Home Visiting Programs in Alameda County

Program Review and Evaluation

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FIRST 5 ALAMEDA COUNTY every child counts

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PROJECT BACKGROUND

In August 2010, the Alameda County Public Health Department (ACPHD) and First 5 Alameda County (F5AC) commissioned Applied Survey Research (ASR) to conduct a review of ten perinatal/early childhood home visiting programs in the county. The broad goal of the project was to support the work of several county working groups – including the Building Blocks Collaborative/Life Course Initiative and the 0-8 Convergence – by assisting this group of programs in moving from a loosely organized "community" of home visiting programs toward a more intentional system of services that effectively address the needs of the county's at-risk families.

To that end, this report collectively and individually describes the set of ten perinatal/early childhood home visiting programs, including whom each one serves, what services and interventions each provides, and the intended and demonstrated outcomes associated with participation in each program. These descriptions are embedded in the larger context of what is known about effective home visiting programs and how these programs are positioned with regard to the recent federal legislation designating new funding for home visiting programs. This report is intended as a source of program information for understanding these programs individually, comparatively, and collectively, and it serves as a resource for ongoing analysis and action as the group continues to work on improving services for those at need.

HOW THE REPORT IS ORGANIZED

After a brief **review of home visiting research**, this report presents the following:

- Some of the **key population needs among Alameda County residents**, with particular focus on data relating to perinatal and early childhood home visiting programs.
- **Cross-program summaries and analysis** of the populations, services and supports offered, along with expected and demonstrated outcomes of the ten home visiting programs in this review.
- A set of **recommendations for enhancing the home visiting services** for at-risk county residents, along with possible actions within each recommendation.

Finally, Appendix 1 provides a **more focused individual look at each one of the ten home visiting programs** included in this report, including more detailed program summaries and data from each program's most recent fiscal year.

Although this Executive Summary includes a great deal of general, summary information about the ten home visiting programs, readers are encouraged to look to the full report for a richer discussion and analysis of the programs and the recommendations described here.

HOME VISITING PROGRAMS REPRESENTED

It is important to note that the ten perinatal/early childhood home visiting programs described in this report by no means represent all – or even most – of the home visiting programs offered county-wide. Specifically, these programs include a subset of home visiting programs that operate through or are associated with ACPHD or F5AC. There were no fixed criteria for inclusion or exclusion in this group of programs being reviewed, except that they serve pregnant, interconceptional, or parenting women and their young children, and they have agreed to collaborate in this project to better serve Alameda County's neediest populations. Indeed, it is hoped that representatives from other programs and agencies join in the ongoing work of the original group as they continue to work on issues related to improving home visiting and related services in Alameda County.

The names and brief descriptions of each of the ten participating perinatal/early childhood home visiting program are provided in the figure that follows. A more complete program-by-program summary – along with available program service and outcome data from each one's most recently completed fiscal year – is included as Appendix 1.

Figure A. Summary of Perinatal/Early Childhood Home Visiting Programs in This Review

Program name	Program description
Improving Pregnancy Outcomes Program (IPOP)	Originally federally funded as the Oakland Healthy Start program in the early 1990's, IPOP aims to reduce infant mortality and morbidity by providing culturally competent case management and health education services to pregnant and inter-conceptional African American women, their children and male partners in order to improve perinatal risk factors such as low birth weight, late entry into perinatal care, pre-term births, perinatal depression and maternal substance use. The program has aligned its case management services with the Life Course Perspective and recognizes the importance of improving inter-conceptional health risk factors that might negatively impact subsequent pregnancies
Black Infant Health (BIH)	Home visiting, outreach and social support services are provided to pregnant and parenting African-American women and their families. The program objectives are to decrease African-American infant mortality and morbidity in Alameda County and to eliminate the persistent disparities in Maternal, Child, and Adolescent Health (MCAH)-related health indicators for this population. African Americans have more than twice the infant mortality rate and by far the highest percentage of LBW and VLBW babies of any other ethnic group in the county.
Maternal Access and Linkages for Desired Reproductive Health (MADRE)	MADRE is a bilingual, bicultural health linkage and access to care program designed to improve the interconception and maternal health of high risk low income women in order to achieve an optimal pregnancy outcome . MADRE serves low income women of childbearing age with one or more of the following: history of fetal or infant loss, previous low or very low birth weight baby, previous premature delivery, history of multiple miscarriages, pregnancy with a non-viable fetal diagnosis i.e. anecephaly, hydrocephaly, genetic disorders, congenital (fetal) anomalies. MADRE provides bio-psychosocial assessment, administrative case management, care coordination, assistance with linkages & access to health care, bereavement support, field visits by staff, education & outreach, and MSW internships. MADRE targets the largest Medi-Cal population in Alameda County.
Perinatal Hepatitis B Program (Perinatal Hep B)	A case management program working with new moms identified through hospital records as HBsAg positive. At least one home visit by Public Health is conducted with additional referrals to community supports to address factors impacting child's health outcomes. Newborns are followed at 12-18 months to ensure appropriate vaccinations.
Public Health Nursing	Multicultural and multilingual targeted case management, outreach and care coordination for low income, high-risk families, via family support and home visiting contracts and partnerships with F5AC, CHDP and MPCAH programs. PHN has a long history of providing intensive family support services to mothers who present at delivery having had no prenatal care, as well as those who give birth to babies with positive toxicology screens. For purposes of this report, CHDP participants and information are not included in Public Health Nursing descriptions.
Pregnant & Parenting Teen Program	Two community-based organizations that provide teens with home-based family support services from prenatal period until the parent is 25 years or until the child is 5 years.
Your Family Counts	Perinatal Home Visiting (partnership with AC Public Health Department Family Health Services): up to 1 year of home-based family support for high risk pregnant and families with newborns provided by a multi-disciplinary team.
Special Start	A public/private partnership between ACPHD Family Health Services and Children's Hospital and Research Center Oakland. The program provides up to 3 years of home-based family support for infants discharged from the neonatal intensive care units with medical and social risks.
Another Road to Safety	A collaboration between F5AC, Social Services Agency (SSA) and CBOs, now overseen by SSA, that provides home-based family support services for families up to 9 months who have entered the child welfare system.
Homeless Families Program	Comprehensive case management and support services that includes transitional and permanent housing assistance. Family Case Management is the core of Homeless Families Program and is a requirement in order to receive transitional or permanent housing assistance, as well as other support services.

A PROFILE OF POPULATION NEEDS IN ALAMEDA COUNTY

As Alameda County begins to consider moving toward a deliberate and coordinated system of home visiting services, it is important to more broadly quantify different needs in the county population as a whole. There is, of course, an enormous amount of data that can facilitate analysis of what the most pressing needs are that should be addressed by Alameda County's home visiting programs. Three types of information were used to summarize the population needs in the county, including the following:

- A summary of county data from the statewide needs assessment recently submitted by the California Department of Public Health, Maternal, Child and Adolescent Health Program (CDPH/MCAH) as part of the state's application for Health Resources and Services Administration (HSRA) and Administration for Children and Families (ACF) home visiting program funds.
- More specific data comparing groups of residents within Alameda County, as well as additional indicators for school readiness and homelessness, which are particularly relevant to Alameda County's home visiting programs but were not part of the statewide needs assessment report.
- A summary of what Alameda County home visiting program administrators have indicated are their greatest challenges in delivering their programs to the county residents they serve.

Findings from the California Statewide Needs Assessment

The CDPH/MCAH statewide needs assessment provides information on 21 indicators relating to home visiting services. The focus of this data presentation is on the relative performance of different California counties (or multi-county regions, depending on the data available).

Findings from this report suggest that relative to other counties, Alameda County as a whole is generally doing well. Of the 21 indicators reported, Alameda County performed above the state median on 17 and fell below the state median on only four. Of those four indicators, the one with the most direct relevance to home visiting programs is the percentage of low birth weight infants. On this indicator, Alameda County ranks as the tenth worst county of the 50 California counties with data for this indicator. (Interestingly, this datapoint is inconsistent with the other birth outcome data for the county, which are generally stronger.) Other indicators on which Alameda County was worse than the state median involved substance use or abuse (i.e., marijuana use and nonmedical use of pain relievers) and crime rates. The latter is significant in that it demonstrates one of the social determinants of health that is most challenging for Alameda County residents. Crime is an indicator that must be considered both as a negative influence on the overall health and well-being of county residents and as a distal outcome that can be improved through prevention and early intervention efforts such as home visiting programs.

Taking a Closer Look at Populations Within Alameda County

The county-level statistics reported in the statewide needs assessment have some limited utility because the emphasis in the statewide needs assessment is on comparing different counties' relative risks, rather than assessing absolute risk within counties. Moreover, the fact that data are only presented at the county level means that the needs of some at-risk subpopulations within counties may be masked. Finally, there are a few key indicators that were not included in the statewide assessment that provide important information about particular community needs and issues in Alameda County.

Thus, to supplement data from the statewide needs assessment, additional indicators for Alameda County residents were examined (with subgroup data included when it was available).

This more targeted look within Alameda County revealed needs in several key outcome areas that home visiting programs typically attempt to impact:

- **Child health:** On birth outcomes, African American mothers are not meeting Healthy People 2020 targets for birth weight, preterm births, and infant mortality; teen mothers have needs in the area of early prenatal care; and all county residents have needs for enhancing vaccination rates in early childhood.
- **Child development and school readiness:** Latino and African American students are particularly at risk based on English-Language Arts proficiency at third grade; non-representative school readiness data suggest students in San Lorenzo Unified and Oakland Unified may be starting school with low readiness levels.
- **Child maltreatment:** African American families in Alameda County have maltreatment rates that exceed Healthy People 2020 targets.
- **Maternal health:** African American and multi-ethnic women are not well-connected to a usual source of health care; other groups within the county may be at-risk on this measure as well.
- **Economic self-sufficiency:** There are more than 2,000 homeless adults with one or more minor children living with them.

What Do Program Administrators Report to Be Their Biggest Service Gaps and Unmet Needs?

A crucial source of information about the unmet needs of Alameda County residents – particularly those who enroll in (or attempt to enroll in) home visiting programs – comes from the administrators of the ten home visiting programs included in this project. Their perspective reflects direct experience with the populations in need. Even though they work with disparate at-risk populations at different points in the perinatal timelines, eight of the ten participating home visiting programs indicated that either they were unable to enroll all of the clients who needed their services, or the clients they have are unable to receive help for as long as they need it.

POPULATIONS SERVED BY PERINATAL/EARLY CHILDHOOD HOME VISITING PROGRAMS[1]

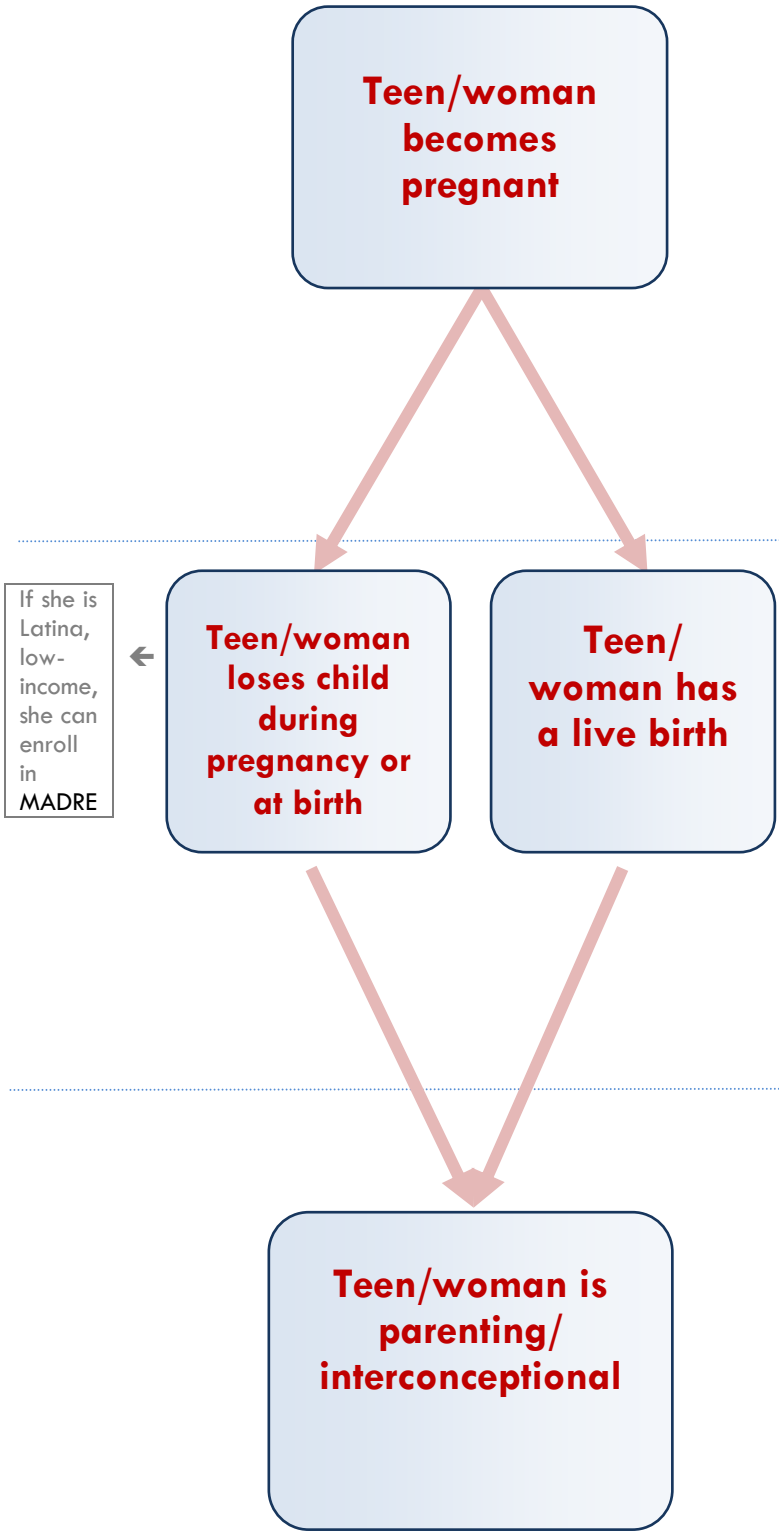
Who is served by the home visiting programs in Alameda County, and how many are served overall? When and how do people get enrolled in the programs? Which populations are targeted by the programs? This section describes the profile of participants who are served by the ten home visiting programs examined in this report.

[1] Please note that in this report, when we refer to perinatal/early childhood home visiting programs, we refer only to the set of ten programs that were examined as part of this project.

Eligibility and Connection Points

The figure on the following page shows when participants can enter each of the home visiting programs, based on the extent to which they meet the various program criteria. As the figure shows, most of the home visiting programs have multiple possible entry points. Seven programs enroll teens and/or women as early as their first pregnancy, but most of them (all but Perinatal Hepatitis B) also enroll participants at later points in time – postnatally or interconceptionally.

Figure B. Program Eligibility and Points of Entry



If she …		She can enroll in …
Is African-American, low-income	→	BIH
Is African-American, low-income, in 1 of 9 zip codes in Fruitvale, W. Oakland, E. Oakland , N. Oakland, Emeryville	→	IPOP
Is a teen	→	Pregnant & Parenting Teen Pgm
Is Hepatitis B positive	→	Perinatal Hep-B Pgm
Is medically and/ or socially at-risk for poor pregnancy outcome	→	Public Health Nursing, Your Family Counts
Is in Path 2 CPS and lives in W. Oakland, E. Oakland, Hayward	→	Another Road to Safety

If she …		She/child can enroll in …
Is African-American, low-income	→	BIH
Is African-American, low-income, in 1 of 9 zip codes in Fruitvale, W. Oakland, E. Oakland , N. Oakland, Emeryville	→	IPOP
Is a teen	→	Pregnant & Parenting Teen Program
And/or infant is medically and/or socially at-risk	→	Public Health Nursing, Your Family Counts
Has an infant in NICU with extreme medical/social risk	→	Special Start

If she …		She/child can enroll in …
Is African-American, low-income, in 1 of 9 zip codes in Fruitvale, W. Oakland, E. Oakland , N. Oakland, Emeryville	→	IPOP
Is a teen	→	Pregnant & Parenting Teen Pgm
Had a previous fetal/ infant loss, pregnancy w/ terminal fetal dx, LBW, preterm delivery	→	MADRE
Is in Path 2 CPS and lives in W. Oakland, E. Oakland, Hayward	→	Another Road to Safety
Is homeless	→	Homeless Families Program

Program Reach

Program reach across the ten home visiting programs in this report is described in two ways: (1) the total number of active participants in each program over a twelve-month period[2]; and (2) the number of new cases enrolled during that twelve-month period. Each number provides important information about the capacity of programs to serve the needs of the community.

The total number of active cases across all programs quantifies the total amount of home visiting intervention that was being delivered to county residents during a twelve-month period. In all, 4,393 **participants were touched by one of these ten home visiting programs in Alameda County over a twelve month period.**

This number is less appropriate for estimating the capacity of home visiting programs to address county need, however. Because many programs provide services to participants for more than a year, knowing the number of new cases may be particularly helpful in determining the gap between the amount of need among residents and the available services to meet those needs. In the most recent fiscal year, the total number of new clients served by the set of home visiting programs was 2,921. This means that across the ten programs, about 66 percent of the cases were new, and 34 percent were continuing from the previous fiscal year.

Data presented in the full report show that the bulk of the home visiting services in this set of programs – 39 percent of all those who receive home visits over a twelve month period – are provided by Public Health Nursing, a fairly low-intensity home visiting program (short participation period with moderately frequent visits).

Two other programs each serve more than 500 clients per year. After Public Health Nursing, the next largest program is Special Start, which, even though it serves 680 participants per year, is somewhat different from the Public Health Nursing program in that it is much more intensive and serves perhaps the most at-risk populations of any of the ten home visiting programs examined. The Pregnant and Parenting Teen Program is the third largest program in terms of number of participants served in a twelve-month period.

There are several mid-size programs serving less than 500 clients yearly, including Another Road to Safety, Your Family Counts, IPOP, Perinatal Hepatitis B, and Black Infant Health. The two smallest programs are MADRE and the Homeless Families Program, serving 62 and 25 clients over a twelve-month period, respectively.

Participation Profiles

By summing across all of the programs, we can begin to get a picture of who has been served in home visiting programs county-wide. Figure C shows the race/ethnicity, preferred language, and age for the set of newly enrolled cases across the programs. As the figure shows:

- Over half (54%) of all newly enrolling program participants are Hispanic/Latino, and about one fifth (21%) are African American.

[2] Programs provided information for their most recent fiscal year (2009-10); thus, the start and end dates differed somewhat.

- Fifty-nine percent of participants speak English as their preferred language, and 32 percent speak Spanish. Small numbers of participants speaking Chinese (Mandarin or Cantonese), Vietnamese, and Tagalog were represented as well.
- Teen participants make up about one quarter of the participants in these programs (24%).

Figure C. Key Demographics – Summing Across Home Visiting Programs

Participant Characteristics	Percent of new program participants
Race/ethnicity	
Hispanic/Latino	53.7%
African American	20.8%
Asian/Pacific Islander	11.3%
Caucasian	3.1%
Other/Multi-ethnic	11.1%
Preferred language	
English	59.2%
Spanish	31.7%
Chinese	4.3%
Vietnamese	1.3%
Tagalog	< 1%
Other	3.0%
Age	
Younger than 20	24.1%
20 or older	75.9%

Source: Individual program data.

Note: Sample sizes are as follows: race/ethnicity = 2,731; language = 2,292; age = 2,224.

DELIVERY OF HOME VISITING PROGRAM SERVICES

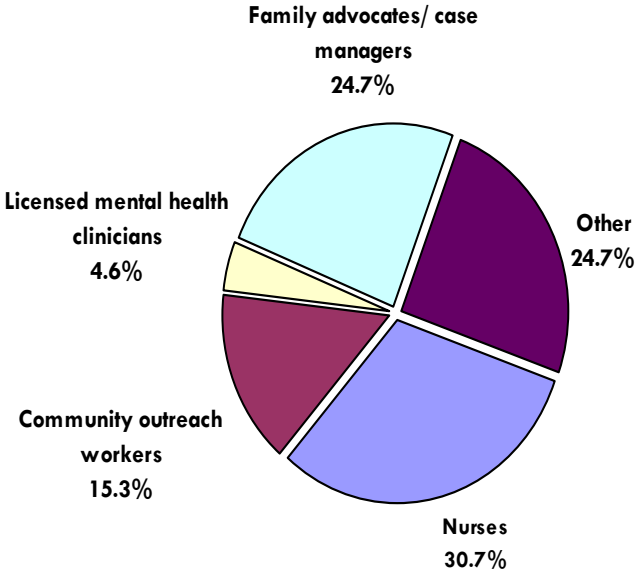
What does it mean to participate in one of these home visiting programs? Who is delivering services? What do programs offer, and what is the intensity of those services?

Staffing

The figure that follows summarizes the types of home visiting staff employed across all ten programs. Nearly one-third of all staff are nurses. About one in four are described as family advocates or case managers, a category that includes primarily bachelor's-level employees. Fifteen percent of home visiting staff are community or community health outreach workers. Mental health experts are rare as program

staff; these individuals more often tend to be consultants to the programs rather than primary staff, or participants are referred to outside mental health services when they are in need of them.[3]

Figure D. Summary of Staffing Across All Home Visiting Programs



Source: Administrator survey of home visiting programs and administrator telephone interviews.

What Do Programs Offer?

Although the models of care, program intensity, and target populations of the home visiting programs vary, many of the programs offer similar services to their participants. **Medical case management**, **health education** (general and specific to certain issues), **information and referrals to social services**, and **assistance with benefits enrollment** are core elements of each of the ten programs. Almost all of the programs also offer assistance with **transportation** needs related to medical visits.

With regard to **mental health needs**, all ten home visiting programs examined refer participants to services if they are in need of mental health care, and First 5-funded programs and Homeless Families Program have resources to provide short-term treatment for acute mental health needs. First 5- funded programs, as well as IPOP and Black Infant Health, also screen for maternal depression using the Edinburgh Postnatal Depression Scale (although program data indicate that not all participants are routinely screened).

Three programs use the ASQ and ASQ-SE for **developmental screening of children;** both IPOP and Black Infant Health use the Denver Developmental Screening Test for developmental screenings.

Support groups provide another way to assist participants in addressing their psychological and emotional needs, and IPOP, Black Infant Health, and MADRE are the only programs that directly offer support groups, although other providers will connect participants with support groups as needed.

[3] F5AC has additional in-house mental health clinicians that work with BIH, IPOP, YFC, Special Start and Pregnant and Parenting Teen programs.

Home visitors in several programs provide **parent education and/or parenting skills training** to participants, including IPOP, Black Infant Health, Pregnant and Parenting Teen Program, Your Family Counts, and Special Start. Another Road to Safety home visitors help parents who need this service to get connected with resources related to parenting.

Basic needs are provided in several programs that serve some of the most financially needy participants, including Pregnant and Parenting Teen Program, Another Road to Safety, and Homeless Families Program. More specific items related to infant and childcare needs are provided through IPOP, Black Infant Health, Perinatal Hepatitis B, and Your Family Counts.

Finally, several programs provide **assistance to fathers** as well. IPOP and Black Infant Health provide several types of services specifically offered to assist fathers. MADRE provides connections to several resources. Pregnant and Parenting Teen Program, Your Family Counts and Special Start include fathers in their case management, and Another Road to Safety assist fathers as part of their family services.

This summary-level table provides an overview of the services offered across the programs; however, this is only a first step in understanding what these programs offer. There is certainly a great deal of variability in how these services are administered, including both the quantity and quality of the services provided across the programs. Although detailed descriptions of how these services are delivered are beyond the scope of this summary, future collaborative work across these programs can employ this summary table as a tool for identifying common program offerings, sharing best practices, and moving closer to adoption of consistent high-quality standards for delivering services across the set of home visiting programs.

Program Intensity: What Is the Dosage of the Home Visiting Interventions?

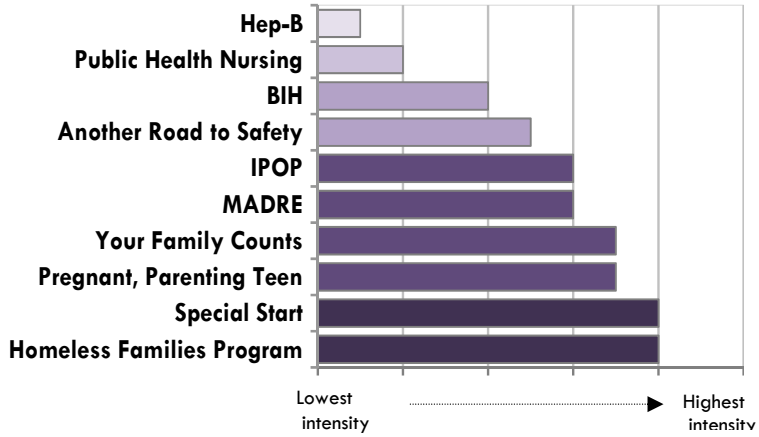
Program intensity refers to a combination of the frequency of home visits offered through a program and the length of participation in that program. According to multiple reviews of the home visiting research literature, a consistent finding is that program models of higher intensity tend to be more effective than those of lower intensity.

As the previous section indicates, many of the home visiting programs examined offer very similar services. However, the services may be more or less effective depending in part on how intensively home visitors can work with program participants to foster a trusting relationship, deliver useful information (such as health or parenting information), and accurately identify clients' needs and offer the right types and amount of support and resources.

The figure that follows displays the each program's intensity, according to the combined frequency of visits and program length. The figure show the average intensity for each program, acknowledging that every home visiting program has some variability in the program intensity that is driven by individual participants' needs and commitment to the program.[4]

[4] A note of caution is offered in the interpretation of this information: Specifically, the program's intended length and frequency of services is generally somewhat greater than what is actually observed in the program participation data. Because some programs did not have service data available for reporting, this figure displays intended program intensity.

Figure E. Summary of OVERALL Home Visiting Program Intensity: Combined Frequency x Length



Source: Administrator survey of home visiting programs and administrator telephone interviews.

The most intensive programs work with participants for both a long period of time and have visits at a weekly or nearly-weekly frequency; in the context of the broader home visiting literature, these programs would generally be considered to be of high intensity. The Homeless Families Program and Special Start – two programs that work with participants who are perhaps the most likely to have broad and highly-complex needs – are the highest-intensity programs among this set.

Several programs fall into a category of moderately-high intensity. This category includes programs such as the Pregnant and Parenting Teen Program (which lasts two or more years) and Your Family Counts (a one-year program) which have weekly to twice-monthly visits. In addition, MADRE and IPOP also are included in this category, but they are both of slightly lower intensity than the other two programs, based on combined frequency and program length measures.

Another Road to Safety is a moderate-intensity program overall. It is somewhat unlike any of the others, in that visits are quite frequent, but last for a fairly short period of time (about six months, in some cases up to nine months). Consistent with this model, administrators of this program describe its primary function as being a connector for participants – to ensure that they are linked up with agencies and services they need, but otherwise providing little in the way of direct intervention.

Black Infant Health is also a moderate-intensity program, with a one-year participation period and visits that are about on a monthly schedule. Public Health Nursing is a low-intensity program, with a fairly short participation period and, monthly visits. Finally, with its highly targeted focus on ensuring appropriate Hepatitis B-related health behaviors, the Perinatal Hepatitis B program is the least intense of the programs. It has just one home visit with longer monitoring of appropriate immunizations.

EXAMINING PROGRAM OUTCOMES

Without a clear representation of what a program intends to change as the result of people participating in it, it is difficult to determine whether the resources and efforts that go into its operation are justified. This section provides a summary of the core outcomes that each program believes it is impacting, as well as existing data that inform programs' progress in achieving changes in those outcome areas. Using

information from the home visiting literature as well as the ten home visiting programs in this review, core home visiting program outcomes were divided according to six general categories, as follows:

- Child health
- Child development and school readiness
- Child maltreatment/exposure to violence
- Maternal health
- Parenting skills/parent-child interactions
- Economic self-sufficiency

Expected and Demonstrated Program Outcomes

What are the specific outcomes that these programs expect to be impacting by offering home visiting services? And, importantly, to what extent are programs achieving these expected outcomes? The figure on the following two pages summarizes both the programs' expected and demonstrated outcomes.

Expected outcomes are represented on the figure by the shading of different cells in the grid. The darker shading designates the primary outcomes of each of the programs, i.e., the "must-have" impacts that are essential to a program's goals. The lighter, striped shading designates secondary program outcomes – those that the program believes it is also impacting, but that are less central to the program's mission. Because the ten programs included in this community of home visiting services offer many of the same interventions to their participants (albeit through different models and among different populations), there is significant overlap in the extent to which they expect to be impacting various outcomes. However, the programs also work with different populations and at different points along the perinatal timeline, so there is also not perfect correspondence across the set.

Inserted into these cells is the available program data that shows each program's progress in achieving their primary and secondary outcomes. (See Appendix 1 for more specific program outcome data.)

It should be noted that the purpose of this figure is to provide a high-level summary of both the data that are available across programs as well as collective program outcomes. **Because these programs serve different populations, intervene at different points along the perinatal timeline, and serve clients with very different risk profiles, it is not appropriate to use the figure to evaluate a particular program's effectiveness relative to another, even if the programs have similar expected outcomes.**

As the figure shows, where data are available, there are some promising outcomes to report. For example, the number of infant mortalities among the two programs that target African American populations in Alameda County suggests that these programs may be improving birth outcomes on this indicator. Immunization rates and possession of a medical home among children are generally strong across the programs that provide these data, even though these outcomes have been reported to be difficult to impact in other home visiting programs.

However, this figure also underscores that there are many more opportunities for programs to enhance the data that they collect to evaluate their effectiveness on many of their expected outcomes. Additionally, if programs want to draw conclusions about outcomes across the set of home visiting services in the county, there are opportunities for standardizing the measurement of common outcomes tools across programs as well.

