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Welcome Baby Shows Promising Outcomes for Families in Los Angeles County

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INTRODUCTION

Welcome Baby, a free and voluntary home visiting program funded by First 5 LA, is offered to all parents in historically disadvantaged communities across Los Angeles County who give birth in participating hospitals. The program offers six engagement points across babies' first 9 months of life, as well as up to three prenatal engagement points for those who enroll prior to giving birth. Although other home visiting models offer services for several years, home visiting programs with fewer visits are less costly and may be more appealing to some families.

Offering in-home visits since 2009, Welcome Baby shifted temporarily from in-person to virtual visits in response to the COVID-19 pandemic. This study evaluated the virtual implementation of Welcome Baby and its effects on families, focusing on the following questions:

1. What are the maternal and child outcomes for Welcome Baby participants who received virtual visits?
2. How do these outcomes differ from those of a comparison group of parents who did not participate in Welcome Baby?

Using program data as well as surveys administered to Welcome Baby and comparison families at 14 weeks postpartum, 10 months postpartum (1 month after the end of the Welcome Baby program), and 18 months postpartum, the study found that despite being delivered virtually, Welcome Baby had positive effects for some important outcomes. Program engagement also expanded substantially with the transition to virtual implementation, potentially extending the benefits to more families.

Highlights: Successful Virtual Implementation

- Welcome Baby enrollment and completion rates increased substantially.
- Families were overwhelmingly satisfied with the support.
- Relative to a comparison group, Welcome Baby Families…
  - were more likely to have an established medical home in their babies' first year of life;
  - were more likely to be screened for domestic violence and depression;
  - were more likely to receive breastfeeding support, and they breastfed longer;
  - had higher levels of parenting confidence; and
  - had children with more positive social and emotional development.

About the Welcome Baby Program

Welcome Baby participants receive up to nine program engagement points, including three prenatal visits for those who enroll in the program prenatally, as well as one bedside visit in the hospital after delivery and five postpartum visits for all participants. During each Welcome Baby visit, participants receive parent education and support on a variety of timely topics, such as prenatal care, childbirth preparation, breastfeeding, home safety, well-care visits, child development, and parent–child interaction, among others. Parent coaches often conduct assessments during visits to identify needs and make referrals, as necessary. Parent coaches also ask about participants' access to and use of medical care, public benefits, and social supports and help link them to services when needed.

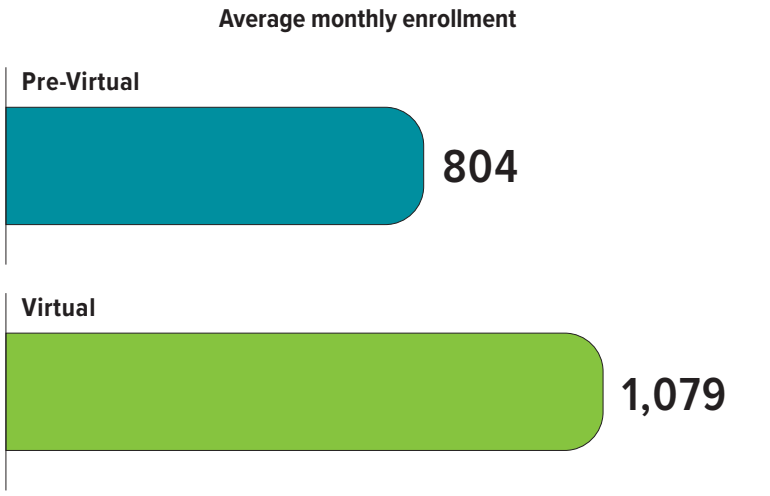
KEY FINDINGS

Welcome Baby program enrollment and completion rates increased dramatically after the transition to virtual visits.

After switching to virtual visits, the program enrolled more than 1,000 families per month—34% more than the 804 families enrolled each month before the pandemic began (when all enrollments were for in-person visits; see Exhibit 1). This increase may reflect more interest in the virtual delivery of services, although it could also reflect an increased need for home visiting services in general.

Program completion rates increased, too. From among those enrolling in the pre-virtual period, 42% completed the final 9-month visit. This completion rate increased to 53% when virtual visits were an option (Exhibit 2). The increase in completion rates was even steeper for participants who identified as Black (increasing from 29% to 46%). These findings suggest that virtual implementation may make home visiting more accessible, especially for Black families.

