota

To be eligible for Medicaid reimbursement in Minnesota, doulas must be certified by an approved training organization and register with the Minnesota Doula Registry.[24] Registration is a one-time $200 fee, excluding training fees that can range up to $800. For some doulas, registration can be cost-prohibitive. Doulas who work as part of a collective or organization must register as an independent entity, which makes it difficult to identify individual doulas who work as part of a collective. The registry also does not provide information about availability.[24]

According to the Minnesota state plan amendment, doulas must practice under the supervision of an enrolled Medicaid provider. The Medicaid provider uses their professional National Provider Identifier Number (NPI) to bill for services on behalf of the doula through a multi-step process as described below. Generally, providers do not charge a fee for this service.[24]

The billing process for doula services in Minnesota includes the following:[22]

- Enter the NPI for the supervising physician, nurse practitioner, or certified nurse-midwife in the rendering box in MN–ITS.
- Bill using the 837P.
- If the billing entity has an additional NPI, enter that NPI in the Pay To box in MN–ITS.
- Bill all non-labor and non-delivery sessions with S9445 and the U4 modifier.
- Bill the labor and delivery session with 99199 and the U4 modifier.

Although doulas can bill for their services, Minnesota has limited reimbursement rates for up to $25.71 for each prenatal and postpartum visit (seven visits, total maximum), and up to $257.10 for labor and delivery.[25] There is no reimbursement for travel. Despite the low reimbursement rate, it has been argued that the rate is comparable to other Medicaid services in the state.[24] The high expense of registration, the multi-step payment process, and the low reimbursement rates has been cited as contributing factors for low rates of doula registration. As of April 2020, there were fewer than 80 doulas registered in the database.[26] Legislative efforts to increase the doula reimbursement rate were nearly successful in 2018, but the bill was combined into one package with several other bills that Governor Dayton ultimately vetoed.[27]

Oregon

Doulas in Oregon must become a certified and registered "Traditional Health Worker" by completing an Oregon Health Authority (OHA)-approved curriculum and enrolling in the state registry. Doulas may complete an $800 OHA-approved training program or receive equivalent credit from an approved program. They are also required to complete a cultural competency course.[24] Doulas receive unique NPI numbers in Oregon and must enroll as a Medicaid provider or enroll with a state-approved Medicaid billing provider. When the bill was initially passed, Oregon reimbursed up to $75 for labor and birth.[27] In 2017, Oregon passed a global fee-for-service rate of $350 for two prenatal visits, continuous support during labor and birth, and two postpartum visits. Some have argued that this rate does not adequately compensate for the doula's time and hidden costs (e.g., transportation).[24] However, the OHA is required to review and revise reimbursement rates every two years.[27] Participating Medicaid coordinating care organizations (CCOs) in Oregon must pay the flat fee to doulas not contracted with their organization but may pay doulas who are contracted as CCO providers at a higher reimbursement rate. This increase is meant to encourage and maintain a doula workforce. However, issues with contract negotiation and reimbursement rates have been cited as barriers. Doula organizations have claimed that some CCOs in Oregon are not providing coverage for doula services.[22] In the fall of 2019, Oregon contracted with 15 CCOs under a new set of regulations referred to as "CCO 2.0: The Future of Managed Care."[28] The updated regulations began implementation on January 1, 2020, and include a focus on the social determinants of health and health equity, requiring a Traditional Health Worker Integration and Utilization Plan.[29] Because doulas are considered "Traditional Health Workers," this may have an impact on their integration and utilization in Medicaid CCOs.

Other State Approaches

Although Minnesota and Oregon may be experiencing some challenges, they remain national leaders. Other states have attempted to follow their example; Maryland, Virginia, Washington, Tennessee, Arizona, Illinois, California, and Rhode Island have all introduced legislation in 2020 to pilot or cover doula services as part of their state Medicaid program.[30] The National Health Law Program's Doula Medicaid Project continually tracks the progress of state and federal bills related to doula services and Medicaid.[30] New York and Indiana came close to passing legislation that covered doula services in Medicaid, but to date have not succeeded. The initiative in New York offers important insight for other states to consider.

