Business Case for Community-Based Maternity Care Models

This resource is intended to support maternal health stakeholders (e.g., health care providers, birth workers, patient advocates, insurers, and policymakers) in creating a business case to invest in community-based maternity care models and support services from a full complement of birth workers to improve maternal health outcomes and eliminate racial inequities. Community-based maternity care models and support services offer enhanced care and support from the prenatal through postpartum periods, including doula and midwifery childbirth care, wraparound services that address social factors that negatively affect maternal and infant health, psychosocial support to bridge cultural gaps between providers and clients, and care coordination that is grounded in reproductive justice.[1] Advancing community-based maternity care and support services can expand access to maternity care that meets the following high-value characteristics:

- Equitable, person-centered, culturally congruent, respectful
- Consistent quality, safety, and equity regardless of individual characteristics including race and ethnicity, age, language, payer or insurance status
- Reductions in severe morbidity and mortality
- Integrated and coordinated care across physical, mental, behavioral, and social needs
- Honors the pregnant person's preferences in concert with risk appropriate care
- Does no harm, reduces medical overutilization and underutilization, and provides transparent information about cost and outcomes

The components that follow can serve as a template to assess the current state of maternity care and support services, create a business plan for offering or supporting the development of new maternal health services, and facilitate strategic conversations and planning to establish and support new models, financially or otherwise. Each component of the business case is accompanied by a series of questions, considerations, and examples to address the following categories: 1) Current state, 2) Objective, 3) Benefits and justification, 4) Implementation strategy, 5) Financials and costs, and 6) Risks.

Terminology

Birthing persons is a term used to describe pregnant persons that is inclusive of all genders and gender identities. Not all birthing people identify as ***women*** or ***mothers***.

This resource uses both gendered and non-gendered language such as birthing persons, pregnant people, mothers, and women to reflect the terminology used by various stakeholders and found in the referenced literature.

Gender neutral language is used when not directly citing an external resource to be inclusive of all birthing persons.

See Appendix for additional definitions.

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1 Current state

Questions and Considerations

a. What is the current maternal health experience for birthing people in my community/patient population? Consider maternal and newborn outcomes, patient experience, out-of-pocket spending, and cost of care.

b. Are there opportunities to improve maternal health care, experiences, and outcomes, and to spend health care resources more wisely?

c. Do all birthing people have access to high-value maternity care and support services?

d. What disparities in outcomes are prevalent for pregnant and birthing people?

Examples

Outcomes

- The rates of pregnancy-related mortality and maternal mortality have more than doubled in the U.S. in the past three decades. The U.S. stands out as an anomaly compared to other high-income countries as international trends move in the opposite direction.[2]
- Mortality rates for non-Hispanic Black women are three to four times higher than for non-Hispanic white women.[3]
- Black women have a higher likelihood of experiencing severe maternal morbidity and complications including preeclampsia and postpartum hemorrhage.[4,5]

Patient experience

- In a cross-sectional survey of diverse childbearing populations in the U.S., one in six women (17.3 percent) reported experiencing one or more types of mistreatment, such as: loss of autonomy; being shouted at, scolded, or threatened; and being ignored, refused, or receiving no response to requests for help. Women of color experienced consistently higher rates of mistreatment even when controlling for other demographic characteristics.[6]
- Women of color in the U.S. perceive prenatal healthcare as a largely disrespectful and stressful experience.[7]
- There is a dearth of patient-reported outcomes measures (PROMs) for maternity care.[8]

Utilization and cost of care

- U.S. spending for maternal and newborn care exceeded $111 billion in 2016 for approximately 4 million births.[9]
- Childbirth is ranked first among principal diagnoses for U.S. national inpatient stays, at a rate of 1,135 per 100,000 people, or 11.7 percent of all hospital stays.[10,2] Newborns follow a similar trend as newborns and infants under the age of one constitute 73 percent of hospital inpatient stays and nearly 58 percent of total costs for children aged 0-17.[11]

