

Maternal Health Network of San Bernardino County

Strategic Plan
2020 - 2025

Acknowledgements

This strategic plan is a result of the combined efforts of countless individuals, organizations, and county service providers.

While **First 5 San Bernardino** provided organizational leadership and the funding to support the development of this plan, numerous key stakeholders, including consumers, providers, and advocates contributed to this plan by participating in county-wide convenings, completing surveys, and attending group meetings to put this plan together. The combined commitment of time and ideas from each of these groups is sincerely acknowledged and appreciated.

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Social Entrepreneurs, Inc., a company dedicated to improving the lives of people by helping organizations realize their potential, provided support in the development of this plan.



Executive Summary

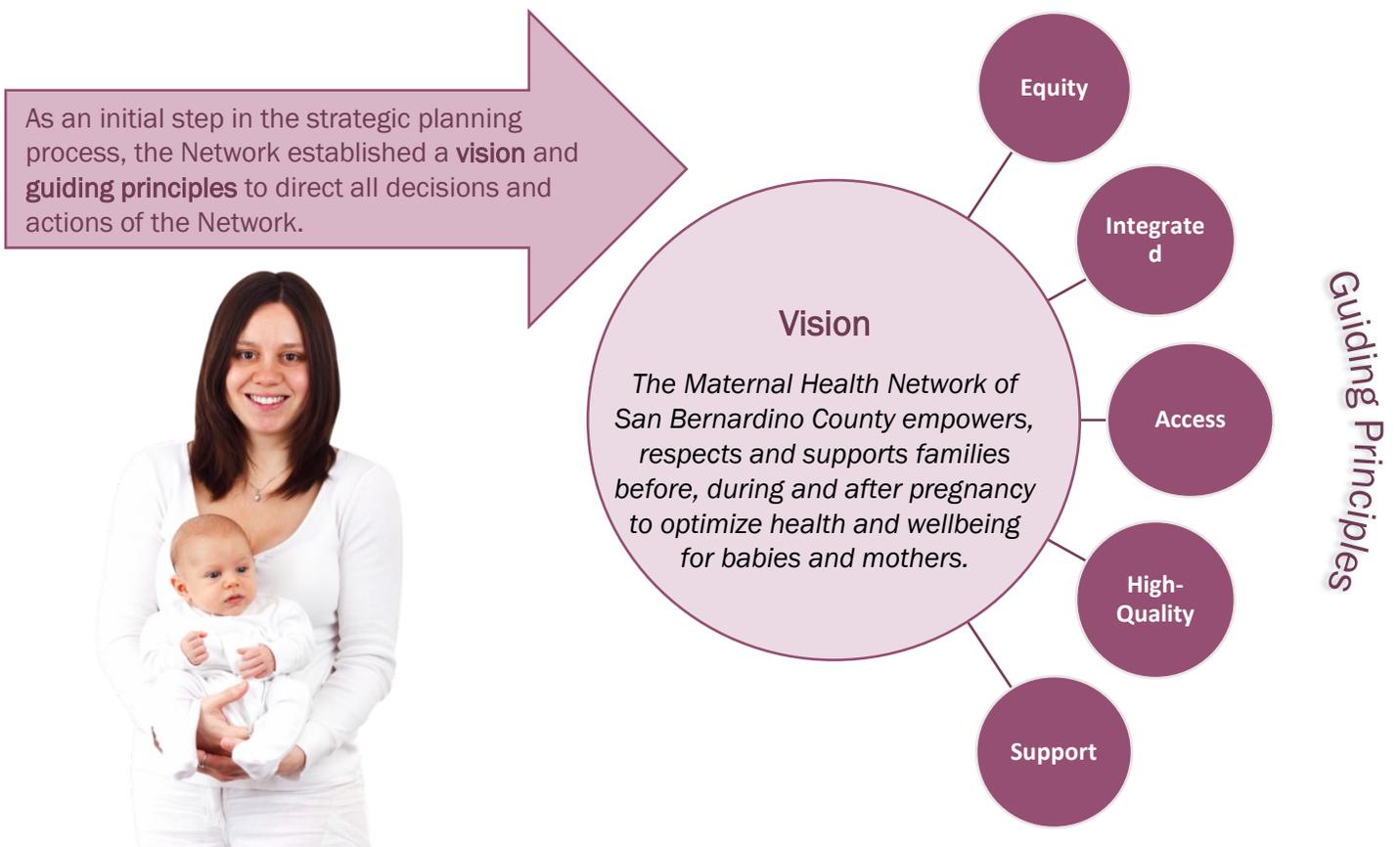
The Maternal Health Network (MHN, herein referred to as “Network”) of San Bernardino County is a collective of various service providers that support the maternal health system throughout San Bernardino County.

Membership includes:

- Prenatal & Postpartum Primary Care Providers
- Community Clinics & Birthing Hospitals
- Oral Health Providers & Advocates
- San Bernardino County Public Health
- Midwives & Doulas
- Health Plans
- Law Enforcement & Detentions
- School-based Services
- Family Resource & Support Service Organizations
- Breastfeeding Support Services & Coalitions
- Behavioral Health & Substance Abuse Providers

The Network has developed a strategic plan with the goal of establishing a comprehensive, coordinated, and responsive support system for families who are planning to become pregnant, those that are pregnant and those that have recently delivered a child

This strategic plan was built utilizing a **collective impact framework**, based on the understanding that issues facing the maternal health system in San Bernardino County were complex and required the joint contribution of multiple service sectors, stakeholders, advocates and consumers.



As an initial step in the strategic planning process, the Network established a **vision** and **guiding principles** to direct all decisions and actions of the Network.



Vision

The Maternal Health Network of San Bernardino County empowers, respects and supports families before, during and after pregnancy to optimize health and wellbeing for babies and mothers.

- Equity
- Integrated
- Access
- High-Quality
- Support

Guiding Principles

The Maternal Health Network of San Bernardino County is committed to the equity of all individuals accessing maternal health services. As such, the Network has chosen to use gender-affirming language where possible. However, wherever outside sources are referenced, the specific gender term utilized by the resource is used to ensure continuity.



The second step in the strategic planning process included the completion of an asset and gaps analysis. The goal was to understand and document the broad landscape of existing maternal health components within the County. A number of consistently identified themes emerged as a result of the asset and gaps analysis. These critical issues have been identified as the most pressing problems that should be addressed by the Network. They include:

Critical Issues

-  **Equity:** Social determinants of health are closely linked to maternal health outcomes. This is most evident amongst African American families who fare far worse in many maternal health outcomes, even in areas where the county as a whole is doing well.
-  **Early Identification of Risk:** Issues such as obesity, diabetes, and alcohol and other drug use can create a high risk pregnancy. That said, families do not always seek or receive preventive supports to meet their physical and behavioral health needs before, in between, during, and directly following pregnancy.
-  **Access to Community Resources:** There is a general lack of knowledge about resources available amongst providers and consumers. Additionally, there are not enough services in place or systems to assist with connections to care.
-  **Data Sufficiency:** Data deficiencies prevent the system from understanding the full range of issues facing families, with a specific gap in information around priority populations. Additionally, the data currently available is outdated and may not reflect the current status of families within the system.
-  **Provider Capacity:** There are not enough providers to meet the growing needs of families within the maternal health system. Additionally, existing providers don't always have the training, supports or resources to implement services within a customized and culturally competent framework.

The final step in the strategic planning process involved the identification of goals and strategies that were developed in response to the critical issues identified. The goals and strategies were developed using the San Bernardino Community Transformation Plan and Community Vital Signs Initiative as a framework for implementation, and as such the terms used are consistent with that Initiative. Icons used are meant to represent the critical issue that the plan component addresses.

Goals

-  **Equity:** Ensure there will be equity in experiences and outcomes amongst African American/Black families engaged in the maternal health system as compared to other groups.
-  **Early Identification of Risk:** Increase early screenings and connection to care for families with high risk pregnancies and ensure they know about and engage in healthy habits before, during and directly following pregnancy.
-  **Access to Community Resources:** Improve coordination of care and cross collaboration between sector providers and county coalitions so that families will know about and will be able to access services that meet their full range of needs.
-  **Data Sufficiency:** Increase reliable, timely and comprehensive data collection efforts across the maternal health network to drive quality improvement and decision making.
-  **Provider Capacity:** Equip the Maternal Health Network with a sufficient workforce to meet community needs in a culturally competent fashion.



The following strategies were selected as they serve to address multiple goals and will require cross-sector support and implementation.

<p>Policy and Practices</p>	  <p>Support Perinatal Equity Initiative to address maternal health disparities as it relates to our goals.</p>	   <p>Work with the criminal justice system to develop a protocol for connecting individuals who are pregnant to care upon release.</p>	   <p>Work with local school districts to connect pregnant teens to services both on and off school sites.</p>
<p>Community Education</p>	  <p>Implement a community education campaign to support healthy pregnancy and delivery. Topics to include healthy habits, benefits of breastfeeding, caring for yourself and your baby directly following birth, and maternal mental health.</p>	  <p>Develop and/or distribute marketing materials that support healthy pregnancy and delivery tips and resources which can be used throughout the Maternal Health Network.</p>	
<p>Service Expansion</p>	   <p>Support co-location of services and team approaches to care for families accessing maternal health services.</p>	  <p>Establish pro-active screening and education efforts with pregnant families.</p>	   <p>Prioritize service expansion in the following areas: Black Infant Health, pre- and inter-conception care, breastfeeding, behavioral health, midwives and doulas, as well as home visiting that specifically focuses on families who are pregnant.</p>
	   <p>Support innovative solutions that expand access to care (telehealth and virtual service provision as well as mobile clinics).</p>	  <p>Ensure the availability of a maternal health help line that provides resource information and navigational supports.</p>	
<p>Data Collection</p>	     <p>Establish a data collection effort that can be used throughout the Maternal Health Network.</p>	    <p>Support organizations in using data to drive discussions around issues of equity and quality of care.</p>	
<p>Workforce Development</p>	   <p>Partner to support workforce recruitment within the maternal health sectors, with an emphasis on reaching people of color.</p>	   <p>Increase provider capacity through targeted training to include implicit bias, culturally competent service delivery, and social determinants of health.</p>	

Legend

-  Equity
-  Early Identification of Risk
-  Access to Community Resources
-  Data Sufficiency
-  Provider Capacity
-  Alignment with Community Vital Signs Initiative of San Bernardino

The network has established an accountability structure that includes the work of a backbone organization, a Leadership Team and Network membership. Together, this multi-level collaboration will meet regularly, work to implement efforts within a cross-sector framework and hold itself accountable using identified benchmarks for measuring success.



Introduction

As a component of their 2015-2020 Strategic Plan, First 5 San Bernardino established a health goal which states that “Children prenatal through age 5 and their families can access the full spectrum of health and behavioral health services needed to enhance their well-being.”



