FIRST 5 KERN

Annual Report 2021-2022

Submitted February 1, 2023

Report Prepared by: Jianjun "JJ" Wang, PH.D. Principal Investigator

Acknowledgments

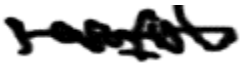
Evaluation findings are presented in this report for Fiscal Year 2021-2022 per requirement of Proposition 10, the California Children and Families First Act of 1998, which invested over $8.8 million of the state tax revenue in 39 programs of early childhood service.

The data gathering followed a strategic plan to justify Results-Based Accountability of the state funding through collaboration of service providers and parents with guidance and support from the following professionals and organizations:

- 2021 Commissioners Lucinda Wasson (Chair), John Nilon (Vice Chair), Brynn Carrigan (Treasurer), Jennie Sill (Secretary), Russell Judd, Dena Murphy, Kelly Richers, Mike Maggard, and Debbie Wood.
- 2022 Commissioners John Nilon (Chair), Russell Judd (Vice Chair), Jennie Sill (Secretary), Brynn Carrigan (Treasurer), Melissa Gilbert, Dena Murphy, Kelly Richers, David Couch, and Debbie Wood.
- First 5 Kern Commission staff
  - Roland Maier, Executive Director
  - Kathy Hylton, Chief Finance Officer
  - Kevin Bartl, Communications & Media Specialist
  - Paula De La Riva-Barrera, Program Officer
  - Crystal Gardner, Finance Specialist
  - Hector Gutierrez, Strategic Initiatives Specialist
  - Anastasia Lester, Program Officer
  - Analy Martinez, Program Officer
  - Charlene McNama, Administrative Finance Specialist
  - Diana Navarro, Senior Research Analyst
  - Sharon Powell, Administrative Assistant
  - Patti Taylor, Senior Finance Officer/Incoming Chief Finance Officer.
- Amy Travis, Incoming Executive Director of First 5 Kern.
- Theresa Martinez, Incoming Chief Evaluation/Program Officer.
- The Institutional Review Board led by Drs. Chandra Commuri and Isabel Sumaya of California State University, Bakersfield (CSUB).
- The Technical Advisory Committee (TAC).

TAC Members are recognized in Appendix B. While acknowledging their indispensable contributions, I wrote the report and shall be fully responsible for any inaccuracies in the findings.

Jianjun "JJ" Wang, Ph.D.



Professor of Research Design and Statistics
Principal Investigator

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Executive Summary

California voters passed Proposition 10 in November 1998 to fund service programs for children ages 0-5 with a 50-cent-per-pack tax on cigarettes and other tobacco products. On December 15, 1998, Kern County Board of Supervisors followed the Health and Safety Code (Sections 130100-130155) to enact Ordinance G-6565 for establishing the *Kern County Children and Family Commission*, also known as *First 5 Kern*. Per state statute, 80% of the tax revenue is distributed according to the rate of live births across counties. In Fiscal Year (FY) 2021-2022, First 5 Kern received $8,810,192 tobacco tax revenue to sponsor 39 programs.[1] The commission also strengthened the *Systems of Care* through promoting service integration for young children and their families.

Proposition 10 requires strategic planning on the expected ending outcomes prior to program funding, which makes it different from traditional approaches of determining the program impact after service delivery (Sutherland, McCroskey, & Halfon, 2001). Following First 5 Kern's (2021) strategic plan, this report is developed to address Outcome-Based Accountability [or Results-Based Accountability (RBA)] in five modules: (1) descriptive data to demonstrate the extent of early childhood support across Kern County, (2) assessment results to track value-added improvements of local service programs under a *pretest* and *posttest* setting, (3) partnership features for evaluating strength and scope of service integration, (4) trend comparison to monitor changes of program findings on a time dimension, and (5) future recommendations to sustain a *Turning the Curve* process for strengthening the funding impact. The report design conforms to a Statewide Evaluation Framework (First 5 California, 2005) and the commission strategic plan for result dissemination in *Child Health, Family Functioning, Child Development,* and *Systems of Care* (First 5 Kern, 2021).

New Developments

In FY 2021-2022, Kern County Superintendent of Schools (KCSOS) launched a five-year plan to implement Transitional Kindergarten (TK) (Gilbert, Nelson, & Cretona, 2022). Meanwhile, First 5 Kern channeled funding from the *Improve and Maximize Programs so All Children Thrive* (IMPACT) of First 5 California to enhance the Quality Rating Improvement System (QRIS). In child protection, the commission supported the Resilient Kern Initiative (RKI) and, where needed, organized community partners to meet non-medical needs of children with Adverse Childhood Experiences (ACEs) in the impacted families. Accordingly, new features of program evaluation are illustrated on two fronts:

1. Incorporating the IMPACT project in service network analyses

Prior to the TK option (Gilbert, Nelson, & Cretona, 2022), First 5 Kern funded summer-bridge programs for kindergarten preparation. To assess the QRIS role in improving the early learning experiences, network analyses are conducted in Chapter 3 to incorporate the statewide IMPACT project as a partner of quality assurance in service integration.[2] Impact stories are presented in Chapter 5 to demonstrate a systemic approach for aggregating qualitative findings from First 5 Kern-funded programs.

2. Supporting service coordination through program consolidation

[1] https://www.first5kern.org/wp-content/uploads/2022/04/Funded-Programs-Guide-2022-03-01.pdf.
[2] https://www.ccfc.ca.gov/partners/qris.html

First 5 Kern (2021) identified Result Indicators (RI) through strategic planning. In the past, Medically Vulnerable Care Coordination Program (MVCCP) offered program training and/or other educational services to address RI 4.1.3 in *Health and Wellness*. The program also assisted service access for children with special needs (RI 1.4.2). As a result, MVCCP was recognized as a *Promising Practice* by the Association of Maternal and Child Health (MCH) in 2015. Built on this foundation, RKI consolidated the MVCCP services with a clear goal of supporting children with adverse experiences.[3] This change allowed MVCCP-Kern County (MVCCP-KC) to focus solely on case referrals across a network of hospitals and other partner agencies.

Summary of Evaluation Approaches

First 5 Kern uses the Persimmony Data Management System to collect and export assessment data on (1) how much has been done and (2) how well each service provider performed in its specialty areas of *Child Health, Family Functioning*, and/or *Child Development*. Furthermore, a *NetDraw* software package is employed to describe the network of service providers in Kern County. In FY 2021-2022, evaluation activities are completed to incorporate findings across four categories:

1. Comparing results of 16 instruments to assess program effectiveness in 12 domains

Multiple sources of information are analyzed from instruments of (1) Ages and Stages Questionnaire-3 (ASQ-3) on child growth across 24 programs; (2) Ages and Stages Questionnaire: Social-Emotional, Version 2 (ASQ:SE-2) for early detection of potential social or emotional problems in eight programs; (3) Adult-Adolescent Parenting Inventory-2.1 (AAPI-2.1) on parenting outcomes from seven programs; (4) Child Assessment-Summer Bridge (CASB) on preschool learning in six programs; (5) Core Data Elements (CDE) and Birth Survey from 28 programs; (6) Family Stability Rubric (FSR) from 15 programs; (7) Desired Results Developmental Profile (DRDP)-Infant/Toddler for infants/toddlers in two programs; (8) DRDP-IT Modified Essentials for infants/toddlers in one program; (9) DRDP-Fundamental View for preschoolers in one program; (10) DRDP-Comprehensive View for preschoolers in four programs; (11) Parenting Survey from Nurturing-Parenting workshops across five programs; and (12) Program-specific surveys from Buttonwillow – Raising A Reader Assessment, Dyadic Assessment of Naturalistic Caregiver-Child Experiences (DANCE), Family Caregivers Project (FCP) – Participant Survey, and North Carolina Family Assessment Scale for General Services (NCFAS-G).

2. Reporting data from program networking under a hierarchical 4C model

Partnership data are collected from the Integration Service Questionnaire (ISQ) to assess the scope and depth of network building across 40 service providers, including 39 programs funded by First 5 Kern and the *IMPACT* project of First 5 California. The network scope is analyzed to examine direct/indirect support, unilateral/reciprocal connection, and primary/non-primary collaboration in both quantitative and qualitative dimensions. In scaling the partnership strength, a 4C (*Co-Existence, Collaboration, Coordination*, and *Creation*) model is employed to ground this investigation in the research literature for ongoing improvement of network building.

[3] https://www.first5kern.org/first-5-kern-awarded-planning-grant-from-aces-aware-initiative/

3. Articulating success stories to track the service impact between adjacent years

Forty descriptive stories are downloaded from a First 5 Kern website.[4] Plots of (a) top-impact words, (b) keyword dispersions, (c) token-word relations, and (d) word clouds are created to extract the service outcomes from various programs. The results show a consistent emphasis on key stakeholders, such as *children, students, parents,* and *families*, in the impact stories to reconfirm the program focus on the original funding priorities of Proposition 10.

4. Monitoring program investment across focus areas of *Child Health, Family Functioning*, *Child Development,* and *Systems of Care*

First 5 Kern received state investment to fund programs in 10 service domains.[5] In FY 2021-2022, the program expenditure reached $8,839,023, exceeding the funding amount of $8,157,356 last year. In Child Health, First 5 Kern invested $666,758 in *Early Intervention*, $317,210 in *General Health Education and Promotion*, $837,258 in *Oral Health Education and Treatment*, and $616,059 in *Prenatal and Early Childhood Home Visiting*. In Family Functioning, the commission spent $1,998,334 on *General Family Support* and $993,058 on *Intensive Family Support*. In Child Development, First 5 Kern designated $484,600 to *Quality Early Learning Supports* and $1,204,569 to *Early Learning Programs*. In Systems of Care, $1,354,660 was invested in enhancing *Policy and Public Advocacy* and $350,317 was devoted to supporting *System Building*.

In combination, First 5 Kern funded 12 programs in *Child Health*, 17 programs in *Family Functioning*, and 10 programs in *Child Development* (see Appendix A). In *Systems of Care*, First 5 Kern supported RKI to lead multi-agency support for children with ACEs. Strategic planning of the fund allocation followed the state statute to "use Outcome-Based Accountability to determine future expenditures" (Proposition 10, p. 4). In comparison to last year, First 5 Kern increased funding of $242,131 in *Child Health*, $217,438 in *Family Functioning*, $36,453 in *Child Development*, and $185,644 in *Systems of Care*.

Primary Aspects of Evaluation Tasks

In FY 2021-2022, First 5 Kern listed 14 evaluation tasks in an annual report to the state commission:

1. Comparison of target and actual counts across 53 result indicators in Child Health, Family Functioning, Child Development, and Systems of Care;
2. Gathering of qualitative stories on the program impact across 39 service providers;
3. Implementation of an Institutional Review Board (IRB) protocol, including site visits, consent form administration and confidentiality training, for 98 program staff;
4. Streamline the consent consideration to monitor referrals on the Unite Us (UU) platform;
5. Collection of service integration data to assess the capacity of program networking;
6. Monitoring of leveraged funds to track external resource recruitment in each program;

[4] https://www.first5kern.org/about-us/success-stories/
[5] The glossary categories of First 5 California are used in First 5 Kern's annual report to the State Commission.

7. Articulation of the achieved results with program funding to justify cost effectiveness;
8. Examination of past recommendations to assess ongoing progress since last year;
9. Analysis of the evaluation findings to support new recommendations next year;
10. Gathering of eight assessment data to report improvement of service outcomes on the time dimension;
11. Training of the evaluator as a certified analyst on network analytics;
12. Investigation of threshold issues of ASQ:SE-2 for social emotional screening;
13. Report of ASQ-3 data for result dissemination; and
14. Preparation of RKI information for program review by the MCH Association.

Completion of these tasks results in the following outcomes:

1. Assessment of the quarterly progress in service deliveries toward the annual target;
2. Illustration of the profound differences First 5 Kern made in the lives of children and their families;
3. Compliance of data handling according to federal, state, and local laws and regulations;
4. Review of IRB compliance in a UU referral form;
5. Summary of social network patterns in service integration;
6. Continuation of First 5 Kern's leadership in expanding sources of program support;
7. Justification of Proposition 10 funding with program outcomes;
8. Confirmation of changes according to past recommendations;
9. Documentation of rationale for new recommendations;
10. Configuration of value-added assessment on the program impact between pretest and posttest results;
11. Completion of network computing on service integration;
12. Publication of an article in Journal of Nursing Measurement on social emotional screening[6];
13. Submission of three proposals for presentation of ASQ-3 results at the 2023 annual meeting of American Educational Research Association; and
14. Recognition of RKI as an Innovation Hub Best Effective Practice of MCH.

Policy Impact of First 5 Kern Funding

School entry policy depends on social and emotional readiness. To monitor child development, ASQ:SE-2 is employed by First 5 Kern-funded programs. When a screening score is above the age-specific threshold, consideration should be given to mental health referrals. Inspection of the screening mechanism revealed a threshold fluctuation in ASQ:SE-2. First 5 Kern fixed the inconsistency issue from excessive missing data in the original instrument scaling.

According to the instrument developers, "The alteration of a screening cutoff score by one or two raw score points might significantly impact a referral decision for a child and family and might determine very different developmental trajectories for the child" (Yovanoff & Squires, 2006, p. 48). First 5 Kern's research caused a 20-point scale

[6] https://connect.springerpub.com/content/sgrjnm/early/2022/06/15/jnm-2021-0023.abstract

adjustment (Wang, 2022a), which could affect school entry decisions for numerous children across the nation.

In summary, First 5 Kern's policy impact is not only reflected by its support for local service delivery, but also illustrated by the effort on result dissemination to promote the best practice. Transparency of First 5 Kern evaluation is further demonstrated by its annual report that has been peer-reviewed by Education Resources Information Center (ERIC) of the United States Department of Education each year. A search of the ERIC database with keywords "First 5" and "Proposition 10" reveals top 15 reports in the ERIC library, and 10 of the contributions come from First 5 Kern.

Report Structure

To streamline the result presentation, this report is divided into five chapters. Chapter 1 includes an overview of First 5 Kern's vision, mission, and partnership building at the commission level. Chapter 2 contains service outcomes in *Child Health, Family Functioning*, and *Child Development*. Chapter 3 is devoted to social network analyses across programs to evaluate effectiveness of partnership building for *Systems of Care*. Chapter 4 focuses on improvement of common service indicators to describe the *Turning the Curve* effects (see Friedman, 2005) between adjacent years. The report ends with a "Conclusions and Future Directions" chapter to review past recommendations and adduce new recommendations for the next year.

Chapter 1: First 5 Kern Overview

Surrounded by mountains on three sides, most Kern communities have some of the worst air quality in the United States, including the highest density of particulate matter (PM 2.5) that risks preterm birth (Smith, 2021). Additional difficulties hinge on the decline of Proposition 10 funding from state tobacco tax due to smoke cessation. To address the persistent environmental and financial challenges, First 5 Kern has sustained stable program support for early childhood services across a five-year funding cycle. Brown Armstrong Accountancy Corporation (2022), the county auditing agency, acknowledged that "The [Kern] County's Commission is a leader at the state level and serves as a model for others. Contractors are held to strict standards of financial and program compliance" (p. 4).

Focus Area Designation

Per the stipulation of the Health and Safety Code of California, the state commission reaffirmed that "While counties design their programs to fit their local needs, they must provide services in each of the following four focus areas: Child Health, Child Development, Family Functioning, Systems of Care".[7] In its strategic plan, First 5 Kern (2021) recapped the four focus areas as:

> Three focus areas advance specific children's issues of Health and Wellness, Parent Education and Support Services, and Early Childcare and Education. The fourth focus area, Integration of Services, ensures collaboration with other agencies, organizations, and entities with similar goals and objectives to enhance the overall efficiency of provider systems. (p. 3)

These local focus areas are aligned with the state focus areas in Table 1.

Table 1: Focus Area Alignments at State and Local Levels

	State Focus Area	First 5 Kern Focus Area
I.	Child Health	Health and Wellness
II.	Family Functioning	Parent Education and Support Services
III.	Child Development	Early Childcare and Education
IV.	Systems of Care	Integration of Services

Vision Statement

In the current funding cycle, First 5 California (2019) set its vision for *all children to receive the best possible start in life and thrive*. In the same year, COVID-19 erupted right after the state strategic planning. Consequently, "The infants born during the pandemic scored lower, on average, on tests of gross motor, fine motor and communication skills compared with those born before it" (Moyer, 2022, p. 2). In coping with this setback, First 5 Kern (2021) embraced the vision statement from First 5 California (2019) and added a key phrase of "supportive, safe, and loving homes and neighborhoods" to enhance the local service capacity. As a result, the commission stated its vision as:

> All Kern County children will be born into and thrive in supportive, safe, loving

[7] First 5 California (2010). *2009-2010 Annual Report*. Sacramento, CA: Author.

homes and neighborhoods and will enter school healthy and ready to learn. (p. 2)

Following Proposition 10, the vision statement is employed as a compass to ensure identification, implementation, and promotion of best practices for improving child and family wellbeing in Kern County. To examine *what works* for result improvement, the commission conducted an annual review in FY 2021-2022 to update its strategic plan through public hearings.

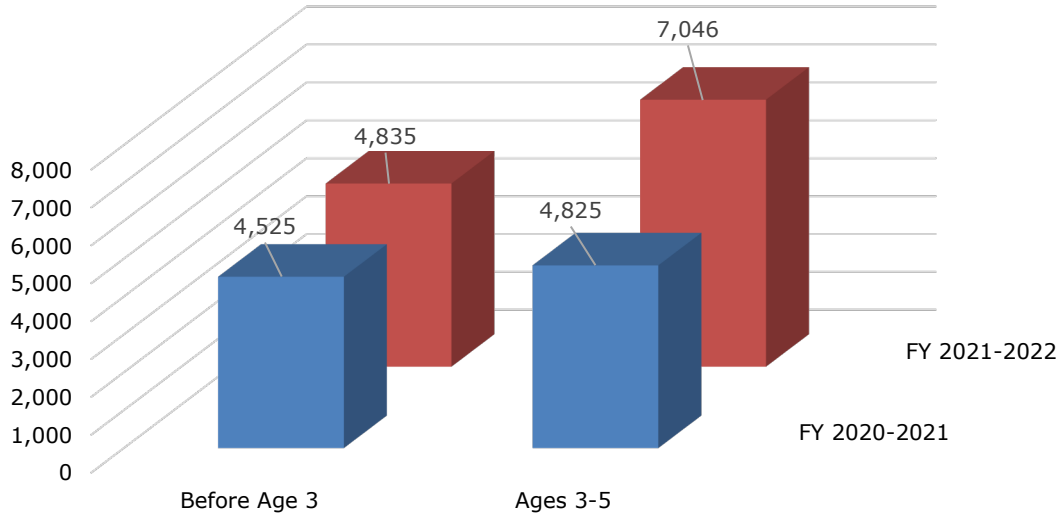
Mission Statement

Guided by its vision statement, First 5 Kern adopts both proven and innovative practices to create, leverage, and maximize local funding for early childhood support. The partnership building has led the commission to develop the following mission statement:

> To strengthen and support the children of Kern County prenatal to five and their families by empowering our providers through the integration of services with an emphasis on health and wellness, parent education, and early childcare and education. (First 5 Kern, 2021, p. 2)

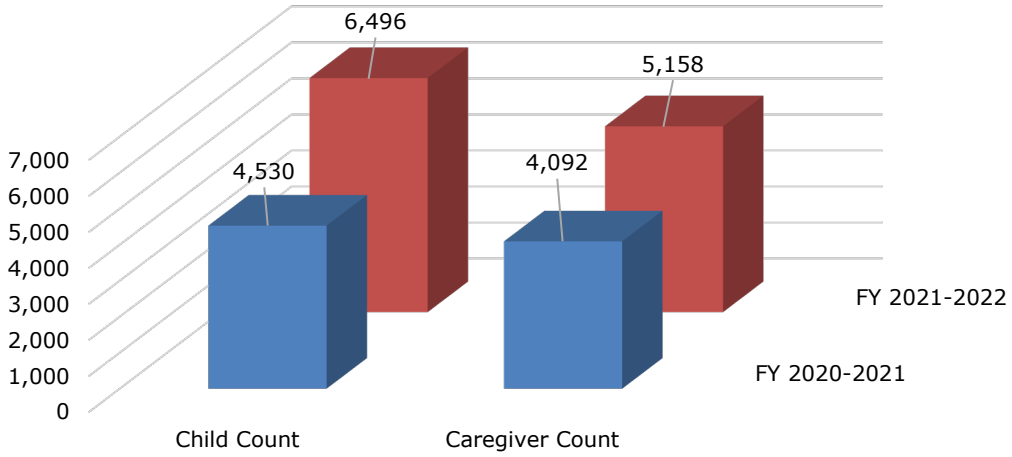
Programs guided by the mission implementation are outcome-driven to support the best possible start for all young children. In comparison to last year, First 5 Kern collaborated with service providers in local communities to sponsor programs for more children ages 0-5. Figure 1 shows more service expansion for preschoolers after age 3, which is compatible with a movement to strengthen the TK initiative in California.