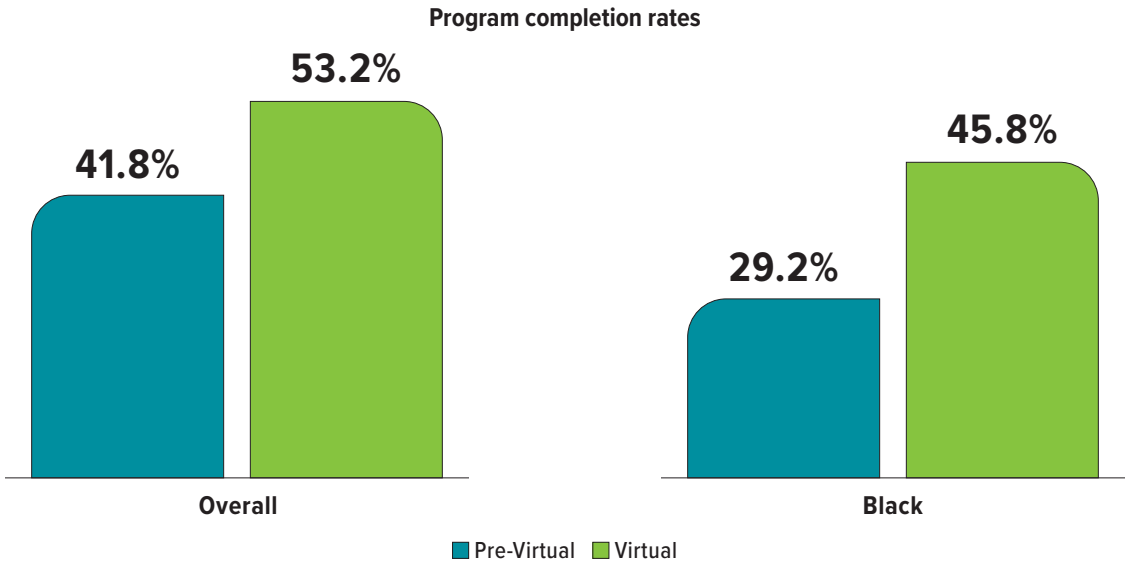
Exhibit 1. Average Monthly Enrollment in Welcome Baby Before and After the Transition to Virtual Visits



Note. This graph presents data from the Stronger Families Database for participants who were enrolled from July 2018 to February 2020 (pre-virtual) and April 2020 to December 2022 (virtual).

***p < .001.

Exhibit 2. Percentage of Welcome Baby Participants Who Completed the Program Before and After the Transition to Virtual Visits, by Race/Ethnicity



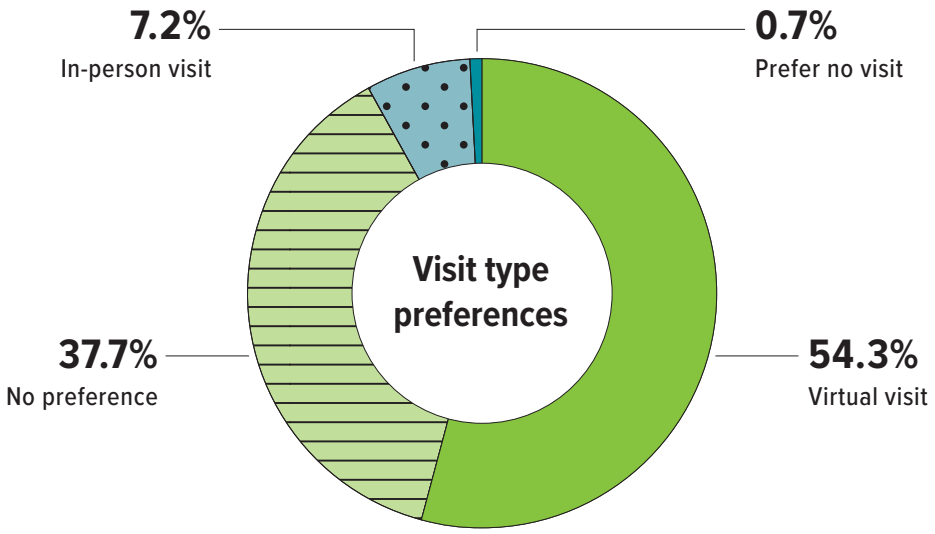
Note. This graph presents data for participants who enrolled in Welcome Baby during a time when they would have received only in-person visits (July 2018 to June 2019) and participants who enrolled during a time when they would have received only virtual visits (April 2020 to December 2022). This excludes participants who enrolled between July 2019 and March 2020, when they could have received a mix of in-person and virtual visits, as well as cases with missing race/ethnicity data.

***p < .001.

These high completion rates are underscored by almost universal satisfaction with the program. Nearly all Welcome Baby participants (94%) surveyed at the end of the program reported that they had found the virtual visits either very or extremely helpful.

In fact, when asked about their preference for in-home versus virtual visits, more than half of Welcome Baby participants said they preferred virtual visits (54%), and 38% said that they had no preference (Exhibit 3). Only 7% of participants said that they would have preferred in-person visits.

Exhibit 3. Percentage of Welcome Baby Participants With Preferences for In-Person Versus Virtual Visits at 10 Months Postpartum



A majority (68%) of Welcome Baby participants who preferred virtual visits said they were more convenient, flexible, and easier to coordinate, plus participants did not have to worry about making their homes presentable for a visitor. An additional 25% said they preferred virtual visits because they felt safer not having additional people in contact with their children, given concerns about COVID-19 at the time.

Welcome Baby participants had greater access to health care than comparison families.

Ensuring that families have access to health care is an important goal of the Welcome Baby program. Having a medical home—defined in this study as a usual place to go for health advice or sick care (that is not the emergency room) and a personal doctor or nurse who knows you and is familiar with your health history—is important for ensuring timely and appropriate health care, which in turn supports the health and well-being of families (Adamson, 2011).