Children prenatal through age 5 and their families can access the full spectrum of health and behavioral health services needed to enhance their well-being.

Families have access to resources and environments that support the total wellness of the child

Families are knowledgeable of and utilize available resources to manage their health

Children are born healthy

To support this goal, the Commission funded separate initiatives which included prenatal substance abuse screening and treatment, lactation support, and improved oral health care during pregnancy. Beyond gains made within these investment areas, the Commission identified the need to deepen its efforts to accomplish its health goal through a collective impact framework and systems building strategy.

To accomplish this, the Commission funded a project intended to achieve the following objectives:

- Develop infrastructure to support a multi-disciplinary maternal health network for San Bernardino County.
- Establish a shared understanding of assets and gaps within the maternal health system.
- Create a strategic plan to guide efforts within the maternal health system for San Bernardino County.

The result was the development of a Maternal Health Network, which conducted an asset and gaps analysis of the maternal health system and used that information to establish the plan contained herein.

Maternal Health Network

The Maternal Health Network (MHN, herein referred to as “Network”) of San Bernardino County is a collective of various service providers and advocates who support the maternal health system throughout San Bernardino County.

Membership includes:

- Prenatal & Postpartum Primary Care Providers
- Community Clinics & Birthing Hospitals
- Oral Health Providers & Advocates
- San Bernardino County Public Health
- Midwives & Doulas
- Health Plans
- Law Enforcement & Detentions
- School-based Services
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Sectors within the Maternal Health Network

The following sectors were identified and engaged throughout the development of this strategic plan and are key to achieving its purpose.

Prenatal & Postpartum Primary Care and Oral Health



Primary and oral healthcare play a key role in the overall health of expectant and recently delivered Individuals. Continuous access to healthcare in the preconception, prenatal, and postpartum periods “can help prevent complications and inform women about important steps they can take to protect their infant and ensure a healthy pregnancy.”¹ While the importance of primary care during pregnancy is well known, oral health is an often overlooked, but nonetheless crucial, indicator of overall maternal and infant health. The oral health of mothers is correlated with the oral health of their children, with studies finding an association between oral disease during pregnancy and poor infant health outcomes.

For the purposes of the Network, prenatal and postpartum primary care providers encompass family and nurse practitioners, pediatricians, obstetricians and gynecologists, federally qualified health Centers (FQHCs), Indian health clinics, and public health clinics. Oral health providers were also engaged and included dental clinics and Denti-Cal providers.

Birthing Supports



Birthing supports comprise individuals and organizations that provide prenatal services such as birthing education and other preparatory activities, as well as a location for and/or assisting in the actual birthing process. Ideal birthing supports help ensure that families have the birth experience of their choosing, by providing safe options grounded in both best practices and current research, as well as based around the pregnant person’s preferences, medical history, and personal circumstances.

For the purposes of the Network, birthing support providers encompass baby-friendly hospitals, hospitals with labor and delivery, birthing centers, midwives, and doulas.

Behavioral Health & Substance Abuse Prevention, Intervention and Treatment



Maternal behavioral health and substance misuse are two factors that have the potential not only to negatively impact the mother and developing child during pregnancy, but to have long-term and long-lasting negative consequences for the emotional and physical health of both parent and child. With internal and external stigmas attached to the disclosure of either a behavioral health or substance misuse issue, finding ways to provide families with the help they need to overcome these barriers to a successful pregnancy can be challenging.

For the purposes of the Network, behavioral health providers encompass counselors, psychiatrists, psychologists, and mental health support groups. Substance use intervention providers comprise “alcohol and other drug” (AOD) counselors, general counseling services, medication assisted treatment (MAT) programs, substance abuse intervention services, and substance abuse support groups.

¹ “What is prenatal care and why is it important?” National Institute of Child Health and Human Development. Accessed at <http://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/pre-natalcare> on May 21, 2019.





Prenatal & Postpartum Wellness



Perinatal and postpartum maternal wellness is focused on supporting a high overall quality of life for individuals who are pregnant or planning to become pregnant. Providing women with the most up-to-date research and best practices in exercise, nutrition, medicine, family planning, and birthing supports can help ensure a healthy lifestyle for individuals and their families before, during, and after pregnancy. This is best facilitated by a seamless continuum of care that delivers similar, reinforcing information to women via multiple resources at all stages of their pregnancy.

For the purposes of the Network, wellness facilitators encompass birth preparation, education, and advocacy groups; breastfeeding supports and lactation consultants; counseling services; family resource centers/support services; federally qualified health centers; help-and hot-lines; home visiting programs; support groups; and WIC services.

Services for Priority Populations



While all women face a baseline set of challenges before, during, and after pregnancy, specific issues faced by marginalized groups may be exacerbated by pregnancy. Living in a high poverty area; experiencing food insecurity, homelessness, or intimate partner abuse; and/or being undocumented are extreme difficulties in and of themselves. Additionally, being a woman of color or a teen can carry its own set of challenges. Navigating one, or more, of these while pregnant requires access to special resources to support the delivery of a healthy baby and well-being of the mother.

For the purposes of the Network, priority populations included women of color, teens, women who are undocumented immigrants, women who are victims of domestic violence, and women who are incarcerated.

Maternal Health Network



Purpose of the Plan

The Network has developed this strategic plan with the purpose of establishing a comprehensive, coordinated, and responsive support system for families who are planning to become pregnant, those that are pregnant and those that have recently delivered a child.



Strategic Orientation

This strategic plan was built utilizing a collective impact framework, based on the understanding that issues facing the maternal health system in San Bernardino County were complex and required the joint contribution of multiple service sectors, stakeholders, advocates and consumers.

Collective Impact Framework

The Stanford Social Innovation Review published a report of collective impact, which examined the approach as it pertains to large-scale social change.² Through their analysis, researchers determined that large-scale change occurs through cross-sector coordination rather than from isolated interventions from individual organizations. Collective impact relies upon five inter-related pillars, which are summarized below.

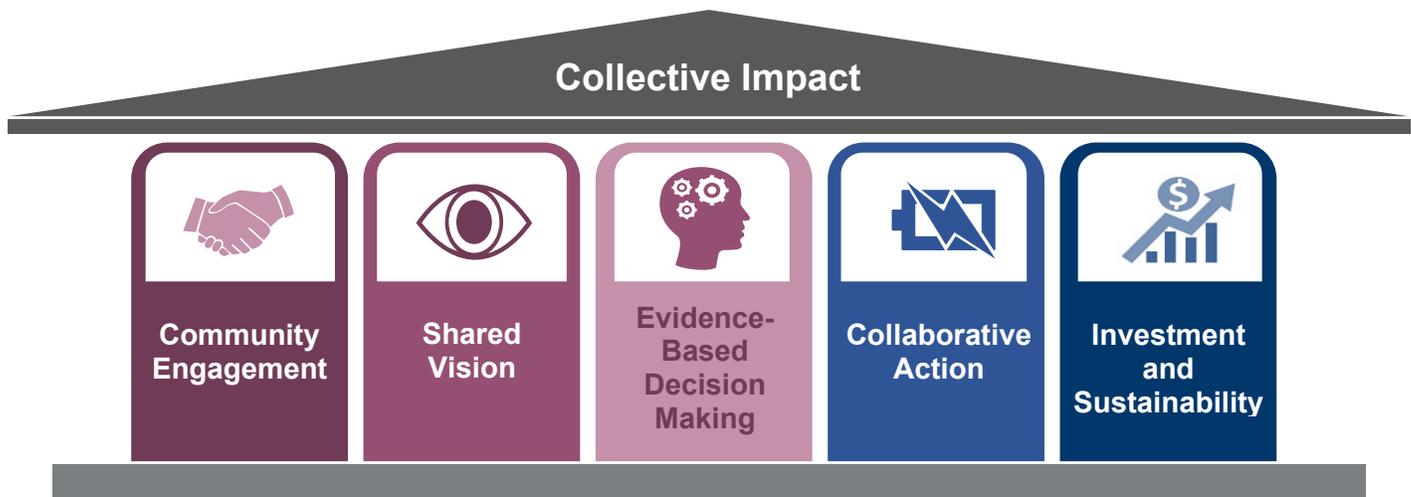


Figure 1. Collective Impact Framework

Community Engagement

- ❖ Work with community to identify aspirations and use public knowledge to drive the vision of the partnership.

Shared Vision

- ❖ Partners come together around a vision for improving outcomes.

Evidence-Based Decision Making

- ❖ Partners organize around outcomes, identifying indicators and collecting local data to determine areas of need and promising practices/activities.

Collaborative Action

- ❖ Community stakeholders come together to collectively move an outcome.

Investment and Sustainability

- ❖ Initiating or redirecting resources (time, talent and treasure) toward practices that have proven to demonstrate results on an ongoing basis.

² Stanford Social Initiative Review, 2011. Retrieved from https://ssir.org/articles/entry/collective_impact#



Vision and Guiding Principles

As demonstrated in Figure 1, a common vision is a key element of collective impact. The following vision and guiding principles serve to direct all decisions and actions of the MHN.

Figure 2. Maternal Health Network Vision and Guiding Principles

Vision

The Maternal Health Network of San Bernardino County empowers, respects and supports families before, during and after pregnancy to optimize health and well-being for babies and mothers.

Guiding Principles

Equity: Across socio-demographic and geographic boundaries, comprehensive systems are in place which provide respectful, equitable and effective care, eliminating health disparities.

Integrated: Across systems, providers and sectors collaborate to create a seamless, efficient, no wrong door for women who are pregnant and for those who have just delivered a child.

Access: Across multiple sectors, partners reach out to those not served and ensure services are provided to women where they are whether it be in jail, a program or in the community.

High-Quality: Across the county, evidence-based practice is promoted, understood and implemented to achieve the best outcomes for women and babies.

Support: Across the service spectrum, women are supported, feel safe, are treated with respect and are provided the information they need to make the best decisions for their health and the health of their child before, during and after delivery.





Situational Analysis

To support evidence-based decision making, the Network commissioned an asset and gaps analysis. The goal was to understand and document the broad landscape of existing maternal health components within the County.

Areas of exploration included:



Maternal Health Status

To understand the maternal health status of families in San Bernardino County, maternal health indicators and other data were gathered.



Maternal Health Resources

To understand what supports are available throughout San Bernardino County related to maternal health, resources were mapped according to their type and location.



Systems Issues

To understand systems issues associated with maternal health services, stakeholders were engaged through community gatherings as well as through provider discussions.