Figure 1: Increase of Service Recipients Between Adjacent Years



The mission also attaches immense importance to articulating different program features for local capacity building. Based on a report of Hispanic majority from decennial census data, First 5 Kern has expanded service delivery for Hispanic/Latino population, as illustrated by the counts of children and primary caregivers in Figure 2. It is the dual emphases of the mission statement on *program support* and *local needs* that differentiate First 5 Kern from other organizations in early childhood services.

Figure 2: Counts of Children and Primary Caregivers in Adjacent Years



Commission Leadership

First 5 Kern's leadership is guided by its strategic plan for a five-year funding cycle. Collaboration with local partners is much needed to sustain service deliveries in traditionally underserved communities. As Lewis and Alexander (2013) reported, "Central Valley counties have the highest child poverty rates" (p. 4). Under COVID-19, childcare is not only a sector of social services, but also the foundation for economic recovery (Darling-Hammond & Johnson, 2020). Thus, Proposition 10 funding for *Systems of Care* played a crucial role in integrating community support and amending the resource shortage for child development.

According to the California Health and Safety Code (Section 130140), "The county commission shall be appointed by the board of supervisors and shall consist of at least five but not more than nine members." Starting on January 1, 2006, any person newly appointed as a Commissioner shall complete a course in ethics training approved by the Fair Political Practices Commission and Attorney General. A repeat of the training is scheduled every two years. Commissioners are required to fill out a government document (i.e., Form 700) to declare no conflict of interest in the funding decisions.

In its daily operation, "The commission also performs administrative site visits to monitor contractor compliance with the requirements of their general agreement and to assist in program evaluation, sustainability, and improvement" (Brown Armstrong Accountancy Corporation, 2022, p. 4). Following an IRB protocol, evaluation site visits are regularly conducted to monitor potential adverse effects of data gathering.

In FY 2021-2022, the commission comprises local community leaders, experts, and advocates, collectively bringing more than two decades of experience in building and improving *Systems of Care* for young children across various communities. Exhibit 1 shows a balanced representation of key stakeholders, including elected officials, service providers, program administrators, and community volunteers, in the commission leadership.

Exhibit 1: First 5 Kern Commission Members

Commissioner (2021)	Affiliation
Lucinda Wasson (Chair)	Retired Kern County Director of Nursing
John Nilon (Vice Chair)	Retired County Administrative Officer of Kern
Brynn Carrigan (Treasurer)	Director, Kern County Department of Public Health Services
Jennie Sill (Secretary)	Children's System of Care Administrator
Russell Judd	Retired Chief Executive Officer, Kern Medical
Dena Murphy	Director, Kern County Department of Human Services
Kelly Richers	Superintendent, Wasco Union School District
Mike Maggard	3rd District Supervisor, County of Kern
Debbie Wood	Retired Coordinator of Health, Bakersfield City School District
Commissioner (2022)	**Affiliation**
John Nilon (Chair)	Retired County Administrative Officer of Kern
Russell Judd (Vice Chair)	Retired Chief Executive Officer, Kern Medical
Jennie Sill (Secretary)	Children's System of Care Administrator
Brynn Carrigan (Treasurer)	Director, Kern County Department of Public Health Services
Melissa Gilbert	Deputy Superintendent, Instructional Services, Kern County Superintendent of Schools
Dena Murphy	Retired Director, Kern County Department of Human Services
Kelly Richers	Superintendent, Wasco Union School District
David Couch	4th District Supervisor, County of Kern
Debbie Wood	Retired Coordinator of Health, Bakersfield City School District

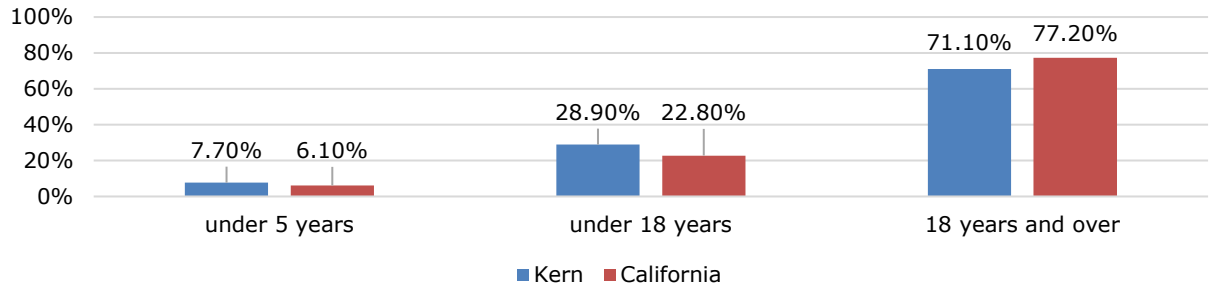
The commission is supported by four committees, *Budget and Finance Committee* (BFC), *Executive Committee* (EC), *Personnel Committee* (PC), and *Technical Advisory Committee* (TAC), in this funding cycle. BFC is led by the Treasurer and three Commissioners to guide the commission and the Executive Director on budgetary and financial planning. EC consists of the Chairperson, the Vice-Chairperson, the Secretary, and the Treasurer to act on any matters pertaining to First 5 Kern operation. PC is supervised by the Vice-Chairperson and three Commissioners to attend all personnel settings, including employment, evaluation, compensation, and discipline of commission employees. TAC includes four Commissioners and 14 community representatives to identify and advise on topics relevant or useful to fulfillment of the commission responsibilities.

The EC, BFC, and PC memberships are publicized in the agenda of each commission meeting. TAC members are recognized in Appendix B of this report. A Commissioner, by virtue of being the Public Health Officer, the Director of Human Services, or the Director of the Behavioral Health and Recovery Services Department, is authorized to designate an Alternate Commissioner to participate at any commission meetings when the Commissioner is unavailable.

Profile of Young Children in Kern County

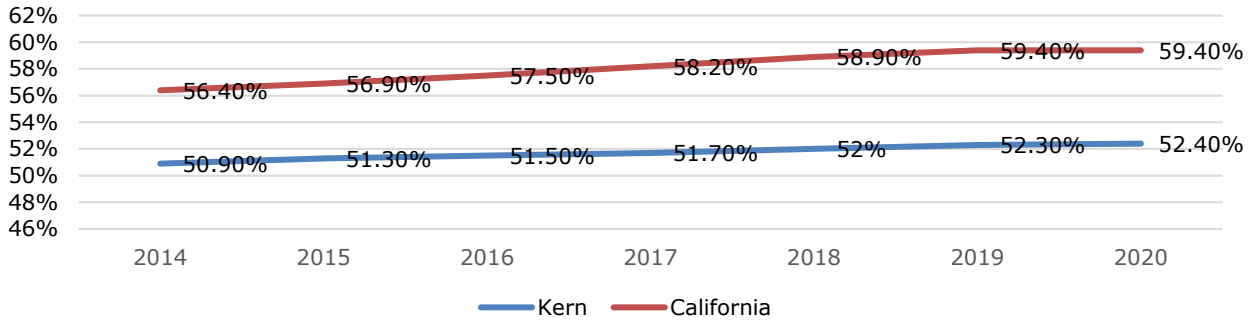
The most recent census data indicate 909,235 people living in Kern County, and 7.7% of the population are under age 5.[8] In comparison to the state population composition,[9] Kern County has relatively more children and fewer adults (Figure 3).

Figure 3: Age Distributions in Kern and California



More importantly, 17.1% of the Kern population hold a bachelor's degree or higher, while the corresponding index across the state is 34.7% (Census Form S1501). The low education level might have directly impacted the local employment rate, which has been falling behind that of the state (Figure 4).

Figure 4: Employment Rates in Kern County and California



Source: Census Form DP03

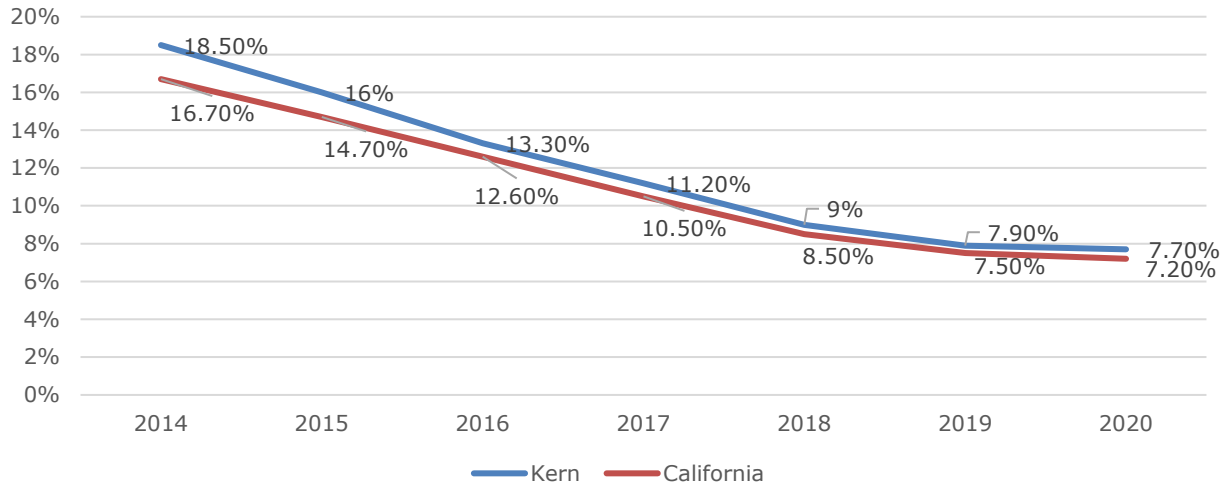
According to Census Form S1901, the median household income is $54,851 in Kern County, much lower than the state median of $78,672. Meanwhile, the countywide poverty rate is 20.4%, much higher than the rate of 12.6% across California (Census Form S1701). These results collectively indicate that Kern families raise more children with fewer resources.

Based on a seven-year trend in Figure 5, the proportion of the population *without health insurance coverage* has been higher in Kern County than the state average. The median income difference is also larger for married couples in Figure 6, indicating a

[8] https://data.census.gov/cedsci/profile/Kern_County,_California?g=0500000US06029
[9] https://data.census.gov/cedsci/all?q=Kern%20County,%20California

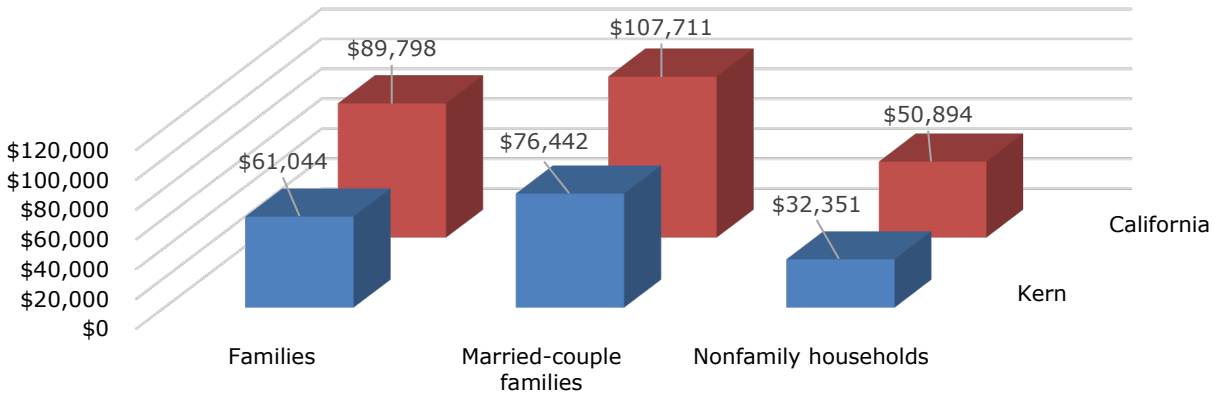
substantial earning gap for families with children. As Constantine and Jonah (2017) reported, "Poverty disproportionately affects Kern County children with more than a third living below poverty compared to less than a quarter of Californian children" (p. 9).

Figure 5: Percent of Population without Health Insurance Coverage



Source: Census Form DP03

Figure 6: Median Income by Types of Families



Source: Census Form S1901

In addition, the residential mobility index is 1.1% in Kern County, lower than the state figure of 1.3% (Census Form S0701). Thus, tracking child population is more germane to Kern County to help project potential needs in education, child care, health care, and other services for children. In particular, children who *speak Spanish at home* account for 38.7% of the local communities, above the state proportion of 28.3% (Census Form S1601). With English language learners consistently accounting for more than one-third of Kern children for decades, Robison-Frankhouser (2003) recollected,

> KCCFC [Kern County Children and Families Commission, or First 5 Kern] faced geographical and demographic challenges within Kern County. The challenge of mountain ranges that surround the valley region and also isolate the desert areas limited families' access to needed services. Low-income and/or LEP [Limited

> English Proficiency] families often struggled to reach services that were too far from their homes. Too often, they found themselves isolated from medical care and child-care services. (p. 6)

Based on the review of child characteristics and home backgrounds, First 5 Kern sponsored family-focused, culturally appropriate, and community-based service deliveries to address the local population needs in Health *and Wellness, Parent Education and Support Services,* and *Early Childcare and Education.* Program information is released online (see Ibid. 1) to show transparency of the commission funding.

Enhancement of Community Support

Treating Proposition 10 funding as *seeds* money (Edelhart, 2016), First 5 Kern further supported fund leverage at the program level to sustain service delivery in local communities. Table 2 shows the leveraged fund of $4,307,421 from 28 partners, far above the corresponding annual amount of $3,832,947 from 26 sources last year. To facilitate service coordination across the community-based programs, First 5 Kern held two TAC[10] and six commission meetings[11] that were open to the general public for information gathering and dissemination.

Table 2: Sources and Leveraged Funds for Program Support in FY 2021-2022

Source	Leveraged Funds
American Recovery & Reinvestment Act	$22,400.00
Borax Visitor Center	$6,000.00
California Department of Public Health	$397,533.00
California Department of Social Services	$74,777.00
California Family Resource Association	$71,191.00
California Office of Emergency Services	$210,240.00
Chevron	$40,000.00
County of Kern	$530,911.00
Desert Lake Community Services District	$840.00
Dignity Healthcare	$9,500.00
Anonymous or Individual Donation	$190,176.00
Corporate Donation – Corporate	$138,382.00
Emergency Food and Shelter Program	$44,041.00
Fees/Tuition	$79,279.00
Fundraisers	$26,572.00
Kern County Aging & Adult Services	$39,230.00
Kern Family Health Care	$8,000.00
Kern Regional Center	$124,373.00
McKinney Vento	$7,790.00
Medi-Cal	$277,993.00
Medical Administrative Activities	$17,057.00
Network for a Healthy California	$56,346.00

[10] https://www.first5kern.org/meetings/tech-advisory-meetings/
[11] https://www.first5kern.org/meetings/commission-meetings/

First 5 Kern staff also assisted establishment of the Black Infant and Maternal Health Initiative of Kern County to set a multi-year strategic plan for reducing health disparities in the local African-American community, especially these pertaining to newborns, pregnant women, and childbirth. In addition, innovative approaches have been taken in FY 2021-2022 to enhance the commission visibility on social media and hybrid-virtual platforms. Altogether, First 5 Kern took part in 38 countywide undertakings for the enhancement of community support (Table 3).

Table 3: First 5 Kern's Participation in Local Undertakings

- ACEs Aware and Resilient Kern Leadership Group Meetings
- Bakersfield College Child Development Advisory Committee
- Bakersfield City School District – School Health Advisory Committee
- Buttonwillow Community Collaborative
- Community Action Partnership of Kern – Health Services Advisory Committee
- County Nutrition Action Plan
- Delano Neighborhood Partnership
- Early Childhood Council of Kern
- East Bakersfield Community Collaborative
- East Kern Collaborative
- Family First Prevention Services Act (FFPSA) Part I Implementation Planning Committee
- Greenfield H.E.L.P.S (Healthy Enriched Lives Produce Success) Collaborative
- Health Net Kern Community Advisory Committee
- Home Visiting and Early Childhood Systems Coordination Meetings
- Indian Wells Valley Collaborative
- Keep Bakersfield Beautiful Committee
- Kern Connected Community Network – Community Advisory Group
- Kern County Network for Children – General Collaborative
- Kern County Prevention Council
- Kern Complete Count Committee (Census 2020)
- Kern Pledge – Kinder Readiness Workgroup
- Kern River Valley Collaborative
- Lost Hills Community Collaborative
- McFarland Collaborative
- Medically Vulnerable Care Coordination Committee
- Medically Vulnerable Children Resource Fair Planning Committee
- Mountain Communities Collaborative
- Oildale Community Collaborative
- Resilient Kern Leadership Committee
- Richardson Special Needs Collaborative
- Robert Wood Johnson and Prevention Institute P3 – Power, People, and Parks Initiative
- Safe Sleep Coalition of Kern County
- Safely Surrender Baby Coalition

Table 3: First 5 Kern's Participation in Local Undertakings

• Shafter Healthy Start Collaborative
• South Valley Neighborhood Partnership Arvin/Lamont/Weedpatch Collaborative
• Southeast Neighborhood Partnership General Collaborative
• West Side "Together We Can" Collaborative
• Wasco Community Collaborative

In First 5 Kern's (2021) strategic plan, program funding is designed to maintain "Community strengthening efforts that support education and community awareness" (Objective 4.4). In this regard, First 5 Kern distributed over 200,000 cases of diapers throughout a Family Resource Center network, health and wellness programs, and childcare centers in the local community.[12] Table 4 lists 63 outreach services of First 5 Kern at the community, county, and state levels.

Table 4: First 5 Kern's Outreach Effort to Promote Public Awareness

Event	Initiator	Participant
Community	1. ACEs Aware Kern County Conference 2. ACEs Aware Kern County Learning Symposium 3. ACEs Aware Kern County Network Engagement Sessions 4. Diaper Purchases for Family Resource Centers 5. First 5 Kern Newsletter 6. First 5 Kern Strategic Plan 7. First 5 Kern Website 8. First 5 Kern Weekly Headlines E-Blast 9. Operation School Bell Celebration	1. "Baby Shower" events at Oasis Family Resource Center and Bakersfield Pregnancy Center 2. Bakersfield Chamber Installation Ceremony 3. Caring Corner Family Collaboratives 4. DHS Purple Ribbon Month Outreach 5. Earned Income Tax Credit-ACEs Outreach Program 6. Golden Empire Kiwanis Club Presentation 7. Kern Medical Reach Out and Read 8. Kids Plates - California License Plate Legislation Workgroup 9. KidsFest 10. Laborers of the Harvest Holiday Food/Gift Event 11. Lamont and Weedpatch Resource and Health Fair 12. Leadership Bakersfield 2022 13. Oasis Family Resource Center Grand Opening 14. Organizational Agility Community of Practice 15. Safe Sleep Coalition of the Central Valley 16. Safely Surrender Campaign 17. Smile California Outreach Campaign 18. Wasco and Taft Rotary Club Presentations
County	10. Ages and Stages Questionnaire Trainings 11. Black Infant and Maternal Health Initiative 12. Community of Excellence (Tobacco Free Coalition of Kern County)	19. ANEMIA Community Leadership Group 20. California Preterm Birth Initiative 21. Chamber of Commerce Governmental Review Council 22. Family First Prevention Services Act (FFPSA) Part I Implementation Planning Committee 23. Fetal Infant Mortality Review

[12] https://www.first5kern.org/wp-content/uploads/2022/09/CFC-Commission-packet-100522-1.pdf

Event	Initiator	Participant
	13. Coalition Participants: Dolores Huerta Foundation, First 5 Kern, Vision y Compromiso, CAPK, Garden Pathways, and City of Bakersfield, Building Healthy Communities Kern County 14. First 5 California – purchased and coordinated personal protective equipment and cleaning supplies for childcare and other programs 15. First 5 Kern Home Visitation and Early Systems Change Partnership 16. Help Me Grow Kern County Collaborative 17. Medically Vulnerable Care Coordination – Trauma Informed Care Trainings 18. Nurturing Parenting – Trainings 19. Robert Wood Johnson and Prevention Institute P3 – Power, People, and Parks Initiative 20. SMART Goals Training	24. Kern Association for the Education of Young Children 25. Kern Complete Count 2020 Census 26. Kern County Board of Supervisors Meetings 27. Kern County Breastfeeding Coalition 28. Kern County Child Death Review Team 29. Kern County Infant Toddler Seminar 30. Kern County Network for Children Governing Board 31. Kern County Prevention Council 32. Kern Early Stars Consortium 33. Kern Medical Safe Home, Safe Baby 34. Kern Pledge Kinder Readiness Work Group 35. MLK Parks Planning Committee 36. Mercy and Memorial Hospitals – Community Benefit Committee 37. Nurse Family Partnership Community Advisory Board 38. Outreach, Enrollment, Retention, Utilization Committee (OERUC) 39. Parks and Recreation City Planning Commission (Representing Ward 1) 40. Safe Sleep Coalition of Kern County 41. Safely Surrender Baby Coalition 42. Tobacco Free Coalition of Kern County Steering Committee
State	21. California Department of Health Care Services – ACEs Aware Initiative 22. First 5 Kern Legislative Visits 23. SMART Growth California – San Joaquin Valley Funders Network 24. UCLA Luskin School of Public Affairs UCLA Human Rights to Water Solution Lab 25. United Way of California	43. Central Valley ACEs Leadership Committee 44. Central Valley Regional Meeting 45. Central Valley Safe Sleep Coalition 46. Earned Income Tax Credit-ACEs Partnership 47. First 5 Association of California Meetings 48. First 5 Association of California Summit 49. First 5 Association of California Evaluation Workgroup Meetings 50. First 5 Association of California Leadership Program 51. First 5 Association of California Policy Committee 52. First 5 Association Statewide Communications Region Representative 53. First 5 California Meetings 54. First 5 California Statewide Communications Region Representative 55. First 5 IMPACT Hub – Region 5 56. Local meetings with state representatives

Event	Initiator	Participant
		57. Safer California Unintentional Injury Prevention Conference 58. Quality Counts California Consortium

Summary of Evaluation Approaches

First 5 Kern uses the Persimmony Data Management System to collect and export assessment data on (1) how much has been done and (2) how well each service provider performed in its specialty areas of *Child Health, Family Functioning*, and/or *Child Development*. Furthermore, a *NetDraw* software package is employed to describe the network of service providers in Kern County. In FY 2021-2022, evaluation activities are completed to incorporate findings across four categories:

1. Comparing results of 16 instruments to assess program effectiveness in 12 domains

Multiple sources of information are analyzed from instruments of (1) Ages and Stages Questionnaire-3 (ASQ-3) on child growth across 24 programs; (2) Ages and Stages Questionnaire: Social-Emotional, Version 2 (ASQ:SE-2) for early detection of potential social or emotional problems in eight programs; (3) Adult-Adolescent Parenting Inventory-2.1 (AAPI-2.1) on parenting outcomes from seven programs; (4) Child Assessment-Summer Bridge (CASB) on preschool learning in six programs; (5) Core Data Elements (CDE) and Birth Survey from 28 programs; (6) Family Stability Rubric (FSR) from 15 programs; (7) Desired Results Developmental Profile (DRDP)-Infant/Toddler for infants/toddlers in two programs; (8) DRDP-IT Modified Essentials for infants/toddlers in one program; (9) DRDP-Fundamental View for preschoolers in one program; (10) DRDP-Comprehensive View for preschoolers in four programs; (11) Parenting Survey from Nurturing-Parenting workshops across five programs; and (12) Program-specific surveys from Buttonwillow – Raising A Reader Assessment, Dyadic Assessment of Naturalistic Caregiver-Child Experiences (DANCE), Family Caregivers Project (FCP) – Participant Survey, and North Carolina Family Assessment Scale for General Services (NCFAS-G).

