FIRST 5 SACRAMENTO COMMISSION
2750 Gateway Oaks Dr., Suite 330
Sacramento, CA 95833

THIS MEETING IS HELD VIA TELECONFERENCE/WEBINAR DUE TO COVID 19 RESTRICTIONS

Computer Link:
https://saccounty-net.zoomgov.com/j/1603606989?pwd=ZEFVR2VrZWc3ZThWU1lMTHYrNnZLQT09

Meeting ID: 160 360 6989
Passcode: 747982
Call-in: 1.669.254.5252

EVALUATION COMMITTEE

AGENDA

Monday, October 18, 2021 – 1:00 PM to 3:00 PM

Members: Steve Wirtz (Chair), David Gordon (Vice Chair), Olivia Kasirye
Advisory Committee Member(s): Emily Bowen, Robin Blanks
Staff: Julie Gallelo, Carmen Garcia-Gomez
Consultant: Applied Survey Research

1. Call to order and Roll Call
2. Public Comments on Off-Agenda Items
3. Approve Draft Action Summary of July 19, 2021
4. Staff Update
5. General Evaluation Update - Applied Survey Research
6. Approve: 2022 Evaluation Meeting Calendar
7. Review and Approve: CalWORKs Home Visiting Special Study
8. Review and Approve: Reducing African American Children Death Report
9. Committee Member Comments
    a. Miscellaneous
    b. Future Agenda Items/Presentations

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EVALUATION COMMITTEE

ACTION SUMMARY

Monday, July 19, 2021 – 1:00 PM - 3:00 PM

Members: Steve Wirtz (Chair), David Gordon (Vice Chair), Olivia Kasirye
Advisory Committee Member(s): Emily Bowen, Robin Blanks
Staff: Julie Gallelo, Carmen Garcia-Gomez
Absent: No one
Consultant: Applied Survey Research

This meeting took place via Zoom due to Covid-19 restrictions and to adhere to the County's policy on social distancing.

1. Call to order and Roll Call
   Action: Meeting was called to order at 1:01 PM. A quorum was established.

2. Public Comments on Off-Agenda Items
   Action: None.

3. Approve Draft Action Summary of May 17, 2021
   Action, approved with edits: Blanks/Wirtz.
   Make a change to the top of page 3 on the DAS, "ASR confirmed that staff collaborated with HMG to develop the proposal."

4. Staff Update
   Action: None.
   Unite Us Referral Portal: Staff provided an update on the Unite Us Referral Portal, ASR and First 5 staff met with Unite Us to discuss data exports. Data will be available in aggregate form from each contractor and as a whole for the First 5 funded agencies. Unite Us is verifying the level engagement of each contractor. Chair S. Wirtz asked whether the referral portals (both Persimmony and Unite Us) will integrate into the system. First 5 staff explained that Unite Us users will need to also enter the service data into Persimmony.

   Persimmony Update: First 5 staff explained the process for transitioning into the new application interface and training of data entry staff to begin using the new interface beginning July 20th.

5. General Evaluation Update – Applied Survey Research
   Action: None.

ASR staff introduced Alyssa Mullins a new member of the evaluation team. ASR provided an update on the evaluation activities that took place during the month of June. Activities included completing the Help Me Grow special study and developing the CalWORKs special study proposal. ASR staff also provided details of the activities shared on the timeline.

6. Review and Approve: Help Me Grow (HMG) Special Study
   Action: Blanks/Bowen

   ASR staff presented the HMG Special Study. ASR looked at the HMG system as a whole, interviewing key personnel and clients. ASR presented findings and recommendations.

   R. Blanks asked whether there is a caseload standard per advocate. ASR explained that, that wasn't part of the study however, a follow-up would be done to find the answer.

   Chair S. Wirtz expressed that the study was very well conducted and hopes that the information is used in an effective way. One recommendation that stood out is that when doing outreach, the outreach is aligned with program capacity.

   Chair S. Wirtz also asked if the HMG staff had feedback and/or comments on the study. ASR explained that HMG staff provided comments and the feedback was incorporated into the study.

   HMG staff, Christine Smith shared the collaborative effort and how the staff will use the study as next steps in the new fiscal year. Christine also answered the question regarding caseload explaining background on how the referrals come into the program and the needs of the family. The length of time families remain in the program varies depending on the needs. Advocates typically have a caseload of about 10 families.

   J. Gallelo shared whether if by Unite Us being implemented in Sacramento, if it would improve the communication as it relates to referrals. J. Gallelo asked if the web outreach/marketing campaign should continue.

   HMG staff, Christine Smith informed the committee that they are exploring Unite Us and other resources. She will also check in with staff to determine if the web ads should resume.

7. Review and Approve CalWORKs Special Study Proposal
   Action: Wirtz/Blanks

   ASR staff presented the CalWORKs Family Support Initiative (same as the CalWORKs Home Visitation Program) special study proposal. The study will focus on the process of the program in order to catch any problem closer to the implementation of the program. The program is fairly new, only having been implemented in April 2019.

   Chair S. Wirtz asked if whether the program itself has current standards for success and how it's being integrated into the current data system (Persimmony).

ASR staff explained that the study will look at the protocol of success for example, time of receiving the referral to opening the referral. The study will not look at outcome data. Also, looking at gaps in data and how to address that.

Chair S. Wirtz clarified if there are specific measurements in place to measure program outcome and how that data will be integrated into Persimmony.

First 5 staff, C. Garcia-Gomez explained that the two curriculums being used have assessment requirements and are set up in Persimmony as assessments.

Program staff, Stephanie Biegler shared the need for this study to include conversations with DHA. She also expressed the need to look at systems change, how are we changing systems so that we can improve family linkages. In addition, she expressed concerns with the timeline of the study because of the limitations of the HFA curriculum. Recommended, waiting until PAT is implemented.

ASR staff shared that the study was meant to be done sooner rather than later to make improvements prior to the implementation to a new curriculum.

Chair S. Wirtz added the need to do the study in phases.

J. Gallelo shared that the study will provide her an opportunity to engage DHA in conversation about what's going well and what's not going well.

O. Kasirye expressed her concern with the timing because programs are not operating at full capacity.

First 5 staff explained that the evaluation team will not be doing outcome evaluation but rather process evaluation in order to implement and make improvements. There is also an opportunity to do a follow-up or phase 2 evaluation.

8. Review and Approve Birth and Beyond AmeriCorps QED Proposal
   Action: Wirtz/Blanks

   ASR staff presented the Birth and Beyond AmeriCorps QED proposal. This study is a more in-depth look than what is typically done for the First 5 Sacramento evaluation.

   Program staff, Stephanie Biegler explained that the study is funded by The Corporation for National and Community Service that requires external evaluation and a QED every 3 years for re-compete. She thanked the evaluation team and First 5 Sacramento. The previous evaluation launched the cultural responsiveness initiative because they learned some things that provided an opportunity for changes and improvements.

9. Receive: Tableau Dashboards
   Action: None.

   ASR staff presented the Tableau Dashboards which will be embedded into the First 5 Sacramento website. The dashboards will include annual data as presented in the evaluation report.

10. Review and Approve RAACD Report Outline
    Action: Minor change to the outline, staff will ask committee members for input.

    Chair S. Wirtz expressed that this outline may not need to be reviewed at this time.

    Commission staff explained that only one change had been made and thus why it was brought forward.

11. Committee Member Comments
    a. Miscellaneous
    b. Future Agenda Items/Presentations

Adjourned: 3:11 p.m.

Respectfully submitted,

Carmen Garcia-Gomez, Evaluation Manager
First 5 Sacramento Commission

Summary of Evaluation Activities for First 5 Sacramento

Oct 2021

Strategy	Task
RAACD	– Completed first draft of report – Partners reviewed and provided feedback on relevant sections – Waiting for CDRT data (sleep-related deaths countywide)
First 5 CA Report	– Created summary of highlights (AR-3)
Annual Report	– In process of pulling data from Persimmony
CalWORKs Special Study	– Interviewed CAPC Staff (5), DHA Staff (6) – Accessed Persimmony Data – Completed report draft – Received feedback from First 5 and CAPC leadership – Waiting for DHA leadership feedback and additional wording clarifications from CAPC
COVID-Funded Partners Follow-Up Survey	– Collected and analyzed responses – Completed draft of report – Received feedback from First 5 – Finalized Report

Timeline

	Oct	Nov	Dec	Jan	Feb	Mar
First 5 CA report	DUE					
RAACD report	DUE	Revisions, Graphic Design	PREZ			
Annual report	Data	Write	DUE	Eval Comm Review and Graphics	PREZ	
CalWORKs Special Study	DUE	Revisions	PREZ			
B&B report (including CPS outcomes)	Data	Data	Write	DUE	Eval Comm Review and Graphics	PREZ

EVALUATION COMMITTEE CALENDAR
2022

Third Monday of every other month
1:00-3:00 p.m.
First 5 Conference Room

JANUARY 10	**JULY 18**
MARCH 21	**SEPTEMBER 19**
APRIL 18	**OCTOBER 17**
MAY 16	

CALWORKS HOME VISITING PROGRAM SPECIAL STUDY

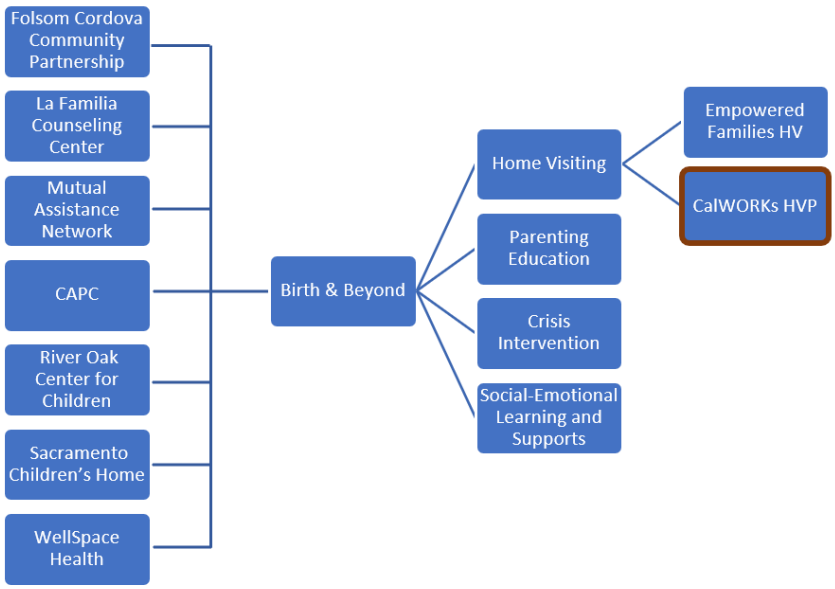
FALL, 2021

Introduction

In the Spring of 2019, Birth & Beyond was awarded a multi-year grant to provide home visiting services to families receiving CalWORKs benefits. CalWORKs is an assistance program funded through the California Department of Social Services (CDSS) that provides cash aid for eligible pregnant women and families with children, with the overall goal of expanding future educational, economic, and financial capability opportunities to help families exit poverty. The local CalWORKs program is administered by the Sacramento County Department of Human Assistance (DHA). The CalWORKs home visiting program (CalWORKs HVP) aims to identify and address family and child hardships in the home, nurture positive parent-child interactions, and improve family stability.

Managed by the Child Abuse and Prevention Council (CAPC), in partnership with Folsom Cordova Community Partnership, La Familia Counseling Center, Mutual Assistance Network, River Oak Center for Children, Sacramento Children's Home, and WellSpace Health, Birth & Beyond provides direct services through nine Family Resource Centers (FRCs). These services include home visiting, parenting education, crisis intervention services, and social-emotional learning and supports (also known as enhanced core). With the addition of the CalWORKs HVP (also known as CalWORKs Family Support Initiative or FSI), Birth & Beyond manages two home visiting programs: CalWORKs HVP and the First 5-funded Empowered Families[1]. The home visiting program that potential participants are assigned to depends on specific eligibility criteria.

Figure 1. CalWORKs HVP Program Structure



[1] "Empowered Families" is used throughout the text, but this program title was not implemented until July 1, 2021. Refers to the First 5 funded home visiting model.

First 5 Sacramento works in partnership with both CAPC and DHA to bolster the success of the CalWORKs HVP. First 5 Sacramento is a major funder of Birth & Beyond and manages the fund disbursement for the CalWORKs HVP contract. First 5 Sacramento contracted with Applied Survey Research (ASR) to conduct the current study.

CalWORKs HVP utilizes the Healthy Families America (HFA) evidence-based home visiting model. HFA enrollment is restricted to mothers who are pregnant or have an infant up to three months in age. Recently, Birth & Beyond leadership decided to expand the CalWORKs HVP population served by adding the Parents as Teachers (PAT) home visiting model, which can enroll children up to 36 months in age, allowing for more families to be served. FRC sites began expanding to include the PAT model during the first quarter of the 2021-22 fiscal year.

This special study aims to better understand referral, enrollment, and data management processes within the CalWORKs HVP to improve client engagement, retention, outcomes. This formative evaluation includes a review of available data metrics, interviews with key staff members, and a review of current forms and data management procedures. This special study has two main goals: 1) to identify preliminary strengths and roadblocks to encourage changes early in the program's implementation and 2) to serve as a baseline assessment of program characteristics.[2]

It is important to note that the COVID-19 pandemic strongly impacted home visiting service delivery. Since the stay-at-home order in March 2020, all home visits have been virtual and other in-person appointments remain restricted. Like families throughout California, CalWORKs HVP families experienced devastating challenges from the impact of COVID 19. With safety regulations constantly changing, families needed to adjust to virtual school requirements and work environments. Parents reported elevated stress and crisis due to job loss, changes in their child's schooling, access to childcare, housing instability, mental health issues, and barriers to accessing resources they previously received. Families who initially engaged in B&B home visiting services and then declined before enrollment expressed a general sense of overwhelm due to COVID-related anxieties, uncertainty, financial strains, and competing priorities in or out of the home. Parents prioritized the essential needs of their family over home visiting participation, leading to decreased attendance. The following report should be read with this caveat in mind.

Sample and Methods

This special study consists of a review of documents and procedures, client and referral metrics obtained from the Persimmony database, and interviews with key staff members from CAPC and DHA.

Persimmony Metrics and Procedural Review

Persimmony is the database that houses all Birth & Beyond data, including that for the CalWORKs HVP. Data entry staff receive completed paperwork from Family Engagement Liaisons (FELs), intake staff at the FRCs, or the home visitors themselves. The evaluation team at First 5 Sacramento and ASR then analyze this data and include findings in annual reports and any applicable special studies for both Birth & Beyond and First 5 Sacramento. All data reported in the current report was extracted from Persimmony, including referral and enrollment data.

Data for the current study include case records, service data, and assessment data for a total of 542 cases. Among them, seven were removed from detailed analyses as duplicates (e.g., parent initially chose not to participate and

[2] FY 2019-20 and FY 2020-21 have been confounded by the COVID-19 pandemic and may not be representative of what may be more typical in the future. It is still valuable to conduct this baseline evaluation to identify issues and make any necessary changes as early as possible in the program.

re-enrolled later or a client transferred between FRCs and a new case record was created).[3] In cases where it appeared that the participant legitimately joined the program, closed out of the program, and re-joined again later, both case files were kept in the final dataset. Additionally, 14 cases were marked with a referral outcome of "not eligible" and another 19 were marked with "not eligible" as a reason that the case was not opened. Clients that were not eligible for participation in the program were excluded from the final dataset. As a result, summaries below describe CalWORKs HVP data metrics using 502 client records.

CAPC Staff Interviews

To better understand current procedures and gain staff insight on program successes, challenges, and suggestions for improvement, ASR interviewed the CAPC Collaboration Senior Project Manager and the CAPC Health Initiatives Senior Project Manager. The former oversees the CalWORKs HVP contract, coordination with First 5 Sacramento, management of model fidelity and implementation, and supervision of the Health Initiatives Senior Project Manager. The latter oversees the referral process between DHA and the CalWORKs HVP, coordinates outreach, supports policy/procedure revisions, supervises the Family Engagement Liaisons (FELs), and manages the contract and accreditation.

ASR also interviewed three Family Engagement Liaisons (FELs) whose primary role is to increase DHA referrals and subsequent enrollment of families into the CalWORKs HVP. Before the COVID-19 pandemic, the FELs would recruit for the program in-person at the DHA bureaus. Since the pandemic, the FELs have been available virtually to receive referrals from DHA intake staff. Additionally, FELs conduct weekly meetings with the Family Resource Centers for technical assistance, to create outreach plans, generate new ideas to increase enrollment, and assist with enrolling families by completing consents and the parent survey over the phone.

Department of Human Assistance Interviews

Because of the DHA's primary role in providing referrals to the CalWORKs HVP, ASR interviewed two DHA program managers, one of which is a manager lead for CalWORKs referrals and the other is a program planner within DHA. The former's role is to oversee those who make the referrals within the bureaus, to make sure that DHA staff are included on new information about the program, to communicate with partners to make sure that the referral process is working, and to bring any program changes or updates to the DHA staff. The latter is the main point of contact for the CalWORKs HVP program within DHA and for the contracts that DHA holds with First 5 Sacramento and the Nurse Family Partnership, and coordinates with the FELs to ensure they are effectively communicating with the various program managers.

Additionally, ASR interviewed four DHA intake supervisors, whose role is to facilitate referrals given and ensure that referrals are filled out correctly, to answer questions that intake staff might have about referrals, provide trainings, reminders, and review cases to ensure that referrals are completed appropriately.

[3] When a client initially chooses not to participate in the CalWORKs program and then returns later, it is possible that the referral source data is skewed, as the participant is marked as a "self-referral" when they return to the program. Additionally, when a client is transferred from one FRC to another, an entire new case record is created and the referral source is changed to "B&B transfer," thus losing the original referral source.

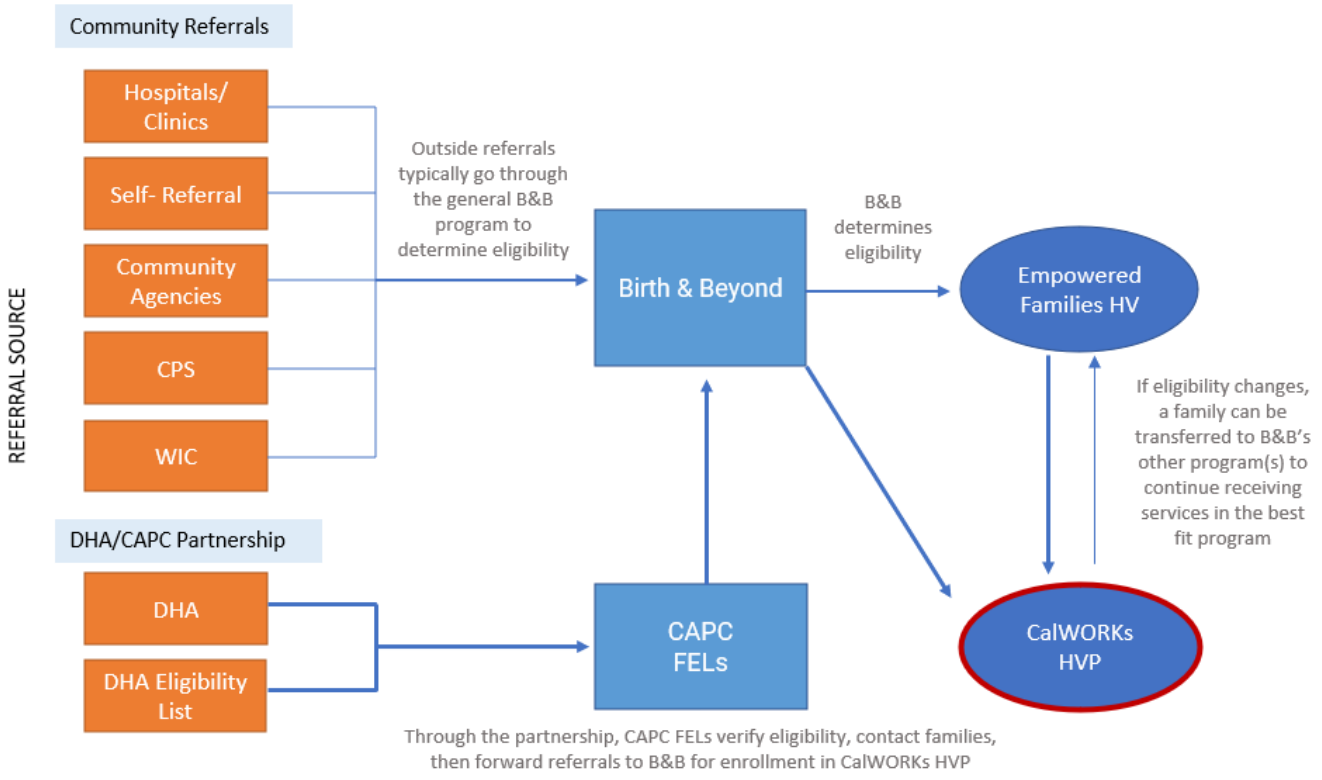
Study Results: Referrals and Client Profiles

The following describes both data extracted from Persimmony and interview responses from CAPC and DHA staff regarding incoming referrals to the CalWORKs HVP, focusing on processes and descriptives rather than outcomes.

Incoming Referral Sources

As displayed in the figure below, most external sources provide referrals to the general Birth & Beyond home visiting program (i.e., referrals do not come directly to the CalWORKs HVP except from DHA). Birth & Beyond staff then sort potential participants into the appropriate home visiting program (Empowered Families or CalWORKs HVP) based on eligibility criteria. During interviews, CAPC staff reported that counts of incoming CalWORKs HVP referrals are relatively arbitrary as intake staff may select this program if they believe the family *might* meet the program's eligibility requirements. In the cases where these potential clients are not eligible for the CalWORKs HVP, they can still be served by the Empowered Families home visiting program through Birth & Beyond. As a result, total estimates of incoming referrals (from all sources) may not accurately reflect how many participants were eligible for the CalWORKs HVP (i.e., some CalWORKs HVP referrals were provided to families that were ineligible for the program, so referral numbers may be skewed).

Figure 2. CalWORKs HVP Referral Processes



CAPC and the Department of Human Assistance (DHA), of which CalWORKs is a program, have an established partnership to ensure eligible families receive CalWORKs HVP referrals. DHA encounters CalWORKs families, determines eligibility based on the criteria outlined by the home visiting model and Birth & Beyond trainings, and works with FELs to refer families to home visiting services. DHA was anticipated to provide the majority of referrals to the CalWORKs HVP, as they provide direct services to eligible CalWORKs home visiting participants. In FY 2019-

20, DHA was the source of 44 (17%) CalWORKs HVP referrals, which decreased to only seven (3%) referrals in FY 2020-21 (-80%). Although this decline is largely due to COVID-19, including the closure of DHA bureaus for in-person appointments, referral numbers were also lower than expected, pre-pandemic. Although these referral numbers are lower than anticipated, DHA program managers expressed they were unable to set a goal number for referrals for each bureau at the onset of the program. While DHA program managers stated that First 5 has goals for CAPC, there were no goals (to their knowledge) in the contract directly between First 5 and DHA. It may be pertinent for DHA to do a systematic review of previous DHA eligibility lists to identify the average number of participants eligible for CalWORKs HVP and ascertain a realistic proportion of those who should be referred to the program directly from DHA.

> *"One of the biggest referral sources… is the eligibility list, so that has been very successful for us."*
> *– CAPC Staff*

Toward the beginning of program implementation (pre-COVID-19), CalWORKs HVP leadership recognized that there were fewer referrals coming from DHA than expected. In response, CAPC staff worked with DHA to create a system where DHA would provide CAPC staff with a list of potentially eligible families based on CalWORKs HVP model requirements, deemed the DHA eligibility list. FELs, who are CAPC employees, make calls to individual families on the eligibility list to determine if they are eligible for and interested in CalWORKs HVP services. CAPC staff reported that this is a successful, yet more time-consuming method to circumvent challenges associated with fewer direct referrals from DHA. Since the process was implemented, the **DHA Eligibility List has been the source of 23% of referrals.**

Of the 502 records observed, about half (48%; 244) came from one of the sources that refer directly to the CalWORKs HVP (see table below).

Figure 3. CalWORKs Home Visiting Program Referrals by Source, FY 2019-20 to FY 2020-21

	FY 19-20	FY 20-21	Total N (%)
Department of Human Assistance (DHA)	**44**	**7**	**51 (10%)**
DHA Eligibility List	**73**	**44**	**117 (23%)**
Birth & Beyond Transfer	**51**	**25**	**76 (15%)**
Other Referring Sources:			
Hospitals/Medical Clinics	5	107[4]	112 (22%)
Self-Referral	33	14	47 (9%)
Community Agencies	16	10	26 (5%)
Child Protective Services	2	8	10 (2%)
Women, Infants, and Children (WIC)	1	0	1 (<1%)
No Answer Provided	5	7	12 (2%)
Other	32	18	50 (10%)
Total Referrals	**262**	**240**	**502 (100%)**

Note: FY 2019-20 includes a small number of cases (n = 2) from FY 2018-19 as program started in April 2019

[4] Although hospitals displayed a large increase in referrals to the CalWORKs HVP program from FY 19-20 to FY 20-21, only 17% (18/107) of these enrolled in the program.

Referral Source Insights

Because DHA is an important referral source for the CalWORKs HVP, ASR interviewed DHA program managers to better understand their referral processes and the strategies that they have taken to make referrals to the CalWORKs HVP. **DHA program managers acknowledged that referrals to the CalWORKs HVP have been lower than anticipated** and that they have worked actively with FELs to attempt to increase referrals to the program.

DHA staff and FELs attend quarterly referral meetings to brainstorm new ideas to increase referrals. DHA staff emphasized that regular reminders seem to be an effective way to increase referrals, as it helps keep the CalWORKs HVP at the forefront of their minds. Intake staff may not serve a CalWORKs family for relatively long periods of time and may need frequent refreshers. Additionally, DHA intake staff typically work with families seeking immediate support for basic needs and may struggle to prioritize referrals to the HVP program amid other tasks, while families may also be less receptive during initial intake. DHA intake supervisors also added that intake staff are shifting gears to prioritize emerging pressing needs (e.g., COVID resources, a focus on Afghan refugees) which may challenge their focus on CalWORKs HVP referrals.

FELs have come up with many ideas to increase referrals coming from the DHA bureaus, including: placing posters in bureau lobbies and interview rooms, creating business cards with CalWORKs HVP information for families to pick up, giving training/refresher presentations to DHA staff about the program, incentivizing referrals for DHA staff by offering a gift card to the DHA intake staff member who had the most referrals to the program in a month, and sitting in the daycare section of the DHA bureaus (when bureaus were open for in-person appointments) to connect directly with parents who might be eligible for the program. Multiple CAPC staff members mentioned difficulties getting innovative outreach ideas approved by DHA, mentioning that there are a lot of hoops to jump through and moving forward with new ideas takes a lot of time.