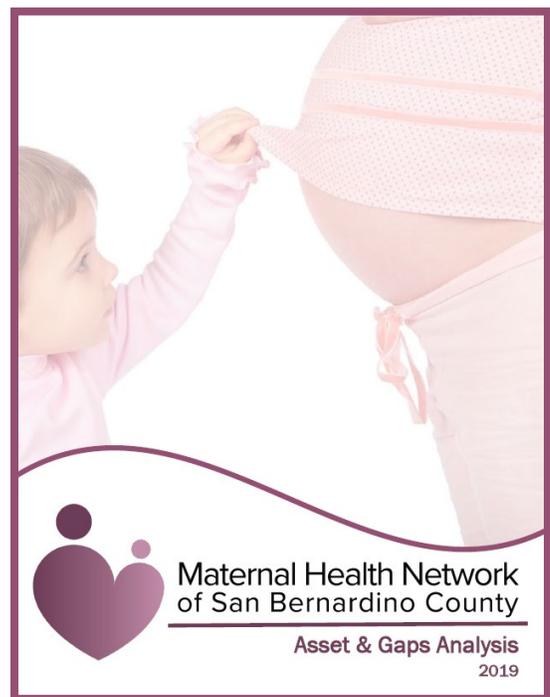


Consumer Experience

To understand the experience of consumers engaged in the maternal health system, surveys were issued to families who were either pregnant or those that had recently delivered a child.

The result was the completion of a Maternal Health Network Asset and Gaps Summary Report, which is a companion document to this strategic plan. The Asset and Gaps Summary Report, along with other documents produced by the Maternal Health Network, can be found at: <http://tiny.cc/MHN>.

A summary of the situation facing families engaged in the maternal health system is included in the following section.



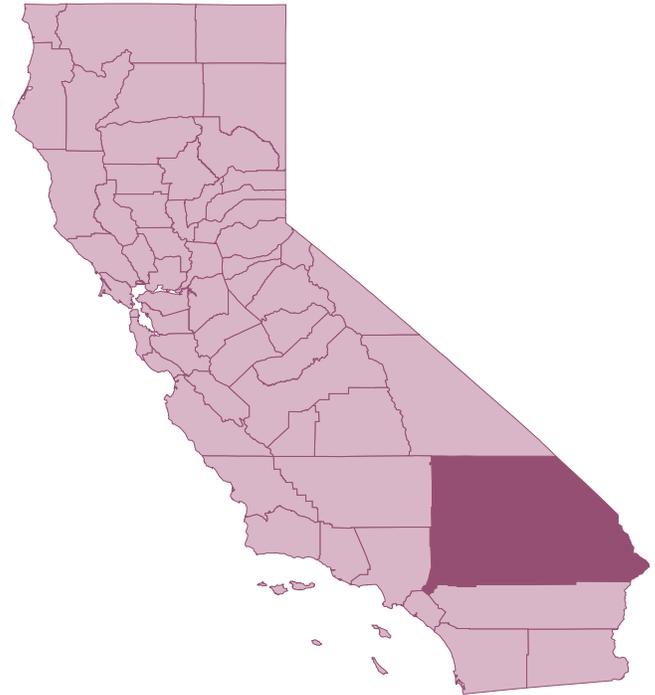


County-wide Context

This section presents a brief description of San Bernardino County to include the geography and demographic profile of residents, with a summary of the factors that can influence maternal health.

Geography

San Bernardino County is located in the southern portion of California. With an area of 20,105 square miles, it is the largest county in the United States. The County is bordered by the state of Nevada to the east, Inyo County to the north, Kern and Los Angeles counties to the east, and Riverside County to the south, with San Bernardino County and Riverside County together encompassing a 27,000 square mile area informally known as the Inland Empire region.



Demographics

The U.S. Census Bureau estimated that there were a total of 2,171,603 people living in San Bernardino County in 2018, an increase of 6.7% over April 2010.³ The highest population density is found in the southwest, particularly in and around San Bernardino City, Fontana, Chino, and Ontario.

Most Relevant Demographic Characteristics

A slight majority of San Bernardino residents are female (50.2%), and approximately 62% of female residents are between the ages of 18 and 65 (i.e. many of whom are within the childbearing range). Of particular relevance to discussions regarding inequities in outcomes and support for priority populations are the following demographic characteristics:⁷

- Over half (54%) of San Bernardino's residents are Latino
- Non-Latino races include: White (27.9%), African American (9.4%), Asian or Pacific Islander (8.2%), American Indian (2.1%), two or more races (3.5%)
- The percentage of individuals living in poverty is 16%
- The percentage of individuals under 65 without health insurance is 8.3%

Social Determinants of Health

Fully appreciating the maternal health needs of families in San Bernardino County requires a fundamental understanding of the social determinants that impact overall health and well-being. The Centers for Disease Control and Prevention (CDC) define social determinants of health as the "circumstances in which people are born, grow up, live, work and age."⁴ In addition, it includes the systems in place to offer healthcare and services to a community.

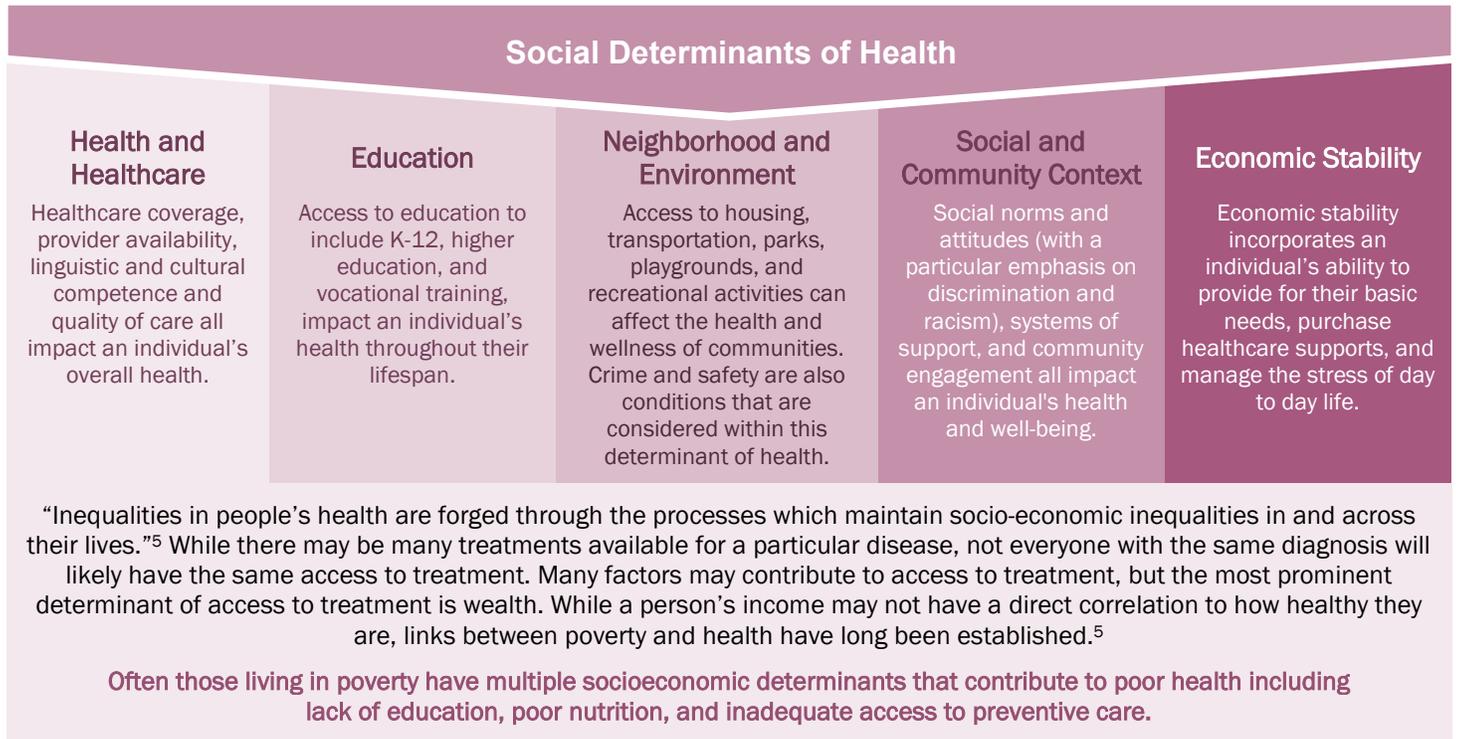
A brief summary of relevant social determinants of health is provided on the following page.

³ U.S. Census Bureau Quick Facts. Retrieved on June 24, 2019 from <https://www.census.gov/quickfacts/fact/table/sanbernardinocountycalifornia/AFN120212>

⁴ Retrieved on November 12, 2018 from: Centers for Disease Control and Prevention. (2018). Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/>



Figure 4. Social Determinants of Health



Key social determinants of health are presented below to highlight those issues that are most likely to impact the health of pregnant or recently delivered women and their infants in San Bernardino County.⁵

Social Determinants of Health Relevant to Maternal Health

	California	San Bernardino County	African American	Asian/Pacific Islander	Hispanic	White
 Uninsured Prior to Pregnancy	24.0%	26.6%	10.0%	14.9%	29.2%	18.8%
 Lives in High Poverty Neighborhoods	38.9%	49.6%	60.7%	28.6%	57.2%	30.3%
 Food Insecurity During Pregnancy	16.6%	18.0%	19.5%	Data not available	15.2%	16.8%
 Received CalFresh (Food Stamps)	24.9%	35.4%	68.0%	Data not available	40.7%	21.8%
 Experienced Intimate Partner Violence	7.1%	9.7%	10.3%	Data not available	9.5%	5.8%
 Homeless/Without Regular Place to Sleep	2.9%	2.6%	9.1%	Data not available	2.2%	Data not available

⁵ All data presented below were retrieved from

Maternal and Infant Health Assessment (MIHA) Survey County and Regional Data Snapshots, 2013-2014. California Department of Public Health. 2016.

Maternal and Infant Health Assessment (MIHA) Survey County and Regional Data Snapshots for Subgroups, 2013-2015. California Department of Public Health; 2018.



Summary of Situation Facing Families in San Bernardino County

The following information represents cross-cutting assets and gaps identified by representatives from each sector of the Maternal Health Network.

Maternal Health Status

Data was collected to understand the maternal health status of families in San Bernardino County. It is important to note that where the County as a whole may be doing well, sub-populations can be suffering from negative health outcomes.

Areas of Strength



Health Insurance Coverage

Most women in San Bernardino County who are pregnant or who are planning to become pregnant have insurance.



Prenatal Care

In San Bernardino County, women receive prenatal care within the first trimester at rates higher than the state average. Additionally, women receive adequate prenatal care at rates higher than the state average. That said, providers question whether women continue to receive consistent care beyond the first trimester.



WIC Participation

San Bernardino County has a significantly higher rate of women participating in WIC during pregnancy than the state average, with 60.9% of pregnant women accessing WIC services at some point during their pregnancy.

Areas for Improvement



Cesarean Births

San Bernardino County has a higher rate of cesarean births (per live births) than the state average.



Prenatal and Postpartum Supports

Nearly one in ten (9%) of recently delivered women in California had no postpartum visits. Women on Medi-Cal were twice as likely to have no postpartum office visits, and more than twice as likely to have no postpartum, emotional or practical support compared to those with private insurance. In addition, very few women access the support of midwives or doulas for prenatal or postpartum support.