2. Reporting data from program networking under a hierarchical 4C model

Partnership data are collected from ISQ to assess the scope and depth of network building across 40 service providers, including 39 programs funded by First 5 Kern and the *IMPACT* project of First 5 California. The network scope is analyzed to examine direct/indirect support, unilateral/reciprocal connection, and primary/non-primary collaboration in both quantitative and qualitative dimensions. In scaling the partnership strength, a 4C model is employed to ground this investigation in the research literature for supporting an ongoing progress of network development.

3. Articulating success stories to track the service impact between adjacent years

In FY 2021-2022, 40 descriptive stories are downloaded from a First 5 Kern website

(Ibid. 4). Plots of (a) top-impact words, (b) keyword dispersions, (c) token-word relations, and (d) word clouds are created to extract the service outcomes from various programs. The results show a consistent emphasis on key stakeholders, such as *children, students, parents,* and *families*, in the impact stories to reconfirm the program focus on the original funding priorities of Proposition 10.

4. Monitoring program investment across focus areas of *Child Health, Family Functioning*, *Child Development,* and *Systems of Care*

First 5 Kern received state investment to fund programs in 10 service domains (Ibid. 5). In FY 2021-2022, the program expenditure reached $8,839,023, exceeding the funding amount of $8,157,356 last year. In Child Health, First 5 Kern invested $666,758 in *Early Intervention*, $317,210 in *General Health Education and Promotion*, $837,258 in *Oral Health Education and Treatment*, and $616,059 in *Prenatal and Early Childhood Home Visiting*. In Family Functioning, the commission spent $1,998,334 on *General Family Support* and $993,058 on *Intensive Family Support*. In Child Development, First 5 Kern designated $484,600 to *Quality Early Learning Supports* and $1,204,569 to *Early Learning Programs*. In Systems of Care, $1,354,660 was invested in enhancing *Policy and Public Advocacy* and $350,317 was devoted to supporting *System Building*.

In combination, First 5 Kern funded 12 programs in *Child Health*, 17 programs in *Family Functioning*, and 10 programs in *Child Development* (see Appendix A). In *Systems of Care*, First 5 Kern supported RKI to lead multi-agency support for children with ACEs. Strategic planning of the fund allocation conformed to the state statute to "use Outcome-Based Accountability to determine future expenditures" (Proposition 10, p. 4). In comparison to last year, First 5 Kern increased funding of $242,131 in *Child Health*, $217,438 in *Family Functioning*, $36,453 in *Child Development*, and $185,644 in *Systems of Care*.

Primary Aspects of Evaluation Tasks

In FY 2021-2022, First 5 Kern listed 14 evaluation tasks in an annual report to the state commission:

1. Comparison of target and actual counts across 53 result indicators in Child Health, Family Functioning, Child Development, and Systems of Care;
2. Gathering of qualitative stories on the program impact across 39 service providers;
3. Implementation of an IRB protocol, including site visits, consent form administration and confidentiality training, for 98 program staff;
4. Streamline the consent consideration to monitor referrals on the UU platform;
5. Collection of service integration data to assess the capacity of program networking;
6. Monitoring of leveraged funds to track external resource recruitment in each program;
7. Articulation of the achieved results with program funding to justify cost effectiveness;
8. Examination of past recommendations to assess ongoing progress since last year;
9. Analysis of the evaluation findings to support new recommendations next year;
10. Gathering of eight assessment data to report improvement of service outcomes on the time dimension;

11. Training of the evaluator as a certified analyst on network analytics;
12. Investigation of threshold issues of ASQ:SE-2 for social emotional screening;
13. Report of ASQ-3 data for result dissemination; and
14. Preparation of RKI information for program review by the MCH Association.

The task completion results in the following outcomes:

1. Assessment of the quarterly progress in service deliveries toward the annual target;
2. Illustration of the profound differences First 5 Kern made in the lives of children and their families;
3. Compliance of data handling according to federal, state, and local laws and regulations;
4. Review of IRB compliance in a UU referral form;
5. Summary of social network patterns in service integration;
6. Continuation of First 5 Kern's leadership in expanding sources of program support;
7. Justification of Proposition 10 funding with program outcomes;
8. Confirmation of changes according to past recommendations;
9. Documentation of rationale for new recommendations;
10. Configuration of value-added assessment on the program impact between pretest and posttest results;
11. Completion of network computing on service integration;
12. Publication of an article in Journal of Nursing Measurement on social emotional screening (Ibid 6);
13. Submission of three proposals for presentation of ASQ-3 results at the 2023 annual meeting of American Educational Research Association; and
14. Recognition of RKI as an Innovation Hub Best Effective Practice of MCH.

Description of the Evaluation Framework

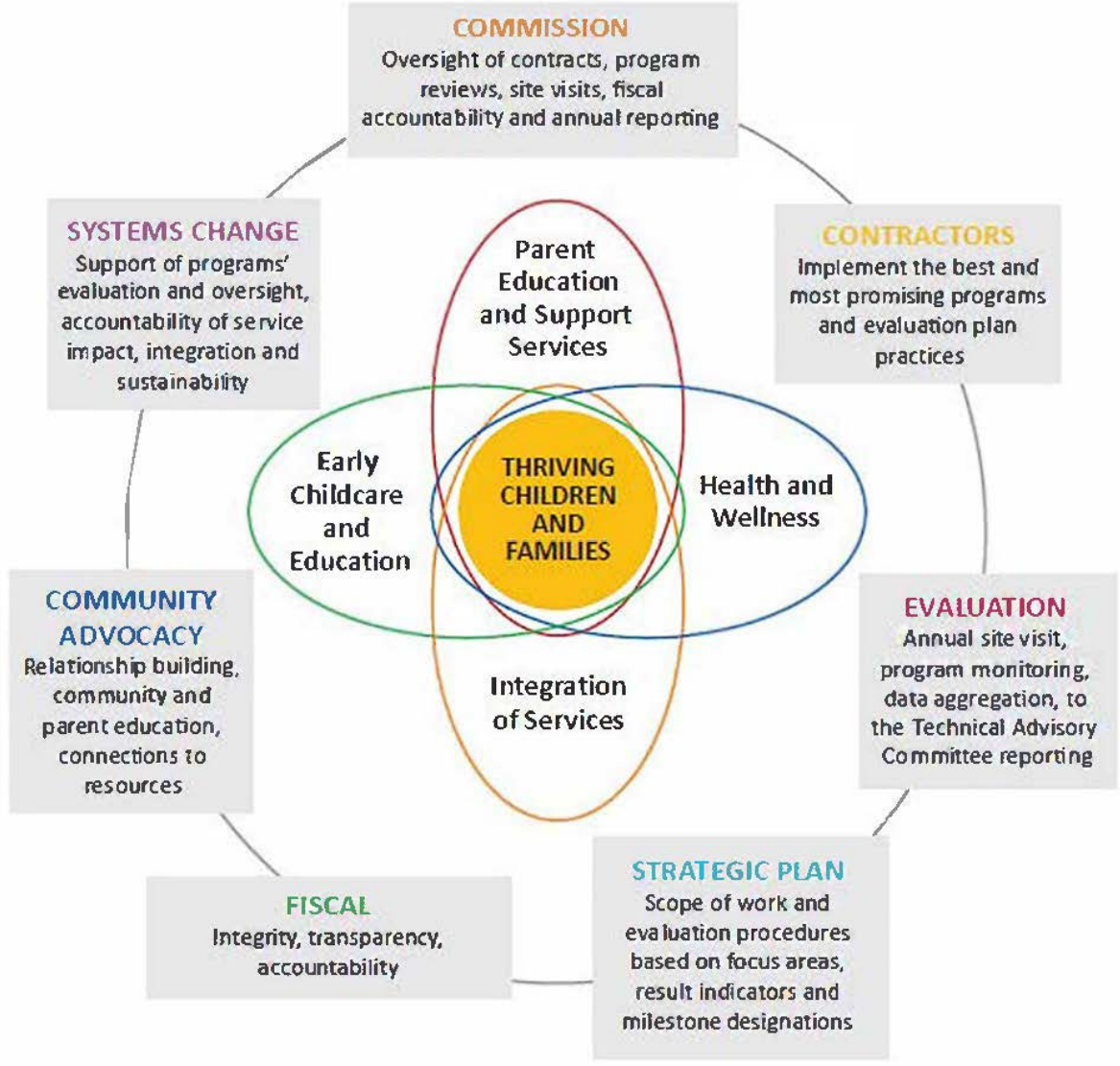
First 5 Kern followed the mandates of Proposition 10 to collect program data for demonstrating results. FY 2021-2022 is the second year of the current funding cycle, and the program needs have been addressed in the last annual report under a five-year strategic plan. To support both *needs-based assessment* and *asset-based assessment*, a coherent system is established to combine service evaluation with program administration in Exhibit 2 that places "Thriving Children and Families" at the center of the commission operation. This funding emphasis is also highlighted by First 5 Association of California.[13]

The asset-based assessment was conducted quarterly to monitor state investment and service delivery at the program level. Service providers also articulated *needs statements* and *measurable objectives* in a Scope of Work-Evaluation Plan (SOW-EP) to delineate resources, data collection tools, result indicators, performance measures, and annual targets. The evaluation team attended TAC meetings regularly to meet an expectation of First 5 Kern's (2021) strategic plan for this funding cycle, i.e., "The evaluation process provides ongoing assessment and feedback on program results. It allows the identification of outcomes in order to build a 'road map' for program development" (p. 8).

[13] https://www.facebook.com/hashtag/f5ad

As an important part of strategic planning, the evaluation mechanism is fully incorporated in First 5 Kern's daily operation to facilitate the assessment of program performance in *Child Health*, *Family Functioning*, and *Child Development*, and sustain partnership building for the improvement of child wellbeing in Kern County. Friedman (2009) noted, "RBA makes a fundamental distinction between Population Accountability and Performance Accountability" (p. 2). Whereas performance accountability is a vital component of program evaluation, population accountability relies on partnership building (Friedman, 2011). In collaboration with CSUB, the *evaluation design* and *evaluator responsibility* are reviewed by an IRB panel to ensure *adequate, transparent*, and *accurate* data collection across 39 programs.

Exhibit 2: First 5 Kern System for Program Administration and Evaluation



It was stipulated by Proposition 10 that "each county commission shall conduct an audit of, and issue a written report on the implementation and performance of, their respective functions during the preceding fiscal year" (p. 12). The RBA requirements also support site visits to identify service gaps. More specifically, the state statute is fulfilled

by this report in five modules: (1) descriptive data from program reviews to demonstrate the evidenced-based support for children ages 0-5 and their families across Kern County, (2) assessment results to track value-added improvements on the effectiveness of funded programs under a pretest and posttest setting, (3) partnership analyses to meet resource demands for service deliveries in hard-to-reach communities, (4) trend comparison to monitor changes of program outcomes between adjacent years, and (5) future recommendations to sustain the "Turning the Curve" process according to the commission strategic plan (First 5 Kern, 2021). Altogether, the report structure is aligned with a Statewide Evaluation Framework (First 5 California, 2019) to delineate the impact of state funding across four focus areas of *Child Health, Family Functioning, Child Development,* and *Systems of Care.*

Built on the description of commission functioning in Chapter 1, program effectiveness is examined in Chapter 2 according to service outcomes in each focus area. Chapter 3 is devoted to addressing the results of program collaboration across focus areas. While the first three chapters are focused on evaluation findings within FY 2021-2022, key indicators of child-wellbeing and family functioning are tracked between adjacent years in Chapter 4 to demonstrate result improvement. Conclusions in Chapter 5 are grounded on the program impact configuration under a framework of the *Program Administration and Evaluation System* in Exhibit 2.

Chapter 2: Impact of First 5 Kern-funded Programs

Located in the southern part of California Central Valley, Kern County covers an area of approximately 8,163 square miles. The terrain extends from the valley floor to *Coastal Ranges* in the west and *Sierra Nevada Range* in the east. It also includes parts of *Mojave Desert, Indian Wells Valley*, and *Antelope Valley*. With the service region larger than 95% of the counties in California, program outreach is needed to support young children across the vast urban, suburban, and rural communities.

First 5 Association of California also stressed a "focus [of service delivery] on those farthest from opportunity" in its 2021 policy agenda.[14] In particular, the association identified four modules: (1) Comprehensive Health and Development, (2) Resilient Families, (3) Quality Early Learning, and (4) Sustainability and Scale (Ibid. 14). The first three modules fit three focus areas of *Health and Wellness*, *Parent Education and Support Services,* and *Early Childcare and Education* in Table 1. First 5 Kern (2021) has aligned its fourth focus area, *Integration of Services*, with the *Sustainability* module to strengthen *Systems of Care*. Regarding the *Scale* component of the fourth module, indicators of child wellbeing and family functioning are tracked between adjacent years to support value-added assessment across programs in Chapter 4.

Following the state report glossaries (First 5 Association of California, 2013), 10 service domains are adopted to describe local programs of First 5 Kern. Two of the domains, (1) *Policy and Public Advocacy* and (2) *Programs and Systems Improvement Efforts*, belong to the fourth focus area of *Systems of Care*. The remaining eight domains address the direct impact of service outcomes for key stakeholders, including children and caregivers. In addition, First 5 Kern's (2021) mission includes support for service providers in partnership building. Table 5 contains the number of beneficiaries in these report domains.

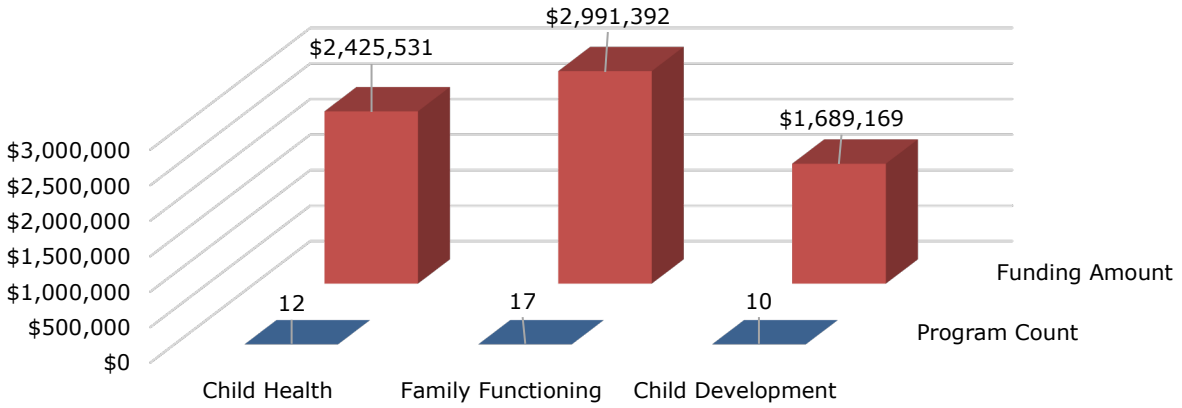
Table 5: Counts of Service Beneficiaries Across Report Domains

Report Domains	Number of Beneficiaries
General Health Education/Promotion	1,224 children; 201 caregivers
Oral Health Education/Treatment	1,960 children
Perinatal/Early Childhood Home Visiting	91 children; 154 caregivers
Early Intervention	523 children; 167 caregivers
General Family Support	3,962 children; 7,523 caregivers; 98 providers
Intensive Family Support	2,672 children; 2,132 caregivers
Quality Early Learning Support	721 children; 79 providers
Early Learning Program	831 children; 829 caregivers; 31 providers

In the last decade, a trend study showed a faster pace of healthcare spending on children than the overall U.S. population (Mangan, 2015). The pattern in Figure 7 confirms more per-program investment in *Child Health* based on the commission funding and program count across focus areas. The need for healthcare is even stronger in low-income families (see Kim, 2012), which also fits the general background of most children in Kern County (see Figure 6 in Chapter 1).

[14] https://first5association.org/wp-content/uploads/2021/04/2021-Policy-Agenda.pdf

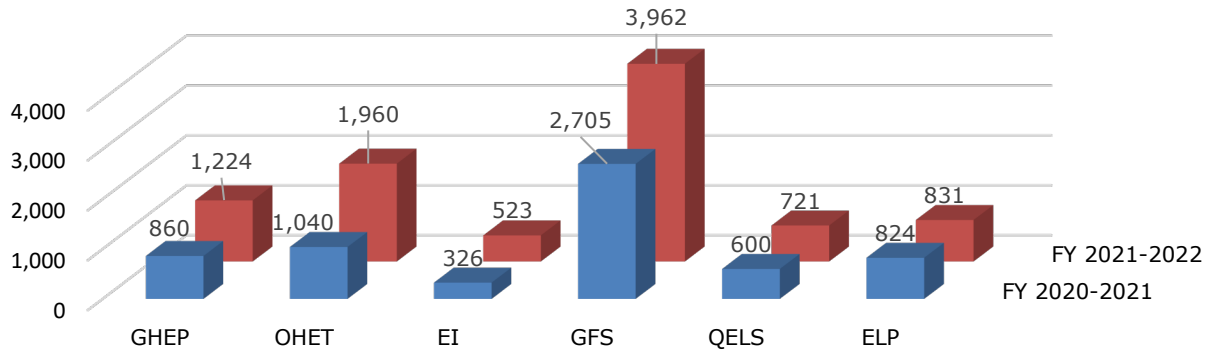
Figure 7: Commission Investments and Program Counts in Three Focus Areas



Source: State Annual Report 2021-2022.

The public campaign on smoke cessation had a direct impact on reducing state revenue from tobacco tax. In FY 2021-2022, First 5 Kern received $398,998 less funding from Proposition 10. Meanwhile, program spending increased $681,667. Fortunately, "Actual revenues and other financing sources were $454,483 more than budgeted. This increase is attributable to the increase in Proposition 56 apportionments from the State and the recognition of GASB Statement No. 87" (Brown Armstrong Accountancy Corporation, 2022, p. 5). As a result, more children are served in six report domains (Figure 8). In addition, restoration of service capacity since COVID-19 also seems to have created more access to First 5 Kern-sponsored services in specific domains of ***Child Health*** (General Health Education/Promotion [GHEP], Oral Health Education/Treatment [OHET], Early Intervention [EI]), ***Family Functioning*** (i.e., General Family Support [GFS]), and ***Child Development*** (Quality Early Learning Support [QELS], Early Learning Program [ELP]) (First 5 California, 2021a).

