

Maternal Health Network of San Bernardino County

Asset & Gaps Analysis
2019

Acknowledgements

While **First 5 San Bernardino** provided organizational leadership and the funding to support this project, numerous key stakeholders, including consumers, service providers, and advocates contributed to this report. The most significant contributions to the information presented in this report was from a number of workgroups that were developed to represent different sectors of the maternal health system.

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Community Summit Participants

In addition to the workgroups, two community summits were held in which data was reviewed and input was gathered to support conclusions regarding the most pressing issues facing families within the maternal health system.

Community summits were held on:

- March 29, 2019
- August 6, 2019

A list of all community summit participants can be found in the appendix of this report.

A Leadership Team provided the direction and guidance for the asset and gaps analysis. Leadership Team members represent key stakeholders in various sectors of the maternal health system throughout San Bernardino County.

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Introduction and Background

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

Membership includes:

- Prenatal & Post-Partum 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 embarked upon a strategic planning process to establish 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. As part of this process, the Network commissioned an asset and gaps analysis 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 and those that had recently delivered a child.

Purpose

This report is a summary of the asset and gaps analysis conducted for each service sector of the Maternal Health Network. Each sector of the Maternal Health Network has a Strengths and Opportunities Brief, which identifies areas of strength and opportunities for improvement for each individual sector. Common themes were identified across service sectors and compiled to create a summary report for the Maternal Health Network.

This report will be used in association with a variety of other data sets (both quantitative and qualitative) to finalize the focus of the Maternal Health Network over the next five-year period of time.



Methods

This asset and gaps analysis involved gathering data and stakeholder input to determine strengths and weaknesses around current maternal health status, the availability of maternal health resources, and systems issues related to service delivery within San Bernardino County. Brief descriptions of data collection and validation methods, and data sources, are provided below for each of these three exploratory components.

Maternal Health Status

Data on and relevant to maternal and infant health indicators were gathered from a variety of sources and compiled into a *Maternal and Infant Health Data Snapshot*.¹ The *Snapshot* provided rates of, and trends for, relevant health indicators for the state of California and San Bernardino County. When available and appropriate, national standard goals (primarily drawn from Healthy People 2020) and rates specific to African American, Asian/Pacific Islander, Hispanic, and White subpopulations were included.²

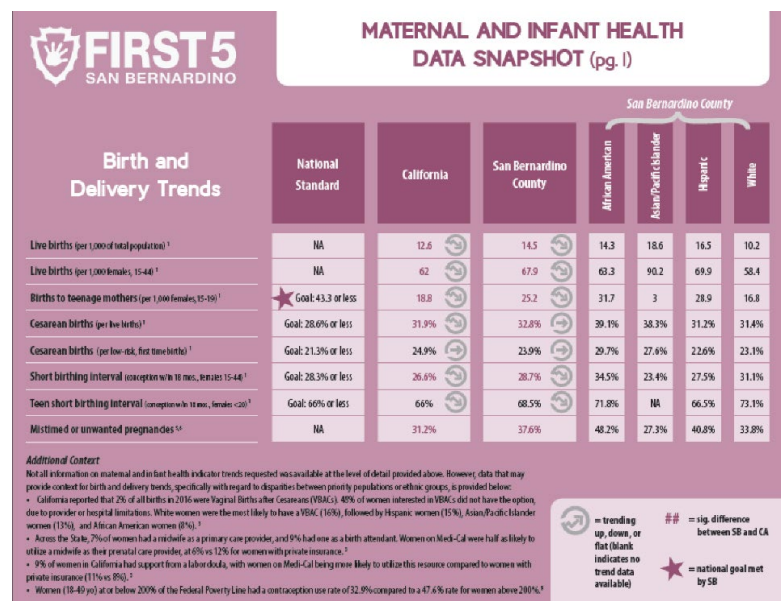
The *Snapshot* was shared with stakeholders during a Maternal Health Summit held March 29, 2019 in San Bernardino County. Participants were asked to join one of five workgroups (Prenatal & Postpartum Primary Care and Oral Health, Birthing Supports, Behavioral Health & Substance Abuse Prevention/Intervention/Treatment, Prenatal & Post-partum Wellness, and Priority Populations) to review data indicators most relevant their workgroup.³

During this review, many workgroup members requested information on indicators not included in the original *Snapshot*. Unfortunately, data on the workgroup-requested indicator rates and trends was for the most part not available at the level of detail provided for the initial indicators included in the *Snapshot*. However, the *Snapshot* was amended with contextual information available for the requested indicators.