New York

In April of 2018, the State of New York announced a comprehensive Medicaid doula pilot initiative to address maternal mortality and racial disparities. The pilot included requirements for attestation of doula training or a copy of the training certificate, enrollment in NY State Medicaid as a fee-for-service provider, and enrollment with each of the Medicaid MCOs participating in the pilot. The intent was to launch the initial pilot in two counties. At the time of publication the pilot had been implemented in only Erie County.[31] The initial pilot program received a hesitant response from doulas in the state, who had concerns about using the payment model of the medical institution rather than serving the client directly.[31]

In 2019, the state legislative body passed a bill that would mandate specific doula certification requirements, including completing a state-sanctioned training course, passing an examination, and paying a certification fee of $40. Doulas would be required to demonstrate “good moral character” in order to be certified, and “only those certified may provide doula services.”[32] While this legislation was attempting to create uniform certification, it remains controversial in the doula community. In an open letter to the New York State Assembly, the community-based doula organization Ancient Song voiced concern that their training might not receive state approval (the requirements of which have not yet been defined), which means that their doulas might not be able to practice as “certified doulas” in New York, a term that has been used by many doula training organizations.[33] The letter also expressed frustration around the requirements of an additional state examination and the definition of “moral character.”[33] As of April 2020, the governor’s office and the bill’s sponsor were working to address the concerns of the doula community, with plans to amend the legislation and send it back to the legislature for consideration.

Examples of Community-Based Doula Programs Serving the Medicaid Population

The Institute for Medicaid Innovation completed an environmental scan to identify organizations across the United States focused on eliminating maternal health disparities that also build community connections. Through a widely distributed request-for-information form, the scan included evaluation criteria such as the proportion of the Medicaid population served, use of innovative approaches to care, stage of implementation, location, reported health outcomes, major barriers, and strategies for success.

Below are examples of organizations that were identified as innovators. It is worth noting that several of the entities highlighted below are predominately hospital-based or -affiliated. This could have implications for their funding structures, including billing Medicaid for doula services. Future research should explore whether this might be a preferred model, as services can be billed as part of a health system rather than as independent reimbursement.

Mountain Area Health Education Center: Mothering Asheville

Buncombe County, North Carolina

Mothering Asheville is one of the few community-based doula programs embedded in a health clinic in the country. It emphasizes creating systemic change in the way that women in Asheville access and utilize care. Key lessons learned include ensuring authentic community engagement through establishing trust, listening to what community members want, and including community members as paid experts in program development.

Boston Medical Center: Birth Sisters Program

Boston, Massachusetts

The Birth Sisters Program is a hospital-run model of community doula support serving childbearing people with social and medical risk factors for poor outcomes. This innovative model of doula support is integrated into a hospital maternity service. Birth Sisters are employees of the hospital's OB/GYN department. Their key lessons learned include hiring a skilled manager to support doulas around complex medical and psychosocial circumstances, building relationships with the health care team, and ensuring that the doula voice is heard on the health care team. This allows the Birth Sisters to navigate maternity care services with its clients easily and to promote communication between the mother and her providers.

San Francisco Support Sisters

San Francisco, California

This early-stage initiative is a partnership between the University of California San Francisco and Zuckerberg San Francisco General Hospital health systems, the SF Department of Public Health, and two community-based organizations (Sister Web Community Doula Network and the Homeless Prenatal Program) to design and pilot a San Francisco-wide CHW-Doula ("Support Sister") program. Among key lessons learned, SFSS emphasized the significant time spent on relationship building between the individuals leading this process, to ensure alignment of goals, agreement about the process, and understanding about what is required for authentic community-health system partnership.