One major way that CAPC staff have tried to increase referrals coming from DHA is through the creation of the **DHA eligibility list**. At the beginning of each month, DHA staff provide FELs with an extensive list (typically over 1,000 names) of everyone who might be eligible for the CalWORKs HVP. The three FELs divvy up this list and cold call the names listed using Google Voice numbers to protect their identities. This approach raises challenges getting potential clients to trust the legitimacy of the call, as clients have not been briefed on the program or warned that they might be receiving a call. In some cases, Sacramento area codes were not available on Google Voice and this can cause further confusion about who is calling them and how they got their phone number. As one FEL put it, "a lot of people don't pick up, or when they do, they might not believe us… It's extremely difficult cold-calling." Additionally, the FELs mentioned that there is often confusion about their specific role in the CalWORKs HVP, as they are neither FRC nor DHA staff. One FEL said that she introduces herself as a DHA staff member to attempt to alleviate confusion to the potential client about who is calling. Although this eases some confusion about the call, there is still concern that it is not factual.

Furthermore, families may appear on the DHA eligibility list for many months in a row and the FELs must manually discern which families they have already called and engaged. They manually cross-check each family to make sure that they are not repeatedly calling a family that has already engaged in the program or who previously asked not to receive any further contact. One FEL estimated that it can take about an hour and a half to look-up 10 names in their database. FELs must also cross-check families with Child Protective Services (CPS) to ensure that they do not have an open case. The FELs explained that CPS requested that they only send three names per email to check case status and that **each FEL is sending about 20-30 emails a week to CPS to complete these case checks**.

It is important to note that when asked about their thoughts on the DHA eligibility list, none of the DHA intake supervisors interviewed were aware of the list. Although it is possible that they are not aware of the list because they are not directly involved in its creation or distribution, it is still telling about the lack of communication within DHA and the CalWORKs HVP. Similarly, DHA Program Managers were asked if their staff review the eligibility list (e.g., to identify patterns in why eligible families might not be receiving a direct referral from DHA) and neither program manager had considered using the list internally to support or improve direct referrals. DHA intake supervisors also felt they were not provided with consistent or regular information, such as Birth & Beyond newsletters only periodically reaching intake supervisors, or inconsistent understanding about the CalWORKs HVP eligibility criteria. One DHA intake supervisor also noted, "we're a very small bureau, so we don't have the liaison on site. We have a shared liaison with a bigger bureau." DHA staff suggested that the accessibility of FELs is an important way to keep the CalWORKs HVP at the forefront of their minds.

Referral to Enrollment

The table below displays client enrollment status by referral source. The highest number of enrollees into the program (denoted by "opened" in the table) were transferred from the other Birth & Beyond home visiting program (Empowered Families).

Thirty cases were listed as "pending" enrollment. CAPC staff confirmed that cases left as pending after a prolonged period are likely a data entry error that has not been updated to the correct enrollment status. The vast majority of those marked pending (90%; 27/30) were from FY 20-21. However, data for the current report were pulled in September 2021 and the latest pending response was from an assessment conducted on 6/24/2021. This provided three months of opportunity to update the enrollment status. It is highly likely that these 30 pending cases represent situations where the case's enrollment status was not updated in the system.

Additionally, six cases had "no answer" for enrollment status, also likely to be a data entry error.

Figure 4. Enrollment Status, by Referral Source, April 2019 through June 30, 2021

	Opened	Not Opened	Pending	No Answer	Total Referrals
B&B Transfer	61	10	4	1	76
DHA Eligibility List (FELs Outreach)	44	68	5	0	117
Department of Human Assistance (DHA)	16	34	1	0	51
Other Referring Sources:					
Self-Referral	22	24	1	0	47
Hospitals/Medical Clinics	18	83	9	2	112
Community Agencies	15	8	2	1	26
Child Protective Services (CPS)	5	4	0	1	10
Women, Infants, and Children (WIC)	1	0	0	0	1
No Answer Provided	2	2	7	1	12
Other	28	21	1	0	50
Total Referrals	212	254	30	6	502

Note: N = 502. "Other Referring Sources" more commonly route through Birth & Beyond and are not typically referred directly to the CalWORKs HVP program as eligible participants.

Study Results: Enrollment Processes and Retention

Enrollment Processes

The Healthy Families America (HFA) model has relatively strict enrollment requirements for participants; the mother must be either pregnant or have an infant under the age of three months. As noted earlier, the CalWORKs HVP is in the process of incorporating a second model (Parents as Teachers; PAT), which has much less stringent requirements. However, all information listed below pertains solely to the HFA model, as the PAT model has not yet been fully implemented.

> *"I'm not sure what we could do to cut down on [enrollment] time but if we could, that'd be great… I'm sure the parents would appreciate that too"*
>
> *– Family Engagement Liaison (FEL)*

According to CAPC staff, when the program receives a referral from an outside source, they first need to obtain consent and determine eligibility. At this point, staff input the family's information into the Persimmony data system, a Birth & Beyond staff member determines if the CalWORKs HVP program (or another) is the best fit, and a team leader assigns a home visitor who then begins the process of making contact.

A FEL handles the referral when it comes from DHA or cold calls from the DHA eligibility list. After a FEL connects with a CalWORKs client who is interested in the program, they then complete the consent forms and a parent survey, which is a requirement from the Healthy Families America model. This enrollment process can take up to five hours to complete with the parent. FELs explained that they frequently check-in with the parent to make sure they are still willing to continue the conversation and that it can take multiple phone calls to complete the enrollment process. One FEL said "once you get a 'yes,' it stops everything for the rest of the day… By the time [the consent and parent survey forms are completed], that's your day."

In addition to the length of time that the parent survey takes, there are also some sensitive questions included on the survey. The FELs described the toll it takes on families that have built rapport with the FEL over several hours on the phone, especially while discussing sensitive topics such as domestic abuse, and then learning that person would not be their home visitor. One FEL described a mother who was particularly upset learning that the person she spoke with on the phone would not be her home visitor and eventually did not continue with the program. FELs suggested that this issue may be alleviated by handing off interested and eligible clients to Birth & Beyond home visiting staff before completing the parent survey to allow the best staff member to build that rapport. This would also allow FELs more time to contact other families from the eligibility list and/or focus on their other responsibilities.

Birth & Beyond policy requires home visitors or FELs to contact families within two days of receiving a referral. Families are expected to be engaged with the program within the first 20 days or the case will be closed. However, the two-day policy could be delayed due to CalWORKs HVP requirements with CPS to ensure there is not an open case before enrollment as well as high caseloads impacting home visitors, FELs, and program staff.

Enrollment Status and Factors of Impact

It was also important to explore other factors that might impact enrollment status, such as FRC site and race/ethnicity of participants.

The table below displays enrollment status into the CalWORKs HVP by client race/ethnicity. Black/African Americans comprised 34% (169/502) of all eligible referrals, followed by Hispanic/Latinos (19%; 94/502). Clients who reported their race/ethnicity as Black/African American had both the highest number of "opened" cases (41%, 86/212) and

the highest number of "not opened" cases (28%, 70/254). Participants who reported their race/ethnicity as Hispanic/Latino were more likely to not open a CalWORKs HVP case than to open one. In terms of the data entry process, race/ethnicity was unknown for 9% of referrals.

Figure 5. Enrollment Status, by Client Race/Ethnicity, April 2019 through June 30, 2021

	Opened	Not Opened	Pending	No Answer	Total Referrals
Black/African American	86	70	10	3	169
Hispanic/Latino	42	48	4	0	94
White	29	37	4	1	71
Multiracial	17	6	1	0	24
Asian	15	45	5	1	66
Other	11	7	2	0	20
Alaska Native/American Indian	4	1	1	0	6
Pacific Islander	2	3	0	0	5
Unknown	6	37	3	1	47
Total	212	254	30	6	502

Note: N = 502

The table below displays enrollment status by the Family Resource Center (FRC) with which the referral was associated. La Familia FRC had the highest number of opened cases, while Arcade FRC had the highest number of not opened, pending, and cases with no enrollment status specified.

Figure 6. Enrollment Status, by Family Resource Center Site, April 2019 through June 30, 2021

	Opened	Not Opened	Pending	No Answer	Total
La Familia FRC	47	21	5	0	73
Valley Hi FRC	36	36	5	0	77
Folsom Cordova FRC	31	6	1	0	38
Arcade FRC	24	124[5]	7	5[6]	160
Meadowview FRC	24	17	5	0	46
WellSpace North Highlands FRC	18	1	0	0	19
North Sac FRC	14	21	1	0	36
River Oak FRC	12	9	0	0	21
Firehouse FRC	6	11	1	0	18
No Answer Provided	0	7	5	1	13
Total	212	253	30	6	501

Note: N = 501; One "not opened" case was assigned to The Cap Center, which is not an FRC site.

[5] The majority of reasons for not opening for the Arcade FRC included No Contact per Contact Policy (40%) and Declined all Services After Initial Contact (36%). The Arcade FRC is also a Community Incubator Lead (CIL), indicating they target prevention and intervention efforts to reduce disproportionate African American child deaths.

[6] All five of these cases have a "Reason Not Opened" response, indicating that the client did not open a case and this field was a data entry error.

Regarding enrollment processes, **reasons listed for why a CalWORKs HVP case was not opened** (see figure below) was of particular interest. The most common reason was that the FRC was unable to contact the client/family. According to CAPC staff, their contact policy allows for up to ten days of contact attempts before the case is marked "not opened." Additional efforts may be needed to explore workload processes to identify further patterns or whether staff need additional resources to support outreach or encourage engagement. The second most common reason for not opening a home visiting case was that the family declined all services after initial contact. This is a potential area for future study; why are families choosing not to enroll after the initial contact?

For 14 clients, cases were not opened due to the FRC being at capacity. Among them, eight cases were assigned to the Valley Hi FRC and six were assigned to Meadowview FRC.[7] Capacity issues are often caused by sites that do not have enough home visitors trained in the model and/or staff turnover. CAPC staff noted that families are typically transferred to another site when the preferred FRC location is at capacity, but that there may also be challenges in families disengaging, as CalWORKs HVP families are often experiencing high levels of crisis which can make it easy for them to deprioritize the program if they are not connected to services right away. As part of Birth & Beyond's continued quality improvement, CAPC continues to work with the collaborative on assessing enrollment challenges of the CalWORKs HVP program.

Figure 7. Reason Case Not Opened, April 2019 through June 30, 2021

	N	%
No contact per contact policy	119	47%
Declined all services after initial contact	61	24%
Transferred to other B&B services	30	12%
Site at capacity	14	6%
Transferred to another B&B FRC site	9	4%
No contact after FRC attempts	7	3%
Moved out of service area	7	3%
Declined services before initial contact	2	1%
Need non-English language services	2	1%
No Answer Provided	2	1%
Open CPS case	1	< 1%
Total	254	100%

Note: N = 254

Program Closure/Retention

The HFA program model does not have strict program closure requirements for enrolled families. Families enrolled in the HFA model are expected to be engaged for three to five years. However, the CalWORKs HVP funding only allows funded enrollment for two years. Despite this contradiction, the CalWORKs HVP included HFA as an acceptable model, creating a model fidelity issue. This inconsistency creates a challenge for the CalWORKs HVP program as the length of the HFA model does not fit with the funding provided for CalWORKs HVP. CAPC is currently working internally to assess the steps they will take as families reach the two-year HVP funding limit, without meeting the HFA three-year enrollment minimum.

As CAPC staff described, regardless of whether families reach time or age limits or other eligibility issues related to the CalWORKs HVP program, families are never forced with a formal exit where they are cut off from services. They

[7] One "opened" case also had a "Site at Capacity" reason for not opening, suggesting this is a data entry error.

are provided opportunities and information about other programs within the Birth & Beyond umbrella that are not bound to the CalWORKs HVP model requirements (e.g., Empowered Families home visiting, parenting education classes, social-emotional learning and supports, community events).

As seen in the table below, the most common reason for closure after CalWORKs HVP enrollment is that the home visitor was unable to reach the family (per contact policy). Surprisingly, only two families closed out of the program because they completed their program goals, such as employment or schooling. This could be due to the relative newness of the program and there is an expectation for this category to see growth in future years.

Figure 8. Reasons for Case Closure after CalWORKs HVP Enrollment, April 2019 through June 30, 2021

	N (%)
No contact per contact policy	48 (47%)
Declined further services	27 (26%)
Moved out of service area	11 (11%)
CPS case opened	5 (5%)
Family changed B&B path	4 (4%)
Completed program goals	2 (2%)
No Answer Provided	2 (2%)
Inter-Agency Referral within B&B	1 (1%)
Chronic stressors prevent program participation	1 (1%)
Child safety concerns	1 (1%)
Total	102

Note: N = 102

CAPC staff also noted that cases when families disengage or lose contact, cases are placed in a "Creative Outreach" status which includes up to 90 days of CalWORKs HVP staff attempting creative ways of reaching/engaging the family back into the program. While this appears unique to the CalWORKs HVP service, a deeper exploration into this process may provide insights into its successes or challenges for program-wide insights.

Study Results: Data Processes and Data Management

In ASR's review of the data, there were some processes that made it very difficult to clean, manage, and analyze the data for this special study. The CalWORKs HVP has many differing forms that are all entered separately into the Persimmony system. To compare data for one client across forms, data must be cleaned and merged. This can become complicated when several merges must occur, as data is not always consistently entered (names or birth dates do not match), there are duplicates of the same client in the system, names of variables are changed mid-year, and forms are completed at differing times. As one example, ASR was interested in understanding if mothers who indicate that they are pregnant and not receiving prenatal care on the Family Information Form received a referral for prenatal care on the Referral Log. However, because Referral Logs can be completed at differing times during the case management plan and Family Information Forms should be completed yearly, it is possible that the Referral Log was completed at a time when the mother was not pregnant or in need of a prenatal care referral. ASR excluded this analysis from this report to avoid the risk of merging inapplicable referral data and misrepresenting whether the client received the necessary referral. To solve this issue, it would be helpful to add additional columns in Persimmony that denote the specific date that each referral was provided.

Additionally, there are situations where data files (exports) simply do not match up to one another. For example, service data includes everyone who has been marked as receiving at least one home visit from the CalWORKs HVP. From inception of the program (April 2019) to the end of FY 2020-21, there were 250 unduplicated adults who received at least one service in the program. However, this is a larger number than those listed on the case record as having "opened" a case (212). Even if those cases marked with an enrollment status of "pending" and "no answer" are included in the "opened" count, it would still be 2 cases fewer than those with service data.

ASR also intended to explore whether immunization records were up to date for children receiving CalWORKs HVP services. At least one immunization record was found for 211 children who were served from the beginning of the program (April 2019) to the end of FY 2020-21 (June 30, 2021). However, immunization records are updated quarterly so determining whether records are adequately "up to date" would require linking the date of the immunization record update to the most recent date of service while also acknowledging that there may be other reasons that may misrepresent whether these records are up to date or not.

Some cases mistakenly have programs linked that are not relevant to CalWORKs (e.g., IS, Youth Support Learning 6+, Family Nurturing Plan). This is likely due to data entry error. These data errors may result in incorrect counts of program participation leading some families to not be counted in the programs in which they should or counted where they should not.

Because Birth & Beyond offers other programming besides the CalWORKs HVP, it is also possible that a case will be exited out of the CalWORKs HVP but will remain open in the Birth & Beyond system. This makes it difficult to identify the exact status of a client within a specific Birth & Beyond program (in this case, CalWORKs HVP).

Additionally, missing or incorrectly entered data is an issue throughout the CalWORKs HVP assessment files. Missing data has a large impact on program evaluation and can have negative downstream effects on the program. It is essential to have complete and consistent data entry to have the most accurate presentation of results and demonstration of program impact.

The following provides examples of data completeness for important assessments given in the CalWORKs HVP.

CHEERS Check-In

The CHEERS Check-In tool can be utilized as a pre/post assessment. It is a parent-child observation tool required for B&B staff utilizing the HFA model to complete semi-annually. The tool is administered within 4 months of enrollment, and then twice per year after. The scores are then compared to review progress toward goals.

Of those served from the start of the program (April 2019) to the end of FY 2020-21 (June 30, 2021), 78 clients received a CHEERS Check-In. This represents 31% of the 250 served (received at least one visit) during that time. However, there is no clear indicator in the database whether all 250 served were eligible for CHEERS Check-Ins as they do not apply to pregnant mothers with no other children 0-5. However, according to the HFA model, the CHEERS Check-In tool should be completed at multiple times during clients' service. Of the 78 who had at least one CHEERS Check-In, 18 (23%) received more than one Check-In. CAPC staff indicated that COVID may have impacted the likelihood of completing a CHEERs Check-In as the tool can be challenging to complete during virtual visits. As a result, it is unclear whether the CHEERs Check-In tool is not being completed as planned or whether more check-ins are being completed and data are missing from client files.

ASQ Records

Of the 173 children aged 0-5 served from the beginning of the program (April 2019) to the end of FY 2020-21 (June 30, 2021), **151 received at least one Ages and Stages Questionnaire (ASQ) developmental screener**. According to CAPC staff, data counts for the number of children in the CalWORKs HVP families are only kept for the "target child" (i.e., the child who qualifies for services within the HFA model). However, ASQs are performed on all children under 5 in the home. Because there is no way to calculate the total number of children under five, it is not possible to check if ASQs are being conducted on all eligible children, or if there are missing data. One suggestion that could solve this issue is to have a question in the case record that asks how many children aged 0-5 are in the household.

Of the children who did receive an ASQ, many received repeat follow-up ASQs. Typical protocol for repeating an ASQ is when a child is "flagged" with a developmental concern in an area or is close to the cutoff for being flagged (in the "monitoring zone"). However, there are cases where the ASQ has been repeated when there was no cause for concern identified. For example, one child received ASQs on 2/24/2020, 4/24/2020, 6/25/2020 and 1/19/2021. This specific child scored in the monitoring zone for problem solving during her first ASQ and scored in the normal range for all subsequent assessments. It is unclear why the ASQ was repeatedly performed in this case.

Of the total number of ASQs performed (286), 32 (11%) ASQs comprising 22 children had at least one area flagged for concern. On the same form, three (9%) of the 32 were marked as receiving a referral for services based on ASQ score. It is unclear why **most children who had an area flagged for concern were not receiving a referral** for developmental services.

Strengths and Recommendations:

With the implementation of a new home visiting model (i.e., PAT) imminent, it seems that now is a particularly appropriate time to recognize current program strengths and employ changes to improve the CalWORKs HVP.

CalWORKs HVP Strengths

Implementing a new program, especially within the context of a global pandemic, is no easy task and the CalWORKs HVP should be commended for serving 212 clients during its first two years of implementation. One reason for the success of the program is the partnership established between CAPC, DHA, and First 5 Sacramento. This partnership allows for open dialogue to improve upon and grow the program. It is a great strength that all three agencies are committed to this program's success and recognize this as an opportunity to make larger systems changes to reduce child abuse and neglect, increase parent and child outcomes, and reach more families that may be more likely to have a unique need for services. Because the current study is primarily focused on processes and data management, the following overviews process-oriented strengths of the CalWORKs HVP program and its partners.

1. The Family Engagement Liaisons have shown Great Creativity in Efforts to Increase Referrals from DHA

FELs described multiple efforts to increase referrals from DHA, including creating posters, business cards, and incentive programs for DHA workers. These creative efforts have likely contributed greatly to the number of referrals and enrollments into the program.

2. Birth & Beyond Staff has Increased Efforts to Engage Clients with Creative Outreach

Instead of following the typical protocol for Birth & Beyond when a client cannot be reached, Birth & Beyond staff created "creative outreach," which allows for up to 90 days of staff trying to find creative ways to re-engage the

family into the program. This extra time can allow a family who may be undergoing a crisis enough time to resolve the immediate crisis and enroll in the program.

3. CAPC Leadership has Prioritized Continuous Quality Improvement and Program Evaluation

CAPC leadership, including the Birth & Beyond Collaborative, emphasized the priority of continuous quality improvement within the program and even before this study was conducted, had committed to assessing the reasons why some families are not enrolling in the program and working to reconcile potential discrepancies between the HFA model and CalWORKs HVP funding.

Similarly, Birth & Beyond leadership recently self-identified a need to reconsider how Parent Surveys are conducted, recognizing the importance of FRC home visitors, rather than the FELs, taking on this task with families. CAPC independently identified and began implementing this transition during the time frame of this study's data collection, thus these changes are not reflected in the findings discussed above. The findings highlight the importance of this transition to support FELs and increase trauma-informed care for the families served. Clients can build rapport with the staff member with which they will most consistently interact and receive more trauma-informed responses within the timeframe of the start of services.

4. CalWORKs HVP is Growing with the Recent Implementation of the Parents as Teachers Model

The HFA model, although certainly positive for families, has very strict inclusion criteria for enrollment (i.e., the mother must be pregnant or have a child under three months of age). With the implementation of the Parents as Teachers Model, the CalWORKs HVP is expanding the population that it can serve to include families with children up to 36 months. This will increase the number of eligible referrals to the program and enrollment.

Birth & Beyond Recommendations

The current phase of this research primarily included interviews with CAPC staff, with the plan to interview FRC staff in the future. The following recommendations are based on these conversations with an emphasis on the support that all seven partners which oversee the Birth & Beyond program should consider.

1. Increase Education to Data Entry Staff and Home Visitors about the Importance of Accurate Data Entry to Decrease Errors and Missingness

Accurate data is essential to continuous quality program improvement, effective program evaluations, and case management. All those who interact with client data (including data entry staff and home visitors) should receive regular trainings to reiterate the importance of data entry and how missing or inaccurate data entry impacts the program. Additionally, FRCs should implement quality assurance checks to ensure data completeness and accuracy.

2. Fill all funded CalWORKs HVP home visitor positions at FRCs, so that No Client is Turned Away because the Site is at Capacity

Although FRC sites will typically transfer a client to a different FRC if they are at capacity, there are some cases where a client is unable to continue services because the FRC site was at capacity. Recruiting and retaining FRC staff, who are fully funded through the CalWORKs HVP, would eliminate the need to turn clients away.

CAPC Recommendations

1. When Safe to do so, Require FELs to Return to DHA Bureaus

Both DHA intake supervisors and the FELs themselves acknowledged that there was a larger number of families referred when the FELs were available in-person at the DHA bureaus. When the concerns of the COVID-19 pandemic have lessened, it would be productive for the FELs to return to the bureaus and there will likely be an uptick in referrals afterward. This will need to involve a re-introduction of the FELs to DHA bureau intake staff and another presentation to intake staff about the CalWORKs HVP.

2. Identify and Implement Ways to Reduce the Administrative Burden on FELs Regarding the DHA Eligibility List

While more direct referrals and warm handoffs from DHA may reduce the reliance on the eligibility list, CAPC can identify opportunities to improve the efficiency and effectiveness of this process, in partnership with DHA and First 5. Some opportunities include identifying alternatives to a Google Voice phone number and incorporating alternative forms of outreach (e.g., texting), work with Child Welfare to explore a process whereby clients with an open CPS case are removed from the list, and evaluating whether the number of contact attempts results in a meaningful return compared to the time spent by FELs.

Additionally, CAPC should support alternative options to reduce the manual effort of FELs in checking and re-checking the DHA Eligibility List for clients already contacted or pending contact. First 5 and ASR can work with CAPC staff to identify software or strategies to automatically refresh or delete those who have already been contacted from the eligibility list.

3. Restructure the Persimmony Database, Reorganizing how Forms and Clients are Entered

Birth & Beyond should work with First 5 Sacramento to restructure the way that they store their data for the CalWORKs HVP. Although there are many changes upcoming because of a Persimmony database remodel and transition, the way that forms are entered and recorded should be reconsidered to make data pulling and analysis more of a simplified and seamless process. Some specific recommendations are to keep one case record for clients (even if they transfer FRCs), to have a field to denote if a client closed out of a specific program (e.g., CalWORKs HVP), even if they remain in Birth & Beyond programming, to reduce the "not eligible" reason for not opening a case to either an enrollment status category OR a reason for case not opened, and to consider adding data fields that would further designate data (e.g., distinguishing whether a family does not meet criteria to need a CHEERS Check-In, adding in dates that referrals were provided, including a question about how many children 0-5 are in the household).

Additionally, any changes made to service documentation and forms within the Persimmony database should be approved by First 5 Sacramento and ASR prior to implementation, to ensure that fields both a) reflect the needs and processes of service providers and data entry staff and b) can be correctly extracted and analyzed to accurately reflect the trends and processes occurring within individual cases.

4. Perform Quality Assurance Checks Frequently to Ensure Model Fidelity

CAPC should frequently check their stored data to ensure that model fidelity is being met. For example, the current study found that of those who received at least one CHEERS Check-In, only 23% received more than one. It is essential to realize these potential issues early in program implementation, so that they can be immediately addressed.

DHA Recommendations

1. Streamline DHA Eligibility List Processes

The current system with the DHA Eligibility List seems particularly unwieldy for the FELs and measures should be taken to best utilize the FELs time and increase "warm handoff" referrals from DHA. DHA mentioned performing frequent "refreshers" about the CalWORKs HVP with their intake staff and that might be a good time to internally identify patterns within the Eligibility List. For instance, DHA staff could:

a. Explore ways to improve the DHA eligibility list prior to sending to CAPC FELs, with a focus on removing duplicates, those with open CPS cases, and those that are not actually eligible for the model criteria. One possibility is to explore a way to automate the process with D-Tech's expertise.
b. Review if the required informing notice is effective, since so many are still not aware of the program when contacted by FELs.

2. Revise Protocols to Ease the Implementation of New Ideas

FELs reported that they have experienced roadblocks in implementing ideas to increase referrals to the CalWORKs HVP. One of these roadblocks was the length of time it takes for an idea to be approved by DHA. DHA should review and revise their protocols to allow for quicker implementation of creative ideas to increase referrals.

3. Increase Staff Buy-In and Improve Internal Communication

One DHA intake supervisor noted that in her experience, families are not interested in the CalWORKs HVP program because they are pregnant or very new parents and have more pressing concerns. Although this may be true, DHA should work to increase buy-in among their staff to adequately explain the benefits of the program to its eligible clients. For instance, staff can highlight how the CalWORKs HVP is designed to reduce, rather than add to, the burdens of first-time parents who may say that they do not have time for this program. In a similar vein, DHA should work to understand how their staff are explaining the program to their clients and ensure that there is adequate emphasis on the role of the program in supporting families, particularly during times of challenge and crisis.