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- Cesarean birth is the most common inpatient surgery in the U.S.[12] For most low-risk birthing persons (defined as nulliparous, term gestation, singleton fetus, vertex presentation or NTSV), cesarean birth creates more risk, including hemorrhage, uterine rupture, abnormal placentation, and cardiac events.[13]
- 27.4 percent of NTSV women had a cesarean birth in 2007. The Healthy People 2020 target rate of 24.7 percent was created to reflect a more modest, attainable rate, after the Healthy People 2010 cesarean target was not met nationally.[14]
- The majority of perinatal spending is associated with the intrapartum hospital stay for birthing persons and newborns. A study showed that 81-86 percent of payments for maternal-newborn care in commercially insured and 70-76 percent in Medicaid insured birthing people was attributed to intrapartum care.[15]
- The average out-of-pocket costs of childbirth and maternal care among birthing persons with employer health insurance increased 49 percent, from $3,069 to $4,569 from 2008 to 2015.[16] Estimated out-of-pocket costs for cesarean sections were higher than for vaginal births.
- The average length of stay in a hospital for a mother following a vaginal birth is 2.2 days vs. that of a scheduled cesarean section at 3.6 days.[17]
- Elective hospitalization is an independent risk factor for overutilization of both cesarean birth and NICU admission among medically low risk families.[18,19]
- Women experience lower rates of severe perineal trauma or hemorrhage in planned home births than in obstetric units, while those with planned hospital births had lower odds of a normal vaginal birth.[20]
- U.S. newborns at all birth weights are increasingly likely to be admitted to an NICU.[21]

2 Objective

Questions and Considerations

a. What is the purpose of the community-based maternity care and/or support service model?

b. What is the value-add of this program relative to standard clinical services? Do all birthing people have access to high-value maternity care and support services?

Examples

*Mission, Vision, and Values from **Birth Detroit** in Detroit, MI* (Accessed October 2020 from: https://www.birthdetroit.com/about-page)

- Mission: To midwife safe, quality, loving care through pregnancy, birth and beyond.
- Vision: We dream of a world where birth is safe, sacred, loving and celebrated for everyone.
- Values: Safety, trust, love, and justice are our guiding values.

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Approach and Values from ***Community of Hope*** *in Washington, DC (*Accessed October 2020 from: https://www.communityofhopedc.org/about/who-we-are*)*

- We care for families by providing direct services with a focus on prevention, healing, and wellness.
- We improve lives by building on families' strengths, honoring their choices, and taking a whole-family, multi-generational approach.
- We lead and advocate for system change to address the effects of historical and current racial inequities on health outcomes and housing opportunities.
- We embrace the diversity of our community, welcome all voices and perspectives, and treat everyone with respect, compassion, and integrity.
- We strive for excellence in all that we do, implement evidence-based practices, measure our outcomes, and use this knowledge to continuously strengthen our work.

3 Benefits and Justification

Questions and Considerations

a. *What is the expected demand for community-based care and/or support services in the community/patient population?*

b. *What are the expected improvements in patient experience, quality outcomes, and access to care associated with the model?*

c. *Consider cost efficiency of community-based care models compared to standard clinical care traditional models. Identify where the current reimbursement for community-based services is inadequate, and more longitudinal savings opportunities (e.g., lifetime costs associated with preterm births).*

Examples: Birth Centers

Demand

- Women's interest in less intervention-focused models for perinatal care – including midwife-led care and freestanding birth centers – far outweighs its uptake, in part due to limited availability and access to these types of providers and facilities as they are not covered by Medicaid or other insurance.[22]
- About three percent of hospital births are self-pay, versus about one-thirds of birth center births and two-thirds of home births.[23]
- Birthing people are looking for culturally congruent care and care closer to home, within their community. The Strong Start analysis demonstrated that the model is of interest at the population health level, but there are policy and reimbursement issues which limit access.[24]
- Out-of-hospital births increased steadily from 2004 to 2017, and the demand for out-of-hospital birthing options was amplified during the COVID-19 pandemic.[25, 26]
- Individuals who participated in Strong Start for Mothers and Newborns II, an initiative that provided enhanced prenatal care to women covered by Medicaid or the Children's Health Insurance Program (CHIP) through Birth Centers, Group Prenatal Care, and Maternity Care