Breastfeeding

Women in San Bernardino are not breastfeeding exclusively for long durations. Whereas the national standard is that 46.2% of women breastfeed three months after delivery, in San Bernardino, the rate is only 22.6%.



Focus on African American Families

African American families fare worse than other race/ethnicity groups in many maternal health indicators, including early and adequate prenatal care, rates of cesarean births, and vaginal births after cesareans (VBACs).



Maternal Health Resources

San Bernardino County is host to a variety of resources to support families within the maternal health system. Resources were identified and mapped according to their service sector and location. An interactive map of these resources can be accessed at the following link: <https://rebrand.ly/first5maternalhealth>

A summary of resources by each service sector is found in the table below*:

Prenatal & Postpartum Primary Care and Oral Health	Birthing Supports for Families	Behavioral Health & Substance Use	Prenatal & Postpartum Wellness	Support for Priority Populations
<ul style="list-style-type: none"> • 3 Breastfeeding Support Services • 4 Federally Qualified Health Centers • 1 Public Health Clinic • 1 Indian Health Clinic • 100 OB/GYN Providers • 111 Family and Nurse Practitioners • 17 Pediatricians • 145 Denti-Cal Providers • 1 Dental Clinic 	<ul style="list-style-type: none"> • 11 Baby-Friendly Hospitals • 8 Hospitals with Labor & Delivery • 2 Birthing Centers • 13 Midwives • 5 Doulas 	<ul style="list-style-type: none"> • 7 Alcohol & Drug Counseling Services • 75 Counseling Service Providers • 5 MAT Providers • 4 Mental Health Support Groups • 28 Psychiatrist Services • 69 Psychologist Services • 10 Substance Use Interventions • 55 Substance Abuse Support Groups • 3 Tobacco Prevention Programs • 1 Federally Qualified Health Center • 4 Help-Line/Hotlines • 3 Psychiatric Hospitals 	<ul style="list-style-type: none"> • 24 Birth Prep, Education, and Advocacy Services • 23 Breastfeeding Support Services • 2 Counseling Providers • 18 Family Resource & Support Services • 48 Federally Qualified Health Centers • 2 Home Visiting Programs • 2 Lactation Consultants • 14 Mobile Clinics • 3 Support Groups • 24 WIC Services • 6 Help-Line/Hotlines 	<p><u>Women of Color</u></p> <ul style="list-style-type: none"> • Black Infant Health Program • Perinatal Equity Initiative • Sankofa Birth Workers Collective • Inland Empire Birth Workers of Color • LIFT Program • African American Advisory Council <p><u>Teens</u></p> <ul style="list-style-type: none"> • 5 Teen Parenting Programs <p><u>Women who are Undocumented Immigrants</u></p> <ul style="list-style-type: none"> • 2 Immigrant Support Service Providers <p><u>Women who are Victims of Domestic Violence</u></p> <ul style="list-style-type: none"> • 23 Domestic Violence Support Organizations <p><u>Women who are Incarcerated</u></p> <ul style="list-style-type: none"> • 1 Criminal Justice Program serving women who are Incarcerated

*Additional resources may be available on the interactive map but not be included in the list above.



As demonstrated in the interactive map referenced above, the majority of birthing support resources within San Bernardino County are located in the southwest part of the county. Not surprisingly, resource distribution is positively correlated with population density, with higher numbers of resources located in the more populated areas. It should be noted that resources may be utilized by individuals living outside of San Bernardino County, which may exacerbate any shortages seen within the region.



System Issues

The following areas were identified as strengths within the maternal health system:

County Coalitions	Stakeholders described a variety of coalitions that exist to support families throughout the maternal health system.
Information Sharing	Inland Empire Health Plan (IEHP) and Molina (the two primary health plans in San Bernardino County) were identified as doing well at providing information and training opportunities to their members.
Innovative Practices	Stakeholders identified innovative practices within the maternal health system to include service integration models of care and a Doula Access Pilot Project being provided by IEHP.
Targeted Interventions	Targeted interventions such as the Black Infant Health Project and the Perinatal Equity Initiative (to address maternal health disparities) and transportation supports (to address barriers to access) are in place and working well.

The following are areas where the system fails to meet the needs of families in San Bernardino County:

Operational Variations	System stakeholders described operational variations amongst service providers, resulting in service provision disparities. The timeliness, quality and ease related to care can be impacted by the business model of the service organization, the approach to care utilized by a provider and/or the payment method of the consumer.
Cultural Competency	Stakeholders describe a workforce that doesn't provide services within a culturally competent framework. Furthermore, service providers do not always have the information, knowledge and/or resources to customize their service approach to targeted populations.
Coordination of Care	Stakeholders identified a lack of coordination amongst service providers making continuity of care difficult and duplication of efforts likely.
Data Deficiencies	System stakeholders identified significant data deficiencies that make it difficult to understand issues facing families in San Bernardino County, specifically within the priority populations. Additionally, the data currently available is outdated and may not reflect the current status of families within the maternal health system.
Service Responsiveness	System stakeholders describe a system that doesn't adequately support individuals as they enter the maternal health system, often leaving families to their own devices to understand what resources exist and how to access them. They described a system that doesn't sufficiently listen to families regarding their concerns and desires or have a referral mechanism to connect families to the variety of resources that are available.



Critical Issues

Within a collective impact framework, a **common agenda** is defined as “a common understanding of the problem among all participants and an agreement of what is most important to focus on.”

For a collective impact initiative, the common agenda serves as a unifying force. Often organizations working on the same social issue will have variations in their definition of the problem. When organizations begin working together, these variations result in frustration and fractured actions that undermine the impact of the collective effort if the time is not spent upfront developing a common agenda. Participants do not have to agree on all aspects of the issue, but they do need to develop clarity and agreement on detailed primary goals in order to have productive dialogue and aligned actions.⁶

A number of consistently identified themes emerged from an analysis of all of the assets and gaps explored within the maternal health system serving San Bernardino County. These critical issues have been agreed upon by the Network as the most pressing problems that should be addressed through this plan. They include:

Equity



Social determinants of health are closely linked to maternal health outcomes. This is most evident amongst African American families who fare far worse in many maternal health outcomes, even in areas where the county as a whole is doing well.

Early Identification of Risk



Issues such as obesity, diabetes, and alcohol and other drug use can create a high risk pregnancy. That said, individuals who are pregnant do not always seek or receive preventive supports to meet their physical and behavioral health needs before, in between, during, and directly following pregnancy.

Access to Community Resources



There is a general lack of knowledge about resources available amongst providers and consumers. Additionally, there are not enough services in place or systems to assist with connections to care.

Data Sufficiency



Data deficiencies prevent the system from understanding the full range of issues facing families, with a specific gap in information around priority populations. Additionally, the data currently available is outdated and may not reflect the current status of families within the system.

Provider Capacity



There are not enough providers to meet the growing needs of families within the maternal health system. Additionally, existing providers don't always have the training, supports or resources to implement services within a customized and culturally competent framework.

⁶ Retrieved on September 23, 2019 from: <http://www.strategyarts.com/2014/11/leveraging-collective-impact-in-your-collective-actions-the-common-agenda/>



Plan for the Future

To address the aforementioned critical issues, the Network engaged in a series of activities to establish a plan for the future. The plan, which includes goals, strategies, timelines and benchmarks, was developed using the San Bernardino Community Transformation Plan and Community Vital Signs Initiative as a framework for implementation. Icons used throughout this section are meant to represent the critical issue that the plan component addresses.

Maternal Health Network Goals

The following goals were developed to drive collaboration efforts over the term of this plan.



Ensure there will be equity in experiences and outcomes amongst African American/Black families engaged in the maternal health system as compared to other groups.



Increase early screenings and connection to care for families with high risk pregnancies and ensure they know about and engage in healthy habits before, during and directly following pregnancy.



Improve coordination of care and cross collaboration between sector providers and county coalitions so that families will know about and will be able to access services that meet their full range of needs.



Increase reliable, timely and comprehensive data collection efforts across the maternal health network to drive quality improvement and decision making.



Equip the maternal health network with a sufficient workforce to meet community needs in a culturally competent fashion.



Collaborative Plan of Action

The following strategies were identified by a wide group of Network stakeholders as the mechanism to realize the goals outlined in this plan. The selected strategies often serve to address multiple goals and will require cross-sector support and implementation. Best practice efforts to implement select strategies can be found in the appendix of this report.

<p>Policy and Practices</p>	  <p>Support Perinatal Equity Initiative to address maternal health disparities as it relates to our goals.</p>	   <p>Work with the criminal justice system to develop a protocol for connecting individuals who are pregnant to care upon release.</p>	   <p>Work with local school districts to connect pregnant teens to services both on and off school sites.</p>
<p>Community Education</p>	  <p>Implement a community education campaign to support healthy pregnancy and delivery. Topics to include healthy habits, benefits of breastfeeding, caring for yourself and your baby directly following birth, and maternal mental health.</p>	  <p>Develop and/or distribute marketing materials that support healthy pregnancy and delivery tips and resources which can be used throughout the Maternal Health Network.</p>	
<p>Service Expansion</p>	   <p>Support co-location of services and team approaches to care for families accessing maternal health services.</p>	  <p>Establish proactive screening and education efforts with pregnant families.</p>	   <p>Prioritize service expansion in the following areas: Black Infant Health, pre- and inter-conception care, breastfeeding, and behavioral health, midwives and doulas, as well as home visiting that specifically focuses on families who are pregnant.</p>
	   <p>Support innovative solutions that expand access to care (telehealth and virtual service provision as well as mobile clinics).</p>	  <p>Ensure the availability of a maternal health help line that provides resource information and navigational supports.</p>	
<p>Data Collection</p>	     <p>Establish a data collection effort that can be used throughout the Maternal Health Network.</p>	    <p>Support organizations in using data to drive discussions around issues of equity and quality of care.</p>	
<p>Workforce Development</p>	   <p>Partner to support workforce recruitment within the maternal health sectors, with an emphasis on reaching people of color.</p>	   <p>Increase provider capacity through targeted training to include implicit bias, culturally competent service delivery, and social determinants of health.</p>	

Legend

-  Equity
-  Early Identification of Risk
-  Access to Community Resources
-  Data Sufficiency
-  Provider Capacity

 Alignment with Community Vital Signs Initiative of San Bernardino



Timeline and Benchmarks for Success

Each of the strategies identified to strengthen the Maternal Health Network is organized as either short-term: urgent, to be addressed within the next 1-2 years; mid-term: important but not urgent, to be completed within 3-5 years; or long-term, which are considered important but can wait. Implementation will depend on leveraging existing efforts as well as establishing new ones. Benchmarks will be used to measure whether each of the strategies has been successfully implemented.