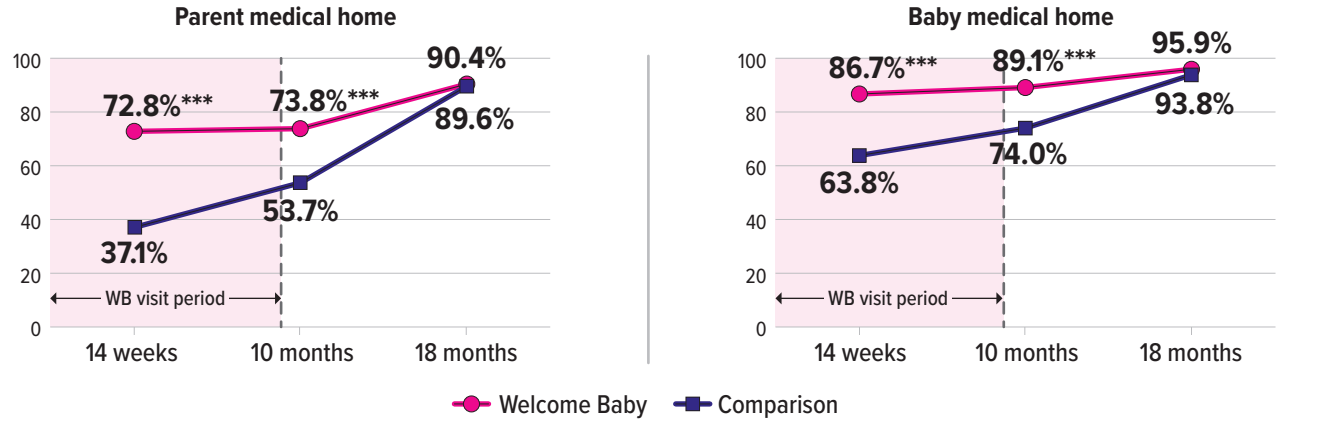
Focus on Subgroups

In addition to examining outcomes for the overall study population, the study team also examined how Welcome Baby affected outcomes for Black and Spanish-dominant families.

Spanish-dominant refers to language preference and differs from identifying as Hispanic/Latina. Although the majority of study participants identified as Hispanic/Latina, and many were bilingual, 30% requested communication in Spanish only and were thus classified as Spanish-dominant. Families with limited English skills are more likely to be immigrants (Twersky et al., 2024) and have lower health literacy in a predominantly English-language health care system (Hernandez et al., 2024). Therefore, they are an important subgroup to consider.

Nearly all study participants—both Welcome Baby and comparison—had health insurance throughout the study and a medical home by 18 months postpartum. However, Welcome Baby participants established a medical home for themselves and their babies much earlier than comparison families. At 14 weeks postpartum, 73% of Welcome Baby participants had a medical home for themselves (compared to only 37% of comparison families), and 87% had a medical home for their babies (compared to only 64% of comparison families) (Exhibit 4). And by the end of the program (at 10 months), 20% more Welcome Baby parents had a medical home for themselves, and 15% more Welcome Baby parents had a medical home for their babies, relative to comparison families. These moderate to large effects may mean that Welcome Baby families have a greater opportunity to access better and more timely medical care in the critical first year of life.

Exhibit 4. Percentage of Welcome Baby and Comparison Group Participants With a Medical Home for Themselves and Their Babies, at 14 Weeks, 10 Months, and 18 Months Postpartum



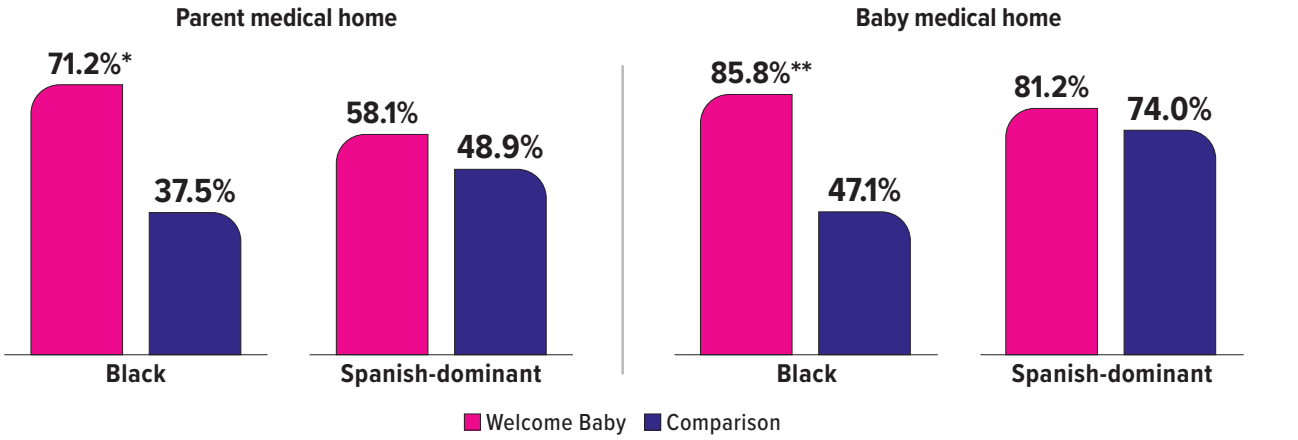
Note. Estimates are based on longitudinal regression models using imputed data and thus are adjusted to account for demographic and contextual background variables and time. The 14-week effect sizes are large (parent medical home Cohen's d = 0.72, baby medical home Cohen's d = 0.73). The 10-month effect sizes are moderate (parent medical Cohen's d = 0.46, baby medical home Cohen's d = 0.73).

***p < .001.

The benefit of Welcome Baby for medical home access was even more pronounced for Black families. Relative to Black families in the comparison group, 34% more Black Welcome Baby participants had a medical home for themselves and 39% more had a medical home for their babies (Exhibit 5) at the end of the program. These are large effects.