Figure 8: Increase of Child Coverage Between Adjacent Years



In this chapter, the scope of service deliveries is tracked for children ages 0-5 and their families. Through the collaboration of First 5 Kern staff, service providers, and parents or guardians, assessment data are gathered to further examine the improvement of program outcomes under a pretest and posttest setting. Due to the RI coverage, the state focus areas (see Table 1) are used interchangeably with First 5 Kern's (2021) focus

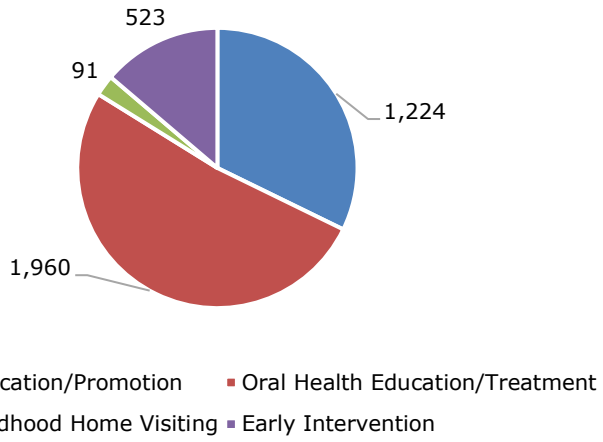
areas to streamline the result presentation. Program affiliations to a particular focus area are based on the primary service features (Ibid. 1). Sustainability of program support is reflected by the leveraged funds through partnership building. The aggregation of program-specific findings is designed to lay a solid foundation toward addressing the fourth focus area, *Systems of Care*, in Chapter 3 on outcomes of service integration.

(I) Service Improvement in *Child Health*

Gearhart (2016) noted, "Kern County often ranks as one of the poorest providers of healthcare in the country" (p. 13). To reverse this pattern with support of well-rounded programs in *Health and Wellness*, First 5 Kern increased funding in four service domains of the state report glossary (First 5 Association of California, 2013) – Besides EI, GHEP, and OHET (i.e., Domains [1] – [3]) in Figure 8, *Perinatal and Early Childhood Home Visiting* (PECHV) is another domain that shows a slight increase of caregivers from 153 last year to 154 this year (Domain [4]).

It should be noted that the client count is relatively smaller in PECHV than in the other categories because home visiting is time-consuming. Likewise, EI service is grounded on program specialty, and hence, its count is smaller than the ones for GHEP or ORET that serve the general population. Figure 9 shows composition of the annual client counts to corroborate fulfillment of First 5 Kern's responsibility in addressing service gaps, particularly the ones unlikely to gain support from for-profit organizations in this region.

Figure 9: Client Counts in Four Domains of *Child Health*



Furthermore, First 5 Kern follows the spirit of Proposition 10 to expand service access for all children. The commitment is reflected by investment increases between adjacent years. For example, the commission funds $666,758 in EI and $616,059 in PECHV, larger than the corresponding amounts of $640,988 and $439,727 last year. The GHEP domain also shows a funding increase from $302,725 to $317,210. In the largest spending domain, OHET services receive $837,258, an increase from $811,714 last year. Eight service providers in *Child Health* have leveraged $2,144,469 from community partners to sustain the capacity building (Table 6).

Table 6: Leveraged Funds by Programs in *Child Health*

Program	Sustainability Fund
Black Infant Health Program	$530,005
Help Me Grow Kern County	$840,306
Kern County Children's Dental Health Network	$9,239
Kern Valley Aquatics Program	$13,741
Make A Splash	$26,775
MVCCP-KC	$82,351
Medically Vulnerable Infant Program	$124,373
Nurse Family Partnership Program	$517,679

Capacity of Program Support in *Health and Wellness*

Program contracts are carefully planned to address **six objectives** under a common goal of *Health and Wellness*, i.e., "All children will have an early start toward good health" (p. 6). Table 7 shows connections between state glossary domains and local service objectives.

Table 7: Association between State Report Domains and Local Objectives

Objectives of *Health and Wellness*	Glossary Domain
1. Children will be enrolled in existing health insurance programs.	[2]
2. Pregnant women will be linked to early and continuous care.	[4]
3. Children will be provided health, dental, mental health, developmental and vision screenings and/or preventative services.	[1] [2] [3]
4. Children with identified special needs will be referred to appropriate services.	[1]
5. Children will develop early healthy habits through nutrition and/or fitness education.	[2]
6. Children and their parents/guardians will be provided with safety education and/or injury prevention services.	[2]

Contrary to a statewide trend of population decline, Kern County has "rising counts of young children" (Manship, Jacobson, & Fuller, 2018, p. 6) which lead to demand on capacity expansion in early childhood support. In this section, Results-Based Accountability is justified by service outcomes of 12 programs with RI alignments to objectives in Table 7. More specifically, health insurance enrollment (**Objective 1**), healthy habit development (**Objective 5**), and safety education for injury prevention (**Objective 6**) are linked to service functioning at both *child* and *family* levels (see RI 1.1.1, 1.1.5, 1.1.6, 1.5.2, 1.6.1-1.6.4 of the strategic plan).[15]

In Domain [1], early interventions are introduced by MVIP to incorporate case management services for medically vulnerable infants and their families. Meanwhile, Special Start for Exceptional Children (SSEC) expands quality early childhood education, parent support, and childcare services in non-traditional hours and for medically fragile infants and toddlers. As Daisy Rodriguez (2022), the SSEC Program Supervisor, indicated, "Our youngest children are unable to attend a traditional pre-k or daycare due to the nature of their medical condition" (p. 2). Meanwhile, Richardson Special Needs

[15] https://www.first5kern.org/wp-content/uploads/2021/05/strategic-plan-2021-2022.pdf

Collaborative (RSNC) offers case management services, behavioral needs screenings, parent education, and referrals for children ages 0 to 5 and their families. A Family Resource Library is sponsored by RSNC to disseminate information about children with special needs. In combination, First 5 Kern has funded a variety of programs across *medical and mental health treatments*, *infant and toddler services*, and *expanded hours of program operation*.

To sustain *Health Insurance Enrollment* in **Objective 1**, Family Caregivers Project (FCP) and MVIP support 58 providers to attend training or other educational services related to *Health and Wellness* this year (RI 4.1.3), exceeding the annual target count of 54. In Report Domain [4], Black Infant Health (BIH), Children's Mobile Immunization Program (CMIP), and NFP offer education on the importance of prenatal care to 203 mothers (RI 1.2.3), surpassing the total target of 154 for these programs.

In Kern County, "Not only is our population in ill health, but the county does not have the healthcare resources to alleviate these issues" (Gearhart, 2016, p. 13). To meet the dual challenges, Glossary Domains [1] and [4] are adopted to address special program needs for young children and their families. Attainment of **Objective 3** relies on delivery of various clinic services. Thus, the corresponding outcomes are represented by the number of children being served (RI 1.3.1, 1.3.2, 1.3.4, 1.3.6, 1.3.7, 1.3.8, 1.3.11), as well as establishment of the program capacity on service coverage (RI 1.3.10). **Objectives 2** and **4** address support for *mothers in pregnancy* and *children with special needs*. Accordingly, program targets are set on the capacity of prenatal care (RI 1.2.1-1.2.7) and special needs identification (RI 1.4.2).

Although California has a low death rate nationally among pregnant women and new mothers, the baby mortality ratio for Black mothers is six times worse than the rate for white women (Ronayne, 2021). Carrigan (2022) further revealed that

- Kern's percent of premature Black infants is nearly 1.2 times higher than the state.
- Kern's rate of underweight Black infants is nearly 1.2 times higher than the state.
- Kern's report of Black maternal deaths is 1.5 times higher than the State. (p. 5-7)

To address these issues, BIH offers case management services to 38 children (RI 2.1.7), and 46 women have obtained prenatal referrals (RI 1.2.2), above the corresponding counts of 30 and 24 last year. BIH also provides information to 58 pregnant women and mothers on prenatal care education (RI 1.2.3), substance abuse education (RI 1.2.5), tobacco cessation education (RI 1.2.6) and home visit arrangement (RI 1.2.7), as prescribed by **Objective 2**.

Additional services are funded in Domains [2] and [3] to support health education, general treatment, and dental care (see Table 7). For instance, Arvin Family Resource Center and Buttonwillow Community Resource Center extend application assistance to 76 families for healthcare access (RI 1.1.1), above the target count of 12. Medical homes are created by MVCCP-KC, Medically Vulnerable Infant Program (MVIP), and Nurse Family Partnership (NFP) for 815 children, surpassing 105 children in the target (RI 1.1.5). The alignment between RI designation and service description is presented in Table 8.

Moreover, First 5 Association of California urges "an intentional focus on Prenatal-

3 during this critical stage of child development".[16] In FY 2021-2022, 97 pregnant women and/or mothers are visited by nurses from NFP to obtain information and education on prenatal and postnatal care (RI 1.2.7), including 70 participants for breastfeeding education (RI 1.2.4) that exceed the target count of 58.

Table 8: Service Description and RI Designation in *Health and Wellness*

Objective	Service Description	RI Designation
1	Health Insurance Enrollment	Family and Child Coverage
2	Prenatal Services	Support for Mothers during Pregnancy
3	Clinic Services in Child Health	Child Service Count; Provider Support
4	Special Needs Referral	Support for Children with Special Needs
5	Healthy Habit Development	Family and Child Support
6	Safety Education	Services for Children and Parents

In protecting child wellbeing, First 5 Kern funds CMIP with a mission to safeguard children from preventable diseases.[17] The program has offered immunization services to 767 children ages 0-5 (RI 1.3.11), more than 741 children last year. As the program announced, "If you can't afford your child's vaccinations, let us help. Our mobile unit brings the immunization clinic to you, and, thanks to our partnership with First 5 Kern, there's no charge for children who qualify."[18] In capacity building, CMIP has increased its number of clinics from 118 last year to 129 this year (RI 1.3.10). In addition, health screenings (Hemoglobin Tests) are offered to 377 children this year (RI 1.3.2), above the target count of 360.

The support network played a critical role for families in poverty that had few places to seek assistance. For example, a new mother drove nearly two hours from Ridgecrest to Bakersfield to get her two-month-old daughter immunized. She testified,

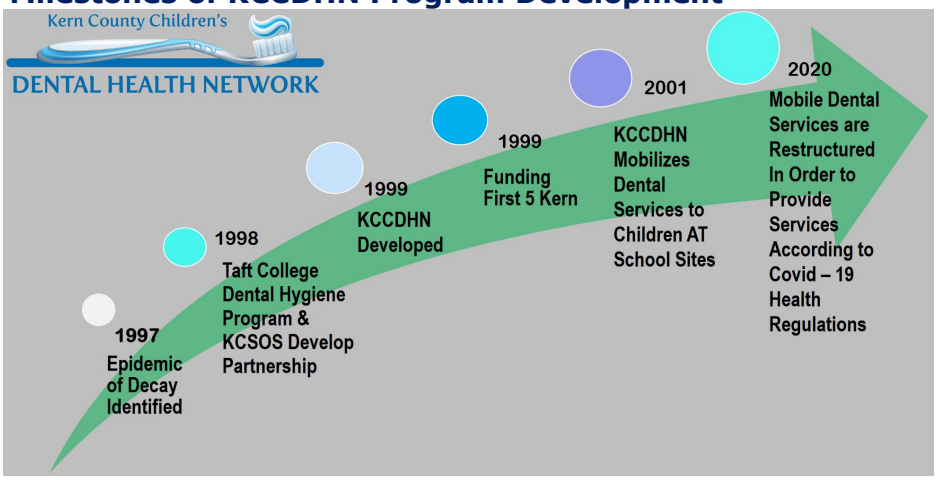
> This was my first time coming to one of the mobile clinics. I was referred by the Health Department and decided to go because my daughter couldn't get into her primary care physician for her two-month-old shots, and they kept pushing back my appointments. My experience at the mobile clinic was very nice and exceeded my expectations" (Ibid. 4).

In terms of her impression, she gave a 10 out of 10 score for her experience – "It was worth the drive to have my daughter get her shots. I want everyone to know. Thank you all so much." The CMIP support is aligned with program description in Domain [2] of the state report glossary.

Clinic Service is another core component of **Objective 3** in *Child Health*. According to First 5 Association of California (2017), tooth decay ranked among the most common reasons for chronic absenteeism in kindergarten. Kern County Children's Dental Health Network (KCCDHN) is one of the longest service providers in *Child Health*. Milestones of the program development are depicted in Figure 10 since its inception.

[16] https://pac.org/job/director-government-affairs-189/
[17] https://www.first5kern.org/wp-content/uploads/2021/07/August-CFC-agenda-packet-080421.pdf
[18] https://www.adventisthealth.org/bakersfield/services/childrens-immunizations/

Figure 10: Milestones of KCCDHN Program Development

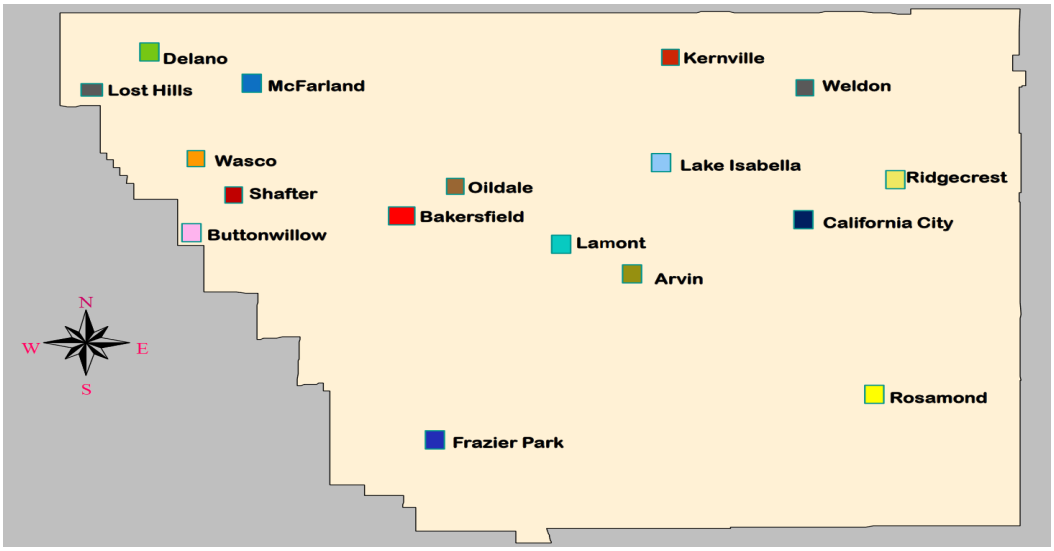


Source: Ibid. 17

Built on the service functioning for more than two decades, KCCDHN has incorporated Drive-Thru Dental Screenings in four steps:

- Professional teams for dental screenings are stationed in a designated parking lot;
- Up to 3 Families are scheduled every 10 minutes;
- Parents complete consent forms on site;
- Children receive a dental screening, fluoride varnish application, dental education, and referral for treatment, if needed.

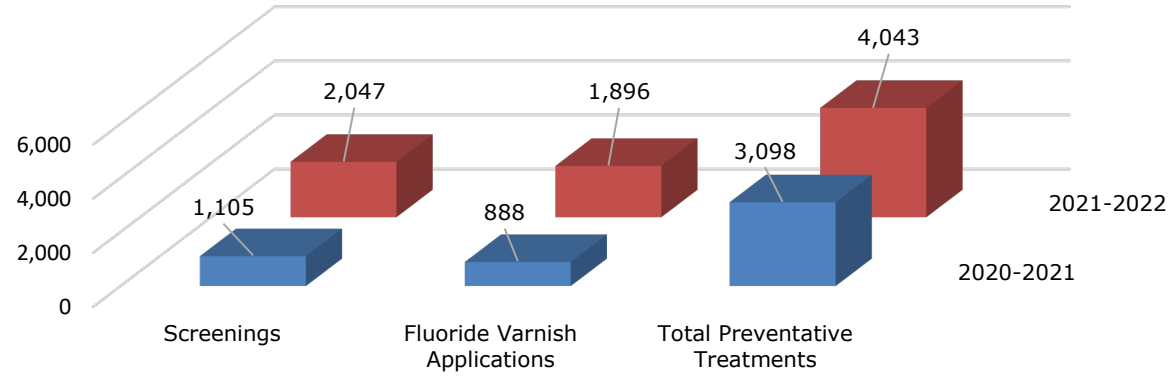
Figure 11: Distribution of KCCDHN Service Access across 17 Communities



Source: Ibid. 17

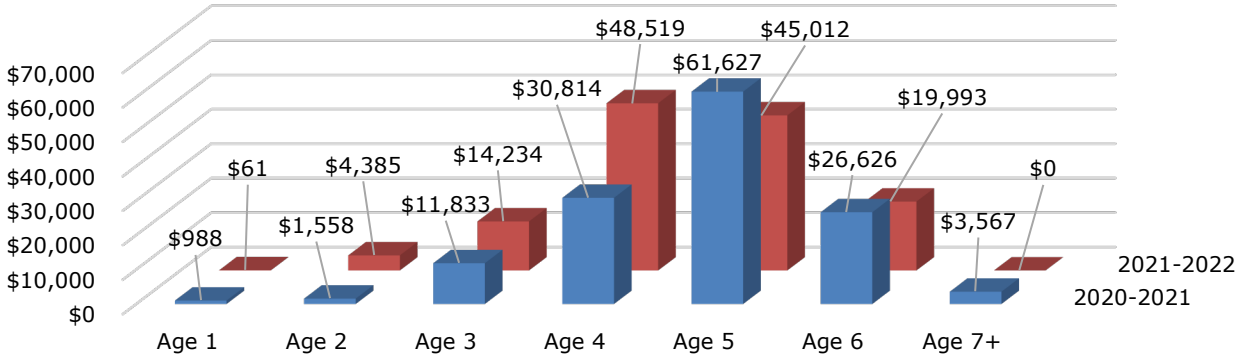
During FY 2021-2022, KCCDHN increases the number of clinics from 76 to 94 (RI 1.3.9) to expand dental services in 17 communities (Figure 11). The program also provides dental screening for 2,147 children (RI 1.3.4), fluoride varnish to 1,896 children, restorative dental care for 4,043 children (RI 1.3.7), as well as dentist-formed 181 exams (RI 1.3.6), 99 restorative treatment cases (RI 1.3.7), and 893 appointments for pediatric dentists (RI 1.3.8).

Figure 12: Service Count Comparison across Preventative Dental Treatments



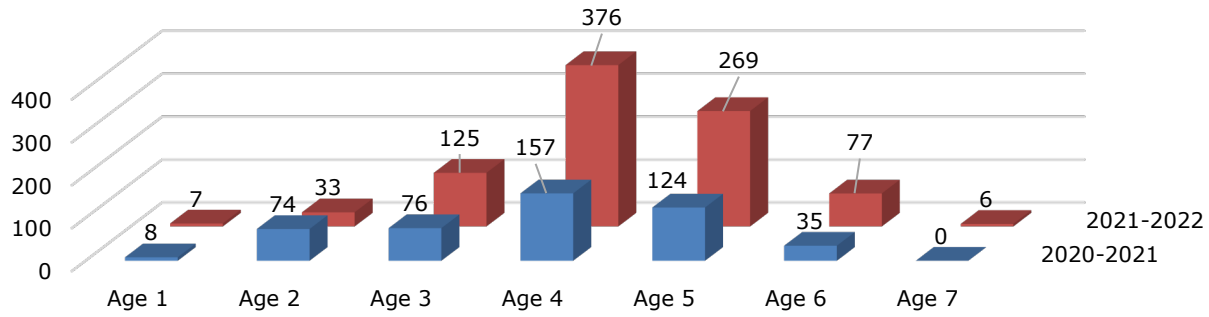
The service count increase is illustrated in Figure 12 across the *dental screening, fluoride varnish,* and *restorative dental care* categories. As a regular practice, a six-month reminder has been sent to families to continue the services after dental home establishment, and the dental home offerings have increased from 124 to 442 on RI 1.1.6. In supporting school readiness, KCCDHN made an extra effort to avoid interruption of dental services for some kindergartners who were in the program since age 5. Less than 2.6% of the KCCDHN funding was designated last year to these cases up to age 7. In FY 2021-2022, the percentage has decreased to a lower level in alignment of the service intention with a focus of Proposition 10 on children ages 0-5 (Figure 13).

Figure 13: Fund Allocation for Oral Health Case Management



KCCDHN also offers case management services for 893 children to improve oral health (Figure 14). While less funding is used for children ages 6-7 (Figure 12), the service recipient count has increased from 35 to 83 between adjacent years (Figure 13), which seems to suggest an improvement in the cost-benefit ratio.