	Strategy	Benchmark for Success
Short Term	Support the Perinatal Equity Initiative (PEI) to address maternal health disparities as it relates to our goals.	➤ Reduction of racial disparities within maternal health outcomes.
	Work with the criminal justice system to develop a protocol for connecting individuals who are pregnant to care upon release.	➤ Release protocol developed and implemented for pregnant people who are incarcerated.
	Develop and/or distribute marketing materials that support healthy pregnancy and delivery tips and resources which can be used throughout the Maternal Health Network.	➤ Marketing materials developed and distributed throughout the Network and efforts are tracked where possible (through social media analytics, number of items distributed, etc.)
	Implement a community education campaign to support healthy pregnancy and delivery. Topics to include healthy habits, benefits of breastfeeding, caring for yourself and your baby directly following birth, and maternal mental health.	➤ Number of media campaigns, community education forums, and other educational efforts (social media posts, blogs, etc.).
	Establish proactive screening and education efforts with pregnant families.	➤ Best practice protocol developed and distributed throughout the Network.
	Increase provider capacity through targeted training to include implicit bias, culturally competent service delivery, and social determinants of health.	➤ Number of county-wide and cross-sector trainings/number of providers trained throughout the Network.
Mid Term	Work with local school districts to connect pregnant teens to services both on and off school sites.	➤ Establishment of standards for connecting teens to services within school system.
	Support co-location of services and team approaches to care for families accessing maternal health services.	➤ Increased number of co-located service sites for maternal health, identified by community.
	Prioritize service expansion in the following areas: Black Infant Health, pre- and inter-conception care, breastfeeding, and behavioral health, midwives and doulas, as well as home visiting that specifically focuses on families who are pregnant.	➤ Increased funding, providers, and programs within the targeted services strategies.
	Ensure the availability of a maternal health help-line that provides resource information and navigational supports.	➤ Availability of maternal health help-line, and tracking number of individuals accessing help-line.
	Establish a data collection effort that can be used throughout the Maternal Health Network.	➤ Number of new/enhanced data collection efforts and reports available throughout the Network.
	Partner to support workforce recruitment within the maternal health sectors, with an emphasis on reaching people of color.	➤ Increased number of providers within the Network, tracked by race and geographical representation.
Long Term	Support innovative solutions that expand access to care (telehealth and virtual service provision as well as mobile clinics).	➤ Number of new innovative service delivery options available as tracked by geographical service provision.
	Support organizations in using data to drive discussions around issues of equity and quality of care.	➤ Number of Network providers using data to drive quality improvement efforts.

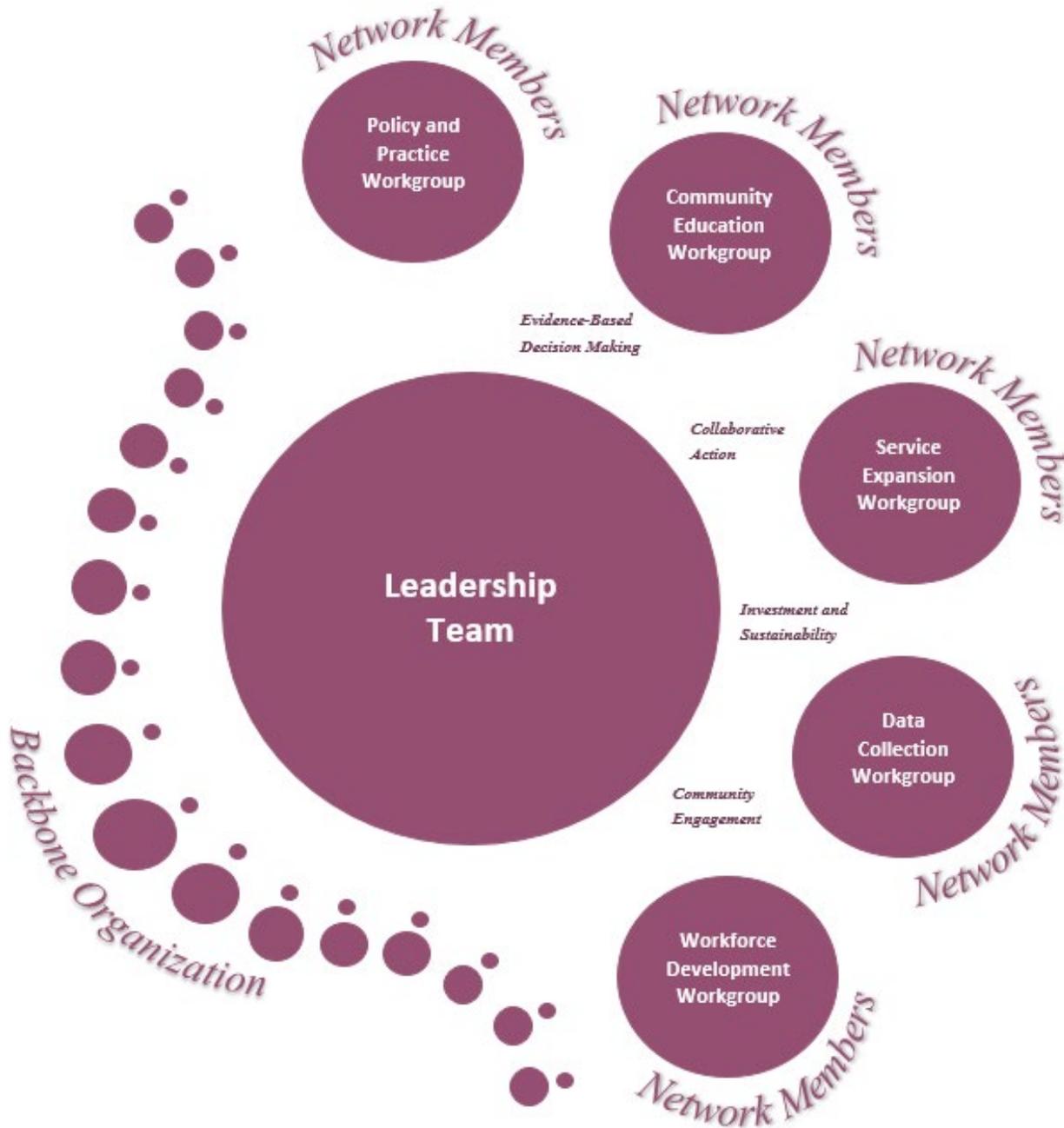


Connecting the Maternal Health Network

The following section describes how the Network will continue to be connected and work towards achieving the goals it has established.

Accountability Structure

To ensure the Network continues to grow, thrive, and implement this strategic plan, it has established an accountability structure that involves a backbone organization, a Leadership Team and a membership base made up of providers, advocates, and consumers within the maternal health system.





Backbone Organization

A defining feature of a collective impact initiative is the presence of a **backbone organization**. First 5 San Bernardino was the backbone organization responsible for originally establishing the Network as well as supporting the development of the plan contained herein.

“The expectation that collaboration can occur without a supporting infrastructure is one of the most frequent reasons why it fails. The backbone organization requires a dedicated staff separate from the participating organizations who can plan, manage, and support the initiative through ongoing facilitation, technology and communications support, data collection and reporting, and handling the myriad logistical and administrative details needed for the initiative to function smoothly.”⁷

First 5 San Bernardino will continue to function in the role of the backbone organization throughout 2020, with the expectation that an alternative entity will take over that role in 2021 and beyond. Potential entities have been identified and will be explored. Additionally, the option of establishing a new non-profit to fulfill the role will be assessed for viability.

First 5 San Bernardino will work in conjunction with the Leadership Team to identify the best option for backbone support for the future.

Leadership Team

The Leadership Team consists of cross-sector leaders, decision makers and community members who provide strategic direction, champion the Network’s efforts and align their own organization’s work to the collaborative plan of action. The Leadership Team is made up from representatives of the following agencies and will continue to meet throughout plan implementation to monitor activity and to modify the approach to goal achievement when necessary.

- Arrowhead Regional Medical Center
- Cal Baptist University
- Center for Oral Health
- Community Health Systems Inc.
- Dignity Health/St. Bernadine Medical Center
- First 5 San Bernardino
- Inland Empire Breastfeeding Coalition
- Inland Empire Health Plan
- Ivy Midwifery Services
- March of Dimes
- Morongo Basin Healthcare District
- Progressive Ob/Gyn Medical Group
- Regional Perinatal Programs of CA
- San Bernardino County Department of Behavioral Health
- San Bernardino County Department of Public Health
- San Bernardino County Sherriff’s Department
- San Bernardino County Superintendent of Schools
- San Bernardino Courts
- St. Joseph Health, St. Mary
- The Village Midwifery Services

Network Membership

Network members are those that are involved in the maternal health system as a provider, connector, advocate or consumer. In the establishment of this plan, membership was established through workgroup participation and summit engagement. Membership will continue to play a critical role through future summit gatherings to establish workgroup specific action plans and implementation efforts. Existing membership is expected to be sustained and grow over time as more people are invited and informed about strategic plan implementation.

⁷ Retrieved on October 11, 2019 from the white paper “Backbone Organizations in Collective Impact” available at https://www.napequity.org/nape-content/uploads/NSF_backbone-memo_FINAL_03-02-17_kjf.pdf



Roles and Responsibilities

The roles and responsibilities of each component of the accountability structure are provided below.

Backbone Organization

The backbone organization will facilitate dialogue between partners, provide direct support for the Leadership Team and workgroups as needed, and generally help to coordinate the actions across efforts. Specific activities the backbone organization will provide include:

- Coordinates, facilitates and documents regular meetings held with the Leadership Team
- Coordinates Community Summits used to facilitate information sharing, engagement and workgroup efforts
- Manages communication efforts on behalf of the Network
- Incubates collaboration with new/expanding partners and key champions
- Ensures alignment amongst the partners and sharing of cross-sector data and information
- Ensures equity is kept at the center of strategies and action
- Tracks implementation activities and prepares an annual progress report
- Cultivates community relations, builds awareness and advances policy

Leadership Team

The Leadership Team will meet on a regular basis and provide support and advocacy for strategic plan implementation. They will also serve as community ambassadors and work throughout their own networks to advance efforts. Specific activities of the Leadership Team include:

- Sustains and advocates for the strategic direction set by the Network
- Provides leadership and continued guidance for strategic plan implementation
- Monitors progress towards goal achievement
- Monitors the environment (local, regional, and national efforts and trends related to the work)
- Unpacks the issues to advise and partner with the workgroups formed through network membership
- Reviews, agrees to, and accelerates the strategies and actions of Network membership

Network Membership

Network membership will lead implementation efforts through participation at Community Summits and upholding commitments made in workgroup action plans. Specific activities of Network membership include:

- Participates in Community Summits to provide input on strategic plan implementation
- Develops and organizes to implement action plans, and adjusts work to reflect what is learned through action
- Collaborates, coordinates, and aligns work to achieve goals of the Network
- Uses and shares data to evaluate and monitor work
- Expands and adapts workgroup structure to meet changing community priorities
- Identifies and secures resources needed to implement action plan strategies

It is important to note that within a collective impact framework, the cascading layers of collaboration may change over time. What is most important is that whatever structure is in place, all efforts tie back to the collaborative plan of action.