However, among Spanish-dominant families (those who prefer to communicate in Spanish), Welcome Baby participants were not significantly more likely than the comparison group to have a medical home (for themselves or their babies) (Exhibit 5) at the end of the program. This finding presents an opportunity for Welcome Baby to consider how to help more Spanish-dominant families overcome barriers to establishing a medical home in an English-dominated healthcare system.

Exhibit 5. Percentage of Black and Spanish-Dominant Welcome Baby and Comparison Group Participants With a Medical Home for Themselves and Their Babies at 10 Months Postpartum



Note. Estimates are based on longitudinal regression models using imputed data and thus are adjusted to account for demographic and contextual background variables and time. The effect sizes for Black families are large (parent medical home Cohen's d = 0.98 and baby medical home Cohen's d = 1.39). The sample sizes for Black families are small (Welcome Baby n = 78 and Comparison n = 18).

*p < .05, **p < .01.

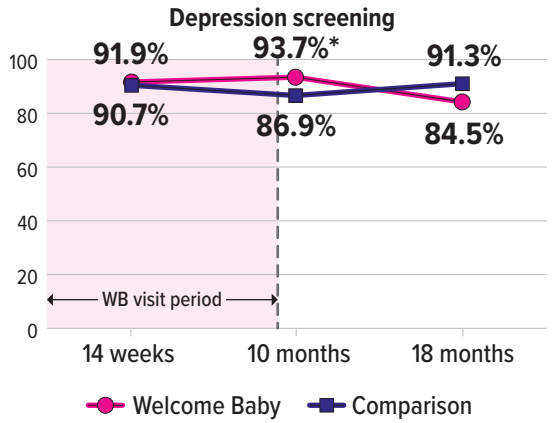
Welcome Baby participants received more health and wellness screenings than the comparison group, though they did not attend more well-care visits overall.

Having a medical home is typically associated with increased rates of childhood immunization and well-child visits (American Academy of Pediatrics, 2024). While we found that Welcome Baby families generally had high rates of participation in well-care visits, we did not find overall differences between families in the Welcome Baby and comparison groups in terms of rates of receiving on-time postpartum care or being up to date on their babies' immunizations, and they reported attending somewhat fewer well-child visits overall.

Welcome Baby participants were more likely to report receiving some health and wellness screenings, however. For example, domestic violence screenings were more common among Welcome Baby participants. Specifically, when their babies were 14 weeks old, Welcome Baby families were more likely to report being asked by a health care provider or parent coach if they felt safe in their home than comparison families. In addition, although Welcome Baby and comparison families were equally likely to be screened for depression at 14 weeks, at 10 months postpartum, Welcome Baby participants were significantly more likely than comparison families to report having been asked about their mental health by a health care provider or parent coach in the past 6 months, suggesting ongoing screening for depression for these families in the first year postpartum. At 18 months,

however, rates of depression screening dropped off substantially for Welcome Baby families, suggesting that the program may be providing an important service that, after the program ends, is not replaced with screenings from another source (Exhibit 6).

Exhibit 6. Percentage of Welcome Baby and Comparison Group Participants Screened for Depression, at 14 Weeks, 10 Months, and 18 Months Postpartum

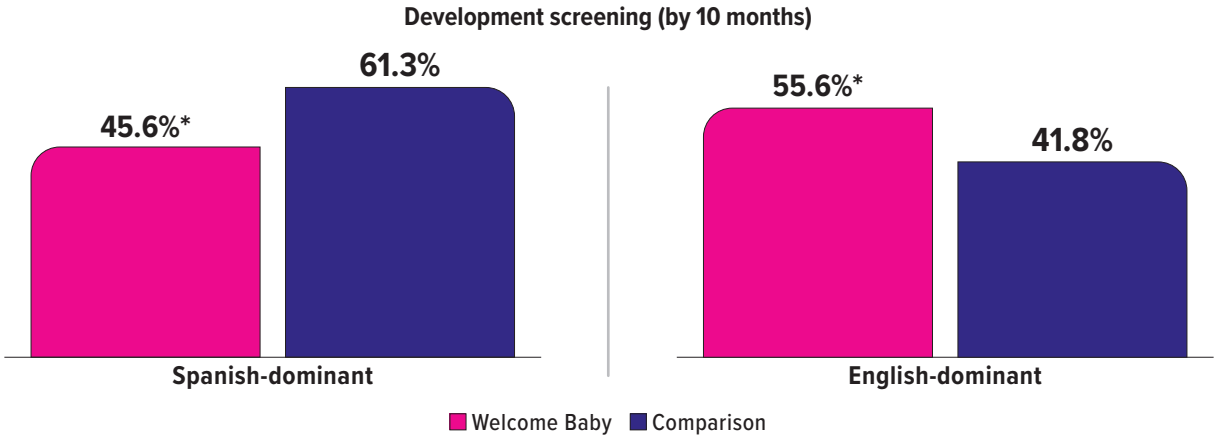


Note. Estimates are based on longitudinal regression models using imputed data and thus are adjusted to account for demographic and contextual background variables and time. The 10-month effect size is small (Cohen's d = 0.31).

*p < .05.

Finally, Welcome Baby children were more likely to receive developmental screenings from a doctor or health care professional, but only among English-dominant families. At 10 months postpartum, after their participation in the Welcome Baby program, English-dominant Welcome Baby participants were more likely than the comparison group to report that a doctor or other health care provider had asked about their babies' development, communication, or social behaviors. But among Spanish-dominant families, Welcome Baby participants were less likely than the comparison group to have their babies screened by a health care provider (Exhibit 7). This finding could reflect barriers to medical care access for some Spanish-dominant families. Spanish-dominant families may be more likely to be recent immigrants to the United States and may benefit from increased support in navigating access to well-care services.