4. Build in Software Eligibility Checks/Reminders

One idea to increase reminders to DHA intake staff was brought up by the DHA intake staff supervisors and involves the use of the Customer Information Portal (CIP) and/or SMART database, which has the capability to pull data from CalWIN and customize a pop-up message to remind staff to explain the program and give a referral based on eligibility criteria.

DHA should also investigate into other technological options/checklists that can automatically highlight potential eligible clients to intake staff. This would help alleviate the responsibility for intake staff to remember to refer, especially with how infrequently they might come across an eligible CalWORKs HVP client.

5. Reconsider the Referral Process and Engagement Timeline

Consider the timeline of engaging clients, introduce clients to CalWORKs HVP but stagger the enrollment process to provide more information to engage clients as they become more stable and not while they are in crisis. A script should be made available to all eligibility workers and used consistently where clients are informed of the home visiting program and advised that in the coming weeks someone will be following up with a call to explain the CalWORKs HVP and potentially enroll in home visiting.

Opportunities for Next Steps (Future Research):

This evaluation is meant to be an ongoing process that will be revisited over time. The following presents ideas for future research paths to increase knowledge and improve procedures for the CalWORKs HVP.

1. Interview DHA intake staff and DHA leadership
    a. What are the specific experiences of DHA intake staff in relation to providing HVP referrals?
    b. What steps can be taken from a leadership perspective to increase referrals?
2. Interview staff at FRCs to ascertain why some sites have large amounts of not opened cases and how to increase enrollment of these referred clients.
3. Include perspectives from current and former CalWORKs clients to gain their insight on the processes of enrollment and retention
    a. For those who decline to enroll after initial contact, what was their reason?
4. Further explore the characteristics of enrolled families in relation to CalWORKs participants and community characteristics, overall.
    a. African American and Hispanic/Latino families comprised the largest *number* of referrals to CalWORKs HVP. Are the proportions of participants referred to CalWORKs HVP reflective of the demographic characteristics of CalWORKs enrolled families?
    b. Among those referred to CalWORKs HVP, are there disproportionate outcomes (e.g., "Not Opened") by race/ethnicity?
5. Administer survey to Birth & Beyond data entry staff and CAPC Data Specialist to better understand their processes
    a. For example, if data entry staff find an error in what they are entering, who do they take it to?
    b. How is data entry monitored for accuracy?
6. Investigate the reasons why there are missing data and work with CAPC and First 5 Sacramento to ensure that full data collection is conducted.
7. Evaluate the implementation of the new home visiting model (Parents as Teachers; PAT)

FIRST 5 SACRAMENTO

Reduction of African American Child Deaths

FY 2020-2021 Evaluation Report, with 3-Year Trends

Table of Contents

Introduction

BACKGROUND & GOALS

In 2011, the Sacramento County Child Death Review Team (CDRT) released a Twenty-Year Report which revealed that African American children were dying at twice the rate (102 per 100,000) of any other ethnic group.[i] The four main causes of disproportionate child death amongst African American children were:

- Perinatal conditions
- Infant sleep-related (ISR)
- Child abuse and neglect (CAN)
- Third-party homicide

In response to the alarming findings from the CDRT report, the Sacramento County Board of Supervisors created the Blue Ribbon Commission on Disproportionate African American Child Deaths to formulate a plan of action. In 2013, the Blue Ribbon Commission released its report with a set of recommendations to reduce African American child deaths by 10% to 20% over the next five years. It addressed four causes of death for which African American children were disproportionately affected.[ii]

The 2013 Blue Ribbon Commission report created target outcomes toward the goal of reducing of child deaths to be achieved by 2020. As seen below, the goals included an overall 10-20% reduction in African American child deaths, and specific reductions for each of the leading causes of infant death, including infant perinatal conditions, infant sleep-related, child abuse/neglect, and third party homicides.

1. Reduce the African American child death rate by **10-20%**
2. Decrease the African American infant death rate due to infant perinatal conditions by at least **23%**
3. Decrease the African American infant death rate due to infant safe sleep issues by at least **33%**
4. Decrease the African American child death rate due to abuse and neglect by at least **25%**
5. Decrease the African American child death rate due to third party homicide by at least **48%**

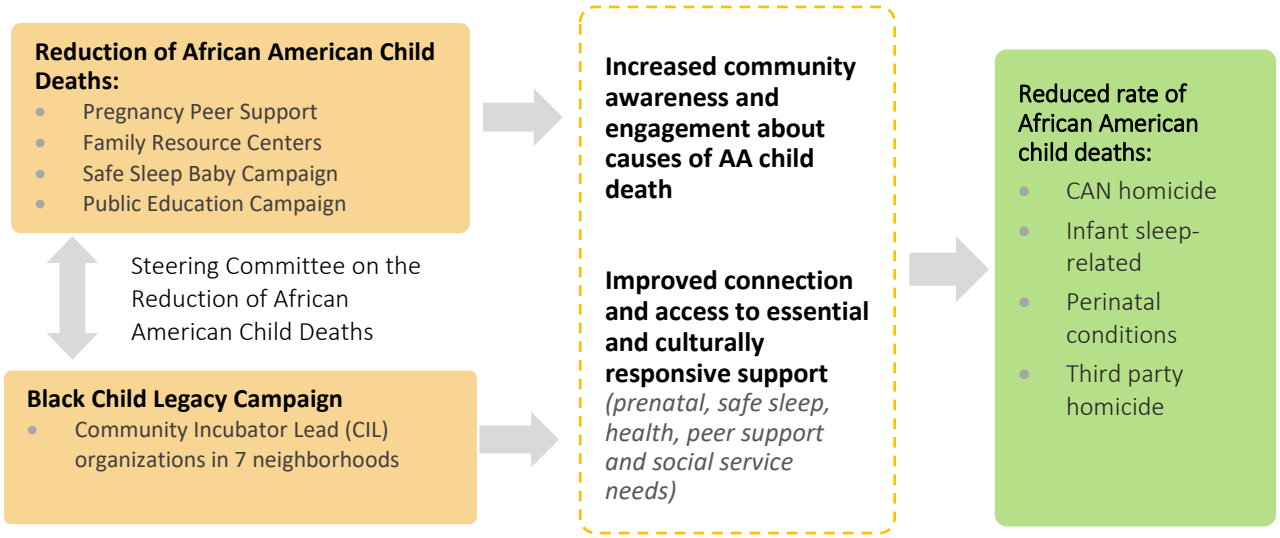
The Blue Ribbon Commission report also called for the establishment of the Steering Committee on Reduction of African American Child Deaths (RAACD). Convened by the Sierra Health Foundation, the RAACD Steering Committee released a Strategic Plan[iii] and Implementation Plan[iv] in 2015. Using a Collective Impact model harnessing the power of multiple county and community stakeholders and sources of funding, the RAACD plans outlined strategies to address the top four causes of disproportionate African American child deaths. Over time, these have coalesced into two interdependent components:

- **The Black Child Legacy Campaign (BCLC):** Led by the Sierra Health Foundation, this strategy involves Community Incubator Lead (CIL) organizations in each of the targeted neighborhoods who lead prevention and intervention efforts to reduce disproportionate African American child deaths.

- **Reduction of African American Child Deaths (RAACD):** Led by First 5 Sacramento, this strategy complements and contributes to BCLC, and includes four programs that focus on preventing deaths due to Perinatal Conditions, Child Abuse and Neglect, and Infant Sleep-Related causes: Pregnancy Peer Support Programs, Family Resource Centers, the Infant Safe Sleep Campaign, and a Public Education Campaign.

The graphic below presents a strategic framework for how Sacramento County is coordinating efforts to reduce African American child deaths.

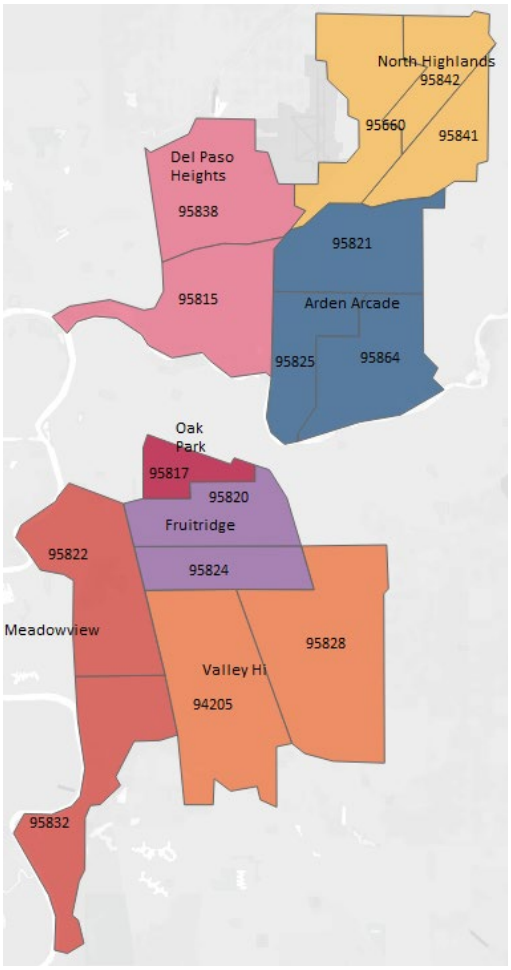
Figure 1 — **Sacramento County's Strategic Framework to Reduce African American Child Death.**



Note: There are many other programs and projects that are also working to decrease the rate of African American child deaths. The current report focuses on perinatal, infant, and child (0-5) African American death, not deaths of all children 0-17.

To meet the Blue Ribbon Commission goals, efforts have been targeted in the neighborhoods in Sacramento County with the highest rates of child death. Not only do these neighborhoods experience high proportions of child death, almost two-thirds of all African Americans that live in Sacramento County reside in these neighborhoods. These communities include:

- Arden-Arcade
- Fruitridge/Stockton Boulevard
- Meadowview
- Valley Hi
- North Sacramento/Del Paso Heights
- North Highlands
- Oak Park



FIRST 5 STRATEGIES TO REDUCE AFRICAN AMERICAN INFANT AND CHILD DEATHS

To address the preventable causes of infant death — perinatal and sleep-related — First 5 Sacramento partnered with various community organizations to launch and implement four programs:

- Pregnancy Peer Support Program
- Family Resource Centers
- Safe Sleep Baby Education Campaign
- Public Education Campaign

This report continues the evaluation of First 5 Sacramento's efforts, describing each investment, FY 2020-2021 outcomes, and recommendations about areas to strengthen.

Pregnancy Peer Support Program

The Pregnancy Peer Support Program was implemented by Her Health First's Black Mothers United (BMU) program. The goal of the program is to provide culturally relevant outreach, education, and individualized support to pregnant African American women in areas of Sacramento that are at high-risk for infant death. In order to be eligible for services, women are required to be pregnant, have entered the program no later than their 32nd week of pregnancy, reside in Sacramento County, and self-identify as African American.

The BMU program includes either in-person or virtual weekly check-ins conducted by pregnancy coaches. Coaches are African American women who are trained to provide education, offer information about medical and social service options, and assist mothers in preparation for the birth of their child. Coaches conduct outreach with partners from community-based organizations and social service agencies to identify and assist the pregnant African American women that are hardest to reach, including those not receiving regular prenatal care and those most at-risk of adverse pregnancy outcomes.

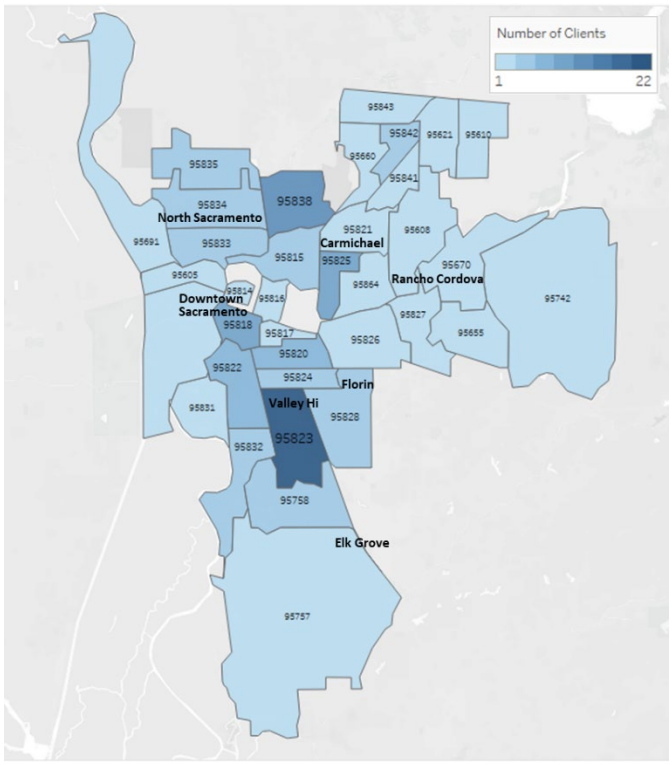
85 babies were born to mothers in the Pregnancy Peer Support program; 83% were born at a healthy birth weight and 80% were delivered full term. There were **zero** infant perinatal deaths in this cohort.

The goal is for pregnancy coaches to connect with clients weekly and meet in person at least every two weeks until delivery and up to four months postpartum. Upon intake, coaches use a health assessment to understand each client's needs related to pregnancy, psychosocial needs, and postpartum plans, including infant safety. With this information, coaches develop individualized care plans for their clients, including information and referrals related to nutrition, health education services, prenatal care, transportation, and connecting women to various social services. Additionally, coaches provide individual support through regular check-in meetings during pregnancy and postpartum, as well as peer support through monthly group meetings and quarterly baby showers.

PROFILE OF CLIENTS

From July 1, 2020 to June 30, 2021, the BMU program served 159 pregnant African American women.

The map represents the number of clients served by zip code. The largest number of clients resided in Valley Hi. Of those with zip code data, almost two-thirds of the clients in FY 2020-21 (64%; 90/141) resided in one of the seven high-risk target neighborhoods of



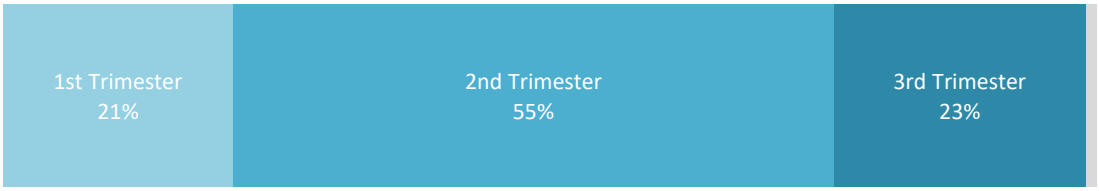
Sacramento County. Participants in high-risk zip codes was similar to that of FY 2019-20 (61%), and higher than FY 2018-19 (49%).

Baby supplies, pregnancy information, and basic needs were the most common pressing needs of BMU clients at intake.

Upon entry into the BMU program, clients complete a comprehensive health assessment intake with their coach. BMU clients that completed an intake form in FY 2020-21 reported an average of two to three **pressing needs**. Mothers were most commonly in need of baby supplies (70%), pregnancy information and support (50%), and basic needs including housing (26%), food (24%), and transportation (24%). About one in five participants (18%) reported counseling/mental health services as their most pressing need.

As seen below, more than half of participants (55%) entered during their second trimester of pregnancy. This proportion is consistent with FY 2019-20 (55%) and FY 2018-19 (51%). Almost one in four (23%) enrolled in their third trimester and about one in five participants (21%) enrolled during their first trimester. [1] **The proportion of participants enrolling earlier in their pregnancy (i.e., the first trimester) has increased** compared to the previous two fiscal years (18% in FY 2018-19 and 15% in FY 2019-20). Clients who enter the program earlier have more time to receive pregnancy education and necessary referrals.[2]

Figure 2 — **Number of Mothers Served, by Trimester of Entry**



Source: Health Assessment Intake. N=159.

In terms of the **socio-economic** realities[3] of participants, 30% were single and head of household (i.e., not partnered). More than one quarter did not have transportation (27%, 42/158) and/or were unemployed and looking for work (24%, 38/158). Additionally, 16% had not graduated high school (25/158), 15% reported they did not have stable housing (23/158), and 14% were unable to fulfill their food needs (21/158).

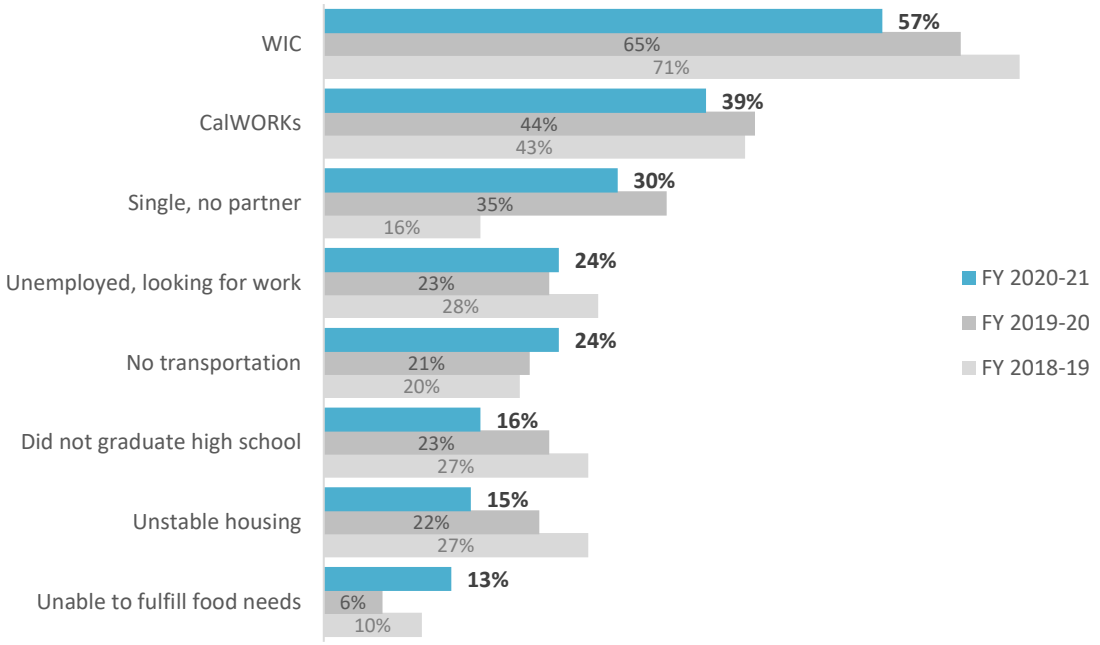
A larger proportion of participants experienced transportation and food needs, compared to FY 2019-20 (21% transportation, 6% food needs) and FY 2018-19 (20% transportation, 10% food needs). On the other hand, fewer participants reported unstable housing than in FY 2019-20 (22%) or FY 2018-19 (27%) and fewer had not graduated high school compared to FY 2019-20 (23%) or FY 2018-19 (27%).

More than half of the participants (57%, 90/158) were enrolled in WIC services for nutritional support and more than one-third (39%, 62/158) were on CalWORKs. Because participants were generally low-income, the utilization of CalWORKs or WIC for additional support is considered a protective factor. CalWORKs

[1] Trimester information was unknown for 1% of mothers participating in the program
[2] Measuring program entry helps to ensure clients receive access to early prenatal care
[3] All counts based on an N of 158 as one participant did not complete the Health Assessment Intake Form

utilization decreased compared to FY 2019-20 (44%) and FY 2018-19 (43%). WIC utilization reported at intake also decreased (57%), compared to FY 2019-20 (65%) and FY 2018-19 (71%).

Figure 3 — **Socio-Economic Factors Reported at Intake, 3-Year Trend**

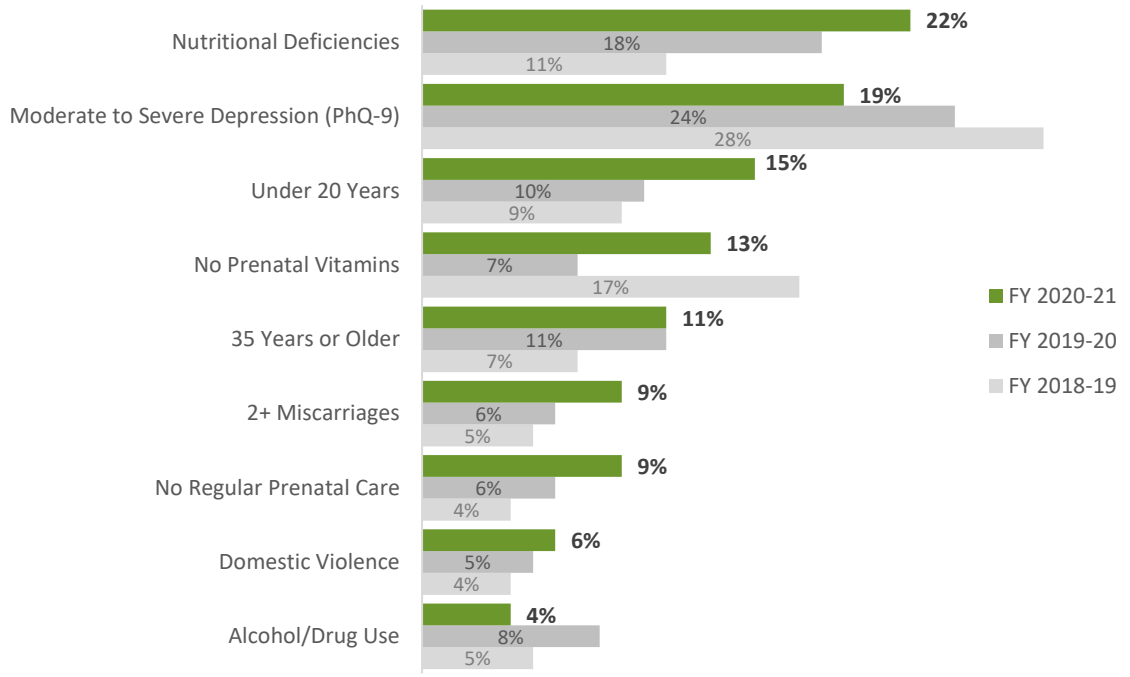


Source: Health Assessment Intake. FY 2018-19 N = 215, FY 2019-20 N = 179, FY 2020-21 N = 158

About one in five BMU program participants in FY 2020-21 experienced nutritional deficiencies (22%, 34/158) and moderate to severe levels of depression (19%, 21/108). About 15% of participants were under 20 years of age during their pregnancy, and 15% had another child less than one year old at the time of intake.[4] Additionally, 13% were not taking prenatal vitamins and about one in ten (11%) participants were 35 or older at the time of their pregnancy. Compared to FY 2018-19 and FY 2019-20, fewer participants in this fiscal year had moderate to severe PhQ-9 depression scores, while a larger proportion were under 20 years of age or not taking prenatal vitamins.

[4] Multiple births spaced closely together can increase adverse outcomes for mothers and babies, including low birth weight and premature birth.
https://www.mayoclinic.org/healthy-lifestyle/getting-pregnant/in-depth/family-planning/art-20044072

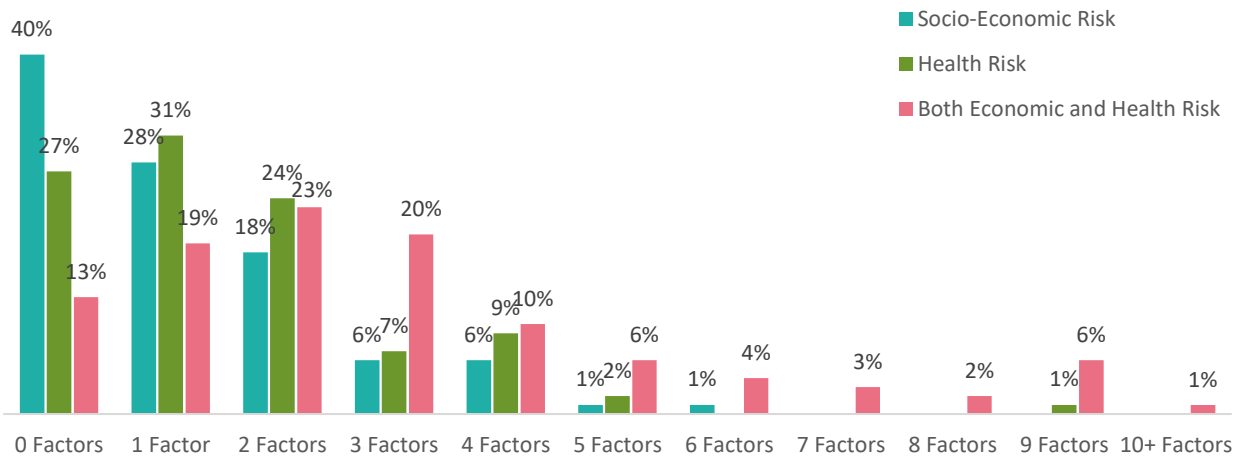
Figure 4 — **Top Health Factors Reported at Intake, 3-Year Trend**



Source: Health Assessment Intake. FY 2018-19 N = 215, FY 2019-20 N = 179, FY 2020-21 N = 158, though response rates may vary for each variable.

The aggregate number of socio-economic and health risk factors from the figures above were also calculated (see figure below). Most participants had at least one health risk factor (57%) and at least one socio-economic risk factor (65%). The specific breakdown of risk factors is provided in the figure below.

Figure 5 — **Percentage of Clients by Number and Type of Risk Factors, FY 2020-21**

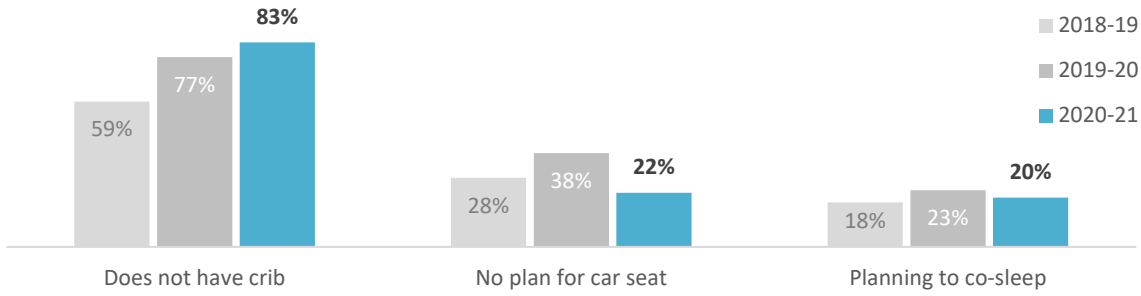


Source: Health Assessment Intake. N = 158

The health assessment also gauges mothers' preparedness for caring for the safety of their infants. Coaches provide resources, referrals, and education when needs are identified. As seen below, most (83%, 128/154) of the participants in FY 2020-21 did not have a crib at the time of intake. The proportion of new participants without a crib has increased since FY 2018-19 (59%) and FY 2019-20 (77%). On the other hand, the percentage of participants that did not yet have a plan for a car seat decreased to 22%

(34/154) from 38% in FY 2019-20. One in five participants (20%) were planning to co-sleep with their child, including those that reported co-sleeping along with some other sleeping arrangement. The percentage planning to co-sleep decreased slightly since FY 2019-20 (23%), although remains slightly higher than 2018-19 proportions (18%).