Figure F. Summary of Demonstrated Outcomes, by Home Visiting Program

		PROGRAM									
	Outcome	IPOP	BIH	MADRE	Hep-B	Pub Hlth Nursing	Pregnant/ Parenting Teens	Your Family Counts	Special Start	Another Road to Safety	Homeless Families Program
CHILD OUTCOMES	**Child health**										
	Reduced infant mortality (up to one-year post-birth)	0 deaths (2 deaths of 429 served over 5 yrs)	0 deaths (1 deaths of 349 served over 5 yrs)								
	Healthy birth weight (not LBW, VLBW)	90%	93%								
	Full-term at birth		90%								
	Current on immunizations		96%	64%	100% Hep B series		98%	94%	98%	99%	
	Has a medical home	86%	82%	91%			98%	99%	100%	99%	
	Child development and school readiness										
	Developmentally on target		99% on target (DDST)				44% had no concerns (ASQ)	42% had no concerns (ASQ)	17% had no concerns (ASQ)		
	Child maltreatment/exposure to violence										
	Reduced maltreatment allegations/substantiations						3% opened CPS case during pgm	5% opened CPS case during pgm	3% opened CPS case during pgm	11% opened CPS case during pgm	
	Child is not exposed to violence in the home										
	Child is living with birth parent(s)						2% in foster care during pgm	2% in foster care during pgm	2% in foster care during pgm	1% in foster care during pgm	

(Figure continues on next page)

Demonstrated Outcomes (cont'd)		PROGRAM									
Outcome		IPOP	BIH	MADRE	Hep-B	Pub Hlth Nursing	Pregnant/ Parenting Teens	Your Family Counts	Special Start	Another Road to Safety	Homeless Families Program
MATERNAL/PARENT/ FAMILY OUTCOMES	**Maternal health**										
	Has a medical home	94%	96%	100%							
	Can advocate for family health care needs										
	Are linked to needed mental health supports	100% were screened for depression	100% were screened for depression				69% were screened for depression	69% were screened for depression	84% were screened for depression	69% were screened for depression	
	Reduced maternal depression										
	Delay subsequent births										
	Engages in healthier behavior	74% prenatal care in 1st trimester	79% prenatal care in 1st trimester				46% breastfed > 6 mos.	46% breastfed > 6 mos.	54% breastfed > 6 mos.		
	Has increased health knowledge										
	Parenting skills/Parent-child interactions										
	Parents have improved parenting knowledge, skills						90% read daily to children	71% read daily to children	89% read daily to children	75% read daily to children	
	Economic Self-Sufficiency										
	Complete high school education						65% in school or graduated				
	Are in school or working						39% employed				33% had income from employment
	Are economically stable										92% (n=11) had income source at exit; 33% (n=4) had perm. hsing at exit

Note: All data are from most recent program fiscal year, except where noted. All data are based on percent of known respondents. Solid, darker shading designates primary outcomes; striped, lighter shading designates secondary outcomes.

RECOMMENDATIONS FOR FUTURE EFFORTS

Supplemented with findings and perspectives from the home visiting research literature, a set of five broad recommendations was developed to help move this group of home visiting programs closer to their goal of becoming a coordinated, deliberate system of services for at-risk Alameda County residents. Please see the full report for a more comprehensive description of each recommendation.

Recommendation 1

Develop a process for: (1) identifying (and then monitoring) the level of county need over time; and (2) coordinating services and ensuring that those in need are matched to the right home visitation programs.

The Issue

One of the biggest challenges faced by programs serving at-risk populations involves accurately quantifying the need that exists in the communities they serve, and then determining the extent to which the need is being met by the services that are available to help people. This challenge is compounded when multiple programs are attempting to work together to address community needs, as the different programs serve some unique and some common target populations within the larger set of at-risk individuals, and programs vary in intensity and services offered. To ensure that those with needs for assistance are matched to programs that are most likely to benefit them, programs (and systems) must communicate with each other and develop a coordinated system to serve clients – all in a way that minimizes expenditures and limits overlap in program participation

Suggested actions

- Decide on a set of key county-level indicators that the group would like to track over time to describe county needs.
- Identify and invite other partners to participate in county-wide coordination efforts.
- Develop guidelines for determining which county residents should be matched to which home visiting programs.
- Develop coordinated outreach efforts to engage clients in the community of service providers and the community at large.
- Once identified and secured, conduct regular monitoring and updating of the portrait of Alameda County needs.

Recommendation 2

Enhance the quality of this community of home visitation programs, both individually and collectively.

The Issue

A precise understanding of which home visiting program features lead to positive outcomes for participants is still evolving; there is little evidence that can be considered to be both strong and consistent across the body of research studies examining what works in home visiting programs. Available evidence does suggest that using highly trained, well-qualified staff leads to better program outcomes. Programs of higher-intensity (greater frequency and longer duration of visits) also tend to be associated with better outcomes, particularly among high-risk populations. Outcomes such as enhanced parenting skills are frequently demonstrated, as are (somewhat less strongly) benefits for children's developmental progress. Less easy-to-impact outcomes are found among child and infant health outcomes and maternal mental health outcomes. Moreover, across all studies of home visiting program effectiveness, a warning emerges about program implementation: there is often wide variability in the extent to which home visitors are actually delivering the program to participants as it is intended to be delivered.

Suggested Actions

- Develop appropriate and consistent approaches to staffing.
- Encourage staff retention within programs.
- Develop consistent approaches to initial and ongoing staff training and development.
- When possible, create coordinated standards of practice among programs doing similar work.
- Review each program design as intended versus as delivered.

Recommendation 3

Finalize and implement a measurement system that gathers clear and relevant data that will help to determine whether the community of home visitation programs is successful.

The Issue

Each program in this community of home visiting programs serves a slightly different target population, using varied home visiting program models to impact outcomes – outcomes that are sometimes shared by other programs and are sometimes unique to a particular program. Moreover, each program has different funder reporting requirements, different data collection tools and protocols, database systems, and different data use "cultures," i.e., how (and whether) staff use data to inform how they run their programs. Despite this substantial variability, it is useful to have some consensus in data collection practices and core data elements across programs. It is recognized that each program will have some data collection requirements and needs that are unique to their own program that make complete standardization neither possible nor desired; however, to become a more intentional system, there must be a core set of data elements that are collected across the set of diverse programs.

Suggested Actions

- Develop common, cross-program data elements to collect about participants, services, and outcomes.
- Establish protocols for gathering feedback from program participants to better understand the program from their perspective.
- Consider use of a single electronic database – or compatible databases – to facilitate merging of data across programs.
- Foster a culture that sees the value of collecting data.
- Develop a high-level summary communication that can simply display your efforts and outcomes.

Recommendation 4

Ensure commitment to the ongoing work of this community of programs by developing and implementing processes to help sustain it.

The Issue

The stated goal of this group of home visiting programs is an ambitious one: To move from being a loosely-organized community of home visiting programs to a deliberate system that serves the needs of Alameda County. The recommendations in this report to advance that goal are fairly complex, and they involve multiple, coordinated, and sustained efforts to achieve them. How does the group stay organized, coordinated, and successful?

Suggested Actions

- Continue meeting regularly.
- Establish subcommittees so that important work gets done in between larger collaborative meetings.
- As a group, rank the recommendations and actions according to whether they are high, medium, or low priority.
- Use your data dashboard to guide your work together.

Recommendation 5

Once program quality and treatment fidelity have been solidified, each program should enhance its routine data collection practices and also consider conducting a one-time, rigorous program evaluation to become more competitive for funding that has an "evidence-based" standard.

The Issue

The Patient Protection and Affordable Care Act of 2010 (ACA) was signed into law on March 23, 2010. One of the provisions of that act included the creation of the Maternal, Infant, and Early Childhood Home Visiting program, which will provide $100 million in early 2011 to states to fund home visiting programs.

With annual increases over five years, it is expected that the total amount of funds to be distributed to home visiting programs will be $1.5 billion by 2014.

The grant program specified that most of the funding would be used to support evidence-based home visiting program models, and information was subsequently provided describing the requirements that would have to be met for a program to be considered to be evidence-based.

Among the programs in this report, only IPOP is based on a model that has been rigorously tested (Healthy Start), with mixed results and not within Alameda County. It is helpful to look at what the key considerations are in conducting high-quality program evaluations, as well as some examples of different research designs that can range from highly rigorous to much less rigorous.

Suggested Actions

- Be informed about issues to consider in planning program evaluation research studies.
- When program staffing and design issues have been addressed and preliminary data show that implementation is "true" to program design, invest in a high-quality research study and commit to enhanced ongoing data collection.

Introduction

PROJECT BACKGROUND

In August 2010, the Alameda County Public Health Department (ACPHD) and First 5 Alameda County (F5AC) commissioned Applied Survey Research (ASR) to conduct a review of ten perinatal/early childhood home visiting programs in the county. The broad goal of the project was to support the work of several county working groups – including the Building Blocks Collaborative/Life Course Initiative and the 0-8 Convergence – by assisting this group of programs in moving from a loosely organized "community" of home visiting programs toward a more intentional system of services that effectively address the needs of the county's at-risk families.

To that end, this report collectively and individually describes the set of ten perinatal/early childhood home visiting programs, including whom each one serves, what services and interventions each provides, and the intended and demonstrated outcomes associated with participation in each program. These descriptions are embedded in the larger context of what is known about effective home visiting programs and how these programs are positioned with regard to the recent federal legislation designating new funding for home visiting programs. This report is intended as a source of program information for understanding these programs individually, comparatively, and collectively, and it serves as a resource for ongoing analysis and action as the group continues to work on improving services for those at need.

HOME VISITING PROGRAMS REPRESENTED

It is important to note that the ten perinatal/early childhood home visiting programs described in this report by no means represent all – or even most – of the home visiting programs offered county-wide. Specifically, these programs include a subset of home visiting programs that operate through or are associated with ACPHD or F5AC. There were no fixed criteria for inclusion or exclusion in this group of programs being reviewed, except that they serve pregnant, interconceptional, or parenting women and their young children, and they have agreed to collaborate in this project to better serve Alameda County's neediest populations. Indeed, it is hoped that representatives from other programs and agencies join in the ongoing work of the original group as they continue to work on issues related to improving home visiting and related services in Alameda County.

The names and brief descriptions of each of the ten participating perinatal/early childhood home visiting program are provided in the figure that follows. A more complete program-by-program summary – along with available program service and outcome data from each one's most recently completed fiscal year – is included as Appendix 1.

Figure 1. Summary of Included Perinatal/Early Childhood Home Visiting Programs

Program name	Program description
Improving Pregnancy Outcomes Program (IPOP)	Originally federally funded as the Oakland Healthy Start program in the early 1990's, IPOP aims to reduce infant mortality and morbidity by providing culturally competent case management and health education services to pregnant and inter-conceptional African American women, their children and male partners in order to improve perinatal risk factors such as low birth weight, late entry into perinatal care, pre-term births, perinatal depression and maternal substance use. The program has aligned its case management services with the Life Course Perspective and recognizes the importance of improving inter-conceptional health risk factors that might negatively impact subsequent pregnancies
Black Infant Health (BIH)	Home visiting, outreach and social support services are provided to pregnant and parenting African-American women and their families. The program objectives are to decrease African-American infant mortality and morbidity in Alameda County and to eliminate the persistent disparities in Maternal, Child, and Adolescent Health (MCAH)-related health indicators for this population. African Americans have more than twice the infant mortality rate and by far the highest percentage of LBW and VLBW babies of any other ethnic group in the county.
Maternal Access and Linkages for Desired Reproductive Health (MADRE)	MADRE is a bilingual, bicultural health linkage and access to care program designed to improve the interconception and maternal health of high risk low income women in order to achieve an optimal pregnancy outcome . MADRE serves low income women of childbearing age with one or more of the following: history of fetal or infant loss, previous low or very low birth weight baby, previous premature delivery, history of multiple miscarriages, pregnancy with a non-viable fetal diagnosis i.e. anecephaly, hydrocephaly, genetic disorders, congenital (fetal) anomalies. MADRE provides bio-psychosocial assessment, administrative case management, care coordination, assistance with linkages & access to health care, bereavement support, field visits by staff, education & outreach, and MSW internships. MADRE targets the largest Medi-Cal population in Alameda County.
Perinatal Hepatitis B Program (Perinatal Hep B)	A case management program working with new moms identified through hospital records as HBsAg positive. At least one home visit by Public Health is conducted with additional referrals to community supports to address factors impacting child's health outcomes. Newborns are followed at 12-18 months to ensure appropriate vaccinations.
Public Health Nursing	Multicultural and multilingual targeted case management, outreach and care coordination for low income, high-risk families, via family support and home visiting contracts and partnerships with F5AC, CHDP and MPCAH programs. PHN has a long history of providing intensive family support services to mothers who present at delivery having had no prenatal care, as well as those who give birth to babies with positive toxicology screens. For purposes of this report, CHDP participants and information are <u>not</u> included in Public Health Nursing descriptions.
Pregnant & Parenting Teen Program	Two community-based organizations that provide teens with home-based family support services from prenatal period until the parent is 25 years or until the child is 5 years.
Your Family Counts	Perinatal Home Visiting (partnership with AC Public Health Department Family Health Services): up to 1 year of home-based family support for high risk pregnant and families with newborns provided by a multi-disciplinary team.
Special Start	A public/private partnership between ACPHD Family Health Services and Children's Hospital and Research Center Oakland. The program provides up to 3 years of home-based family support for infants discharged from the neonatal intensive care units with medical and social risks.
Another Road to Safety	A collaboration between F5AC, Social Services Agency (SSA) and CBOs, now overseen by SSA, that provides home-based family support services for families up to 9 months who have entered the child welfare system.
Homeless Families Program	Comprehensive case management and support services that includes transitional and permanent housing assistance. Family Case Management is the core of Homeless Families Program and is a requirement in order to receive transitional or permanent housing assistance, as well as other support services.

HOW THIS REPORT IS ORGANIZED

There are four primary sections to this report:

- Section 1 provides a brief **review of home visiting research**, including a summary of several widely-implemented home visiting programs, as well as an analysis of features of different programs that are associated with program benefits and an examination of the types of outcomes that have been shown to be impacted by home visiting programs.
- Section 2 attempts to quantify some of the **key population needs among Alameda County residents**, with particular focus on data relating to perinatal and early childhood home visiting programs. This section includes data from the recent statewide needs assessment submitted by the California Department of Public Health, Maternal, Child and Adolescent Health Program (CDPH/MCAH) as part of the state's application for Health Resources and Services Administration (HSRA) and Administration for Children and Families (ACF) home visiting program funds. The section also includes a more targeted look at additional relevant data for Alameda County residents, and it summarizes feedback from program administrators reporting on their biggest services gaps and challenges.
- Section 3 includes **cross-program summaries and analysis** of the populations, services and supports offered, and expected and demonstrated outcomes of the ten home visiting programs studied.
- In Section 4, a set of **recommendations for enhancing the home visiting services** for at-risk county residents are proposed, along with possible actions within each recommendation.

Finally, Appendix 1 provides a **more focused individual look at each one of the ten home visiting programs** included in this report, including, for each one:

- A program summary describing whom it targets, the program's dosage and core services, and expected program outcomes; and
- Data available from the most recent fiscal year pertaining to participants served, services provided, and outcomes achieved.

Section 1:

Home Visitation Programs

An Overview of Current Research

In this section:

- Reviews of research findings examining widely used home visitation programs
- Key findings summarizing research across programs, including:
  - Elements of different programs that are most often linked to successful outcomes
  - Key outcomes domains and how successfully programs have been able to impact them

A Brief Review of Home Visiting Research

Home visiting programs have been in existence for over one hundred years, and efforts to research their effectiveness using rigorous methodologies have been under way since the 1960s (Haskins, Paxson, & Brooks-Gunn, 2009). In recent years, a number of comprehensive reviews of the home visiting program research literature have synthesized findings across dozens of rigorously conducted studies in order to determine which programs lead to the best outcomes and provide the most cost-effective services.

However, despite a temptation to look for a simple answer to the question of what works best in home visiting programs, the research appears to show that no single home visiting program model is consistently effective across the broad array of outcomes and target populations that programs have been created to improve. The real answers to questions about what works in home visiting programs require a more nuanced look at the data that have been reported for various programs.

This report section briefly summarizes the findings from a number of rigorous studies and reviews evaluating the best-known home visiting programs in the country. It should be noted that this is not an exhaustive review of the home visiting research literature conducted to date, but rather an overview of key findings and conclusions about home visiting programs. Those who wish to read more comprehensive and in-depth literature reviews should see Gomby (2005), Howard and Brooks-Gunn (2009) and a 1999 publication of *The Future of Children*, in which a full issue is devoted to the review and analysis of a set of widely-implemented home visiting programs. After this program-based summary of the major research findings, study results are described at a more detailed level, looking separately at different features of programs that have been examined and then, finally, describing which of those program features have been shown to lead to improvements in different core outcome areas.

WHICH PROGRAMS SHOW EVIDENCE OF EFFECTIVENESS?

There are a number of home visiting programs operating throughout the country, but a relatively small number have been evaluated using randomized clinical trials, which are generally considered to be the gold standard of rigorous research methods, providing the best evidence of whether a program is effective. This section provides a brief summary of five of the most widely-implemented home visiting programs that have employed randomized clinical trials to measure their effectiveness. These include the following:

- Nurse Home Visitation Program (also referred to as Nurse-Family Partnerships)
- Parents as Teachers (PAT)
- Healthy Start
- Healthy Families America
- Comprehensive Child Developmental Program (CCDP)

It should be noted that a number of researchers (e.g., Daro, Dodge, Weiss, & Zigler, 2009) have expressed concern about overreliance on randomized clinical trials. These researchers highlight concerns about the

particular conditions that must exist to conduct a randomized clinical trial – such as studying narrow populations and using extraordinary measures to keep participants in the study – that may ultimately limit the generalizability of the research findings to many "real world" settings and demands. Thus, the summaries that follow describe the best scientific evidence for program effectiveness, but such data should always be supplemented with considerations of the specific needs to be served by any particular home visiting program being implemented in a community.

Nurse Home Visitation Program/Nurse-Family Partnerships

The Nurse Home Visitation Program (also called Nurse-Family Partnerships), developed by David Olds, is widely perceived to be the most effective home visiting program. It has been so well-regarded, in fact, that it was the original model for developing criteria for deciding which programs will be funded through the Maternal, Infant, and Early Childhood Home Visiting program, a provision of the recently-enacted Patient Protection and Affordable Care Act of 2010 (ACA). The program includes home visits by nurses to low-income pregnant and parenting women. Visits occur weekly to monthly, and the program lasts through the child's second birthday. Core interventions include teaching positive health behaviors, parenting skills, and maternal development (education and employment, life skills, etc).

Evidence accrued across three rigorous evaluations in different settings and with different populations all showed significant impacts on child and maternal outcomes. (For more complete reviews, see Coalition for Evidence-Based Policy, 2008; Olds, Henderson, Kitzman, Eckenrode, Cole, & Tatelbaum, 1999.) Findings in one or more studies showed improvements in child outcomes that included child health, child safety, developmental progress, and academic achievement. For the mothers in the program, one or more studies showed improvements in economic, health, and crime/legal outcomes.

There were, however, some notable differences across the three studies in the outcomes achieved in the program. For example, although women in the Elmira (New York) and Memphis studies had reductions in time spent on welfare and subsequent births, no such benefits were observed among a sample of women in Denver. Among children's outcomes, academic performance benefits were observed for just a subset of children with mothers who had mental health issues or low intelligence.

Armed with what is generally perceived to be the strongest evidence of an effective home visiting program model, in 1996, David Olds began expanding the Nurse-Family Partnerships to other states, while simultaneously working to ensure that all new implementations maintain strong fidelity to the intended program delivery model. It should be noted, however, that some researchers have reservations about the extent to which this program has been favored over others. Some home visiting experts are troubled by the inconsistencies in findings across studies with different populations, and many feel that the emphasis on nurses and the narrowly-defined target population are overly limiting (Haskins, et. al., 2009).

Parents as Teachers

The Parents as Teachers (PAT) program has been evaluated in three randomized clinical trials with 2-3 year follow-ups (see Wagner & Clayton, 1999 for a review). The PAT program includes monthly home visiting delivered by paraprofessionals (trained parent educators) who focus their intervention efforts on promoting positive parenting practices and teaching parents about child development. The three clinical trials of the PAT program all targeted low-income women, and one of the two clinical trials focused exclusively on teen mothers.

Results of the studies found small or no effects for many child outcomes (which focused on child development, child health, and neglect/abuse) when looking at results overall. There was some evidence of benefits for children, including increased self-help development, increased immunizations and reduced injuries among the treated group. More focused subgroup analyses revealed that impacts on children were strongest among Spanish-speaking Latino families, very low-income families, and families that received more intensive visits. For example, looking at one subsample of Latina mothers and their children, benefits were observed in children's development in three out of five developmental domains, and among Spanish-speaking families, children showed stronger gains than controls on four of five developmental domains.

Evidence was not as strong for parent outcomes as it was for child outcomes (Wagner & Clayton, 1999). There was at best weak and sometimes no evidence of improvements in parenting-related knowledge, attitudes, or behaviors. Evidence of impact was somewhat more likely to be observed among the very low-income participants in the program.

Importantly, two of the three evaluations were also plagued by high attrition rates. This is an important consideration, in that those who are benefiting the least from a program are arguably the most likely to drop out of it. If this was the case with PAT, then the high study attrition rates further attenuate the likely real-world impact of the PAT program.

Healthy Start

The Healthy Start Program (HSP) is a program targeting mothers who recently gave birth who are at risk of neglect or abuse of their child. The program uses trained paraprofessionals recruited from the community who visit the new mothers weekly at first, with visits decreasing in frequency to quarterly visits. Participation lasts until the child is two years old.

A well-conducted randomized clinical trial of Healthy Start Hawaii with fairly low attrition rates showed mixed program results (Duggan, et al., 1999). On a number of key outcomes, no significant program impact were apparent after two years, including measures of adequacy of well-child health care; maternal life skills, mental health, social support, or substance use; child development; the child's home learning environment or parent-child interaction; pediatric health care use for illness or injury; or mothers' reports or child protective services data relating to child maltreatment.

The program did succeed in linking families with pediatric medical care, improving maternal parenting efficacy, decreasing maternal parenting stress, decreasing use of nonviolent discipline, and decreasing injuries resulting from partner violence. And, underscoring the importance of ensuring that programs are implemented in a manner that closely tracks with their intended service delivery, there were also agency-specific positive program effects on several outcomes that the authors suggested might have been related to fidelity to the program model.

Another three-year follow-up (Duggan et al., 2004) found that the program did not have appreciable overall impacts on the prevention of child abuse – or on any maternal outcomes. Ultimately, the authors suggest that there is limited evidence of substantial lasting program impact.

Healthy Families America

The model for Healthy Families America (HFA) is based on that of Hawaii Healthy Start (Howard & Brooks-Gunn, 2009). HFA targets pregnant women and new mothers who are at risk of child abuse or neglect. Services are delivered by trained paraprofessionals recruited from the community, and home visits occur

weekly at the beginning of the program and taper to quarterly visits. The program is longer than most, with participation extending until the child's fifth birthday.

A thorough review of 33 research studies examining the effectiveness of Healthy Families America was conducted by Harding and colleagues (2007). According to this review, the program showed the most consistent evidence of improved parenting outcomes (e.g., parenting attitudes), whereas there was mixed evidence for impacts on child health and development, maternal life course, and child maltreatment. In another review that included three clinical trials of HFA, Howard and Brooks-Gunn (2009) noted that improvements in harsh parenting and parent reports of abuse and neglect suggested a positive program influence, but that Child Protective Services reports of substantiated abuse did not show any evidence of benefit from program participation in the two studies where this measure was included. Harding and colleagues suggest that additional research is needed to identify the cause of such variability in findings about the program (Harding et al., 2007).

Comprehensive Child Developmental Program

The Comprehensive Child Developmental Program (CCDP) was developed to provide case management and early childhood education to low-income families with children under five. Although it was not originally conceived of as a home visiting program, services delivered in twice-monthly, 30-minute home visits provided to parents by a case manager or staff person trained in early childhood development. The intervention focuses specifically on parenting education and does not include direct work with the child.

In a large-scale randomized trial with a five-year follow-up was conducted in 21 sites, and it included over 4,000 participants (St. Pierre & Layzer, 1999). There were no consistent, significant program effects for any of the major program outcomes examined, including: early childhood education, child and family health, parenting education, family economic self-sufficiency, or maternal life course. Although other researchers have pointed to implementation challenges related to service delivery, St. Pierre and Layzer (1999) argue that there was little evidence to suggest poor implementation on the part of the administering agencies; they did point out that one agency serving less high-risk clients had somewhat better success. They also suggest that one issue that should be considered with these programs is the extent to which the services that families need – such as adequate housing and mental health services – may play a role in the outcomes of home visiting programs; if those services don't exist, there is only so much a program based on referring clients to services delivered externally can accomplish (St. Pierre & Layzer, 1999).

FINDINGS BY KEY PROGRAM FEATURES

Two recent reviews of home visiting programs completed by researchers at Child Trends (Kahn & Moore, 2010) and RAND (Karoly, Kilburn, & Cannon, 2005) move beyond a program-by-program look at the home visiting research findings. Instead, both reviews attempt to synthesize findings from research conducted on 35 and 19 home visiting programs, respectively (although the RAND study looked at other programs besides home visiting programs too).

The Child Trends report (Kahn & Moore, 2010) summarizes experimental home visiting research data by looking at effectiveness of programs for children in **different age groups** and by **different types of child and parent outcomes**, including the following: physical health and development, externalizing behavior, cognitive development, mental/emotional health, parenting skills, parent-child relationship, child maltreatment, substance use, and reproductive health. Their summary – as well as that of the RAND

researchers – analyzes the common features shared by the programs that are most effective in achieving different outcomes.

It is noteworthy that there are few absolutes in the home visiting research. The key findings for the programs serving families with children 0-3 years old include the following:

- **High-intensity programs are more effective than lower-intensity programs.** Kahn and Moore (2010) define "high intensity" as including programs that last for more than one year and that meet at least weekly. Programs meeting more often than monthly, but less than weekly, were less consistently successful, and programs meeting monthly or even less often were largely unsuccessful in impacting any outcomes studied. Karoly, Kilburn, and Cannon (2005) also suggest that more intensive programs are more effective; however, they also point out that there is still no conclusive evidence as to what constitutes an optimal program dosage, or how that should vary based on different participant population characteristics.

- Both reviews suggest that **better-trained staff achieve better outcomes,** with definitions of "better-trained" varying somewhat depending on specific program details. For example, Karoly, Kilburn, and Cannon (2005) point to stronger results in nurse-led home visits than those of paraprofessionals or lay professionals. Looking at programs teaching parenting skills, the Child Trends review by Kahn & Moore (2010) finds that programs that use therapists, counselors, or social workers to teach parenting skills (and provide referrals) typically are effective in impacting one or more desired program outcomes.

Kahn and Moore (2010) designated other program features as giving mixed evidence – but still some positive support – for their effectiveness with families with children in early childhood. They list the following program features as showing mixed reviews for effectiveness:

- **Staffing-related (and staff-service combinations):**
    - Use of paraprofessionals as home visitors
    - Use of nurses to specifically teach parenting skills in home visits
    - Use of paraprofessionals to teach parenting skills and provide referrals
- **Service-related:**
    - Programs that begin before a child's birth
    - Programs that target teen/adolescent mothers (but this was also identified as an area for more research)
    - Programs that provide a combination of parenting skills and referrals

Generally, however, across a number of reviews of the home visiting literature, it is often noted that there is still little known about the specific components of home visiting interventions that are most closely linked to strong outcomes. This is particularly the case when looking at effectiveness among specific groups of individuals, e.g., teen mothers or very high-risk families, which have both shown mixed pictures of benefit across studies of different programs. Kahn & Moore (2010) suggest other areas where little research has been done (and more is needed) for programs targeting families with children in early childhood, including the effectiveness of counseling delivered by home visitors, cost-benefit calculations, and impacts of family planning services and referrals.

FINDINGS BY TYPE OF PARTICIPATION OUTCOME

Broad descriptions of the effectiveness of different programs (and features of programs) gloss over an important consideration: home visiting programs are created to address a variety of issues, and therefore it may be more important for a program to demonstrate strong outcomes in some areas and to expect small or insignificant impacts in others.

Various reviews of home visiting programs organize their discussions of key program outcomes along similar lines, although each one uses a slightly different set of outcome categories to sort and describe results depending on their research interest and focus. For example, one review that approaches home visiting programs from a child maltreatment perspective uses a more detailed set of outcomes related to that domain (e.g., including both self-reported maltreatment and substantiated maltreatment; Howard & Brooks-Dunn, 2009), whereas others instead include more focused discussions of different child development outcomes (e.g., both social skills and cognitive development in Kahn & Moore, 2010).

For the purposes of the community of home visiting programs in Alameda County that are included in this report – which will be described more fully in later report sections – six general outcome areas appear to be most relevant for examining home visiting program findings. These outcome areas in some cases include outcomes and indicators that are split out into more specific categories in other outcome categorizations. These include:

- Children's health (including prenatal, birth outcome, and infant/child health);
- Children's developmental progress and school readiness;
- Child maltreatment and exposure to violence (which broadly includes child abuse, violence in the home, and children living safely with parents);
- Maternal health (mental and physical health, includes behaviors that relate to child health, such as breastfeeding);
- Parenting skills and parent-child interactions; and
- Economic self-sufficiency (which broadly includes completion of high school as well as indicators relating to stability in income and possession of basic needs).

