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Findings from the First 5 California Home Visiting Workforce Study

Appendix B: Study Methods

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I. Workforce survey constructs

The study team developed key constructs to address the following research questions:

1. Who is the current home visiting workforce?
2. What are their job responsibilities and work schedules?
3. What are the implementation supports in place for the home visiting workforce, including supervision? How are these supports perceived by staff?
4. What are the promising and scalable practices used by home visiting sites to recruit the workforce?
5. What are the promising and scalable practices used by home visiting sites to retain the workforce?

Table 1 presents the key constructs included in the full workforce survey.[1] The study team framed survey questions to ask about pre-COVID and the current COVID context for some constructs. Questions were asked of both supervisors and home visitors, unless noted by an asterisk (*), in which case only supervisors were asked the question.

Table 1. Workforce survey constructs

Research question and construct	Item-level constructs
Who are the current home visiting workforce?	
Position	Job title
Demographics	Age, gender, race/ethnicity, languages spoken, participation in public subsidy
Educational attainment	Educational level (e.g. BA), degree content, coursework, licenses and credentials
Tenure in the field	Years in early childhood field, years in home visiting sector, years in current position
What are their job responsibilities and work schedules?	
Work schedules	Number of hours and days paid per week
	Number of hours and days worked per week
	Evening and weekend home visiting
Caseloads	Caseloads
	Duration (in minutes) of each home or virtual visit
	Characteristics of families served
Responsibility	Job responsibilities (e.g., direct home visiting services, paperwork, etc.)
	Hours per week per job responsibility
What are the implementation supports in place for the HV workforce, including supervision? How are these supports perceived by staff?	
Supports	Types and hours of supervision (including observation as part of supervising; reflective supervision; peer supervision, etc.)
	Type of supports (e.g., structured parenting curricula, consultants to address specific family needs, technical supports, protocols for risk screening and referrals, mental health supports)
	Perception of supervision and supports, additional supports needed
Workforce preparation	Training hours before serving families
	Types of pre-service and ongoing trainings
	Perception of training needs (e.g., in what areas is more training needed)
What are the promising and scalable practices used by HV sites to recruit the workforce?	

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[1] Some survey items were developed based on the MIHOPE (Duggan, et al., 2018) and HVCT (Sandstrom, et al., 2020) study tools.

Research question and construct	Item-level constructs
Workforce pipeline	*Recruiting strategies (e.g., where supervisors find hires)
	*Educational requirements for staff
	*Background/skills you are looking for when recruiting
	*Knowledge/higher ed/certifications that are helpful for home visitors to have before they start
	*Challenges and successes in filling positions
	*Competency frameworks (if any) used for hiring, training and support staff
	Advancement opportunities
What are the promising and scalable practices used to retain and support the workforce?	
Workforce retention	Job satisfaction and work environment
	Mental health supports
	Psychological resources (mindfulness, stress, and depressive symptoms)
	Future career plans
	*Duration of home visitors staying in their position
	*Reasons for turnover
Compensation	Hourly wage or annual
	Time since last wage increase
	Benefits (e.g., health insurance, paid vacation days, etc.)
	Work flexibility
	*Factors on which earnings are based (e.g., degree, experience, etc.)
	How is the workforce represented (i.e., unions)

Note: Questions with an asterisk (*) were asked of supervisors only.

II. Study definition of home visiting

The study team developed a definition of home visiting to anchor the development of the full workforce scan and survey, with the goal to capture both evidence-based and home-grown home visiting programs across the state and to ensure diverse representation of programs. This definition continued to evolve throughout outreach and recruitment efforts, as counties nominated a large number of programs that may not have fit the study's definition but were a part of California's home visiting system and important to encompass. One example of nominated programs includes home-visiting compatible interventions that can be used alongside a home visiting program.

Home Visiting Definition

Home visiting is a primary service delivery strategy for inter-generational family-centered supports during the pivotal window of pregnancy through early childhood. Home visiting services are provided by trained professionals with pregnant or parenting families with children birth to age 5. Services are voluntary and provided in the family's home or another location (physical or virtual) of the family's choice on an ongoing schedule.