Figure 14: Number of Children Case-Managed for Oral Health



These services have generated positive outcomes in Domain [3] to sustain oral health treatments with well-rounded team support for problem solving. In this year, a child received a dental screening/fluoride varnish application and was identified with visual caries. When a dental office contacted the mom to verify an appointment, it became clear that the parent was deaf. With the coordination of KCCDHN, extra effort was made to arrange an interpreter and ensure accurate communication for the child at a dental appointment (Ibid. 4). As Children Now (2018) noted, "Care coordination is especially critical for children with special health care needs" (p. 35).

Guided by **Objective 4**, MVCCP-KC oversees case referrals across a network of hospitals and other partner agencies. Built on the *Promising Practice* recognition of MVCCP by MCH in 2015, RKI is recognized as MCH's *Best Effective Practices* to consolidate the MVCCP services with a clear goal of supporting children with adverse experiences. In Spring 2022, RKI networked with hundreds of service providers during an ACEs Conference to showcase a pilot project with Omni Family Health on incorporating ACE screenings in clinical settings.

In program collaboration, Help Me Grow (HMG) addresses RI 4.4.1 by supporting 10 service providers to participate in events of early childhood education. Social service referrals are provided by 2-1-1 Kern County (2-1-1) to 1,088 families on RI 2.4.1. The program also refers 608 families for services of developmental screening, an increase from 557 families last year. Impact stories indicated that information and referral (I&R) specialists at 2-1-1 not only offered answers to resource questions for local families, but also paid special attention to the needs of young children. For instance, a specialist communicated with a mother to provide developmental screening for a 5-year-old child as an additional resource option through HMG. A developmental specialist has alleviated parent concerns about the boy's behavior and referred the case to Kern Behavioral Health and Recovery Services (Ibid. 4).

Altogether, HMG, MVCCP-KC, and MVIP have assisted 351 children with special needs in service access (RI 1.4.2), far above the MVIP target count of 55. Besides completion of developmental screening for 302 children by the IMPACT project of the state commission, Blanton Child Development Center (BCDC), Health Literacy Program (HLP), and HMG have screened 397 children for potential developmental delay (RI 1.3.1), surpassing their target of 375. The service expansion is important because "Accessible, quality health care and seamless care coordination are critical to achieving positive health

outcomes for children and to promoting efficient care through prevention, early detection and disease management" (Children Now, 2018, p. 35).

For more than five years, First 5 county commissions have been the largest funders of home visiting programs across California (First 5 Association of California, 2017). In addition, effectiveness of NFP has been demonstrated through randomized trials across the nation (Heckman, 2014), and BIH is another program that has a proven record of success in reducing mortality of African-American infants across 13 counties in California (Parma, 2022). The *group-based education in BIH* and *home-based consultation in NFP* have jointly contributed to enhancement of *Perinatal and Early Childhood Home Visiting* indicators in Domain [4] of the state report glossary. The early intervention is cost-beneficial because "The highest rate of return in early childhood development comes from investing as early as possible" (Heckman, 2012, ¶. 2). Therefore, an 18-month Kern County home visiting project includes BIH, NFP, Family Resource Centers and other community partners to collect data and host collaborative learning sessions on program models for the service populations in local communities.[19]

The broad impact has been illustrated by a BIH story on offering one-on-one case management to extend support in both material and spiritual dimensions. In particular, a mother had a family death during her postpartum phase shortly after moving to California. A Family Health Advocate (FHA) introduced her to WIC services for formula access and community resources for additional supplies of diapers, wipes, and other necessities. Her anxiety and depression were relieved by BIH due to the teamwork of FHA, case managers, and mental health professionals (Ibid. 4).

As a relatively new program in the current funding cycle, Court Appointed Special Advocates (CASA) is designed to enhance health and safety of infants and toddlers under a circumstance of abuse and/or neglect. Besides weekly visits of CASA volunteers in foster care, the program offers resource packets to guide client access to health and education services. This program partners with HMG to support service provider training in child developmental screening. Meanwhile, HLP continues its services in nutrition and fitness education to address **Objective 5** of *Child Health*.

Safety Education in **Objective 6** is addressed by KVAP and MAS. In Kern County, an important aspect of *Safety Education and Injury Prevention* hinges on child protection against the risk of drowning around swimming pools, canals, lakes, and the Kern River. KVAP and MAS provide swimming pool access to families with children ages 0-5. The safety education includes First Aid classes, swim lessons, and water safety training on different devices in two locations, the remotely-located Weldon and densely-populated Bakersfield. In FY 2021-2022, outcomes in Domain [2] are reflected by swim lesson completion for 339 children in KVAP and MAS (RI 1.6.2). Meanwhile, 44 parents or guardians participate in swim lessons of KVAP, above its target of 25 (RI 1.6.3). Training for First Aid/Cardiopulmonary Resuscitation is offered by FCP and KVAP to 87 parents/guardians (RI 1.6.4). KVAP also offers water safety education for 106 children, exceeding its target of 80 (RI 1.6.1).

In summary, young children are vulnerable and "the most likely to experience severe injury or death" (Kern County Network for Children, 2017, p. 10). Parent education

[19] First 5 Kern's annual report to the State Commission.

on hazard prevention, such as water safety, is critical for maintaining health and wellness of infants, toddlers, and preschoolers. In traditionally underserved communities with special needs, oral, medical, and mental health services are provided by BIH, CMIP, KCCDHN, MVIP, NFP, RSNC, and SSEC. The *Systems of Care* further incorporate MVCCP-KC to prevent missing appointments for children and enforce good practice in safe sleep education, including arranging a Pack-N-Play bed for a baby this year (Ibid. 4). As a result, a dozen programs collectively addressed six objectives of *Health and Wellness*:

(1) Children were enrolled in existing health insurance programs with support of AFRC and BCRC;
(2) Prenatal support was provided by BIH and NFP programs;
(3) Medical, dental, and behavioral health services were delivered by CMIP, KCCDHN, and RSNC;
(4) Special-needs services were supported by MVCCP-KC, MVIP, RSNC, and SSEC;
(5) Early screening of developmental delay was conducted by CASA, HMG, MVCCP-KC, and MVIP;
(6) Injury prevention and water safety were addressed by KVAP and MAS.

Primary features of program support are categorized in four domains to differentiate the *health education*, *home visiting*, *oral health*, and *early intervention* services for children ages 0-5 (Table 9).

Table 9: Program Features in *Health and Wellness*

Domain	Program*	Primary Services	Age
Early Intervention	HMG	Developmental Screening	0-5
	MVIP	Targeted Intensive Intervention	0-2
	SSEC	Targeted Intensive Intervention	0-2
	RSNC	Targeted Intensive Intervention	3-5
General Health Education and Promotion	CASA	Developmental Screening on Potential Delay	0-5
	CMIP	Mobile Program for Immunizations	0-5
	KVAP	Safety Education in Weldon	0-5
	MAS	Safety Education in Bakersfield	0-5
	MVCCP-KC	Quality Health Systems Improvement	0-5
Oral Health	KCCDHN	Mobile Program for Oral Healthcare	0-5
Prenatal/Infant Home Visiting	BIH	Maternal/Child Healthcare	0-2
	NFP	Maternal/Child Healthcare	0-2

*Program full names are listed in Appendix A.

Improvement of Program Outcomes across Service Providers

The *Child Health* domain covers preventive and restorative care (Belsey, 2009). Both demand data tracking to assess effectiveness of program support in child developmental screening, parent education, behavioral health intervention, and infant service coordination. In this section, assessment outcomes are gathered to evaluate improvement of the service benefit for local children ages 0-5 and their families.

1. Support of Healthy Child Development

In FY 2021-2022, indicators of early childhood development are collected from ASQ-3 screening in BIH, CASA, HMG, MVIP and NFP programs. The BIH data only contain

observations on one boy. For the rest programs, Table 10 contains the percent of children with performance levels above the age-specific ASQ-3 thresholds in *Communication* (COM)*, Gross Motor* (GM)*, Fine Motor* (FM)*, Personal-Social* (PerS), and *Problem Solving* (ProS) domains. In comparison, a relatively consistent finding has been obtained in COM to show 80% or more children performing above the threshold across the four programs.

Historically, MVIP was redesigned from a project, *High Risk Infant Program*, to promote family-centered, community-based, and coordinated care for children with special healthcare needs. In June 2000, Clinica Sierra Vista received a Title V grant to sponsor nurse visits and case management services for over 2,000 infants in Kern County. The program focused on (1) reducing hospitalizations and emergency room visits; (2) identifying developmental disabilities and/or delays and referring to appropriate resources to help minimize/prevent delays; (3) linking families to community resources; (4) helping families establish safe homes for medically fragile infants; (5) empowering families through education; (6) helping families adjust to infant's special needs; (7) reducing infant mortality in high-risk population; and (8) preventing child abuse. With First 5 Kern funding, a small group of medically vulnerable infants received ASQ-3 screening in MVIP this year. It has been shown in Table 10 that the health constraint did not hinter problem-solving skill development, and 90.5% of the children performed above the ProS threshold.

Table 10: Percent of Children with Performance Level above ASQ-3 Threshold

Program*	N	COM	GM	FM	PerS	ProS
CASA	10	80.0	100	60.0	80.0	60.0
HMG	364	89.8	87.9	80.5	92.9	92.9
MVIP	21	85.7	33.3	76.2	47.6	90.5
NFP	34	97.1	85.3	100	100	100

*Program full names are listed in Appendix A.

In CASA, the ASQ-3 screening indicates no developmental delays among 60% or more children. Because of its support for children under an abuse and/or neglect environment, the small CASA sample had an exposure to adverse experiences. In contrast, HMG collected larger data to detect developmental delays in the general population. In its referral service, a development specialist reached out to a mother to complete a scheduled follow-up developmental screening using both ASQ-3 and ASQ:SE-2 over the phone. The results confirmed the mother's concerns about speech delay based on her child's performance near the threshold of ASQ-3. A referral was made to the Ascension Center to address the development issue in a timely fashion (Ibid. 4). Due to the diligent effort illustrated in this example, the HMG result in Table 10 shows 80% or more children performing above the threshold across five ASQ-3 domains.

To improve pregnancy outcome and infant development, intensive case management services are arranged by NFP in sequential steps: (1) weekly during the first month of enrollment, (2) every other week until the birth of the baby, (3) weekly during the first six weeks after delivery, (4) every other week until the baby is 21 months, and (5) monthly during months 22-24. Public health nurses are sent to conduct home visits with low-income, first-time mothers at the *prenatal* and *infant care* stage for two and a half years. Topics of parent education include newborn care, parenting preparation, baby-friendly environment setting, referral assistance, and healthy pregnancy. The program

also offers communications in both English and Spanish to ensure effective parental engagement. By design, the service outreach covers communities of Bakersfield, Lamont, Ridgecrest, Rosamond, Shafter and Wasco. The positive impact of NFP is demonstrated by the highest percentage of children passing the COM, FM, PerS, and ProS thresholds of ASQ-3 screening in Table 10.

Due to the program differences, results of data analysis seem to be impacted by the sample size. For programs with a sample larger than 30 (i.e., HMG and NFP), child performance is significantly above the ASQ-3 thresholds at α=.0001. For CASA and MVIP with smaller samples, not all the child development indicators are significant at α=.05 (Table 11). To avoid the potential artifact from statistical testing, effect sizes are computed to reflect the practical program impact that is less sensitive to the sample size variation. Except for a couple of ASQ-3 domains in the MVIP results, most effect sizes in Table 11 are above 0.80, suggesting strong practical influences of First 5 Kern-funded programs in child growth (Cohen, 1988).

Table 11: ASQ-3 Results from CASA, HMG, MVIP, and NFP

Program	Domain	df	t	p	Effect Size
CASA	COM	9	2.47	0.0358	1.65
	GM	9	14.03	<.0001	9.35
	FM	9	2.48	0.0348	1.65
	PerS	9	1.58	0.1474	1.05
	ProS	9	1.71	0.1218	1.14
HMG	COM	362	27.79	<.0001	2.92
	GM	361	37.23	<.0001	3.92
	FM	352	27.86	<.0001	2.97
	PerS	358	32.75	<.0001	3.46
	ProS	362	34.70	<.0001	3.65
MVIP	COM	20	3.58	0.0019	1.60
	GM	20	*1.18*	0.2512	0.53
	FM	20	2.19	0.0404	0.98
	PerS	20	3.37	0.0031	1.51
	ProS	20	*1.34*	0.1955	0.60
NFP	COM	33	7.32	<.0001	2.55
	GM	33	17.98	<.0001	6.26
	FM	33	13.93	<.0001	4.85
	PerS	33	19.81	<.0001	6.90
	ProS	33	16.88	<.0001	5.88

2. Improvement of Parent Health Literacy

In improving parent understanding of child wellbeing, First 5 Kern funded HLP to offer health literacy education for 57 parents (RI 2.3.2), above 45 parents last year. "Given that children learn their habits from the adults in their life, it is important for adults to both create an environment conducive to healthy living and lead by example" (Constantine & Jonah, 2017, p. 27). The following parent response is obtained on the HLP impact assessment,

> The center is an amazing program for both of my boys and I highly recommend to the community. … We love the projects that are given each month. The children

> cannot wait to get home to do them. They especially loved the transportation activity. One of them got a car and the other got an airplane, and they were excited that they both had different activities to complete. (Ibid. 4)

The program offering has kept families engaged in improving child health and wellness. Based on the Scope of Work and Evaluation Plan, FCP and HLP offered nutrition and fitness education to 97 parents or guardians this year. The service on enhancing health literacy has addressed RI 1.5.2 of First 5 Kern's (2021) strategic plan, i.e., "Number of parents/guardians who received nutrition and/or fitness education" (p. 5). As a result, 107 parents received education from FCP and HLP.

3. Support of Healthy Parent-Infant Interaction

Parent-infant interaction is important in developing an infant's central nerve system (Barlow et al., 2007). NFP adopts the Dyadic Assessment of Naturalistic Caregiver-Child Experiences (DANCE) to monitor effectiveness of parent-infant interaction. The golden standards of the DANCE *Sensitivity and Responsivity* scale[20] are listed in Table 12 to evaluate the effect of parent-infant interaction on 22 infants aged 1-23 months.

Table 12: DANCE Results on the Sensitivity and Responsivity Scale

Scale of Sensitivity and Responsivity	NFP Result	Golden Standard
1. Positioning	98.9%	100%
2. Visual Engagement	88.6%	95%
3. Pacing	91.8%	90%
4. Negative Touch	0%	0%
5. Non-Intrusiveness	90.9%	90%
6. Responsiveness	90.7%	85%

The results show that caregivers surpass the golden standards in *Pacing, Non-Intrusiveness,* and *Responsiveness* domains. According to the scale design, *pacing* indicates the tempo of caregiver-child interactions that is complementary to the child's behavior, active level, and needs. *Non-Intrusiveness* represents no intrusion of caregivers in the child's activity, as well as emotional or physical space. *Responsiveness* displays the caregiver's supportive reactions to the child's state, affect, and communication. In addition to the attainment to these golden performances, no negative touch was found in interactions with children. The assessment also demonstrated the need to improve the caregiver's body positioning and visual engagement.

The DANCE data exhibit result improvement over FY 2019-2020, the last time of data collection, on better positioning of caregivers to read child's communications and more visual attention toward children with a shared focus of interest (Wang, 2021). According to the National Association for the Education of Young Children (NAEYC) (2020), "Development and learning are dynamic processes that reflect the complex interplay between a child's biological characteristics and the environment" (p. 8). Thus, these changes in parent control of the environmental setting are beneficial to child growth.

[20] The DANCE Coding Sheet: Sensitivity and Responsivity Dimension
Dyadic Assessment of Naturalistic Caregiver-Child Experiences: DANCE - PDF Free Download (docplayer.net)

On the DANCE scale of *Emotional Quality and Behavioral Regulation*, results in Table 13 shows caregiver performance above the golden standard of *Verbal Connectedness* that supports communication with young children. In *Expressed Positive Affect, Caregiver's Affect Complements Child's Affec*t, and *Verbal Quality*, the DANCE results are within 2% to 4% below the golden standards of 100%.

Table 13: DANCE Results on Emotional Quality and Behavioral Regulation

Scale of Emotional Quality and Behavioral Regulation	NFP Result	Golden Standard
1. Expressed Positive Affect	98.4%	100%
2. Caregiver's Affect Complements Child's Affect	96.8%	100%
3. Verbal Quality	98.6%	100%
4. Verbal Connectedness	91.1%	75%

In summary, findings in Tables 13 and 14 are approaching or above the golden standards of the DANCE measurement.[21] The near-flawless performance indicates the positive impact of NFP services on healthy parent-infant interaction in both cognitive and emotional domains.

4. Coordination of Infant Medical Services

Prior to the commission support, few organizations offered similar programs for infants with serious health conditions in Kern County. It was reported that MVCCP-KC "enhanced coordination of existing case management services to measurably improve long-term outcomes for children, birth to 5 years of age, who are at risk of costly, lifelong medical and developmental issues" (Thibault, 2017, p. 3). The need has been persistent when Medi-Cal and Healthy Families have restrictions on assisting undocumented families.

To strengthen the support for network building, MVCCP-KC is designed to bridge gaps and leverage resources for improvement of the service system to benefit parents, providers, and other partners of healthcare. The partnership also includes collaboration with the Maternal, Child, and Adolescent Health (MCAH) program of Kern Department of Public Health. According to Proposition 10, "A requirement of the state laws governing the county commissions is to ensure that money from the Children and Families Trust Fund is not used to replace or 'supplant' existing local funding for programs and services."[22] The care coordination reflects the Proposition 10 spirit of filling a void in the existing system.

In summary, information in this section focuses on service outcomes of First 5 Kern-funded programs in *Health and Wellness*. Program features are classified by *service types* (e.g., dental care, mental health, insurance application, parental education), *child conditions* (general support vs. special-needs assistance), *delivery methods* (group-based vs. home-based service), *facility capacities* (mobile service vs. community-based support), and *age groups* (infants, toddlers, and preschoolers). To justify the Results-Based Accountability on these dimensions, evaluation findings are derived from various sources of data (e.g., ASQ-3, DANCE) and service providers (KCCDHN). As First 5 Kern

[21] http://www.cittdesign.com/dance/sites/default/files/Practice5_19M_1_0.pdf
[22] http://first5association.org/overview-of-proposition-10/

(2021) maintained,

> Evaluation is an important component of the Strategic Plan and the Proposition 10 implementation process in Kern County. Carefully tracked and reported information details program outcomes and the impact on the communities served. (p. 2).

The service tracking and value-added assessment in this section consistently indicated First 5 Kern's positive impact in *Health and Wellness* across Kern County.

(II) Program Enhancement in *Family Functioning*

It is well-known that "Parents are the medium through which child behavior and family functioning are influenced" (Van As, 1999, p. 48). Accordingly, *Parent Education and Support Services* are identified as a focus area in First 5 Kern's (2021) strategic plan to fund 17 programs for improving family functioning and child wellbeing. The support is essential due to the recent pandemic stress. As Jolie (2020) projected, "By the time we emerge from the COVID-19 crisis, violence will have scarred the lives of many children" (p. 1).

For child protection, First 5 Kern funded Differential Response Services (DR), Domestic Violence Reduction Project (DVRP), and Guardianship Caregiver Project (GCP) to provide safety net support for young children in local communities. "The need for family- and community-centered care is particularly critical in pregnancy and the first five years of life, when the architecture of the brain is established and neural connections grow at the fastest rate in a person's lifetime" (Briscoe, 2019, p. 1). In the local capacity building, FCP trained parents and caregivers on nutrition education, parenting skills, and healthy development of children ages 0-5. The program also distributed a toolkit to introduce culturally and linguistically specific tools, activities, and materials for service outreach and network building.