HealthNet Community Doula Program

Los Angeles, California

The HealthNet Community Doula Project is a collaborative effort that has funded the foundational structure of a community-based organization to develop policies and protocols, workflows, and tracking and reporting mechanisms; provided office space; and sponsored events in the community to promote the program while inviting the doulas to attend and participate in the events. Key lessons learned include the need to support the development of the CBO. In addition, they realized that the FFS model for doulas was not a sustainable employment model. HealthNet (a Medicaid Managed Care Organization) was able to take a step back and switch over to a salaried employment model so that the doulas are paid monthly for a set number of births/visits. This allows the doulas to focus on the work and the clients without having to focus on attaining a set number of clients per month. The biggest lesson learned was that the doulas need to have agency over the decisions that are made around the structure of their work to allow for fidelity to the uniqueness of the community doula model.

Source: Institute for Medicaid Innovation (2020). *Community-based maternal care for the Medicaid population*

Training and Certification

Although training and certification are not mandatory for practice, many doulas choose to become certified.[24] More than 100 independent organizations in the United States provide doula training and certification, each with its own curriculum and requirement. Table 2 provides more detail regarding the three primary certification organizations, their requirements, and the cost of certification. It is important to note that the cost of the certification programs might represent a barrier for low-income individuals seeking to become certified doulas, which in turn might limit access to community-based doulas for marginalized populations seeking services.[2] In addition, these training curriculum might not include a focus on community-based doula skills, social justice training, and a broader understanding of and ways to combat systemic racism in the health system.

Matching federal funds for Medicaid depends on services provided by or recommended by a licensed provider. The lack of uniform certification for doulas can create obstacles to Medicaid coverage for doula services, particularly for doulas who operate outside of the traditional doula model and include CHW services in their practice.[24] Minnesota and Oregon attempted to address this barrier by creating a list of state-approved doula training and certification programs. New York attempted to create universal training and certification standards for the state but was met with resistance from the doula community.

Table 2. Examples of Doula Training and Certification Requirements

Organization Name	Training & Ceritfication Requirements	Cost
Childbirth and Postpartum Professional Association (CAPPA) URL: https://www.cappa.net/	**Key Requirements:** - Attend a CAPPA Labor Doula training class. - Attend a minimum of three labors/births as a doula. - Create a resource list with information on local support for parents. - Pass the multiple choice exam and essays in CAPPA Academy. An 85% passing grade is required. - Pass the Scope of Practice Pretest. A 100% passing grade is required.	$650 to $750 in addition to books
Doulas of North America (DONA) URL: https://www.dona.org/the-dona-advantage/about/	**Key Requirements:** - Attendance at a DONA approved birth doula workshop (valid for 4 years from completion) - Provide birth doula labor support to several clients and their families (3 clients) - Creation of Local Area Resource List (45 resources in approved categories) - Essay on the Value and Purpose of Labor Support - Written Reference from Perinatal Health Professional and Client	$700- $1,100
Childbirth International URL: https://childbirthinternational.com/portfolio/birth-doula-training/	**Key Requirements:** - Reflective Practice Assignment - Physiology exams (online, open book) - Birth evaluations for 2 clients - Childbirth class survey - Book reviews for 2 books - Module evaluations	$725 or $680 online

Source: Institute for Medicaid Innovation (2020). *Community-based maternal care for the Medicaid population.*

Doulas provide high value care that is associated with improved maternal health outcomes such as increased rates of breastfeeding, lower rates of cesarean sections, and increased satisfaction with one's birth experience.[10,13] In addition, doula services may be associated with cost savings.[16] However, doula services are rarely covered by Medicaid, and as a result, community-based doula programs experience challenges in providing services to the Medicaid population. Clinical, research, and policy opportunities to increase access and coverage for doula services can be found at the end of this report.