Exhibit 7. Percentage of Spanish- and English-Dominant Welcome Baby and Comparison Group Participants Whose Babies Were Screened for Developmental Concerns, at 10 Months Postpartum



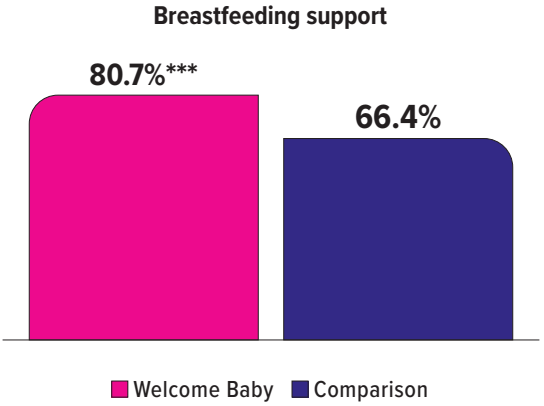
Note. Estimates are based on cross-sectional regression models using imputed data and thus are adjusted to account for demographic and contextual background variables. The effect sizes are moderate for Spanish-dominant families (Cohen's d = -0.63) and English-dominant families (Cohen's d = -0.63).

*p < .05.

Welcome Baby participants received more breastfeeding support than the comparison group.

Welcome Baby participants often reported that breastfeeding support was the most helpful Welcome Baby resource. One participant said of her Welcome Baby team, "They helped me a lot with breastfeeding… I had no idea what breastfeeding was, or what it was like to breastfeed." And significantly more Welcome Baby participants (81%) said they had received breastfeeding support from a health professional, such as a lactation specialist, nurse, or home visitor, than the comparison group (Exhibit 8). Participants also reported breastfeeding for a longer duration by the 14-week interview.

Exhibit 8. Percentage of Welcome Baby and Comparison Group Participants Who Reported Receiving Breastfeeding Support, at 14 Weeks Postpartum



Note. Estimates are based on cross-sectional regression models using imputed data and thus are adjusted to account for demographic and contextual background variables. The effect size is moderate (Cohen's d = 0.49).

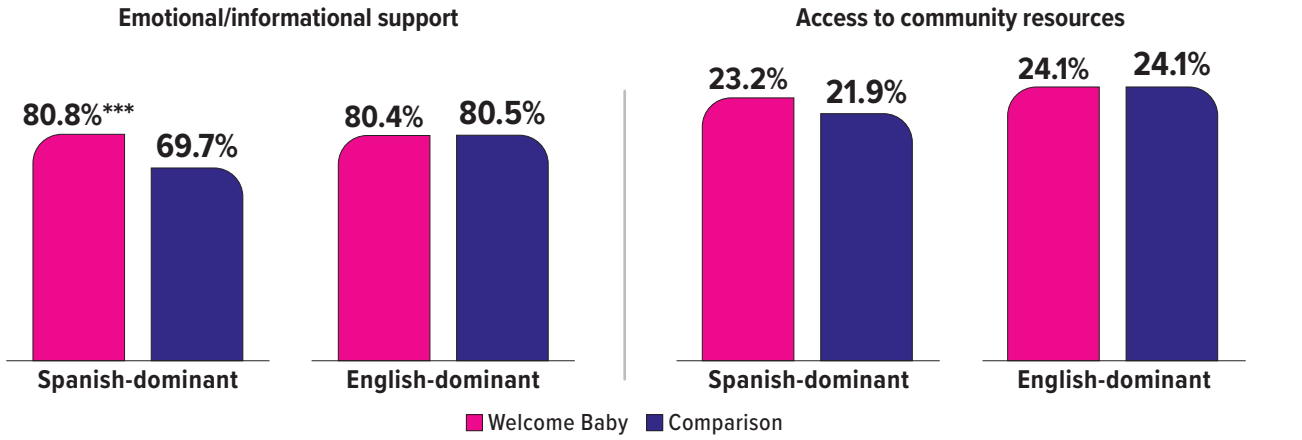
***p < .001.

Welcome Baby provides critical support for participants and may help close the gap in access to social support and community resources for Spanish-speaking families.

Welcome Baby participants highlighted the critical emotional support they had received through the program. As one participant said, "Speaking to [my parent coach] made me feel a lot better. . . . She was my actual first person that I was able to discuss things with openly and honestly, even though she was a stranger." Parents in the comparison group also reported high levels of support from family and community networks. In fact, among English-dominant families in the study, we found parents' ratings of social support (including access to emotional and informational support and access to broader community resources) to be statistically equivalent for Welcome Baby and the comparison group.

The story is different, however, for Spanish-dominant families. Among families who preferred communicating in Spanish, those in Welcome Baby reported higher levels of emotional and informational support (such as having someone who will listen to you and having someone to give you good advice) and greater access to community resources (such as knowing community agencies to go to for help and knowing where to find important medical information) than comparison families (Exhibit 9). In addition, although in the comparison group, social support scores were lower for Spanish-dominant families than English-dominant families, after participating in the program, Spanish-dominant Welcome Baby families' scores on these measures were on par with scores for their English-dominant peers. This suggests that the Welcome Baby program may help to level the playing field for Spanish-speaking families.