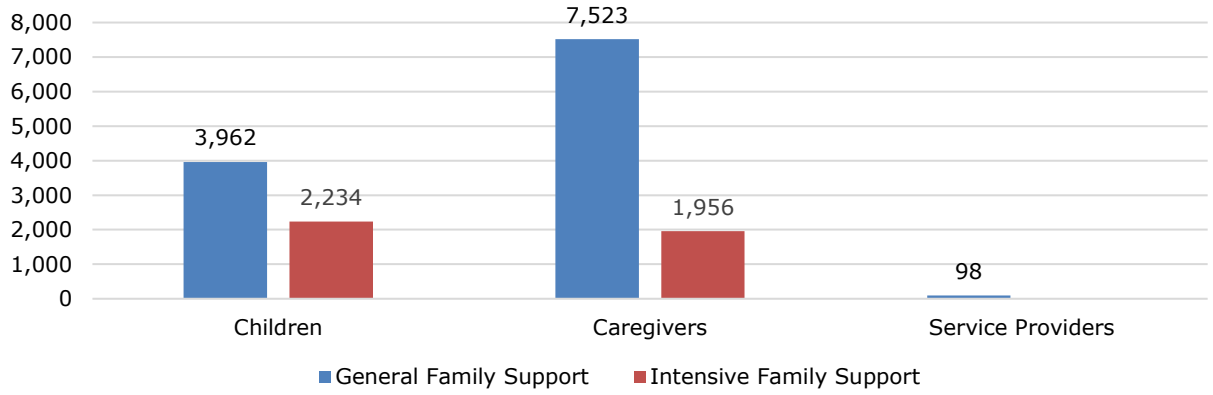
With First 5 Kern support, Community Action Partnership of Kern (CAPK) sponsored 2-1-1 for service referral, HMG for developmental screening, as well as two family resource centers, East Kern Family Resource Center (EKFRC) and Oasis Family Resource Center (OFRC), that included case management and parent education through *home-based services* and *kindergarten transition* programs. In partnership with HMG, the 2-1-1 program has a mission to connect families to medical facilities, family resource centers, legal assistance programs, and other community support systems. Both EKFRC and OFRC are centrally located to expand service access in hard-to-reach communities. These direct and indirect services contributed to the recognition of CAPK as the non-profit of the year for the Beautiful Bakersfield award from the Greater Bakersfield Chamber of Commerce on June 25, 2022.[23]

It should be noted that this fiscal year also has the highest inflation surge in forty years (Winters, 2022). First 5 Kern's funding of $1,998,334 in *General Family Support* (GFS) is larger than $1,800,380 last year. Likewise, program expenditure in *Intensive Family Support* (IFS) has increased from $973,574 to $993,058 between adjacent years. In Figure 15, caregiver numbers in GFS are much larger than the number for IFS because GFS beneficiary includes parents and guardians. As the pandemic impact dwindles down,

[23] https://m.facebook.com/BeautifulBakersfieldAwards/posts/

caregivers are no longer operating in lockdown mode. Center-based services can accommodate more children than home-based programs. Thus, the caregiver count is reduced from 13,669 last year (Wang, 2022b) to 7,523 this year. The beneficiary counts are depicted to show the capacity of First 5 Kern support for local children, caregivers, and service providers in these domains.

Figure 15: Capacity of General Family Support and Intensive Family Support



Altogether, First 5 Kern funded 13 center-based programs to deliver *general parenting workshops, court-mandated parent education*, and *case management* services. The annual investment reached $2,773,954 in *Family Functioning*. Fourteen service providers in *Family Functioning* also leveraged $1,871,289 from community partners to sustain the capacity building (Table 14).

Table 14: Leveraged Funds by Programs in *Family Functioning*

Program	Sustainability Funds
2-1-1 Kern County	$332,466
Differential Response Services	$504,000
East Kern Family Resource Center	$52,000
Family Caregiver Project	$337,500
Greenfield School Readiness	$5,890
Guardianship Caregiver Project	$39,230
Kern River Valley FRC/Great Beginnings Program	$125,082
Lamont Vineland School Readiness Program	$11,429
McFarland Family Resource Center	$29,272
Mountain Communities Family Resource Center	$122,739
Oasis Family Resource Center	$43,425
Shafter Healthy Start	$5,900
Southeast Neighborhood Partnership Family Resource Center	$3,525
Women's Shelter Network	$258,831

Capacity of Program Support to Strengthen Family Functioning

Services in *Family Functioning* are strategically designed to ensure that "All parents/guardians and caregivers will be knowledgeable about [1] early childhood development, [2] effective parenting and [3] community services" (First 5 Kern, 2021, p. 5). The three-fold considerations are aligned with two domains of the statewide report glossary (see First 5 Association of California, 2013), [1] General Family Support and [2]

Intensive Family Support. To articulate different service configurations, Table 15 shows a match between these service domains and the four objectives of *Parent Education and Support Services* in First 5 Kern's (2021) strategic plan.

Table 15: Service Domains and Objectives in Family Functioning

Objectives in Family Functioning	Domain
1. Children and families will be provided with targeted and/or clinical family support services.	[2]
2. Parents/guardians will be provided culturally relevant parenting education and supportive services.	[1]
3. Parents/guardians will be provided with educational services to increase family reading and/or literacy.	[1]
4. Parents/guardians and children will be provided social services.	[1]

General services in Domain [1] are sustained through parent education and social support. In Domain [2], First 5 Kern funds special services to restore and/or improve home environments. A service network has been established through program referrals (e.g., 2-1-1) and collaborations (e.g., Women's Shelter Network with DR, DVRP, and GCP). Across the state, 2-1-1 connects over 1.4 million people to a service network.[24] The local 2-1-1 program provides information about community services 24 hours a day, seven days a week. In FY 2021-2022, 2-1-1 responded to a total of 1,255 unduplicated callers with children ages 0-5. The referrals served 2,043 young children and 174 callers with a pregnant woman in the household. Without the referral support, families could have been misguided, and service delays might occur for young children with special needs for program access.

First 5 California (2015b) highlighted the need to "Support sustainability of Family Resource Centers and other community hubs for integrated services for children and families" (p. 1). Due to the importance of improving parenting skills, First 5 Kern (2021) strategically funded programs to enrich caregiver knowledge about early childhood development, childrearing strategies, and community support. These efforts are aligned with State Commission's attempt to "strengthen families' resilience, expand support systems, and reduce child abuse and neglect" (First 5 Association of California, 2017, p. 7). As Thompson and Uyeda (2004) observed,

> Family resource centers have also emerged as a key platform for delivering family support services in an integrated fashion. They serve as "one-stop" community-based hubs that are designed to improve access to integrated information and to provide direct and referral services on site or through community outreach and home visitation. (p. 14)

Based on First 5 Kern's (2021) strategic plan, *Targeted and/or clinical supports* in **Objective 1** are linked to service deliveries at both child (RI 2.1.1, 2.1.7-2.1.9, Ibid. 15) and group (RI 2.1.4-2.1.6, Ibid. 15) levels. For instance, Small Steps Child Development Center and Women's Shelter Network offered group therapy for 45 children. In addition, multiple result indicators have been developed to evaluate the attainment of **Objectives 2-4**:

[24] https://www.unitedwaysca.org/our-work/2-1-1-resources

1. Court-mandated parent education, group parenting education, and educational workshops (RI 2.2.1-2.2.3, Ibid. 15) are assessed to reflect family support in **Objective 2**;
2. Reading strategy development and literacy workshops (RI 2.3.1, 2.3.2, Ibid. 15) are evaluated to address parent/guardian education in **Objective 3**;
3. Program referrals and transportation services (RI 2.4.1, Ibid. 15) are adopted to support program outreach in **Objective 4**.

Table 16 shows the alignment between RI designation and service capacity.

Table 16: Service Capacity and RI Designation

Objective	Service Capacity	RI Designation
[1]	Targeted/Clinical Family Support	Parent and Child Participation
[2]	Parent Education Offerings	Parent Learning Outcome
[3]	Reading Literacy Services	Parent Training Outcome
[4]	Referral/Transportation Support	Family Service Access

In summary, First 5 Kern fills program gaps by connecting *what is needed* with *what is available* in *Parent Education and Support Services*. The emphases on parent support, including both *referral* and *direct services*, have been well-justified because "Of all the things that influence a child's growth and development, the most critical is reliable, responsive, and sensitive parenting" (Bowman, Pratt, Rennekamp, & Sektnan, 2010, p. 2). It is the program support and partnership collaboration that sustain service deliveries for children ages 0-5 and their families across Kern County.

Overview of Program Alignment with the Strategic Plan

While children are born equal, their growth environment may vary. To extend a protection network for all children, DR examines reports of child abuse and neglect based on information from Child Protective Services (CPS). DR case managers discuss family assessments, care plans, and service delivery strategies, as well as positive and negative implications to child development at weekly meetings with service supervisors. Case closures are dependent on the mitigation of risk factors with confirmation from DR supervisors. Intensive home visitations are conducted to reduce the recurrence rate.

For instance, it was reported in an impact story that an unexpected death of a client left behind three children, including a four-year-old. A DR case manager responded with timely support for the boy to obtain guardianship. The subsequent services included an arrangement of burial services, treatments of head lice, and offering of car seats, cleaning supplies, food baskets, and hygiene kits throughout the time of case management (Ibid. 4). The scope of service is far beyond child protection.

As the DR provider, "Kern County Network for Children [KCNC] serves many functions benefiting children and families in Kern County."[25] Through its extensive community networking, DR identifies cases and offers strength-based, family-centered support, such as counseling, parent education, job training, food, utility, housing assistance and transportation. The leadership roles are illustrated by six projects (Table

[25] http://kern.org/kcnc/about/

17). DR's intense case management led to home visits to 1,637 families (RI 2.1.5) that impacted 2,249 children ages 0-5 (RI 2.1.8). The partnership capacity is built on support of nine county agencies, 15 community-based organizations, 21 family resource centers, and five funders of local child services.[26]

Table 17: DR Roles in Strengthening Family Functioning

Roles	Projects
Administrative and Fiscal Agent	Promoting Safe and Stable Families
Administrative and Fiscal Agent	Child Abuse Prevention, Intervention, and Treatment
Administrative and Fiscal Agent	Community Based Child Abuse Prevention
Administrative and Fiscal Agent	Kern County Children's Trust Fund
Administrative Agent	Foster Youth Services Program/AB490 Liaison Activities
Administrative Agent	County Accreditation of Local Community Collaborative

Intense case management services are also provided by CASA for 68 children (RI 2.1.8), exceeding its target of 50 children in FY 2021-2022. Each case demands tremendous attention. For example, one family had five children in protective custody due to parent's inability to provide adequate care and supervision. CASA extended the much-needed support for seven months while the parents attempted to keep a safe home for children prior to their return from foster care. The CASA intervention has guided children to follow instructions, improve behaviors, and become respectful to each other. Eventually, "The CASA saw the family grow in love and the children were happy to be all back together" (Ibid. 4).

As a DR partner, DVRP provides legal assistance and representation for victims of domestic violence. Infants experiencing domestic violence tend to have worse academic outcomes in school due to neurodevelopmental lags and a higher risk of health issues, including gastrointestinal distress, trouble eating and sleeping, as well as stress and illness (Bullock et al., 2021). Furthermore, children ages 0 to 3 are too fragile to recover from severe abuse or neglect (KCNC, 2017). DVRP takes specific steps to address the need of early protection, including court document preparation, legal consulting, safety planning, victim representation, and resource referral, in communities of Bakersfield, Delano, Frazier Park, Mojave, and Shafter.

Child protection further depends on an understanding of the legal system. In an impact story of DVRP, two children under 5 years old were exposed to domestic violence. The mother was choked, slapped and threatened with a knife for suicide. DVRP filed the appropriate paperwork for a protective order and a custody order. After tedious legal proceedings, children were rescued from the abusive and violent household (Ibid. 4).

To gain assistance from extended families, GCP receives First 5 Kern funding to help grandparents and non-parent caregivers in obtaining guardianship for children, and thus, re-establishing stable and loving homes. The new settlement is critical to discontinuation of physical, mental, and emotional harm to child victims. It is also much needed during the pandemic when the virus claims the lives of primary caregivers, and thus, grandparents are expected to step in for childcare (Dube & Magalhaes, 2021). To

[26] http://kern.org/kcnc/links/

reduce issues of attachment, mental anxiety, and psychological depression among young children, the program supports guardianship transitions under critical circumstances, including parent incarceration or unemployment, substance or child abuse, child neglect or abandonment, physical or mental illness, parent divorce, and teen pregnancy.

In partnership with CPS, GCP reported a story in which a grandmother gained assistance to apply guardianship for a six-week-old infant. The baby was in danger of serious crimes committed by parents. To avoid burdening the dependency system, GCP filed a guardianship request on behalf of the grandmother, and it was found to be "necessary and convenient" by a Probate Judge who closed the court case with guardianship approval. In response, the grandmother repeated her gratitude in the following sentences: "Thank you so much for your help. I am forever grateful to you. My grandchild is safe thanks to you. May God Bless You!" (Ibid. 4).

Domestic support may involve child protection in a homeless shelter setting. WSN offers family counseling, group therapy, parent education, case management, and medical or legal support. Altogether, GCP, DVRP, and Women's Shelter Network (WSN) served 468 children (RI 2.1.9) and 363 parents or guardians (RI 2.1.6), surpassing the corresponding targets of 407 and 351 this year. These services contribute to prevention of domestic violence and alleviation of substantiated child abuse/neglect, which, in turn, reduces the burden of foster care facilities.

Across California, "Half of kids in foster care have endured four or more adverse childhood experiences" (Children Now, 2018, p. 49). Within the local community, Corson (2017) estimated, "On average, 50 children per day are referred to CPS for abuse or neglect with an average of 10 substantiated referrals per day" (p. 2). First 5 Kern funded the following FRCs to strengthen family stability:

1. Arvin Family Resource Center (AFRC)
2. Buttonwillow Community Resource Center (BCRC)
3. East Kern Family Resource Center (EKFRC)
4. Greenfield School Readiness (GSR)
5. Kern River Valley Family Resource Center-Great Beginnings Program (KRVFRC)
6. Lamont Vineland School Readiness Program (LVSRP)
7. McFarland Family Resource Center (MFRC)
8. Mountain Communities Family Resource Center (MCFRC)
9. Oasis Family Resource Center (OFRC)
10. Shafter Healthy Start (SHS)
11. Southeast Neighborhood Partnership Family Resource Center (SENP)

Four additional programs received funding in *Focus Area III: Early Childcare and Education* with a scope of work in *Parent Education and Support Services*:

1. Delano School Readiness (DSR)
2. Lost Hills Family Resource Center (LHFRC)
3. Neighborhood Place Community Learning Center (NPCLC)
4. West Side Outreach and Learning Center (WSOLC)

To increase accessibility, all these FRCs are set at central community locations. Resources from NAEYC are employed to enrich culturally relevant parent education and

support services. Table 18 shows an increase of family support service coverage from 5,106 to 5,964 parents/guardians in 14 programs between adjacent years (RI 2.4.3).

Table 18: Number of Family Support Recipients in 14 Programs

Focus Area	Program	2020-2021 Count	2021-2022 Count
Child Health	RSNC	110	61
Family Functioning	AFRC	84	530
	BCRC	300	126
	EKFRC	218	167
	GSR	1,078	997
	KRVFRC	54	54
	LVSRP	417	490
	MCFRC	84	73
	MFRC	1,194	732
	OFRC	4	98
	SENP	581	755
	SHS	267	1,358
Child Development	DSR	686	496
	WSOLC	29	27

Despite service overlaps across focus areas, over 90% of the recipients in Table 18 are supported by programs in *Family Functioning*. In comparison, most programs in *Focus Area I: Child Health* are countywide in nature. The majority of service providers in *Focus Areas II* and *III* are FRCs and community-based agencies. Due to the emphasis on program support, parent education outcomes in *Focus Area II* are presented below. The last part of this chapter addresses results in *Focus Area III, Early Childcare and Education.*

Establishment of Parenting Beliefs against Child Maltreatment

Depending on program capacities, FRC services include court-mandated parent education, nutrition instruction, financial training, school readiness preparation, nurse consultation, transportation support, and legal assistance. The well-rounded support is demonstrated by a list of nearly two dozen partners in FRC brochures for program referrals pertaining to (1) medical, dental, and mental health treatment, (2) child developmental screening, (3) parent employment and education, (4) household utility and rental assistance, (5) domestic violence prevention, (6) family insurance application, (7) health screening, and (8) clothing, food, shelter, and other emergency/safety support.

Table 19: Participant Count in Court-Mandated Parent Education

Focus Area	Program	Parent
Family Functioning	EKFRC	18
	KRVFRC	21
	LVSRP	12
	OFRC	12
	SHS	11
	SENP	52
Child Development	NPCLC	20

Guided by its strategic plan, First 5 Kern funded court-mandated parent education in seven center-based settings: (1) East Kern Family Resource Center (EKFRC), (2) Kern

River Valley Family Resource Center (KRVFRC), (3) Lamont Vineland School Readiness Program (LVSRP), (4) Neighborhood Place Community Learning Center (NPCLC), (5) Oasis Family Resource Center (OFRC), (6) Shafter Healthy Start (SHS), and (7) Southeast Neighborhood Partnership Family Resource Center (SENP). Altogether, these programs are classified in two focus areas to offer the much-needed service for 146 parents (Table 19), exceeding the annual target of 110 parents (RI 2.2.1).

Improvement of parental belief is supported by court-mandated parent education according to positive norms of nurturing parenting. To evaluate the outcome, researchers identified a norm-referenced Adult-Adolescent Parenting Inventory-2 (AAPI-2.1) for measuring attitudes and beliefs about parenting and assessing parental knowledge of child development (Berg, 2011; Moore & Clement, 1998). Samuelson (2010) noted, "Effective parent education programs have been linked with decreased rates of child abuse and neglect, better physical, cognitive and emotional development in children, increased parental knowledge of child development and parenting skills" (p. 1). Constructs of the AAPI-2.1 assessment reflect five parent beliefs on child maltreatment:

A. Inappropriate developmental expectations of children
B. Lack of parental empathy toward children's needs
C. Strong parental belief in the use of physical punishment
D. Reversing parent-child family roles
E. Oppressing children's power and independence

Besides First 5 Kern, at least nine other First 5 county commissions employed AAPI-2.1 to evaluate the effectiveness of parent education.[27] The instrument was recommended by California Evidence-Based Clearinghouse for Child Welfare (2014). "Responses to the inventory provide an index of risk of behaviors known to be attributable to child abuse and neglect" (First 5 California, 2021b, p. 37). In FY 2021-2022, AAPI-2.1 results are gathered from pretest and posttest sessions to track 227 data records, more than doubling the count of 108 last year.

Table 20: Significant Improvement of Parental Belief in SENP and SHS

Program*	Construct	Result
SENP	A	t(36)=5.65, p<.0001; Effect Size=1.88
	B	t(36)=8.23, p<.0001; Effect Size=2.74
	C	t(36)=6.03, p<.0001; Effect Size=2.01
	D	t(36)=7.98, p<.0001; Effect Size=2.66
	E	t(36)=5.14, p<.0001; Effect Size=1.71
SHS	A	t(6)=3.01, p=.0236; Effect Size=2.46
	B	t(6)=4.69, p=.0033; Effect Size=3.83
	C	t(6)=3.81, p=.0089; Effect Size=3.11
	D	t(6)=4.10, p=.0063; Effect Size=3.35
	E	t(6)=6.22, p=.0008; Effect Size=5.08

*Program full names are listed in Appendix A.

Among the 12 records of AAPI-2.1 in EKFRC, only three parents had their responses tracked between the pretest and posttest. The achieved sample size is too small for a statistical analysis of the result improvement. Meanwhile, a significant impact has been

[27] These nine other counties are Los Angeles, Madera, Sacramento, San Bernardino, Santa Barbara, Santa Cruz, Solano, Shasta, and Tuolumne.

demonstrated in all AAPI-2.1 constructs by SHS at α=.05 and SENP at α=.0001. All effect sizes in Table 20 are larger than 0.80 to suggest strong practical impacts from these programs.

In addition, KRVFRC, LVSRP, NPCLC, and OFRC demonstrate significant improvement of Construct B on parental empathy toward children's needs. Table 21 also shows a significant enhancement of Construct C on parental belief in the use of physical punishment at KRVFRC. NPCLC illustrates a significant improvement of Constructs D and E on *parent-child family roles* and *children's power or independence* (Table 21). Effect sizes are strong for these results to suggest a practical impact of the program support.

Table 21: Aspects of Significant Impact from KRVFRC, LVSRP, NPCLC and OFRC

Construct	Program*	Result
B	KRVFRC	t(16)=3.43, p=.0034; Effect Size=1.88
	LVSRP	t(8) = 2.47, p=.0390; Effect Size=2.74
	NPCLC	t(11)=4.54, p=.0008; Effect Size=2.01
	OFRC	t(6) = 5.92, p=.0010; Effect Size=2.66
C	KRVFRC	t(16)=2.65, p=.0176; Effect Size=2.46
D	NPCLC	t(11)=3.19, p=.0086; Effect Size=2.01
E	NPCLC	t(11)=4.57, p=.0008; Effect Size=2.01

*Program full names are listed in Appendix A.

Court-mandated parenting classes are typically linked to cases of marriage dissolution involving minor children.[28] "A critical factor in offering children from the effects of toxic stress and adverse childhood experiences is the existence of supportive, stable relationships between children and their families, caregivers, and other important adults in their lives" (Bocanegra, 2014, p. 3). Due to the impact on different stakeholders, the services are supported by programs in both *Family Functioning* (i.e., EKFRC, KRVFRC, LVSRP, SHS, and SENP) and *Child Development* (NPCLC).

In summary, the complexity of family functioning has made no program interventions equally effective across the AAPI-2.1 constructs. Table 20 indicates that the positive impact on *Construct A* only occurred in SENP and SHS. While their effect sizes are strong in all AAPI-2.1 construct improvements, KRVFRC, LVSRP, NPCLC, and OFRC only have significant effects on some of the constructs. EKFRC are excluded from the statistical analyses because of its small sample.