Before describing research findings related to these outcome domains, it is also important to consider the categories used in describing the priorities of the ACA Maternal, Infant, and Early Childhood Home Visiting Program. The priorities for this funding are described using a somewhat different classification scheme than the one described above. For example, prenatal, maternal and newborn health are described together, and child maltreatment and child development are both included in a grouping that is described as "child health and development." The ACA Home Visiting Program description of desired impacts includes the following:

- "prenatal, maternal and newborn health;
- child health and development including prevention of maltreatment and improvements in cognitive, language, social-emotional and physical development;
- parenting skills

- school readiness;
- reductions in crime and domestic violence;
- improvements in family economic self-sufficiency; and
- improvements in the coordination and referrals for other community resources and supports" (Maternal, Infant, and Early Childhood Home Visiting Program, 2010).

Despite this slight difference in sorting, nearly all of the outcomes that have been described as being impacted by Alameda County home visiting programs are included in this set of desired impacts, except for crime prevention, which may be an expected long-term outcome but is not a focus in the ten programs included in this report. Moreover, the last desired impact in this list – better coordination and referrals – is best considered in discussions about program delivery and developing a system of care, rather than an outcome per se.

With this background in mind, the section that follows synthesizes research reviews that have documented the extent to which different types of home visiting programs have demonstrated clear impacts on the six outcome areas described previously. The intention of this summary is to determine whether there are outcomes that are more (and less) likely to be impacted by home visiting programs.

Child Health

Although this category encompasses a broad group of indicators, perhaps the most relevant for programs in Alameda County relate to birth outcomes, immunizations, and children's possession of a medical home. Although many of the researched programs begin after mothers have given birth, one program that did demonstrate positive birth outcomes was the Nurse-Family Partnership program. Interestingly, these outcomes were demonstrated for their rural (Elmira, New York) sample (decreases in preterm delivery for smokers, increases in birth weight for children of women less than 17 years old) but not their urban Memphis, TN sample (Olds et al, 1999). It has been posited that this difference may be due to higher pre-program smoking rates among the Elmira sample, and that improvements in preterm and low birth weight births were due to changes in women's smoking (see Gomby, 2005).

Of six studies reviewed by Kahn and Moore (2010) that reported on immunizations, one was able to demonstrate improvements in child immunization, and another demonstrated mixed impacts on this indicator. The other four studies did not demonstrate program impacts on immunizations. Howard and Brooks-Gunn (2009) also identified just one program – an Early Head Start program – that showed significant program impacts on immunizations.

There is limited evidence of success in connecting families with a medical home as well. Howard and Brooks-Gunn (2009) point to several studies of Healthy Families America and Healthy Start Program suggesting that routine health care visits or possession of a medical home did not increase due to program participation.

In sum, these three areas within the larger category of children's health have not been particularly easy to impact across different home visiting programs and populations.

Child Development and School Readiness

Two outcome areas described by Kahn and Moore (2010) are related to these outcomes, including **cognitive development** and **social skills.** According to the authors, only five of 16 programs reporting on cognitive development outcomes demonstrated no evidence of program impact (including some of the best-know programs, e.g., CCDP, Healthy Start, and PAT), and six programs had mixed results. The remaining six programs that showed strong evidence of cognitive development improvements tended to include programs that were either high-intensity, or include teaching parenting skills as part of their visits, or both (Kahn & Moore, 2010). The review by Howard and Brooks-Gunn (2009) also suggested that eight out of nine programs examined showed clear or mixed impacts on children's' cognition.

Of the seven programs that included measures of social skills, four demonstrated no impact, one demonstrated mixed findings, and two had strong support for their impact on social skills. The two most effective programs both included training in parenting skills as a core part of their intervention. One of the two was a high-intensity intervention, and the other was of moderate intensity, providing an average of 1 to 4 visits per month (Kahn & Moore, 2010).

Results across these two reviews seem to suggest that home visiting programs may expect to achieve moderately good but somewhat inconsistent results in domains related to ensuring children's developmental progress is on target, especially in programs that focus on building parenting skills. Gomby (2005) has also suggested that home visiting programs may have a greater impact on these outcomes when combined with interventions in early childhood education settings.

Child Maltreatment and Exposure to Violence

Eight programs in the Kahn and Moore (2010) review reported on child maltreatment outcomes. Of these eight, six programs showed mixed support for child maltreatment outcomes, and two programs demonstrated no impact at all; none were deemed to show clear, strong support for impacts on child maltreatment. The six programs with mixed support included programs with both nurse home visitors and trained paraprofessionals, and two were high-intensity programs, but others were not. Three of the programs specifically targeted families at risk for child abuse or neglect (Kahn & Moore, 2010).

The review by Howard and Brooks-Gunn (2009) takes a more focused approach in looking at the success of home visiting programs in improving child maltreatment outcomes. They have noted the difficulty in drawing conclusions across programs due to use of different measures of child abuse and neglect, the existence of state laws that define maltreatment differently from one region to another, and the added complication that existing abuse is more likely to be detected among program participants than those who are not being seen by a home visitor.

To address issues related to use of different measures, Howard and Brooks-Dunn (2009) describe two types of maltreatment data: self-reports and Child Protective Services (CPS) data. Based on self-reported outcomes, four out of five studies (two NFP, one Early Head Start, and one Early Start) demonstrate positive impacts, but when the data are based on actual reports, only one of five programs – the NFP program (Elmira) was successful. The authors suggests that collecting data from both sources – CPS and participants' self-reports – may yield more valid findings than relying solely on one or the other, as both have limitations. In the case of CPS reports, the outcome in question is such a low-frequency (and, likely, underreported) occurrence that it is difficult to detect statistically significant impacts; for the self-report data, the information is vulnerable to misreporting and so it is most useful when complemented by externally-verified reports.

Maternal Health

This outcome area is also quite broad, and several of the indicators in this domain fall into other categories as well. Maternal health encompasses both mental and physical health, and it can include behaviors that directly relate to child health, both pre- and post-natally, such as prenatal health care and substance use, breastfeeding, and smoking.

Howard and Brooks-Gunn (2009) summarizes results for 13 different studies that measured two components of maternal mental health: depression and parenting stress. (The Child Trends review by Kahn and Moore (2010) does not explicitly summarize this outcome.) Of these studies, six found no evidence of improvements in these outcomes – including all three randomized clinical trials of the Nurse-Family Partnership program. Two others (including one HFA program) found initial improvements that did not last over longer-term measurements. Only two (including one targeting mothers with a very low birth weight infant) found results that lasted over the long-term, suggesting that this is an area where home visiting programs typically have less success.

Maternal health behaviors – which closely relate to children's health and well-being – are another area that Alameda County home visiting programs are having a likely impact, although this is a less common measure in the research literature. One program – the Nurse-Family Partnership program – reported on substance use behavior and found some research support indicating reduced maternal use of cigarettes, alcohol, marijuana and other substances in the last 30 days (Olds et al., 1999). Mothers who received the home visits also had longer reported breastfeeding, fewer subsequent births, and longer between-birth intervals in one or more of the three clinical trials.

In short, research looking at maternal mental health outcomes suggests that this may be a difficult area to impact through home visits; data regarding other maternal health behaviors is somewhat limited, but there are promising results from some of the Nurse-Family Partnership studies.

Parenting Skills and Parent-Child Interactions

Reviews of home visiting program research suggest that parenting skills and parent-child interactions are often significantly impacted by home visiting interventions (researchers sometimes also categorize these outcomes as "home environment" and include measure of home environment quality). Several researchers have argued that this is an important outcome domain, as it may be the precursor to outcomes related to child abuse and neglect (Gomby, Culross, & Behrman, 1999; Howard & Brooks-Gunn, 2009). Outcomes are described in a number of ways; they can include self-reported measures and observations of interactions by home visitors, and encompass measures such as parenting harshness, parenting responsively and sensitivity, and more general parenting attitudes.

A number of programs have been shown to lead to improvements in parenting skills (measured in a number of different ways), including the Nurse-Family Partnership Program, Early Start, Early Head Start, Healthy Families (New York only) and 18 other programs reviewed by Child Trends (Kahn & Moore, 2010) and Howard and Brooks-Gunn (2009). Generally, measures that use self-reports of attitudes or practices by parents show greater evidence of program benefits than home environment ratings or parent-child observations by an independent rater (Gomby, et al., 1999).

Economic Self-Sufficiency

For the purposes of this brief review, indicators of greater economic self-sufficiency are defined fairly broadly and include both educational attainment as well as indicators related to stability in income and possession of basic needs. (Some researchers classify these outcomes under the umbrella of "maternal life course.") On some of these measures, many programs do not expect to have a direct impact, and thus do not evaluate them. Of those that have done so rigorously, only the Nurse-Family Partnerships Program demonstrates positive impacts on the length of time participants spent on welfare (Olds et al., 1999). Both Hawaii Healthy Start and the Comprehensive Child Development Program examined outcomes related to participating mothers' school and work attainment (CCDP measured use of public assistance programs as well), but found no consistent evidence of program benefit on these measures (Daro & Harding, 1999, St Pierre & Layzer, 1999).

SUMMARY

Taken together, research on home visiting programs suggest that there is not a "one size fits all" home visiting program that can be broadly applied across different populations and to serve different needs. There is also no single program feature that appears to benefit home visiting participants. At best, it is possible to draw some conclusions about what tends to be more effective in home visiting programs.

- Across all of the widely implemented home visiting programs, David Olds' Nurse-Family Partnership does have the strongest body of evidence to support its effectiveness. However, the existing data – and the cautions of a number of researchers and practitioners – remind us that this model is not guaranteed to work in all settings and for all desired outcomes, and that other programs have shown promising support for making an impact with different populations and for specific outcomes.

- Several researchers have suggested that the Nurse-Family Partnership program that may be particularly strong due to its focus on primary prevention – i.e., working with pregnant women – and David Olds' insistence on strong fidelity to the intended delivery of services in NFP program implementations. In the NFP program research and in research studies examining several other programs, questions about how closely sites are able to deliver programs as they are intended cloud researchers' ability to understand why and for whom programs are effective. (This concern also underscores the need for accurate and comprehensive tracking of services delivered through home visiting programs.)

- Reviews of the home visiting literature to date have also identified two factors that fairly consistently lead to better outcomes among program participants:

  (1) More highly-trained home visitors tend to have greater impacts on outcomes; and

  (2) Higher intensity programs (those that include more frequent visits over a longer period of time) tend to have better outcomes.

- Across a set of six dimensions of home visiting program outcomes, some trends began to emerge regarding areas that were more (and less) easy to impact by home visiting programs:

- **Children's health outcomes** – including birth outcomes, immunizations, and possession of a medical home – were not strongly impacted by most home visiting programs.

- Outcomes related to **children's developmental progress and school readiness** did show promise. Across a number of studies examining a range of home visiting programs, several positive results were observed for cognitive and social development.

- On **child maltreatment outcomes**, impacts are difficult to assess, due to challenges in accurate reporting; however, this outcome area is generally seen as difficult to impact.

- **Maternal health outcomes** encompass a range of mental and physical health measures. On mental health measures, there is not a great deal of research showing promising results for home visiting programs. However, there is some support for home visiting programs' ability impact maternal health behaviors such as substance use, smoking and sexual/reproductive health.

- **Parenting skills and parent-child interactions** are considered by many researchers to be the precursors to more extreme outcomes related to child abuse and neglect, as well as a pathway through which children's healthy social, emotional, and cognitive development occurs. Given that perspective, it is encouraging that a number of home visiting programs have been shown to successfully impact how parents feel about parenting and how they interact with their child.

- **Economic self-sufficiency** is another broad outcome domain that includes educational attainment, economic stability, and ability to provide basic needs for one's family. There is little evidence upon which to draw in this domain; however, NFP has demonstrated the best evidence of success in this area. Nonetheless, this remains as an area where programs should continue to look for effective practices that lead to better outcomes.

Section 2:

A Profile of Population Needs in Alameda County

In this section:

- A broad look at the Alameda County context, including:
  - Results of the statewide needs assessment
  - A closer look at key Alameda County populations and data
  - A summary of program administrators' perception of program gaps and needs

The Alameda County Context: What Are the Community Needs?

In Alameda County, there are a number of perinatal or early childhood home visiting programs that offer a variety of services to families. Recently, ten of these programs began a collaboration intended to better integrate both the services they offer and the way that they measure their impact in the community. The ten programs include programs administered by the Alameda County Public Health Department and First 5 Alameda County, and several involve partnerships with other government agencies and health care and community-based organizations. Although not all programs county-wide are participating in this collaboration, the group that is working together represents a substantial portion of those offering home visiting services in the county, and ultimately, these programs hope to move from a community of home visiting programs to a deliberate system of home visiting programs.

There are significant challenges in attempting to bring these programs together to achieve more coordinated and effective home visiting services to county residents in need. As Alameda County begins to consider moving toward a deliberate and coordinated system of home visiting services, it is important to more broadly quantify different needs in the county population as a whole. By doing this, we can begin to answer questions about the extent to which there are unmet needs for home visiting services among county residents who are not able to be served currently – and which of those needs are the largest and most immediate.

In this section, we report on three types of information summarizing the population needs that are being targeted by home visiting programs in Alameda County:

- First, a summary of county data gathered from a variety of sources for the recent California statewide needs assessment are described. These data provide information for a number of indicators relating to home visiting services, including information about the relative performance of Alameda County versus other counties and the state as a whole.
- To supplement the broad, county-level data from the state needs assessment, a subsequent section presents more specific data for various groups of Alameda County residents, as well as additional indicators related to school readiness and homelessness, which are particularly relevant to Alameda County's home visiting programs but were not part of the statewide needs assessment report.
- Finally, this section concludes with the perspective of Alameda County home visiting program administrators – specifically, a summary of what the administrators have indicated are their greatest challenges in delivering their programs to the county residents they serve.

FINDINGS FROM THE CALIFORNIA STATEWIDE NEEDS ASSESSMENT

There is an enormous amount of data that can facilitate analysis of what the most pressing needs are that should be addressed by Alameda County's home visiting programs. Perhaps the most relevant data for this purpose come from the statewide needs assessment recently submitted by the California Department of

Public Health, Maternal, Child and Adolescent Health Program (CDPH/MCAH) as part of the state's application for Health Resources and Services Administration (HSRA) and Administration for Children and Families (ACF) home visiting program funds. These program funds were established as part of the Patient Protection and Affordable Care Act of 2010 (ACA), signed into law by President Obama on March 23, 2010.

The state needs assessment reported on 21 indicators that were either required by HSRA as part of the application for funds or deemed as critical components of several frameworks that guide maternal, infant, and child health and well-being programs throughout the state. These frameworks, including the life course perspective, social determinants of health, and the socio-ecological model, broadly consider the social, psychological, economic, environmental, and cultural contexts in which people live, and they recognize that all of these factors interact together to influence the well-being of individuals and families.

Indicators Included in the State Report

The 21 indicators reported in the statewide needs assessment are listed below. They are sorted according to the outcome areas that were used in the previous section to summarize key findings from the home visiting research literature. (Five outcome areas are represented here; no data relating to the sixth – parenting skills/parent-child interactions – was reported in the statewide needs assessment.)

- Child health
    1. Percent of live births with first trimester prenatal care
    2. Infant mortality rate per 1,000 live births
    3. Percent of births that were premature
    4. Percent of infants born low birth weight (< 2500 grams)
- Child development and school readiness
    5. Percent of public school students enrolled in special education
- Child maltreatment/exposure to violence in the home
    6. Substantiated cases of child maltreatment, per 100,000 children
    7. Children ages 0-17 in foster care, rate per 1,000
    8. Domestic violence clients served face-to-face, per 100,000 residents
- Maternal health
    9. Prenatal alcohol and drug use per 1,000 live births
    10. Percent of live births with in-hospital exclusive breastfeeding
    11. Maternal depression rate per 1,000 women with labor/delivery discharge
    12. Birth intervals less than 24 months among women 15-44 years with a live birth
- Economic self-sufficiency
    13. Percent residents living in poverty (all ages)
    14. Percent of unemployed labor force

15. Four-year (grade 9-12) dropout rate, per 100 residents

Other indicators that are not strictly included in the above categories but may be relevant to some of them include:

16. Prevalence of illicit drug use (other than marijuana) in past month – ages 12 +
17. Prevalence of binge alcohol use in past month – ages 12 +
18. Prevalence of marijuana use in past month – ages 12 +
19. Prevalence of nonmedical use of pain relievers in past month – ages 12 +
20. Number of arrests ages 10-17 per 100,000 residents
21. Number of reported crimes per 100,000 residents

It is important to note that the statewide needs assessment emphasizes counties' relative standings; i.e., their performance on the indicators as compared with other counties and the statewide mean and median. However, this may not be particularly useful for within-county needs assessment. For example, many California counties are struggling with very high unemployment rates. A comparative look across counties shows that Alameda County is doing better than most other counties, but it still faces a significant unemployment problem, with more than one in ten residents who are unemployed.

Summary of Alameda County Strengths and Needs Relative to Other Counties

Findings from the statewide needs assessment suggest that relative to other counties, Alameda County is generally doing well. Of the 21 indicators reported, Alameda County performed above the state median on 17 and fell below the state median on only four. The figure that follows shows the four indicators for which Alameda County statistics were worse than the state median.

Figure 2. Indicators on Which Alameda County Was Worse than the State Median

County has greatest needs on these indicators

	State median	Alameda County	County ranking (smaller numbers = worse performance)
Number of reported crimes per 100,000 residents, 2008	2960.4	4663.4	5
Percent of infants born low birth weight (< 2500 grams), 2009	6.4	7.1	10
Prevalence of marijuana use in past month – ages 12 +, 2006-08	7.1	8.2 (region-level)	7 (out of 15)
Prevalence of nonmedical use of pain relievers in past month – ages 12 +, 2006-08	5.2	5.2 (region-level)	8 (out of 15)

Source: Affordable Care Act Maternal, Infant and Early Childhood Home Visiting Program: Supplemental Information Request for the Submission of the Statewide Needs Assessment, 2010.

Note: 50 or more counties included in "County ranking" unless otherwise noted.

Of these four indicators, the one with the most direct relevance to home visiting programs is the percentage of low birth weight infants. On this indicator, Alameda County ranks as the tenth worst county of the 50 California counties with data for this indicator. (Interestingly, this datapoint is inconsistent with the other birth outcome data for the county, which is generally much stronger.)

It is also relevant for programs that address substance use/abuse among mothers that both marijuana use and nonmedical use of pain relievers is somewhat high in Alameda County; this may represent an area in which home visitors should deliver stronger interventions as part of their services.

The fourth indicator – crime rates – demonstrates one of the social determinants of health that is most challenging for Alameda County residents. It is an indicator that must be considered both as a negative influence on the well-being of county residents and as a distal outcome that can be improved through prevention and early intervention efforts such as home visiting programs.

The figure that follows shows the indicators for which Alameda County statistics were better than the state median. The figure is sorted according to how strongly Alameda County performed **relative to other California counties**.

The seven indicators in green denote those for which Alameda County was at or above the 75th percentile of all the counties (or regions) with data for that indicator. The eight indicators in purple are designated as being those in which Alameda County is doing fairly well; on these measures, the county is between the 60th and 74th percentile for all state counties. The two orange indicators at the bottom of the table warrant some monitoring; although the county is doing better than the state median on these, it is not by a large margin. Alameda County only ranks in the 50th to 59th percentile relative to other counties on these two indicators.

Figure 3. Indicators on Which Alameda County Was Better than the State Median

	State median	Alameda County	County or region ranking (larger numbers = better performance)
County is strong on these indicators (75th percentile or above)			
Substantiated cases of child maltreatment, per 100,000 children, 2009	9.8	4.0	54
Prevalence of binge alcohol use in past month – ages 12 +, 2006-08	21.0	19.9 (region-level)	14 (out of 15 regions)
Birth intervals less than 24 months among women 15-44 years with a live birth, 2008	14.3	10.4	51
Percent of live births with first trimester prenatal care, 2008	76.5	86.7	50
Infant mortality rate per 1,000 live births, 2008	5.3	4.2	18 (out of 22 counties)
Percent of live births with in-hospital exclusive breastfeeding, 2007	60.6	72.8	44
Number of arrests ages 10-17 per 100,000 residents, 2008	5579.2	3940.7	43
County is doing fairly well on these indicators (60-74th percentile)			
Percent residents living in poverty (all ages), 2008	13.4	10.4	43
Percent of unemployed labor force, 2009	12.4	10.7	41
Domestic violence clients served face-to-face, per 100,000 residents, 2008	52.3	20.2	40
Prevalence of illicit drug use (other than marijuana) in past month – ages 12 +, 2006-08	4.2	4.1 (region-level)	10 (out of 15 regions)
Percent of public school students enrolled in special education, 2009	11.2	10.5	36
Children ages 0-17 in foster care, rate per 1,000, 2009	6.8	5.2	35
Percent of births that were premature, 2008	9.8	9.5	33
Prenatal alcohol and drug use per 1,000 live births 2006-08	14.3	13.1	28 (out of 45)
County should monitor these indicators (50th -59th percentile)			
Four-year (grade 9-12) dropout rate, per 100 residents, 2007-08	17.0	16.7	30
Maternal depression rate per 1,000 women with labor/delivery discharge, 2006-08	9.6	9.3	22 (out of 42)

Source: *Affordable Care Act Maternal, Infant and Early Childhood Home Visiting Program: Supplemental Information Request for the Submission of the Statewide Needs Assessment, 2010.*

Note: 50 or more counties are included in "County ranking" unless otherwise noted.

What do the county data suggest about Alameda County needs relative to other California counties?

- Child health: Of the four child health indicators, the county data were very strong for two and fairly strong for one, relative to other counties in California. The county is generally strong in this domain.
- Children's developmental progress and school readiness: Alameda County is doing fairly well relative to other counties on rates of children's enrollment in special education. However, this indicator does not directly inform questions about the extent to which developmental progress is monitored and fostered.
- Child maltreatment/exposure to violence in the home: Alameda County data are stronger than those of most counties on one indicator (rates of substantiated maltreatment); the county is doing fairly well on the other two indicators (foster care placement and domestic abuse). By these metrics, Alameda County is generally strong in this domain.
- Maternal health: Of the four indicators that are related to maternal health, Alameda County is strong in two areas (breastfeeding and intervals greater than 24 months between births), and prenatal alcohol and drug use rates were fairly strong. (This also has implications for children's health.) Although Alameda County was better than the state median for maternal depression rates, the difference was not a large one, and thus this indicator should be considered for ongoing monitoring and possible enhanced intervention efforts among home visiting programs.
- Economic self-sufficiency: Three indicators directly relate to economic self-sufficiency. On two of these, Alameda County is strong relative to other California counties, including the percentage of people living in poverty and the percentage of people who are unemployed. However, on the third indicator, four-year dropout rates, the county is not performing particularly well, with rates that are close to the state median. This should also be considered for ongoing monitoring and potentially stronger home visiting interventions.

TAKING A CLOSER LOOK AT POPULATIONS WITHIN ALAMEDA COUNTY

According to the statewide assessment, Alameda County is generally performing well relative to other counties on a set of 21 key indicators, with some needs emerging in areas such as maternal depression, low birth weight, educational attainment, and substance use and abuse. However, the county-level statistics reported in the statewide needs assessment are limited in three ways: (1) as described previously, the emphasis in the statewide needs assessment was to present relative risks across the counties, rather than assessing absolute risk within counties; (2) the fact that data are only at the county level means that the needs of some at-risk subpopulations within the county may be masked; and (3) it leaves out data on homelessness, which is an additional important indicator for Alameda County.

To address these limitations, this section presents information on a few select indicators at a more detailed level, reporting statistics for more specific population characteristics using the most recent data available for each indicator. This section also includes information about rates of homelessness in the county.

As in the previous subsection, indicator data are presented according to the key outcome areas that have been identified as being most impacted by home visiting programs in Alameda County. (Five of the six outcome areas are represented here; no data relating to the sixth – parenting skills/parent-child

interactions – is collected and readily available for the county.) In addition, where available, the figures that follow include flags indicating subgroups that are currently not meeting Healthy People 2020 targets.

Child Health

A vast amount of data is available for summarizing perinatal and early childhood health outcomes county-wide. Because several of the home visiting programs examined in this project relate to birth outcomes, these are the focus in this section. This section begins with data that inform discussions about the size of county needs among at-risk women who give birth, using Medi-Cal-enrolled women as a proxy for describing the population of low-income, at-risk women in the county. As the figure shows, there were more than 6,600 births to women enrolled in Medi-Cal in 2008. Of these, more than half were births to Latina women, and almost one in five were births to Black women.

Figure 4. Number of Total and Medi-Cal Births in Alameda County, by Race/Ethnicity – 2008

	Total in Alameda County	Latino	White	Black	Asian	Pacific Islander	Native American	Multi-Race	Other or unknown/ withheld
Total births	20,784	6,597	5,054	2,415	5,463	205	48	524	478
Medi-Cal births	6,600	3,658	626	1,239	770	104	19	122	62
Percent of total births that were Medi-Cal	31.8	55.4	12.4	51.3	14.1	50.7	39.6	23.3	11.5

Source: Alameda County Vital Statistics files: Birth, Fetal Death, and Death files.

The next several figures describe the magnitude of poor birth outcomes, looking not only at low-income, at-risk county populations, but more broadly – at the county as a whole. Indicators examined include infant mortality, low birth weight, preterm births, and prenatal care.

The table that follows shows the numbers and rates of perinatal deaths for the year 2007, defined as follows:

- **Fetal deaths** are deaths occurring at 20 or more weeks of gestation
- **Neonatal deaths** are defined as the number of deaths at less than 28 days of age
- **Perinatal deaths** are defined as the number of fetal or neonatal deaths at 28 weeks of gestation to seven days after birth
- **Postneonatal deaths** are defined as the number of deaths at age 28 days to 365 days of age
- **Infant deaths** are defined as the number of deaths within 365 days of age. Neonatal and postneonatal deaths combined constitute infant deaths.

Table cells are shaded red where the mortality rates exceed the levels that have been adopted as Healthy People 2020 targets. As the shading indicates, Alameda County is generally not meeting Healthy People 2020 targets for fetal deaths county-wide. In addition, although the other overall county population mortality rates are in line with goals set by Healthy People 2020, the population of Black mothers in the county is still at risk on most of these measures, as are the group of residents captured by the "Other race/ethnicity" category.

Figure 5. Infant Mortality Outcomes in Alameda County, by Race/Ethnicity – 2007

	HP 2020 target	Total in Alameda County	Latino	White	Black	Asian/ Pacific Islander	Other race/ ethnicity
Fetal deaths (Fetal mortality rate)	5.6 per 1,000	130 (6.0 per 1000)	31 (4.4 per 1000)	32 (6.1 per 1000)	31 (12.2 per 1000)	29 (4.9 per 1000)	7 (6.2 per 1000)
Neonatal deaths (Neonatal mortality rate)	4.1 per 1,000	79 (3.7 per 1000)	16 (2.3 per 1000)	17 (3.3 per 1000)	24 (9.5 per 1000)	20 (3.4 per 1000)	2 (2.1 per 1000)
Perinatal deaths (Perinatal mortality rate)	5.9 per 1,000	128 (5.9 per 1000)	28 (4.0 per 1000)	30 (5.7 per 1000)	36 (14.2 per 1000)	28 (4.8 per 1000)	6 (6.2 per 1000)
Postneonatal deaths (Postneonatal mortality rate)	2.0 per 1,000	28 (1.3 per 1000)	7 (1.0 per 1000)	9 (1.7 per 1000)	5 (2.0 per 1000)	4 (0.7 per 1000)	3 (3.1 per 1000)
Infant deaths (Infant mortality rate)	6.0 per 1,000	107 (5.0 per 1000)	23 (3.3 per 1000)	26 (5.0 per 1000)	29 (11.5 per 1000)	24 (4.1 per 1000)	5 (5.2 per 1000)

Source: California Department of Public Health (CDPH). Retrieved 12.20.10 at http://ipodr.org/001/bcf/mortality.html; and Healthy People 2020. Retrieved at: http://www.healthypeople.gov/2020/default.aspx

Note: Births with unknown values are not included. For definitions, see preceding text.

The two figures that follow display information on low or very low birth weight births and preterm births, respectively. Consistent with infant mortality data, the first table shows that the percentage of low birth weight infants is much higher among Black mothers than among mothers from other backgrounds, and this rate exceeds the targets provided by Healthy People 2020 among both Black mothers who are older and younger than 20 years old. In addition, the table reveals that the percentage of low birth weight infants born to teen mothers exceeds Healthy People 2020 targets.

Figure 6. Low or Very Low Birth Weight Births County-wide, by Race/Ethnicity and Age of Mother – 2009

	Low or very low birth weight	Not low or very low birth weight	Percent of births that were low or very low birth weight
HP 2020 target	7.8 percent low birth weight		
Race/ ethnicity			
Black mothers	270	2,161	11.1%
Latina mothers	347	5,909	5.5%
Other	817	10,816	7.0%
Age of mother			
Under 20	100	1,134	8.1%
20 or older	1,334	17,752	7.0%
Combined race/ethnicity and age			
Black mothers under 20	44	290	13.2%
Black mothers 20 or older	226	1,871	10.8%
Latina mothers under 20	40	623	6.0%
Latina mothers 20 or older	307	5,286	5.5%
Total, all births	1,434	18,886	7.1%

Source: California Department of Public Health (CDPH). Retrieved 12.20.10 at http://www.apps.cdph.ca.gov/vsq/default.asp; and Healthy People 2020. Retrieved at: http://www.healthypeople.gov/2020/default.aspx

Note: Births with unknown values are not included.

As the figure below shows, rates of preterm births also exceeded Healthy People 2020 targets for Black mothers as well, but not among other groups.

Figure 7. Preterm Birth Outcomes in Alameda County, by Race/Ethnicity – 2006

	HP 2020 target	Total in Alameda County	Latino	White	Black	Asian	Pac. Islander
Percent of births that were preterm (< 37 weeks)	11.4	8.7	8.0	8.0	11.6	6.8	8.4

Source: California Environmental Health Tracking Program, 20080807, MATERNAL AND INFANT HEALTH DATASETS: Yearly Measures. http://www.ehib.org/page.jsp?page_key=92 and Healthy People 2020. Retrieved at: http://www.healthypeople.gov/2020/default.aspx

The figure that follows displays rates of early prenatal care by key race/ethnicity subgroups. As the figure shows, teen mothers were particularly at risk for late prenatal care. The percentage of teens who received prenatal care in their first trimester was almost ten points below the targeted level set by Healthy People 2020.