Workgroup members and other stakeholders (primarily the Leadership Team) then reviewed the final *Snapshot* and identified areas of strength and potential areas for improvement around maternal and infant health outcomes. Additionally, workgroup members explored their unique role in addressing the identified areas of improvement, coming up with concrete next steps that may assist with improving indicators of health for women and infants. Those are described in more detail later in this report.

It is worth noting that the data inequities and limitations found when investigating many of the indicators of interest may impact the final focus and structure of this, and subsequent, reports. In other words, the workgroups and facilitators are only able to make recommendations based on the data available. Other assets and gaps, and strengths and weaknesses of the maternal health system may ultimately be overlooked due to data deficiencies.

Figure 1. Sample Page from Data Snapshot



¹ A list of resources utilized for the *Snapshot* are included in Appendix A.

² Healthy People 2020. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Available from <https://www.healthypeople.gov/2020/data-search/>.

³ Further information on the focus of each workgroup is included on [page 12](#) of this report.



Maternal Health Resources

This part of the analysis focused on developing an understanding of the types, number, and distribution of maternal health resources within San Bernardino County. Resource type, address, and other relevant information were accessed via:

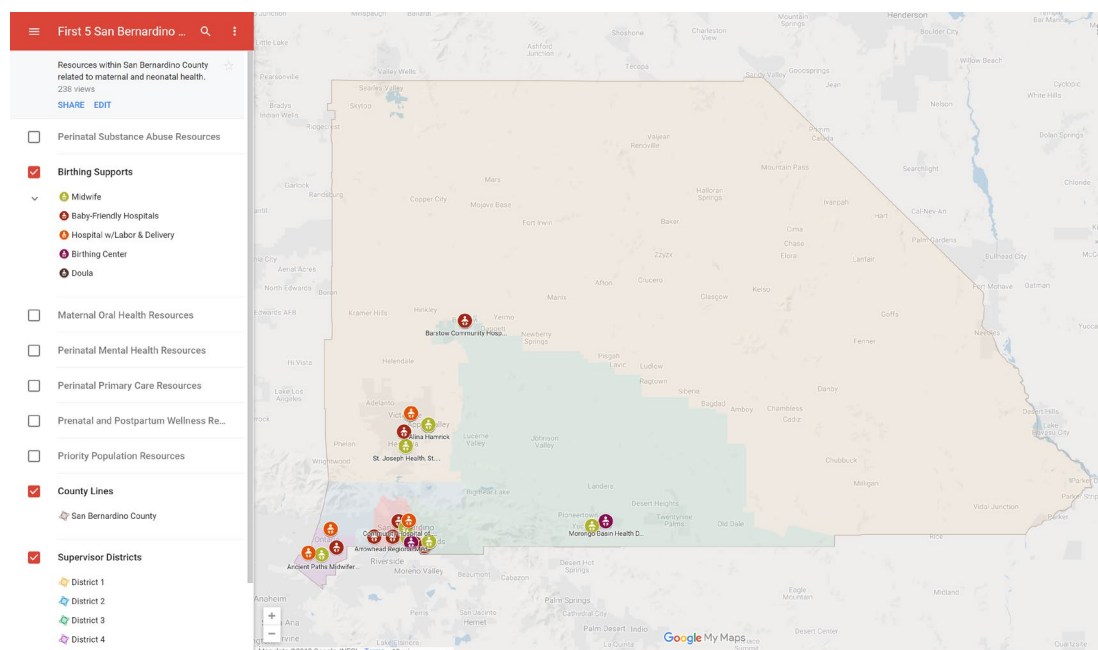
- *Inland Empire Breastfeeding, Childbirth and Community Resource Guide*
- *San Bernardino County Behavioral Health Directory of Services*
- *San Bernardino County Public Health Breastfeeding Resources Flyer*
- *San Bernardino County 2-1-1*
- *Key stakeholders and support providers, including the Inland Empire Health Plan, the Community Health Association, the Center for Oral Health⁴, the Inland Empire Breastfeeding Coalition, and the Perinatal Advisory Council: Leadership, Advocacy, and Consultation (PAC/LAC).*

Additional data was collected directly from key stakeholders to include the Inland Empire Health Plan, the Community Health Association, the Center for Oral Health, the Inland Empire Breastfeeding Coalition, and the Perinatal Advisory Council: Leadership, Advocacy, and Consultation (PAC/LAC).