Restoration of Family Functioning for Child Protection

Besides the importance of parent education, external intervention is sometimes needed to improve family functioning for child protection. For instance, Children Now (2018) pointed out,

> Children need access to quality, affordable mental health care and supports that monitor and treat mental illness, help kids build positive relationships, assist kids who have experienced trauma, and give kids the ability to face typical stressors with resilience. (p. 37)

First 5 Kern funded four programs to improve family functioning for early childhood

[28] https://clevelandstatecc.edu/training/continuing-education/parenting-and-divorce-workshops.html

protection. The result tracking is reported in this section to gauge program effectiveness.

1. DR Service to Strengthen Child Protection

In FY 2021-2022, DR uses the North Carolina Family Assessment Scale for General Services (NCFAS-G) to monitor improvement of family functioning on eight dimensions, *Environment, Parental Capabilities, Family Interactions, Family Safety, Child Well-being, Social/Community Life, Self-Sufficiency*, and *Family Health*. The assessment is conducted across 109 families from urban, suburban, and rural communities to track changes. The reliability index, as represented by Cronbach's alpha, has reached 0.93 to confirm consistency of the gain score measures.

Table 22 shows effect sizes between 0.30 and 0.80 for a medium program impact. In particular, an effect size of 0.72 in found on the *family safety* indicator, suggesting a relatively stronger practical impact of DR on child protection. Statistical testing also indicates a highly significant difference from DR support at α=.0005. In addition, DR shows significant program influences at α=.05 on NCFAS-G indicators of *Environment, Parental Capabilities, Family Interactions, Social/Community Life, Self-Sufficiency*, and *Family Health*.

Table 22: Impact of DR Services on the NCFAS-G Scales

Scale Domain	Results	
Environment	t(108)=2.31, p=.0227;	Effect Size=0.44
Parental Capabilities	t(108)=2.27, p=.0252;	Effect Size=0.44
Family Interactions	t(108)=3.53, p=.0006;	Effect Size=0.68
Family Safety	t(108)=3.73, p=.0003;	Effect Size=0.72
Child Well-Being	t(108)=1.92, p=.0574;	Effect Size=0.34
Social/Community Life	t(108)=2.25, p=.0268;	Effect Size=0.43
Self-Sufficiency	t(108)=3.33, p=.0012;	Effect Size=0.64
Family Health	t(108)=2.69, p=.0083;	Effect Size=0.52

2. DVRP Support to Reduce Domestic Violence

DVRP provides a full range of legal assistance for child protection. Upon case identification, DVRP assigns a supervising attorney and a paralegal to examine the issue of a child's exposure to domestic violence. Feasible plans are implemented to protect children and other victims with *substantiated abuse* experiences. The service also includes interpretation support for clients in 21 languages.[29] In FY 2021-2022, DVRP supported 136 parents or guardians (RI 2.1.6) and 182 children (RI 2.1.9) to prevent domestic violence, child abuse and/or neglect.

At end of the DVRP services, 33 victims of domestic violence responded to a program survey. All of them "agreed" or "strongly agreed" to the following six statements:

- My sense of safety and peace of mind have been restored;
- The child(ren) live in a safe environment;

[29] http://gbla.org/about-gbla/history/

- The child(ren) live in a stable environment;
- The child(ren) are no longer exposed to domestic violence;
- I know my rights and protections as a victim of domestic violence; and
- The child(ren) in the household are not subjected to abuse and/or neglect.

The strong consistency of the responses is reconfirmed by Cronbach's alpha index of 0.99. Since "Child abuse and neglect present serious threats to children's well-being" (Children Now, 2018, p. 45), the results suggest a key role of DVRP in reducing child victimization and repairing family functioning as prescribed by RI 2.1.6 and 2.1.9 of First Kern's (2021) strategic plan.

3. GCP Services for Child Protection

In the United States, around 2% of children are raised by grandparents (Bera, 2020). The situation is often related to a home setting with drug abuse, parent divorce/decease, domestic violence, or psychiatric illness. While legal procedures are established to serve adult victims of domestic violence, "increasing attention is now focused on the children who witness domestic violence" (Bragg, 2003, p. 5). GCP assists caregivers to prevent abuse or neglect of children ages 0-5 through establishment of guardianship protection. The services include (1) representation of prospective caregivers in preparing guardianship petitions, (2) responding to objections, (3) planning for mediations and guardianship hearings, and (4) completion of post-hearing letters and orders.

For more than a decade, the rate of child abuse/neglect in Kern County has been around 9.2%, while the state rate was kept under 7%.[30] To close the gap, GCP offered services to 197 guardians and 241 children to prevent domestic violence, child abuse and/or neglect (RI 2.1.6, 2.1.9), surpassing the corresponding targets of 180 and 200, respectively. "When a child cannot be returned home and adoption is not in the child's best interests, then guardianship is considered to be a more permanent plan for a child" (KCNC, 2016, p. 50).

For GCP program evaluation, exit survey data were gathered from 65 clients this year. All respondents "agreed" or "strongly agreed" to the following statements:

- The child(ren) live in a safe environment;
- The child(ren) live in a stable environment;
- I am able to access medical services for the child(ren) in the household
- I am able to access mental health treatment for the child(ren);
- I am more knowledgeable about the duties, rights, and responsibilities of legal guardianship; and
- The child(ren) in the household are not subjected to abuse and/or neglect.

The Cronbach alpha index reached 0.86 to indicate adequate consistency of the responses.

The case management has achieved its intended goal to establish a stable environment for grandchildren and support family access to medical homes, health or mental health services, and preschool education. The settlement is important because "A child that has a stable placement or finds a permanent home, through reunification with

[30] www.Kidsdata.org

parents, guardianship or adoption, is more likely to receive the services and supports they need to heal and thrive" (Children Now, 2018, p. 47).

4. Collaborative Interventions on Family Support

Mental health support requires collaborative efforts in social emotional screening and service referrals. As Bates et al. (2006) projected, "Overall, the work of First 5 has critical implications for the way that early disabilities and developmental delays are identified and approached. Early identification and treatment will likely have profound impacts on the special education system" (p. 53). As an outcome measure, Ages and Stages Questionnaires®: Social-Emotional, second edition (ASQ:SE-2) is employed to help professionals of home visiting, early intervention, and child welfare screen and assess infants and young children in the area of social-emotional development.

The ASQ:SE-2 data contain 482 cases, including 30 children born prematurely, from seven programs. OFRC data are collected from only two boys, and both indicated no concern on social emotional status. While the sample size is too small for a statistical analysis of OFRC results, Table 23 contains findings of analyzing the remaining ASQ:SE-2 data from the remaining programs, Discovery Depot Child Care Center (DDCCC), HLP, HMG, MCFRC, NFP, Small Steps Child Development Center (SSCDC), and WSN. All effect sizes are larger than 0.80 to show strong practical importance of the program support on the screening results.

CASA assists infants and toddlers to overcome the impact of child abuse and/or neglect. Although the sample size is relatively small (i.e., N=10), children scored significantly lower than the ASQ:SE-2 threshold at α=.001. The *large effect size* and *90% passing rate* indicate strong practical influences of CASA in keeping children below the thresholds for mental health referrals. HMG and HFP are also affiliated in the focus area of *Child Health*. HMG offers screening options *online* or *over the phone* through 2-1-1 Kern County. NFP provides home visiting services to support low-income, first-time mothers at *prenatal* and *infant care* stages. Both *center-based* and *home-based* programs show ASQ:SE-2 scores significantly below the threshold at α=.005.

Table 23: Percent of Children with Screening Results below Referral Thresholds

Program	Descriptive Statistics		Statistical Testing			
	N	Percent	Df	t	p	Effect Size
CASA	11	91	10	4.16	.0020	2.63
DDCCC	22	100	21	7.70	<.0001	3.36
HLP	70	86	69	6.10	<.0001	1.45
HMG	281	90	280	22.20	<.0001	1.32
MCFRC	10	90	9	1.64	.1346	1.09
NFP	43	93	42	11.85	<.0001	3.66
SSCDC	29	90	28	7.10	<.0001	2.68
WSN	25	60	24	1.31	.2014	0.87

*Program full names are listed in Appendix A.

MCFRC and WSN are programs of *Family Functioning*. The ASQ:SE-2 data from MCFRC fail to reach statistical significance at α=.05 because of a small sample. However, its effect size is larger than .80, indicating the screening scores practically below the age-specific threshold. Thus, the results confirm a good mental status of the children according

to the social-emotional screening. Due to the prior exposure of its clients to domestic violence, WSN shows the lowest percentage of children below the ASQ:SE-2 thresholds than any other programs. In addition, DDCCC, HLP, and SSCDC are programs of *Child Development*. Children demonstrated a passing rate of 86% in HLP, 90% in SSCDC, and 100% in DDCCC.

In summary, ASQ:SE-2 screening has been administered in eight programs across three focus areas. Depending on the service features, the rate of healthy social-emotional screening results remains in a range from 60% in WSN to 100% in DDCCC. The analyses also indicate a need to gather more data for verification of the insignificant findings from MCFRC (Table 23).

5. Case Management Services for General Family Support

General case management is supported by 18 programs to extend services to children of the general population in Table 24, except for MVIP that is exclusively focused on medically vulnerable children. While the infant support in BIH and NFP, as well as dental services in KCCDHN, demand individualized attention, all other programs offer family-based support to reflect the emphasis of result reporting in *Parent Education and Support Services*. Altogether, 543 families (RI 2.1.4) and 1,013 children (RI 2.1.7) received general case management support in FY 2021-2022, surpassing the corresponding target count of 463 families and 700 children.

Table 24: General Case Management Support across Eighteen Programs*

Focus Area	Program	Family Count	Child Count
Child Health	BIH	--	38
	KCCDHN	--	311
	MVIP	50	--
	NFP	--	53
	RSNC	29	29
Family Functioning	AFRC	25	30
	BCRC	15	14
	EKFRC	33	40
	GSR	34	36
	KRVFRC	63	69
	LVSRP	33	46
	MCFRC	37	42
	MFRC	33	51
	OFRC	32	44
	SENP	74	93
	SHS	17	27
Child Development	DSR	18	28
	LHFRC	15	15
	WSOLC	35	47

*Program full names are listed in Appendix A.

Implementation of Nurturing Parenting Curriculum in Parent Education

According to Stephen Bavolek (2000), the Nurturing Parenting (NP) curriculum

developer, parenting patterns are learned in childhood and replicated later in life when children become parents. Thus, negative experiences may engulf children in parenting models of abuse, neglect, exploitation, and victimization. The NP curriculum is considered a high-quality program and has been employed in both court-mandated and non-court-mandated parent education settings. Due to its impact on improving parenting skills, the Departments of Army and Navy utilize the NP program to enhance parenting skills for first-time parents in military bases worldwide (Family Development Resources, 2015). NP has also been recognized as an effective approach by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the National Registry for Evidence-based Parenting Programs (NREPP).

In FY 2021-2022, NP workshops were offered to remediate five maltreatment patterns: (1) having inappropriate developmental expectations of children, (2) demonstrating a consistent lack of empathy towards meeting children's needs, (3) expressing a strong belief in the use of corporal punishment and utilizing spanking as their principle means of discipline, (4) reversing the role responsibilities of parents and children, and (5) oppressing the power and independence of children by demanding strict obedience (Schramm, 2015). The NP materials on the *Infant, Toddler, and Preschooler* track are available in six languages, including English and Spanish. There is no minimum education requirement for program training.

Across Kern County, AFRC, BCRC, DSR, GSR, and MFRC used NP in non-court-mandated parent education. A three-day training was sponsored by First 5 Kern to introduce NP concepts and procedures to the FRC staff. Each workshop lasted 120 minutes. A variety of topics were presented in the workshops to improve positive lifestyles, design appropriate expectations, strengthen mutual understandings, develop self-concepts, establish family values, and handle discipline issues. An unduplicated count of 129 parents participated in the workshops (RI 2.2.2), above the target of 120 parents across five program sites (AFRC, BCRC, DSR, GSR, MFRC). Specific goals have been set for these workshops in Table 25.

Table 25: Goals of Nurturing Parenting Workshops

Workshop	Goal
1	Increase parent's knowledge of nurturing parenting and nurturing as a lifestyle
2	Increase parent's awareness of appropriate expectations of children
3	Increase parents' ability to promote healthy brain development in their children
4	Help parents recognize and communicate their feelings and their child's feelings
5	Improve parent's and children's self-worth and self-concept
6	Help parents recognize and understand their feelings and their child's feelings
7	Increase parents' skills in developing family morals, values, and rules
8	Increase parents' understanding of the importance of praise
9	Increase parents' awareness of other ways to discipline besides spanking
10	Increase parents' ability to recognize and handle stress

Participants were asked to rate the usefulness of the workshops on a five-point scale with 5 representing the most positive result. Table 26 showed the range of average

ratings between 4.43 and 4.83. The result reconfirmed usefulness of workshop contents.

Table 26: Mean Ratings on the Usefulness of NP Workshops

Workshop	N	Mean
1	99	4.66
2	93	4.57
3	79	4.57
4	65	4.43
5	71	4.65
6	72	4.65
7	53	4.83
8	51	4.78
9	42	4.55
10	46	4.63

The 10 workshops were also offered in sequence. First, a feedback survey for Workshop 1 included two questions on practicing the concept of nurturing parenting:

- Before this workshop, how much did you practice the concepts of nurturing parenting?
- How likely are you to practice the concepts you learned today?

At the concluding section of parental training, two additional questions were employed in Workshop 10 to assess the learning outcomes:

- As a result of today's workshop, how do you feel about your ability to handle your own stress in positive ways?
- As a result of today's workshop, how do you feel about your ability to help your child or children handle their stress in positive ways?

On average, Table 27 showed that participants initially practiced nurturing parenting concepts at 3.85, below a scale value of four for the "some/a lot" category. After the first workshop, the value increased to 4.58, approaching "a lot" of practice at the highest level. At conclusion of the 10th workshop, parents reported that they gained "some" or "a lot of" ability to handle own stress in positive ways. More importantly, participants seemed to have more confidence in helping children handle stress.

Table 27: Mean Ratings on Special Survey Items for Workshops 1 and 10

Item	N	Mean
Practice nurturing parenting before Workshop 1	99	3.85
Practice nurturing parenting after Workshop 1	99	4.58
Ability to handle own stress after Workshop 10	46	4.37
Ability to help child handle stress after Workshop 10	46	4.48

While Workshops 1 and 10 served as the introduction and conclusion sessions, Workshop 9 was designed to increase parents' awareness of alternative ways to discipline children besides spanking. Perhaps because the alternative ways were not clearly defined, no significant changes occurred in parent awareness as an outcome [t(41)=.20, p=.8458]

at α=.05. The result was reconfirmed by a weak effect size of .06 for little practical impact. Workshop 2 was intended to increase parent's awareness of appropriate expectations of children. The appropriateness could be child-specific, and was difficult to expect at a group level. Thus, no significant difference was observed in the pre/post surveys of workshop outcome [t(92)=1.06, p=.2938]. The effect size, as represented by Cohen's d, was .22, suggesting a weak practical impact. Because *awareness* fits the basic level of Bloom's taxonomy below more advanced categories, such as *understanding* and *application*, it is expected to observe no profound impact from Workshops 2 and 9.

Table 28: Increase of Participant Knowledge on the Content of Workshops 3-8

Workshop	Pretest Mean	Posttest Mean	t*	Effect Size
3	2.70	4.16	8.41	1.90
4	3.35	4.38	8.45	2.11
5	3.52	4.77	7.95	1.90
6	3.50	4.57	6.64	1.58
7	3.51	4.55	4.85	1.35
8	3.90	4.86	6.17	1.75

*Based on N and t values in Table 26, all p values are less than .0001.

For Workshops 3-8, Table 28 showed highly significant improvement (i.e., α=.0001) in parental learning outcomes between pretest and posttest surveys. Effect sizes were computed to assess the practical impact of workshop training beyond statistical testing. All effect sizes were larger than 0.80, suggesting a strong impact of these workshops this year.

The value of NP workshops reconfirms an assertion of Bowman, Pratt, Rennekamp, and Sektnan (2010), i.e., "investments in high-quality parenting education will be among the best investments any community can make" (p. 8). Through the NP workshop offerings, positive impacts occurred in parent education to support child development. Thus, First 5 Kern funding has reached its original goal in *Family Functioning*, i.e., "Families and communities are engaged, supported, and strengthened through culturally effective resources and opportunities that assist them in nurturing, caring, and providing for their children's success and well-being" (First 5 California, 2014, p. 7).

Strengthening Commitment to Caregiver Training

FCP offers family support training to friends, caregivers, and parents. The effectiveness of the training is evaluated by participants before and after the workshop. On a five-point scale with 1 representing responses of "little" and 5 for "a lot", the anonymous feedback shows an increase in the average rating from 3.66 to 4.24 on an item regarding participant's *knowledge about strategies for raising children*. Similar knowledge acquisitions occurred in the FCP responses on improvement of participant preparation for CPR, First Aid, stress identification and management, effective ways of communication, and awareness of available activities for child support. A total of 205 respondents, 119 before the workshop and 86 after the workshop, participated in the evaluation data gathering. More participants recognized the importance and great impact of their work after the workshop.

In addition, FCP incorporated audiovisual learning aids to develop TALK (i.e., Tell, Ask, Listen, and KeepSafe) steps for the caregiver's first-hand skill development.[31] In an impact story, FCP worked with a mother who recognized certain signals and changes in her son. Based on what she learned about the stages of child growth from the program, she visited a pediatrician to report a potential delay of communication and language development. The timely attention has resulted in satisfactory solutions to some of the issues with a long-term impact in child growth (Ibid. 4).

Adoption of *Raising a Reader* Curriculum for Caregiver Engagement

Although it is generally agreed that reading is essential for cognitive development, good reading instruction is rarely available to disadvantaged Latino students (Jacobson, 2021). As an innovative approach, a *Raising a Reader* (RAR) curriculum is adopted by BCRC to engage caregivers in a routine of book sharing with their children. Survey data are gathered from 15 RAR participants. The majority (or 73.3%) of families earn an annual income under $50,000, and only 20% of the adults are exposed to education beyond high school. English language development is needed for 93.3% of the children with Hispanic/Latino ethnicity.

RAR has an instructional strategy to foster healthy brain development, healthy relationships, a love of reading, and literacy skills critical for school success. Through the program intervention, respondents indicated that 26.7% of the parents had no difficulty sharing books with children on a regular basis. Typically, 10 minutes were spent each time when books were looked at by readers and children. The program demonstrated features of:

- letting children choose what to read by 80% of the parents;
- talking about new words and what they meant by 6.7% of the parents;
- using different voices for different characters in the story by 3.3% of the readers.

In reaction, children engaged attentively in the RAR activities. In particular, the survey respondents reported the following observations about children:

- 93.3% paid much attention to the story;
- 80.0% turned pages of the book;
- 46.7% asked questions about the book;
- 33.3% read the book to parents or told them a story about the pictures;
- 20% wanted to read the book again.

RAR is held by BCRC as an evidence-based, scalable, and affordable program. It is also backed by 39 independent evaluation projects to document the learning impact over time and across diverse settings.[32] On average, the result indicated that children asked to *look at books 10 times per week*.

In summary, among 17 programs in *Family Functioning*, First 5 Kern sponsored court-mandated and non-court-mandated parent education at 12 FRCs across Kern County. A total of 805 parents participated in educational workshops from 14 programs across three focus areas (RI 2.2.3), exceeding the total target of 594 parents. AAPI-2.1,

[31] https://visionycompromiso.org/what-we-do/training/
[32] https://www.raisingareader.org/

RAR, FCP, and NP workshop data were analyzed to show effective services of program training in early childhood support. In delivering the service on child protection, parent/guardian reports were employed to indicate program outcomes after the DR, DVRP, and GCP interventions. The positive impact of DR was illustrated by the NCFAS-G results. Meanwhile, ASQ:SE-2 data were analyzed from CASA, HLP, HMG, MCFRC, NFP, and WSN to determine the need for mental health referrals. Based on these findings, children are not only well-protected in their living environment, but also fully supported for reading literacy and social emotional development.

(III) Funding Impact in *Child Development*

According to the National Association for the Education of Young Children (NAEYC) (2020), "Children are active learners from birth, constantly taking in and organizing information to create meaning through their relationships, their interactions with their environment, and their overall experiences" (p. 11). To expand the early learning opportunity, First 5 Kern channeled $522,713 of IMPACT (Improve and Maximize Programs so All Children Thrive) grant, more than $509,350 last year, from the state commission to increase the number of high-quality early learning initiatives, including engaging families in the early learning process. As Melnick, Meloy, Gardner, Wechsler, and Maier (2018) recollected,

> First 5 California approved $190 million in funding to support quality improvement efforts through First 5 IMPACT (Improve and Maximize Programs so All Children can Thrive). While some county commissions are deeply involved in this work, others pass through funds to another county-level agency. (p. 7)

First 5 Kern is among the "deeply involved" county commissions to promote IMPACT in early childhood education.