Figure 6 — **Infant Safety Risk Factors Reported at Intake**

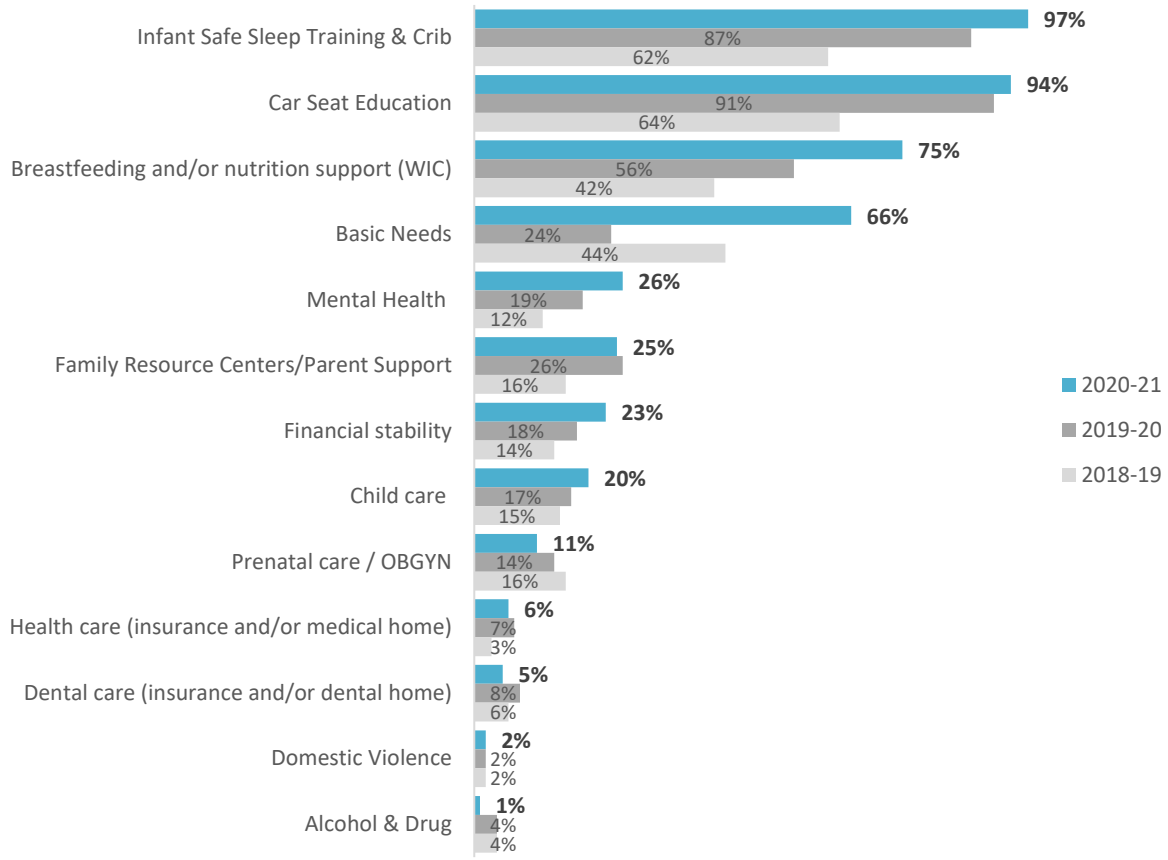


Source: Health Assessment Intake. N = 158, though response rates vary for each variable

REFERRALS

A key role of BMU's pregnancy coaches is to assess mothers' needs and provide referrals throughout their pregnancy as challenges arise. Referrals were given to women in the program based on self-reported needs and the needs observed by their pregnancy coaches. Nearly all participants received a referral for infant safe sleep training and crib (97%, 149/154) and car seat education and safety (94%; 144/145). Proportions of referrals for these services have continued to increase since FY 2019-20 (87% and 91%, respectively) and FY 2018-19 (62% and 64%, respectively). Additionally, three-quarters of the participants received one or more referrals for breastfeeding and/or nutritional support (i.e., WIC) at intake.

Figure 7 — **Percent of Clients Receiving Referrals, by Type, 3-Year Trend**



Source: Care Plan and Referral Log. N = 154. Five clients served in FY 2020-2021 were missing intake referral data.

As part of case management, pregnancy coaches help their clients connect to the services they need. When clients report contacting requested services, coaches log the initial referrals as having been followed up. Because follow-up data was not available on every client, the next analysis presents referral information on the 94 clients who had initial referrals *and* an exit form. For instance, 98% of clients who completed an exit form were referred for infant safe sleep training during their time in the BMU program. Among those referred, 43% said they were able to follow up on the referral, and 43% of those that followed-up said they received the infant safe sleep training.

The impact of COVID-19 needs to be acknowledged here as well, as many partner services continued to have reduced capacity or limited in-person services throughout FY 2020-21. It is possible that some mothers may have been unable to access services for which they were referred. The role of BMU's pregnancy peer mentors also continued to shift to adapt to changing needs related to COVID-19. Coaches had to navigate local, state, and national safety requirements while also assisting clients with navigating systems that were constantly changing due to the pandemic and increasing focus on families' access to basic needs among unprecedented circumstances.

Figure 8 — **Type of Referrals Provided and Client Report of Follow-Ups and Service Connections among Exited Program Participants**

Referral Type	Number of Referrals Given	Percentage Receiving Referral	Number of Referrals Followed Up	Percentage of Referrals Followed Up	Number of Services Received	Percentage of Services Received
Car Seat Education	88	94%	32	36%	13	41%
Infant Safe Sleep Training and Crib Provided	92	98%	40	43%	17	43%
Breastfeeding / Nutrition Support (WIC)	58	62%	33	57%	14	42%
Basic Needs	59	63%	32	54%	11	34%
Family Resource Centers/Parent Support	24	26%	9	38%	3	33%
Mental Health/Counseling	21	22%	6	29%	3	50%
Financial Stability	17	18%	13	76%	5	38%
Prenatal Care/OBGYN	13	14%	6	46%	4	67%
Child Care	18	19%	12	67%	4	33%
Dental Care	5	5%	2	40%	1	50%
Health Care (Insurance or Medical Home)	8	9%	5	63%	2	40%
Alcohol and Drug	1	1%	1	100%	1	100%
Domestic Violence	2	2%	1	50%	0	0%
Previous High-Risk Pregnancy	2	2%	1	50%	1	100%
Sexually Transmitted Infection	0	0%	NA	NA	NA	NA

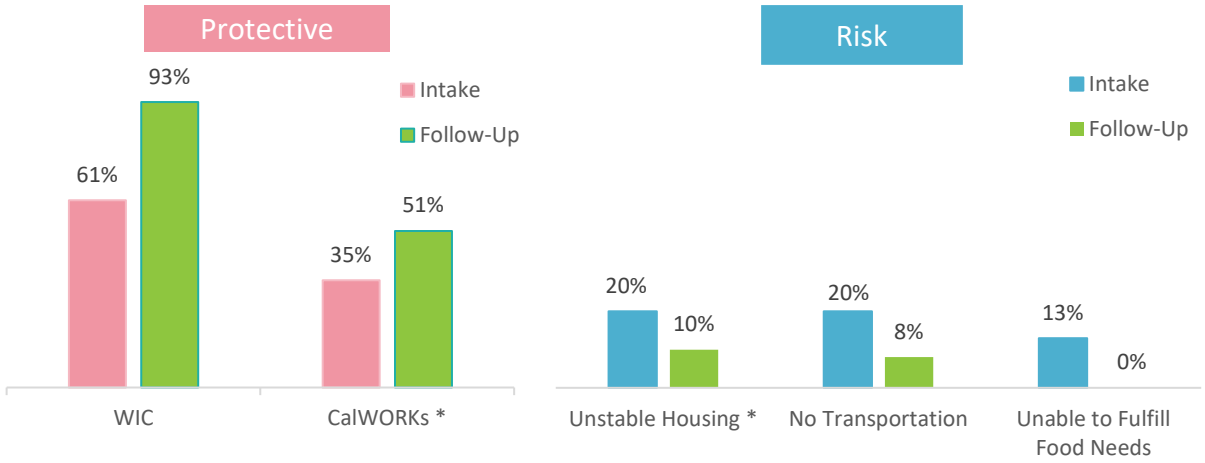
Source: Care Plan and Referral Log, 2020-21. Follow-up status is assessed for clients who have both a referral form and an exit form, therefore these numbers are different than in the figure above. N varies by item.

CHANGES IN RISK AND PROTECTIVE FACTORS

One of the primary objectives of the Pregnancy Peer Support program is to understand factors that pose a direct risk to the health of the baby as well the health and well-being of mothers. During intake and follow-up health assessments, clients are asked to self-report on a variety of factors related to socio-economic conditions, psychosocial wellbeing, maternal health, and infant safety. The following presents results from a matched set of clients (n = 82) who completed both intake and follow up assessments.

Participants with both an intake and follow up assessment increased their use of **socio-economic protective resources**. WIC enrollment increased 32 percentage points (61%, 50/82 at intake; 93%, 76/82 at follow-up). More participants also had CalWORKs financial support between intake (35%, 29/82) and follow-up (51%, 42/82). Participants also decreased (improved upon) all **socio-economic risk factors** related to resource information provided by the BMU program. Participants experiencing unstable housing decreased by 50% (16/82 at intake and 8/82). Access to transportation substantially improved between intake (20% with transportation needs) and follow up (8% without transportation). At intake, 13% (10/78) were unable to fulfill food needs. At follow-up, ALL participants that completed both assessments were able to fulfill their food needs. These findings continue to indicate that BMU participants increased connections with essential services that improved their families' stability and basic needs.

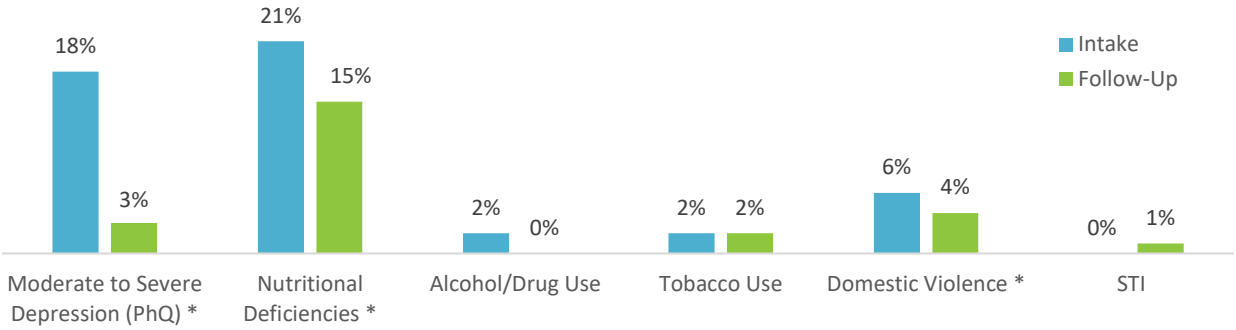
Figure 9 — **Change in Reported Socio-Economic Factors from Intake to Follow Up Assessment**



Source: Health Assessment Intake and Follow Up. Matched sets; N = 82. N's may vary based on item response rate. Column names marked with * represent a statistically significant change.

As for **health risk factors**, participants with both intake and follow up assessments were most likely to experience nutritional deficiencies (21%) or moderate to severe depression[5] (18%) at intake. At follow up, mothers with moderate to severe depression (3%) substantially decreased. Mothers reporting nutritional deficiencies at follow-up (15%) decreased six percentage points after program completion. Reports of domestic violence and alcohol/drug use also decreased.

Figure 10 — **Change in Reported Health Factors from Intake to Follow Up Assessment**



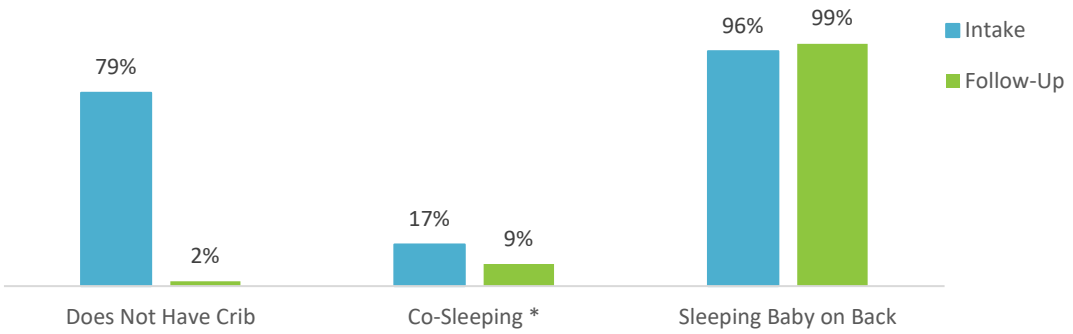
Source: Health Assessment Intake and Follow Up. Matched sets; N = 82 for all categories except depression, where N = 64. Column names marked with * represent a statistically significant change.

After completion of the BMU program, participants also displayed positive changes in **preparedness for infant safety**. At intake, 79% of mothers did not have a crib for their baby, which reduced to only 2% at the time of their follow-up. The proportion of parents planning to co-sleep with their baby (17%) also decreased to 9% upon completion of the program.[6] Nearly all (99%) reported that babies were put to sleep on their backs after program completion, a slight increase from those who intended to sleep babies on their back at intake (96%).

[5] As defined by the PhQ-9 assessment

[6] Co-sleeping includes some mothers reporting co-sleeping and some other sleeping arrangement (i.e., crib)

Figure 11 — **Change in Reported Infant Safety Practices from Intake to Follow-Up Assessment**



Source: Health Assessment Intake and Follow Up. Matched sets; N = 82. Categories marked with * represent a statistically significant change.

BIRTH OUTCOMES

Birth outcome information was provided by mothers during their postpartum visit with their Pregnancy Coach. There was a total of 85 infants born,[7] including 83 singletons and one set of twins (2 infants). For the second consecutive year, there were zero infant deaths reported as of the mothers' postpartum follow-ups.

For the second consecutive year, there were zero fetal or perinatal deaths among infants born during BMU program involvement.

Of the 85 infants, 82% (70/85) were born at a healthy birth weight, 82% (70/85) were born full term, and combined, 75% (64/85) had a healthy birth outcome in that they were born at a healthy birth weight and full term. In terms of less favorable outcomes, 18% (15) of the 85 babies were born low birth weight and 18% (15) of infants were born pre-term. Nine infants (11%) were born both low birth weight *and* pre-term, including the two twins. Ten babies stayed in the NICU and one was born with jaundice. The proportion of babies born with unfavorable outcomes remain similar to those in FY 2018-19 and FY 2019-20. See Appendix 1 for a list of factors associated with individuals' adverse birth outcomes.

In terms of perinatal outcomes, at the time the Pregnancy Outcome Form was completed approximately one month postpartum, 87% (74/85) of babies had been taken for well-baby checks with a pediatrician. Infants receiving well-baby visits increased from 79% in FY 2019-20. Similar to last fiscal year, 65% (55/85) of babies exclusively breastfed in the hospital, and 19% (16/85) breastfed in combination with formula in the hospital, meaning that **84% of infants received some, or only, breastmilk in the hospital.** Hospital breastfeeding rates increased from 78% in FY 2019-20. At follow-up, 40% (34/85) of babies were exclusively breastfed and 28% (24/85) were receiving a combination of breastmilk and formula. In total about **two thirds (68%) were receiving some, or only, breastmilk as of their first postpartum home visit.**

[7] Number of infants born from mothers who joined BMU in either FY 2019-20 or FY 2020-21 and received service(s) in FY 2020-21.

Figure 12 — **Birth and Perinatal Outcomes of Pregnancy Peer Support Clients**

	All Infants (N = 85)		Twins (N = 2)		Singletons (N = 83)	
Live Births	85	100%	2	100%	83	100%
Favorable Outcome						
Healthy birth weight	70	82%	0	0%	70	82%
Full-term birth	70	82%	0	0%	70	82%
Healthy birth weight *and* full-term birth	64	75%	0	0%	64	75%
Unfavorable Outcome						
Preterm birth	15	18%	2	100%	13	16%
Low birth weight	15	18%	2	100%	13	16%
Newborn death	0	0%	0	0%	0	0%

Source: Pregnancy Outcomes Form.

The figure below represents the prevalence of key risk and protective factors across different profiles of birth outcomes to discern the association between maternal factors and birth outcomes: healthy births (not low birthweight, not preterm), one poor birth outcome (either low birthweight *or* preterm), and both poor birth outcomes (low birthweight *and* preterm). The proportion of mothers' WIC enrollment was higher for those with healthy births (63% enrolled) compared to those with one poor outcome (58% enrolled) and two poor outcomes (33%). Single, unpartnered mothers also comprised a larger portion of those with one (42%) or two (56%) poor birth outcomes, compared to those with healthy births (27% single, unpartnered).

Figure 13 — **Birth Outcomes based upon Risk and Protective Factors Identified at Intake**

Pregnancy Risk and Protective Factors from Intake	Healthy Births (N = 64)		Either LBW *or* Preterm (N = 12)		Both LBW *and* Preterm (N = 9)	
Health Factors	n	%	n	%	n	%
No Regular Prenatal Care	5	8%	2	17%	2	22%
2+ Miscarriages	3	5%	1	8%	2	22%
35 years or older	7	11%	0	0%	2	22%
Under 20 years old	6	9%	2	17%	2	22%
No Prenatal Vitamins	2	3%	0	0%	3	33%
STI	0	0%	0	0%	0	0%
Alcohol or Drug Use	5	8%	0	0%	0	0%
Tobacco Use	2	3%	0	0%	0	0%
Anxiety/Depression	21	33%	4	33%	1	11%
Nutritional Deficiencies	13	20%	2	17%	3	33%
Obesity	5	8%	0	0%	0	0%
Socio-Economic Factors	n	%	n	%	n	%
WIC	40	63%	7	58%	3	33%
CalWORKs	22	34%	5	42%	4	44%
Did Not Graduate High School	8	13%	1	8%	1	11%
Unstable Housing	8	13%	1	8%	1	11%
No Transportation	12	19%	3	25%	1	11%

Unable to Fulfill Food Needs	7	11%	2	17%	3	33%
Unemployed, Looking for Work	6	9%	3	25%	1	11%
Single, Unpartnered	17	27%	5	42%	5	56%
Program Factors	***M***	**SD**	***M***	**SD**	***M***	**SD**
Gestational Weeks at BMU Intake	21.48	7.61	22.44	8.50	21.50	9.55
Gestational Weeks at First Prenatal Visit[8]	7.88	3.66	6.33	2.08	6.50	3.54
Number of BMU Weekly Check-Ins[9]	11.59	8.01	15.00	7.27	4.57	4.28

Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form.

FACTORS THAT ARE ASSOCIATED WITH ADVERSE BIRTH OUTCOMES

In order to understand the factors that are associated with adverse birth outcomes, a series of analyses were conducted. It is important to note that none of the following analyses imply causation. It is likely that other factors played into the relationship between the studied variables. In addition to an adverse birth outcome variable, that was dichotomous (either yes, there was an unhealthy birth outcome or no, it was a healthy birth), two other outcome variables (birthweight and gestational age) were analyzed as separate dependent variables, as it is likely that there are different predictors for each.

- The first outcome variable examined whether there was a healthy or unhealthy birth, as a dichotomous variable
- The second outcome variable examined birth weight as a continuous variable
- The third outcome variable examined gestational age as a continuous variable.

First, in order to identify factors that had a significant relationship to the outcomes studied, correlations were conducted on all variables identified in the figure above. Correlations imply a relationship between two variables; significant correlations mean variables are related to one another in some way (though correlations do not mean that a variable caused an outcome). Across the outcomes analyzed, significantly correlated variables are shown in the figure below (variables that were not correlated with any birth outcome are not displayed). All correlations were in the expected directions (i.e., someone who was unable to fulfill food needs was more likely to have an adverse birth outcome). Three cohorts of BMU clients (FY 2018-19 through FY 2020-21) were included to increase statistical power. This increased the sample size to 288.

[8] There were large amounts of missing data in this category, results should be interpreted cautiously. Out of 87 participants reporting having had a first prenatal visit, 26 (30%) did not report the number of gestational weeks.
[9] Numbers reported here are comprised of the 61 women who delivered *and* exited the program, as valid check-in counts are only available after exit.

Figure 14 — **Factors that Correlate with Birth Outcomes**

Risk Factors at Intake	Analysis 1	Analysis 2	Analysis 3
	Adverse Birth Outcome	Birthweight	Gestational Age
	(Dichotomous; Y/N)	*(Continuous)*	*(Continuous)*
Single, no partner	●		
Unable to fulfill food needs	●	◆	
Unemployed, looking for work		●	●
Anxiety or depression	●		
Domestic violence	●		
Obesity		●	
Tobacco use	●	●	
Alcohol/drug use	●	◆	
Number of check-ins with BMU pregnancy coach	◆	●	●
Weeks at BMU Intake		◆	

Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form. A blue dot represents statistical significance of at least $p < .05$. The gray diamond symbol represents marginal statistical significance at $p < .10$

Next, ASR conducted regressions to determine how each of the correlated variables identified (above) independently predicted birth outcomes. Regressions are more sophisticated than correlations and can discern if an independent variable is able to statistically predict an outcome variable, over and above the influence of any other covariates. Variables that were not correlated with birth outcomes were not included in regression models, since they did not have a statistical relationship or impact on one another. It is important to note that although regressions provide more sophisticated analyses than correlations, they do *not* imply causal relationships. As with the correlational analysis, clients from FY 2018-19, FY 2019-20, and FY 2020-21 cohorts were included for analysis to increase power of results (N = 288).

First, a logistic regression was conducted on the dichotomous measure of adverse birth outcomes (yes/no). Inability to fulfill **food needs** and **tobacco use** both independently predicted having an adverse birth. The odds of a tobacco user having a low birthweight and/or pre-term birth were nearly five times greater than non-tobacco users.

Tobacco use, inability to fulfill food needs, obesity, and fewer check-ins with a BMU pregnancy coach each predicted having an infant with one or more adverse birth outcomes.

Secondly, results of a linear regression on the continuous birth weight variable highlighted that obesity, tobacco use, and number of weekly BMU check-ins each independently correlated with infant birth weight. **Tobacco use** and **fewer check-ins with the BMU pregnancy coach** each independently predicted having an infant with a lower birthweight. Maternal **obesity** was predictive of a child having a higher birth weight, which may have its own health impacts on the mother and infant, including a greater likelihood of a cesarean delivery[v] or pre-term birth.[vi]

Lastly, a linear regression was conducted on the continuous outcome of gestational age. **More check-ins with a BMU pregnancy coach** independently predicted delivering an infant at a higher gestational age. This demonstrates the program's impact on birth outcomes and may provide evidence that increasing check-ins positively impact the mother and child. Continued support of BMU check-ins and a deeper understanding of barriers some mothers may face to attend regular check-ins may provide further opportunities for growth and impact.

The table below displays the factors that were found to independently predict birth outcomes.

Figure 15 — **Factors that Independently Predict Birth Outcomes**

Risk Factors at Intake	Analysis 1	Analysis 2	Analysis 3
	Adverse Birth Outcome	Birthweight	Gestational Age
	(Dichotomous: Y/N)	*(Continuous)*	*(Continuous)*
Unable to fulfill food needs	●		
Tobacco use	●	●	
Unemployed, looking for work		◆	
Obesity		●	
Number of check-ins with BMU pregnancy coach		●	●

Source: Health Assessment Form, Pregnancy Outcomes Form, and Exit Form. A blue dot represents statistical significance of at least $p < .05$. A gray diamond represents marginal significance at $p < .1$.

Overall, there were multiple risk factors correlated with having an adverse birth outcome. When further explored to best understand the relationships between variables and outcomes, food needs, tobacco use, and fewer check-ins with a BMU pregnancy coach emerged as significant independent predictors of one or more adverse birth outcomes. These results can provide guidance for program focus and improvements (i.e., exploring new ways to encourage and support tobacco cessation or reminding clients of the many benefits of frequent and consistent check-ins with their pregnancy coach).

LEVEL OF PROGRAM COMPLETION

The BMU program strives to reach pregnant women wherever they are in their pregnancy, and sometimes this is not until later in gestation. Different dosage thresholds were set based upon mothers' trimester of entry to evaluate the extent to which participants completed the program. Women who entered the program during their first trimester have the opportunity to complete at least 21 prenatal visits with their Pregnancy Coach; therefore, the minimum threshold of completion for women in the First Trimester Cohort is 21 prenatal visits. Ideally, women who entered the program in their second trimester would have 10 or more prenatal visits, and women who entered in their third trimester would have 6 or more prenatal visits.

> "Days I wanted to give up, it wasn't an option … they wouldn't let you give up. They have your back 100 percent and support you through the whole way."
>
> – BMU Client

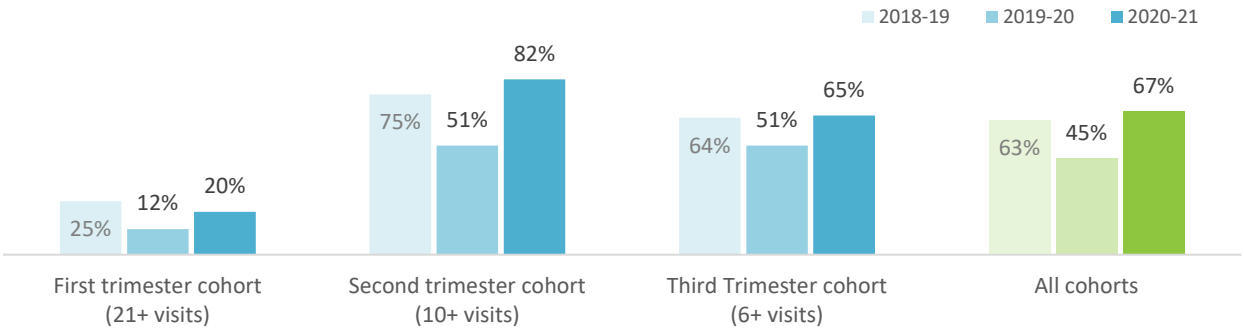
The BMU program reaches a high-need population, and retention of this population has historically been a challenge, particularly amidst a global pandemic. Program completion is defined as completing a) the minimum prenatal service requirements based on the trimester of entry and b) a postpartum visit with the BMU pregnancy coach. Partial completion is defined as completing one but not both requirements. Participants who exited without completing either requirement are categorized as *not* completing the program. Amongst participants who completed the program, the figure below illustrates the level of prenatal visit completion per cohort, as well as an average across all cohorts. Out of the 61 women who delivered *and exited* the program in FY 20-21, [10] **two-thirds (67%, 41/61) had completed the minimum number of prenatal visits based on their timing of program entry**. Twenty percent (2/10) of mothers

[10] Some mothers remain in the program for up to six months postpartum and therefore, some of these mothers joined the BMU program in FY 19-20.

entering the program in their first trimester, 82% (28/34) of those entering in the second trimester, and 65% (11/17) entering in the third trimester completed the minimum number of prenatal visits.