Both print and electronic maps were produced using the resource information provided. Print maps were generated, according to workgroup, using ArcGIS. These maps are included in the individual sector Strengths and Opportunities Briefs.

An interactive, web-based map that summarizes the maternal and infant health resources available across San Bernardino County was also produced, and is available at <https://urlzs.com/9gzGt>. The map provides a holistic, geographic snapshot of the Birthing Supports, Maternal Oral Health, Perinatal Substance Abuse, Perinatal Mental Health, Perinatal Primary Care, Prenatal and Post-partum Wellness, and Priority Population resources available within the County. The map can be embedded on the websites of community groups, stakeholders, or government agencies, and shared with clients looking for particular types of supports. Upon completion of this project control of the map will be given to an identified party to manage the updating, sharing, and usage of the map.

Figure 2. Screenshot of Interactive, Web-based Resource Map



⁴ Only those primary and oral health care providers that accept Medi-Cal and Denti-Cal were included in the resource mapping.



Maternal Health Systems Issues

The Maternal Health Status indicators and resource maps were provided to stakeholders at Community Summits and via continued contact with workgroup and Leadership Team members. This facilitated discussions regarding maternal health system strengths and weaknesses, but primarily included only the provider viewpoint.

To ensure that the consumer perspective was also being considered, a survey was distributed to families who were either currently pregnant or had recently delivered a child⁵ at the time of survey completion. The survey was distributed via SurveyMonkey through Leadership Team members, workgroup members, and individuals who participated in the first Community Summit. It was designed to determine consumer satisfaction with a number of different services and components of the maternal health system.

Surveys were collected over a period of 21 days (June 18– July 8, 2019). A total of 154 surveys were completed by consumers from across the county. Results of the consumer survey can be found in the companion document, Maternal Health Network of San Bernardino County Consumer Survey Results, 2019.



A summary analysis of all data collected informed the [Recommended Priorities](#) presented later in this report.