While home visiting programs vary in goals and content of services, in general, home visiting programs included in the workforce scan should provide visits that focus primarily on assessing child and family strengths and needs, setting family goals, linking participants with prenatal and postpartum care, fostering connections with pediatric care, providing information on pregnancy and child developmental stages and progress, promoting strong parent-child attachment, coaching parents on learning activities that foster their child's development, or coordination with needed community services to support self-sufficiency, health, and resilience.

Pediatric programs

We also include out-of-home pediatric programs that may include prenatal care and follow-up for healthy development-related services during the first three years of a child's life. These programs are designed to

improve the health and well-being of participants during and after pregnancy, and the infant or young child by a paraprofessional and/or professional outside of the family home, including, but not limited, to pediatric or clinical environments. Programs may provide comprehensive support, including parenting education, health information, developmental assessments, providing referrals, and promoting early learning.

III. Sampling and recruitment process

To obtain information about California's home visiting programs and workforce, the study team developed two web-based survey tools. The first is a registration survey that was used to enroll local programs in the study, obtain staff contact information, and collect key program-level information. Data from the registration survey will also contribute to a complete landscape of home visiting programs in California. This includes providing F5CA with counts of almost all home visiting programs, their funded slots, and models used across all 57 counties where home visiting programs are currently implemented. The second tool is a workforce survey, which was administered to all home visitors and supervisors who were enrolled in the study through the registration survey. The workforce survey focused on understanding the size and depth of the home visiting workforce, their demographic descriptors and well-being factors, their roles and responsibilities, and any organizational structures that support their work and retention efforts. The workforce survey was available online in English and Spanish, and a paper version was available by request in additional languages.[2]

Outreach and recruitment efforts for the study began in early summer 2020. In May, the study team started to develop a list of home visiting programs across California and compile contact information. The study team first used results of the F5CA annual survey to identify existing home visiting models in each county. The study team then received a list of home visiting programs from CHVP, which included evidence-based and non-evidence-based programs and their contact information, plus contacts for model administrators and national leads. Using Google searches, the study team verified that home visiting programs in the list met criteria in the home visiting definition, confirmed contact information, and searched for additional programs not on the list. The study team also identified programs through nominations from Core Advisory Group (CAG) Members, First 5 commission executive directors, home visiting funders, model representatives, and other key stakeholders.

The registration survey used to enroll local programs in the study, obtain contact information, and collect key program-level information opened on Aug. 3, 2020, and closed on Nov. 25, 2020, with a total of 389 home visiting programs enrolled in the study after removing the duplicates and ineligible entries. If the home visiting program did not complete the registration survey within a week, a member of the study team followed-up by email and/or phone, with a total of three follow-up attempts. Additional outreach methods included Twitter postings by Child Trends and First 5 California, and sharing the link at California Virtual Home Visiting Project webinars. Members of the CAG, First 5 commission executive directors, home visiting funders, model representatives, and other key stakeholders also encouraged participation on behalf of the study.

The full workforce survey opened on Aug. 25, 2020, and closed on Nov. 6, 2020, with a total of 918 respondents, after removing duplicated and ineligible cases.

In addition, workforce data were also collected through interviews. Interviews were conducted with 20 home visitors during October and November 2020 to further understand staff experiences with virtual

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[2] Additional languages available upon request were Vietnamese, Tagalog, and Cantonese. No surveys were requested in these languages.

home visits and related program supports.[3] More information on recruitment of home visitors and analysis of interviews can be found in Section VII.

IV. Registration survey response rate by county

Figure 1 presents the number of programs that completed the registration survey by county. When an agency registered, the individual home visiting programs within that agency were counted as unique programs in this map.