Despite the continued impact of the COVID-19 pandemic and fewer women delivering and exiting the program, the proportion completing the minimum number of prenatal visits was higher than in FY 2019-20 (44%) or FY 2018-19 (63%). FY 2019-20 rates may reflect the initial impact of COVID-19 when shelter-in-place orders and high levels of uncertainty limited the ways women could achieve weekly visits with coaches (e.g., transportation services suspended for three months). As communities got more accustomed to virtual visits, program completion rates may have increased back to pre-pandemic proportions. However, since the number of participants remained lower than the previous two fiscal years, barriers (e.g., stressors for basic needs, access to reliable internet source for virtual sessions) exacerbated or caused by the pandemic may still be impacting program involvement and completion.

Figure 16 — **Completion of Prenatal Service Requirements, by Trimester Cohort of Entry, 3-Year Trend**

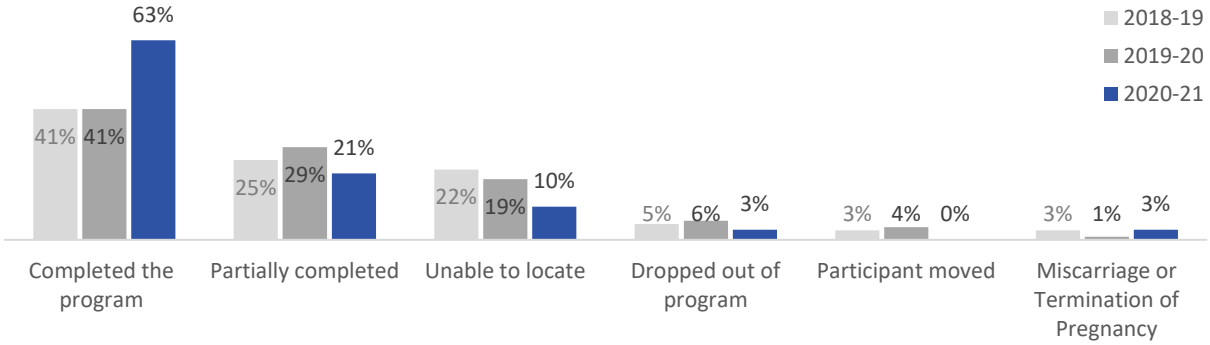


Source: Exit Form. Data are not presented for clients who do not have an exit form, as the dosage status is unknown. FY 2018-19 N = 62, FY 2019-20 N = 123, FY 2020-21 N = 61

Another essential component of the Pregnancy Peer Support model is the postpartum support provided by coaches. These visits typically occurred around 30 days after delivery and provide an opportunity for coaches to learn about the delivery outcome, check in on mom and baby's well-being, complete the postpartum paperwork, and provide referrals to any necessary resources. In FY 2020-21, all participants (100%, 61/61) that delivered and completed an exit form in FY 2020-21 met with their pregnancy coach for at least one postpartum visit. In comparison, 68% of the FY 2019-20 participants and 97% of FY 2018-19 participants met with their pregnancy coach for at least one postpartum visit.

Among all participants exiting the BMU program in FY 2020-21, 63% completed both the minimum number of prenatal visits and a postnatal visit with their coach, while 21% completed one of the two requirements. Participants completing both components was higher than the previous two fiscal years (41%), and the proportion of those that BMU was unable to locate (10%) or those that dropped out of the program (3%) decreased compared to previous fiscal years.

Figure 17 — **Status at Program Exit, 3-Year Trend**



Source: Exit Form. FY 2018-19 N= 149, FY 2019-20 N = 123, FY 2020-21 N= 96

CLIENT SUCCESS STORY

Vivian[11] is a second-time mom who initially connected with BMU in 2019 while pregnant with her first daughter. During that pregnancy, Vivian's coach assisted her with "a lot of help and supplies," attended doctor's appointments, and assisted her when she did not have transportation, "even in the rain, even though she had her own children." Vivian also felt that the Mommy Mingle groups helped remind her she was not alone, even when she felt like it. She also learned how to use a car seat as a first-time mom, and had a space to talk about depression, mental health, and experiences with doctors not meeting their needs.

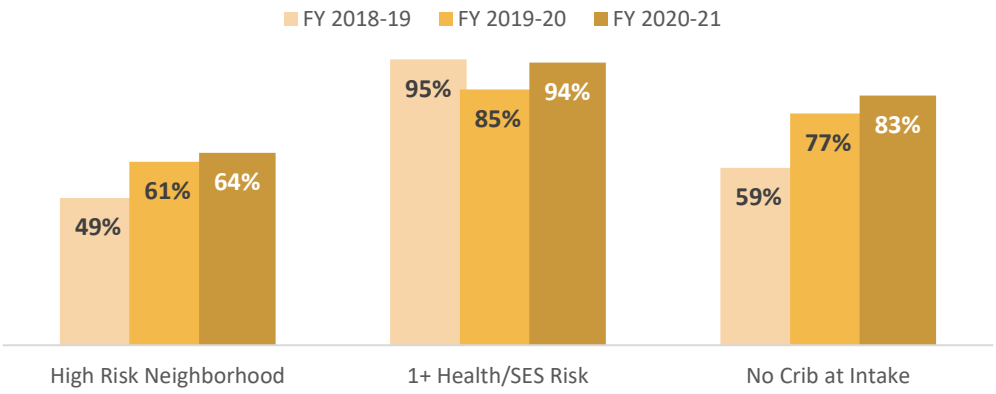
Vivian became pregnant with her second child in 2021. Around that time, she also became homeless with her two-year-old, and "was doing really bad." She reconnected with BMU and her pregnancy coach assisted her with several weeks of hotel vouchers, helped her find listings for jobs that were hiring, assisted her with groceries, and made sure she and her family were safe. As Vivian described, "[my pregnancy coach] made sure my mental health wasn't failing due to my situation. She never made me feel alone even at my worst part of life… I was so grateful I cried." For Vivian, the BMU program was an essential source of support and family, particularly among her most difficult times. As she explained, even on the days she wanted to give up, the BMU program would not let her. "They have your back 100 percent and support you through the whole way… They have helped my family and I in so many ways I can't thank them enough."

THREE YEAR SUMMARY, FY 2018-19 TO FY 2020-21

Between FY 2018-19 and FY 2020-21, BMU served a highly vulnerable population.

- A large portion of BMU clients lived in one of the seven designated high-risk neighborhoods.
- Nearly all participants had at least one health and/or socioeconomic risk factor at intake
- BMU increasingly received clients that did not yet have a crib for their baby at the time of intake
- Needs may have been exacerbated by the global COVID-19 pandemic, beginning in March 2020

[11] Fictitious names used



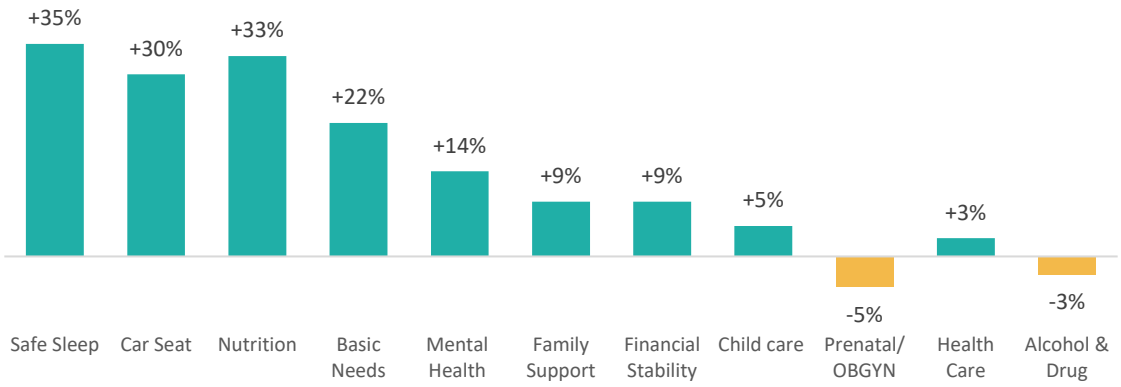
No more than one in five clients entered the BMU program during their first trimester. Each year, about half of all mothers served entered during their **second trimester**. COVID likely impacted program participation (16% decrease between FY 18-19 and FY 19-20 and a further 12% decrease between FY 19-20 and FY 20-21), although BMU staff adapted their programming to safely serve clients in virtual settings including group and individual workshops.

Despite fewer mothers served, BMU clients have consistently shown improvements in protective factors, safe sleep practices, access to resources, and decreased health risks and psycho-social barriers. Among participants with intake and follow-up health assessments, BMU clients typically:

- Increased their use of protective factors (WIC and CalWORKs)
- Increased access to stable housing, transportation, and were able to fulfill food needs
- Decreased reports of moderate to severe depression (PhQ-9) and nutritional deficiencies

Additionally, 94% to 98% of clients had **access to a crib** by the time they completed their BMU program. Reported rates of co-sleeping decreased for the first time in FY 20-21 (17% at intake, 9% at follow-up). Nearly all participants reported sleeping their baby on their back at follow-up.

Between FY 2018-19 and FY 2020-21, BMU largely **increased outgoing referrals**. Infant safe sleep, car seat education, and breastfeeding/nutrition referrals increased more than 30%. Nearly all participants received a referral to infant safe sleep training (97%) and car seat education (94%) in FY 2020-21. Referrals to prenatal/OBGYN care and alcohol and drug treatment decreased slightly, overall. The number of referrals for sexually transmitted infections, dental care, and domestic violence largely stayed the same across the three years (not pictured below).



Between FY 2018-19 and FY 2020-21, BMU client **birth and perinatal outcomes** were favorable, overall:

- Most babies were born at a healthy birth weight and full-term (76% FY 18-19, 80% FY 19-20, 75% FY 20-21)
- The percent of babies born with jaundice decreased from 4% in FY 18-19 to 1% in FY 20-21
- The proportion of clients reporting a well-baby check up with a pediatrician increased from 56% in FY 18-19 to 87% in FY 20-21.
- Almost two-thirds of mothers reported exclusively breastfeeding in the hospital in FY 19-20 (63%) and FY 20-21 (65%)

Despite overall favorable outcomes, the proportion of clients with low birth weight (17% FY 18-19, 12% FY 19-20, 18% FY 20-21) or pre-term births (20% FY 18-19, 17% FY 19-20, 18% FY 20-21) remained higher than Sacramento African Americans (12% LBW, 13% pre-term) or the total countywide population (7% LBW, 9% pre-term).[12] Between FY 2018-19 and FY 2020-21, the **factors predicting adverse birth outcomes** (low birth weight and/or pre-term birth) commonly included fewer check-ins with BMU pregnancy coaches, anxiety or depression, tobacco use, and a lack of basic needs (i.e., inability to fulfill food needs, unstable housing.) These patterns may highlight the added vulnerabilities of mothers served by BMU and the importance of these services in Sacramento County.

OPPORTUNITIES FOR IMPROVEMENT

As coaches, staff, and community members continued to adapt to the unprecedented circumstances of FY 2020-21, BMU continued to make significant impacts on families in Sacramento County. In addition to these successes, the analyses discussed above highlight opportunities to improve the program further, such as:

- Identify opportunities to leverage funding and stability to build more program capacity, thus serving more mothers in Sacramento County.
- Explore opportunities to expand support for tobacco use, obesity, and other health risk factors which correlated with adverse birth outcomes.
- Continue efforts to reach mothers as early in their pregnancy as possible and keep them engaged through the duration of their pregnancy. Work to remind families of the benefits of regular and consistent check-ins with the pregnancy coach and innovate ways to keep mothers engaged.
- Explore referral partnerships to enroll more mothers and enroll them earlier in their pregnancies. In FY 2020-21, the most common referral sources were word of mouth from friends or family (40%), BMU outreach (22%), Community Incubator Leads (9%), and social media (7%). Strengthening partnerships with OBGYN clinics and other service providers may support opportunities for growth.
- Continue efforts centering BMU in trauma-informed practice, including efforts that build on wellness and mindfulness. Pregnancy Coaches With this model, pregnancy coaches will learn basic mindfulness practices as a method of supporting themselves as “caregivers” and clients in the program will be encouraged to develop practices to support stress relief and general wellness during the postpartum period and beyond.

[12] Countywide rates include 2017-2019 rolling averages

Family Resource Centers

The Birth & Beyond Family Resource Center (FRC) program is implemented by seven community-based organizations who aim to prepare staff with the skills and competencies to serve families through home visiting, parenting education workshops, crisis intervention, and social-emotional learning and supports (enhanced core) in nine Sacramento County neighborhoods.

First 5 Sacramento provides funding for FRCs with the goal of decreasing child abuse and neglect through prevention and early intervention. Birth & Beyond services intend to improve the lives of children and their families, especially those from particularly at-risk backgrounds. Birth & Beyond supports a strengths-based approach to case management to maximize the current skills of staff and each participant and to educate and increase skills in areas of need.

Birth & Beyond understands and values the cultural diversity in the population that it serves, and therefore takes great care in developing staffing that mirrors their clients in terms of demographic characteristics, language, and experience living or working within the service area. Throughout their tenure at Birth & Beyond, staff receive training, direct supervision, and experience to enhance their personal and professional development. In 2018-19, all FRCs underwent training with consultant Adele James and each FRC developed a plan to increase outreach and cultural responsiveness.

In addition to deliberate staffing, Birth & Beyond also strategically locate FRCs in neighborhoods characterized by high birth rates, low income, as well as those above County averages for referrals to and substantiated reports to Child Protective Services (CPS), the greatest incidence of referrals to the child welfare system for child abuse and neglect. FRCs are located in nine neighborhoods:

- Arden Arcade
- Del Paso Heights
- Meadowview
- North Highlands
- North Sacramento
- Oak Park
- Rancho Cordova
- South Sacramento
- Valley Hi

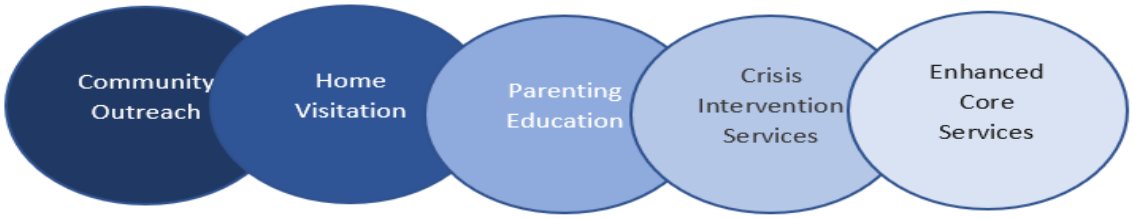
The locations of the FRCs coincide with neighborhoods identified by the Blue Ribbon Commission as the focal areas for the RAACD initiative. Although the focus is reducing child death across all of Sacramento County, one FRC was expanded (Valley Hi) and one FRC was re-established (Arden Arcade) with First 5 funding with the specific target of serving African Americans and reducing the African American child death rate.

Located throughout Sacramento County in areas of high need, all FRCs provide standard services complemented by unique activities and special events that reflect the characteristics of its specific neighborhood. All Birth & Beyond activities, classes, community events, family activities, and direct services are operated out of the FRC neighborhood hubs. As discussed in previous sections, First 5 funded partners faced difficulties throughout FY 2020-21 due to the devastating impact of the COVID-19 pandemic on families and communities. With frequently changing safety regulations and risk at the local, state, and national level, parents faced elevated stress due to job loss, reduced access to childcare and

resources/basic necessities, and shifts to virtual settings for things like schooling and work. These added hardships impacted Birth & Beyond's programming, as they shifted to more crisis intervention. Additionally, some parents needed to prioritize their family's essential needs and COVID-related anxieties over home visitation and workshop participation, leading to decreased attendance. This section should be read with these considerations in mind.

The core services provided by the FRCs during FY 2020-21 included home visiting, parenting education, crisis intervention services, and enhanced core services. Home visiting clients receive direct case-management and parenting education through the *Nurturing Parenting Program* model. Due to COVID, services were provided using virtual platforms during FY 2020-21, compared to pre-COVID meetings in the family's home. Parent education clients attend FRC-based workshops based upon either *Making Parenting a Pleasure* or *Nurturing Parenting Program* models. Crisis intervention clients receive intense, short-term case-management services for emergent situations, such as homelessness, food instability, domestic violence, substance abuse, or COVID-related emergency supplies. Enhanced core clients receive "light touch" services, such as FRC-based classes, events, or activities that are intended to augment other services the client is receiving, or to promote social and community engagement and therefore reduce isolation. All services that FRCs provide contribute to decreasing child abuse and neglect, however the current report focuses on home visiting and parenting education outcomes.

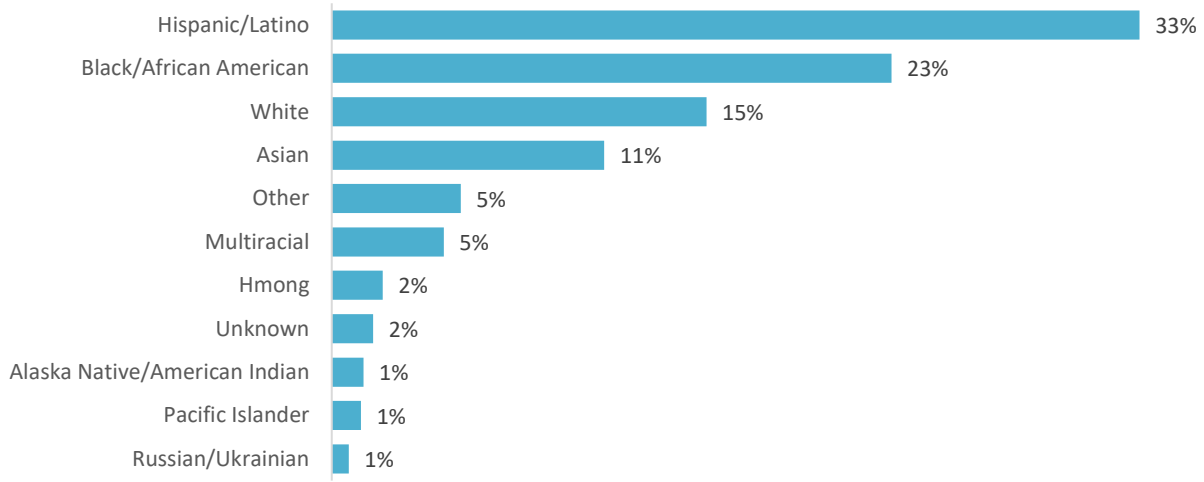
Figure 18 — **Birth & Beyond Services**



In FY 2020-21, FRCs served with funding from First 5 Sacramento, FRCs served an estimated 3,898 adults and 1,152 children. About 23% of clients served at FRCs identified as Black/African American. The figure below describes the ethnicity break-down for all participants. Birth & Beyond serves a more diverse population compared to Sacramento County's overall population, which is about 44% White, 24% Hispanic/Latino, 17% Asian, 11% African American, and 5% some other race/ethnicity.[13]

[13] Source: U.S. Census Bureau, 2020.

Figure 19 — **Ethnicities Served at Family Resource Centers in Sacramento County**



Source: Birth & Beyond Demographics Report on Persimmony, FY 20-21.

HOME VISITING

The Home Visiting program through Birth & Beyond for FY 2020-21 used the *Nurturing Parenting Program* (NPP), an evidence-based home visiting curriculum provided at least weekly, with a minimum of two months of visiting services. In FY 2020-21, 978 parents received at least one home visiting service funded by First 5 Sacramento, of which 23% identified as Black/African American. Among the parents receiving First 5 funded home visiting, **296 received eight or more hours of home visiting.** Of those with 8 or more hours, 13% (37/291) identified as Black/African American. Consistent with FY 2019-20, the North Sacramento FRC served the highest proportion of African American home visiting parents (34%; 33/98) followed by the Firehouse FRC (31%; 40/128).

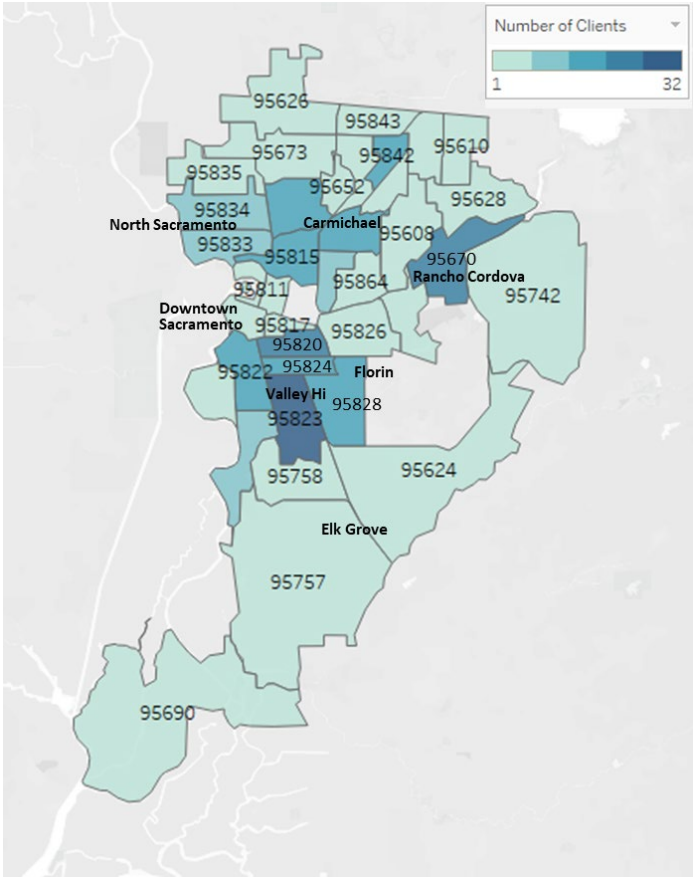
Figure 20 — **Proportion of African American Home Visiting Clients, by FRC**

	Total # Home Visiting Clients	N (%) African American	8+ hours home visiting	N (%) African American
Valley Hi FRC	**168**	**40 (24%)**	**62**	**7 (11%)**
WellSpace North Highlands FRC	**132**	**22 (17%)**	**36**	**4 (11%)**
Firehouse FRC	**128**	**40 (31%)**	**31**	**7 (23%)**
La Familia FRC	**119**	**16 (13%)**	**37**	**5 (14%)**
Arcade FRC	**102**	**27 (26%)**	**30**	**3 (10%)**
North Sacramento FRC	**98**	**33 (34%)**	**34**	**6 (18%)**
Meadowview FRC	**97**	**29 (30%)**	**26**	**5 (19%)**
Folsom Cordova FRC	**82**	**8 (10%)**	**22**	**0 (0%)**
River Oak FRC	**52**	**8 (15%)**	**18**	**0 (0%)**
Total	**978**	**223 (23%)**	**296**	**37 (13%)**

Source: Birth & Beyond First 5 Funded Home Visiting participants receiving NPP home visiting (N=978); Valley Hi counts include Valley Hi FRC (n=128) and Valley Hi Village (n=40)

The map displays the geographic location where home visiting participants resided. The largest number of home visiting participants completing eight or more hours were located in the Valley Hi neighborhood (zip code 95823, 11%). The areas with the fewest number of home visiting participants were primarily in areas surrounding the perimeter of Sacramento County. Among these home visiting participants, about two-thirds (68%, 202/295) resided in one of RAACD's seven targeted primary service areas.

Figure 21 —**Location of Home Visiting Participants Receiving 8 or more Hours of Home Visiting**



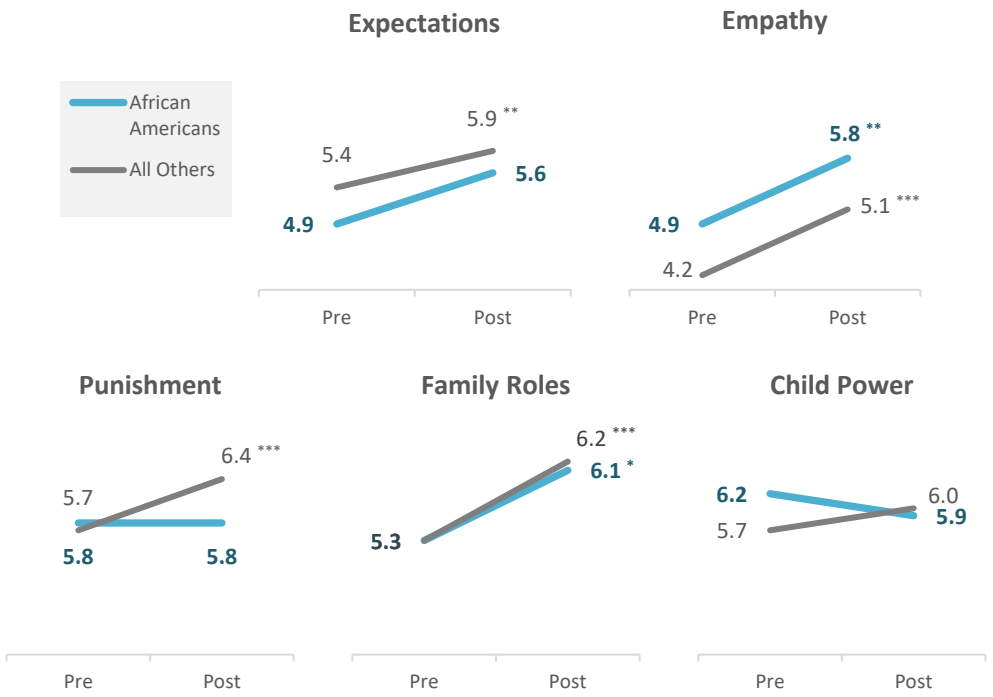
Source: B&B First 5 Funded Home Visiting Participants receiving 8+ hours home visiting. N=296

Home visiting participants were screened using the Adult Adolescent Parenting Inventory (AAPI),[14] a tool that measures risk for child maltreatment. It includes five domains: *Expectations of Children, Parental Empathy Towards Children's Needs, Use of Corporal Punishment, Parent-Child Role, and Children's Power*. Each item is scored on a scale of 1 (high risk) to 10 (low risk).