Exhibit 9. Average Social Support Scores—Emotional/Informational Support and Access to Community Resources—for Spanish- and English-Dominant Welcome Baby and Comparison Group Participants, at 10 Months Postpartum



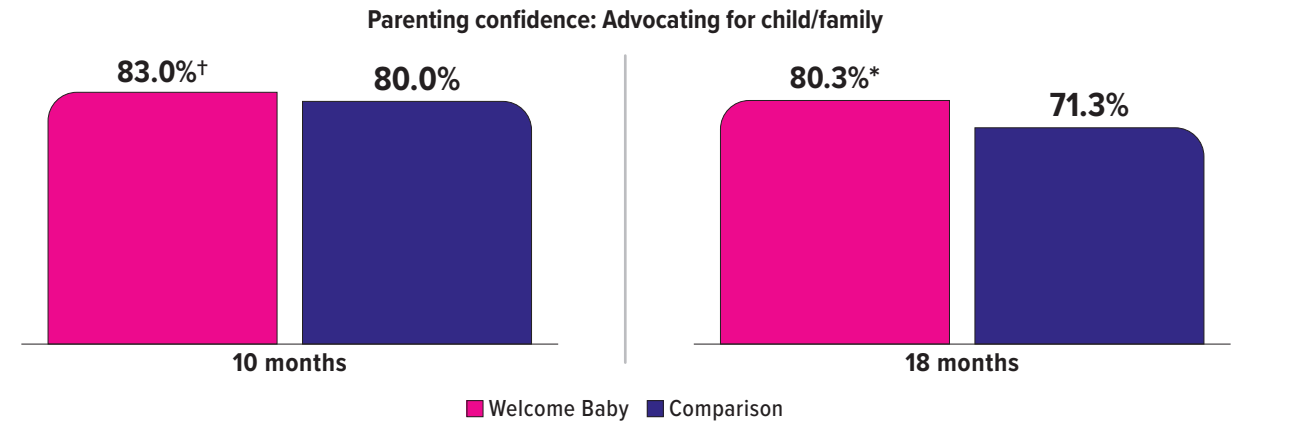
Note. The Access to Community Resources measure has a scale ranging from 6 to 30 points; the Emotional/Informational Support measure has a scale that ranges from 0 to 100 points. Estimates are based on cross-sectional regression models using imputed data and thus are adjusted to account for demographic and contextual background variables. The Spanish-dominant effect sizes are small for Access to Community Resources (Cohen's d = 0.23) and small to moderate for Emotional/Informational Support (Cohen's d = 0.33).

*p < 0.05, ***p < .001.

Welcome Baby participants reported more positive parenting confidence.

Supporting parenting beliefs and practices is at the heart of the Welcome Baby program, and we find some differences between Welcome Baby and comparison participants on measures of parenting. In particular, although both the Welcome Baby and comparison groups reported high levels of parenting confidence, by the end of the program, Welcome Baby participants were a little more confident in their ability to advocate for their child and family than those in the comparison group. This difference was small and not statistically significant, but the gap widened by 18 months postpartum such that Welcome Baby participants were significantly more confident than the comparison group in their ability to advocate for their child and family 9 months after the program ended (Exhibit 10).

Exhibit 10. Average Scores on Parents' Confidence in Advocating for Their Child and Family for Welcome Baby and Comparison Group Participants, at 10 and 18 Months Postpartum



Note. The Parenting Confidence measure has a scale ranging from 0 to 100 points. Estimates are based on longitudinal regression models using imputed data and thus are adjusted to account for demographic and contextual background variables and time. The effect sizes are small (10-month Cohen's d = 0.16; 18-month Cohen's d = 0.18).

†p < 0.1, *p < .05.

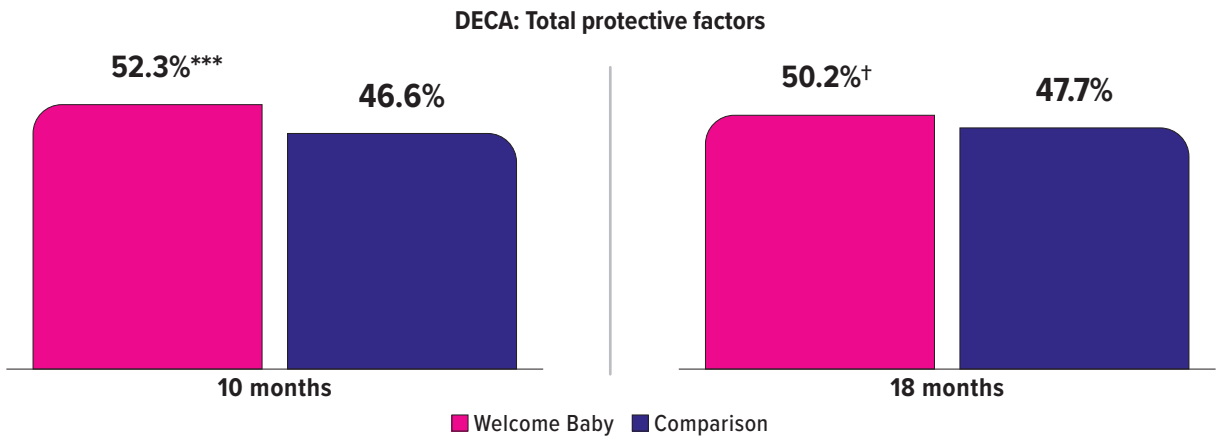
Welcome Baby parents also scored somewhat higher than the comparison group on a measure of parent–child interaction, reflecting calm, responsive, and positive engagement with their child, although the difference was not statistically significant and was not sustained at 18 months postpartum. There were also no statistically significant differences between the Welcome Baby and comparison groups on other parenting behaviors, including home safety practices; creating a supportive learning environment; and reading, singing, and telling stories to their children.