Figure 8. Percent of Births with Prenatal Care Starting in First Trimester, by Race/Ethnicity and Age of Mother – 2009

	Began prenatal care in first trimester	Did not begin prenatal care in first trimester	Percent of births with first trimester prenatal care
HP 2020 target	77.9% in first trimester		
Race/ ethnicity			
Black mothers	1,924	487	79.8%
Latina mothers	5,114	1,110	82.2%
Other	10,283	1,300	88.8%
Age of mother			
Under 20	841	388	68.4%
20 or older	16,480	2,509	86.8%
Mothers under 20, by race/ethnicity			
Black mothers under 20	226	105	68.3%
Black mothers 20 or older	1,698	392	81.2%
Latina mothers under 20	464	198	70.1%
Latina mothers 20 or older	4650	912	83.6%
Total, all births	17,321	2,897	85.7%

Source: California Department of Public Health (CDPH). Retrieved 12.20.10 at http://www.apps.cdph.ca.gov/vsq/default.asp; and Healthy People 2020. Retrieved at: http://www.healthypeople.gov/2020/default.aspx

Note: Births with unknown values are not included.

Finally, the figure that follows shows the percentage of children who were reported by their parents to have been current on their vaccinations at 24 months. According to these data, children in almost every racial/ethnic group in Alameda County demonstrated vaccination rates that were below Healthy People 2020 targets; thus, this area of children's health is clearly one in which additional efforts and monitoring are warranted.

Figure 9. Up-to-Date on Vaccinations at 24 Months in Alameda County, by Race/Ethnicity, 2009

	HP 2020 target	Total in Alameda County	Latino	White	Black	Asian	Other
Up-to-date on vaccinations at 24 months	80%	68%	67%	70%	59%	78%	82%

Source: Alameda County Expanded Kindergarten Retrospective Study 2009 (cited in The Health of Alameda County Cities and Places: A Report for the Hospital Council of Northern and Central California, 2010: http://www.whhs.com/static/adminuploads/documents/cna_2010_4cd44f575cc89.pdf) and Healthy People 2020. Retrieved at: http://www.healthypeople.gov/2020/default.aspx.

Note: HP 2020 target refers to proportion of children aged 19-35 months who receive recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella, and PCV vaccines.

Child Development and School Readiness

Current Healthy People 2020 guidelines recommend "[increasing] the proportion of children who are ready for school in all five domains of healthy development: physical development, social-emotional development, approaches to learning, language, and cognitive development." Although a population-level measure of children's school readiness is not yet available for Alameda County, recent data collected on incoming kindergarten students in targeted county regions – including several in geographic areas also targeted in two of the home visiting programs – provide a preliminary view of the school readiness needs in different districts. Estimates of the percentage of children who are ready for school across all dimensions of readiness ranged from 39 percent of entering kindergarten students in Oakland Unified to 70 percent of entering kindergarteners in Emery Unified (although caution should be used in interpreting these numbers).

Figure 10. Percentage of Entering Kindergarten Students At or Near Proficiency Across Four Domains of Readiness, Fall 2009

	Percentage of entering kindergarten students at or near proficiency in all domains of readiness
San Lorenzo Unified	46%
Hayward Unified	61%
Emery Unified	70%
Oakland Unified	39%
Total, all assessed students	47%

Source: Applied Survey Research, *School Readiness in Alameda County 2009*.

Note: The four domains of readiness examined include: Self-Care & Motor Skills, Self-Regulation, Social Expression, and Kindergarten Academics, and also can be mapped onto the five dimensions identified by HP 2020. These percentages are based on non-randomly sampled students and are thus not generalizable to the population of kindergarten students. Percentages should be used as preliminary information only.

Data are available at the county level for third grade test outcomes, which are strongly impacted by children's readiness levels at kindergarten. According to the following figure, only about half of students county-wide are performing at grade level on third grade tests in English-Language Arts. Among Latino and Black students, proficiency rates are lowest, at only 29 percent and 30 percent of students, respectively.

Figure 11. Percentage of Third Grade Students Proficient or Advanced on English-Language Arts California Standards Tests 2009-10

	Total in Alameda County	Latino	White	Black	Asian	Native Hawaiian Pac. Islander
Proficient or Advanced on 3rd grade ELA CST	51%	29%	71%	30%	74%	37%

Source: California Department of Education, 2010.

Child Maltreatment

The figure that follows displays information about the number and incidence of child maltreatment allegations, substantiations, and entries in Alameda County, by racial/ethnic breakdowns. According to the table, Black families in Alameda County have an incidence of child maltreatment that is higher than Healthy People 2020 targets of 8.5 victims per 1,000.

Figure 12. Number and Incidence of Child Maltreatment Allegations, Substantiations, and Entries in Alameda County – Children 0-5 Years Old, 2009

	HP 2020 target	Total in Alameda County	Latino	White	Black	Asian/Pacific Islander
Children with child maltreatment allegations (Incidence per 1,000)	8.5 maltreatment victims per 1,000	3,801 31.1 per 1,000	1,190 30.7 per 1,000	770 24.8 per 1,000	1350 93.4 per 1,000	233 7.3 per 1,000
Children with child maltreatment substantiations (Incidence per 1,000)		576 4.7 per 1,000	152 3.9 per 1,000	141 4.5 per 1,000	235 16.3 per 1,000	36 1.1 per 1,000
Children with child maltreatment entries (Incidence per 1,000)		315 2.6 per 1,000	72 1.9 per 1,000	77 2.5 per 1,000	147 10.2 per 1,000	14 0.4 per 1,000

Source: *Child Welfare Services Reports for California*. Retrieved 12/20/2010, from University of California at Berkeley Center for Social Services Research website. URL: <http://cssr.berkeley.edu/ucb_childwelfare>.

Note: Counts and rates for Native American families not included due to small n's.

Maternal Health

One of the core outcomes of several home visiting programs is that enrolled mothers have a medical home. Healthy People 2020 objectives set a target that 83.9 percent of individuals have a "usual primary care provider." Although perfectly comparable data are not available to determine the extent to which county residents are meeting this target, county-level data from the California Health Interview Survey describe the percent of residents who "have a usual place to go when they are sick or need health advice."

Note that although having a usual source of care is not the same as having a usual primary care provider, these data are still informative; it can be assumed that all of those with a usual primary care provider are subsumed under the larger category of those with a usual source of care. If the percentage of people with a usual place for care is lower than the HP 2020 targets for primary care, then it can be inferred that this population is also not meeting the targets for having a usual primary care provider. This is the case with Black women multi-ethnic women, as shown in the table below.

However, some caution should be used in drawing conclusions about the other populations displayed below. Although the percentage of people in those groups who have a usual place for care exceeds the HP 2020 targets for having a usual primary provider, some of those people may be using sources such as an emergency room or urgent care center for their usual care. **Thus, this table may underreport how many and which groups of county residents do not have a usual primary care provider.**

Figure 13. Women Age 15-45 with a Usual Place to Go When Sick or Need Health Advice, 2005

	Percent who have a usual place for health care
HP 2020 target (usual primary care provider)	83.9
Hispanic	93.9
White	86.4
Black	83.7
Asian	87.1
Pacific Islander	100.0
Native American	100.0
Multi-ethnic	83.0
Total	88.2

Source: California Health Interview Survey, 2005.

Economic Self-Sufficiency

The statewide needs assessment describes county-level data related to employment, poverty, and high school completion. In addition to these data, Alameda County home visiting programs also measure self-sufficiency outcomes related to having safe and stable housing. The most recent homeless census conducted in the county occurred in January, 2009. Using a community-defined standard of homelessness that includes both literally homeless persons as well as those "whose living situation is transient or precarious and those lacking a place of their own, for whom literal homelessness may be imminent" (Speiglman & Norris, 2009; p. 17), there were more than 2,000 homeless adults who had some or all of

their minor children living with them. Another 1,426 homeless did not have their minor children living with them. This represents a significant county-wide need that may be unmet.

Figure 14. Number of Homeless Adults with Children under 18 in Alameda County – January, 2009

	Estimated number of homeless with minor children
Homeless adult, minor child(ren) not living with him/her	1,426
Homeless adult, some but not all of minor children living with him/her	277
Homeless adult, all of minor children living with homeless	1,978
Total homeless with minor children	3,681

Source: Speiglman & Norris, *Alameda Countywide Homeless Count and Survey*, 2009.

In sum, this closer look at specific Alameda County populations suggests the following populations needs for the additional set of key outcome areas examined.

Figure 15. Summary of Supplemental Indicators of Alameda County Need

Outcome area	Specific indicators	Groups with greatest needs
Child health	Birth outcomes	Black mothers
	Early prenatal care	Teen mothers
	Vaccinations	All county residents
Child development and school readiness	School readiness	Students in San Lorenzo, Oakland Unified (non-representative samples)
	Third grade English- Language Arts tests	Latino and African American students
Child maltreatment	Child maltreatment substantiations	Black families
Maternal health	Having a usual source of care	Black and multi-ethnic women, although other groups may have needs also
Economic self-sufficiency	Homeless adults with minor children	Large numbers of homeless families; no specific subgroups identified

WHAT DO PROGRAM ADMINISTRATORS REPORT TO BE THEIR BIGGEST SERVICE GAPS AND UNMET NEEDS?

A crucial source of information about the unmet needs of Alameda County residents comes from the administrators of the ten home visiting programs included in this project. Their perspective reflects direct experience with the populations in need, as well as an ability to identify county- and community-level shifts occurring over time in the social determinants of health that impact their programs' effectiveness.

The figure that follows on the next page summarizes the key challenges of administering each home visiting program, as described by each program's administrator. Themes that emerged in more than one program are listed in the table columns next to administrators' descriptions of their service gaps.

- The most frequently named gap is in service capacity. In some form, even though they work with disparate at-risk populations at different points in the perinatal timelines, eight of the ten programs indicated that either they were unable to enroll all of the clients who needed their services, or the clients they have are unable to receive help for as long as they need it.
- Four program administrators also reported that communication across different systems of care was a challenge that led to gaps in services for participants who receive home visiting interventions. This included issues between their program and the agencies to which they referred clients, as well as with the medical providers who were supposed to provide information to the home visiting programs.
- Four programs also noted that they do not have enough resources for assisting clients with housing. This is a particular problem for teen clients.
- Three programs indicated that their programs have limited availability of mental health services for clients, and two noted unmet language needs.

Additional issues mentioned by individual program included difficulties associated with Medi-Cal, such as not being able to be covered, long wait times, or not being able to receive certain services or supplies through Medi-Cal. One program cited a need for taxi vouchers or other transportation assistance. One program would like to be able to offer more services to clients, such as life skills classes. Another program cited general challenges in effectively working with the population they serve (teens).

Figure 16. Summary of Program Service Gaps and Challenges, as Identified by Program Administrators

Program	Gaps Noted by Program Administrators	Program demand exceeds capacity	Communication and coordination across systems	Unmet needs for housing services	Unmet needs for mental health services	Unmet language needs in program
IPOP	Lack of mental health service Inability to provide access to housing (another huge problem) Demand exceeds capacity.	✗		✗	✗	
BIH	There is a lack of staff and mental health service	✗			✗	
MADRE	Mental health care is often not funded or clients lose their temporary Medi-Cal and are not eligible for services. Insulin pens are not covered by Medi-Cal. Glasses dental and many medical services are not covered and there are long waits to obtain care for specialized clinics at HGH when there Is not Medi-Cal. Obtaining and maintaining Medi-Cal for clients, inordinate amount of time to get approval; adding baby to Medi-Cal a major problem. Transportation for high risk clients, a need for Taxi Vouchers Mayan Language, low literacy. Most clients less than 6th grade. Unmet needs for housing; overall program demand exceeds capacity	✗		✗	✗	✗
Perinatal Hepatitis B Program	There is a huge gap in provider reporting via CMR		✗			
Public Health Nursing	Capacity – there are over 7000 referrals per year (including CHDP). Caseload is supposed to be no more than 35 at a time; all PHN are close to 60. Other services are overloaded – forces clients to stay in program longer than they should.	✗	✗ (General overload of referring agencies impacts PHN)			
Pregnant & Parenting Teen Program	Limited housing options for under 18 with children Client needs require more time than funding allows. Difficulty inherent in teen population – they are inconsistent, hard to reach	✗		✗		
Your Family Counts	More families could be served if there were more funding and staffing. Many families would otherwise qualify for the program can't be offered services due to the lack of capacity.	✗				

Program	Gaps Noted by Program Administrators	Program demand exceeds capacity	Communication and coordination across systems	Unmet needs for housing services	Unmet needs for mental health services	Unmet language needs in program
Special Start	More families could be served if there were more funding. We currently can see only about 20% of the fragile NICU population in our Level 3 NICUs. Many families who would otherwise qualify for the program based on medical and psychosocial risk can't be offered services due to lack of capacity. (Public Health and Children's Hospital Oakland Special Start) Would like to offer more practical assistance to families (e.g., life skills) –CHO Special Start Would like to have staff that speak even more languages –CHO Special Start Large caseloads, in part because regional center funding has been cut and families need help into child's 2nd-3rd year to understand/address special needs and help them receive services through regional center and then transition to school district.– CHO Special Start	x	x			x
Another Road to Safety	Program is intended to connect to other resources if screening indicates a need. However, referring agencies are returning many families back to ARS, either because the agency screens do not identify an issue or because families can still decline services of the agencies. This lack of coordination between ARS and referring agencies is an issue being explored currently.		x			
Homeless Families Program	The gaps occur in capacity building – there is an increase in the referrals of homeless families, however, the program requires more funding and staffing to meet the needs	x		x		
Total number of programs indicating each need		**8**	**4**	**4**	**3**	**2**

Source: Administrator survey of home visiting programs and administrator telephone interviews.

Section 3:

Summarizing Across Programs

In this section:

- Cross-program summaries and analysis of the following features of the home visitation programs:
  - Populations served
  - Services and supports offered
  - Outcomes achieved

Populations Served by Perinatal/Early Childhood Home Visiting Programs[5]

The previous section of this report provided a snapshot of some of the key needs that home visiting and other programs are attempting to address among Alameda County residents. Who are those programs serving, and how many are served overall? When and how do people get enrolled in the programs? Which programs are most likely to serve people with different demographic characteristics?

This section describes the profile of participants who are served by the subset of ten home visiting programs examined in this report, including the Improving Pregnancy Outcomes Program (IPOP), Black Infant Health (BIH), Maternal Access and Linkages for Desired Reproductive Health (MADRE), Perinatal Hepatitis B Program, Public Health Nursing (not including CHDP), Pregnant and Parenting Teen Program, Your Family Counts, Special Start, Another Road to Safety, and Homeless Families Program.

Although it is not a comprehensive assessment of the degree to which at-risk populations in the county are being served across all available home visiting services, this set of programs is providing assistance to a large portion of those in need. Moreover, this represents an initial – and ongoing – attempt to begin quantifying the services provided across multiple programs working throughout the county, with a goal of increasing the number of programs who participate in this effort in the future.

SUMMARY: WHO IS BEING SERVED?

The populations served by Alameda County's perinatal/early childhood home visiting programs can be summarized along a number of dimensions, including:

- **Target populations:** Who is targeted in each of the ten programs examined;
- **Connection points:** What potential participants' points of entry into the programs are, and how they initially get connected to the programs;
- **Program reach:** The number of county residents served by each program and across all programs in the past fiscal year; and
- **Participation profiles:** A summary "snapshot" of the race/ethnicity, age, and other characteristics of participants, looking across all ten of the home visiting program recipients.

Target Populations

The figure on the following page summarizes the target populations of the ten of home visiting programs. Criteria for eligibility are displayed across the top row, with specific requirements listed by program.

[5] Please note that in this report, when we refer to perinatal/early childhood home visiting programs, we refer only to the set of ten programs that were examined as part of this project.

Figure 17. Summary of Target Populations for Each Program

Program	Racial/ ethnic criteria	Age criteria	Geographic criteria	Specific medical criteria	Specific social criteria	Income criteria
IPOP	African American	Reproductive age	9 zips in Fruitvale District, E. Oakland, W. Oakland, N. Oakland, Emeryville	High medical risk pregnancy or parenting child < 2; needs help w/ basic needs (high social risks)		<200% FPL
BIH	African American	18-45		High medical risk pregnancy or parenting child < 1; needs help with basic needs		< 200% FPL
MADRE	Latina			Hx of fetal/ infant loss, pregnancy w/ terminal fetal dx, LBW, preterm delivery		< 200% FPL
Perinatal Hepatitis B Program		15-45		Hep-B positive and pregnant		
Pregnant & Parenting Teen Program		Teens, and through age 25				
Public Health Nursing				Medically and/ or socially at-risk (pre- or post-birth)		
Your Family Counts				Medically and/ or socially at-risk (pre- or post-birth)		
Special Start				Infants discharged from NICU with extreme medical/social risk		
Another Road to Safety		Child must be 0-5	W. Oakland E. Oakland Hayward		Path 2 CPS	
Homeless Families Program					Currently homeless	

Source: Administrator survey of home visiting programs and administrator telephone interviews.

As the figure shows:

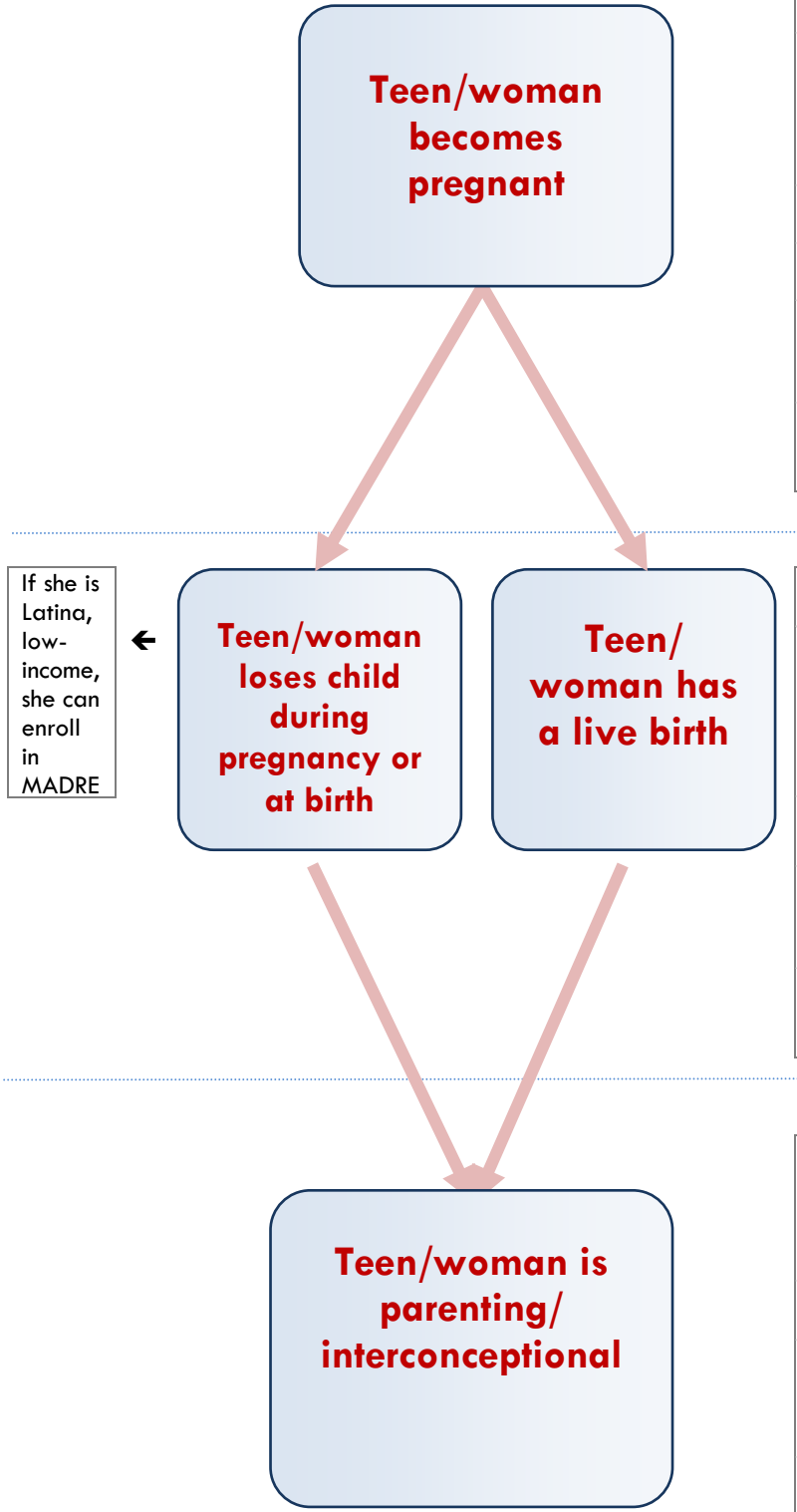
- Two of the ten programs focus exclusively on African American populations, and one program focuses on Latina women. (Although the Perinatal Hepatitis B program serves mostly Asian and Pacific Islander populations, this is not a criterion for participation.)

- Just one program focuses on serving teen populations; however, most of the programs also include participants who are in their teens.
- Two programs limit their participant populations to include those who live in certain high-risk county regions. Both of these programs serve regions of Oakland; in addition, Emeryville is targeted by IPOP, and Hayward is targeted by Another Road to Safety.
- Seven programs target women who are at risk for (or who have had) a high-risk pregnancy:
    - IPOP and BIH, which serve African American county residents;
    - MADRE, which serves Latina women with a prior negative pregnancy outcome;
    - Perinatal Hepatitis B, which serves Hepatitis-B-positive pregnant women (most often of Asian or Pacific Islander backgrounds);
    - Special Start, which focuses on NICU-discharged infants with the most extreme medical and social risk profiles; and
    - Public Health Nursing and Your Family Counts, which use medical and social risk as their primary requirement for their perinatal participants.
- Two programs target participants who have entered into other county systems – i.e., through Child Protective Services or services for homeless families.
- Income criteria for participation are explicit in three programs.

Connection Points

The figure on the following page shows when participants can enter each of the home visiting programs, based on the extent to which they meet the previously described program criteria. As the figure shows, most of the home visiting programs have multiple possible entry points. Seven programs enroll teens and/or women as early as their first pregnancy, but most of them (all but Perinatal Hepatitis B) also enroll participants at later points in time – postnatally or interconceptionally.

Figure 18. Program Eligibility and Points of Entry



If she …		She can enroll in …
Is African-American, low-income	→	BIH
Is African-American, low-income, in 1 of 9 zip codes in Fruitvale, W. Oakland, E. Oakland , N. Oakland, Emeryville	→	IPOP
Is a teen	→	Pregnant & Parenting Teen Pgm
Is Hepatitis B positive	→	Perinatal Hep-B Pgm
Is medically and/or socially at-risk for poor pregnancy outcome	→	Public Health Nursing, Your Family Counts
Is in Path 2 CPS and lives in W. Oakland, E. Oakland, Hayward	→	Another Road to Safety

If she …		She/child can enroll in …
Is African-American, low-income	→	BIH
Is African-American, low-income, in 1 of 9 zip codes in Fruitvale, W. Oakland, E. Oakland , N. Oakland, Emeryville	→	IPOP
Is a teen	→	Pregnant & Parenting Teen Program
And/or infant is medically and/or socially at-risk	→	Public Health Nursing, Your Family Counts
Has an infant in NICU with extreme medical/social risk	→	Special Start

If she …		She/child can enroll in …
Is African-American, low-income, in 1 of 9 zip codes in Fruitvale, W. Oakland, E. Oakland , N. Oakland, Emeryville	→	IPOP
Is a teen	→	Pregnant & Parenting Teen Pgm
Had a previous fetal/ infant loss, pregnancy w/ terminal fetal dx, LBW, preterm delivery	→	MADRE
Is in Path 2 CPS and lives in W. Oakland, E. Oakland, Hayward	→	Another Road to Safety
Is homeless	→	Homeless Families Program

The figure that follows shows the places where participants learn about or get referred to those home visiting services. The figure clearly shows that the bulk of the opportunities for county residents to learn about these programs occur in medical settings – either through clinics or providers or in hospitals. In programs such as BIH, IPOP, MADRE, Pregnant and Parenting Teen, Your Family Counts and Special Start, hospital outreach coordinators play a role in connecting participants to program services, and for Special Start in particular, longer-term participation is decided by an advisory group that holds weekly meetings to review cases to determine which ones demonstrate the greatest need.

Five programs (BIH, IPOP, MADRE and Pregnant and Parenting Teen Program) indicated that they also do broad outreach in the community, using media, word of mouth, outreach in places such as markets and laundromats, and public events and resources to inform the public about their programs and services.

Only two programs – Another Road to Safety and Homeless Families Program – directly enroll clients who are already receiving assistance through other county services. This may be another avenue for those programs that do community outreach to connect with potential participants.

Figure 19. Where Do Participants Connect to the Programs?

In the Community

Public Health Clearinghouse (I & R line)	Health fairs	Resource fairs	Outreach in markets, laundromats, on the street	Word of mouth	Media campaigns
• BIH • IPOP • MADRE	• BIH • IPOP • MADRE • Public Health Nursing	• BIH • IPOP • MADRE	• BIH • IPOP • Pregnant & Parenting Teen	• BIH • MADRE	• BIH • IPOP • MADRE

Through Other Services, Programs, and Systems

Medical/Health care settings		Pre-K and K-12 system		Early childhood services		Other systems	
Clinics/providers	**Hospitals**	**Schools**	**Head Start sites**	**First 5**	**WIC**	**Homeless services**	**Child Protective Services**
• BIH • IPOP • MADRE • Hep-B • Your Family Counts (via F5AC hospital outreach coordinator; HOC) • Public Health Nursing • Pregnant & Parenting Teen	• IPOP • MADRE • Your Family Counts (Alta Bates & Highland) • Public Health Nursing • Special Start (2 paths) - NICU infant ID'd by ECC HOCs followed until infant discharged from NICU - Longer-term participants ID'd from Alta Bates & CHO NICUs, by review • Pregnant & Parenting Teen	• Homeless Families • Pregnant & Parenting Teen	• BIH • IPOP	• BIH • IPOP • MADRE • Pregnant & Parenting Teen	• BIH • IPOP • MADRE	• Homeless Families	• Another Road to Safety

Source: Administrator survey of home visiting programs and administrator telephone interviews.

Program Reach

Two types of estimates of program reach are provided in this section: (1) the total number of active participants in each program over a twelve-month period; and (2) the number of new cases enrolled during that twelve-month period. Each number provides important information about the capacity of programs to serve the needs of the community.

The total number of active cases across all programs provides an estimate that quantifies the total amount of home visiting intervention that was provided to county residents during a twelve-month period. It is one way of describing program efforts, in that it describes the total amount of assistance that is being provided across the ten home visiting programs. However, this number is less appropriate for estimating the capacity of home visiting programs. Because many programs provide services to participants for more than a year, knowing the number of new cases may be particularly helpful in determining the gap between the amount of need among residents and the available services to meet those needs.

Of course, some caution should be used with interpretations using both sets of numbers. For example, because not all programs operate on the same fiscal year cycle, the summed participant count represents an average across twelve months of program services, rather than single, fixed starting and ending dates. In addition, a small percentage of participants (approximately five percent in one comparison across programs) enrolled in more than one of the ten programs examined. Also, as previously noted, not all home visiting programs in the county are included in this study.

Total active cases

The left half of Figure 20 shows the number of active participants in each of the ten programs for their most recently completed fiscal years.[6] The summed number of participants is provided at the bottom of the figure as well; **this number – 4,393 participants – provides an approximate estimate of the total number of individuals or families who are touched by one of these ten home visiting programs in Alameda County over a twelve month period.**

The figure shows that the bulk of the home visiting services –39 percent of all those who receive home visits over a twelve month period – are provided by Public Health Nursing, a fairly low-intensity program (short participation period with moderately frequent visits).

Two other programs each serve more than 500 clients per year. After Public Health Nursing, the next largest program is Special Start, which, even though it serves 680 participants per year, is somewhat different from the Public Health Nursing program in that it is much more intensive and serves perhaps the most at-risk populations of any of the ten home visiting programs examined. The Pregnant and Parenting Teen Program is the third largest program in terms of number of participants served in a twelve-month period.

There are several mid-size programs serving less than 500 clients yearly, including Another Road to Safety, Your Family Counts, IPOP, Perinatal Hepatitis B, and BIH. The two smallest programs are MADRE and the Homeless Families Program, serving 62 and 25 clients over a twelve-month period, respectively.

[6] Fiscal year 2009-10. Start and end dates vary across programs. Each program was asked to provide data for their "active cases" in the last fiscal year; there may be some variation across programs in how they define "active cases."

Total new cases

As the columns in the right half of the figure shows, in the most recent fiscal year, the total number of new clients served by the set of home visiting programs is 2,921. This means that across the programs, about 66 percent of the cases were new, and 34 percent were continuing from the previous fiscal year.

Figure 20. Summary of Number of Participants Served, by Program and Overall

Program	All active cases			All new cases			Program indicates demand exceeds capacity
	Number last FY	Percent of total active cases	Program "reach" ranking	Number last FY	Percent of total new cases	Program "reach" ranking	
Public Health Nursing	1,743	39.3%	1	1,410	48.3%	1	✓
Special Start	680	15.3%	2	327	11.2%	2	✓
Pregnant & Parenting Teen Program	550	12.4%	3	306	10.5%	3	✓
Another Road to Safety	341	7.7%	4	228	7.8%	4	
Your Family Counts	290	6.5%	5	192	6.6%	5	✓
IPOP	255	5.8%	6	123+	4.2%	7	✓
Perinatal Hepatitis B Program	254	5.7%	7	187	6.4%	6	
BIH	193	4.7%	8	87	3.0%	8	✓
MADRE	62	1.4%	9	49	1.7%	9	✓
Homeless Families Program	25	1.0%	10	12	<1%	10	✓
Total	4,393	100.0%	---	2,921	100.0%	---	

Source: Individual program data.