⁵ Within one year



Countywide Context

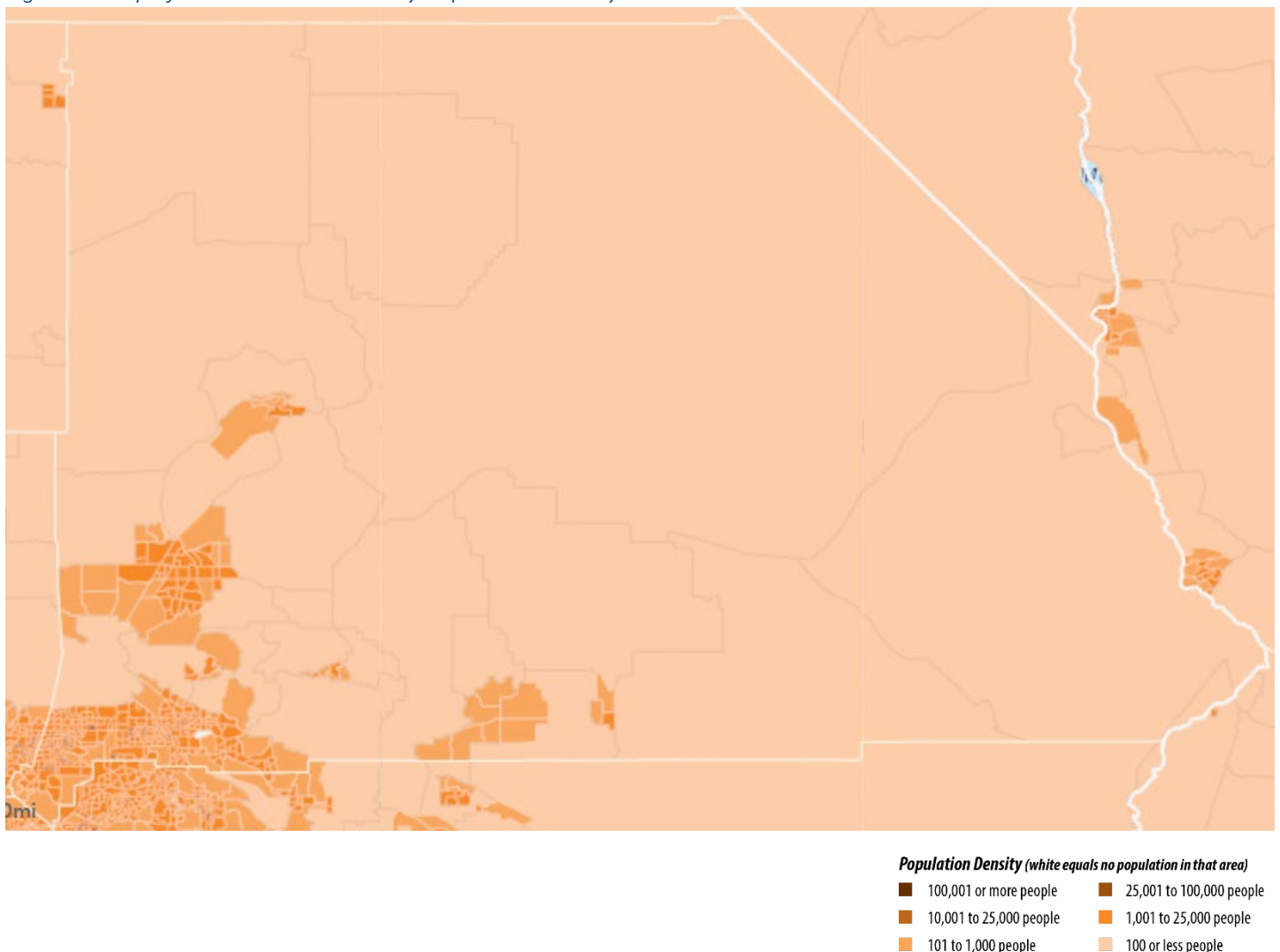
This sub-section presents a brief description of San Bernardino County to include the geographic, demographic and socio-economic factors (social determinants of health) that can influence maternal health.

Geography

San Bernardino County is located in the southern portion of California, and with an area of 20,105 square miles is the largest sized 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.

Most relevant to this report is San Bernardino's mix of urban and rural areas, with major population centers being located in the southwest part of the county and the rest of the county being relatively rural and unpopulated, as demonstrated by Figure 3. Both area types have ramifications on maternal health resource availability, as not surprisingly, resource distribution is positively correlated with population density. Rural areas therefore are not host to many maternal health resources. While the more populated areas are, those resources are likely to be utilized by individuals living just outside San Bernardino County in equally heavily populated areas.

Figure 3. Map of San Bernardino County Population Density⁶



⁶ Accessed via ArcGIS.



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 2010.⁷ Figure 3 illustrates that the highest population density is found in the southwest, particularly in and around San Bernardino City, Fontana, Chino, and Ontario.