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Homes, reported that Strong Start's enhanced care offered numerous important benefits over typical maternity care, including more focus on women's psychosocial risk factors and need for education.[27]

Quality, outcomes, and patient experience

- Of the women that attempt birth at a birth center, 6 percent end up delivering via C-section, more than four times lower than the national average of 27 percent.[28]
- Babies born via vaginal birth exhibit a healthier gut microbiome for the first 9 months of life than those born via c-section, resulting in a lower risk of future infections.[15]
- Women who give birth at birth centers are significantly less likely to deliver a preterm baby and their babies exhibit higher average birth weights for both preterm births and births that reach full term.[15]
- There is less potential exposure to infection for non-hospital births; birth centers focus on actualizing health and wellness, and avoid over-medicalizing birth or treating pregnancy as a disease.
- Medicaid beneficiaries participating in the Center for Medicare and Medicaid Innovation Strong Start program reported having time for questions, feeling listened to, spoken to in a way they understood, and being involved in decisions and treated with respect.[29]
- Women who participated in Strong Start had higher rates of breastfeeding compared to all women nationally - 87 percent of mothers exclusively breastfeeding at time of discharge compared to 41.5 percent nationally.[30]
- In midwife-led birth center care, greater time is allotted to individual prenatal and postpartum visits per patient than typical physician care; women receiving midwifery care are less likely to perceive that their provider did not spend enough time with them.[31]

Cost of care

- Because birth center births are less likely than hospital births to use medical interventions or to end in a cesarean, the average cost of a vaginal delivery at a birth center is 50 percent lower than a hospital.[15]
- Cesarean reductions avert future costs, as over 85 percent of pregnant women with a history of cesarean have repeat cesareans.[32]
- There are cost savings associated with reductions in preterm birth.[33]
- In the Strong Start Initiative, the average birth cost for a mother in the program was $1,759 less than the average birth cost in the Medicaid comparison group. The total cost for mothers and infants during the birth and postpartum periods was $2,010 less than mothers in the Medicaid comparison group.[24]
- Based on a 2014 and 2013 study, respectively, prevention of unnecessary cesarean births saves Medicaid over $11.6 million for every 10,000 births,[34] and $27.25 million in facility fee payments for every 13,030 births.[35]
- Payments for birth at birth centers are approximately 50 percent less for vaginal birth than for cesarean birth.[36]

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Examples: Perinatal Support Workers

Demand

- With growing focus on meeting social needs, demand is growing for culturally congruent care for the whole person and addressing needs related to mental health, food and housing security, immigration status, etc.[37]

Quality, outcomes, and patient experience

- Having support through various roles (including member of hospital staff and member of the woman's social network) reduced relative risk of cesarean birth by 25 percent, the presence of a doula decreased this risk by 39 percent.[38]
- Relative to women with usual care, women with continuous support are less likely to use any pain medication or epidural anesthesia, and have lower rates of vacuum, or forceps, assisted birth.[39]
- Women who give birth at a hospital with more midwife-attended births have lower odds of giving birth by C-section and lower odds of episiotomy.[40]
- Birthing persons who received doula support had lower preterm and cesarean birth rates than Medicaid beneficiaries regionally: 4.7 vs 6.3 percent and 20.4 vs 34.2 percent.[33]
- Utilizing doulas is associated with shorter births[38] and higher rates of breastfeeding initiation.[41]
- The association between doula support and positive birth outcomes is larger, and in some cases statistically stronger, among women who are low income, socially disadvantaged, or who experience cultural or language barriers to accessing care.[42]

Cost of Care

- For a first birth, cost-effectiveness analyses indicate potential savings associated with doula support reimbursed at an average of $986; doulas could save up to $884 and be cost-effective up to $1,360 per doula.[33] (*Note: this analysis did not assess whether reimbursement rates for doulas contributed to fair and livable wages*).
- The reduction of cesarean births from the use of doulas could save Medicaid at least $646 million per year.[43] If midwife-attended births continue to rise (to account for 20 percent of births), Medicaid would see savings of $1.13 billion for state programs by 2027.[44]
- The reduction of cesarean births from the use of doulas could save private payers $1.73 billion annually.[43] If midwife-attended births continue to rise, private health plans would see savings of $2.82 billion by 2027.[44]