Maternity Community Health Worker Services in Medicaid

The term community health worker (CHW) represents a broad spectrum of services—including "generalists," who assist with a wide variety of health needs in their community, or "specialists," who focus on one issue area or task (such as maternity CHWs).[34] In 2009, the U.S. Department of Labor developed an occupational classification for CHWs (SOC 21-1094). The Patient Protection and Affordable Care Act (2010) recognized the integral role that CHWs play on the health care team, defining a CHW as a person who promotes health or nutrition within the community in which the individual resides by doing the following:[35]

- serving as a liaison between communities and healthcare agencies;
- providing guidance and social assistance to community residents;
- enhancing community residents' ability to effectively communicate with healthcare providers;
- providing culturally and linguistically appropriate health or nutrition education;
- advocating for individual and community health;
- providing referral and follow-up services or otherwise coordinating care; and
- identifying and enrolling eligible individuals in federal, state, local, private, or nonprofit health and human services programs.

A series of participatory research projects that have centered on CHWs have produced a list of ten core roles of CHWs, along with their essential skills and qualities.[36, 37] These include cultural mediation among individuals, communities, and health and social service systems, culturally appropriate health education and information, and care coordination, case management, and system navigation.[37] The National Academy for State Health Policy (NASHP) has identified state activity to integrate CHWs into health care systems in all but three states (Alabama, Tennessee, and Wyoming).[38] For many states, this includes covering CHW services under Medicaid. In 2014, CMS issued a rule allowing for Medicaid payment opportunities for preventive services by unlicensed individuals, including CHWs.[39]

Outcomes for Community Health Worker Services

Research evaluating the impact of CHWs specifically during pregnancy is quite limited. However, there are small-scale programs that have demonstrated the potential benefits of this model of care. For example, maternity CHWs in Arizona's Health Start program have provided families with one or more self-identified social and/or medical risk factors with education on prenatal care, support, and advocacy services; referral services to the appropriate level of care (for pregnant and postpartum women); and home visits for the first two years of a child's life. Mothers who participated in this program were more likely to have a normal birthweight infant than non-Health Start mothers with similar risk factors. Hispanic women were three times as likely to have a normal birthweight infant compared to Hispanic mothers not participating

in the program.[40] Similarly, an evaluation of maternity CHW program, MOMobile, found that their program was associated with increased rates of breastfeeding initiation and decreased rates of maternal depression.[41]

Although not related to pregnancy, recent studies have shown that employing CHWs in primary care reduced hospital stays by 65 percent and doubled the rate of patient satisfaction.[42] Evidence also suggests that Medicaid enrollees who received CHW interventions may have improved access to preventive and social services.[43, 44] These studies evaluated general CHWs, not maternity CHWs, but they do provide an evidence base for future researchers to investigate the potential health and cost benefits of investing in and evaluating CHW programs that specifically target maternal and infant health outcomes.

Research has demonstrated that CHWs are a worthwhile investment. The Penn Center for Community Health Workers found that for every dollar Penn Medicine invested in their evidence-based CHW program, they had a return on investment of $1.80.[45] To date, the Penn Center has not adapted the program to encompass maternity services, creating their own maternity CHW model, but are exploring this option. In addition, a recent economic evaluation of an intervention utilizing the Individualized Management for Patient-Centered Targets (IMPaCT) model, which trains CHWs to provide tailored social support for high-risk patients, found that for every dollar invested in the program, there would be a return of $2.47.[46] Currently, there is limited research on the return on investment for maternity community health workers.

Examples of CHW Programs Serving the Medicaid Population

Through a national environmental scan of community-based maternal support initiatives, the Institute for Medicaid Innovation identified maternity community health worker programs that are focused on eliminating disparities and supporting their communities. Methods for this scan can be found on page 10. Below are a couple of examples of organizations that were identified as innovators.

Buffalo Prenatal Perinatal Network

Buffalo, New York

BPPN works collaboratively with social services agencies, hospitals, and other resources such as behavioral health providers. BPPN CHWs provide intensive case management, including assisting with securing health care coverage, housing, food, and clothing to stabilize the family. They ensure that women and children attend all medical appointments by arranging for transportation or transporting the patient themselves. They also are a Healthy Families site offering home-based parenting programs and work with parents on parenting, child development, prevention of child abuse, and self-sufficiency. They work with families until the child is age 5. BPPN also has a Responsible Fatherhood Initiative that offers a 13-week support group for dads focusing on topics such as personal development, disciplining children, and engaging with children. Also, women receive resources on family planning and basic essentials for mom and baby, breastfeeding, and postpartum depression.