Most Relevant Demographic Characteristics

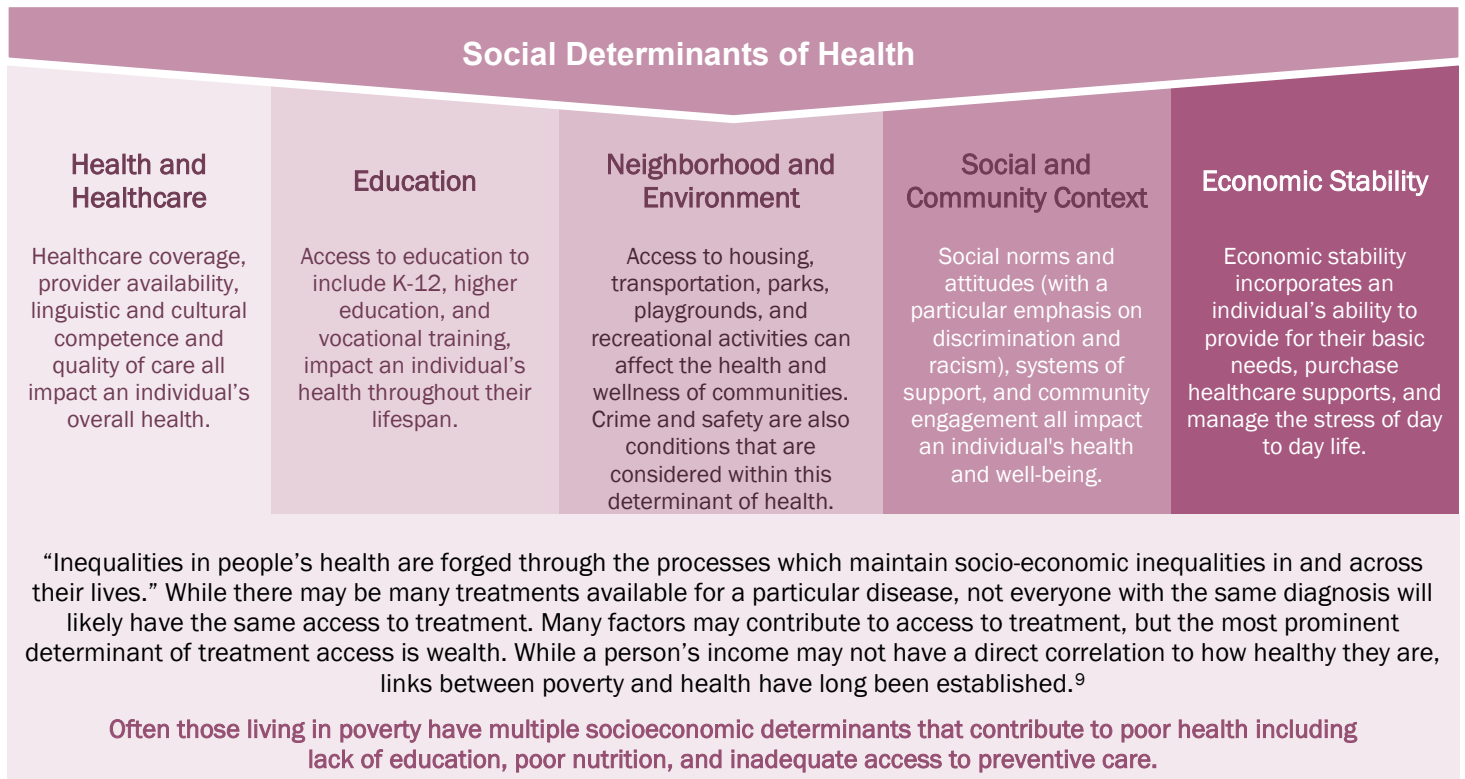
Half of San Bernardino residents are female (50.2%), and approximately 62% of residents are between the ages of 18 and 65 (i.e. many of whom are within the childbearing age range). Of particular relevance to discussions regarding inequities in outcomes and support for priority populations are the following 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%), and 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. A brief summary of relevant social determinants of health is provided below. 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."⁸ In addition, it includes the systems in place to offer healthcare and services to a community.

Figure 4. Social Determinants of Health



⁷ U.S. Census Bureau Quick Facts. Accessed on June 24, 2019 at <https://www.census.gov/quickfacts/fact/table/sanbernardinocountycalifornia/AFN120212>







⁸ 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/>

⁹ Retrieved on October 25, 2018 from: <http://books.google.com>: Graham, H. (2007). Unequal Lives: Health and Socioeconomic Inequalities. Berkshire, England: Open University Press.



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.¹⁰ Some of these determinants are further investigated throughout this report, specifically with regard to services and support for priority populations.

Figure 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 Cal Fresh (food stamps) during pregnancy	24.9%	35.4%	68.0%	Data not available	40.7%	21.8%
 Physical or psychological intimate partner violence	7.1%	9.7%	10.3%	Data not available	9.5%	5.8%
 Homeless/without a regular place to sleep during pregnancy	2.9%	2.6%	9.1%	Data not available	2.2%	Data not available

¹⁰ 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.