Commitment to Success

The Network is committed to ensuring strategic plan success and as such has developed a plan for ongoing communication, evaluation and regular updates to the plan.

Ongoing Communication

Ongoing communication is critical to ensure efforts are championed and momentum is sustained. The following actions will occur to ensure there is consistent communication throughout the Network and with key stakeholder groups.

Internal Communication Efforts

Regular communication will occur between the backbone organization, Leadership Team and Network membership through email, phone calls and face-to-face meetings/convenings. The backbone organization will lead communication efforts, although Leadership Team and other Network members may at times communicate between one another.

Regular meetings will ensure that there is a common vocabulary, shared focus and commitment to the collaborative plan of action, and cross-sector coordination.

- The Leadership Team will meet at least eight times throughout the year, once by phone and once in person each quarter.
- Network membership will meet at least eight times throughout the year, once through Summit participation and once by phone each quarter.

External Communication Efforts

External communication efforts will occur to keep stakeholders informed about issues impacting families engaged in the maternal health system, the Network itself, and progress made on the strategic plan. The backbone organization will take the lead in communicating with complimentary groups through attendance at meetings and through email communications. Additionally, an annual progress report will be developed and distributed. Groups that will be engaged include, but are not limited to:

- San Bernardino County Community Vital Signs
- San Bernardino County Board of Supervisors
- Perinatal Equity Initiative
- Inland Empire Perinatal Mental Health Collaborative
- Inland Empire Breastfeeding Coalition
- Help Me Grow - Inland Empire
- Perinatal Nursing Leadership Group

Evaluation

The Network has established a process for evaluating its progress to ensure continued momentum and a mechanism to adjust course when necessary. The backbone organization will continually assess progress of each strategy on the following schedule:

- **Mid-Year Report of Activity:** The backbone organization will prepare an informal report on activities conducted for each strategy at the mid-year mark to be shared with the Leadership Team and Network membership. This will offer an opportunity for early successes to be celebrated and mid-course adjustment to be made when necessary.
- **Annual Progress Report:** The backbone organization will also prepare a formal progress report, using the benchmarks for success as the measurement tool for strategic plan implementation. This information will be used to support updates to the plan in the following year.

Updating the Plan

Updates to the strategic plan will be made annually, led by the Leadership Team and facilitated by the backbone organization. Establishment of annual action plans will also occur annually, led by Network membership through the use of workgroups, and facilitated by the backbone organization. Each of these will take place in the first quarter of each calendar year.



Appendix



Appendix A. Comprehensive List of MHN Membership

Achunkwe, Ngwe	Ellis, Andrea	Johnson, Shavon	Nguyen, Brittany	Simental , Deanette
Adorador, Anita	Ermilio, Vanessa	Jones, Renee	Nordstrom, Charlotte	Simpson, Tamika
Alkire, Kathy	Espinosa, Diana	Joukadarian, Nyree	Noriega, Adriana	Sinkhorn, Dr. , Paul
Alvarez, Angelica	Esquibel, Lisa	Jover, Elenita	Northcott, Farrah	Slininger, Julia
Amaya, Myrna	Estrada, Lesley	Juniper, John	Nwokoji, Precious	Small, Patricia
Arnold, Carolyn	Evans, Christina	Kaeni, Katayune	Oakes , Stephanie	Smith, Jaquelin
Arroyo, Maria	Every, Ramona	Kelce, Taylor Ann	Ochoa-Lopez, Eva	Smith, Lisa
Azevedo, Katie	Faulkner, Cindy	Kemp, Sharon	Offerrall, Tania	Sneed, Elizabeth
Balamban, Mimi	Ferguson, Robin	Kieffer, Alycia	O'Gilvie, Karmolette	Sorrie, Tolani
Barnes, Miranda	Fillman, Terry	Kimani, Winnie	Ohikhuare, Maxwell	Spier, Pat
Barrera, Veronica	Flippin, Bonnie	Kimpel, Kim	Olson, Amelyn	Spurlock, Cece
Bárzaga, Conrado	Flores, Arleth	Lamb, Jamie	Ortega, Nancy	Stenson-Ray, Hillary
				Stover, Deanna
Batra, Dr., Priya	Flores-Carter, Kendra	Larsen, Matt	Ortega-Jara, Emilia	Sunday, Jennifer
Bayardo, Lizbeth	Fortuna-Huizar , Erika	Lee, Haenee	Osuiwu, Constance	Tarter, Carolina
Berrios , Monica	Funk, Heidi	Lee, Wendy	Padilla , Marissa	Terrell , Latrenda
Bills, Marta	Gallardo, Edyth	Lee, Yu-Yen (Ellen)	Pagan, Stacy	Tobosa, Gina
Borchard, Brittany	Garcia, Karina	Leslie, Brenna	Patel, Janki	Turk, Cynthia
Bramson, Leslie	Garcia, Morena	Logans, Mercedes	Patel, Nishtha	Umana, Cynthia
Breazile, Tenaya	Garcia, Xenia	Long, Vanessa	Pena, Jonnie	Urdo, Laura
Brizendine, Verne	Garza, Tiffany	Long, William	Petersen, Anne	Valdez, Jetza
Brubaker, Sarriah	Gibbs, Dee Ann	Lopez, Bertha	Phillips, Raylene	Valenzuela, Guillermo
Bryan, Mary	Gin, Barbara	Lopez, Trysty	Piazzisi, Megan	Valle, Maria
				Van Brunt, Amanda
Bustos, Stacie	Gomez, Susan	Lowery, Stacey	Pinkney, Ava	Vasquez, Beatriz
Carr, Marcia	Granizo , Lilia	Macias, Clara	Polk, Robyn	Vidaurri, Ashley
Carraby, Toya	Gray, Jaclyn	Maitre, Herlay	Poon, Jeffrey	Villalpando, Ruth
Carrillo, Yvonne	Greene, Jacquie	Martinez, Danielle	Pratt, David	Weatheril, Rebekah
Castillo, Luis	Gurrola, Mary	Martinez, Georgia	Purkhiser, Izamar	Whiting, Rebecca
Chagolla, Daniel	Haag, Monica	Matson, Ashley	Quebec, Alejandra	Williams, Asuncion
Chota, Gilma Doris	Haessly, Laurie	McClane, Staci	Quijada, Cristal	Williams, Marie
Chow, Amy	Hager, Melinda	Mccord, Joyce	Quiroz , Veronica	Williams, Rosario
Cliff, Erin	Haire, Phalos	Mcdermott, Brenda	Ramirez, Karin	Williams, Stephanie
Colchado, Sonia	Hall, Shaylee	Mcdowell, Wendy	Richardson, Dorothy	Winfrey, Celest
Collins, Sadawn	Harding, Kassandra	Mcgivney, Nichole	Robinson, Robbie	Wingo, Jodie
Combs, Jackie	Haro-Ramirez, Janet	McGrath, Scott	Robinson, Ronnie	Youngblood, Karen
Cordova, Arlene	Heischober, Lois	Meadors, Megan	Rodriguez, Denisha	
Corona-Zitney, Nayeli	Hernandez, Mia	Medina, Anna	Rodriguez, Gasselle	
Cortes, Irma	Hernandez-Singh, Sara	Medor, Janelle	Rudy, Dr., Ellen	
Cruz, Katelyn	Hill, Clarese	Mendoza, Amber	Salamat, Arezou	
Dailey, Patrick	Hilton, Veronica	Molina, Arlene	Samuel, Alexandra	
Davila, Robert	Hite, Mahealani	Morales, Renea	Sandoval, Janel	
Davis, Jennifer	Hsu, Susanne	Morehouse, Kelly	Sanjari, Maryam	
Delphin, Dorothy	Hutchinson, Rebecca	Mott, Stacy	Schnaus, Loretta	
Dement, Adriana	Jaidar, Deverly	Mracek, Sharlene	Scott, Karen	
Diaz, Evelyn	Jhun, Halie	Nastase , Damaris	Shields, Sheila	
Dotson, Alexis	Jimenez, Gabriela	Navarro, Ernelyn	Shih, Wendy	
Egan, Janet	Johns, Jamesina	Navidad, Yarely	Shouman, Diana	
Elizarraraz, Elva	Johnson, Kim	Neal, Kanisha	Silguero, Levith	



Appendix B. Best Practice Approaches to Supporting Maternal Health

Research on Evidence-Based and Best Practices

<i>Evidence-Based or Best Practice</i>	Equity	Early ID of Risk	Access to Resources	Data Sufficiency	Provider Capacity
<p>Health Equity Impact Assessment Tool: Based on a tool originally developed in Washington state, The Health Equity Impact Assessment (HEIA) tool evaluates the impact of public policies, programs and administrative practices on health disparities in North Carolina.ⁱ The HEIA uses data and community involvement to address health disparities and facilitate systems change and has been incorporated into the N.C. Perinatal Health Strategic Plan.ⁱⁱ The HEIA has also been adopted by Improving Community Outcomes for Maternal and Child Health, an initiative of the North Carolina General Assembly which allocates \$2.5M in recurring funds for three years to implement evidence-based interventions in maternal and child health to age five health departments serving 13 rural and urban counties.</p>	●				
<p>Reduce Implicit Bias: The Council on Patient Safety in Women's Health Care produced a Patient Safety Bundle as part of their efforts to reduce peripartum racial and ethnic disparities.ⁱⁱⁱ The Patient Safety Bundle is a structured way of improving care processes and patient outcomes and is built upon established best practices. It provides a framework to help providers reduce racial disparities in health care by focusing on the following four categories:</p> <ol style="list-style-type: none"> 1. <i>Readiness:</i> Establishing systems to accurately document self-identified race, ethnicity, and primary language; providing staff-wide education on peripartum racial and ethnic disparities and their root causes and best practices for shared decision making; engaging diverse patient, family, and community advocates who can represent important community partnerships on quality and safety leadership teams. 2. <i>Recognition and Prevention:</i> Providing staff-wide education on implicit bias; providing convenient access to health records without delay; establishing a mechanism for patients, families, and staff to report inequitable care and episodes of miscommunication or disrespect. 3. <i>Response:</i> Engaging in best practices for shared decision making; ensuring a timely and tailored response to each report of inequity or disrespect; addressing reproductive life plan and contraceptive options not only during or immediately after pregnancy, but at regular intervals throughout a woman's reproductive life; establishing discharge navigation and coordination systems post childbirth to ensure that women have appropriate follow-up care and understand when it is necessary to return to their health care provider. 4. <i>Reporting/Systems Learning:</i> Building a culture of equity, including systems for reporting, response, and learning similar to ongoing efforts in safety culture; developing a disparities dashboard that monitors process and outcome metrics stratified by race and ethnicity; implementing quality improvement projects that target disparities in healthcare access, treatment, and outcomes; considering the role of race, ethnicity, language, poverty, literacy, and other social determinants of health, including racism at the interpersonal and system-level when conducting multidisciplinary reviews of severe maternal morbidity, mortality, and other clinically important metrics; adding as a checkbox on the review sheet: Did race/ethnicity (i.e. implicit bias), language barrier, or specific social determinants of health contribute to the morbidity (yes/no/maybe)? And if so, are there system changes that could be implemented that could alter the outcome? <p>Each of the four categories in the bundle is paired with resources to help carry out the mission.</p>	●		●	●	●
<p>Reduce Maternal Morbidity: A pilot program in Atlanta, GA sought to determine if maternal morbidity could be reduced with the implementation of a clinical pathway-specific Maternal Early Warning Trigger (MEWT) tool.^{iv} The tool is designed to screen for sepsis, cardiovascular dysfunction, severe preeclampsia-hypertension and obstetrical hemorrhage. The primary goal was early assessment and treatment of patients suspected of clinical deterioration. The tool addressed the four most common areas of maternal morbidity and resulted in significant improvement in maternal morbidity.</p>		●			