Gateway's Dasher CHW Maternity Program

Lehigh Capital Zone, Pennsylvania

By partnering with Dasher, a community health worker organization, Gateway is supporting an effort for Medicaid enrollees to partner with low-income, economically fragile employees who are paid a living wage and are on the journey to becoming economically stable. Some of Dasher's employees are former Medicaid recipients and were themselves low income. Employment of this workforce and use of this employee engagement model lead to lower turnover and therefore longer-lasting relationships in the community. Ensuring that CHWs have the training needed to rapidly build trust and continuously work to solve member issues in a quick, confidential, and culturally appropriate way is critical.

Source: Institute for Medicaid Innovation (2020). *Community-based maternal care for the Medicaid population*

Community Health Worker Medicaid Reimbursement

Although most state Medicaid agencies allow reimbursement for CHW services, the mechanisms and programs vary across the country. Some states have created specific offices and/or agencies for CHWs through 1115 waivers, while others have implemented mandates for Medicaid MCOs as part of their state plan amendment.[38] Examples of mechanisms that states have used to provide coverage for CHW services under Medicaid are highlighted in Table 3. Most states use a combination of these methods in addition to local, state, and federal grants.

Medicaid MCOs may contract with CHW services, paying for it as an "administrative expense."[47] As such, CHWS are not independent providers of care per se (which is different from a doula, who would operate as a contracted care provider, and whose services would be included as part of the MCO's negotiated capitated rate with the state), but are instead employed by the MCO to provide services to enrollees. While doulas' employment costs can be considered as part of quality-improvement efforts, CHWs would likely be considered as a "human capital" administrative cost.[48] If MCOs work with an outside organization to access CHW services, then the administrative cost would likely be an "outsourced function."

Table 3. State Approaches for CHW Medicaid Coverage

Potential Coverage Mechanism	Explanation	State Example
1115 Waivers	These waivers allow states to experiment with Medicaid delivery models and payment mechanisms.	In **Washington**, the 1115 waiver allows CHWs to be paid as a part of Medicaid value-based payment. CHWs can be part of Washington's Health Homes, which allows them to receive Medicaid funding for each patient served.[38] **New Mexico** has an Office of Community Health Workers within its Department of Health. Through a Medicaid 1115 Waiver, Centennial Care (New Mexico's Medicaid program) has leveraged contracts with MCOs to support the use of CHWs in serving Medicaid enrollees. CHW salaries, training, and service costs are allocated as MCO administrative costs (rather than as a medical expense) and are embedded in capitated premium rates paid to Medicaid MCOs.[38]
State Plan Amendments	SPAs can explicitly include CHWs as part of interdisciplinary care teams that are included in patient-centered health home models of care	States that have SPAs for CHWs include **Michigan, Minnesota, New York, and Oregon**.[38,50] In **Michigan**, health plans must maintain a ratio of at least one full-time CHW per 20,000 covered lives.[38]
Federal Funding	CHWS and community-based doulas have received funding from federal sources including HRSA and the Maternal, Infant, and Early Childhood Home Visiting program.	Illinois' program utilizes these funds to support both CHW and doula home visiting programs. **Washington** state used the Temporary Assistance for Needy Families (TANF) dollars to help fund a pilot program that combines state home visitation and TANF programs, in partnership with HealthConnect One Community-Based Doula Home Visiting Program.[21]

Source: Institute for Medicaid Innovation (2020). *Community-based maternal care for the Medicaid population.*

Training and Certification

Similar to doulas, CHWs do not have a standardized approach to certification. There is state variation in whether CHWs are required to complete state certification or its educational credential equivalent to provide services and receive Medicaid reimbursement. In Arkansas, for example, a state plan amendment requires "Community Health Aides" to be certified in order to receive Medicaid reimbursement.[38] More commonly, CHWs are recognized by employers for their ability to deliver core CHW functions, typically defined on a state-by-state basis.[49] Thirty-nine states, including D.C., do not require certification for CHWs to operate within the state. However, some states, such as New Mexico, Maryland, Oregon, Rhode Island, Kentucky, Delaware, and Florida, recommend and/or provide voluntary certification. It should be noted that while the certification is voluntary, it may be necessary in certain states for CHW employers to be eligible for Medicaid reimbursement.