Sectors within the Maternal Health Network

The following sectors were identified as the most appropriate for providing a lens through which to evaluate the maternal health systems and supports in San Bernardino County. These sectors also provided the focus for the workgroups previously referenced in this report. The majority of workgroup participants were practitioners or advocates within the specified sector.

Prenatal & Postpartum Primary Care and Oral Health



Primary and oral healthcare play a key role in the overall health of expectant and recently delivered mothers. Continuous access to healthcare in the preconception, prenatal, and post-partum periods “can help prevent complications and inform women about important steps they can take to protect their infant and ensure a healthy pregnancy.”¹¹ 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 outcomes.

For the purposes of this project, prenatal and post-partum 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 limited to 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 women 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 mother-to-be’s preferences, medical history, and personal circumstances.

For the purposes of this project, 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 mother and child. With internal and external stigmas attached to the disclosure of either a behavioral health or substance misuse issue, finding ways to provide mothers with the help they need to overcome these barriers to a successful pregnancy can be challenging.

For the purposes of this project, 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.

¹¹ “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 post-partum maternal wellness is focused on supporting a high overall quality of life for pregnant or planning to become pregnant women. 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 women 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 this project, 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; lactation consultants; 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 this project, 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





Findings

Through data collection and information gathered from the Leadership Team, workgroup members, and Community Summit participants, the following information represents cross-cutting strengths and areas for improvement identified by representatives from each sector of the Maternal Health Network.

Maternal Health Status of Families in San Bernardino County

Members of the Maternal Health Network analyzed the data collected and identified areas of strength and areas for improvement. Through this analysis, stakeholders understood 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 Post-partum Supports

Almost one in ten (9%) of recently delivered women in California had no post-partum visits. Women on Medi-Cal were twice as likely to have no post-partum office visits, and more than twice as likely to have no post-partum, 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, that rate is only 22.6%.



Focus on African American/Black Families

African American/Black 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 for Families in San Bernardino County

Resource Availability

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 Clinics• 1 Indian Health Clinic• 100 OB/GYN Providers• 111 Family and Nurse Practitioners• 17 Pediatricians• 145 Denti-Cal Providers	<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	<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	<p><u>Women of Color</u></p> <ul style="list-style-type: none">• Black Infant Health program• Perinatal Equity Initiative• Sankofa Birthworkers Collective• IEBWC• LIFT• 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



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 being found 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.



Barriers to Accessing Resources

There are a variety of reasons that families may not be able to access the resources they need through the maternal health system. Barriers to access were identified through information from providers, as well as through the consumer survey. The following list represents barriers to accessing resources in San Bernardino County identified across service sectors.



Lack of Information

System stakeholders identified that there is a general lack of information available to providers as well as consumers regarding the benefits or availability of resources before, during, and after pregnancy.



Travel/Transportation

System stakeholders identified that travel times and lack of transportation can prevent consumers from getting the birthing supports they need if they reside in areas where there are no resources easily available.



Childcare

System stakeholders identified that many women have difficulty accessing care due to childcare constraints. Lack of places offering a space for children to be occupied during service delivery was identified as a barrier.



Insufficient Resources

System stakeholders identified that the rural areas of the county lack sufficient services, forcing some to cross county or state lines to get the care they need. Additionally, stakeholders identified that there is a lack of sufficient services to support high-risk pregnancies and sub-populations.



Lack of Knowledge about Available Resources

System stakeholders identified that there is a general lack of knowledge by both providers as well as consumers about the supporting resources that are available.



Cost Prohibitive

System stakeholders described a system in which not all services are covered under typical insurance products, making it cost prohibitive for consumers to access care.



Stigma and/or Fear Associated with Accessing Support

System stakeholders identified that families are reluctant to disclose or access supports due to stigma or fear, particularly when facing behavioral health needs, substance use intervention needs, and immigration.

Other barriers identified by specific service sectors included issues such as:

- **Policy Barriers:** Age restrictions related to accessing services can prevent teenagers who are pregnant from accessing care.
- **Trust in Providers:** System stakeholders perceive that consumers may be unwilling to access supports due to a lack of trust for service providers.



Satisfaction with Services

To determine how well resources are being deployed, a consumer survey was collected from families who are either currently pregnant or who recently delivered a child (within the last year). A total of 154 surveys were collected between June 19th and July 8th, 2019. Results are provided below. Neutral responses are not reported. Therefore, responses will not total the number of responses “n” and percentages will not equal 100% when added.