In total, 203 parents had both a pre- and post-AAPI assessment after completing the NPP home visiting program. Of these, 32 (16%) were African American. The figure below displays mean scores on each AAPI domain, separated by African American and All Other Races. Overall, African Americans performed similarly to those of other racial backgrounds, and in general, scores on the AAPI tended to increase from pre- to post-assessment. However, for African Americans, their AAPI score on Children's Power decreased from pre- to post-test (although this change was not statistically significant).

[14] FY 2020-21 was the last year that B&B used both the NPP and APPI tools.

Figure 22 — **Change in Mean Scores on AAPI in Pre- and Post-Test for Home Visiting Clients**

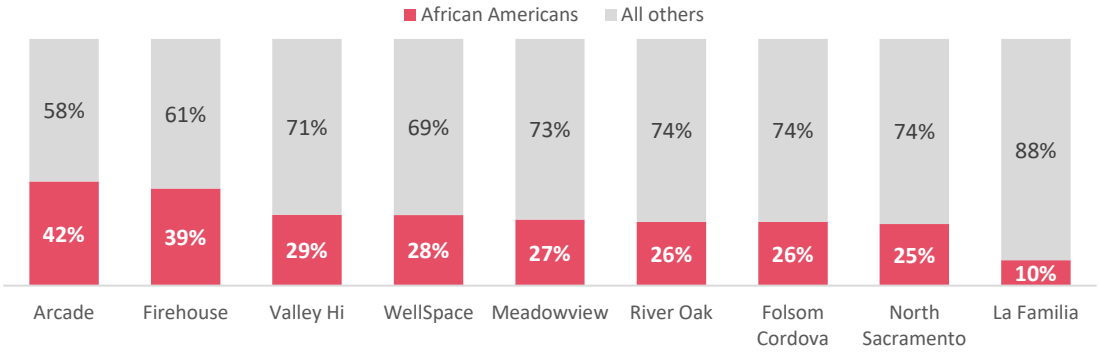


Source: AAPI pre- and post-assessment scores, Birth & Beyond 2020-21. Note: African American N = 32. All Other Races N = 171. Statistical significance reported at post-test value as * p < .05, ** p <.01, and *** p < .001

PARENTING EDUCATION

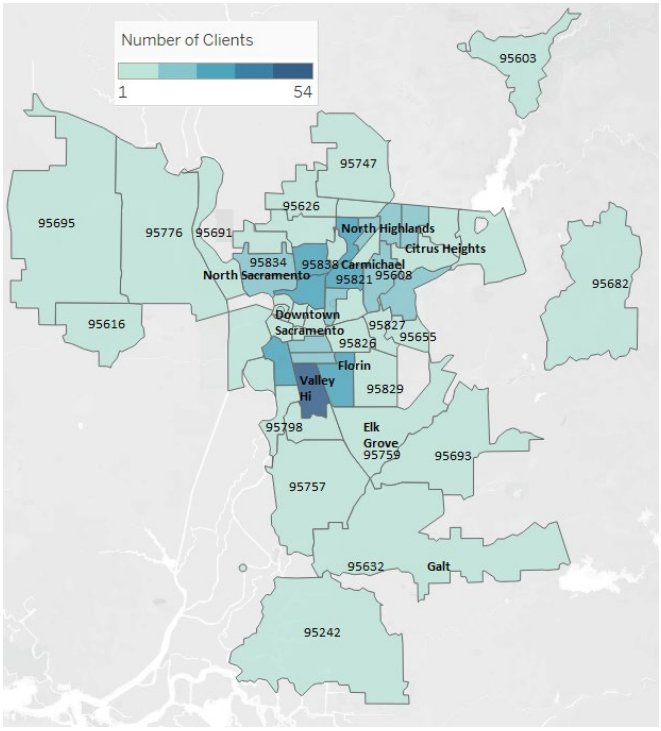
Parenting education workshops are group-based classes conducted virtually through Family Resource Centers (FRCs). In FY 2020-21, there were a total of 531 parents who attended parenting workshops funded by First 5 Sacramento. Of these, 146 (27%) identified as African American. Of the FRCs, the Arden Arcade location served the highest proportion of African American parents (42%; 19/45), followed by Firehouse FRC (39%; 26/66).

Figure 23 — **Proportion of African American Parenting Education Workshop Clients by FRC**



The map displays the geographic location where parenting education participants resided. The area with the highest numbers of participants was the Valley Hi neighborhood (zip code 95823). The areas with the fewest parenting education participants were primarily in areas surrounding the perimeter of Sacramento County. Of those with zip code data, 50% (258/518) of parenting education participants resided in one of RAACD's seven targeted primary service areas.

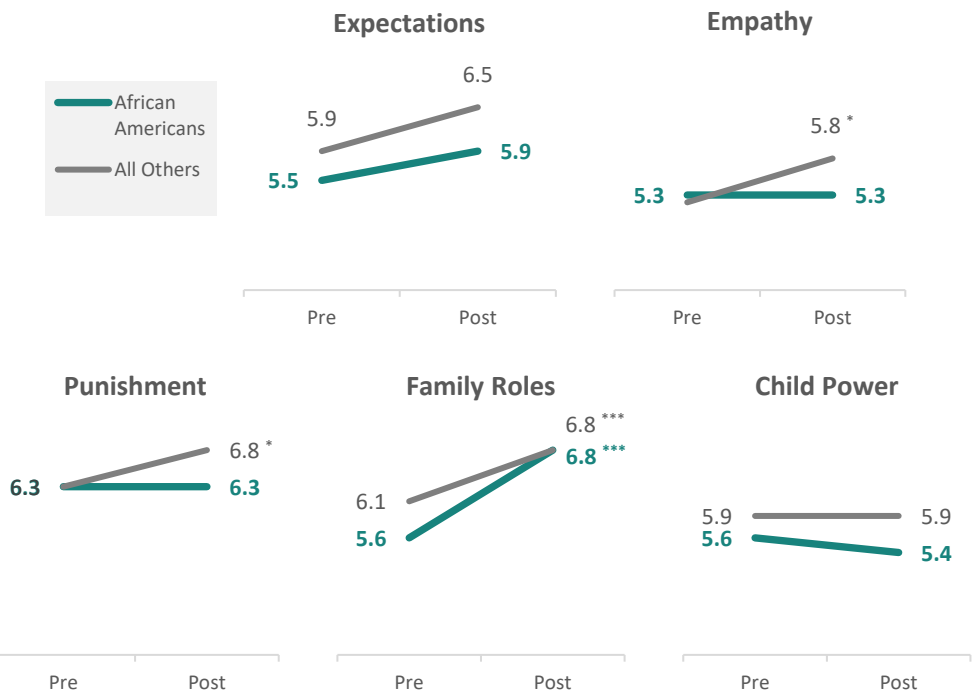
Figure 24 — **Location of Parenting Education Participants**



The Adult-Adolescent Parenting Inventory (AAPI) was also used to assess parenting education workshop participants' beliefs about child-rearing. Parents completed the tool before beginning the parenting education program and again after completion.

Two hundred fourteen parenting education workshop participants had both a pre- and post-test, including nine participants who took the parenting education course twice and had two sets of pre and post-tests. Of the total, 28% (60) were African American. When comparing African Americans to all other races, African Americans were less likely to show statistically significant increases on the domains of the AAPI (this group only displayed statistically significant increases on the Family Roles domain, while all other races displayed statistically significant increases on all domains except child power).

Figure 25 — **Change in Mean Scores on AAPI in Pre- and Post-Test for Parenting Education Clients**



Source: AAPI pre- and post-assessment scores, Birth & Beyond FY 2020-21. Note: African American N = 60. All Other Races N = 154. Statistical significance reported at post-test value as * p < .05, ** p <.01, and *** p < .001

CLIENT SUCCESS STORY

"Having CPS show up at my house was a wake-up call. I had to make changes."
– FRC Home Visiting Client

Patrice[15] was referred to Valley-Hi Village FRC as a result of experiencing domestic violence. When connecting with the Village, Patrice stated that "having CPS show up at my house was a wakeup call. I had to make changes." Through this willingness and openness, Patrice's home visitor was able to build a professional, productive, positive relationship with her and noticed a positive impact on Patrice, her household, and her relationship with her child. Patrice was an active participant in home visiting and stated that she learned a lot from the Nurturing Parenting Program on how to take care of herself and how to help her son grow up to be healthy and strong. She also mentioned that the support and resources her home visitor provided reduced her stress and gave her hope in rebuilding. Patrice stayed true to her desire to make change, and after about six months the family graduated from the home visiting program. She is stable in her healing

[15] Fictional names used

and intentional in her engagement with her son, teaching him and being empathetic toward herself and her child. She is employed, in a safe household, and looking forward to a new chapter in her life.

TWO YEAR TRENDS, FY 2019-20 TO FY 2020-21

As the work of the Family Resource Centers has only been presented in the RAACD report for FY 2019-20 and FY 2020-21, two-year trends are reported here.

The Birth & Beyond home visiting program provided eight or more hours of home visiting services to about 48% fewer parents in FY 2020-21, compared to FY 2019-20 (296 and 557, respectively). The prolonged impact of the COVID-19 pandemic throughout the 2020-21 fiscal year likely played a large role in this decrease as families and staff navigated new and unexpected challenges. For instance, parents navigated limited access to the appropriate technology for virtual home visiting, shifting priorities to essential needs and emergency response, increased use of virtual spaces and time spent schooling or working at home, and safety concerns about social distancing. Not only did COVID impact home visiting services overall, but this very likely played a role in families' ability to commit to eight or more hours of home visiting services.

COVID also likely impacted service delivery specific to African American parents and families. The proportion of African Americans receiving eight or more hours of home visiting decreased from 21% in FY 2019-20 to 13% in FY 2020-21. The Birth & Beyond parenting education program also served 4% fewer parents in FY 2020-21, compared to FY 2019-20 (532 and 557, respectively). However, a larger proportion of those served were African American in FY 2020-21, compared to FY 2019-20 (27% and 25%, respectively).

Regarding AAPI scores, African Americans completing the pre- and post-assessments following home visiting or parenting education workshops performed similarly to those of other races, except in the case of the "children's power" domain. Among home visiting participants, African American scores in "children's power" decreased from pre to post-assessments in FY 2019-20 and FY 2020-21. Among parenting education workshop participants, African American scores decreased in FY 2020-21 only. Because of this trend, the home visiting curricula should be examined to ascertain why African Americans might be declining in their scores after program participation. FY 2020-21 was the last year that Birth & Beyond used the AAPI assessments, so it may be possible that future tools may shed light on these differences.

OPPORTUNITIES FOR IMPROVEMENT

Birth & Beyond's efforts in prioritizing the Birth & Beyond Cultural Responsiveness Initiative should be recognized. They should continue these efforts to improve engagement of African American parents in service intake and service completion and work to rebuild relationships with families for recurring home visiting services as it becomes safe to do so. Birth & Beyond may also consider frequently monitoring potential differences between and within groups using the new curriculum and assessment tools to identify potential patterns and make adjustments early in its implementation.

Safe Sleep Baby

Safe Sleep Baby (SSB) is an education campaign managed by the Child Abuse Prevention Council (CAPC) to increase knowledge and change behaviors about infant safe sleeping practices. The overarching goal is to decrease infant sleep-related deaths in Sacramento County, especially among African American infants. Specific strategies include:

- Public education campaign to share SSB messages
- Direct education for parents, hospital staff, health professionals, and social service professionals
- Cribs4Kids program to provide education and cribs to pregnant or new mothers who do not have a safe place to sleep their baby
- Quarterly SSB Collaborative meetings
- Systems change efforts related to safe sleep education policies and procedures

The Child Abuse Prevention Council Safe Sleep Baby campaign has consistently shown that the majority of parents trained on safe sleep practices go on to follow those practices with their infants.

It is important to review the following results with the knowledge that the COVID-19 pandemic continued to impact SSB opportunities and outreach for the entirety of FY 2020-21. Since March 2020, SSB successfully transitioned to nearly all virtual workshops and no contact crib drop-offs, innovated new methods for outreach and engagement, and continued to foster relationships with organizations in virtual settings. However, families' limited internet/telephone services and fewer opportunities to directly engage with partner providers should be held in consideration when interpreting trend data.

SAFE SLEEP BABY PUBLIC EDUCATION CAMPAIGN

Since the beginning of the Campaign, CAPC has sought to ensure that education and messages regarding safe sleep are created and delivered in a culturally relevant and sensitive manner. All SSB materials were created with extensive input from African American community members and distributed within the neighborhoods with the highest rates of African American infant sleep-related death in Sacramento County.

Additionally, AmeriCorps Member Parent Health Educators continued utilizing SSB Social Media Campaign pages to further communicate safe sleep education and the risk factors that result in infant sleep-related deaths. These strategies were particularly important in consideration of the COVID-19 pandemic impacting outreach in physical spaces and fewer opportunities for families to see flyers, posters, and informational resources in physical, public spaces.

- In FY 2020-21, the SafeSleepBabySacramento Facebook page had 2,186 followers. The Facebook page had 15 posts during the 2020-21 fiscal year. The number of Facebook page followers has increased exponentially since FY 2018-19 (57 followers) and FY 2019-20 (85 followers).
- SSB also has an active Instagram account (@safesleepbabysacramento) which had 160 followers and 15 posts during FY 2020-21.
- For additional reach, SSB partnered with Black Infant Health (BIH) and cross-posted information on the SSB message and free workshops on the BIH MeetUp, Facebook, and Instagram pages.

SAFE SLEEP BABY DIRECT EDUCATION

SSB Education for Community Service and Health Providers

SSB conducted "train-the-trainer" workshops for professionals who work with pregnant or new mothers to increase providers' knowledge about infant safe sleep practices and promote referrals to SSB parent workshops for infant safe sleep education and cribs. Trained community professionals included Cribs for Kids (C4K) partner representatives, community-based service providers who work with pregnant or new mothers, and medical provider organizations who work with pregnant or new mothers. From July 2020 to June 2021, 280 community-based service providers (down from 334 in FY 19-20) and three medical provider offices received this training (a slight decrease from the five in FY 19-20), including:

- Child Protective Services (CPS)
- UC Davis Hospital
- Black Infant Health
- Safe Kid Mercy Medical
- Her Health First
- Sacramento County CPS Social Workers
- Sacramento County Nurse Family Partnership

While the number of community-based providers decreased since FY 2019-20, the 280 providers trained exceeds the SSB annual goal of 250 by 12%. Decreases in the number of medical providers reached reflect the impact of COVID-19 on scheduling SSB education sessions.

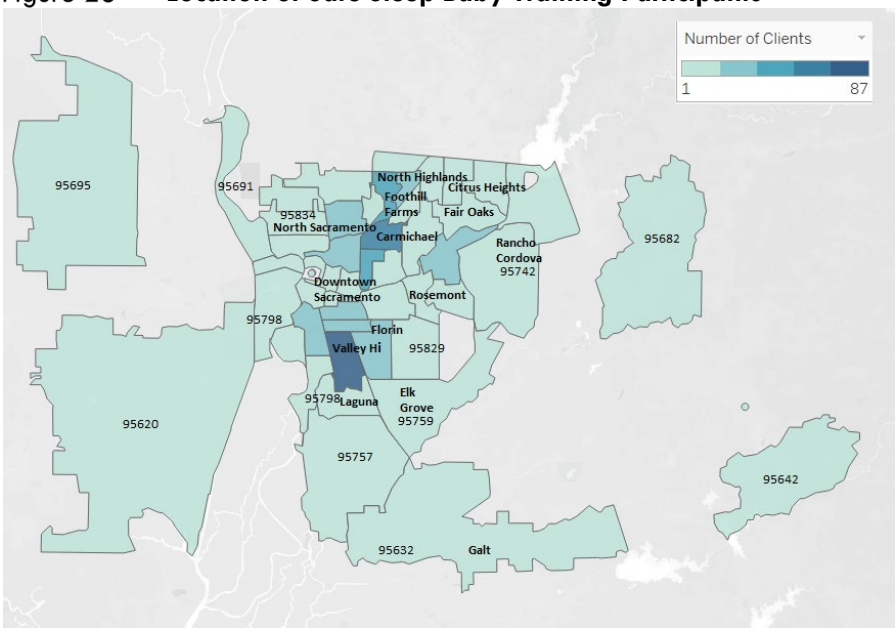
SSB Education for Parents

SSB provides education to families through virtual home visits and hour-long workshops. All families (of any ethnicity) are welcome in the program, but there is a special emphasis on reaching African American families. These visits and workshops are valuable tools to increasing knowledge about safe sleep practices as parents receive information from a trusted source in a private and welcoming setting. Each session offers several key pieces of knowledge, including statistics about infant death due to sleep-related causes, the Six Steps to Safe Sleep Your Baby, and an educational video. After successfully completing the training, parents receive a free Pack 'n Play crib if they do not have a safe place to sleep their infant. During the 2020-21 fiscal year, 691 unduplicated parents received SSB education (about 30% less than the 984 who received the education in FY 2019-20 and 22% less than the 883 from FY 2018-19). Among them, 213 (31%) were African American, compared to a target reach of 26%. Additionally, 18 parents took the SSB course more than once,[16] for a total of 709 SSB workshops provided. Parents were trained by the following Cribs for Kids partners:

- CAPC
- Folsom Cordova Community Partnership FRC
- Her Health First
- La Familia Counseling Center
- Mutual Assistance Network Arcade FRC
- Mutual Assistance Network Del Paso FRC
- Meadowview FRC
- North Sacramento FRC
- River Oak FRC
- Valley Hi FRC
- WellSpace Health FRC

[16] This could include parents taking the course for a subsequent baby or to repeat the education. SSB's priority is for parents to understand *and* follow the education in their behavior of sleeping their baby no matter how many times they need to receive the information.

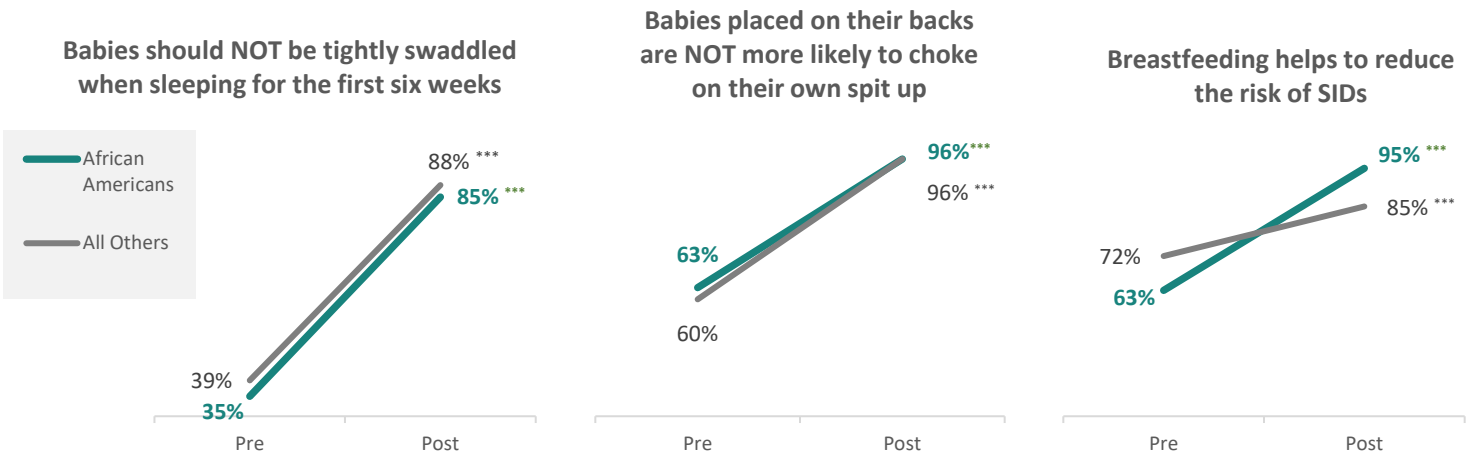
Figure 26 — **Location of Safe Sleep Baby Training Participants**



The map displays the geographic location where SSB parent participants resided. The area with the highest numbers of participants was the Valley Hi neighborhood (zip code 95823). The areas with the fewest SSB participants were primarily in areas surrounding the perimeter of Sacramento County. Of those with zip code data, 56% (359/637) of SSB parent participants resided in one of RAACD's seven targeted primary service areas. This represents a positive increase in SSB's reach as 54% of participants resided in one of the seven targeted neighborhoods in FY 2019-20 and only 44% in FY 2018-19.

Of the 691 individuals who received the SSB training, 88% (605/691) of participants completed both a pre- *and* post-test to measure changes in knowledge before and after the training. Among them, almost one-third (31%; 190/605) of training participants identified as African American. The questions in the figure below show the highest increases in knowledge (all statistically significant changes) for all respondents. Because of SSB's focus on African American infant sleep safety, African American participants' responses are displayed separately from all other races.

Figure 27 —**Increases in Correct Answers about Infant Safe Sleep Knowledge in Pre- and Post-Test**



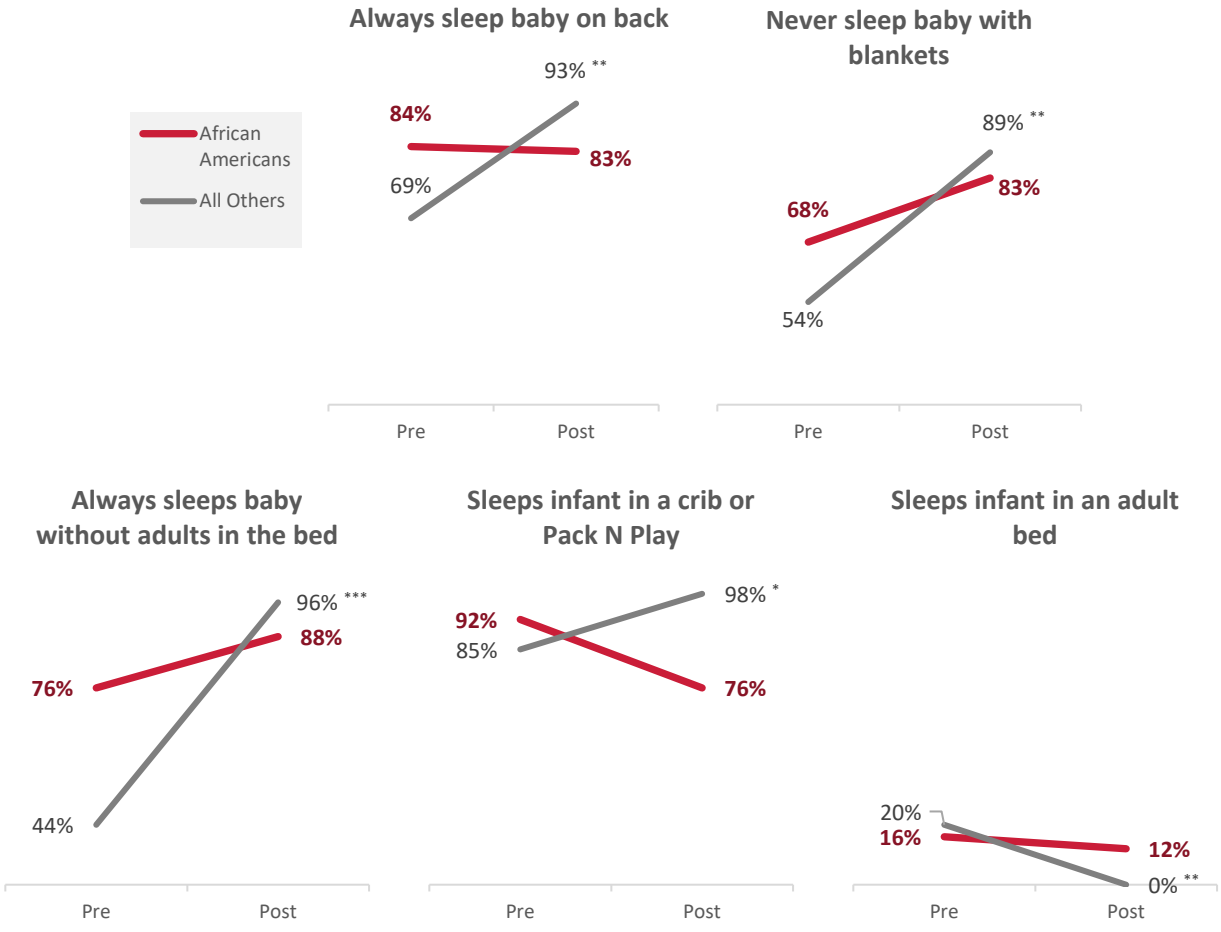
Source: SSB Pre- and Post-Surveys. African American N = 190, All Others = 415.Both groups had statistically significant differences between pre- and post-tests for all three measures at $p < .001$.

Additionally, participants completed an intake survey, where they described their intentions for infant safety practices. Within 3-4 weeks of the SSB one-hour training, 102 parents were reached with a follow-up call to understand the extent to which they were using infant safe sleep practices. After matching parent reached with those who had data from their intake interview, the sample size was 71.

Participants' intentions for infant safety practices (Intake Survey) were compared with their actual safety practices following the birth of their child (Exit Interview) to further measure the impact of the SSB program. Among *all* participants, parents increased their intention to always sleep their baby on their back (74% Intake; 90% Follow-Up), to never sleep their baby with blankets (59% Intake; 87% Follow-Up), and to sleep their baby without an adult in the bed (55% Intake; 93% Follow-Up). The number of participants reporting their baby sleeps in an adult or family bed also decreased (18% Intake, 4% Follow-Up). All of these changes were statistically significant.

Changes in intention varied among African American participants compared to all other race/ethnicities. For instance, African American participants increased their intention to sleep babies without blankets by an average of fifteen percentage points between intake (68%) and follow-up (83%). Participants of all other race/ethnicities also substantially increased their intention to sleep babies without blankets (+35 percentage points) between intake and follow up. The figure below demonstrates the differences in intention and follow-up between African Americans and all other races.