Among the states that do require certification for CHWs, the approaches vary. Some states, like Arkansas and Illinois, use certification boards that develop core competencies for training and certification.[29] Others use a third-party certifying body, such as the Indiana Community Health Workers Association or the Ohio Board of Nursing. The Texas Department of State Health Services (DSHS) established and operates its own training and certification program, with certification lasting two years. Texas DSHS reviews and approves all certification, training, and continuing education. While the approaches may differ across states, the common thread among them is the focus on ensuring that the core competencies of community health workers are met.[50] In other words, CHWs are hired and evaluated based on their ability to communicate effectively with patients in general, rather than on their expertise in specific areas, such as maternal and child health. Usually, this evaluation is determined by a mix of experience, formal training, and letters of reference.[38]

Some CHWs, such as maternity CHWs, may work in birth settings. For those who work in birth settings, they may be utilizing general CHW skills, such as health communication and care coordination, but might not have the specific skills of traditional doula training, such as pain-management and lactation support. In response, Mamatoto Village, a Washington, D.C.-based organization, developed a training program for a new, comprehensive perinatal health worker (PHW) model. The program has been recognized by Medicaid MCOs in the D.C. area and has secured contracts to receive reimbursement for services provided by their PHWs. Figure 1 provides a comparison of key differences among doulas, community birth workers, and Mamatoto's perinatal health workers. While this chart is specific to the Mamatoto Village curriculum, it is helpful in demonstrating the areas of overlap and differentiation between these types of peer and community-based providers.

Figure 1. Comparison of Doula, CBW, and PHW Training

	Doula	CBW	PHW
Average Length of Training	**16-24 hours**	**64 hours**	**300 hours**
Intentionally reflexive of the community served		✓	✓
Offers extended perinatal support services from 1st trimester to six months postpartum			✓
Conducts prenatal home visitation	✓	✓	✓
Care coordination and social service navigation			✓
Care management			✓
Assessing psychosocial and health needs		✓	✓
Goal setting and prioritizing of psychosocial and health needs			✓
Required charting & documentation		✓	✓
Antepartum (high-risk) maternal care support	✓*	✓	✓
Provides perinatal health education	✓	✓	✓
Provides parenting education		✓	✓
Provides emotional and social support	✓	✓	✓
Provides education on reproductive rights, informed choice and decision making, and birth planning	✓	✓	✓
Serves as an accountability partner		✓	✓
Labor support	✓	✓	✓
Provides lactation anticipatory guidance and support	✓∞	✓	✓
Conducts postpartum home visitation	✓	✓	✓
Provides postpartum day and/or overnight support	✓º	✓^	✓
Conducts perinatal mood and anxiety (PMADs) screening		✓	✓
Provides wellness coaching		✓	✓
Serves as an advocate	✓	✓	✓
Domestic Violence Advocate*		✓	✓
Administers smoking cessation intervention			✓
Administers advanced maternal and infant assessment tools			✓
Employed within a community based organization or agency (includes clinics)	Δ	✓	✓
May work independently and establish their own practice	✓	✓	

CBW = Community Birth Worker and PHW= Perinatal Health Worker - these are specific designations through training offered exclusively by Mamatoto Village
*If additional training was received to function in this capacity
∞ Doulas can deliver basic lactation support when they have received lactation training beyond their initial training
º If dually trained as a postpartum doula these services can be provided. Birth Doulas alone are not trained to offer these services.
^CBW training include the skills neccesary to conduct extended postpartum support
Δ Doulas traditionally work independently, however, a small percentage work in community settings

Source: Mamatoto Village Incorporated. (n.d.). Mamatoto Village Scope of Practice Chart.