Note: All counts are based on each program's most recently completed fiscal year 2009-10; start and end dates vary across programs. There may be some small variations across program in how they define "active cases."

+ Number of new cases for IPOP is an estimate, as cases were not readily identifiable as new or continuing. Estimate was computed by taking the same proportion of new/total as that of Special Start, a program of similar duration.

Across both estimates of program reach, it is interesting to note that there is essentially no correlation between the size of the program (in terms of the number of participants served) and administrators' indication that they have significant capacity issues in serving those who could be eligible for their services. Programs large and small – and those serving different target populations – report that they face challenges in providing services for all of those who could benefit from their program.

Participation Profiles

By summing across all of the programs, we can begin to get a picture of who has been served in home visiting programs county-wide. Figure 21 shows the race/ethnicity, preferred language, and age for the set of newly enrolled cases across the programs.[7] As the figure shows:

- Over half (54%) of all newly enrolling program participants are Hispanic/Latino, and about one fifth (21%) are African American.
- Fifty-nine percent of participants speak English as their preferred language, and 32 percent speak Spanish. Small numbers of participants speaking Chinese (Mandarin or Cantonese), Vietnamese, and Tagalog were represented as well.
- Teen participants make up about one quarter of the participants in home visiting programs (24%).

Figure 21. Key Demographics – Summing Across Home Visiting Programs

Participant Characteristics	Percent of new program participants
Race/ethnicity	
Hispanic/Latino	53.7%
African American	20.8%
Asian/Pacific Islander	11.3%
Caucasian	3.1%
Other/Multi-ethnic	11.1%
Preferred language	
English	59.2%
Spanish	31.7%
Chinese	4.3%
Vietnamese	1.3%
Tagalog	< 1%
Other	3.0%
Age	
Younger than 20	24.1%
20 or older	75.9%

Source: Individual program data.

Note: Sample sizes are as follows: race/ethnicity = 2,731; language = 2,292; age = 2,224.

[7] Future measurement of participants characteristics (not possible for this report) would provide an even richer understanding of the extent to which different groups in the community are being served by further dividing participants according to perinatal stage; i.e., age, race/ethnicity, and language among new participants who were: (1) pregnant; (2) post-natal; and (3) interconception.

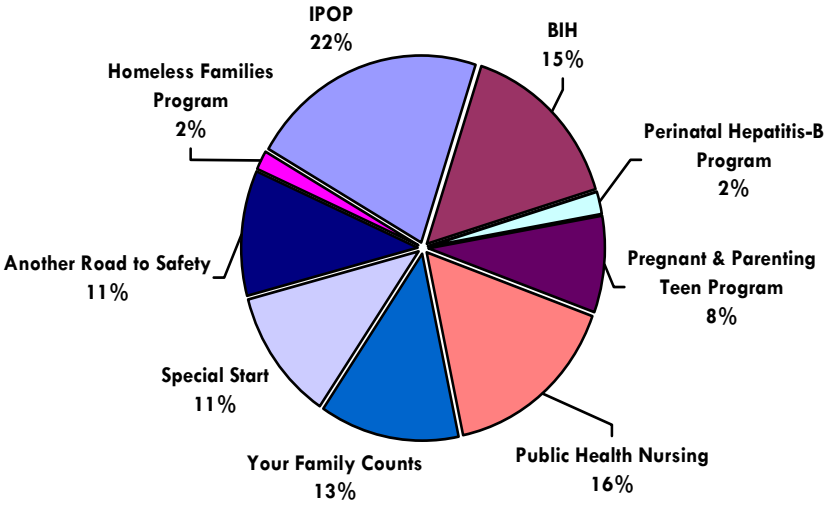
The set of figures that follow separately examine the programs in which participants from different racial and ethnic groups newly enrolled in the last fiscal year of each program. [8]

As Figure 22a shows, BIH and IPOP – two programs that target African American participants – together enrolled about 37 percent of the African American participants who received services in one of the ten home visiting programs. New Latina home visiting program participants (Figure 22b) were most likely to have enrolled in the Public Health Nursing Program; more than half (58%) received home visits through this program. Although the MADRE program serves Latina women exclusively, its small size relative to other programs is indicated by the small percentage of Latina home visiting program participants it enrolled overall (3% of Latina participants).

Nearly half (48%) of new Asian and Pacific Islander home visiting program participants were enrolled in the Perinatal Hepatitis B Program (Figure 22c). Another 37 percent of Asian and Pacific Islander participants enrolled in the Public Health Nursing Program. Among new White home visiting program participants, the largest percentages were enrolled in Special Start (36%) and Public Health Nursing (33%; see Figure 22d).

Figure 22. Through What Programs Are Different Populations Served?

a. African American participants

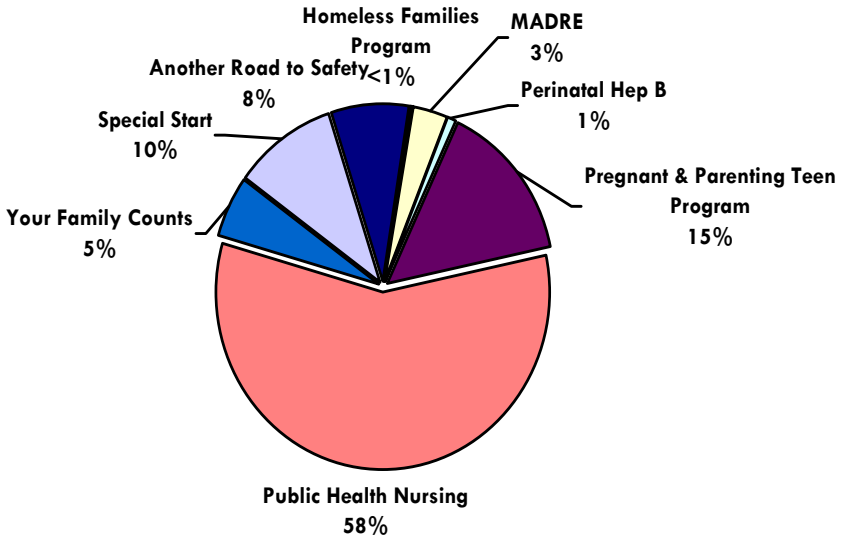


Source: Individual program data.

Note: Sample size = 568.

[8] Race/ethnicity is the one participant characteristic for which complete data are available across all the programs examined in this report.

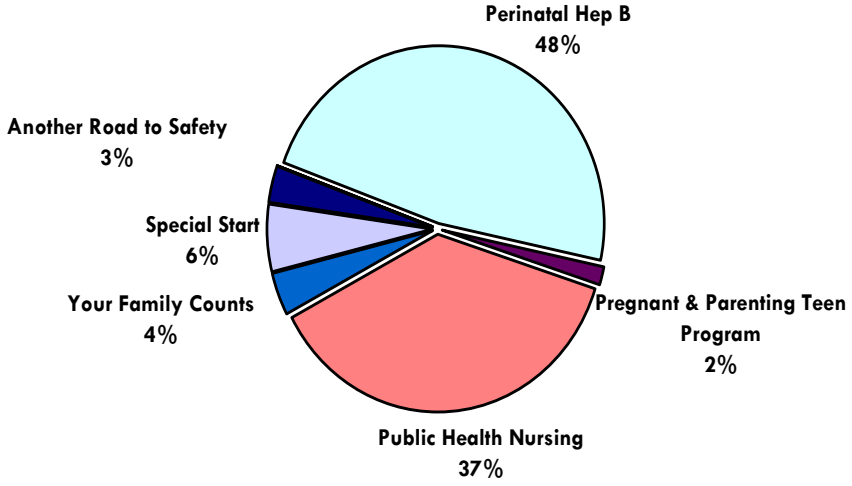
b. Latina participants



Source: Individual program data.

Note: Sample size = 1,467.

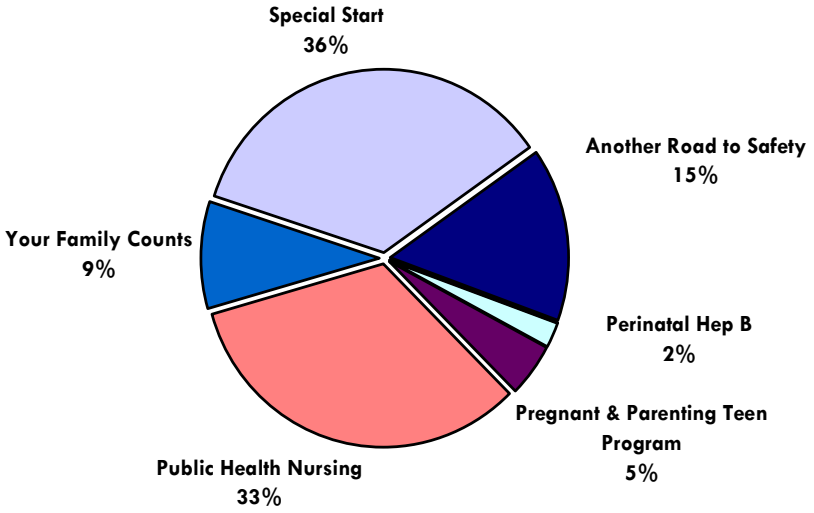
c. Asian/Pacific Islander participants



Source: Individual program data.

Note: Sample size = 309.

d. White participants



Source: Individual program data.

Note: Sample size = 85.

ANALYSIS: TO WHAT EXTENT ARE AT-RISK COUNTY RESIDENTS BEING SERVED THROUGH HOME VISITING PROGRAMS?

Quantifying the degree of county-wide unmet needs for home visiting services is a complex task, and there are a number of ways to estimate the extent to which the needs of Alameda County residents are being met through this set of home visiting programs. As part of this analysis, it is important to keep in mind that these ten programs represent only a portion of the home visiting services in the county, and they also do not include other complementary programs and services that are attempting to address the needs of the county through other methods besides home visiting.

- **Overall need:** The number of yearly births to mothers receiving Medi-Cal assistance is one commonly used proxy for estimating the number of at-risk families in the county; for Alameda County, this is approximately 6,600 births yearly. In a given year, almost 4,400 families are served in this set of ten programs, with 66 percent – 2,921 families – being new cases that were opened during the fiscal year. Moreover, the participants in these programs are at different points along the perinatal timeline, with only a subset being part of the group of 6,600 new births. Consequently, by any estimate, there is a large proportion of residents who are not receiving home visiting services but would likely benefit from them. Of course, it is likely that many residents receive home visiting services and support through other programs as well.
- **Needs related to improving birth outcomes:** Data for different racial/ethnic and age groups suggest that African American and teen populations in the county do not meet Healthy People 2020 targets on some birth outcomes:

  - More than 1,200 African American women on Medi-Cal give birth each year. In comparison, a total of 568 African American participants – from different points in the perinatal timeline – newly enrolled in one of the ten home visiting programs during the most recent fiscal year of each program.

  - Teen births county-wide (not limited to Medi-Cal recipients) numbered 1,234 in 2009; at least 537 pregnant teens and parenting teens newly enrolled in one of the ten home visiting programs during the programs' most recent fiscal years.

- **Needs related to child maltreatment:** Breakdowns of child maltreatment data by race/ethnicity show that Healthy People 2020 targets are not currently being met among African American families in Alameda County; in 2009 there were 235 substantiations among African American families. The program that most directly addresses the population of families in the child welfare system – Another Road to Safety – enrolled just 62 new African American families in their last fiscal year.

- **Needs related to having a medical home:** Although unmet needs may be underestimated for this indicator among certain subpopulations in Alameda County, there are clear data suggesting that African American women are not meeting Healthy People 2020 objectives in this area. Based on 2009 population estimates, 10,000 or more African American adult women of all ages may not have a medical home. As noted above, across all programs there were 674 African Americans who newly enrolled in one of the home visiting programs, and among them most report high rates of connecting women to a medical home. Thus, although the home visiting programs reach relatively few African American women county-wide each year, those who are enrolled in one of the programs have a strong likelihood for being linked to a medical home.

Portrait of Program Services

In the previous section, a summary of who is being served by ten home visiting programs in Alameda County was presented. This section explores what participation in those programs means, including who is delivering services, when participants receive them, what the services entail, and how long they are provided.

SUMMARY: WHAT SERVICES ARE PROVIDED THROUGH THE HOME VISITING PROGRAMS?

The available home visiting services can be examined according to the following dimensions:

- **Staffing:** Who is providing the home visits, and what kinds of professional development and support do they receive?
- **Timing of program intervention:** At what point in the perinatal timeline do programs focus on serving participants?
- **Services provided:** What types of services are offered through program participation?
- **Program intensity:** For how long and with what frequency do participants receive home visiting services?

Program Staffing

The figure on Page 50 summarizes the types and number of people who staff each of the ten home visiting programs. The staff types are divided into several categories, including nurses, community outreach/ community health outreach workers, mental health experts, family advocates or case managers (most of whom have a bachelor's degree), and other paid staff. As the figure shows:

- As a program serving extremely medically and socially at-risk newborns, Special Start (including both the Public Health Department and Children's Hospital of Oakland programs) has the largest number of employees on staff, both overall and including only nursing staff. Reflecting the multiple challenges faced by their participant population, Special Start also has the largest number of specialists among their staff.
- Public Health Nursing has nearly the same number of staff as Special Start, although its staffing model is somewhat different from Special Start, in that it serves many more clients but for a brief period of time.
- The next two most heavily staffed programs both serve participants through multiple agencies. They include the Pregnant and Parenting Teen Program (administered through Tiburcio Vasquez Health Center and Brighter Beginnings) and Another Road to Safety (providing service through Family Support Services of the Bay Area, La Familia Counseling Service, and Prescott-Joseph Center for Community Enhancement).

- IPOP, Black Infant Health, and Your Family Counts, are similar in terms of the total number of staff members they have, and all three programs employ a combination of nurses and community outreach workers (COWs). Your Family Counts is composed of slightly more nurses than COWs, whereas the opposite is true for IPOP and BIH.
- As the only program with just one home visit for participants, Perinatal Hepatitis B Program needs few staff to serve the relatively large number of clients it serves – although as previously noted, those staff must be fluent in multiple languages to accommodate their diverse participant backgrounds.
- The two smallest programs in terms of number of participants are also the programs with the smallest staff sizes: the Homeless Families Program and MADRE.

Figure 23. Program Staffing: Who Is Providing Services?

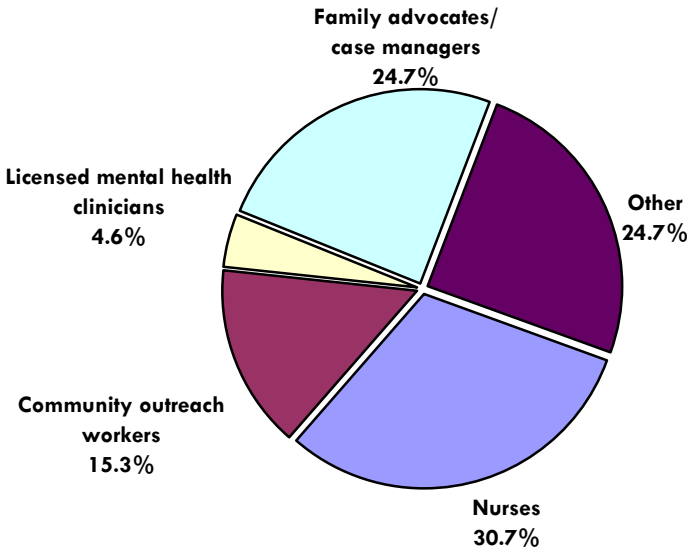
Program	Nurses	Licensed mental health clinicians	Community Outreach Workers	Family advocates/ case managers	Other	Total FTE staffing	Program ranking, by size of staff
Special Start for Infants (includes both Public Health Dept and Children's Hospital Oakland programs)	16.7 nurses	4.6 LCSW 0.5 Nurse/ psychologist	1 CHOW/ substance abuse counselors	2 Ancillary Support/ family advocates	1 Admin Asst 1.55 Physical therapist, infant devel. specialist 0.1 Devel. pediatrician	27.45	1
Public Health Nursing	12 PHN		7 CHOW		4 PHN (supervisors) 4 clerks	27	2
Pregnant/Parenting Teen Program (Brighter Beginnings; & Tiburcio Vasquez)				BB- 8 family advocates TV - 9 case mgrs	BB - 2 pgm mgrs TV- 2 sups, 1 admin	22	3
Another Road to Safety (Family Support Services, L a Familia, Prescott-Joseph)		1 clinician		11-12 advocates	7 supervisors and support staff at 3 sites	20	4
IPOP	3.6 RN		4 CHOWs		1 Fatherhood Services CHOW	8.6	5
BIH	3.4 RN		4 CHOWs		1 Secretary	8.4	6
Your Family Counts	4 RN		3 CHOWs		1 HSC	8	7
Perinatal Hep-B	1 PHN				3 PHI 1 Medical Clerk	5	8
Homeless Families Program			.25 outreach worker	1.75 case mgrs (MSW, MPH)	1 prog dir. (LCSW) 1 housing spec.	4	9
MADRE			1 CHOW		1 Medical Social Worker	2	10

Source: Administrator survey of home visiting programs and administrator telephone interviews.

Note: F5AC has additional in-house mental health clinicians that work with BIH, IPOP, YFC, Special Start and Pregnant and Parenting Teen programs.

The figure that follows summarizes the types of home visiting staff employed across all ten programs examined. Nearly one-third of all staff are nurses. About one in four are described as family advocates or case managers, a category that includes primarily bachelor's-level employees. Fifteen percent of home visiting staff are community or community health outreach workers. Mental health experts are rare as program staff; these individuals more often tend to be consultants to the programs rather than primary staff, or participants are referred to outside mental health services when they are in need of them.[9]

Figure 24. Summary of Staffing Across All Home Visiting Programs



Source: Administrator survey of home visiting programs and administrator telephone interviews.

The following table provides a preliminary description of the professional development and ongoing support that home visitors in each program receive. (Some caution should be used in interpretation of this table, as information for some programs is more complete than for others.) The table suggests that regular case review meetings are a standard practice to support the staff for most, if not all, programs.

However, it also suggests that the home visiting programs may vary considerably with regard to offering external educational and professional development opportunities. It is also unclear whether staff at the various programs have access to information and updates that allow them to keep abreast of changes and new opportunities related to providing relevant, accurate information and referrals to program participants. This is an avenue that is recommended for further exploration and discussion across programs, as it greatly impacts the quality of the services that participants receive from the home visitors.

[9] F5AC has additional in-house mental health clinicians that work with BIH, IPOP, YFC, Special Start and Pregnant and Parenting Teen programs.

Figure 25. Summary of Training and Support Offered to Home Visiting Staff, as Reported by Administrators

Program	Ongoing Professional Development and Support
IPOP	PHNs and CHOWs continuously attend trainings to allow updates and professional development. Support also offered through case management and supervision.
BIH	All Public Health nurses continuously attend trainings to allow updates and professional development related to the perinatal and interconceptional period.
MADRE	Monthly case review with BIH/IPOP PHN, weekly case review with MADRE supervisor, and encouraged to participate in ECC case management and other training opportunities
Perinatal Hep-B	Trainings through the state Perinatal Hepatitis B Program and through the Asian Liver Center at Stanford
Public Health Nursing	Monthly case conferences to go over caseload, check in on case progress, with a 6-month follow-up review. All staff are encouraged to participate in trainings sponsored by county, community-based agencies, HUD, and other educational opportunities.
Pregnant/Parenting Teen Program	Regular case review meetings. Training in use of reflective practice techniques with clients and training in the Growing Great Kids curriculum
Your Family Counts	Close supervision model including two times a month programmatic and reflective supervision (addressing what staff bring to the work as well as how cases affect them). The program additionally has many training opportunities provided by the primary funder ECC. All professional staff are supported in attendance at outside training related to CEUs to maintain their respective licenses.
Special Start for Infants	(Public Health) Close supervision model including two times a month programmatic and reflective supervision (addressing what staff bring to the work as well as how cases affect them). The program additionally has many training opportunities provided by the primary funder ECC. All professional staff are supported in attendance at outside training related to CEUs to maintain their respective licenses. (Children's Hospital Oakland) Twice monthly clinical supervision (once a week for new staff through their first year). Monthly training meetings – topics depend on needs identified (e.g., financial fitness). Monthly sociocultural meetings to discuss issues that arise in helping diverse populations.
Another Road to Safety	Regular case review meetings; consultations with mental health staff through contract with Children's Hospital.
Homeless Families Program	Close supervision which includes two times a month programmatic and clinical supervision. Program Director convenes a monthly clinical case conference for staff and partners that focuses on themes related to homelessness (i.e., substance abuse, mental health, child development, policies, clinical case presentations, etc). All staff are encouraged to participate in trainings sponsored by county, community-based agencies, HUD, and other educational opportunities.

Source: Administrator survey of home visiting programs and administrator telephone interviews.

When Do Programs Provide Assistance During the Perinatal/Early Childhood Timeline?

Although there is a great deal of overlap across some of the home visiting programs in Alameda County, there are important differences in terms of when the programs intervene to provide services to various county populations. This is similar to Figure 18 in the previous section, which details when participants can enroll in the different programs, but it is not the same thing; rather, the figure that follows shows the full period during which services are provided through each program (and not just the starting points for participants). Considerations of when programs intervene impact many other program factors as well, such as the amount and types of assistance that may be needed as well as the outcomes that can be measured and achieved during the program.

The following figure displays the perinatal and early childhood timeline across the horizontal axis, with the periods of each program's intervention plotted along the timeline. As the figure shows, the program with the earliest possible intervention point is the MADRE program, which works with participants before pregnancy – in many cases enrolling women who do not yet have any children but have lost a child previously during pregnancy or childbirth.

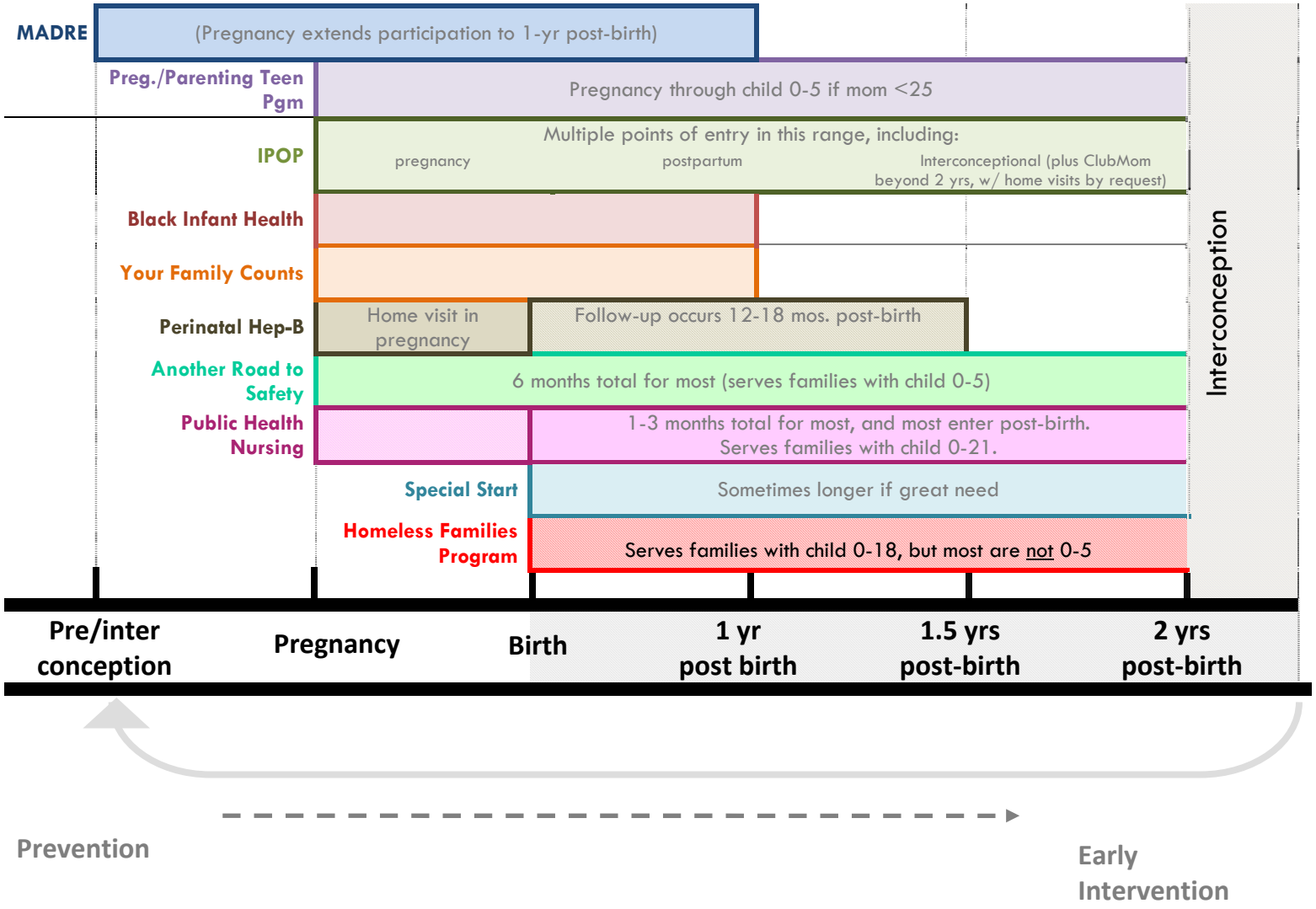
Other programs that provide services at a very early intervention point prior to childbirth include IPOP, Black Infant Health, Your Family Counts, the Pregnant and Parenting Teen Program, and the Perinatal Hepatitis B Program. Of these, the Perinatal Hepatitis B program is the only one that conducts its home visits only before the child's birth (even though it continues to monitor progress after the child is born).

In IPOP, Black Infant Health, Pregnant and Parenting Teen Program, and Your Family Counts, if the programs begin working with mothers prior to giving birth, they all continue to offer them services for some period of time post-birth as well. Each of these programs also enrolls a portion of their participants after they have given birth as well. The Public Health Nursing Program enrolls some women before they give birth, but the majority of their participants enroll postpartum. Although Another Road to Safety includes families in which a woman is pregnant, this is not a typical participant intervention point for their program. Special Start begins working with families only after an infant with extreme medical and social risks is discharged from the NICU. The Homeless Families programs works with families who have a child 0 to 18 years old, and very few of their clients exclusively have children 5 or younger.

Displaying these programs along an intervention timeline highlights a basic but important fact about home visiting services: enrollment in one of these programs at a very early point in the perinatal timeline – e.g., when a teen or a woman becomes pregnant for the first time – may mean that she does need to enroll in a program that intervenes later, such as Special Start, when the issues and costs that address a family's needs will be often be more complex and costly.

Relatedly, because the various home visiting programs intervene at different points along the perinatal timeline, the county-level trend data described in Section 2 of this report will mean different things to different programs. For example, positive trends in birth outcomes – such as infant mortality, birth weight or preterm birth – may both be an indication of program success for programs such as MADRE, IPOP, and BIH, and also an indication of reduced population risk for programs that intervene later in the timeline, such as Special Start.

Figure 26. Period of Intervention: When in the Perinatal/Early Childhood Timeline Do Programs Intervene?



Source: Administrator survey of home visiting programs and administrator telephone interviews.

Program Services: What Do Programs Offer?

Although the models of care, program intensity, and target populations of the home visiting programs vary, many of the programs offer similar services to their participants. As shown in the figure that follows on the next page, **medical case management**, **health education** (general and specific to certain issues), **information and referrals to social services**, and **assistance with benefits enrollment** are core elements of each of the programs. Almost all of the programs also offer assistance with **transportation** needs related to medical visits.

With regard to **mental health needs**, all programs refer participants to services if they are in need of mental health care, and First 5-funded programs and Homeless Families Program have resources to provide short-term treatment for acute mental health needs. First 5- funded programs, as well as IPOP and Black Infant Health, also screen for maternal depression using the Edinburgh Postnatal Depression Scale (although program data indicate that not all participants are routinely screened).

First 5-funded programs use the ASQ and ASQ-SE for **developmental screening of children;** both IPOP and Black Infant Health use the Denver Developmental Screening Test to measure children's developmental progress.

Support groups provide another way to assist participants in addressing their psychological and emotional needs, and IPOP, Black Infant Health, and MADRE are the only programs that directly offer support groups, although other providers will connect participants with support groups as needed.

Home visitors in several programs provide **parent education and/or parenting skills training** to participants, including IPOP, Black Infant Health, Pregnant and Parenting Teen Program, Your Family Counts, and Special Start. Another Road to Safety home visitors help parents who need this service to get connected with resources related to parenting.

Basic needs are provided in several programs that serve some of the most financially needy participants, including Pregnant and Parenting Teen Program, Another Road to Safety, and Homeless Families Program. More specific items related to infant and childcare needs are provided through IPOP, Black Infant Health, Perinatal Hepatitis B, and Your Family Counts.

Finally, several programs provide **assistance to fathers** as well. IPOP and Black Infant Health provide several types of services specifically offered to assist fathers. MADRE provides connections to several resources. Pregnant and Parenting Teen Program, Your Family Counts and Special Start include fathers in their case management, and Another Road to Safety assist fathers as part of their family services.

This summary-level table provides an overview of the services offered across the programs; however, this is only a first step in understanding what these programs offer. There is certainly a great deal of variability in how these services are administered, including both the quantity and quality of the services provided across the programs. Although detailed descriptions of how these services are delivered are beyond the scope of this summary, future collaborative work across these programs can employ this summary table as a tool for identifying common program offerings, sharing best practices, and moving closer to adoption of consistent high-quality standards for delivering services across the set of home visiting programs.

Figure 27. What Services Do Programs Offer?