Research on Evidence-Based and Best Practices

Evidence-Based or Best Practice	Equity	Early ID of Risk	Access to Resources	Data Sufficiency	Provider Capacity
<p>Medicaid Coverage for Doula Care: Doulas can help reduce the impacts of racism and racial bias in health care on pregnant women of color by providing culturally appropriate patient-centered care and advocacy. Currently only two states, Minnesota and Oregon, provide doula care broadly for their pregnant Medicaid enrollees. The National Health Law Program’s Doula Medicaid Project seeks to improve health outcomes for pregnant Medicaid enrollees by ensuring that all pregnant individuals enrolled in Medicaid who want access to a doula, will have one.^v</p> <p>In 2018, New York State developed a Medicaid pilot program to cover labor support and home visits by doulas in order to address the discrimination and inequities in health care experienced by low-income communities and communities of color.^{vi} The pilot focused on Erie and Kings Counties which have among the highest maternal and infant mortality rates and largest number of Medicaid births in New York State. The New York State Medicaid Program will reimburse participating doulas for up to four prenatal visits, support during labor and delivery, and up to four postpartum visits.^{vii}</p>	●	●	●		●
<p>Community-Based Doula Program: Health Connect One (HC One) in Chicago developed a Community-Based Doula Program, which provides support to young families during pregnancy, birth, and the early postpartum period. The populations served are primarily low-income Hispanic and African-American women. According to the Association of Maternal and Child Health Programs, “Community-based doulas provide culturally sensitive pregnancy and childbirth education, early linkage to health care and other services; labor coaching, breastfeeding promotion and counseling, and parenting education, while encouraging parental attachment. The peer-to-peer relationship and the continuity of care knit a fabric of support around the family, which has broad and deep impact on a variety of outcomes.”^{viii} The principal outcomes include longer breastfeeding duration and less use of c-sections as well as immediate and long-term cost savings. HC One collaborates with community health agencies nationwide in establishing effective programs and securing community support to train and hire community-based doulas.^{ix}</p>	●	●	●		●
<p>12-Point Plan to Close the Black-White Gap in Birth Outcomes: In 2005, Contra Costa County launched the Life Course Initiative, which addresses social determinants of health through its Building Economic Security Today (BEST) pilot project.^x The BEST project helps reduce economic inequities by providing financial education classes, one-on-one support to families, and asset development educational materials. The Life Course Initiative utilizes the 12-Point Plan to Close the Black-White Gap in Birth Outcomes as a framework for improving health care for African American women, strengthening African American families and communities, and addressing social and economic inequities.^{xi} The 12-Point Plan is different from other approaches to addressing equity in health care in that it goes beyond the traditional medical model and prenatal care to address family and community systems, and social and economic inequities.</p>	●		●		
<p>Gestational Diabetes Mellitus Project: The Massachusetts Diabetes Prevention and Control Program (DPCP) identified missed opportunities for screening, managing, and follow-up of gestational diabetes and worked together to develop an action plan to realize those opportunities. The diabetes program launched a television and poster campaign to encourage Hispanic/Latino women who have been diagnosed with gestational diabetes to talk to their doctors about reducing their risk of developing Type 2 diabetes. The program also developed an informational poster in English and Spanish and a resource guide to educate women about the risks of gestational diabetes.^{xii}</p>	●	●			



Research on Evidence-Based and Best Practices

Evidence-Based or Best Practice	Equity	Early ID of Risk	Access to Resources	Data Sufficiency	Provider Capacity
<p>First Steps Program: The First Steps Program works to assist mothers and infants in obtaining the health and social services they need by referring low-income pregnant women to comprehensive healthcare services.^{xiii} Women enrolled in Managed Care plans are eligible for enhanced services as part of this program, including Maternity Support Services (MSS) which offer preventive health messages, pregnancy education, referrals to resources in the community, and nutrition counseling. A multidisciplinary team approach is used and includes a nurse, behavioral health specialist, nutritionist and community health workers with services offered in an office, group or home setting. The enhanced services also include Infant Case Management (ICM) as well as Childbirth Education (CBE), which helps prepare the mother to develop self-advocacy skills as well as manage the changes experience during and after pregnancy. First Steps is administered by the Health Care Authority in Washington State.^{xiv}</p>		•	•		
<p>MotherWoman: Community-based Perinatal Support Model: The MotherWoman® Community-based Perinatal Support Model™ (CPSM) provides a comprehensive safety net for mothers at risk for/or experiencing perinatal depression.^{xv} Implementation of the CPSM began in 2014 in Massachusetts communities that produced more than 21,000 births annually and other areas where the communities had high rates of teen births, minority populations, low birth weight and poverty – all factors which are correlated with an increased risk for perinatal depression. The objectives of the program are to expand resources, increase provider competence and promote mothers' inherent resilience at all points of provider contact. The program aims to address barriers to care through multi-sector collaboration. Program outcomes included perinatal depression professional trainings to over 200 providers and universal screening implemented in OB, pediatrics, social services, and inpatient care, with more mothers engaged in education, screening and referral as needed.</p>	•	•	•		•
<p>Life Plan Tool: To increase the knowledge of women of reproductive age on preconception health and wellbeing topics and to encourage them to initiate conversations with their healthcare providers and establish personal pregnancy planning goals, the Colorado Department of Public Health and Environment produced a Reproductive Life Plan booklet.^{xvi} Each page of the tool contains specific information about general health, reproductive health, personal safety, financial wellness, emotional health and self-esteem.</p>		•			
<p>Pursuing Motherhood Planning Before Pregnancy: A Guide: Delaware designed a guidebook to help women achieve maximum health before attempting to get pregnant by providing information about how to address the factors contributing to infant mortality in their state.^{xvii} It provides pregnant women with information on nutrition, best weight, vaccination, dental health, healthy lifestyle choices, sexually transmitted diseases, domestic violence, chronic diseases (high blood pressure, diabetes, gestational diabetes, HIV), the benefits of birth spacing, postpartum depression, prenatal care schedule, and more, as well as descriptions of Delaware's Preconception Care program and Family Practice Team Model program.</p>		•	•		



Research on Evidence-Based and Best Practices

Evidence-Based or Best Practice	Equity	Early ID of Risk	Access to Resources	Data Sufficiency	Provider Capacity
<p>Obesity Education: The Academy of Nutrition and Dietetics states that all women, particularly overweight and obese women, should have access to nutrition education and counseling regarding the potential maternal and fetal complications that can accompany obesity before and during pregnancy.^{xviii} The Academy recommends that during the preconception period, all women should be screened during routine care to determine their weight status with overweight and obese women offered counseling and interventions to assist in reaching a healthy body weight. It is further recommended that during pregnancy, all women should be provided with education about appropriate weight-gain goals and potential risks of excessive gestational weight gain. During the postpartum and interconception period, women should have access to nutrition education and lifestyle counseling to help reduce postpartum weight retention, with behavioral counseling focused on improving dietary intake tailored to the needs of postpartum women provided for the first 12 to 18 months postpartum. Since regular attendance at group sessions may be difficult for new mothers, the Academy suggests that alternative methods of education like text messages and online programs should be explored.</p>		●			
<p>Parent Child Assistance Program: The Washington State Department of Social and Health Services (WSDSHS) has funded the Parent Child Assistance Program (PCAP) to assist with maternal substance abuse intervention.^{xix} PCAP is a three-year home visitation model that helps to link women with substance abuse treatment, provide support for treatment completion and recovery, and help clients develop relapse prevention strategies.^{xx} Case managers assist women with securing services such as family planning, safe housing, health care, domestic violence services, parenting skills, and mental health services and also offer transportation for important appointments. Numerous studies have demonstrated that the program produces positive outcomes for mothers, with many women completing substance abuse treatment, remaining abstinent from alcohol/drugs for at least one year while in the program, using a family planning method on a regular basis, and no subsequent birth or an unexposed subsequent birth three years after program entry.</p>			●		
<p>Centering Pregnancy: The Health Foundation of Western and Central New York launched a program in 2009 that focused on areas with high poverty rates that have a high risk of poor maternal and child health outcomes. One of the grantees was a hospital that implemented the Centering Pregnancy model at their prenatal clinic in 2013. The Centering Pregnancy cohort had a higher attendance rate (92%) for their first postpartum visit compared to the clinic's attendance rate (80%) as well as higher breastfeeding rates (50%) compared to their clinic counterparts (25%) at the postpartum visit. 92% of the women reported that they felt prepared for labor, birth and parenting.^{xxi} Centering Pregnancy is group prenatal care bringing women due at the same time out of the exam rooms and into a comfortable group setting. Women complete a conventional medical history and physical exam in a doctor's office or clinic and then are invited to join a group of eight to 12 women or couples who have similar due dates. The groups meet regularly throughout the pregnancy and continue to meet through the postpartum period, meeting every month for four months and then bi-weekly. Studies have shown that the program nearly eliminates racial disparities in preterm birth.^{xxii}</p>	●	●	●		●
<p>Text4Baby: Oklahoma implemented the free Text4Baby mobile health service in 2014 by targeting pregnant women and mothers with infants under age one who are covered by Medicaid. Women enrolled in Text4Baby receive three personalized text messages per week, timed to their due date or baby's birthday. The content includes Oklahoma-specific programs and resources.^{xxiii}</p>			●		