Service Satisfaction	n	Highly Satisfied	Satisfied	Not Satisfied	Highly Dissatisfied
Prenatal Care through a Doctor's Office	105	41.90%(44)	40.00%(42)	4.76%(5)	4.76%(5)
Birth/Delivery through a Hospital	77	38.96%(30)	36.36%(28)	6.49%(5)	6.49%(5)
Breastfeeding/Lactation Instruction/Support	61	49.18%(30)	27.87%(17)	8.20%(5)	6.56%(4)
Family Planning/Birth Control	54	40.74%(22)	38.89%(21)	9.26%(5)	1.85%(1)
Post-partum Doctor's Visit	51	33.33%(17)	39.22%(20)	5.88%(3)	9.80%(5)
Birthing Supports through a Doctor	43	39.53%(17)	34.88%(15)	4.65%(2)	6.98%(3)
Oral Health / Dental Care	39	48.72%(19)	33.33%(13)	2.56%(1)	0.00%(0)
Lamaze/Childbirth Education Class	35	37.14%(13)	37.14%(13)	11.43%(4)	2.86%(1)
Extended Hospital Stay after the Birth/Delivery	34	44.12%(15)	38.24%(13)	5.88%(2)	11.76%(4)
Post-partum Depression Support	25	36.00%(9)	28.00%(7)	20.00%(5)	8.00%(2)
Prenatal Care through a Midwife	20	65.00%(13)	15.00%(3)	5.00%(1)	10.00%(2)
Nutritionist	20	25.00%(5)	45.00%(9)	0.00%(0)	10.00%(2)
Mental Health Care During Pregnancy	19	47.37%(9)	26.32%(5)	5.26%(1)	15.79%(3)
Pregnancy Support Group	18	44.44%(8)	27.78%(5)	5.56%(1)	11.11%(2)
Birth/Delivery through a Birthing Center	12	41.67%(5)	25.00%(3)	8.33%(1)	8.33%(1)
Birthing Supports through a Midwife	12	75.00%(9)	16.67%(2)	0.00%(0)	8.33%(1)
Prenatal Care through a Doula	10	70.00%(7)	10.00%(1)	0.00%(0)	10.00%(1)
Home Visiting Services	10	70.00%(7)	20.00%(2)	0.00%(0)	10.00%(1)
Alcohol or Substance Use Treatment During Pregnancy	9	66.67%(6)	22.22%(2)	0.00%(0)	0.00%(0)
Post-partum Visit by a Midwife	9	66.67%(6)	22.22%(2)	0.00%(0)	11.11%(1)
Birth/Delivery in a Home Setting	8	62.50%(5)	25.00%(2)	0.00%(0)	0.00%(0)
Birthing Supports through a Doula	8	62.50%(5)	12.50%(1)	0.00%(0)	8.33%(1)
Post-partum Visit by a Doula	7	71.43%(5)	14.29%(1)	0.00%(0)	14.29%(1)



Maternal Health Systems Issues Impacting Families in San Bernardino County

To understand systems issues associated with maternal health services through San Bernardino County, stakeholders were engaged through community gatherings as well as at the workgroup level.

System Strengths

Stakeholders identified system strengths and areas where the service sector was adapting to meet the needs of families in San Bernardino County. Strengths identified included:

County Coalitions

Stakeholders described a variety of coalitions that exist to support families throughout the maternal health system. Some of them include the Inland Empire Breastfeeding Coalition, the Inland Empire Maternal Mental Health Collaborative, the Oral Health Action Coalition – Inland Empire, the Inland Empire Birth Workers of Color, and the Perinatal Nurse Leadership Coalition.

Information Sharing

Inland Empire Health Plan 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.





System Deficiencies

Areas where the system fails to meet the needs of families were also identified and include:

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 women 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 women regarding their concerns and desires or have a referral mechanism to connect families to the variety of resources that are available.

Social Determinants of Health

Beyond the systems issues identified above, there was an overwhelming concern for how the social determinants of health impact all areas of maternal health. The most significant social determinants raised across multiple sectors included poverty and the lack of adequate transportation available to families needing to access care before, during, and directly following pregnancy.