Overall, 57 of the 58 counties in California had at least one home visiting program,[4] and 55 of the counties with home visiting programs completed the registration survey. In total, 389 home visiting programs were registered; however, this number is affected by large counties, such as Los Angeles (55 programs registered) and Sacramento (26 programs registered). Twenty-four counties (42%) that registered a home visiting program registered three or fewer programs.[5]

Figure 1. Number of registered programs by county (n = 389)

Source: Home visiting registration survey, 2020, Child Trends
Note: Some programs serve multiple counties and are counted more than once per each county they serve (n = 10)

A total of 67 home visiting models were represented by programs in the registration survey, and the most commonly reported evidence-based models included Parents as Teachers, Early Head Start – Home Based

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[3] A more in-depth study of the transition to virtual home visits in California was conducted in June and July 2020. This included interviews with 64 home visiting staff and a survey of families on their caseloads. A research brief on these findings can be accessed here: https://www.childtrends.org/publications/understanding-needs-californias-home-visiting-workforce-during-covid-19
[4] Mariposa County does not currently have any home visiting programs.
[5] A home visiting program may service families in more than one county; however, the program may not have served families within that county at the time of the survey. The study team reached out to these programs to better understand how home visiting services were distributed across the counties in California. For example, some programs may have operated similarly across multiple counties whereas other programs might have had different eligibility requirements, served different kinds of families, and/or provided different numbers of funded slots across counties.

Option, Healthy Families America, Nurse-Family Partnership, and Nurturing Parenting Programs (Table 2). In addition, 38 programs reported using a home visiting model that was not previously known or identified, and these likely reflect local or home grown models. These additional home visiting models are represented as "Other" in Table 2.

Table 2. Number of home visiting programs registered by model (n = 364)

Home visiting model name	Number of registered programs using each model
Attachment and Biobehavioral Catch-Up (ABC) Intervention	1
Adolescent Family Life Program	2
African American Perinatal Health Program	3
Behavioral Health Home Visiting	2
Black Mothers United Pregnancy Mentoring Home Visiting Program	2
Child Parent Psychotherapy	2
DULCE	3
Early Head Start – Home-Based Option	47
Early Steps to School Success	4
Family Spirit	6
Fathers Corps	3
Healthy Babies	8
Healthy Families America	43
Home Instruction for Parents of Preschool Youngsters (HIPPY)	2
Learning About Parenting	4
Maternal Early Childhood Sustained Home Visiting Program (MECSH)	1
MCAH Antenatal & Postnatal Nurse Visits	3
Nurse-Family Partnership	24
Nurturing Parenting Programs	28
Parent-Child+	5
Parenting Wisely	4
Parents as Teachers	64
Perinatal Outreach Education (POE)	3
Positive Youth Development	2
Public Health Nursing	20
SafeCare	17
Triple P-Positive Parenting Program®-Home Visiting (Triple P-Home Visiting)	8
Welcome Baby	12
Welcome Home Baby	3
Other Model	38
TOTAL	**364**

Source: Home visiting registration survey, 2020, Child Trends
Note: Models used in programs that serve multiple counties are only counted once, resulting in the lower n

V. Workforce survey response rate by PPIC region

In total, registration survey respondents provided contact information for 1,750 home visiting staff. The workforce survey was distributed via email and completed by 918 respondents, resulting in a 52 percent response rate. Respondents were from 171 home visiting programs and 48 counties. A total of 54 home visiting models were represented by respondents, and the most commonly reported evidence-based models included Early Head Start – Home Based Option, Healthy Families America, Nurse-Family Partnership, and Parents as Teachers.

To describe how workforce characteristics and program supports might vary by geographical contexts such as different economic indicators, responses to COVID-19, and impacts of recent wildfires, counties were grouped into regions according to the Public Policy Institute of California (PPIC) and their use of Public Use Microdata Areas (PUMAs) as assigned by the US Census Bureau.[6] Table 3 presents which counties are represented by each PPIC region.