Program	Medical case mgmt/ Advocacy	Health education	Information & referrals to services	Assistance w/benefits enrollment	Conduct mental health screening	Mental health services	Support groups	Conduct develop-mental screening	Parent ed/ parenting skills	Services for fathers	Transpor-tation	Provision of basic needs
IPOP	✖	✖	✖	✖	✖	Refer	Offered	✖	✖	Support groups; refer to case mgmt	✖	Baby items
BIH	✖	✖	✖	✖	✖	Refer	Offered	✖	✖	Case mgmt, workshops	✖	Baby items
MADRE	✖	✖	✖	✖	Psycho-social assessment	Refer	Offered			Education, referral, advocacy, linkages	✖	✖
Perinatal Hep-B	✖ (Hep-B focused)	✖ (Hep-B focused)	✖	✖		Refer	Connect	✖				Baby items
Public Health Nursing	✖ (and direct care)	✖	✖	✖		Refer	Connect	✖			✖	
Pregnant & Parenting Teen	✖	✖	✖	✖	✖	Refer and treat acute problems	Connect	✖	✖	Case mgmt	✖	✖
Your Family Counts	✖	✖	✖	✖	✖	Refer and treat acute problems	Connect	✖	✖	Case mgmt	✖	Baby items
Special Start for Infants	✖	✖	✖	✖	✖	Refer and treat acute problems	Connect	✖	✖	Case mgmt	✖	
Another Road to Safety	✖ (as part of general case mgmt)	Connect	✖	✖	✖	Refer and treat acute problems	Connect	✖	Connect	As part of family services	✖	✖
Homeless Families Program	✖ (and direct care)	✖	✖	✖	✖	Refer and treat acute problems	Connect		Connect	As part of family services	✖	✖

Source: Administrator survey of home visiting programs and administrator telephone interviews.

Program Intensity: What Is the Dosage of the Home Visiting Interventions?

Program intensity refers to a combination of the frequency of home visits offered through a program and the length of participation in that program. According to multiple reviews of the home visiting research literature, a consistent finding is that program models of higher intensity tend to be more effective than those of lower intensity.

As the previous figure has shown, many of the home visiting programs examined offer very similar services. However, the services may be more or less effective depending in part on how intensively home visitors can work with program participants to foster a trusting relationship, deliver useful information (such as health or parenting information), and accurately identify clients' needs and offer the right types and amount of support and resources.

The series of figures that follow display the program intensity according to three dimensions: frequency of visits, length of participation in the program, and the combination of these two factors. These figures show the average intensity for each program, acknowledging that every home visiting program has some variability in the program intensity that is driven by individual participants' needs and commitment to the program. The figures are largely based on administrator reports of how programs are intended to be delivered, as records of visits are not consistently available across all the programs.[10]

[10] A note of caution is offered in the interpretation of this information: Specifically, the program's intended length and frequency of services is generally somewhat greater than what is actually observed in the program participation data.

Figure 28. Summary of Home Visiting Program Intensity: Frequency of Visits

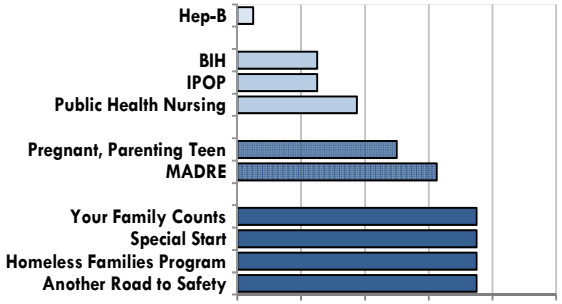


Figure 29. Summary of Home Visiting Program Intensity: Length of Participation

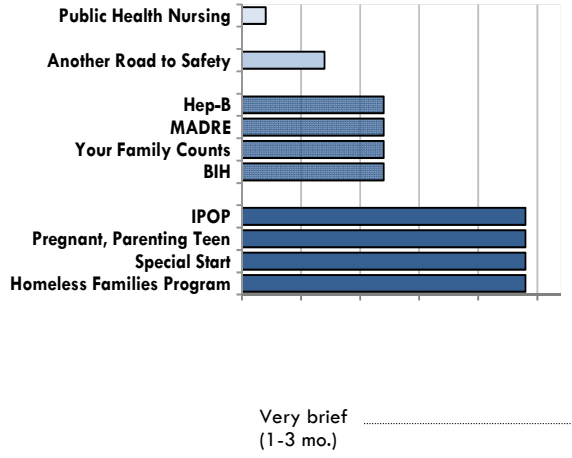
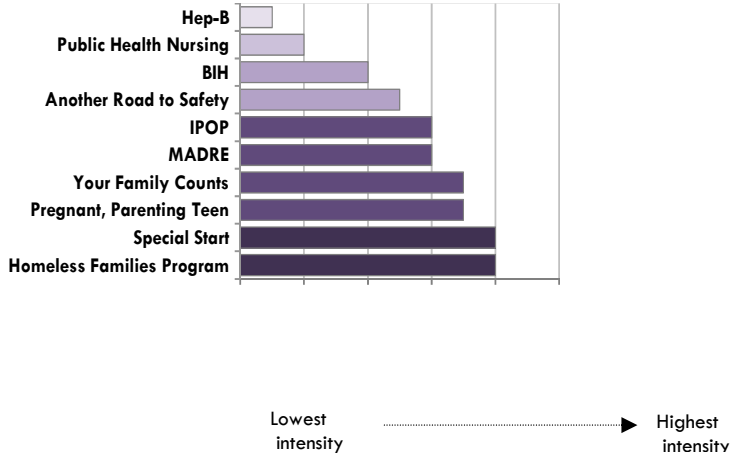


Figure 30. Summary of OVERALL Home Visiting Program Intensity: Combined Frequency x Length



Source: Administrator survey of home visiting programs and administrator telephone interviews.

The first figure in the series (Figure 28) shows the average frequency of home visits for each program. The lowest-frequency program is Perinatal Hepatitis B, in which participants only receive one visit. The rest of the programs range from about once-a-month visits to nearly-weekly visits.

The second figure in the set displays the typical length of participation in each program. The Public Health Nursing program is the briefest, with average participation of only two months, followed by Another Road to Safety, which is typically six months in length. Four programs have typical program participation lengths of about one year, and the most intensive programs keep participants for two years – and in some cases even longer.

How do these measures of program dosage combine to reflect overall program intensity?

- The most intensive programs work with participants for both a long period of time and have visits at a weekly or nearly-weekly frequency; in the context of the broader home visiting literature, these programs would generally be considered to be of high intensity. The Homeless Families Program and Special Start – two programs that work with participants who are perhaps the most likely to have broad and highly-complex needs – are the highest-intensity programs among this set.

- Several programs fall into a category of moderately-high intensity. This category includes programs such as the Pregnant and Parenting Teen Program (which lasts two or more years) and Your Family Counts (a one-year program) which have weekly to twice-monthly visits. In addition, MADRE and IPOP also are included in this category, but they are both of slightly lower intensity than the other two programs, based on combined frequency and program length measures.

- Another Road to Safety is a moderate-intensity program overall. It is somewhat unlike any of the others, in that visits are quite frequent, but last for a fairly short period of time (about six months, in some cases up to nine months). Consistent with this model, administrators of this program describe its primary function as being a connector for participants – to ensure that they are linked up with agencies and services they need, but otherwise providing little in the way of direct intervention.

- Black Infant Health is also a moderate-intensity program, with a one-year participation period and visits that are about on a monthly schedule.

- Public Health Nursing is a low-intensity program, with a fairly short participation period and, monthly visits.

- Finally, with its highly targeted focus on ensuring appropriate Hepatitis B-related health behaviors, the Perinatal Hepatitis B program is the least intense of the programs. It has just one home visit with longer monitoring of appropriate immunizations.

ANALYSIS: WHAT IS THE OVERALL AMOUNT OF PROGRAM INTERVENTION? DOES IT HAPPEN AT THE RIGHT TIME, AND IS IT PROVIDED BY THE RIGHT PEOPLE?

As this section has shown, many of the home visiting programs examined for this report offer similar services, although they likely vary considerably in the depth and quality with which they provide them to participants. The impact of these services may be different from one program to another, based on several other program factors, such as how broadly and intensively the services are provided, who is delivering them, and when along the perinatal timeline the intervention is delivered.

To summarize the profile of services among this set of programs, the figure that follows categories several program dimensions simultaneously, in order to generate further discussion and reflection about whether program resources are being directed in the most optimal manner.

The first two columns display a summary of where (in a relative sense) current home visiting resources and efforts are being expended. Looking at combined measures of each program's reach and intensity, the Pregnant and Parenting Teen Program and Special Start appear to be the highest-impact interventions, from the perspective of the size of each program's intervention efforts (considerations of impact from the perspective of outcomes are discussed in the following section).

The two columns on the right side of the figure display other program service elements. These columns are displayed alongside the program efforts to facilitate reviews and discussion of how home visiting services are coordinated in the future. For example, some questions for consideration follow:

- Of the two largest county-level interventions, only one (Pregnant and Parenting Teen Program) occurs early in the intervention timeline. Given that that is the case, should the staffing of that program include more staff with nursing and/or clinical backgrounds?
- Programs that intervene as early as pregnancy contain a mixture of high and low levels of staff qualifications. Should there be consistent staffing guidelines among programs serving these participants?
- Is there a potential cost savings in shifting the bulk of home visiting efforts to occur earlier in the intervention timeline? Would this earlier concentration of efforts result in a need for less resource-heavy interventions and staff who are not as highly-trained for programs that intervene later?

Of course, although the information in this summary table is helpful for use as a comprehensive planning tool, it is not sufficient. The needs of the specific target populations served by each program should be considered as well. Moreover, information about which programs are able to show evidence of success in achieving their intended outcomes – which is addressed in the section that follows – is an essential element in discussions about the appropriate "mix" of coordinated home visiting programs.

Figure 31. Mapping Amount of Program Intervention onto Staffing and Timing of Interventions

	Given where resources and effort are being expended…			Are these the right staff to provide services?	Is this when interventions should be occurring?
Program	**Program size** (number served yearly)	**Program intensity** (freq x length)		**Staffing qualification levels**	**Earliest opportunity for intervention**
IPOP	Medium	Moderately high		Higher	Pregnancy
BIH	Medium	Moderate		Higher	Pregnancy
MADRE	Small	Moderately high		Lower	Pregnancy
Perinatal Hep B Program	Medium	Very low		Lower	Pregnancy
Pregnant & Parenting Teen	Large	Moderately high	← **Largest county intervention?**	Lower	Pregnancy
Public Health Nursing	Very large	Low		Higher	Pregnancy, but most are postpartum
Your Family Counts	Medium	Moderately high		Higher	Pregnancy, but most are postpartum
Special Start	Large	High	← **Largest county intervention?**	Higher	Postpartum
Another Road to Safety	Medium	Moderate		Lower	Typically already parenting
Homeless Families Program	Small	High		Lower	Typically already parenting

Note: Categories for program size: Very large = > 1,000; Large = 500-999; Medium = 100-499; Small = < 100. Categories for program intensity: See Figure 28-30; Categories for staffing: Higher /lower = Proportion of nurses and clinical staff members to total staff is above/below median for the 10 programs (all in "lower" have 0 or 1 nurses or clinicians on staff).

Examining Program Outcomes

Without a clear representation of what a program intends to change as the result of people participating in it, it is difficult to determine whether the resources and efforts that go into its operation are justified. This section provides a summary of the core outcomes that each program believes it is impacting, as well as existing data that inform programs' progress in achieving changes in those outcome areas. As part of this review, common screening and assessment tools that are currently in use across multiple programs are described.

SUMMARY: WHAT ARE THE EXPECTED AND ATTAINED OUTCOMES IN THE HOME VISITING PROGRAMS?

As the previous section of this report has shown, the ten programs included in this community of home visiting services offer many of the same interventions to their participants (albeit through different models and among different populations). Consequently, there is also overlap in the extent to which the programs expect to be impacting various outcomes.

As the figure on the following page shows, the program outcomes have been divided according to the six general categories used throughout this report, with more specific expected outcomes listed under each. The figure provides a summary-level representation of the most common set of core outcomes that the set of home visiting programs expects to impact, although the ways in which different programs express and/or measure the specific outcomes vary somewhat. For example, several programs seek to improve the health behaviors of participants, but programs may target different types of health behaviors, e.g., substance use, smoking, breastfeeding, prevention of sexually transmitted infections, etc.

Figure 32. Overview of Major Home Visiting Program Outcomes

Outcome area	Specific outcomes
Child health	• Reduced infant mortality (up to one-year post-birth) • Healthy birth weight (not low/very low BW) • Full-term at birth • Current on immunizations • Has a medical home
Child development and school readiness	• Developmentally on target
Child maltreatment/ exposure to violence	• Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home • Child is living with birth parent(s)
Maternal health	• Has a medical home • Can advocate for family health care needs • Is linked to needed mental health supports • Reduced maternal depression • Delay subsequent births • Engages in healthier behavior (specific indicators vary by individual programs) • Has increased health knowledge (specific indicators vary by individual programs)
Parenting skills/ parent-child interactions	• Improved general knowledge/behavior related to good parenting skills (mothers and/or fathers, as applicable by program; specific indicators vary by individual programs)
Economic self-sufficiency	• Complete high school education • Are in school or working • Are economically stable

Expected Primary and Secondary Outcomes

The figure that follows displays two types of expected outcomes for each home visiting program: Primary outcomes (i.e., those that are central to the goals of the program) and secondary outcomes (i.e., those that are likely to be occurring through program participation, but are of somewhat lower priority than the primary outcomes).

As the figure shows, the expected outcomes emphasize the areas of child and maternal health, and the most consistently-shared expected program impacts involve helping participants secure the services that will in turn lead to better physical and emotional health. These include ensuring children and mothers have a medical home, ensuring that participants can advocate for their health care needs, and ensuring participants are connected to needed mental health supports (all four outcomes are expected for all programs).

Additional expected outcomes vary somewhat according to the issues faced by specific program target populations and when in the perinatal/early childhood timeline the programs intervene. For

example, the Perinatal Hepatitis B program focuses on a more narrow set of outcomes than do longer-term programs that attempt to address multiple simultaneous medical and social risks. Similarly, because Another Road to Safety and Homeless Families Program typically enroll families with older children, these programs do not emphasize birth outcomes, whereas the programs that work with pregnant women tend to include birth outcomes among their primary set of expected outcomes.

Figure 33. Summary of Primary (☒) and Secondary (×) Expected Outcomes, by Home Visiting Program

		PROGRAM									
	Outcome	IPOP	BIH	MADRE	Hep-B	Pub Hlth Nursing	Pregnant/ Parenting Teens	Your Family Counts	Special Start	Another Road to Safety	Homeless Families Program
CHILD OUTCOMES	**Child health**										
	Reduced infant mortality (up to one-year post-birth)	☒	☒	☒	☒	☒	☒	☒	☒		
	Healthy birth weight (not LBW, VLBW)	☒	☒	☒	×	×		☒ (for postpartum ppts' subsequent births)	☒ (for postpartum ppts' subsequent births)		
	Full-term at birth	☒	☒	☒				☒ (for postpartum ppts' subsequent births)	☒ (for postpartum ppts' subsequent births)		
	Current on immunizations	☒	☒	×	☒ (Hep-B specific series)	☒	☒	☒	☒	×	☒
	Has a medical home	☒	☒	☒	×	☒	☒	☒	☒	×	☒
	Child development and school readiness										
	Developmentally on target	☒	☒	×		×	☒	☒	☒	×	☒
	Child maltreatment/exposure to violence										
	Reduced maltreatment allegations/substantiations	×	×	×		×	×	☒	☒	☒	×
	Child is not exposed to violence in the home	×	×	×		×	☒	☒	☒	☒	×
	Child is living with birth parent(s)	×	×	×		×	×	☒	☒	☒	☒

(Figure continues on next page)

Expected Outcomes (cont'd)		**PROGRAM**									
Outcome		IPOP	BIH	MADRE	Hep-B	Pub Hlth Nursing	Pregnant/ Parenting Teens	Your Family Counts	Special Start	Another Road to Safety	Homeless Families Program
MATERNAL/PARENT/ FAMILY OUTCOMES	**Maternal health**										
	Has a medical home	☒	☒	☒	☒	☒	☒	☒	☒	×	☒
	Can advocate for family health care needs	☒	☒	☒	☒	×	☒	☒	☒	×	×
	Are linked to needed mental health supports	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
	Reduced maternal depression	×	×	×		×	☒	☒	☒	×	
	Delay subsequent births	☒	☒			×	☒	×	☒		×
	Engages in healthier behavior	☒ Esp. prenatal care, smoking, substance use	☒ prenatal care	☒ Related to healthy pregnancy	×	☒	☒ Esp. breast-feeding STI, birth control	× Esp. breastfeeding	× Esp. breastfeeding		☒
	Has increased health knowledge	×	×	☒ (esp. re pregnancy)	☒	☒	☒ Esp. STI and birth control	×	×		☒
	Parenting skills/ Parent-child interactions										
	Parents have improved parenting knowledge and skills	×	×	×		×	×	×	×		☒
	Economic self-sufficiency										
	Complete high school education	×				×	☒				
	Are in school or working	×	×	×		×	☒	×			☒
	Are economically stable	×	×	×		×	☒	☒	☒	×	☒ (and in permanent housing)

Demonstrated Program Outcomes

To what extent are programs achieving these outcomes? The figure on the following page summarizes available data relating to major program outcomes. (For more specific outcome data for each program, please refer to Appendix 1 of this report.) The figure uses data from each program's most recent fiscal year – except in the case of infant mortality, which also includes a five-year mortality count due to the low incidence of this outcome. To assess the degree to which data are available for each program's primary and secondary outcomes, different shading is used to designate both types of expected program outcomes; solid orange shading designates a primary expected outcome, and the lighter striped shading designates a secondary expected outcome.

It should be noted that the purpose of this figure is to provide a high-level summary of both the data that are available across programs as well as collective program outcomes. **Because these programs serve different populations, intervene at different points along the perinatal timeline, and serve clients with very different risk profiles, it is not appropriate to use the figure to evaluate a particular program's effectiveness relative to another, even if the programs have similar expected outcomes.**

As the figure shows, where data are available, there are some promising outcomes to report. For example, the number of infant mortalities among the two programs that target African American populations in Alameda County suggests that these programs may be improving birth outcomes on this indicator. Immunization rates and possession of a medical home among children are generally strong across the programs that provide these data, even though these outcomes have been reported to be difficult to impact in other home visiting programs.

However, this figure also underscores that there are many more opportunities for programs to enhance the data that they collect to evaluate their effectiveness on many of their primary and secondary expected outcomes. Additionally, if programs want to draw conclusions about outcomes across the set of home visiting services in the county, there are opportunities for standardizing the measurement of common outcomes tools across programs as well.

Figure 34. Summary of Demonstrated Outcomes, by Home Visiting Program

		PROGRAM									
	Outcome	IPOP	BIH	MADRE	Hep-B	Pub Hlth Nursing	Pregnant/ Parenting Teens	Your Family Counts	Special Start	Another Road to Safety	Homeless Families Program
CHILD OUTCOMES	**Child health**										
	Reduced infant mortality (up to one-year post-birth)	0 deaths (2 deaths of 429 served over 5 yrs)	0 deaths (1 deaths of 349 served over 5 yrs)								
	Healthy birth weight (not LBW, VLBW)	90%	93%								
	Full-term at birth		90%								
	Current on immunizations		96%	64%	100% Hep B series		98%	94%	98%	99%	
	Has a medical home	86%	82%	91%			98%	99%	100%	99%	
	Child development and school readiness										
	Developmentally on target		99% on target (DDST)				44% had no concerns (ASQ)	42% had no concerns (ASQ)	17% had no concerns (ASQ)		
	Child maltreatment/exposure to violence										
	Reduced maltreatment allegations/substantiations						3% opened CPS case during pgm	5% opened CPS case during pgm	3% opened CPS case during pgm	11% opened CPS case during pgm	
	Child is not exposed to violence in the home										
	Child is living with birth parent(s)						2% in foster care during pgm	2% in foster care during pgm	2% in foster care during pgm	1% in foster care during pgm	

(Figure continues on next page)

Demonstrated Outcomes (cont'd)		PROGRAM									
Outcome		IPOP	BIH	MADRE	Hep-B	Pub Hlth Nursing	Pregnant/ Parenting Teens	Your Family Counts	Special Start	Another Road to Safety	Homeless Families Program
MATERNAL/PARENT/ FAMILY OUTCOMES	**Maternal health**										
	Has a medical home	94%	96%	100%							
	Can advocate for family health care needs										
	Are linked to needed mental health supports	100% were screened for depression	100% were screened for depression				69% were screened for depression	69% were screened for depression	84% were screened for depression	69% were screened for depression	
	Reduced maternal depression										
	Delay subsequent births										
	Engages in healthier behavior	74% prenatal care in 1st trimester	79% prenatal care in 1st trimester				46% breastfed > 6 mos.	46% breastfed > 6 mos.	54% breastfed > 6 mos.		
	Has increased health knowledge										
	Parenting skills/Parent-child interactions										
	Parents have improved parenting knowledge, skills						90% read daily to children	71% read daily to children	89% read daily to children	75% read daily to children	
	Economic Self-Sufficiency										
	Complete high school education						65% in school or graduated				
	Are in school or working						39% employed				33% had income from employment
	Are economically stable										92% (n=11) had income source at exit; 33% (n=4) had perm. hsing at exit

Note: All data are from most recent program fiscal year, except where noted. All data are based on percent of known respondents. Solid, darker shading designates primary outcomes; striped, lighter shading designates secondary outcomes.

What screening and assessment tools are used, and for what purpose?

How are programs measuring their outcomes? As the home visiting programs begin to consider cross-program tracking of outcomes, it is important to assess where the best opportunities are for adopting common tools – and to recognize that not doing so may lead to unclear conclusions about programs' success. For example, on the previous figure displaying program outcomes for developmental progress, the programs report data using multiple tools – the Denver Developmental Screening Test (DDST) and the Ages & Stages Questionnaire (and ASQ-SE). Results across programs are very different for programs using these tools. Among children measured on the DDST, 99 percent of children were on target developmentally; among children measured on the ASQ and ASQ-SE, rates were much lower. It is unclear whether such differences are true differences or at least partly due to the different ways of measuring developmental progress.

As the figure below shows, some tools are used across a number of programs, including the ASQ and ASQ-SE, 4Ps Plus, and the Life Skills Progression. These tools all represent promising opportunities for standardizing measurement across the set of home visiting programs.

Figure 35. Which Programs Use Various Screening Tools?

	Child development		Child safety	Maternal health		Multiple domains	
Program	Denver (DDST)	ASQ/ ASQ-SE	Domestic violence screener	Edinburgh maternal depression	4Ps Plus Substance use	Life Skills Progression	Acuity Assessment Tool
IPOP	✖	Staff trained	✖ on 4Ps Plus	✖	✖		✖
BIH	✖	Staff trained	✖ on 4Ps Plus	✖	✖		
MADRE			✖	Uses own screener			
Perinatal Hep-B							
Public Health Nursing							
Pregnant & Parenting Teen		✖		✖		✖	
Your Family Counts		✖	✖ on 4Ps Plus	✖	✖	✖	
Special Start for Infants		✖	✖ on 4Ps Plus	✖	✖	✖	
Another Road to Safety						✖	✖
Homeless Families Program							

Source: Administrator survey of home visiting programs and administrator telephone interviews.

ANALYSIS: WHAT ARE THE BEST OPPORTUNITIES FOR HOME VISITING PROGRAMS TO IMPACT OUTCOMES?

As this section has shown, there is a great deal of variability in the amount and types of data collection that occurs across the set of home visiting programs. Available program data do suggest some promising outcomes across the programs; however, there are also many areas where improvements are needed – both in terms of increasing data collection and continuing to ensure that the programs are doing all they can to enhance their priority outcomes for all participants.

The figure on the following page summarizes results demonstrated by the home visiting programs for a select set of outcomes. The figure embeds these outcomes (broadly summarized in the right column) in the context of two important considerations: (1) whether the outcomes have generally been demonstrated in the research literature to be easy or difficult to impact; and (2) the degree of need there is in Alameda County for interventions that address those outcomes.

The figure helps to identify some "success stories" for Alameda County; for example, despite research suggesting that they can be difficult to impact, data from the set of home visiting programs have shown strong results for children's immunization and possession of a medical home, which is even more promising given that improving vaccination rates is a particular need in the county.

The figure also shows some areas where additional efforts might not be as fruitful as desired. There is some indication from the statewide needs assessment that maternal depression is potentially an issue for Alameda County that bears monitoring (county rates were close to the statewide median). Most of the programs reviewed in this report have indicated that linking women with mental health services and/or reducing maternal depression are among their primary expected program outcomes. However, across a number of studies, it has been difficult to find strong support for home visiting programs' impacts on maternal mental health.

Finally, this figure points to some promising opportunities for Alameda County home visiting programs. Two areas where research results have shown benefits from home visiting are in women's health behaviors and health care utilization and development of parenting skills. These are two areas where many of the home visiting programs are not currently collecting data, even though they believe they are impacting these outcomes. Thus, with additional efforts to increase (and ideally standardize) data collection in these outcome areas, the set of programs may be able to demonstrate additional program successes.

Figure 36. Summary of Selected Home Visiting Outcomes: Potential for Change, County Need, and Preliminary Results

	Summary of research reviews	County population need	Status of current outcome data
Child health Birth outcomes	+/– NFP has shown success, but not with urban Black sample	High need among Black, teen pops across multiple indicators	Mixed; positive infant mortality outcomes; additional needs for improvement in LBW, preterm births, and early prenatal care that related to positive birth outcomes. More programs should collect data on this.
Immunizations	– Generally difficult to impact	High need; vaccination rates below HP 2020 targets	Strong outcomes: Generally high rates of current/ complete immunizations
Medical home	– Generally difficult to impact	Unknown – some suggestion of particular needs among African Americans	Strong outcomes: Generally high rates of children with medical home
Child development and school readiness	+ Promising evidence that outcomes can be impacted by HV	High need; low 3rd grade proficiency, school readiness	Needs more development; tools need to be standardized and programs need to ensure measurement at program exit
Child maltreatment/ exposure to violence	+/– Mixed, depending on how measured	Mixed: low maltreatment rates, but rates for Black families above HP 2020 targets	Needs more development – not all programs track; those that do have between 3-11% opening new CPS cases.
Maternal health Mental health (stress, depression)	– Generally difficult to impact	Moderate need; maternal depression rate close to state median	Needs more development; participants are not universally screened; programs do not appear to screen at program exit, so difficult to assess
Physical health/access to healthcare	+/? Needs more study, but NFP has positive findings	High need; use of 2 substances worse than state median; prenatal care lacking in some pops	Mixed; strong among programs that report these outcomes, but significant needs for additional data collection.
Parenting skills/parent child interactions	+ Promising evidence that outcomes can be impacted by HV	Unknown	Needs more development; need to define key indicators and identify ways to measure
Economic self-sufficiency	+/–/ ? Needs more study; findings so far are mixed	Mixed: 4-yr HS dropout rate worse than state median; poverty, unemployment rates better than most	Needs more development; current data do not show strong impacts; some positive education outcomes for teen program

Section 4:

Building an Intentional System of Home Visitation Programs

In this section:

- Recommendations for future efforts, with
  - Descriptions of key issues
  - Suggested specific actions

Recommendations for Future Efforts

RECOMMENDATION 1

Develop a process for: (1) identifying (and then monitoring) the level of county need over time; and (2) coordinating services and ensuring that those in need are matched to the right home visitation programs.

Key needs: Retrieving and monitoring county data; cross-program analysis, communication, and coordination

THE ISSUE

One of the biggest challenges faced by programs serving at-risk populations involves accurately quantifying the need that exists in the communities they serve, and then determining the extent to which the need is being met by the services that are available to help people. This challenge is compounded when multiple programs are attempting to work together to address community needs, as the different programs serve some unique and some common target populations within the larger set of at-risk individuals, and programs vary in intensity and services offered. To ensure that those with needs for assistance are matched to programs that are most likely to benefit them, programs (and systems) must communicate with each other and develop a coordinated system to serve clients – all in a way that minimizes expenditures and limits overlap in program participation.

SUGGESTED ACTIONS

Decide on a set of key county-level indicators that the group would like to track over time to describe county needs.

The indicators selected can be organized in a number of different ways. Two possible options are as follows:

- On an **intervention timeline,** looking at populations targeted for services
    - Primary prevention: e.g., tracking predictors of teen pregnancy (early alcohol and drug use; poor school performance); or predictors of poor pregnancy outcomes (smoking, substance use, late prenatal care);

  - Early intervention: e.g., tracking number of births to women on Medi-Cal or infants admitted to NICU;
  - Intervention: e.g., rates of child maltreatment or homelessness.

- Sorted by the **six key outcome areas** described previously in this report, looking at one or two key indicators in each that the community of home visiting programs expects to impact :
  - Child health: e.g., continued tracking birth outcomes and immunization rates.
  - Child development/school readiness: e.g., tracking rates of grade-level proficiency at third grade (adding school readiness when such measurement is implemented universally);
  - Child maltreatment/exposure to violence in the home: e.g., rates of child maltreatment;
  - Maternal health: available county-level indicators may be most valid and available for health behaviors such as substance use and smoking;
  - Parenting skills/parent-child interactions: no data may yet be available for this;
  - Economic self-sufficiency: e.g., unemployment rates, high-school dropout rates.

Identify and invite other partners to participate in county-wide coordination efforts.

Examining the set of core indicators of need across the county, determine which other programs, organizations, and agencies need to be included in ongoing meetings to coordinate home visiting services with other related services. Some examples identified in meetings so far include representatives from Social Services, Behavioral Health Care, and Early Head Start. There are a number of home visiting programs that operate in conjunction with center-based care for children 0-5; these programs should be engaged as well, particularly because research suggests that home visiting programs working in conjunction with center-based interventions may be more effective than those without, especially in promoting children's healthy development.

Develop guidelines for determining which county residents should be matched to which home visiting programs.