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4 Implementation Strategy

Questions and Considerations

a. *Where, when, and how will the community-based maternity care model and/or support services be implemented?*

b. *Consider traditional health care stakeholders that benefit from the current state/status quo and how to anticipate, coordinate, and mitigate any related barriers to implementing the community-based care model.*

c. *Define or explain approach to the following:*

- *Mission/philosophy*
- *Organizational/business structure*
- *Target population*
- *Products/services*
- *Workforce*
- *Accreditation and licensure*
- *Technology and infrastructure (including electronic health records)*
- *Performance outcomes metrics*
- *Public image/marketing*
- *Existing employment options for perinatal support workers*

Example

About us from ***CHOICES: Memphis Center for Reproductive Health*** in Memphis, Tennessee (Accessed October 2020 from https://memphischoices.org/about-us/)

- Mission: CHOICES envisions a world where sexual and reproductive healthcare is recognized as an essential human right.
- Business structure: CHOICES is a nonprofit organization, led by a board of directors.
- Target population: The clinic is inclusive of everyone regardless of sex, race, religion, marital status, sexual orientation, gender identity, age, disability, etc.
- Services: CHOICES offers abortion services, birth control, HIV services, LGBTQ+ services, menopause management, pregnancy options counseling, sexual assault forensic services and more healthcare options for both women and men.
- Workforce: A comprehensive team made up of two doctors, four certified nurse midwives and administrative personnel.

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5 Financials and Cost

Questions and Considerations

a. *For new or planned services: what are the expected costs to launch the community-based care and/or support services model?*

b. *What are the expected operating expenses?*

c. *What are the expected sources of revenue (e.g., payer reimbursement, grants)?*

d. *For each of the questions above, consider major assumptions and dependencies that inform the estimate.*

Examples

Birth centers

- According to some sources, startup costs for birth centers can range from under $1 million to almost $2 million, depending on size and location of the center.[35]
- Operating expense cost categories can include:
  - Ordinary costs – construction, regulatory and licensure fees, taxes, insurance (organization and malpractice), utilities, accreditation (sometimes required)
  - Birth center materials – furniture, office equipment, medical equipment, medical supplies, IT equipment
  - Staff salaries and benefits
- Sources of revenue can include:
  - Provider fees and facility fees paid by insurers
  - Self-pay
- See: BirthBundle - Bundled Clinical Care and Payment Model for Maternity and Newborn Care (Minnesota Birth Center)

Doulas

- The cost of implementing a community-based doula program varies greatly depending on existing infrastructure, cost of living, typical start-up costs in the area, etc.[45]
- Program budgets for a basic community-based doula program (two doulas and a supervisor, administration and other direct costs, serving up to 50 births per year), vary from $100,000 to $200,000 per year.[45]
- Doula training, certification, and registration generally range from about $800 to $1,200.[42]

Assumptions and Dependencies

- Under the ACA, Medicare is required to pay midwives the same amount in physicians' fees as they would pay clinicians at a hospital. Medicare covers a fraction of births but is often used to set rates for various state Medicaid programs.[46]
- Some states are implementing provider discrimination policies that require the same reimbursement rates for any provider for a given CPT or HCPCS code. The payment can

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vary based on quality and other negotiated terms, but providers cannot be paid less based solely on licensure/credentials.

- Providing raises for well-trained, productive, loyal employees is preferable to the higher costs of replacing an employee, especially a midwife. Employees earning less than $50,000/year cost about 20 percent of their annual salary to replace, and a physician or executive director costs more than 200% of their annual salary to replace. Registered nurses and midwives fall somewhere in between.[47,48]

6 Risks

Questions and Considerations

a. What are the risks associated with launching/supporting the community-based maternity care and/or support services model?

b. What are the risks associated with not launching/supporting the model?