Table 3. California counties by PPIC region

PPIC region	County	PPIC region	County
Los Angeles County	Los Angeles County	**Northern**	Butte County
Orange County	Orange County		Trinity County
San Diego County	San Diego County		Tehama County
Bay Area	Alameda County		Glenn County
	Contra Costa County		Siskiyou County
	Marin County		Plumas County
	Napa County		Modoc County
	San Francisco County		Lassen County
	San Mateo County		Colusa County
	Santa Clara County		Del Norte County
	Santa Cruz County		Humboldt County
	Solano County		Mendocino County
	Sonoma County		Sierra County
Central Valley and Sierra	Alpine County		Lake County
	Inyo County		Nevada County
	Mariposa County		Shasta County
	Mono County	**Inland Empire**	Imperial County
	Calaveras County		Riverside County
	Amador County		San Bernardino County
	Tuolumne County	**Sacramento area**	El Dorado County
	Fresno County		Placer County
	Kern County		Sacramento County
	Kings County		Sutter County
	Madera County		Yuba County
	Merced County		Yolo County
	San Joaquin County	**Central Coast**	Monterey County
	Stanislaus County		San Luis Obispo County
	Tulare County		Santa Barbara County
			Ventura County
			San Benito County

Source: Geography of Child Poverty in California, February 2017, Public Policy Institute of California (PPIC)

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[6] Public Policy Institute of California (PPIC) defined 9 regions that are collections of counties, which are themselves collections of PUMAs ("Public-Use Micro Area") that are defined by the US Census Bureau.
https://www.ppic.org/content/pubs/other/0217SBR_appendix.pdf

Workforce survey respondents represented all nine PPIC regions. The majority were from the Central Valley and Sierra, Los Angeles, Inland Empire, and Bay Area regions (see Figure 2).

Figure 2. Full workforce survey respondents by PPIC region (n = 915[7])
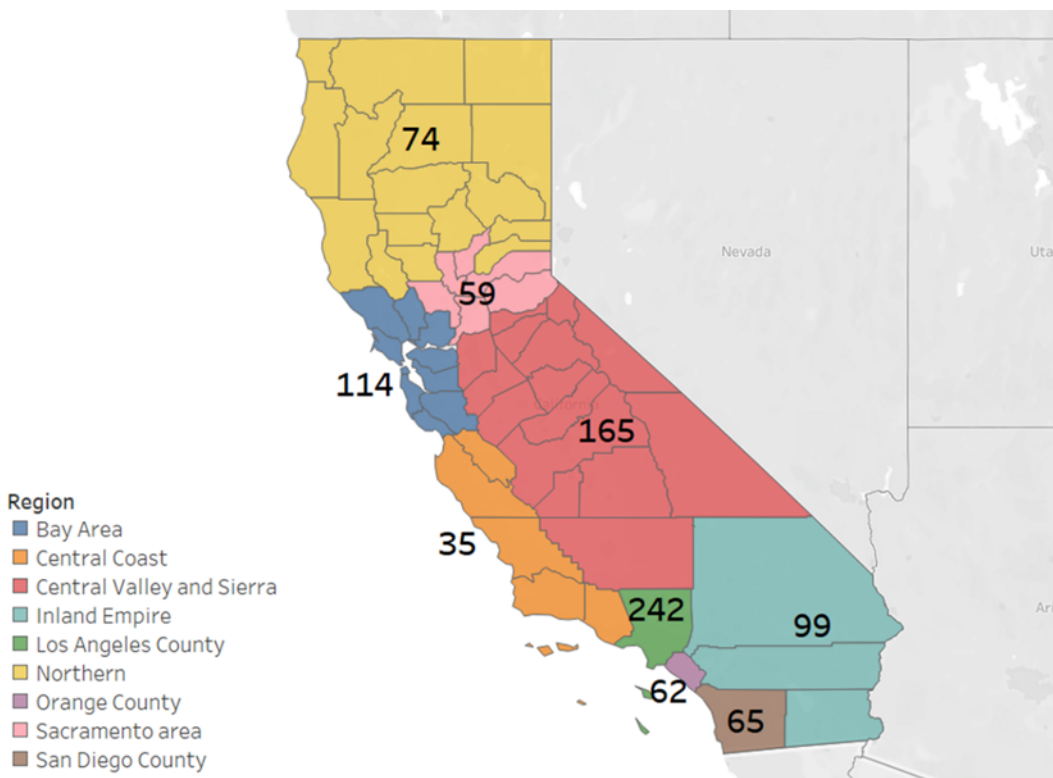
Source: Home visiting workforce survey, 2020, Child Trends

VI. Analyses

Registration and workforce survey data were stored on a secure network server and were cleaned and analyzed in the R Statistical Software.[8]

For the registration survey, entries that were duplicated or had other data issues such as incomplete responses were tracked, and when necessary, the study team followed-up with respondents to resolve these issues. Changes were made to the data based on the follow-up responses prior to analysis. Descriptives such as the number of programs registered and the counties represented by those programs were computed.