To maximize the effectiveness of the community of home visiting programs and the benefits experienced by program participants, these guidelines should include considerations of program eligibility, staffing, intensity, and key intended outcomes. Resources in this report for building these guidelines are summarized in the following figure.

Figure 37. Resources in This Report for Matching Participants to Programs

Program elements	Issues to consider	Resources available in this report
Participant eligibility	Determine how many different programs a participant could enroll in, given age, race/ethnicity, pregnancy/parenting status, geographic location, risk factors	Figure 18: Program eligibility and points of entry
Staffing	Participants with more complex issues will generally benefit more from highly trained staff	Figure 23: Program staffing: Who is providing services?
Program intensity	Participants with higher risk will generally benefit more from programs of higher intensity	Figure 30: Summary of OVERALL home visiting program intensity: Combined frequency x length
Key outcomes	Match participants to programs that most directly address and impact their core outcomes	Figure 33: Summary of primary and secondary expected outcomes, by home visiting programs

Of course, program capacity issues need to be considered as well, and thus, there also needs to be a collective, cross-program mechanism to determine which programs have open slots for participants at any given time. This is currently in development, via a client indexing system through First 5's ECChange system.

Similar efforts have been undertaken that may provide useful models for this effort, including the Early Childhood Mental Health Systems Group in Alameda County, and the Perinatal Coordination Group, which has developed a summary document describing some of the home visiting programs in the county.

Develop coordinated outreach efforts to engage clients in the community of service providers and the community at large.

Use *Figure 19: Where do participants connect to the programs?* in this report to examine the current outreach efforts among programs and determine whether (and where) additional outreach efforts are warranted.

Once identified and secured, conduct regular monitoring and updating of the portrait of Alameda County needs.

Designate a period once every year in which the trends over time are updated with recent information. Meet to review newly available data, discuss trends and interpretations, and consider whether new data warrant shifts in program size, intervention focus, or other actions.

RECOMMENDATION 2

Enhance the quality of this community of home visitation programs, both individually and collectively.

Key needs: Analysis of program staffing, design, and implementation; coordination across programs as appropriate

THE ISSUE

A precise understanding of which home visiting program features lead to positive outcomes for participants is still evolving; there is little evidence that can be considered to be both strong and consistent across the body of research studies examining what works in home visiting programs . Available evidence does suggest that using highly trained, well-qualified staff leads to better program outcomes. Programs of higher-intensity (greater frequency and longer duration of visits) also tend to be associated with better outcomes, particularly among high-risk populations. Outcomes such as enhanced parenting skills are frequently demonstrated, as are (somewhat less strongly) benefits for children's developmental progress. Less easy-to-impact outcomes are found among child and infant health outcomes and maternal mental health outcomes. Moreover, across all studies of home visiting program effectiveness, a warning emerges about program implementation: there is often wide variability in the extent to which home visitors are actually delivering the program to participants as it is intended to be delivered.

SUGGESTED ACTIONS

Develop appropriate and consistent approaches to staffing.

Recognizing that research does not currently have clear answers about the exact qualifications or backgrounds that lead to better outcomes for participants, Gomby (2005) recommends the following:

- Families with multiple, complex issues should be assigned to extremely well-trained home visitors; and
- Any paraprofessionals who are employed as home visitors should be well-trained, they should be given clear and detailed curricula and protocols for working with their clients, and their work should be confined to a fairly narrow set of well-defined goals.

Because there is some inconsistency and imprecision in how people define "paraprofessional" versus "professional" home visitors, the community of home visiting programs in Alameda County should also

work to develop common definitions – and roles – of paraprofessional and professional staff in their home visiting programs.

Finally, the community of home visiting programs should develop a set of shared guidelines for determining which home visiting participants are matched to home visitors with various levels of skills and training.

Encourage staff retention within programs.

Home visitor staff turnover tends to correlate with paraprofessional/professional status, and it has been suggested that lower wages earned by paraprofessional staff lead to greater turnover, which may in part account for poorer outcomes in programs that use paraprofessionals (see Gomby, 2005). In any case, whenever a new home visitor must pick up where another left off, delays and interruptions in the connections and efforts with home visiting clients may occur. Ensuring staff satisfaction and adequate wages are critical elements in retaining staff. Responsive and supportive supervision are essential for maintaining staff satisfaction as well.

Develop consistent approaches to initial and ongoing staff training and development.

For individual programs and as a group, program administrators should identify core set of essential skills and knowledge that each type of home visitor should possess, as well as desired (but nonessential) additional skills and knowledge. Supervisors should ensure that training and additional resources are available to assist home visiting staff (professional and paraprofessional) with any development needs, and programs should share with each other any training and professional development opportunities and resources they offer that may be useful to staff in other programs. To maintain high-quality trainings, brief surveys of training effectiveness should be distributed and feedback should be used to modify future offerings.

Programs that use screening and assessment tools should ensure that all staff are thoroughly trained on them and are comfortable using them prior to initiating any home visits. This is particularly true of tools that require some level of judgment from those who administer them (e.g., the Life Skills Progression).

Programs should implement procedures that allow for supervisors' regular review of home visitor practices and fidelity to treatment model (see more on this below). Some examples include reviews of written documentation of visits or periodic on-site observations. Supervisors should provide explicit feedback and recommendations for improvement.

As part of their support for staff, programs should ensure that supervision includes assisting home visitors in coping with stressors inherent in serving at-risk populations.

A continuously updated, comprehensive list of county referral resources should be provided to all home visiting staff for their own information and for them to give out to clients.

When possible, create coordinated standards of practice among programs doing similar work.

Identify different subsets of programs with overlapping target populations, service models, and goals, and agree on common practices. As a first step, this may include initial meetings to learn specific information about how different programs address similar issues they face with their participant

populations. For example, among the programs that work with pregnant women to achieve better birth outcomes, program administrators could meet to learn about each other's approaches to ensure good prenatal care, reduced smoking and substance use, and other practices, and then agree on a set of common practices and resources the programs will consistently use to address their common issues. (Resources available in this report to facilitate this effort: *Figure 25: Summary of training and support offered to home visiting staff, as reported by administrators*.)

Review each program design as intended versus as delivered.

Even the very best evidence-based home visiting program will be ineffective if it is not implemented in a way that very closely matches how it happens "on paper." Most programs have a well-articulated model of who the program should be serving, what the program is supposed to provide (and how frequently and for what duration), and what it expects to achieve. However, many programs face challenges in one or more of these areas when it comes to implementation; moreover, programs sometimes lack the information (or access to information) that allows them to determine the extent to which the program is being delivered in the way that it is intended to be delivered.

It is recommended that programs take detailed stock of both what they believe they are doing (e.g., with a program logic model) as well as what is actually occurring in their program delivery.[11] Some of the program elements that should be examined include comparisons of **intended versus actual program service delivery** on the following dimensions:

- Participants: Do your program participants match those the program was created to serve? Are they at higher or lower risk than your program intends? If so, does this necessitate any shifts in program practices with regard to recruitment and enrollment or services offered?
- Frequency of home visits: What percentage of participants are receiving visits at least as often as the program intends?
- Duration of participation: What is the average length of participation, and how does this compare with the expected duration, or the perceived time needed to help participants (overall, or as a function of different levels of risk)?
- Dropout rates: What percentage of participants are completing the program? How many are lost due to dropping out or becoming ineligible? Are there any trends in reasons for dropping that warrant a review of program procedures?
- Services received: What percentage of participants receive various referrals and services? Are there critical intervention elements that everyone should receive (e.g., depression screens), and if so, are they receiving them? Are there certain expected services or referrals that are not being delivered?

[11] In order to do this, programs may need to enhance their data collection systems – see Recommendation 3 for guidance in this).

RECOMMENDATION 3

Finalize and implement a measurement system that gathers clear and relevant data that will help to determine whether the community of home visitation programs is successful.

Key needs: Measurement of participants, services, outcomes; communicating results; coordination across programs

THE ISSUE

Each program in this community of home visiting programs serves a slightly different target population, using varied home visiting program models to impact outcomes – outcomes that are sometimes shared by other programs and are sometimes unique to a particular program. Moreover, each program has different funder reporting requirements, different data collection tools and protocols, database systems, and different data use "cultures," i.e., how (and whether) staff use data to inform how they run their programs. Despite this substantial variability, it is useful to have some consensus in data collection practices and core data elements across programs. It is recognized that each program will have some data collection requirements and needs that are unique to their own program that make complete standardization neither possible nor desired; however, to become a more intentional system, there must be a core set of data elements that are collected across the set of diverse programs.

SUGGESTED ACTIONS

Develop common, cross-program data elements to collect about participants.

Each program already collects a core set of demographic and socioeconomic variables; it may be helpful to standardize the ways in which these data are collected across programs to facilitate reporting across programs (e.g., using the same race/ethnicity categories, collecting income information using the same income ranges, etc.).

In addition to this, programs should consider generating a brief set of critical common data elements to be included in each program's intake form. Each program's intake form would thus include a subset of items that all programs were collecting similarly, as well as the intake questions that are unique to each program.

Whenever possible, any screening and assessment tools used to assess participant needs should be standardized across programs as well. Some examples of the most frequently used tools among this group of programs include: the Life Skills Progression assessment tool (in use by some First 5-funded programs); the Edinburgh (for screening for maternal depression; used by five of ten programs); the ASQ and ASQ-SE (used by First 5 programs, with staff from BIH and IPOP trained on it); and 4P's Plus (an alcohol and drug use screener with items about domestic violence and mental health as well; used by IPOP, BIH, Special Start, and Your Family Counts).

Develop common, cross-program data elements to collect about services.

Most programs also already collect (and access) information about the services being delivered to participants, although not in a way that is consistent across the set of home visiting program that are currently working together. As with data about participants, programs should collectively identify a small set of key data to track in a similar way across all the programs (a larger number of variables can still be collected on a program-by-program basis, to meet individual program needs). This will allow for a more detailed and accurate portrait of the experiences of participants in the different home visiting programs, and it will allow for a better ability to summarize the amount and types of county-wide intervention across programs.

At minimum, service data should track, for each participant, program start and end dates, counts and dates of visits, type of contact (telephone, in person), services received, and referrals made by home visitors.

Service data that can be directly entered into an electronic database via use of laptop computers or handheld devices, rather than collected on paper and then re-entered electronically later, will be more likely to be complete and accurate. However, careful consideration and sensitivity should be used in decisions about implementing these measures during face-to-face contacts, as clients sometimes feel mistrustful or that they are not being listened to when home visitors use computers during the visits.

Develop common, cross-program data elements to collect about outcomes.

Each program in the community of home visiting services in Alameda County has already identified the outcomes they believe they are impacting through their interventions. (See Figure 33 for a summary of those outcomes.)

As a group, the programs should decide on a set of indicators within each of the six outcome areas that they will begin to track as a group – or, alternately, that a subset of the programs will agree to track. This will allow the group of programs to move forward as a community of programs working together. (Each program will also likely have some unique outcomes that they wish to track as well.)

Once there is an agreement to track certain outcomes, the programs should agree on common measurement tools to use, measurement schedules, and procedures for collection and entry of data – all to enable enhanced sharing, comparing, and presentation of results across the community of programs. (See Recommendation 5 for more guidance on measurement options.)

Establish protocols for gathering feedback from program participants to better understand the program from their perspective.

Consider using anonymous surveys to allow participants to freely express their satisfaction with the program and their own experiences, including what has been particularly helpful about the program and what needs to be improved.

Consider use of a single electronic database – or compatible databases – to facilitate merging of data across programs.

ECChange, the system initially developed by First 5 Alameda County in partnership with Alameda County Public Health Nursing, is already in use by many of the home visiting programs; use of ECChange (or other systems that can be easily merged with ECChange data) is the most promising way to facilitate the compiling (and eventual analysis) of data across the programs.

Foster a culture that sees the value of collecting data.

Data collection often feels like a burden to program staff. Any change that requires them to do more work – either moving from no data collection to some minimal data collection, or increasing the amount or rigor of the data that are already collected – should be accompanied by attempts to demonstrate why their extra efforts are necessary. Program managers should consider including yearly or semi-yearly program data reviews to help them guide improvements in their program, as well as to build reflective practice skills among the home visitors they supervise. This will also help to minimize the amount of missing or unusable program data. (For more on this topic of performance management, see Walker & Moore 2011.)

Develop a high-level summary communication that can simply display your efforts and outcomes.

An important component of measurement involves communicating results effectively. To do this, the following steps are recommended:

- Create a 'dashboard' of critical data elements (participants, services, outcomes) that will be fed by each program.
- Agree on data submission timelines and who will put it all together.
- Infuse key population-level data trends to complement program data – is Alameda County "turning the curve" on outcomes such as child maltreatment and school readiness?
- Agree on key messaging elements, including: Who else needs to see these data? Who will ensure that the data get to them; i.e., what is the group's outreach and dissemination strategy?

RECOMMENDATION 4

Ensure commitment to the ongoing work of this community of programs by developing and implementing processes to help sustain it.

Key needs: Group member engagement; establishment of group processes.

THE ISSUE

The stated goal of this group of home visiting programs is an ambitious one: To move from being a loosely-organized community of home visiting programs to a deliberate system that serves the needs of Alameda County. The recommendations in this report to advance that goal are fairly complex, and they involve multiple, coordinated, and sustained efforts to achieve them. How does the group stay organized, coordinated, and successful?

SUGGESTED ACTIONS

Continue meeting regularly.

Set a regular time and place for monthly meetings. Have group members commit to attending.

Establish subcommittees so that important work gets done in between larger collaborative meetings.

Subcommittee work should focus on essential group tasks that are more intensive and time-consuming than what can be accomplished in group meetings.

As a group, rank the recommendations and actions according to whether they are high, medium, or low priority.

Use these rankings to determine which efforts are initiated first.

Use your data dashboard to guide your work together.

The dashboard (described in the previous section) will be an indicator of both your progress in developing shared group-level data collection efforts as well as a simple source of information about the extent to which your programs are achieving success and whether impacts are seen at the population level.

RECOMMENDATION 5

Once program quality and treatment fidelity have been solidified, each program should enhance its routine data collection practices and also consider conducting a one-time, rigorous program evaluation to become more competitive for funding that has an "evidence-based" standard.

Key needs: Program decisions about committing resources to evaluation

THE ISSUE

The Patient Protection and Affordable Care Act of 2010 (ACA) was signed into law on March 23, 2010. One of the provisions of that act included the creation of the Maternal, Infant, and Early Childhood Home Visiting program, which will provide $100 million in early 2011 to states to fund home visiting programs. With annual increases over five years, it is expected that the total amount of funds to be distributed to home visiting programs will be $1.5 billion by 2014. Key features of the grant program include the following:

- A focus on serving high-risk populations
- Several priority domains of interest, including:
    - Prenatal, maternal and newborn health
    - Child health, including prevention of injuries and abuse and neglect
    - School readiness and cognitive, language, social-emotional, and physical development
    - Parenting skills
    - Crime and domestic violence
    - Family economic self-sufficiency
    - Coordination and referrals to other community resources and supports.

In addition, the grant program specified that most of the funding would be used to support evidence-based home visiting program models, and information was subsequently provided describing the requirements that would have to be met for a program to be considered to be evidence-based.

Unfortunately, among the programs in this report, only IPOP is based on a model that has been rigorously tested (Healthy Start), with mixed results and not within Alameda County. None of the other programs working together in this project currently meet the evidence-based standard. Given that, it does not seem likely that any of the programs are yet ready to apply for this funding. However, it is helpful to look

at what the key considerations are in conducting high-quality program evaluations, as well as some examples of different research designs that can range from highly rigorous to much less rigorous.

SUGGESTED ACTIONS

Be informed about issues to consider in planning program evaluation research studies.

There are a number of options available for programs that are interested in conducting research to evaluate their impact. Choices must be made about the sample of participants to include, how participants are assigned to receive services, what variables are measured as part of the research, and the schedule of measurement, i.e., at what intervals key data are collected.

The figure that follows summarizes key elements of an evaluation research design, what the "gold standard" is for each element, and the rationale for using the gold standard.

Figure 38. Considerations for Evaluation Research Designs

Criteria	The gold standard	Rationale for gold standard
Sample	Research is conducted with a sample that closely approximates the population that it is intended to serve	A highly effective program for some people and in some environments may not be effective for different populations.
Assignment to receive treatment	**Random assignment** is used to select which potential participants will receive treatment and which will not receive treatment (or will receive delayed treatment after study is completed). A quasi-experimental design uses **comparison groups (not randomly assigned)** rather than control groups. This is less desirable than random assignment to treatment, but it allows for comparisons between the treated group and a relevant, untreated but similar group.	With a randomly assigned control and treatment group, it is possible to draw causal conclusions about program impact. Random assignment allows for any personal, background characteristics that may impact program effectiveness to be (theoretically) evenly distributed across treatment and control conditions. With quasi-experimental design, statements about causation cannot be made, but the presence of a relevant untreated participant group at least provides a standard for comparison. Without such a standard, any results from program participation could be charged as being caused by factors outside of the services received through the program itself (e.g., improving economic conditions in the community).
Dropouts	**Low dropout rates** must be maintained throughout the length of the program and study to properly determine program effectiveness	High dropout rates threaten our ability to speak to the program's effectiveness. If the program is not working for people, they are more likely to discontinue participating, leaving only the subset of continuing participants to demonstrate how well the program works. Even if significant impact is observed in a small set of the original participants who follow through to the end, it is impossible to know how broadly effective the program is for all potential participants if many of them have dropped and change cannot be measured for them.
What to measure	Three types of data should be measured: 1. **Who is being served:** Characteristics related to clients served (number enrolled, number completed, demographic and socioeconomic characteristics, etc) 2. **Program services received and dosage:** Frequency and length of visits, services, information and referrals given, etc. 3. **Outcome data:** What outcomes are the expected due to program participation?	Measuring **who is served** allows for accurate description of a program's population – and an ability to ensure that a program maintains high participation and completion rates. These data also can help look more closely at subgroups for whom the program is most effective Measuring **services received and dosage** allows programs to ensure that the intervention is being delivered as intended. These data also allow programs to look more closely at associations between receipt of certain services and outcomes. Collecting data on **expected outcomes** is essential to determine whether the program is having the impact on participants that it intends.
When to measure	1. **Who is being served:** Measure all demographic and SES data at intake. Also use a program closeout form to record reasons for program exit (completed, dropped, etc) 2. **Program services received and dosage:** Ongoing logs of services received and referrals made should be made continuously, at every program contact, for the length of program participation 3. **Outcome data:** Pre-treatment (at intake) and post-treatment (at program exit) data should be collected. Long-term outcome measures should be considered as an enhancement to end-of-program outcome reporting.	Measuring who is served at intake and reasons for exit allow for examination of whether program dropouts tend to be from any particular demographic or SES groups. Ongoing recording of services and referrals allows for the most accurate data to be collected (versus later recording of this information) Pre- and post-test collection of outcome data: In the context of control/comparison group designs, collecting pre-treatment measures allows for checks to make sure that the treated and untreated samples are roughly equivalent before they start, as well as a way to statistically control for any meaningful pre-treatment differences. For studies with no control or comparison group, pre- and post-test outcome measurement allows for calculation of changes occurring during the course of program participation

When program staffing and design issues have been addressed and preliminary data show that implementation is "true" to program design, invest in a high-quality research study and commit to enhanced ongoing data collection.

A hierarchy of possible research designs follows, ordered according to rigor (most to least).

Most rigorous: Randomized clinical trial

Randomized Clinical Trial

Description: A potential pool of eligible program participants is randomly assigned to participate or not participate in the program. Care should be taken to ensure that all participants – both in the treatment group (receiving program services) and in the control group – stay enrolled in the study for the entire period of data collection. All participant and outcome data (as described in the previous table) will be collected from both the treatment group and the control group at the same intervals, including at intake (participant demographic and socioeconomic backgrounds and outcome measures) and at program exit (or after a fixed period of time for the control group, roughly corresponding to the typical length of participation). The treated group should have all service and referral data continuously collected and recorded as well, and reasons for program exit should be documented for each participant and included as part of the program evaluation. Data would be analyzed to determine whether the program caused significant changes in the treated group, relative to the control group. Changes can also be examined to determine whether outcomes differ for different types of participants or those who use different combinations of services or receive more intense program dosages. Long- term outcome measures should be considered as an enhancement to end-of-program outcome reporting.

Analysis: This research design is costly and difficult to implement. In addition, any efforts to maintain high participation rates that would not be considered a regular program practice limit the generalizability of the study findings to the "real-world" program implementation. However, this remains the standard that is used by many funders and researchers as essential for demonstrating that a home visitation program is truly "evidence-based." It is also the only method that permits a program to say that it caused certain outcomes to occur among its participants. And the inclusion of long-term follow-up will satisfy concerns about lasting program impact.

Recommendation: A home visitation program should conduct an experimental evaluation study of this kind – or at minimum a quasi-experimental study (described below) – at least once to establish its credibility and effectiveness. After initial effectiveness is demonstrated in this way, subsequent studies at this level of rigor are recommended only when significant elements of the program or the populations it serves are modified extensively.

Highly rigorous: Non-equivalent comparison group study (next page)

Non-Equivalent Comparison Group Study

Description: Eligible program participants enroll in the program and three types of data (participant, service, and outcome data) are collected on the recommended schedule, in accordance with the descriptions in Figure 36. As with the randomized clinical trial, care should be taken to ensure that program participants stay enrolled in the study for the entire period of data collection to provide for an accurate look at program impact – and not just impact for those who stay enrolled for the full length of the program. This study design must include a comparison group as well, and two comparison group options are available: (1) recruitment of a non-randomly assigned group that meets the program eligibility criteria and agrees to complete the same data collection measures as the program participants; or (2) use of existing data from a similar community sample to establish benchmarks for any pre- and post-test outcome data that are collected from the program participants. Data collected with this design are again analyzed to look at pre-post changes in outcomes for the treatment versus comparison groups. Changes can also be examined to determine whether outcomes differ for different types of participants or those who use different combinations of services or receive more intense program dosages. Long-term (post-participation) follow-up is also an option for this design.

Analysis: This research design is almost as costly and difficult to implement as a randomized clinical trial, but less so if a comparison group is created using existing data. A caveat to that option is that it is often quite difficult to find existing data that is perfectly comparable to the measures being collected among program participants, so this comparison group option has limited feasibility. Also, as with the randomized clinical trial design, efforts to maintain high participation rates that would not be considered a regular program practice limit the generalizability of the study findings to the "real-world" program implementation.

Recommendation: As described above, a home visitation program should conduct an evaluation study of this kind or a randomized clinical trial at least once to establish its credibility and effectiveness. Given the additional benefits of a randomized clinical trial and the small difference in implementation challenges between this design and that one, it is perhaps more advisable to use the randomized design than this one if deciding between the two. Again, after initial effectiveness is demonstrated in one of these ways, subsequent studies at this level of rigor are recommended only when significant elements of the program or the populations it serves are modified extensively.

Moderately rigorous: Pre-Test Post-Test Design Study (next page)

Pre-Test Post-Test Design Study

Description: Participant, service, and outcome data are collected on all participants. At pre-test (intake), demographic and SES data and pre-test measures of outcomes are measured. Ongoing logs of services received and referrals made should be made continuously, at every program contact, for the length of program participation. At post-test (at program exit) outcome measures should again be assessed, and reasons for exit (completion, dropout, etc) should be logged for each participant. Changes from pre-test to post-test will be calculated, and changes can also be examined to determine whether different types of participants or those who use different combinations of services or receive more intense program dosages experience larger pre-post change. Longer-term follow-up – months or years after program participation – can be implemented as part of this design as well.

Analysis: This research design is clearly not as rigorous as the control and comparison group models; however, it is far superior to post-test only designs in that it allows for programs to quantify the amount of change that occurs among its participants over the course of their engagement with the program. This research design is a feasible ongoing measurement option that balances a moderate level of measurement rigor with the realities imposed by time, cost, and staff commitment to research. It is more feasible in programs that have an institutionalized culture of data collection, streamlined data entry procedures, and a user-friendly electronic database system.

Recommendation: This model of data collection for evaluation should be considered as the goal for Alameda County home visitation programs as a regular practice. Although it can be difficult for program staff to initially adopt practices associated with measurement of pre- and post-test outcomes, there are a number of steps that can be taken to make the transition for staff easier. In addition, the amount of data collected can be very little (only the most essential participant, service, and outcome data) or much more detailed (detailed and comprehensive measures of participants, services, and outcomes); programs can choose the amount of data they decide to collect depending on staff capacity, funder requirements, or other individual program considerations.

Less rigor: Post-test Only Design (next page)

Post-test Only Design (with Participant Data Collection)

Description: Participant, service, and outcome data are collected on all participants. Intake data are collected that include only demographic and socioeconomic characteristics of participants. Ongoing logs of services received and referrals made may or may not be kept; if they do, it is recommended that they be updated continuously, at every program contact, for the length of program participation. At post-test (at program exit) outcome measures would be assessed, and reasons for exit (completion, dropout, etc) should be logged for each participant. Changes in key outcomes are not able to be measured; instead data from a single timepoint (end-of-program) is used to describe potential program impact. Comparisons can also be made across participants from different demographic or socioeconomic backgrounds, or by comparing participants who use different combinations of services or receive more intense program dosages experience larger pre-post change. Longer-term follow-up – months or years after program participation – can be implemented as part of this design as well.

Analysis: This research design provides less information than the pre-test post-test design about how much participants have changed over the course of the program, but it does measure outcome data of interest, and these data can still be compared to desired benchmarks or population-level data. This research design is also more feasible than many others, particularly for programs that are just beginning to develop formal data collection protocols and systems.

Recommendation: This model of data collection for evaluation should be considered as a possible stepping-stone as Alameda County home visitation programs move toward county-wide implementation of pre-test post-test measures of desired program outcomes. This measurement option may be an easier starting point for increased data collection efforts, allowing program staff to become more comfortable with gathering and recording more data than they currently do. As with the pre-post design, the amount of data collected and entered can be varied (and scaled up over time), ranging from very little (only the most essential participant, service, and outcome data) to much more detailed (detailed and comprehensive measures of participants, services, and outcomes).

Very low rigor: Collecting Participant Data Only (next page)

Collection of Participant Data Only

Description: Only basic participant data are collected, typically at intake. The data usually include some level of demographic and socioeconomic information and, possibly, logs of services received and referrals made. Most programs who collect this data usually also have a closure form to track reasons for program exit (completion, dropout, etc.)

Analysis: Collection of these data allows programs to describe for funders the number and types of participants served, but the data cannot speak at all to the program's effectiveness.

Recommendation: Although this limited data collection often feels like the only model that program staff will support, there is very little to recommend for this model. Without some attention to gathering data about program outcomes, it is difficult to justify funding a home visitation program. Despite the challenges associated with increasing the amount and types of program data collected, it is strongly recommended that all programs move beyond this "bare bones" model of program measurement.

Appendix 1:

Taking a Closer Look at Individual Home Visitation Programs in Alameda County

In this section:

- Summaries of ten perinatal/early childhood home visitation programs in Alameda County
- Data "snapshots" describing program efforts and outcomes from each program's most recently completed fiscal year

Improving Pregnancy Outcomes Program

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Improving Pregnancy Outcomes Program (IPOP)	
Target population(s)	• Low income (below 200% FPL), African American pregnant, postpartum, and interconception/parenting women who are medically and socially at-risk • Geographic limitation: Must live in Oakland and Emeryville zip codes 94601, 94602, 94603, 94605, 94606, 94607, 94608, 94609, 94621 • African American fathers/male partners of women with a child 0-2.
Length of program participation	• Until child's second birthday • If mother becomes pregnant again, participation renews with new pregnancy as new case.
Program intensity	• Frequency of contact is once per month or more as agreed by case manager and client.
Core services provided	**Women:** • Public health nurses and community health outreach workers do home-based visiting that includes: o Medical case management o Information and referral to mental health services o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment o Health education • Parenting classes • Support groups • Transportation to medical visits • Provision of parenting supplies **Fathers/male partners:** • Boot Camp for New Dads, individual and group support, referrals, follow-up, and advocacy **Additional program activities** • Community education services • Club Mom, Community Baby Showers

Primary program outcomes expected	**Child health**
	• Reduced infant mortality
	• Improved birth outcomes
	  o Babies are born a healthy weight
	  o Babies are born full-term
	• Children are current on immunizations
	• Children have a medical home
	Maternal health
	• Have a medical home
	• Can advocate for own/family health care needs
	• Are linked to needed mental health supports
	• Delay subsequent births
	• Receive appropriate prenatal care
	• Reduce smoking and substance use

Secondary program outcomes expected	**Child development/school readiness** • Child is developmentally on target **Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home • Child is living with birth parents **Maternal health** • Reduced maternal depression • Increased health knowledge **Parenting skills/parent-child interactions** • Mothers/fathers have improved general knowledge of/behavior related to parenting **Economic self-sufficiency** • Complete high school • Are in school or working • Families are economically stable

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

<table>
<tr><th colspan="2">Improving Pregnancy Outcomes Program (IPOP)</th></tr>
<tr><td>Number of active clients FY 2009-10</td><td>

255 (188 pregnant; 66 non-pregnant) women; 246 children
35 participants in male support services
106 cases (42%) closed during the fiscal year (loss of follow-up, moved, completed)

</td></tr>
<tr><td>Key demographics of clients served</td><td>
Among all active clients

All African American, English-speaking
Number in each age group:

<table>
<tr><th>Age (Pregnant)</th><th>Age (Non-Pregnant)</th><th>Age of children</th></tr>
<tr><td>10—14yrs…..3</td><td>22—24yrs….31</td><td>0-11 mos…113</td></tr>
<tr><td>15—18yrs….25</td><td>25—29yrs….19</td><td>12-23 mos…77</td></tr>
<tr><td>19 yrs…….14</td><td>30—34yrs….12</td><td>24+ mos……42</td></tr>
<tr><td>20—24yrs…76</td><td>35—44yrs……3</td><td>Unknown……..4</td></tr>
<tr><td>25—34yrs…57</td><td>45—54yrs……0</td><td></td></tr>
<tr><td>35—44yrs…10</td><td>55—64yrs……0</td><td></td></tr>
<tr><td>45+yrs……..4</td><td>65+yrs……..1</td><td></td></tr>
</table>

Insurance: Medi-Cal = 86%; Healthy Families 0.4%; Private/Other = 7%; Other = 7%; None = 0.4%
Income (pregnant enrollees only): Below 100% FPL = 80%; Between 100-185% FPL = 5%; Between 185-200% FPL = 15%.