Examples

General risks

- Risks associated with not implementing community-based maternity care include continued disrespect and abuse, loss of autonomy and self-determination for birthing persons; continued suboptimal outcomes and medicalization of childbirth; and failure to support community health and wellness.
- Birth workforce:
  - Culturally congruent care is a key feature of community-based care, but there is a shortage of Black and Brown providers of maternity services; obstacles to training and education faced by people of color must be overcome. Obstacles include financial barriers and structural racism which present barriers to BIPOC from matriculating or completing medical or nursing education, or doula credentialing and certification programs.
  - As midwives and perinatal support workers of color take the lead to champion community-based models of maternity care, they are doing so within the context of experiencing racism and oppression, chronic stress, and underpayment.
  - The national certifications for doulas provide many of the core skills but often leave out essential birth justice skills (e.g., mitigating racism, providing trauma-informed care).
  - Federal recognition of perinatal support workers is needed. (For example, the US Dept of Labor does not list doulas in their list of apprenticeships).

Revenue risks

- Birth centers:[46]
  - For approximately 20 to 30 percent of birth center patients, transfer to a hospital will be necessary, either before, during or after birth. Facility fees are typically paid where the baby is born, not where the resources we expended during labor. This means that birth

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centers get little compensation when a transfer occurs. (Value-based payment models can better reflect the value of birth center services, and incentivize birth centers' to identify early and avert patients who might develop risk).
    - Medicaid pays approximately half the amount that private payers pay for births – depending on the patient payer mix it is difficult for the birth center to be financially sustainable.
- Perinatal support workers:
    - Most doula programs (70 percent) rely on funding from private grants, as less than 5 percent of doula programs are funded by Medicaid.[49]
    - However, 96 percent of 98 community-based doula programs surveyed in one study serve women who are insured by Medicaid.[49]
    - Only two states have expanded Medicaid to reimburse for doula services: Minnesota and Oregon.[50] (New Jersey's Medicaid reimbursement begins 1/1/21)
        - Indiana passed a bill, but stripped funding for expansion before the legislative session. The bill is now law, but it is unclear how reimbursement will work with no funding.[51]
        - New York launched a pilot doula program for Medicaid beneficiaries in certain areas.[52]

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Appendix

Definitions

Birth center: The birth center is a health care facility for childbirth where care is provided in the midwifery and wellness model. The birth center is freestanding and not a hospital. Birth centers are an integrated part of the health care system and are guided by principles of prevention, sensitivity, safety, cost-effectiveness, and appropriate medical intervention. While the practice of midwifery and the support of physiologic birth and newborn transition may occur in other settings, this is the exclusive model of care in a birth center. The birth center respects and facilitates a pregnant person's right to make informed choices about their health care and their baby's health care based on her values and beliefs. The person's family, as they define it, is welcome to participate in the pregnancy, birth, and the postpartum period. (AABC Standards for Birth Centers – revised 2017)

Birthing persons: A term used to describe a pregnant person that is inclusive of all genders.

> *Note: Not all birthing people identify as "women" or "mothers." This resource uses both gendered and non-gendered language such as birthing persons, pregnant people, mothers, and women to reflect the terminology used by various stakeholders and found in the referenced literature. Gender neutral language is used when not directly citing an external resource to be inclusive of all birthing persons.*

Perinatal support workers: An umbrella term used to describe someone who graduated from a specialized program which allows them to provide physical, emotional and educational support through a birthing person's pregnancy and into the infant's first year of life. (Adopted from the Global Perinatal Support Worker Inc.)[53]

Strong Start: The Strong Start for Mothers and Newborns Initiative, an effort by the Department of Health and Human Services, was launched in 2012 to reduce preterm births and improve outcomes for newborns and pregnant women. The initiative was made up of two streams: the first encouraging providers to use best practices in order to reduce the rate of early elective deliveries. The second stream tested three evidence-based maternity care service approaches: Centering/Group Visits, Birth Centers and Maternity Care Homes. The program ran for four years and is no longer active. (Adopted from the CMS)[54]

reVITALize obstetric data definitions: This set of obstetric data definitions are formally endorsed by the American Academy of Family Physicians, American College of Nurse-Midwives, The American College of Obstetricians and Gynecologists/The American Congress of Obstetricians and Gynecologists, the Association of Women's Health, Obstetric and Neonatal Nurses, and the Society for Maternal–Fetal Medicine.[55]

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