Welcome Baby babies had higher social and emotional development than babies in the comparison group.

Babies of Welcome Baby participants had significantly higher social and emotional development scores, as measured by the Devereaux Early Childhood Assessment (DECA), than babies in the comparison group (Exhibit 11). The DECA comprises an Initiative subscale and Attachment/Relationships subscale, which are combined to form a Total Protective Factors subscale.

Total protective factors scores, which reflect positive behaviors central to social and emotional health and resilience for babies, were significantly higher for Welcome Baby children than for the comparison group right after the program ended. The gap closed somewhat 9 months after the end of the program, but Welcome Baby children still had somewhat higher total protective factors scores at 18 months (Exhibit 11).

Exhibit 11. Average Social and Emotional Scores—DECA Total Protective Factors—for Welcome Baby and Comparison Group Babies, at 10 and 18 Months

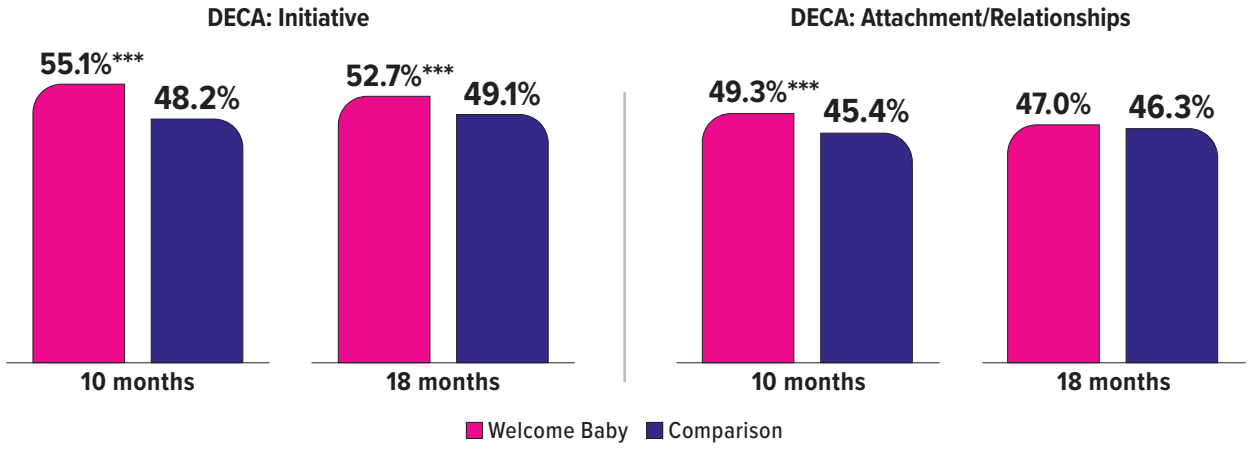


Note. DECA = Devereaux Early Childhood Assessment. The DECA t-score has a scale of 28 to 72 points. Estimates are based on cross-sectional regression models using imputed data and thus are adjusted to account for demographic and contextual background variables. The Total Protective Factors effect size is small to moderate at 10 months (Cohen's d = 0.37) and small at 18 months (Cohen's d = 0.29).

†p < 0.1, ***p < .001.

Differences were even larger on the Initiative subscale, which captures children's ability to use independent thought and actions to get their needs met. Welcome Baby scores were significantly higher than the comparison group's at 10 months of age as well as at 18 months of age, 9 months after the program ended; this reflects a moderately large effect (Exhibit 12). Relative to the comparison group, Welcome Baby children also had higher Attachment/Relationship scores at 10 months, reflecting mutual, strong, long-lasting relationships with significant adults in their lives.

Exhibit 12. Average Social and Emotional Scores—DECA Initiative and Attachment/Relationships—for Welcome Baby and Comparison Group Babies, at 10 and 18 Months