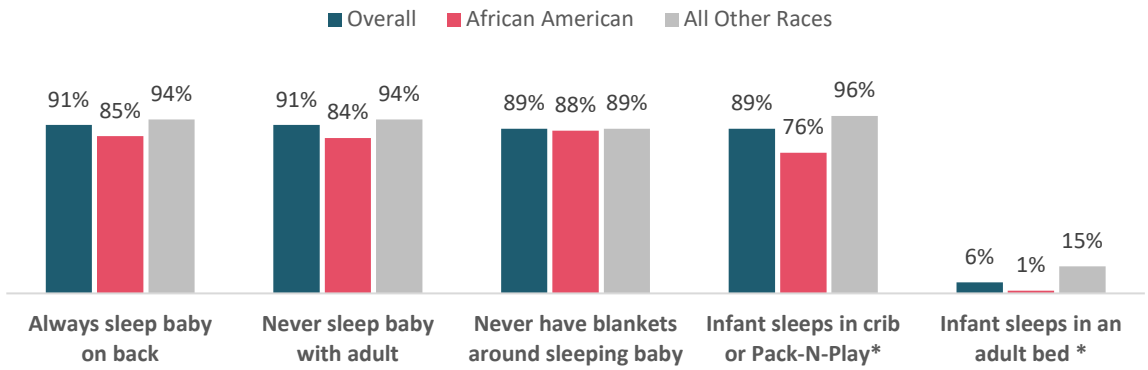
Figure 28 — **Differences Between Intentions at Intake and Behaviors at Follow-Up in Infant Safe Sleep Practices (Matched Pairs)**



Source: CAPC, SSB Intake and Exit Surveys. Note: **indicates a statistically significant difference at $p < .01$ *** indicates a statistically significant difference at $p < .001$. African American N = 25; All Other Races N = 46.

Parents/caregivers that received a crib following their SSB training were also contacted within three to four weeks to provide follow-up information about their decisions to safely sleep their infants. A total of 101 participants completed the follow-up assessment, including 34 African Americans (34%). At follow-up, parents most commonly reported the safe sleep behaviors of *always sleeping their baby on their back* (91%; 90/99) and *never sleep baby with an adult* (91%; 88/97). These were closely followed by *sleeping child in crib or Pack-N-Play* (89%; 90/101) and *never having blankets around their sleeping baby* (89%; 88/99). The proportion of parents engaging in safe sleep behaviors at follow-up increased for each category compared to FY 2019-20. Never having blankets around their sleeping baby had the most substantial increase at follow-up from FY 2018-19 (66%), FY 2019-20 (71%), and FY 2020-21 (89%). Six participants reported their infant slept in an adult bed.

Figure 29 — **Percent of SSB Participants Practicing Infant Safe Sleep Behaviors at Follow-Up, by Race**



Source: CAPC, SSB Follow up Survey. Overall N = 101; African American N = 34; All Other Races N = 67. *indicates that African American percentages statistically significantly differ from all other races at $p < .05$.

CRIBS FOR KIDS (C4K) PROGRAM

CAPC also manages the Cribs for Kids (C4K) Program, which partners with community hospitals and local organizations to provide pregnant or new parents with infant safe sleep information and Pack 'n Play cribs, funded by First 5 Sacramento and Sacramento County Department of Child Family and Adult Services (DCFAS). Pregnant or new mothers who reportedly did not have a safe location to sleep their infant were able to receive a free crib after completing a one-hour SSB workshop with CAPC or other C4K partners. Outside of C4K trained community partners, new mothers could also view an SSB informational video during their hospital stay and videos were also broadcast in pediatric and OBGYN waiting rooms. Nurses provide a unique opportunity to engage parents in an infant safe sleep conversation, by specifically asking expectant or new mothers the SSB question: *"Where will you sleep your baby when you return home?"* This wording offers the chance to begin a non-judgmental conversation about infant safe sleep practices and the risk of infant sleep-related death. In hospital settings, parents would receive information and a referral to CAPC for follow-up. From July 1, 2020 to June 30, 2021, crib distribution partners included:

- 9 Birth and Beyond Family Resource Centers
- CAPC
- Her Health First, Black Mothers United
- Liberty Towers Impact Center for Independent Living
- Rose Family Creative Empowerment Center for Independent Living

- Sacramento Food Bank
- SCOE Help Me Grow
- Sutter Health Teen Programs
- WellSpace Health Cultural Broker Program (CBP)

From July 2020 to June 2021, **C4K partners provided a total of 331 cribs to parents and caregivers** in need. Hospitals also provided another 22 cribs to families in need.

Of the 331 cribs distributed by C4K partners, 116 cribs were provided to African American parents and caregivers, representing 35% of the total. The proportion of cribs distributed to African American parents and caregivers remained relatively consistent with FY 2019-20 (36% of partners' total) and FY 2018-19 (36% of partners' total).

SAFE SLEEP BABY EDUCATION POLICIES AND PROCEDURES

Another goal of SSB is to increase sustainability of the program by partnering with hospitals and medical providers to encourage the adoption of SSB policies and education. SSB education is being implemented in **all** four main hospital systems of Sacramento:

- Dignity Health
- UC Davis
- Kaiser
- Sutter

In FY 2020-21, **all** eight birthing hospitals in Sacramento continued to successfully implement SSB education policies. Prior to the implementation of the SSB campaign in 2015, hospitals did not uniformly provide infant safe sleep education.

CLIENT SUCCESS STORY: SAFE SLEEP BABY WORKSHOP

Jada[17] was a first-time mom referred to Safe Sleep Baby (SSB) through the Black Infant Health (BIH) program. As a former foster youth who was estranged from her mother and grandmother since childhood, Jada was interested in SSB because she had no "motherhood role models." Jada completed her SSB training via Zoom and remained very engaged by asking a lot of follow-up questions. She was shocked to learn about the risks associated with co-sleeping and co-sleeper bassinets since she had initially planned to use a co-sleeper bassinet prior to taking the workshop. Jada was also shocked and saddened to learn how often an infant sleep-related death occurs in Sacramento County and vowed she would only use the portable cribette provided by the CAPC through the SSB program. As a result of this workshop, Jada reported feeling well-prepared for the birth of her son.

[17] Fictitious names used throughout success stories

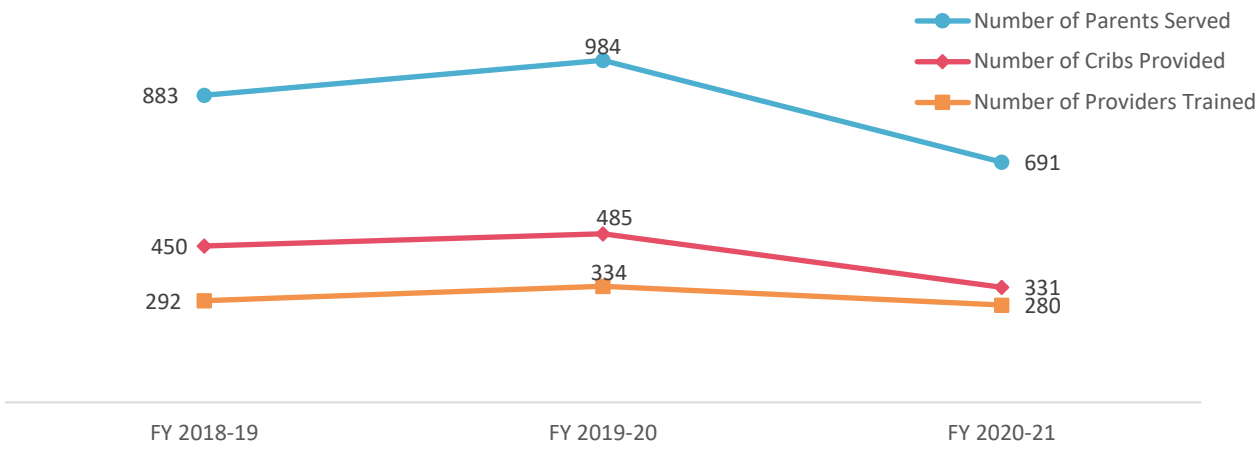
Toni, [18] a fourth time mom with three children under ten years old, recently delivered a baby girl, Rose, born several months premature, weighing less than two pounds. Rose stayed in the NICU for about three months until she was able to come home. In the meantime, Toni still needed everything since she had expected about three more months of preparation. Toni was a single mother and was feeling overwhelmed and unsupported. She was unemployed, living in mutual housing, and without reliable access to a car making her ability to purchase baby necessities and visit her daughter in the hospital even more difficult. She has also had experience with postpartum depression and CPS involvement. Despite these barriers, Toni was determined to be a successful mother to her children. She was referred to the Safe Sleep Baby workshop by her Home Visitor at the Sacramento Children's Home. Upon engagement with CAPC's SSB Black Infant Health (BIH) Health Advocate/Educator, Toni participated in a virtual workshop and CAPC SSB staff delivered a crib to her home within a couple hours. The CAPC's Health Advocate/Educator also provided her with additional information about the BIH Program which made Toni very happy. She stated, "That would be wonderful! I just want to make sure that my Advocate will be you, right? I feel comfortable with you and you have made this process feel very nurturing and supportive to me". Within eight weeks, Toni's CAPC Health Advocate/Educator noticed tremendous personal growth and Toni has become one of the program's most active clients. She continuously meets short-term goals and reaches out when she is feeling overwhelmed.

> *"You have helped me so much in this process. I initially was so overwhelmed by the cost of a crib, but you made this workshop very easy to understand and were patient with me when I had questions. … Without you and both programs I would have been lost, and that is the truth."*
>
> – Toni to her SSB/BIH Advocate

THREE YEAR TRENDS, FY 2018-19 TO FY 2020-21

Between FY 2018-19 and FY 2020-21, the Safe Sleep Baby program educated a total of 2,558 parents and provided 1,266 cribs to those who needed a safe place to sleep their baby.

Figure 30 — **Three Year Trends for the Safe Sleep Baby Program for Numbers Served and Cribs Provided**

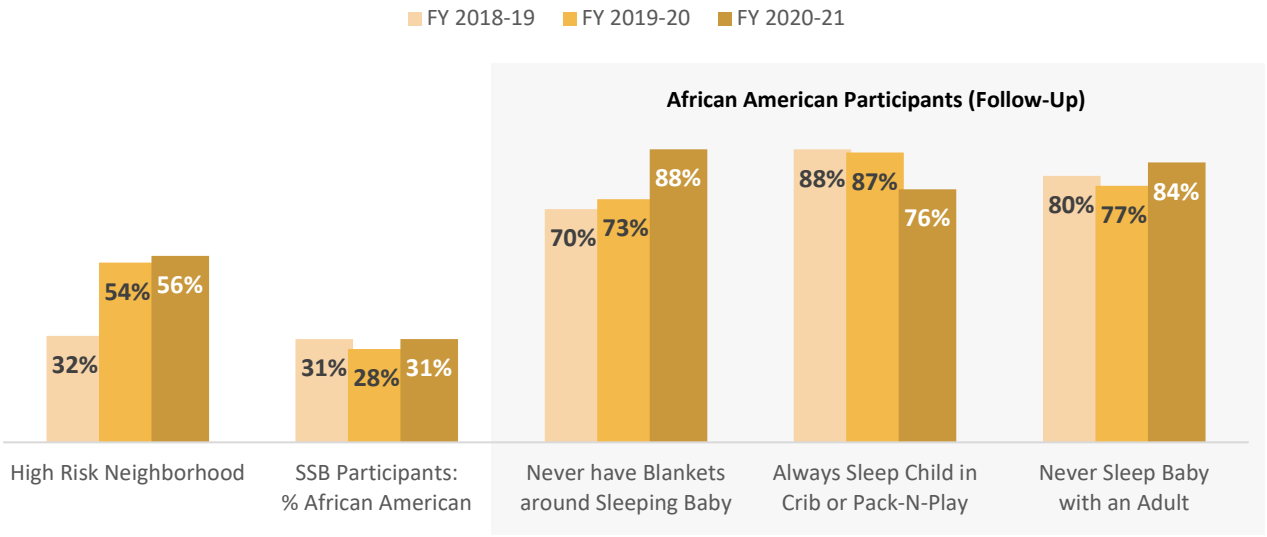


Overall, the numbers that SSB have served, and their outcomes, have been favorable throughout the three year period:

[18] Fictitious names used throughout success stories

- A large portion of SSB clients lived in one of the seven RAACD high risk neighborhoods.
- About 1/3 of SSB participants have been African American
- A majority of African American participants reported safe sleep behaviors at follow-up

Figure 31 — **Three Year Trend Data for the Safe Sleep Baby Program regarding Participant Demographics and Outcomes**



OPPORTUNITIES FOR IMPROVEMENT

The Safe Sleep Baby Campaign had great success in FY 2020-21, including its quick programmatic shift in response to COVID-19, however there are always opportunities for further growth of the program. These include:

- Engage African American expectant and new parents in conversation to determine barriers to not sleeping their infant in a crib or Pack-N-Play after program participation. The SSB campaign should then adjust its message according to parent input.
- Analyze the five-years of CDRT data that overlaps with SSB campaign implementation to identify infant sleep-related deaths and Sacramento County neighborhoods where infants are most at-risk of a sleep-related death. The SSB program should then prioritize these areas for education.

Public Education Campaign

The fourth strategy funded by First 5 was a public education campaign. In a groundbreaking partnership with Sacramento County Public Health Department, the purpose of the campaign was to raise public awareness about the fact that institutionalized racism is the root cause of the racial disparities in safe births for both infant and mother. Runyon Saltzman, Inc. (RSE) managed this comprehensive media campaign, titled the Unequal Birth Campaign. Unequal Birth initially launched in February 2020 and included radio advertisements, social media advertisements, LED billboards around the county, and the creation of a new website (UnequalBirths.com).

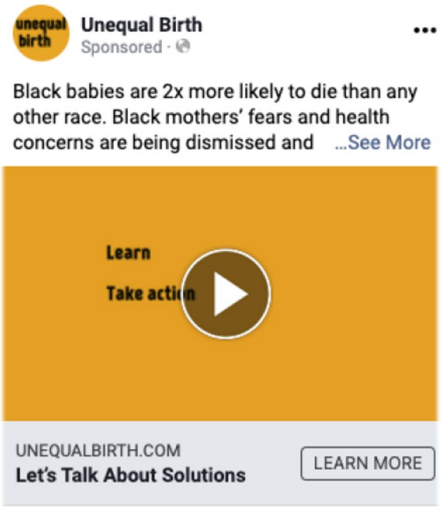
In 2019-20, RSE established the Unequal Birth Campaign in partnership with GroupWorks, Earth Mama Healing, and community members, including focus groups and photo shoots with real Sacramento families. RSE implemented the campaign through digital advertising (e.g., radio and streaming platforms), social media, and billboards.

In FY 2020-21, RSE expanded the campaign through the development of new storyboards, scripts, and content for organic and paid social media reach, including two new videos. The team ran the new social media campaign between January and June 2021. RSE also developed and launched a new page on the Unequal Birth Campaign website to encourage sharing of the campaign, and revised website content to be effective and engaging, based on website analytics. RSE also developed a mini social toolkit for partners to encourage discussions around birth inequities in the community.

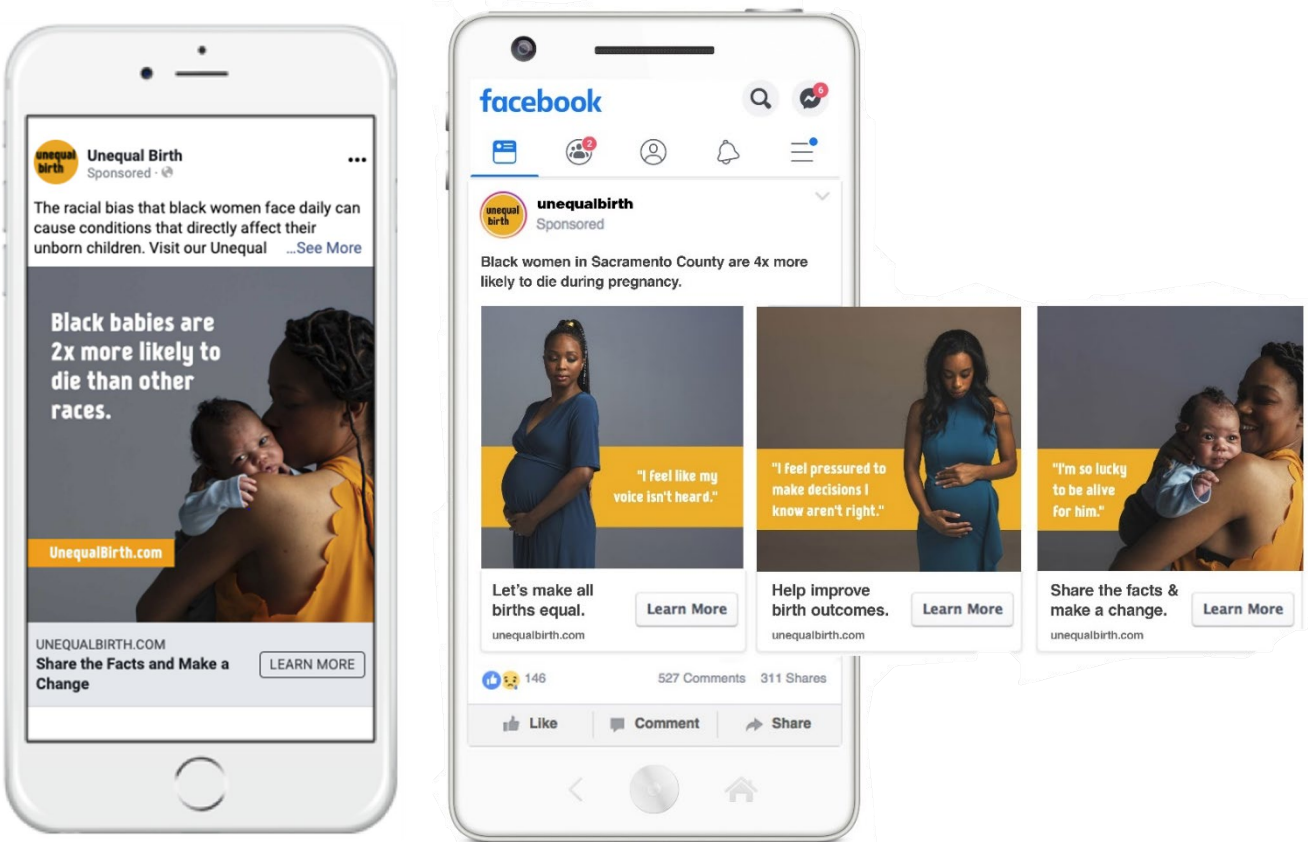
This fiscal year, RSE also collaborated with Her Health First to develop, finalize, and test new campaign concepts for a Sac Healthy Baby campaign refresh. RSE developed three new concepts and logos, implemented stakeholder and community testing of concepts, and developed new website outline and content. More information on the Sac Healthy Baby campaign is anticipated in upcoming fiscal years.

SOCIAL MEDIA ADVERTISEMENTS

Paid social media advertisements ran across Facebook and Instagram from January 11 – June 19, 2021. Ads received more than 1.6 million impressions.[19] There were 24,068 clicks on the links/posts provided across the two platforms. Ads included videos, still photos, and pictures in carousal form, meaning that there were multiple pictures that users could scroll through (see picture below). User engagement with posts included a total of 489 post reactions, 97 post comments, 108 shares, and 22 saves. Compared to FY 2019-20, user engagement decreased, including a 21% decrease in the number of clicks to links provided. However, the click-through rate[20] for the 2021 campaign was 1.46% which was well above the 0.60% industry benchmark.



[19] 1,651,609 Impressions, or the total number of times users saw the advertisement.
[20] Number of clicks divided by the number of times the ad is shown



The infant mortality static image had the highest engagement (82 reactions, 23 comments) followed by the video ad highlighting Black babies as two times more likely to die than any other race (76 reactions, 12 comments). More than 47,000 users engaged with the infant mortality video ad and more than half of the viewers watched at least 50% of the video ad.

WEBSITE TRAFFIC

Through the UnequalBirth.com website, target audiences can learn more about disparities in African American birth and maternal outcomes, highlighting racial bias and discrimination as the cause. UnequalBirth.com describes the problem of racial disparities in perinatal health outcomes, provides links to supporting research, offers ideas of how to make a change, and encourages support for local organizations working to address these issues.

In FY 2020-21, almost 15,000 users visited the Unequal Birth website for a total of 19,411 sessions. Users averaged 1.14 pages viewed during a session. The Unequal Birth Campaign's main landing page had more than four times as many page views as other pages on the site, suggesting that more dominant, eye-catching calls to action may be needed to encourage more website engagement.

About 200 users clicked the "Take Action" button after visiting the landing page, followed by 128 visits to the "Research" page.

THREE YEAR TRENDS, FY 2018-19 TO FY 2020-21

RAACD public education efforts have shown tremendous growth in the past three fiscal years. Public education campaigns were led by Runyon Saltzman, Inc. (RSE) and included the Sac Healthy Baby (FY 2018-19) and Unequal Birth Campaigns (FY 2019-20 and FY 2020-21). These efforts used websites, social media, and community events (pre-COVID) to raise awareness about racial disparities in maternal and infant death rates. The Sac Healthy Baby campaign aimed to connect African American mothers to services to support them through their pregnancies and for the well-being of their babies. The Unequal Birth Campaign directly addressed institutional racism as the root cause of racial disparities in safe births for infants and mothers.

- **Community Event:** In FY 2018-19, the Sac Healthy Baby Collaborative convened the fourth annual Pride & Joy Baby Shower, attended by 113 participants including 104 pregnant or new mothers. Partners shared program information and referrals. Television and print news outlets also covered the event.
- **Website Reach:** In FY 2018-19, there were 2,170 visits to the SacHealthyBaby website. There were 33,010 visits to the UnequalBirth website in FY 2019-20 and 19,411 visits to UnequalBirth.com in FY 2020-21.
    - Website reach was particularly high in FY 2019-20 due to additional advertisements including **LED Billboards** in high-traffic freeway areas and **radio** advertisements.
- **Social media:** Web and social media content for the Unequal Birth Campaign directly included real Sacramento families through concept focus groups and photo shoots for advertisements. Social media for the Unequal Birth campaign received more than three million impressions in FY 2019-20 and over 1.6 million impressions in FY 2020-21.

Aside from the SacHealthyBaby website and community event, FY 2018-19 was largely a planning period to reprioritize campaign funds and the launch of a new program. The success of the Unequal Birth Campaign's reach through social media, website, billboards, and radio advertisements in FY 2019-20 and FY 2020-21 highlight the great potential for campaigns of a similar nature in the future.

OPPORTUNITIES FOR IMPROVEMENT

Social media and web content are increasingly utilized for information and the development of social bonds and identity. During FY 2019-20 and FY 2020-21, the COVID-19 pandemic also increased our reliance on virtual "public" spaces. While the UnequalBirth campaign continued to have an impactful reach throughout Sacramento County in FY 20-21, opportunities for future growth may include:

- Explore efforts to include text or phone call campaigns to Sacramento County families. While communities increasingly relied on virtual spaces and internet resources as a result of COVID-19 and physical distancing protocols, the pandemic also highlighted disparities in reliable internet access. Phone and text options may offer additional opportunities for public education efforts despite continued reduced capacity in public spaces.
- Identify opportunities to partner with other community programs and influencers. For instance, "page takeovers" are an example of "cross-pollination," a way to reach new audiences through temporary posting privileges on other programs' social media platforms. These strategies can expand the reach of message and offer the potential to increase followers.
- Incorporate additional social media post strategies to target an intergenerational audience. This may include participating in media trends (e.g., using audio with a viral reach on Instagram reels), or considering the spectrum of options from 15 second "stories" to long form "Live" videos.

- Expand “Call to Action” opportunities to encourage link clicks and create meaningful ways that community members can get involved with the causes associated with the Unequal Birth Campaign.

Longitudinal Outcomes of RAACD Participants

In support of RAACD's goal to reduce African American infant and child deaths, an assessment is conducted every three years to determine survival of participants one year after birth. Specifically, this analysis involves a "lookup" of death records to determine if any children served by the initiative perished in their first year of life.

Conducted by (CDRT? PUBLIC HEALTH), this exploration includes African American families that received one or more services from Black Mothers United (BMU), Safe Sleep Baby (SSB), or Birth & Beyond Home Visiting between January 1, 2016 and December 31, 2017.[21] This data range was selected as 2018 was the most current reconciled CDRT data available at the time of the analysis and the analysis required a 12-month observation window.

Results remain pending receipt of aggregated findings.

Total number of infant deaths, by cause and program of participation during 2016-2017:

- X infant deaths among Black Mothers United (BMU) 2016-2017 participants
    - Counts by cause (if any deaths)
- X infant deaths among Safe Sleep Baby (SSB) 2016-2017 participants
    - Counts by cause (if any deaths)
- X infant deaths among Birth & Beyond Home Visiting 2016-2017 participants
    - Counts by cause (if any deaths)

Potential Next steps:

- Additional analyses about hours served

[21] Inclusion criteria limited to pregnant mothers or parent with a child under the age of one at the time of service in 2016 or 2017. Program dosage criteria include SSB: minimum of 1-hour, Home Visiting: minimum of 8-hours as less than these minimums do not constitute an intervention by these programs. Parents that were only provided resources were also excluded.

Countywide Trend Data

The overall goal of the four programs funded by First 5 Sacramento (Pregnancy Peer Support Program, Safe Sleep Baby Initiative, Family Resource Centers, and Perinatal Education Campaign) is to help reduce the rate of African American perinatal, child abuse and neglect, and sleep-related deaths in Sacramento County.

This section presents population-level data about infant deaths and their causes, with 2012 as the baseline year, as the RAACD efforts by First 5 and other partners began after the publication of the Blue Ribbon Commission Report in 2013.

Since 2012-2014, Sacramento County has seen a 17% decrease in the rate of infant death amongst African Americans, and a 32% decrease in disparity between the rates of African Americans and other ethnic groups.

Starting with the baseline year of 2012 and target date of 2020, the Blue Ribbon Commission Goals include related to this initiative include:

1. Reduce the African American child death rate by **10-20%**
2. Decrease the African American infant death rate due to infant perinatal conditions by at least **23%**
3. Decrease the African American infant death rate due to infant safe sleep issues by at least **33%**
4. Decrease the African American child death rate due to abuse and neglect by at least **25%**
5. Decrease the African American child death rate due to third party homicide by at least **48%**

To measure progress toward these goals, population data has been gathered from the Public Health Department regarding:

- All infant deaths (with race categories defined)
- Preterm births
- Low birthweight infants

Additionally, the Child Death Review Team (CDRT) provided data regarding:

- Infant deaths due to perinatal conditions
- Infant deaths due to sleep-related conditions (ISR)
- Child abuse and neglect homicides

It is important to note that available countywide data lag behind data from First 5 funded initiatives reported earlier. Countywide data is current as of 2019, while data from First 5 funded initiatives represent FY 2020-21. Technical details related to these data can be found in Appendix 2. To account for the effect of small population size, death rate data represent three-year rolling (overlapping) averages (number of infant deaths for each target year divided by the number of infant births in those years).