The Mamatoto Village case study demonstrates the innovative approach to combine the role of a doula and CHW into a new, comprehensive provider, the perinatal health worker (PHW). The PHW receives 300 hours of training in a broad range of topics, including perinatal support up to six months postpartum, goal setting and prioritizing of psychosocial and health needs, and smoking-cessation interventions.[51] The PHW training uses a community health worker framework to merge the knowledge and skills necessary to provide perinatal support, as well as the cultural familiarity required to address psychosocial needs. Furthermore, the Mamatoto's PHW training program prepares women to serve in their communities while building social and economic capital.

Addressing Maternal Health Disparities through Community-Based Care

Initiative: Mothers Rising Home Visiting Program
Organization: Mamatoto Village, Inc.
Location: Washington, D.C.
Phase of Initiative: Implementation

Established in 2013, Mamatoto Village is a nonprofit 501(c)(3) organization providing perinatal support services in the District of Columbia and Prince George's County, Maryland. In 2012, after having served as doulas and feeling the inadequacies of their training, Aza Nedhari and co-founder Cassietta Pringle saw a critical need for a career training program and direct support services tailored to black women in the D.C. Area. In response to this demand, Mamatoto Village was actualized. Mamatoto situated its mission within two core programs, the Perinatal Health Worker Training (PHWT) and the Mothers Rising Home Visitation (MRHV) program.

The MRHV program is an innovative model of care to address existing barriers and health disparities that directly affect black women and their families using evidence-based screening tools, a risk-stratified care management assessment, service models, and interventions with a cultural overlay that is adaptable and scalable for other communities. The MRHV program's attitude toward perinatal care is holistic and hands-on, providing support within a three-generational approach that takes into account the autonomy and authority of each client to author their path, as well as the personal narrative while offering individualized care guided and co-created by the mother. The three-generation approach is an upstream solution that recognizes the impacts of racism on the multigenerational transmission of health, well-being, parenting behaviors, and wealth. It emphasizes the need to consider the intersection of social and structural determinants to facilitate a progression of the family toward wellness as a biological and social norm.

Currently, Mothers Rising is offered to Medicaid-eligible persons through managed care contracts in the District of Columbia and services over 300 women and families per year. Positive relationships with Medicaid managed care organizations (MCOs), and broad coverage of home visiting services is vital to the sustainability and longevity of Mothers Rising. MCO case managers referred 26 percent of individuals participating in Mothers Rising during FY19, and providers serving Medicaid-eligible participants accounted for another 40 percent. Beyond fiscal transactions, intentionally cultivating strong relationships with MCOs has created a feedback loop with providers to ensure continuity of care and the ability to address critical issues with immediacy. Mamatoto Village has also served as a thought partner, advising MCO leadership on how to best serve the targeted population.

Outcomes:

- 150+ women completing the Perinatal Health Worker training (2013-2019)
- 71% prenatal care initiation in the 1st trimester
- 83% vaginal birth rate
- 86% full-term birth
- 83% healthy birthweight (>2500g)
- 92% breastfeeding initiation
- 77% postpartum visit attendance
- 0% maternal and infant demise

Maternity CHWs provide innovative services that combine the specific expertise of maternity care with the community connections and cultural congruity of CHWs. CHWs in primary care settings have been shown to improve access to preventive care and social services and are associated with reduced hospital stays and increased patient satisfaction.[42-44] CHWs have also demonstrated high return-on-investment.[45] CHWs services are covered by Medicaid in most states, although the mechanisms through which states reimburse these services and the certification requirements that states require vary.[38] Building upon the evidence base that currently exists for CHW services and applying the model to maternity care may have the same improved outcomes and reduced costs, particularly in the Medicaid population. Clinical, research, and policy opportunities to support increased access to maternity CHWs for the Medicaid population are discussed in the next section.