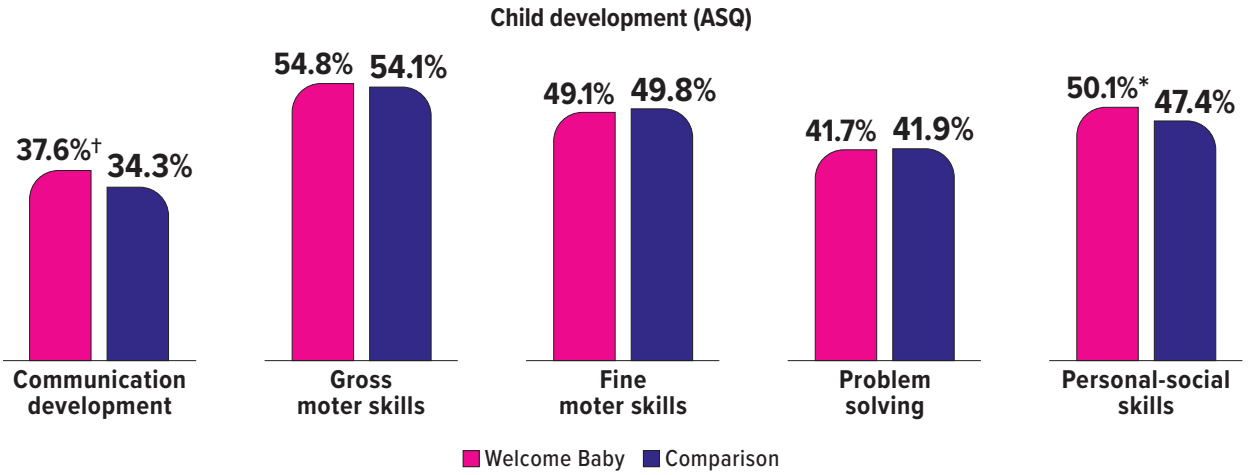


Note. DECA = Devereaux Early Childhood Assessment. The DECA t-score has a scale of 28 to 72 points. Estimates are based on cross-sectional regression models using imputed data and thus are adjusted to account for demographic and contextual background variables. The Initiative effect size is moderate at 10 months (Cohen's d = 0.40) and 18 months (Cohen's d = 0.40); the Attachment/Relationships effect size is small at 10 months (Cohen's d = 0.28).

***p < .001.

Similarly, Welcome Baby children demonstrated higher personal-social skills at 18 months of age, as measured by the Ages and Stages Questionnaire (ASQ-3), than children in the comparison group (Exhibit 13). Welcome Baby scores on communication development were also slightly higher than the comparison group's, but the difference was not statistically significant.

Exhibit 13. Average Child Development Scores—Ages and Stages Questionnaire (ASQ)—for Welcome Baby and Comparison Group Babies, at 18 Months



Note. Estimates are based on cross-sectional regression models using imputed data and thus are adjusted to account for demographic and contextual background variables. The Communication Development effect size is small (Cohen's d = 0.21); the Personal-Social Skills effect size is small (Cohen's d = 0.28).

†p < 0.1, *p < .05.

CONCLUSIONS

Home visiting has been shown to be an effective tool for supporting maternal and child health, positive parenting practices, and the safety and healthy development of children (Administration for Children and Families, U.S. Department of Health and Human Services, n.d.). Less intensive programs like Welcome Baby, and especially the virtual implementation of such programs, have the potential to increase access to services and provide benefits to families at a lower cost than longer term programs with in-person home visits. Indeed, this study found that the transition to virtual implementation significantly boosted enrollment in Welcome Baby and program completion rates, indicating greater accessibility and acceptance of the program, particularly among Black families.

The study also revealed important program benefits for families. Welcome Baby demonstrated its strongest effects during and just after the program concluded, within babies' first year—a pivotal period for establishing a foundation for healthy development and family well-being. Compared to other families, Welcome Baby participants

- were more likely to have established medical homes for themselves and their babies in their babies' first year,
- had a higher likelihood of receiving critical breastfeeding support,
- were more likely to be screened for depression and domestic violence,
- felt more confident in advocating for their families and children, and
- had children who exhibited more positive social and emotional development.

Although some advantages for Welcome Baby families remained 9 months after the program ended, some of the positive effects diminished or disappeared after the home visits ended, with the comparison sample "catching up" to the Welcome Baby sample. This may indicate that families need sustained support to achieve and maintain the best outcomes. In addition, outcomes varied by family characteristics, suggesting some families may benefit from the program's current structure more than others. Finally, study findings did not show significant benefits on other outcomes, such as receipt of well-care services, parenting practices, or strengthening families' social support networks.

All in all, the virtual implementation of the Welcome Baby program shows some promise as a support system at a critical point in the early postpartum period for families. In addition, the switch from in-person to virtual implementation appears to have made the program more accessible, as evidenced by significantly increased enrollment and completion rates, especially for Black families. For families who might be nervous about having someone in their home, a virtual home visiting option enables them to receive the benefits of program participation. Continuing to provide a wide range of supports for families while tailoring additional supports to meet individual family needs may be the best approach to ensure that all families can benefit from the program.

Study Methods

To identify the effects of Welcome Baby, the study team collected data from 607 Welcome Baby participants as well as a comparison group composed of 306 individuals who had recently given birth in Los Angeles County. These individuals did not participate in Welcome Baby but received services from a social service agency that offers nutritional support and health care referrals to pregnant and postpartum parents and their children.

The study team began collecting outcome data through a survey of Welcome Baby participants in October 2021, when the babies were approximately 14 weeks old. The study team collected comparable data from the comparison group beginning in March 2021, when those participants' babies were also about 14 weeks old. We followed up with a second round of surveys when the babies in each group were about 10 months old (May 2022–July 2023 for the Welcome Baby sample and August 2021–May 2022 for the comparison sample) and again with a third round of surveys when the babies in each sample were about 18 months old (January 2024–April 2024 for the Welcome Baby sample and April 2022–February 2023 for the comparison sample).

The analyses presented here controlled for demographic and background characteristics, some of which differed between the Welcome Baby group and the comparison group. Control variables included marital status, mother's age, baby's age, first born baby, income level, education status, race, employment status, mother's preferred language, household size, Best Start community, SPA category, and COVID-19 death rate. For outcomes measured at multiple points in time, we used longitudinal regression analyses to estimate the changes in responses over time by Welcome Baby versus the comparison group. To account for variation in the severity of the COVID-19 pandemic during the follow-up data collection period, we also controlled for variation in the COVID-19 death rate in Los Angeles County during that period. We used multiple imputation procedures to minimize the effects of survey nonresponse on the statistical precision of our estimates. We conducted sensitivity analyses to ensure that our imputation strategies and statistical controls did not unduly influence the size and direction of our impact estimates. Despite these precautions, it is important to note that the analyses presented here were nonexperimental, which means that they may be subject to unknown and uncontrolled biases.

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