For the workforce survey, descriptive statistics such as the proportions of responses, mean, standard deviation, median, minimum, and maximum were computed for the variables of interest and were presented as tables and charts in the report. To capture the level of association between key variables (presented in Appendix D), we conducted cross-tabulations and chi-square and one-way ANOVA tests of significance for select questions with five variables: PPIC region; race and ethnicity; years of experience in the home visiting field; education and background; and depressive symptoms. We did not adjust for multiple comparisons as this was purely for descriptive purpose.

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[7] Three respondents did not select the county in which their program operates, resulting in the lower n for this map.

[8] R Core Team (2020). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/

Bivariate linear regression analyses were conducted to better understand the association between COVID-related stress and depressive symptoms, and between mindfulness and depressive symptoms. Follow-up regression moderation analyses were performed to investigate the interaction of mindfulness between COVID-related stress and depressive symptoms.

Similarly, we ran bivariate and multiple logistic regression models to study what community, programmatic, and home visitor level characteristics predicted the likelihood of remaining in current position. Only the predictors that were significant in the bivariate model or predictors that had theoretical background in the home visiting literature were added to the multivariate model. Predictors were added to the multivariate model by groups in the order of community-level, program-level, and home visitor-level variables.

VII. Qualitative methods

In addition to the surveys, workforce data were collected through interviews with home visitors. Interviews were conducted with 20 home visitors during October and November 2020 to further understand staff experiences with virtual home visits and related program supports.[9] The study team purposefully recruited staff from 10 home visiting programs that had previously participated in interviews in spring 2020 and 10 new home visiting programs. The list of programs was identified from the process previously described in Section III. Programs represented both evidence-based and home-grown models, as well as different geographic regions of the state, including rural and urban communities. In addition, 20 home visitors from 20 programs, representing 14 models, across 16 counties participated in interviews. Two interviews were conducted in Spanish.

After obtaining verbal consent, interviews were recorded, and audio from the recordings were transcribed verbatim. Interviews took approximately 1 hour each. The transcripts, along with high-level notes taken during the interviews, were qualitatively coded to identify themes across transcripts to align with and provide needed context to the workforce survey. The following themes were the focus of coding:

- Experience with home visiting during the COVID pandemic
- How to best support families with home visiting during COVID
- Transition back to in-person home visits
- Retention, workload, and home visitor well-being
- Supervision and professional development

Four independent analysts started with a predetermined set of codes derived from the interview questions and high-level notes. The study team then identified additional codes based on emerging themes across interviews and restructured the coding scheme based on subsequent text analyses. Analysts focused on identifying the number of topics and themes that were addressed in the interviews and key quotes to serve as exemplars for those themes.

Two rounds of reliability were conducted throughout the coding process. First, each analyst independently coded the same transcripts and achieved consensus on more than 80 percent of the codes. When there was a disagreement in application of a code, the analysts discussed the disagreement and came to a consensus. In all cases, agreement was reached. Second, a third-party analyst performed a review on a subset of transcripts to ensure quality assurance. Specifically, the third-party analyst reviewed the high level notes documents and coding sheets one at a time for four interviews and noted any potential disagreements with coding. The study team then reviewed these discrepancies and came to a consensus on all codes where there was disagreement.

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[9] A more in-depth study of the transition to virtual home visits in California was conducted in June and July 2020. This included interviews with 64 home visiting staff and a survey of families on their caseloads. A research brief on these findings can be accessed here: https://www.childtrends.org/publications/understanding-needs-californias-home-visiting-workforce-during-covid-19