Looking Forward

Opportunities exist to increase utilization of community-based maternal care in the Medicaid population. Findings from the Institute for Medicaid Innovation's national environmental scan of initiatives found that Medicaid reimbursement is critical for the sustainability of programs, and that the reimbursement amount should reflect the time, effort, and expertise of community-based maternal care professionals. Incorporating the voice of the community-based workforce in the development of programming and policy is critical to ensuring equity, and engaging provider groups and the targeted community, including doulas and CHWs. Innovative approaches to increase utilization of these services may include alternative payment models, such as the bundled payment options, to assume the cost and savings associated with community-based doula and maternity CHW services, including labor support, childbirth education, lactation counseling, and social services referral.

Medicaid stakeholders, including state agencies and managed care organizations, might consider the following clinical, research, and policy opportunities as next steps to increasing the utilization of community-based maternal care.

Clinical Opportunities

Explore ways in which maternity care teams may collaborate with community-based workers.

Incorporating peer, community-based maternity workers such as doulas and CHWs into the care team might increase access to these services and remove potential barriers for reimbursement. A potential opportunity exists to integrate community-based workers in partnership with a clinic, community-based organization, and MCO. However, it is essential to balance this relationship with the community-based worker's connection to client priorities and self-efficacy.

Encourage culturally concordant, community-based care that utilizes community-based workers in a self-empowering, financially sustainable way.

The Institute for Medicaid Innovation's environmental scan of maternity CHW and community-based doula programs found that successful implementation was dependent on engagement from the community, listening to the community-based professionals serving the program, and creating a system of financial sustainability that prioritizes livable wages for the professionals.

Consider providing targeted assistance for the training of maternity community health workers and community-based doulas.

Increased support, including certification fee waivers and subsidized training, for maternity CHWs and doulas of color, and those interested in pursuing a career in maternity support services who are low income may help to increase the number of available professionals who live and work in their communities. Ultimately, this might improve health equity through facilitating community and cultural connections and increasing access to services.

Research Opportunities

Explore the impact of maternity community health workers, including program evaluation, return on investment, and improvement in outcomes for the Medicaid population.

The current evidence base for maternity CHWs relies on small-scale program evaluations and global research. To understand how the United States can utilize the CHW workforce to improve maternal health outcomes, additional research on the health outcomes and the business case for maternity CHWs may be helpful in ensuring equitable Medicaid reimbursement.

Develop the research infrastructure to continually track, monitor, and evaluate programs that employ community-based maternity support providers.

Developing user-friendly data tracking and databases that can help with program and outcome evaluation for community-based doula and maternity CHW programs is an important part of building an evidence base for these interventions. It is also important to explore the difference in health outcomes, client satisfaction, and cost savings between community-based and private-pay doulas as well as between general CHWs and maternity CHWs.

Evaluate the various settings for community-based maternal support programs, including independent collaboratives, clinically embedded services, and partnerships among community-based doulas, maternity CHWs, and Medicaid MCOs.

The Institute for Medicaid Innovation's environmental scan of maternity CHW and community-based doula programs found that there are a variety of different ways to create community-based maternal support programs, including innovative partnerships and collaborative services that embed community-based care into the clinical system. Exploring the differences among these approaches, including both provider and client satisfaction and preference, might help to develop a "best practice" for this model of care.

Policy Opportunities

Explore opportunities to increase access to community-based maternal support service providers, including community-based doulas and maternity CHWs for the Medicaid population.

Utilization of the 1115 waiver, state plan amendment, and/or alternative-based payment models to support a state's efforts to increase access and coverage for community-based maternal support services.

Consider supporting the development of a standard credentialing procedure for community-based health workers.

Lack of standardized credentialing represents a barrier for many community-based maternal support service providers seeking Medicaid reimbursement. Lessons from states that have attempted to standardize have shown that actively incorporating the voices of the community is necessary for successful implementation.

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Reviewers

Prior to publication of the final report, the Institute for Medicaid Innovation sought input from independent clinical, scientific, and policy experts as peer reviewers who do not have any financial conflicts of interest. However, the conclusions and synthesis of information presented in this report do not necessarily represent the views of the individual peer reviewers or their organizational affiliation(s).

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