Other systems issues raised in specific sectors included:

- **Underutilization of Specific Resources:** Stakeholders described a system in which hospitals, midwives and doulas do not work in concert to comprehensively serve families throughout the birthing process.
- **Lack of Whole Person Care Framework:** Stakeholders describe a system that doesn't acknowledge behavioral health or oral health as a component of an individual's "whole health" or as a necessary partner within the healthcare system.
- **Workforce Shortage:** There is an insufficient workforce to support primary or behavioral health care services.
- **Prioritization of Infant Health:** Stakeholders describe a system that prioritizes the health of the infant over that of the mother.



Conclusions

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.

Critical Issues

Equity

Social determinants of health are closely linked to maternal health outcomes. This is most evident amongst African American/Black 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, women 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 women, 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.

Opportunities for Consideration

The following opportunities are being offered for consideration as ways to address the issues identified above. These opportunities have been identified based on workgroup suggestions and stakeholder input.

Issue	Opportunity
Equity	<ul style="list-style-type: none">Establish an advocacy agenda that address the social determinants of health and supports target populations.Support Perinatal Equity Initiative to address maternal health disparities.
Early Identification of Risk	<ul style="list-style-type: none">Implement a community education campaign to support health pregnancy and delivery.Establish pro-active screening and education efforts with pregnant families.
Access to Community Resources	<ul style="list-style-type: none">Prioritize service expansion in the following areas: Black Infant Health, home visiting, pre and inter-conception care, breastfeeding, and behavioral health.Establish a systems navigator to connect families to care early.
Data Sufficiency	<ul style="list-style-type: none">Collect and use data to support systems improvement.
Provider Capacity	<ul style="list-style-type: none">Increase provider capacity through targeted training and supports.Improve coordination of care and cross collaboration between sector providers and county coalitions.



Appendix



Appendix A. Maternal and Infant Health Data Snapshot



Appendix B. Sources for Indicators included in Maternal and Infant Health Data Snapshot

Family Health Outcomes Project. (2018, December). Retrieved from <https://fhop.ucsf.edu/san-bernardino-county-databooks>.

Health Coverage and Care for Undocumented Immigrants. (2015). Public Policy Institute of California. Retrieved from <https://www.ppic.org/publication/health-coverage-and-care-for-undocumented-immigrants/>.

Listening to Mothers: Results from a Population-Based Survey of Women's Childbearing Experiences. (September 2018). California Health Care Foundation. Retrieved from <https://www.chcf.org/publication/data-snapshot-listening-mothers-california/>.

Maternal and Infant Health Assessment (MIHA) Survey, 2015-2016. California Department of Public Health. 2016.

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.

Maternal mortality: California and US, 2003-2007 Average. March of Dimes: Peristats. Retrieved from <https://www.marchofdimes.org/Peristats/ViewSubtopic.aspx?reg=06&top=6&stop=370&lev=1&slev=4&obj=1&cmp=99>.

Sufrin, C., Beal, L., Clarke, J., Jones, R., & Mosher, W. D. (2019). Pregnancy Outcomes in US Prisons, 2016–2017. *American Journal of Public Health*, 109(5).

Reproductive Status and Contraceptive Use Among California Women Ages 18-49, 2008. (2012). Data Points: Results from the 2008 California Women's Health Survey, (7)5.

Trends in pregnancy-related mortality in the United States: 1987-2014. Centers for Disease Control. Retrieved from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-mortality-surveillance-system.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Freproductivehealth%2Fmaternalinfanthealth%2Fpmss.html.

Workplace Breastfeeding Support in California. California Department of Public Health. Retrieved from <https://www.cdph.ca.gov/Programs/CFH/DMCAH/CDPH%20Document%20Library/BFP/BFP-WorkplaceBreastfeedingSupportingCalifornia.pdf>





Appendix C. Prenatal and Post-Partum Primary Care & Oral Health Strengths and Opportunities Brief



Appendix D. Birthing Supports Strengths and Opportunities Brief



Appendix E. Behavioral Health Strengths and Opportunities Brief



Appendix F. Prenatal and Post-Partum Wellness Strengths and Opportunities Brief



Appendix G. Target Populations Strengths and Opportunities Brief