Research on Evidence-Based and Best Practices

Evidence-Based or Best Practice	Equity	Early ID of Risk	Access to Resources	Data Sufficiency	Provider Capacity
<p>Pregnancy Medical Homes Initiative: The North Carolina Division of Public Health (NCDPH) created a new pregnancy-care model for Medicaid recipients that establishes Pregnancy Medical Homes (PMHs).^{xxiv} The PMH initiative provides essential support to pregnant women, linking community resources with health care providers to provide the best chance for healthy pregnancies, deliveries, and newborns. The PMH program is an outcome-driven initiative monitored for specific performance indicators where practices agree to work toward quality improvement goals, such as eliminating elective deliveries before 39 weeks, using 17p to prevent recurrent preterm birth, reducing primary c-section rates, improving the postpartum visit rate, and more.^{xxv} Participating providers receive financial incentives from Medicaid for risk screening and postpartum visit completion, ongoing collaboration with a pregnancy care manager, local Community Care of North Carolina (CCNC) network support, data and analytics from CCNC's Informatics Center, and clinical guidance materials and resources.</p>		●	●		●
<p>Internatal Care Program (ICP) for Women Who Have Experienced Poor Birth Outcomes: A Provision of Preconception, Interconception, and Prenatal/Postnatal Care: The Internatal Care Program (ICP) served women of childbearing age in the Phoenix Metropolitan area who were underserved and uninsured and who had experienced one or more of the following adverse birth outcomes: second trimester loss, intrauterine fetal death, preterm birth, and/or low birth weight.^{xxvi} The ICP provides clinical care, care coordination, and health education/promotion to women with poor birth outcomes. The key objectives are to increase the number of women who deliver at term, improve birth intervals, increase access to quality preconception interconception, prenatal, and postnatal health care, and provide continuity from the postnatal period through subsequent pregnancies, which is accomplished by having the same provider perform health care services in the preconception and prenatal period. The program is a replication and an expansion of the Grady Interpregnancy Care Program at Grady Memorial Hospital, which is based on coordinated primary healthcare coupled with social support. The majority of patients had their mental health needs addressed, were consuming a folate supplement, were using contraception if they did not desire a pregnancy, and were engaging in physical activity. Of those who were pregnant, 87% had prenatal care in the first trimester. There were also demonstrated improvements in patient knowledge and attitudes about preconception health.</p>	●	●	●		
<p>Baby Basics: The What to Expect Foundation developed a Baby Basics program that aims to help get everyone – from physicians and staff, to patients and families – on the same page as a way to support vulnerable populations and strengthen the delivery of prenatal care.^{xxvii} The materials and programs are designed specifically to provide lower-income and lower-literacy populations with crucial prenatal health information and support so they can become effective users of the health care system and advocate for themselves and their families.^{xxviii} There are more than 11 active Baby Basics programs across the country and hundreds of health care providers purchase the Baby Basics book to use with their patients each year.</p>	●	●	●		●
<p>Moms2B: Ohio State University and other community social service organizations in the state offer a community-wide comprehensive prenatal and first-year-of-life program called Moms2B.^{xxix} The program provides weekly education and support sessions to promote healthy lifestyle choices and link women with support services. Using a multi-disciplinary team approach, health care professionals including doctors, nurses, social workers, dieticians, lactation counselors, and health care students educate women on topics including family planning, labor and delivery, maternal-infant health, reproductive health and more.^{xxx} The program is free to attend and women are offered a \$5 Kroger gift card for attendance, transportation assistance, on-site childcare and a hot, healthy meal.</p>		●	●		●



Research on Evidence-Based and Best Practices

Evidence-Based or Best Practice	Equity	Early ID of Risk	Access to Resources	Data Sufficiency	Provider Capacity
<p>Strategies to Collect Patient Race, Ethnicity and Language Data: The American Hospital Association published a report in 2011 titled "Improving Health Equity Through Data Collection and Use: A Guide for Hospital Leaders."^{xxxi} The document lays out key strategies for collecting patient race, ethnicity and language data, including:</p> <ol style="list-style-type: none"> 1. Engaging senior leadership 2. Defining goals for data collection 3. Combining disparities data collection with existing reporting requirements 4. Tracking and reporting progress on an organization-wide basis 5. Building data collection into quality improvement initiatives 6. Utilizing national, regional, and state resources available 7. Reviewing, revising and refining process and categories constantly. <p>The report acknowledges that even though the majority of hospitals collect patient race, ethnicity, and primary language data, many organizations are challenged in using the data to provide equitable patient-centered care. Leading practices include:</p> <ol style="list-style-type: none"> 1. Using an equity scorecard or dashboard to report organizational performance 2. Providing interpreter services 3. Reviewing performance indicators such as length of stay, admissions, and avoidable readmissions 4. Reviewing process of care measures 5. Reviewing outcomes of care 6. Analyzing provision of certain preventive care. 	●			●	●
<p>Maternal Mortality Review Information Application: The Maternal Mortality Review Information Application (MMRIA, or 'Maria'), reflects lessons learned from implementing a previous version of the system, the Maternal Mortality Review Data System (MMRDS), among 13 state maternal mortality review committees (MMRCs).^{xxxi} MMRIA is designed to support and standardize data abstraction, case narrative development, documentation of committee decisions and routine analysis. MMRIA is available free of charge and jurisdictions interested in using MMRIA work in close partnership with the <i>Enhancing Reviews and Surveillance to Eliminate Maternal Morality (ERASE MM)</i> team at the Centers for Disease Control and Prevention (CDC). The team provides programmatic assistance and training to help committees use the system effectively and reduce duplicative processes during abstraction, case review, and analysis.</p>				●	●
<p>Birth Registry: The American College of Obstetricians and Gynecologists (ACOG) is recruiting sites for their Birth Registry.^{xxxi} The Birth Registry is the first national clinical data registry that is centered around labor and delivery outcomes in the United States.</p> <p>Its primary focus is capturing clinical data entered into the electronic health record (EHR) by providers. Through clinical performance measures and data quality metrics, the Birth Registry provides a unique opportunity for providers to better understand the overall quality of the maternity care provided within their institution.^{xxxi}</p> <p>In order to enroll, the facility should complete the interest form and a member of the Birth Registry team will reach out within two business days. The complete onboarding process is dependent upon the signing of all required documents by the facility's leadership and ACOG, and successful integration of the facility's EHR with the registry vendor. There is currently no cost to enroll or participate in The Birth Registry for the first year.</p>				●	



Research on Evidence-Based and Best Practices

Evidence-Based or Best Practice	Equity	Early ID of Risk	Access to Resources	Data Sufficiency	Provider Capacity
<p>Comprehensive Plan to Reduce Maternal Deaths and Life-Threatening Complications from Childbirth Among Women of Color: In 2018, New York City announced a five-year plan to eliminate disparities in maternal mortality between Black and White women.^{xxxv} One of the main components of the plan involves enhancing data quality and timeliness. To carry this out, the NYC Maternal Mortality and Morbidity Review Committee will drive data quality improvement by examining maternal deaths and analyzing and compiling data on severe complications experienced by expectant and new mothers. In order to address the challenge of data having historically been on a two to three-year time lag, the Health Department will provide preliminary estimates of mortality annually. The City will also request the NY State Health Department to release relevant hospital data within one year.</p>	●			●	
<p>Massachusetts Statewide Race and Ethnicity Data Collection: In 2007, all Massachusetts hospitals were required to begin collecting race and ethnicity data from every patient with an inpatient stay, an observation unit stay, or an emergency department visit.^{xxxvi} A standardized set of reporting categories was created and train-the-trainer sessions were held. The required data includes a detailed list of ethnicities, with 31 reporting categories that include 144 ethnicities or countries of origin. The effort has helped bring attention to reducing disparities in the quality of health care in policy discussions.</p>	●			●	
<p>Diversity and Health Equity in the MCH Workforce Resource Guide: In May 2016, The Maternal and Child Health (MCH) Workforce Performance Center published a new guide entitled, "Diversity and Health Equity in the Maternal and Child Health Workforce: A Resource Guide to Key Strategies and Actions for MCH Training Programs."^{xxxvii} The resource guide shares strategies and activities to support training programs' efforts to increase diversity and integrate cultural and linguistic competence into training efforts. Each section includes resources and short vignettes highlighting strategies used by MCH Training Programs. The resources and vignettes are organized by three key themes:</p> <ol style="list-style-type: none"> 1. Recruitment and retention of faculty, trainees, and program staff from racially and ethnically diverse and under-represented backgrounds 2. Raising awareness of disparities and inequities through curricula, research, learning, practice, and service environments 3. Integration of cultural and linguistic competence in all aspects of training, learning, practice, and service. 	●				●
<p>Utilizing Community Health Workers: Evidence shows that community health workers (CHWs) improve access to care and improve health outcomes for vulnerable populations.^{xxxviii} Community health workers are uniquely qualified to work with vulnerable and high-risk populations, including pregnant and postpartum women and their children and families, because they are trusted members of the community. States have adopted a wide range of strategies to develop and support CHWs through defined roles and practices, sustainable funding, training and certification, and integration with the public health and healthcare system. For example, New Mexico and Massachusetts have established state CHW offices to perform functions such as coordinating CHW and other public health activities, certifying workers and trainers, approving training programs and curricula, and supporting the workforce through training and educational opportunities. Arizona established the Healthy Start Program, where CHWs educate and support pregnant women and new moms through home visits and group classes.</p>	●	●	●		●



Research on Evidence-Based and Best Practices

Evidence-Based or Best Practice	Equity	Early ID of Risk	Access to Resources	Data Sufficiency	Provider Capacity
<p>Infusing Cultural and Linguistic Competence into Health Promotion Training: The National Center for Cultural Competence created a 90-minute video titled "Infusing Cultural and Linguistic Competence into Health Promotion Training" which discusses integrating cultural and linguistic competence into a health program framework.^{xxix} The video consists of six chapters which address the rationale and framework for cultural competence, with the last chapter including people who have experienced cultural competence issues as well as maternal and child health professionals' work in the field around this topic.^{xi} This resource was listed on the MCH Navigator website, which is funded by the Health Resources and Services Administration (HRSA) to provide free access to highly vetted trainings.</p>	●				●
<p>Alabama Perinatal Excellence Collaborative: The Alabama Perinatal Excellence Collaborative (APEC) aims to improve pregnancy outcomes by equipping Obstetric providers with evidence-based guidelines and decision trees to assist them in the care of pregnant women.^{xii} The APEC website provides easy access to the guidelines and direct contact with APEC leaders. The guidelines can be viewed on a personal computer, tablet or smartphone and there is an app designed to be compatible with iOS and Android devices.</p>					●
<p>Reaching Practicing MCH Professionals in the Rocky Mountain Region: The Colorado School of Public Health has been funded to develop and deliver graduate level Maternal and Child Health (MCH) courses to address the current educational needs of geographically-isolated MCH working professionals in the region.^{xiii} The School will offer courses, without charge to MCH workers in rural, frontier, and tribal underserved areas of the Rocky Mountain region. These credits can be directed toward a public health Certificate in Maternal and Child Health, and ultimately to the master of public health degree. The project addresses the target students' major barriers to higher education, namely distance and cost. The project will create educational opportunities that are distance-based, and as flexible as possible to respond to the needs of working people.</p>					●

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