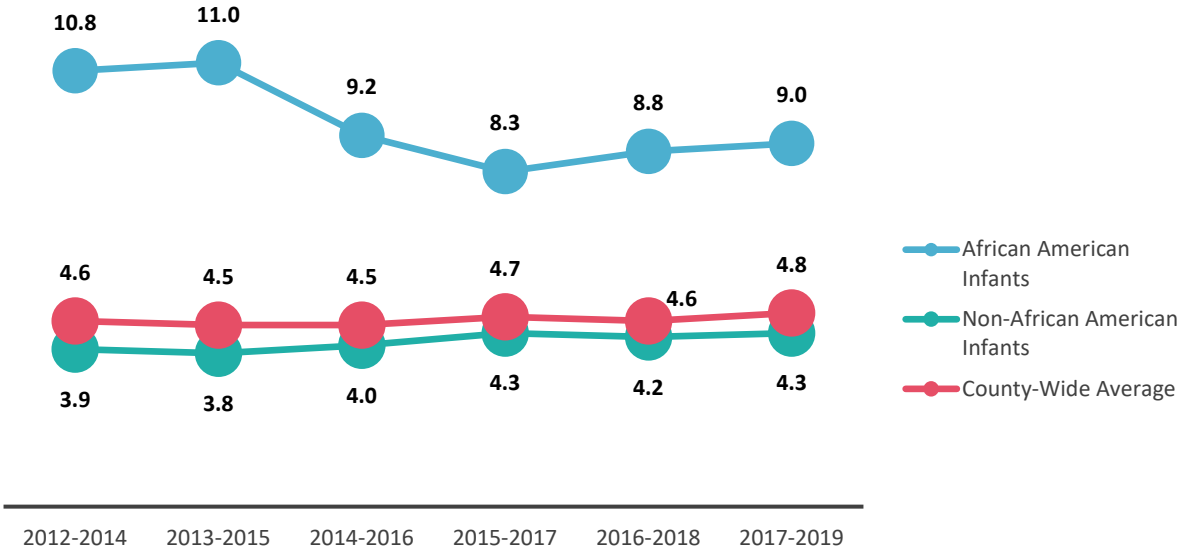
Please also note that it is standard for child death rates to be reported out of 100,000 and infant death rates to be reported out of 1,000. Rates are noted in the source located below each figure.

OVERALL INFANT MORTALITY

During the three-year baseline period (2012-2014), African American infants died at a rate of 10.8 per 1,000 births. During 2017-2019, African American infants died at a rate of 9.0 per 1,000 births, a 17% reduction from the baseline. The rate of infant death in Sacramento County in 2018 was markedly higher than other years (7.2 in 2017, 12.7 in 2018, and 7.2 in 2019). It is likely that this was an anomaly and is further support to continue to use three-year rolling averages in data presentation. However, because of the spike in 2018, the rolling averages for 2016-18 and 2017-19 are impacted.

Secondly, these data show a 32% reduction in the disparity between African American infant death and all other races. In years 2012-2014, the gap in disparity between rolling average rates was 6.9 and in 2017-2019, the gap was 4.7.

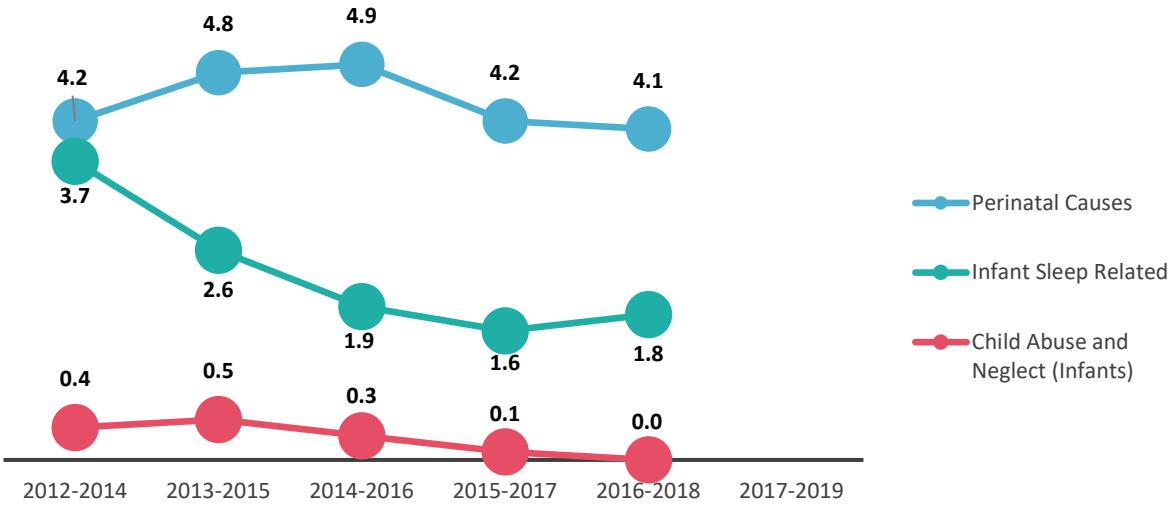
Figure 32 — **Three-Year Rolling Average Rate of Infant Death in Sacramento County**



Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files.
Rate is per 1,000 infants.

The figure below displays changes in rates for the three causes of focus for the First 5 Sacramento RAACD initiative's goal of reducing African American infant death. Strikingly, infant deaths for each cause have declined from the baseline of 2012-2014 and demonstrate the success of the initiative.

Figure 33 — **Three-Year Rolling Average Rates of African American Infant Death: Sleep Related, Perinatal Causes, and Child Abuse and Neglect**



Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018. Rate is per 1,000 infants.

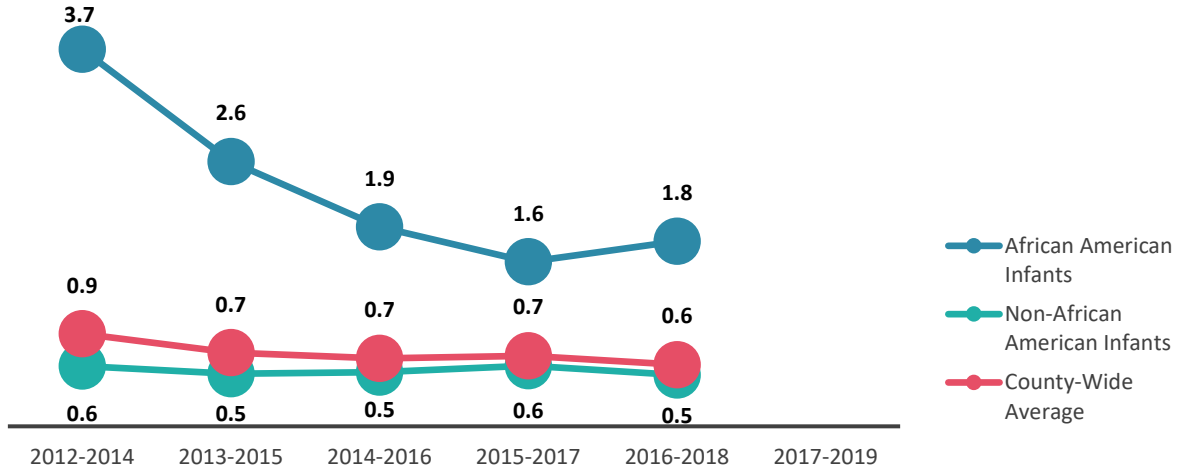
In the sections below, each cause (perinatal, infant sleep-related, child abuse and neglect) is discussed separately, including comparisons to countywide estimates.

INFANT SLEEP RELATED DEATHS

The term "Infant Sleep Related Deaths" (ISR) refers to any infant death that occurs in the sleep environment, including Sudden Infant Death Syndrome, Sudden Unexpected Infant Death Syndrome, and Undetermined Manner/Undetermined Natural Death. These rolling rates demonstrate a dramatic decrease in African American ISR deaths (3.7 in 2012-2014 and 1.8 in 2016-2018), representing a 51% decrease. The Safe Sleep Baby campaign is very likely one contributor to these large decreases. There was one additional African American ISR death in 2018 (4, as compared to 3 in 2015, 2016, and 2017). This accounts for the small uptick in ISR cases. In regard to decreases in disparities, the gap in ISR death rates among African American infants decreased by 58%.

Since 2012-2014, Sacramento County has seen a 51% decrease in the rate of infant sleep related death amongst African Americans, and a 58% decrease in disparity between the rates of African Americans and other ethnic groups.

Figure 34 — **Three-Year Rolling Average Rates of Infant Sleep Related Deaths in Sacramento County**

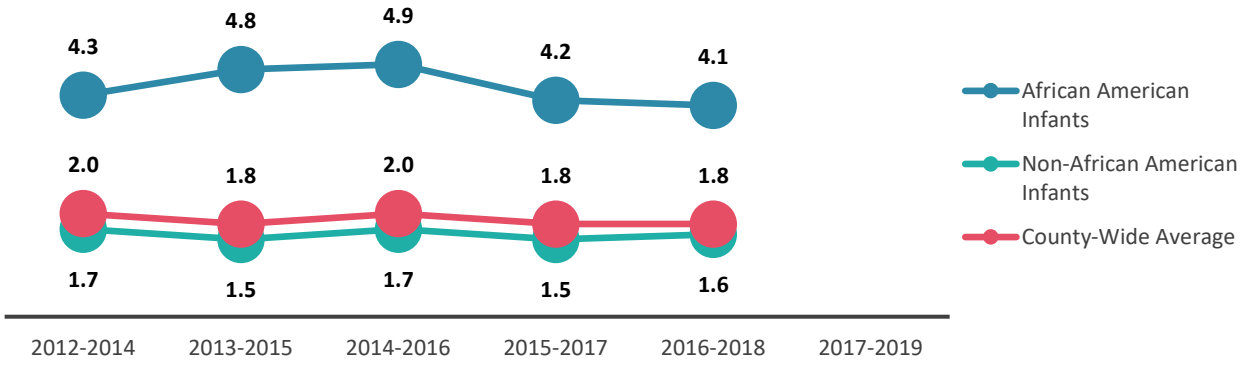


Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018. Rate is per 1,000 infants.

INFANT DEATHS DUE TO PERINATAL CAUSES

Perinatal causes include deaths due to prematurity, low birth weight, placental abruption, and congenital infections and include deaths through one month post-birth. During the baseline period of 2012-2014, African American infants died from perinatal causes at a rate of 4.2 per 1,000 births. Unfortunately, there was a small increase in the rate of death in the time periods of 2013-2015 and 2014-2016. However, the rates decreased in both 2015-2017 and 2016-2018, now below the original baseline rate (a 5% decrease). This represents a promising downward trend and needs to be further tracked.

Figure 35 — **Three-Year Rolling Average Rates of Infant Death Due to Perinatal Causes in Sacramento County**

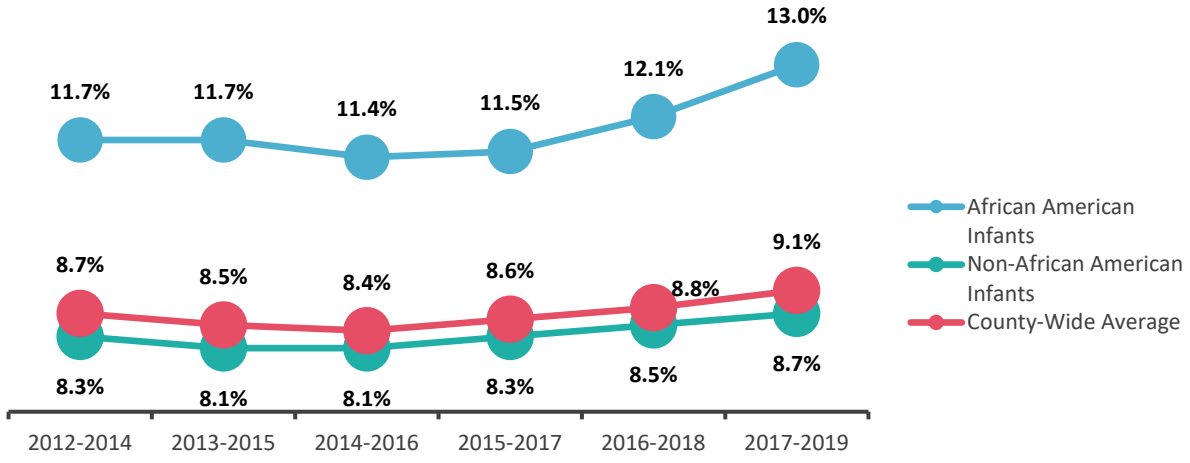


Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018. Rate is per 1,000 infants.

PRETERM BIRTHS

Infants born before 37 weeks of gestation are considered preterm. In Sacramento County, 13.0% of African American babies were born preterm during the years 2017-2019. Unfortunately, this indicates an 11% increase in the number of African American preterm births compared to 2012-2014 (11.7%). It is important to note that preterm births among infants of all other races also displayed an increase from 2014-2016 to 2017-2019, so there may be a trend developing for all races. More focused work needs to be targeted in this area to decrease the number of preterm births in the African American community, as well as Sacramento County as a whole.

Figure 36 — **Three-Year Rolling Average Percentage of Preterm Infants Born in Sacramento County**

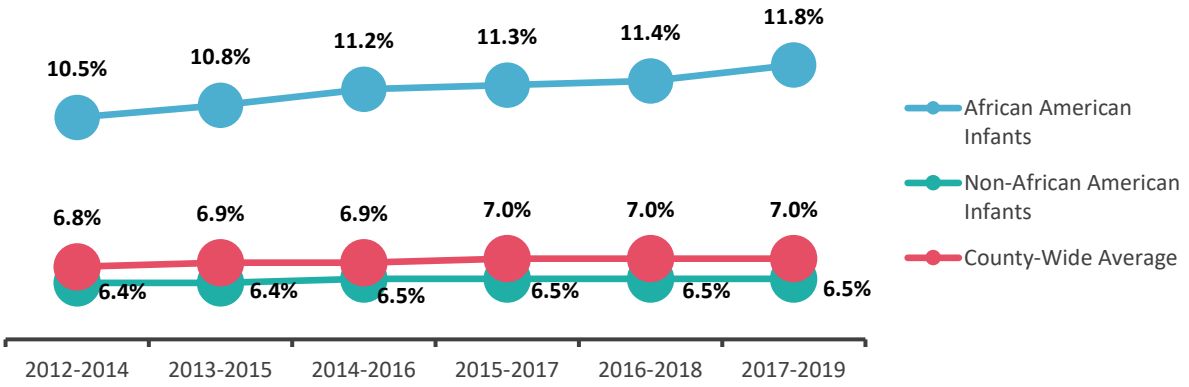


Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files.

LOW BIRTH WEIGHT

Low birth weight newborns are those weighing less than 2,500 grams. The figure below displays the percentage of African American infants born low birth weight (LBW) from baseline (2012-2014) through most current available data (2017-2019) compared to infants of all other races. The percentage of African American babies born with LBW during 2017-2019 increased by 12% compared to baseline (10.5% in 2012-2014, 11.8% in 2016-2018). More effort needs to be focused in this area for a continued decrease in infants born with LBW in the African American community and Sacramento County, overall.

Figure 37 — **Three-Year Rolling Average Percentage of Low Birth Weight Babies Born in Sacramento County**



Source: Sacramento County, Department of Health Services, Public Health Division, Epidemiology Program, Birth Statistical Master Files.

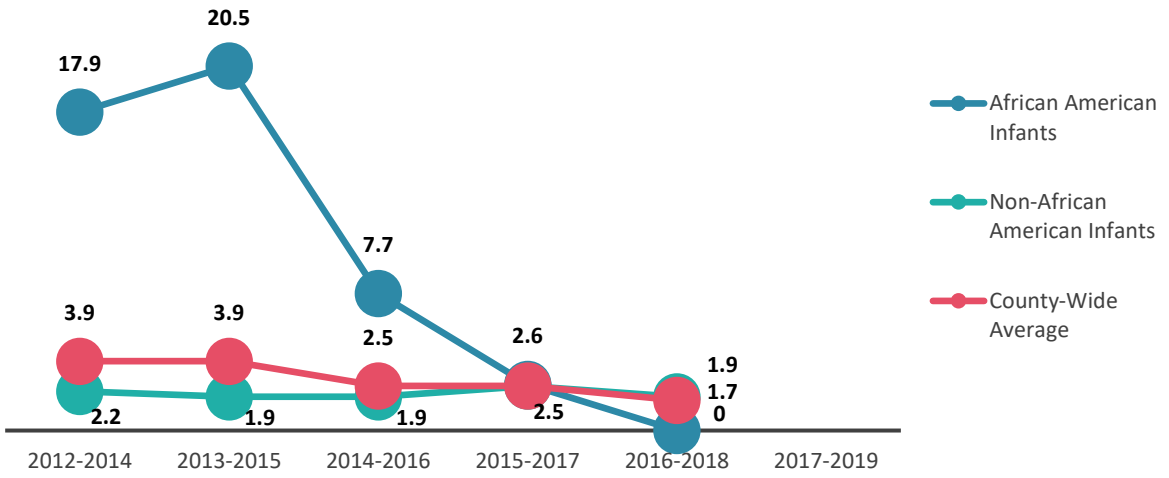
DEATHS DUE TO CHILD ABUSE AND NEGLECT (0-5)

Sacramento Child Death Review Team reviews all child deaths in Sacramento County and give a determination as to cause of death. During the three-year baseline period (2012-2014), African American infants aged 0-1 died from Child Abuse and Neglect at a rate of 0.4 per 1,000 children. Due in part to the efforts of the Family Resource Centers, this number has declined significantly to a rate of zero per 1,000 children (with zero African American infant deaths due to child abuse and neglect in 2016, 2017, and 2018).

During the baseline period of 2012-2014, African American children aged 0-5 died from Child Abuse and Neglect at a rate of 17.9 per 100,000 children. Due in part to the efforts of the Family Resource Centers, this rate has drastically declined to 0 in 2016-2018. This represents a 100% decrease and over a 100% decrease in disparities compared to the baseline year.

Since 2012-2014, Sacramento County has seen an 100% decrease in the rate of child death due to CAN homicide amongst African Americans, and over a 100% decrease in disparity between the rates of African Americans and other ethnic groups.

Figure 38 — **Three-Year Rolling Average Rates of Child (0-5) Death due to Child Abuse and Neglect in Sacramento County**



Source: Sacramento County Child Death Review Team Report 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019. Rate is per 100,000 children.

Summary and Conclusions

Despite the continued and prolonged impact of the COVID-19 pandemic, the Reduction of African American Child Deaths initiative had a meaningful impact on Sacramento families. First 5 funded four programs that each focused on a different cause of death and employed different modalities to promote change in the health and well-being of Sacramento African Americans. The Pregnancy Peer Support Program paired pregnant African American mothers from high-risk areas with pregnancy coaches to receive one-on-one education, resources, and support. Family Resource Centers, located in high-risk areas of Sacramento County, employed multiple strategies with the goal of reducing child abuse and improving parent and child outcomes. The Safe Sleep Baby project provided one-hour education workshops and cribs to new parents and providers. The Public Education Campaign utilized online communications, including social media advertisements and a comprehensive website to educate the general population of Sacramento County about the fact that racism is the root cause of racial disparities in birth outcomes and offering ways to take action.

It is important to note that in addition to direct service, parenting education, and public education campaigns, policy/systems change is also needed to effect real and lasting change. It is prudent for First 5 Sacramento to continue to advocate for policy and systems change across Sacramento County and the state of California as a whole.

Countywide rates showed positive results, likely due in part to the RAACD initiative. Although infant deaths due to perinatal causes decreased, preterm and low birthweight births are increasing across Sacramento County, and as a larger national trend. The RAACD programs are appropriately positioned to explore the larger patterns in these trends and "scale up" efforts to address them at a county level. The positive outcomes depicted across RAACD programs, this may be an indication of the need to provide additional funding so that these programs can "scale up" and reach even more Sacramento families.

Appendix 1— Factors Associated with Poor Birth Outcomes

Case	# of weeks at program entry	Twin	Birthweight (lb)	Low Birthweight	Gestational Age	Preterm	# weeks prenatal care began	Lack of or late prenatal care	# of weekly check-ins	Socio-economic barriers	Psycho-social factors during pregnancy	Mother's health conditions
1	12	N	5.14	Y	34	Y	1st Trimester	N	--			Prior gestational Diabetes; Nutritional deficiencies; 2+ miscarriages; Diabetes
2	24	N	3.40	Y	32	Y	9	N	--	Single, no partner		Teen
3	19	N	5.13	Y	36	Y	4	N	2			Has child < 1 year;
4	32	N	4.14	Y	36	Y	3rd Trimester	N	2			Nutritional deficiencies; 35+ years of age
5	10	N	3.14	Y	33	Y	1st Trimester	N	14	Single, no partner; Pressing food needs		35+ years of age
6	32	N	5.13	Y	32	Y	3rd Trimester	Y	5	Single, no partner; No high school diploma;		Teen
7	29	N	3.12	Y	28	Y	1st Trimester	N	3	Unemployed, looking for work; No stable housing (Pressing Need); No transportation	Anxiety/Depression	Nutritional deficiencies; 2+ miscarriages;
8	29	N	4.14	Y	39	N	4	N	--	Single, no partner; No high school diploma; No transportation; Pressing food needs	Anxiety/Depression	Prior Low Birthweight; Prior pre-term delivery
9	11	N	5.12	Y	39	N	1st Trimester	N	9			
10	31	N	6.30	Y	37	Y	1st Trimester	N	--			
11	24	N	7.40	N	34	Y	2nd Trimester	Y	4	Pressing food and housing needs		
12	12	N	6.00	N	36	Y	1st Trimester	N	16	Single, no partner; Unemployed, looking for work; Pressing food needs		
13	12	N	6.11	N	36	Y	7	N	14	Pressing food needs		
14	26	N	5.15	N	39	N	--	N	18	Single, no partner	Anxiety/Depression;	Nutritional deficiencies;
15	25	N	7.30	Y	37	Y	8	N	15	Single, no partner; Unemployed, looking for work; Unstable housing; No transportation;		Nutritional deficiencies; Teen; 2+ miscarriages;
16	32	N	5.30	N	40	N	3rd Trimester	Y	2	Pressing food needs		Teen
17	11	N	6.00	Y	32	Y	1st Trimester	N	15	Pressing food needs	Anxiety/Depression;	Prior gestational Diabetes; Preeclampsia; Prior pre-term delivery;
18	23	N	4.40	N	40	N	13	Y	24	No transportation, Pressing housing need	Anxiety/Depression;	Has child < 1 year;
19	15	N	5.15	Y	41	N	10	N	27	Single, no partner; Unemployed, looking for work		
20		Y	4.30 5.60	Y Y	32	Y Y	--	--	3	Single, no partner; Unable to fulfill food needs		

Appendix 2 — Technical Notes Related to County Trend Data

In Spring 2019, representatives from First 5 Sacramento, Sierra Health Foundation, and the Public Health Department met to discuss and agree upon core parameters for gathering and sharing RAACD data. Another meeting was held in Fall 2021 to reconvene and clarify any additional elements. The following presents the highlights of these discussions.

BASELINE YEAR

The Blue Ribbon Commission report cited data from 2007-2011, and set goals based on the change desired after that period. 2012 is being used as the starting period for RAACD partners, although implementation began to get underway in 2014 and 2015. Because of the instability of one-year estimates, this report uses the three-year period of 2012-2014 as the baseline period, and tracks change in subsequent three periods relative to that baseline period.

CODING OF RACE

Birth data is based on birth certificate information and includes individuals who identify as African American only. Mixed race individuals are not included in the PHD's category of African American.

Death data is gathered by the PHD from the coroner's office and is based on the race of the deceased on the death certificate. The race listed on the birth certificate and death certificate may not always match.

DATA SOURCES AND RATES

Partners agreed to use data from the Sacramento County Public Health Department for the source for tracking RAACD trends. It was also agreed to show trends per 1,000 population, and not 100,000 population.

Data	Numerator Data Source	Denominator Data Source	Measured as:
Low-birthweight infants	PH	PH births	Rate per 1,000 births
Preterm infants	PH	PH births	Rate per 1,000 births
All Infant Death (<1 year)	PH	PH births	Rate per 1,000 births
Infant Sleep-related Death (<1 year)	CDRT	PH births	Rate per 1,000 births
Infant Perinatal Condition Death (<1 year)	CDRT	PH births	Rate per 1,000 births

Appendix 3 — Analysis Details

Logistic Regression Predicting Dichotomous Healthy Birth Outcome (yes/no).

	B	S.E.	df	*p*	OR
Tobacco use	**1.606**	**.793**	**1**	**.043**	**4.982**
Unable to fulfill food needs	**1.121**	**.428**	**1**	**.009**	**3.069**
Single, No Partner	.441	.338	1	.192	1.554
Anxiety/Depression	.432	.358	1	.228	1.540
Domestic Violence	-.158	.811	1	.846	.854
Alcohol/drug use	.565	.728	1	.438	1.760
BMU Service Count	-.049	.028	1	.080	.953
Constant	-1.410	.351	1	.000	.244

Note: bolded variables are statistically significant at $p \leq .05$

Linear Regression Predicting Continuous Birth Weight

	B	S.E.	*t*	*p*
Obesity	**1.008**	**.411**	**2.451**	**.015**
Tobacco use	**-.996**	**.468**	**-2.126**	**.035**
BMU Service Count	**.031**	**.015**	**2.129**	**.034**
Unable to fulfill food needs	-.416	.269	-1.546	.123
Clients not looking for work	-.396	.212	-1.871	.063
Alcohol/drug use	-.473	.414	-1.144	.254
BMU Weeks at Intake	-.009	.013	-.716	.475
Constant	7.030	.450	15.606	.000

Note: bolded variables are statistically significant at $p \leq .05$

Linear Regression Predicting Continuous Gestational Age

	B	S.E.	*t*	*p*
BMU Service Count	**.065**	**.023**	**2.779**	**.006**
Clients not looking for work	-.293	.363	-.806	.421
Constant	38.142	.414	92.223	.000

Note: bolded variables are statistically significant at $p \leq .05$

Appendix 4 — References & Endnotes

[i] Sacramento County Child Death Review Team: A Twenty Year Analysis of Child Death Data 1990 – 2009. http://www.thecapcenter.org/admin/upload/final%2020%20year%20cdrt%20report%202012_1%2026%2012.pdf

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[iii] RAACD Strategic Plan, March 2015. https://www.shfcenter.org/assets/RAACD/RAACD_Strategic_Plan_Report_March_2015.pdf

[iv] RAACD Implementation Plan, September 2015. https://www.shfcenter.org/assets/RAACD/RAACD_Implementation_Plan_2015.pdf

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vi McDonald, S. D., Z. Han, S. Mulla, & J. Beyene. 2010. "Overweight and obesity in mothers and risk of preterm birth and low birth weight infants: systematic review and meta-analysis." BMJ, 2010, 341:c3428. https://www.bmj.com/content/341/bmj.c3428