</td></tr>
<tr><td>Range and average length of participation</td><td>

Data not accessible at this time

</td></tr>
<tr><td>Range and average frequency of contact</td><td>

Data not accessible at this time

</td></tr>
<tr><td>Services provided</td><td>
Services provided (clients may have received assistance in more than one)
<table>
<tr><th>Service</th><th>Number Receiving</th></tr>
<tr><td>Referred for housing assistance</td><td>153</td></tr>
<tr><td>Assisted with Jobs/Jobs training</td><td>79</td></tr>
<tr><td>Interconceptional women receiving home visits</td><td>195</td></tr>
<tr><td>Parenting skill building/education</td><td>142</td></tr>
<tr><td>Transportation services</td><td>119</td></tr>
<tr><td>Breastfeeding education</td><td>130</td></tr>
<tr><td>Nutritional education</td><td>203</td></tr>
<tr><td>Screened for depression</td><td>255</td></tr>
</table>
</td></tr>
</table>

Outcomes achieved	**Child health** • 0 cases of infant deaths in last FY. From 6/1/2005 – 5/31/2010, there were 2 infant deaths out of 429 served • 4% (3 of 78) of births were very low birth weight • 6% (5 of 78) of births were low birth weight • 90% (70 of 78) of births were normal birth weight • 86% of infants/children had a known medical home **Maternal health** • 94% of women had a known medical home • 74% of pregnant women began prenatal care in first trimester; 21% began prenatal care in second trimester; 3% began prenatal care in third trimester; 1% had no prenatal care.

FINDINGS FROM OTHER REPORTS

- Data from 1/1/2009 to 12/31/2009 revealed that of those who received **Edinburgh depression screens:**
    - 12% of postpartum depression screens were positive;
    - 18% of pregnancy depression screens were positive.

Black Infant Health Program

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Black Infant Health Program (BIH)	
Target population(s)	• Low income African American pregnant or parenting women who are medically and socially at-risk • African American fathers/male partners of women with a child 0-1. • Children up to 1 year old.
Length of program participation	• Until child's first birthday.
Program intensity	• Frequency of contact is once per month or more
Core services provided	**Women:** • Public health nurses and community health outreach workers do home-based visiting that includes: o Medical case management o Information and referral to mental health services o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment o Health education • Classes in: o Health education o Parenting o Life skills • Support groups • Transportation to medical visits • Provision of parenting supplies **Children:** • Medical case management • Developmental screening **Fathers/male partners:** • Case management, information and referral, parenting and health education • Support groups **Additional program activities** • Community education services

Primary program outcomes expected	**Child health**
	• Reduced infant mortality
	• Improved birth outcomes
	  o Babies are born a healthy weight
	  o Babies are born full-term
	• Children are current on immunizations
	• Children have a medical home
	Maternal health
	• Have a medical home
	• Can advocate for own/family health care needs
	• Are linked to needed mental health supports
	• Delay subsequent births
	• Receive appropriate prenatal care

Secondary program outcomes expected	**Child development/school readiness** • Child is developmentally on target **Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home • Child is living with birth parents **Maternal health** • Reduced maternal depression • Increased health knowledge **Parenting skills/parent-child interactions** • Mothers/fathers have improved general knowledge of/behavior related to parenting **Economic self-sufficiency** • Complete high school • Are in school or working • Families are economically stable

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Black Infant Health Program (BIH)	
Number of active clients FY 2009-10	• 193 women (106 continuing cases; 87 new cases) • 87 cases (45%) closed during the fiscal year (52 unable to locate, 27 completed, 4 moved, 3 no longer eligible, 1 other reason)
Key demographics of clients served	Among all new clients: • All African American, English-speaking • Age range was 16-39; average age = 23.6 years old • Insurance: Medi-Cal = 94.0%; Other = 6.0% • Income sources: Aid to Families with Dependent Children 27.7%; Employment 26.5%; Parent/partner 3.6%; Other/unknown 25.3%; None 16.9%; Unknown 4.6% • Perinatal status at entry: Pregnant 1st trimester 16.3%; pregnant 2nd trimester 44.2%; pregnant 3rd trimester 25.6%; postpartum 14%; unknown 1%
Range and average length of participation	• Data not accessible at this time
Range and average frequency of contact	Among all new clients • Total visits = 1,607 • Average number of visits per client = 18.5
Services provided	Referrals provided to new clients (clients may have received assistance in more than one) Referral — Number receiving Childbirth education — 1 High risk pregnancy — 1 Prenatal care — 20 WIC (prenatal) — 37 PHN — 31 WIC (child) — 1 Medical — 2 Disability — 1 Food — 2 Housing/Shelter — 3 Parenting — 1 Postpartum depression — 15

Outcomes achieved	**Child health** • 0 cases of infant deaths in last FY. From 2005-2010, there was 1 infant deaths out of 349 served • 93% of births were normal birth weight • 90% were full-term at birth • 96% were current on immunizations • 82% of infants/children had a known medical home **Child development/school readiness** • 99% were developmentally on target (Denver Developmental) **Child maltreatment/exposure to violence** • 98% have no maltreatment allegations **Maternal health** • 96% had a known medical home • 79% had first trimester prenatal care

Maternal Access and Linkages for Desired Reproductive Health Program (MADRE)

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Maternal Access and Linkages for Desired Reproductive Health Program (MADRE)	
Target population(s)	• Hispanic/Latina women with a history of fetal/infant loss, pregnancy with terminal fetal diagnosis, history low birth weight or preterm delivery
Length of program participation	• Up to one year after the loss of a pregnancy (longer if medically warranted) • Pregnancy during program extends/renews participation for up to one year post-birth
Program intensity	• Once a week to once or more per month, depending on client needs
Core services provided	**Women:** • Medical Social Worker and community health outreach worker do field visits that include: o Administrative medical case management o Information, referral, and linkage to mental health, health, and/or dental services o Information and referral to social services o Assistance with Medi-Cal and other health/financial benefits enrollment for self, children o Health education o Consultation with medical/health providers o Accompanying clients to health appointments • Support groups • Transportation to medical visits • Translation services for medical visits • Provision of clothing, food supplies **Children:** • Administrative medical case management • Information and referral to qualifying benefits • Consultation with child's medical/health providers **Additional program activities** • Community outreach • Dia de los Muertos • Education, referrals, advocacy, linkages for fathers

Primary program outcomes expected	**Child health**
	• Reduced infant mortality
	• Improved birth outcomes
	  o Babies are born a healthy weight
	  o Babies are born full-term
	• Has a medical home
	Maternal health
	• Have a medical home
	• Can advocate for own/family health care needs
	• Are linked to needed mental health supports
	• Receive appropriate medical and prenatal care
	• Have increased health knowledge and increased understanding of how to have a healthy pregnancy

Secondary program outcomes expected	**Child health** • Child is current on immunizations **Child development/school readiness** • Child is developmentally on target **Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home • Child is living with birth parents **Parenting skills/parent-child interactions** • Mothers/fathers have improved general knowledge of/behavior related to parenting **Economic self-sufficiency** • Are in school or working • Families are economically stable

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Maternal Access and Linkages for Desired Reproductive Health Program (MADRE)	
Number of active clients FY 2009-10	• 62 clients served total with administrative medical case management • 16 cases (26%) closed during fiscal year; 46 were active at end of fiscal year
Key demographics of clients served	• Data not accessible
Range and average length of participation	• Data not accessible

Range and average frequency of contact	• Data not accessible
Services provided	• Complete data not accessible; a total of 127 referrals were made to clients for health care coverage for client or family members: 1 Healthy Families, 73 Medi-Cal, 53 no/low costs insurance
Outcomes achieved	(Based on data collected on "Case Closure" form; i.e., for closed cases only, possible n=16) **Child health** • 91% of children had a medical home and had wellness exams (10 of 11 for whom applicable); 9% unknown (1 of 11) • 64% of children had immunizations (7 of 11 for whom applicable); 36% unknown **Maternal health** • 100% of women had a medical home (16 of 16)

Perinatal Hepatitis B and Other Communicable Diseases Program (Hep-B)

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Perinatal Hepatitis B and Other Communicable Diseases Program (Hep-B)	
Target population(s)	• Pregnant women who are Hepatitis B positive
Length of program participation	• Pregnancy to 12 -18 months post-birth, when post-vaccine serology is complete
Program intensity	• One home visit prior to delivery • Caseworker phone contact immediately after delivery
Core services provided	**Women:** • Public health nurse and public health investigators do home-based visiting that includes: o Health education, specifically related to Hepatitis B and issues related to birth and transmission to baby o Medical case management o Information and referral to mental health services o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment • Provision of parenting supplies **Children:** • Medical case management • Information and referral to qualifying benefits **Additional program activities** • Education of medical community about Hep B • Referrals for household and sexual contacts of participants

Primary program outcomes expected	**Child health** • Children have a medical home • Newborns receive Hepatitis B vaccine, Hep B Immune Globulin, and full Hep-B vaccine series • Children are Hep-B negative **Maternal health** • Women have increased knowledge regarding: o Hepatitis B and its health implications o Infant's Hep-B-related medical needs post-birth • Have a medical home • Can advocate for own/family health care needs • Are linked to needed mental health supports
Secondary program outcomes expected	**Child health** • Child is born a health weight • Child has a medical home **Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home • Child is living with birth parents **Maternal health** • Engages in healthier behavior related to transmission of Hep B

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Perinatal Hepatitis B and Other Communicable Diseases Program (Hep-B)	
Number of active clients FY 2009-10	• 254 (187 of those were opened during FY 09-10) • 53 cases closed during FY 09-10
Key demographics of clients served	Among cases opened in FY 09-10 • 79% Asian Pacific Islander; 7% Latina; 4% African American ; 2% African immigrants; 1% White; 7% Unknown • Breakdown for Asian/Pacific Islanders: 53% Chinese; 19% Vietnamese; 5% Filipino; 5% Indian; 2% Korean; 2% Pacific Islanders; 2% Mongolian; 7% unknown • Of Chinese participants, 79% speak Chinese as their primary language • Of Vietnamese participants, 34% speak Vietnamese as their primary language • Of Latina participants, 69% speak Spanish as their primary language • 30% of participants are Medi-Cal eligible

Range and average length of participation	• 28% percent of cases were complete in less than or up to twelve months.
Range and average frequency of contact	• Not applicable – one home visit only per participant
Services provided	Among cases opened in FY 09-10 • Caseworkers contacted the patient/health care provider/delivery hospital within 72 hours 96% of the time. • 93% of HBsAg positive moms eligible for a home visit received one during the 2009-10 fiscal year.
Outcomes achieved	• 100% of cases closed that completed post vaccine serology were HBsAg negative (not infected with the Hepatitis B Virus) and had a positive Hepatitis B Surface Antibody (Anti-HBs), meaning they had immunity to the Hepatitis B virus.

Public Health Nursing

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Public Health Nursing	
Target population(s)	• Pregnant or parenting women who are medically and socially at-risk (focus for this report includes programs MCAH and Sudden Infant Death Syndrome; does not include cases referred through Child Health and Disability Prevention Program)
Length of program participation	• Most: 1-3 months. 20% - up to 9 months or longer
Program intensity	• Frequency of contact is once or twice per month
Core services provided	**Women:** • Public health nurses do home-based visiting that includes: o Medical case management o Information and referral to mental health services o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment o Health education o Direct provision of health care services • Connection to: o Classes in life skills, completing education o Support groups • Transportation and accompaniment to medical visits **Children:** • Medical case management • Developmental screening and referrals

Primary program outcomes expected	**Child health** • Children have a medical home • Children are current on immunizations **Maternal health** • Women have a medical home • Women can advocate for own/family health care needs • Are linked to needed mental health supports • Women know their own health status and can manage/control any chronic health conditions • Women have increased knowledge about children's health • Women are not abusing alcohol or drugs
Secondary program outcomes expected	**Child development/school readiness** • Child is developmentally on target **Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home • Child is living with birth parents **Maternal health** • Reduced maternal depression • Delay subsequent births

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Public Health Nursing	
Number of active clients FY 2009-10	• 333 continuing cases at start of FY • 1410 cases opened during FY • 1743 total active cases during FY
Key demographics of clients served	Among all active cases: • 66% Hispanic; 8% African American; 3% Caucasian; 8% Asian; <1% Pacific Islander; 12% multi-race; 3% other • 45% are Spanish speaking; 47% English; 1% Mandarin or Cantonese; 1% Southeast Asian; < 1% Tagalog • Average age: 26 years old • Almost all families were insured at first visit (99.8%) • 6% of children were of low birth weight; none were very low birth weight
Range and average length of participation	Among completed/closed cases: • Range = 0-1,022 days • Average = 76 days

Range and average frequency of contact	Among completed/closed cases: • Range = 0-22 visits • Average = 2.06 visits
Services provided	• Data not available
Outcomes achieved	**1240 cases closed during the FY (71% of all active cases).** • No outcome data are available

Pregnant and Parenting Teen Program

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Pregnant and Parenting Teen Program	
Target population(s)	• Pregnant and parenting teens, or parenting young adults up to 25 and their infant children.
Length of program participation	• Depends on agency: Two years or more; through age 25 or child is 0-5
Program intensity	• Frequency of contact is twice per month
Core services provided	**Teens/Women:** • Home visits include: o Support for staying in school/completing high school o Information and referral to mental health services, or direct provision of services if acute issues o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment o General health, prenatal, and postnatal education o Psycho-educational curriculum: teaching parent-child bonding, child development (social, emotional, physical) • Connection to: o Classes in life skills, completing education o Support groups • Transportation and accompaniment to medical visits • Provision of parenting supplies **Children:** • Developmental screening and referrals **Fathers/male partners:** • Case management, information and referral, parenting and health education **Additional program activities** • Yearly graduation ceremony for those completing HS, GED, vocational school • Yearly holiday party with dinner, toys for children

Primary program outcomes expected	**Child health** • Children are current on immunizations • Children have a medical home **Child development/school readiness** • Children are developmentally on target **Child maltreatment/exposure to violence** • Child is not exposed to violence in the home **Maternal health** • Have a medical home • Can advocate for own/family health care needs • Are linked to needed mental health supports • Reduced maternal depression • Delay subsequent births • Engage in health behavior; i.e., breastfeed, sexual health, birth control • Have increased knowledge of birth control and STI's (BB) **Parenting skills/Parent-child interactions** • Mothers/fathers learn about child development and practices that promote bonding **Economic self-sufficiency** • Finish high school • Are employed or in school • Are economically stable
Secondary program outcomes expected	**Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is living with birth parents **Parenting skills/parent-child interactions** • Mothers/fathers have improved general knowledge of/behavior related to parenting

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Pregnant and Parenting Teen Program	
Number of active clients FY 2009-10	• 244 continuing cases at start of FY • 306 new cases opened during FY • 550 total active cases in FY

Key demographics of clients served	Among all active cases • 74% Hispanic; 17% African American; <1% Caucasian; 2% Asian/Pacific Islander • 22% are Spanish speaking • 71% of mothers are not employed; 21% of fathers are not employed • The average client is 17 years old; ages ranged from 12.6 to 29.9 years (sd=1.5) • 32% of respondents are either in CalWorks or CalLearn programs • All families were insured at first visit • 3% have children with special needs • 4% of mothers had premature deliveries • 3% of mothers smoked during pregnancy; 2% of mothers were substance users during pregnancy
Range and average length of participation	Among completed/closed cases • Range = 0-2,405 days • Average = 337 days (about 11 months)
Range and average frequency of contact	Among completed/closed cases • Range = 0-20 visits • Average = 4.3 visits
Services received	Among completed/closed cases • 69% were screened for depression (23% screened positive) • 0% received referrals for smoking cessation + • 1% received referrals for substance abuse + • 73% received books • 46% of children received developmental screens

Outcomes achieved	**233 cases closed during the FY (42% of all active cases).** **Outcomes for completed /closed cases:** **Child health** • 98% of children have a primary pediatrician; 97% have had appropriate well child visits • 98% are current on immunizations • 8% were exposed to secondhand smoke **Child development/school readiness** • 44% of children demonstrated no concerns in ASQ screens **Child maltreatment/exposure to violence** • CPS cases opened for 3% of families during the reporting period • 2% of families had a child placed in foster care during the reporting period **Maternal health** • 7% were smoking at the last visit • <1% were using substances at last visit • 46% who had a child 1+ years old had breastfed for more than 6 months **Parenting skills/parent-child interactions** • 90% of families read to their children daily **Economic self-sufficiency** • 65% of teens were in school or graduated at last visit • 39% were employed

Note: + indicates percentages that are based on 50% or fewer of the total cases.

Your Family Counts

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Your Family Counts	
Target population(s)	• Medically and socially high-risk pregnant and parenting women and their infant children
Length of program participation	• One year post-birth
Program intensity	• Frequency of contact ranges from once per week to twice per month
Core services provided	**Women:** • Home visits from multi-disciplinary team include: o Medical case management o Information and referral to mental health services, or direct provision of services if acute issues o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment o General health education • Connection to: o Classes in life skills, completing education, parenting classes o Support groups • Transportation and accompaniment to medical visits • Provision of basic needs **Children:** • Medical case management • Developmental screening and referrals **Additional program activities** • Parenting events, car seat training and free car seats if qualified

Primary program outcomes expected	**Child health** • Children are current on immunizations • Children have a medical home **Child development/school readiness** • Children are developmentally on target **Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home • Child is living with birth parents **Maternal health** • Have a medical home • Can advocate for own/family health care needs • Are linked to needed mental health supports • Reduced maternal depression **Economic self-sufficiency** • Families are economically stable
Secondary program outcomes expected	**Maternal health** • Delay subsequent births • Are breastfeeding • Have increased health knowledge **Parenting skills/parent-child interactions** • Mothers/fathers have improved general knowledge of/behavior related to parenting **Economic self-sufficiency** • Are in school or working

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Your Family Counts	
Number of active clients FY 2009-10	• 98 continuing cases at start of FY • 192 new cases opened during FY • 290 total active cases in FY
Key demographics of clients served	Among all active cases: • 46% Hispanic; 34% African American; 4% Caucasian; 10% Asian/Pacific Islander; <1% Native American • 32% are Spanish speaking • 6% of mothers were teens at the birth of their child • 74% of mothers are not employed; 32% of fathers are not employed • 32% of respondents are either in CalWorks or CalLearn programs • 99% of families were insured at first visit • 46% have children with special needs • 13% of mothers had premature deliveries • 6% of mothers smoked during pregnancy; 8% of mothers were substance users during pregnancy
Range and average length of participation	Among completed/closed cases: • Range = 0-729 days • Average = 178 days (about 6 months)
Range and average frequency of contact	Among completed/closed cases: • Range = 0-33 visits • Average = 4.8 visits
Services received	Among completed/closed cases: • 69% were screened for depression (55% screened positive) • 4% received referrals for smoking cessation + • 12% received referrals for substance abuse + • 77% received books • 7% received support from a child development specialist • 35% received support from a lactation specialist • 57% of children received developmental screens

Outcomes achieved	**171 cases closed during the FY (59% of all active cases).** **Outcomes for completed /closed cases:** **Child health** • 99% of children have a primary pediatrician; 92% have had appropriate well child visits • 94% have current immunizations • 4% were exposed to secondhand smoke **Child development/school readiness** • 42% of children demonstrated no concerns on ASQ screens **Child maltreatment/exposure to violence** • CPS cases opened for 5% of families during the reporting period • 2% of families had a child placed in foster care during the reporting period **Maternal health** • 8% were smoking at the last visit • 2% were using substances at last visit • 46% who had a child 1+ years old had breastfed for more than 6 months **Parenting skills/parent-child interactions** • 71% of families read to their children daily

Note: + indicates percentages that are based on 50% or fewer of the total cases.

Special Start

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Special Start	
Target population(s)	• NICU infants with extreme medical and social risk
Length of program participation	• Two years post-birth (up to 3 years in most extreme cases)
Program intensity	• Frequency of contact ranges from once per week to twice per month
Core services provided	**Women:** • Home visits from multi-disciplinary team include: o Medical case management o Information and referral to mental health services, or direct provision of services if acute issues o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment o General health education • Connection to: o Classes in life skills, completing education, parenting classes o Support groups • Transportation and accompaniment to medical visits • Provision of basic needs **Children:** • Medical case management • Developmental screening and referrals **Additional program activities** • Car seat training and free car seats if qualified • Follow-up in foster care placement as applicable

Primary program outcomes expected	**Child health** • Children are current on immunizations • Children have a medical home **Child development/school readiness** • Children are developmentally on target **Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home • Child is living with birth parents **Maternal health** • Have a medical home • Can advocate for own/family health care needs • Are linked to needed mental health supports • Reduced maternal depression • Delay subsequent births **Economic self-sufficiency** • Families are economically stable
Secondary program outcomes expected	**Maternal health** • Are breastfeeding • Have Increased health knowledge **Parenting skills/parent-child interactions** • Mothers/fathers have improved general knowledge of/behavior related to parenting

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Special Start	
Number of active clients FY 2009-10	• 353 continuing cases at start of FY • 327 new cases opened during FY • 680 total active cases in FY
Key demographics of clients served	Among all active cases: • 48% Hispanic; 25% African American; 10% Caucasian; 9% Asian/Pacific Islander; 5% multi-race • 25% are Spanish speaking • 11% of mothers were teens at the birth of their child • 71% of mothers are not employed; 27% of fathers are not employed • 24% of respondents are either in CalWorks or CalLearn programs • 95% of families were insured at first visit • 46% have children with special needs • 81% of mothers had premature deliveries • 7% of mothers smoked during pregnancy; 10% of mothers were substance users during pregnancy
Range and average length of participation	Among completed/closed cases: • Range = 0-1,301 days • Average = 392 days (about 13 months)
Range and average frequency of contact	Among completed/closed cases: • Range = 0-53 visits • Average = 6 visits
Services received	Among completed/closed cases: • 84% were screened for depression (17% screened positive) • 15% received referrals for smoking cessation + • 11% received referrals for substance abuse + • 91% received books • 67% of children received developmental screens

Outcomes achieved	**280 cases closed during the FY (41% of all active cases).** **Outcomes for completed /closed cases:** **Child health** • 100% of children have a primary pediatrician; 97% have had appropriate well child visits • 98% have current immunizations • 7% were exposed to secondhand smoke **Child development/school readiness** • 17% of children demonstrated no concerns in ASQ screens **Child maltreatment/exposure to violence** • CPS cases opened for 3% of families during the reporting period • 2% of families had a child placed in foster care during the reporting period **Maternal health** • 6% were smoking at the last visit • 2% were using substances at last visit • 54% who had a child 1+ years old had breastfed for more than 6 months **Parenting skills/parent-child interactions** • 89% of families read to their children daily

Note: + indicates percentages that are based on 50% or fewer of the total cases.

Another Road to Safety

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Another Road to Safety	
Target population(s)	• Path 2 Child Protective Services families with a child 0-5 (have an open case). • Families must show need for financial or social assistance that they are currently not receiving. Limited to cases with no active domestic violence or substance abuse, no weapons in initial CPS report, no uncontrolled mental illness. • Geographic limitation: Must live in certain county areas: East Oakland, West Oakland, and South Hayward.
Length of program participation	• 6-9 months. At 6 months, there may be an extension granted for 1, 2, or 3 months based on written request
Program intensity	• Frequency of contact is once per week (some contacts by phone)
Core services provided	**Women:** • Home visits include: o Information and referral to mental health services, as indicated by screening, or direct provision of services if acute issues o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment • Connection to: o Classes in life skills, completing education o Support groups • Transportation and accompaniment to medical visits • Provision of basic needs **Children:** • Developmental screening and referrals **Fathers/male partners (as part of family services):** • Case management, information and referral, parenting and health education
Primary program outcomes expected	**Child maltreatment/exposure to violence** • Delay or prevention of subsequent allegations/substantiation • Children are not exposed to violence in the home • Children and parents are living together in a safe environment

Secondary program outcomes expected	**Child health** • Child is current on immunizations • Child has a medical home **Child development/school readiness** • Child is developmentally on target **Maternal health** • Can advocate for own/family health care needs • Are linked to needed mental health supports • Reduced maternal depression **Parenting skills/parent-child interactions** • Mothers/fathers have improved general knowledge of/behavior related to parenting **Economic self-sufficiency** • Families are economically stable

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Another Road to Safety	
Number of active clients FY 2009-10	• 113 continuing cases at start of FY • 228 cases opened during FY • 341 total active cases during FY
Key demographics of clients served	Among all active cases: • 49% Hispanic; 37% African American; 5% Caucasian; 3% Asian; <1 % Pacific Islander; 4% multi-race; 2% other • 10% of mothers spoke Spanish; 90% English + • Age: average age of child = 8.35 yrs; average age of mother = 32.93 • 64% of respondents are in CalWorks • 99% of families were insured at first visit + • 17% have children with special needs + • 4% of mothers smoked during pregnancy; 3% of mothers were substance users during pregnancy
Range and average length of participation	Among completed/closed cases: • Range = 0-644 days • Average = 200 days (about 6.5 months)
Range and average frequency of contact	Among completed/closed cases: • Range = 0-110 visits • Average = 14 visits

Services received	Among completed/closed cases: • 69% were screened for depression (of those 59% screened positive) • 7% were referred for smoking cessation • 5% received referrals for substance abuse + • 79% received books
Outcomes achieved	**216 cases closed during the FY (64% of all active cases).** **Outcomes for completed/closed cases:** **Child health** • 99.4% of children have a primary pediatrician; 97% have had appropriate well child visits + • 99% are current on immunizations • 7% were exposed to second-hand smoke at last visit + **Child maltreatment/exposure to violence** • New CPS cases opened for 11% of families during the reporting period • 1% of families had a child placed in foster care during the reporting period **Maternal health** • 15% of mothers were smoking at the last visit • 5% were using substances **Parenting skills/parent-child interactions** • 75% of families read to their children daily + **Economic self-sufficiency** • 57% of families have at least one employed parent **Other** • 38% of families had a final family risk level of "high" or "very high."

Note: + indicates percentages that are based on 50% or fewer of the total cases.

Homeless Families Program

PROGRAM DESCRIPTION: WHAT DOES THIS PROGRAM DO?

Homeless Families Program	
Target population(s)	• Homeless families with a child under 18
Length of program participation	• Up to 2 years. Final 6 months of services occur after family has secured permanent housing.
Program intensity	• In emergency housing – at least twice per week • In transitional housing – at least twice per month • In permanent housing – at least once per month
Core services provided	• Visits from case managers include: o Assistance in securing housing (emergency, transitional, permanent) o Assistance with medical care needs o Information and referral to mental health services, or direct provision of services if acute issues o Information and referral to social services o Assistance with Medi-Cal and other benefits enrollment o General health education and life skills • Connection to resources for: o Employment resources o Child care o Basic needs (food) • Transportation

Primary program outcomes expected	**Child health** • Child has a medical home • Child is current on immunizations **Child development/school readiness** • Child is on target developmentally and school-ready • Child attends school • Child is performing well at school. **Child maltreatment/exposure to violence** • Child(ren) live with parents **Maternal health** • Have a medical home • Are linked to needed mental health supports • Engage in healthier behavior • Have increased health knowledge **Parenting skills/parent-child interactions** • Children and parents have strong relationship **Economic self-sufficiency** • Are in school or working • Families are economically stable • Families are in permanent housing
Secondary program outcomes expected	**Child maltreatment/exposure to violence** • Reduced maltreatment allegations/substantiations • Child is not exposed to violence in the home **Maternal health** • Can advocate for own/family health care needs • Delay subsequent births

PROGRAM DATA: WHAT ARE THE DOCUMENTED PROGRAM EFFORTS AND OUTCOMES?

Homeless Families Program

Number of active clients FY 2009-10

- 13 clients (families) at start of FY
- 12 new clients began in last FY
- 25 total active clients

Key demographics of clients served

Among new clients (n = 12)

- 25% Latino (n = 3); 75% non-Latino
- 75% African-American (n = 9); 17% White- multi-racial (2); 8% Native American (1)
- 33% were in domestic violence situation (n = 4)
- 0% had: mental illness, substance abuse, HIV/AIDS, developmental or physical disability

Range and average length of participation

Among closed cases (n = 11 families/12 adults)

Time in pgm	# of clients	Time in pgm	# of clients
< 1 mo.	1	7-12 mos.	2
1-2 mos.	2	13-24 mos.	4
3-6 mos.	1	25-36 mos.	2

Range and average frequency of contact

- Data not available

Services received

Among closed cases (n = 12 adults in 11 families)

Services	# of clients	Services	# of clients
Outreach	12	Legal	2
Case management	12	Alcohol or drug abuse services	1
Life skills	8	Other health care	1
Transportation	6	Education	1
Mental health services	4	Employment assistance	1
Housing placement	4		

Outcomes achieved

11 of 25 cases (families) closed during FY (44% of all active cases)

Outcomes for completed/closed cases:

Economic self-sufficiency

- 33% (n = 4) had employment from income; 17% (n =2) had no financial resources.
- 92% had some amount of income
- 33% had permanent housing at program exit

- Monthly income (among closed cases; n = 12 adults in 11 families)

	At entry	At exit
No income	2	1
$1-150	0	1
$151-250	1	1
$251-500	1	1
$501-1,000	7	7
$1,001-1,500	1	1
$1,500+	0	0

- Housing status (among closed cases; n = 12 adults in 11 families)

	Number
Permanent housing	4
Transitional housing for homeless	4
Moved in with family or friends	2
Unknown	2

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