In the focus area of *Early Childcare and Education*, two general domains of the state report glossaries have been addressed: [1] Quality Early Learning Supports (QELS) and [2] Early Learning Programs (ELP). In FY 2021-2022, the commission designated $484,600 to QELS and $1,204,569 to ELP. Including the investment from IMPACT, the total program spending in FY 2021-2022 adds to $2,211,882, larger than $1,652,715 last year. Meanwhile, 10 service providers in *Child Development* leveraged $291,661 to sustain the capacity building (Table 29).

Table 29: Leveraged Funds by Programs in *Child Development*

Program	Sustainability Funds
Blanton Child Development Center	$73,296
Delano School Readiness	$44,370
Discovery Depot Child Care	$9,000
Health Literacy Program	$29,752
Lost Hills Family Resource Center	$1,000
Neighborhood Place CLC	$52,260
Small Steps Child Development Center	$14,000
South Fork Preschool and Daycare Center	$20,445
West Side Outreach and Learning Center	$17,255
Wind in the Willow Preschool	$30,283

Following its strategic plan, First 5 Kern funds HLP to offer monthly parent and child workshops for promoting interactive learning and reading strategies. Parents are given take-home health kits to expand knowledge of early developmental milestones and child behavioral norms. BCDC, DDCCC, and SSCDC support early childcare for families with special needs. In particular, BCDC works with parenting teens, SSCDC serves children with exposure to domestic violence, and DDCCC supports homeless families. For instance, the DDCCC program cited experiences of a mother to document the positive impact:

> one of the parents in our infant toddler class has gained employment and moved out of the shelter. She is now motivated and ready to create a better environment for her family. She demonstrates interest in her child's growth and constantly asks questions and participates in any activities involving her child. Even during the distance learning period for her older children, she made sure to keep them on task and help them with their academic life. These programs jointly promote parent education, early childhood reading literacy, and school readiness across Kern County. (Ibid. 4)

In service outreach, First 5 Kern funds South Fork Preschool (SFP) and Wind in the Willows Preschool (WWP) to sponsor school readiness and developmentally appropriate activities in rural communities of Boron, Kern River Valley, Lake Isabella, and Mojave Desert. These programs extend quality daycare and early education to traditionally-underserved children ages 3 to 5.

In supporting the law of compulsory education, First 5 Kern sponsors 11 programs for preschool preparation that ensure the best possible start in life and thrive for all children at the point of kindergarten entry. Four of the programs are affiliated with Focus Area III: *Early Childcare and Education*:

1. Delano School Readiness (DSR)
2. Lost Hills Family Resource Center (LHFRC)
3. Neighborhood Place Community Learning Center (NPCLC)
4. West Side Outreach and Learning Center (WSOLC)

DSR and LHFRC were originated from a First 5 California School Readiness Initiative (SRI). In addition, First 5 Kern supported development of Summer-Bridge classes across eight programs in Focus Area II: *Parent Education and Support Services*:

1. Arvin Family Resource Center (AFRC)
2. Buttonwillow Community Resource Center (BCRC)
3. East Kern Family Resource Center (EKFRC)
4. Greenfield School Readiness (GSR)
5. Lamont Vineland School Readiness Program (LVSRP)
6. McFarland Family Resource Center (MFRC)
7. Oasis Family Resource Center (OFRC)
8. Shafter Healthy Start (SHS)

The partnership building has merged services across focus areas. Similar to the eight programs that extend the SRI services with a primary focus on parent education, the four programs in *Child Development* also provide direct family support services through case management, referral support, and parent education on developmental

milestones and norms. The alignment between RI designation and service description is summarized in Table 30. Service outcomes are examined in the following sections to assess effectiveness of these center-based, home-based, and Summer-Bridge programs, as well as individualized support services for children with special needs.

Table 30: Service Description and RI Designation in Child Development

Objective	Service Description	RI Designation
[1]	Home-Based, Center-Based, and Summer-Bridge Childcare and Education	Child Service Access
[2]	Accommodation of Children with Special Needs and During Non-Traditional Hours	Service Availability

In summary, First 5 Kern's support for *Child Development* has addressed two objectives: (1) Children will enter school prepared as a result of their participation in early childhood education and childcare services, and (2) Children under special circumstances (e.g., non-traditional hours and/or children with special needs) are given access to early childhood education and childcare services (First 5 Kern, 2021). In the current strategic plan, multiple Result Indicators (RI) have been specified to link **Objective 1** to service outcomes of home-based, center-based, and Summer-Bridge programs (RI 3.1.1-3.1.3, Ibid. 15). **Objective 2** aims at the service access by children with special needs (RI 3.2.1, Ibid. 15) and/or during non-traditional hours (RI 3.2.3, Ibid. 15).

Table 31: Delivery of Early Education Services on Center-Based Platforms

Focus Area	Program*	Count
Family Functioning	EKFRC	27
	GSR	57
	MFRC	31
	SHS	35
Child Development	BCDC	18
	DDCCC	35
	DSR	26
	HLP	71
	LHFRC	25
	NPCLC	106
	SFP	35
	SSCDC	36
	WSOLC	24
	WWP	31

*Program full names are listed in Appendix A.

Capacity of Program Support in Child Development

Because program capacities are interconnected, First 5 Kern-funded programs may incorporate multiple services across focus areas, which fit the original purpose of making FRCs function as a one-stop hub in local communities (Thompson & Uyeda, 2004). In Table 31, center-based service counts are listed for 14 programs across two focus areas.

They have collectively provided education services for 557 children, more than 479 children last year (RI 3.1.1).

First 5 Kern also funds home-based education services. These programs are located in different communities (Table 32). In FY 2021-2022, BCRC, EKFRC, DSR, LHFRC, and OFRC deliver home-based education for 114 children, above the target of 83 children (RI 3.1.2). In the community served by DSR, some families opt for in-person, center-based services. Therefore, the participant count is nine for home-based services, below the annual target for DSR. Nonetheless, the number has substantially increased from five last year.

Table 32: Delivery of Early Education Services on Home-Based Platforms

Focus Area	Program Program*	Child Count Participant	Child Count Target
Family Functioning	BCRC	8	8
	EKFRC	46	15
	OFRC	36	15
Child Development	DSR	9	15
	LHFRC	15	10

*Program full names can be found from Appendix A with the acronyms.

Exhibit 3: Different Service Sites Funded by First 5 Kern Commission

Home-Based Learning

Center-Based Learning

Summer Bridge Program

Special Need Support

Exhibit 3 contains photos of different early childhood supports. Besides the learning opportunities in home, classroom, and group settings, the last photo shows a child with special needs enjoying dinosaur inquiries with a service provider. While programs of home-based learning provide individualized developmental activities, center-based learning incorporates a common curriculum to allow group collaboration. Summer bridge programs are structured in a classroom setting for preparation of kindergarten entry.

Besides the broad-based support across *Child Health, Family Functioning*, and *Child Development*, program offerings are not delimited to part-day or part-year care. In particular, SSEC served 27 children in center-based education activities during non-traditional hours (RI 3.2.3), exceeding the target of 20 children. SFP partnered with SSEC to serve 39 children with special needs in educational center-based activities (RI 3.2.1), above the service count of 31 children last year.

Similar flexibilities have a broad impact on improving the state economy that shows a low share of female workers under a hefty burden of child care (Miller, 2019). In recent years, families on average spend more on childcare than on housing, healthcare, food, and college (Bonello, 2019). Without First 5 Kern support during non-traditional hours, local families have to use private service providers. Consequently, "Those needing care beyond that time must pay the high price for full care in private centers. This creates inequality in expendable income in families with children and puts a heavier burden on women who work" (Drake, 2008, p. 4). Hence, early childhood support from First 5 Kern has removed a long-lasting barrier for local families.

In summary, the commission led countywide efforts to champion wide-ranging support for early childhood education across valley, mountain, and desert communities. "Children who attend preschool are not only more prepared for kindergarten but some also say children are better set up for the rest of their lives" (Mauskopf, 2019, p. 2). To strengthen school readiness for children from different family backgrounds, result indicators have been monitored on the quality of home-based, center-based, and Summer-Bridge programs. By design, these services have addressed persistent issues of program access by children *with special needs* and/or *in remote locations*.

Table 33: Instruments for Data Collections in Focus Areas II & III

Instrument	Feature	Population
ASQ-3	Age-appropriate measures to assess child development in *Communication, Gross Motor, Fine Motor, Personal-Social*, and *Problem-Solving* domains.	Ages 0-5
CASB	Value-added assessment in child *Communication, Cognitive, Self-Help, Scientific Inquiry, Social Emotional* and *Motor* skills.	Ages 4-5
DRDP-IT/Preschool View-Modified Essentials	Indicators of *Approaches to Learning – Self-Regulation, Cognition, Language and Literacy Development, Physical Development-Health, and Social and Emotional Development*.	Infant or Toddler; Preschooler
DRDP-PS Fundamental/ Comprehensive Views	Indicators of *Approaches to Learning – Self-regulation, Cognition, History-Social Science, Language and Literacy Development, Physical Development-Health, Social and Emotional Development,* and *Visual and Performing Arts*.	Preschooler

Assessment of Program Outcomes in Early Childhood Education

In FY 2021-2022, assessment data have been gathered from pretest and posttest settings to track program improvement. Instruments employed in this section include ASQ-3, CASB, Desired Results Developmental Profile (2015) (DRDP) - Infant/Toddler (IT) View, DRDP-IT/Preschool (PS) - Modified Essentials, DRDP-PS/Fundamental View, and DRDP-PS/Comprehensive View. Features of the data collection are listed in Table 33 to support result tracking in early childhood development.

1. ASQ-3 Findings

Among programs funded by First 5 Kern, 24 service providers track developmental status against age-specific thresholds for 1,464 children during Months 2-60. In Section (I) of this chapter, ASQ-3 findings were reported statistically for 429 children from CASA, HMG, MVIP and NFP programs to examine developmental delays in *Health and Wellness*. BIH appeared to be an exception for having a single case in its data. This section is devoted to presentation of ASQ-3 findings from 934 children, 743 from 12 programs in *Focus Areas II: Parent Education and Support Services* and 291 children from seven programs in *Focus Areas III: Early Childcare and Education* (Table 34).

Table 34: Scope of ASQ-3 Data Collection in Focus Areas II & III

Focus Area	Program*	Months	Sample Size
II	AFRC	2-60	50
	BCRC	2-60	34
	EKFRC	2-60	40
	GSR	33-60	54
	KRVFRC	2-60	113
	LVSRP	2-60	66
	MCFRC	2-60	23
	MFRC	8-60	79
	OFRC	2-60	46
	SENP	2-60	163
	SHS	2-60	52
	WSN	6-60	23
III	BCDC	4-33	30
	DDCCC	12-60	22
	DSR	2-60	31
	LHFRC	18-60	42
	NPCLC	2-60	90
	SSCDC	6-60	42
	WSOLC	42-60	34

*Program acronyms are listed in Appendix A.

The ASQ-3 measures comprise child growth indicators in *Communication* (COM), *General Motor* (GM), *Fine Motor* (FM), *Personal-Social* (PerS), and *Problem-Solving* (ProS) domains. Table 35 shows that a couple of programs have reached a 100% passing rate in COM, GM, and ProS. These domains also include relatively low rates below 80%. In contrast, ranges of the passing rate are 12.5 in PerS and 17.9 in GM, much smaller than the ranges for COM, FM, and ProS. The results indicate that young children develop these skills at different paces. Hence, it is important to design programs that are age-

appropriate to close learning gaps at the early stage.

Table 35: Percent of Children with Performance Level above ASQ-3 Threshold

Focus Area	Program*	COM	GM	FM	PerS	ProS
II	AFRC	90.0	72.0	92.0	84.0	94.0
	BCRC	89.7	89.7	72.4	93.1	96.6
	EKFRC	95.0	85.0	82.5	85.0	100
	GSR	96.3	82.5	77.8	92.6	96.3
	KRVFRC	87.6	83.2	74.3	80.5	89.4
	LVSRP	89.2	89.2	76.9	92.3	93.8
	MCFRC	100	82.6	87.0	95.7	95.7
	MFRC	91.1	79.7	65.8	92.4	92.4
	OFRC	62.2	75.6	77.7	75.6	82.2
	SENP	91.9	93.2	96.3	94.4	96.9
	SHS	94.2	100	75.0	88.5	98.1
	WSN	73.9	73.9	65.2	73.9	87.0
III	BCDC	87.2	80.9	91.5	89.7	100
	DDCCC	95.5	100	86.4	90.9	95.5
	DSR	86.7	73.3	76.7	80.0	93.3
	LHFRC	98.8	98.8	94.2	98.8	100
	NPCLC	90.0	82.2	70.0	92.2	94.4
	SSCDC	100	84.6	92.3	97.4	100
	WSOLC	97.1	91.2	79.4	88.2	94.1

*Program acronyms are listed in Appendix A.

Table 36: Test Statistic (t) for Significant Results in 17 Programs

Focus Area	Program	df	COM	GM	FM	PerS	ProS	EZ
II	AFRC	49	11.77	6.40	13.04	10.30	8.72	>1.82
	BCRC	33	7.15	11.06	7.87	8.35	12.46	>2.48
	EKFRC	39	11.10	13.26	10.83	11.19	7.87	>2.52
	GSR	53	9.10	12.35	10.34	10.57	10.26	>2.49
	KRVFRC	112	12.13	14.79	10.28	11.80	10.95	>1.94
	LVSRP	65	10.48	14.40	10.81	14.07	17.75	>2.59
	MCFRC	22	8.69	9.60	8.53	7.56	8.40	>3.22
	MFRC	78	11.76	14.29	11.25	13.37	14.35	>2.54
	OFRC	45	2.88	5.94	7.99	5.07	4.03	>0.85
	SENP	162	22.53	38.28	38.43	32.76	33.58	>3.54
	SHS	51	9.53	32.66	10.12	10.45	9.43	>2.64
	WSN	22	4.19	6.65	5.18	3.78	3.37	>1.43
III	BCDC	29	14.08	12.34	11.30	13.13	9.93	>3.68
	DDCCC	21	16.20	15.99	9.42	8.67	7.76	>3.38
	DSR	30	3.86	4.46	7.21	4.10	4.90	>1.40
	LHFRC	41	10.27	8.39	5.06	6.73	9.72	>1.58
	NPCLC	89	12.54	15.99	10.49	14.22	13.46	>2.22
	SSCDC	41	20.15	9.63	15.07	16.04	19.94	>3.00
	WSOLC	33	10.26	16.27	6.87	8.55	11.43	>2.39

*Program acronyms are listed in Appendix A.

Statistical testing has been conducted to examine whether the level of child development is significantly above the corresponding ASQ-3 threshold. The test statistic from single sample t tests is listed in Table 36. All t values are significant at α=.005. Effect sizes (EZ) are larger than 0.80, indicating a strong program impact on all five ASQ-3 outcome measures across 19 programs.

In summary, child developments in *Communication, Gross Motor, Fine Motor, Personal-Social*, and *Problem-Solving* categories are important outcomes from ASQ-3 assessments. In *Focus Areas II* and *III*, data sizes vary from 22 in DDCCC to 163 in SENP (see Table 33), which may have impacted the result of statistical significance. According to the American Psychological Association (2001), "For the reader to fully understand the importance of your findings, it is almost always necessary to include some index of effect size or strength of relationship in your Results section" (p. 25). Hence, effect sizes are reported in Table 36 to confirm the strong practical program impact.

Table 37: Domain Coverage of DRDP-PS Comprehensive Assessment

Domain	Knowledge and Skill Measures
ALT-REG	(1) Attention Maintenance, (2) Self-Controlling, (3) Initiation, (4) Curiosity and Initiative in Learning, (5) Self-Control of Feelings and Behavior, (6) Engagement and Persistence, (7) Shared Use of Space and Materials.
COG	(1) Spatial Relationships, (2) Classification, (3) Number Sense of Quantity, (4) Number Sense of Math Operations, (5) Measurement, (6) Patterning, (7) Shapes, (8) Cause and Effect (9) Inquiry Through Observation and Investigation, (10) Documentation and Communication of Inquiry, (11) Knowledge of the Natural World.
HSS	(1) Sense of Time, (2) Sense of Place, (3) Ecology, (4) Conflict Negotiation, (5) Responsible Conduct as a Group Member.
LLD	(1) Understanding of Language, (2) Responsiveness to Language, (3) Communication and Use of Language, (4) Reciprocal Communication and Conversation, (5) Interest in Literacy, (6) Comprehension of Age-Appropriate Text, (7) Concepts about Print, (8) Phonological Awareness, (9) Letter and Word Knowledge, (10) Emergent Writing.
PDHLTH	(1) Perceptual-Motor Skills and Movement Concept, (2) Gross Locomotor Movement Skills, (3) Gross Motor Manipulative Skills, (4) Fine Motor Manipulative Skills, (5) Safety, (6) Personal Care Routines: Hygiene, (7) Personal Care Routines: Feeding, (8) Personal Care Routines: Dressing, (9) Active Physical Play, (10) Nutrition.
SED	(1) Identity of Self in Relation to others, (2) Social and Emotional Understanding, (3) Relationships and Social Interactions with Familiar Adults, (4) Relationships and Social Interactions with Peers, (5) Symbolic and Sociodramatic Play.
VPA	(1) Visual Art, (2) Music, (3) Drama, (4) Dance.

1. Desired Results Developmental Profile (DRDP) Indicators

DRDP includes different forms to gain *comprehensive, fundamental*, and *essential* views of child development in specific programs. In general, the *Comprehensive View* focuses on the full range of learning and development that most early childhood curricula cover. The *Fundamental View* addresses the five domains of school readiness and the *Essential View* focuses on selected measures within selected domains.

The DRDP form also adopts different assessment outcomes for various age groups. As shown in Table 37, the domains for preschool children contain multiple measures of *Approaches to Learning–Self-Regulation* (ALT-REG), *Cognition* (COG), *History-Social Science* (HSS), *Language and Literacy Development* (LLD), *Physical Development–Health* (PD-HLTH), *Social and Emotional Development* (SED), and *Visual and Performing Arts* (VPA). The ratings are scaled sequentially according to developmental levels.[33]

In addition, DRDP includes four measures of English language development (ELD), *Comprehension of English, Self-Expression in English, Understanding and Response to English Literacy Activities,* and *Symbol, Letter*, *and Print Knowledge in English*. The ratings are scaled on six points, (1) Discovering Language, (2) Discovering English, (3) Exploring English, (4) Developing English, (5) Building English, and (6) Integrating English.[34]

Due to differences in child maturity, the following measures are excluded from DRDP-IT: ALT-REG 6, ALT-REG 7, LLD 6 – LLD 10, COG 4 – COG 7, COG 10, PDHLTH 9, and PDHLTH 10. Domains HSS and VPA are not addressed by the DRDP-IT instrument. In FY 2021-2022, appropriate forms of DRDP are adopted by eight programs to assess child development levels (see Table 38).

Table 38: DRDP Data Tracking across Eight Programs

Instrument	Program	$N_{Pretest}$	$N_{Posttest}$	$N_{tracking}$
DRDP IT Essential	HLP	11	6	6
DRDP IT	BCDC	16	19	11
	SSCDC	11	7	3
DRDP PS Comprehensive	DDCCC	17	8	0
	DSR	24	23	22
	SSCDC	6	14	3
	SSEC	2	17	1
DRDP PS Fundamental	SFP	20	9	9
	WWP	18	33	15
DRDP PS Essential	HLP	30	10	10

To avoid substantial data attrition, DRDP outcomes are aggregated for each form/view to examine changes of the assessment results between pretest and posttest measures.

- **Indicators of DRDP-IT View**

Although 14 cases are tracked in DRDP-IT data collection from BCDC and SSCDC (Table 38), deletion of missing data has left seven cases in BCDC and three cases in SSCDC with matched pretest and posttest measures of ATL-REG, COG, LLD, PDHLTH, and SED (see Table 39). Due to the inadequate information tracking, observations of pretest and posttest measures are treated as two groups of data. After missing data deletion, 25 cases are retained from pretest and posttest sessions. Significantly better performance has been found in the posttest data on the *Language and Literacy Development* (LLD) measure [t(48)=2.10, p=.041]. The effect size, as indicated by Cohen's d, reached 0.61

[33] https://www.desiredresults.us/sites/default/files/docs/forms/DRDP2015-IT-Comprehensive-View-20200124_ADA.pdf
[34] https://www.desiredresults.us/sites/default/files/docs/forms/DRDP2015_PSC_Combined-20200123RatingRecorg.pdf

for a moderate impact of BCDC and SSCDC on the LLD outcome. It should be noted that eight out of 25 cases reported multiple results from the pretest and/or posttest assessments. Due to the lack of variability in duplicated cases, it is no surprise to observe insignificant differences in most DRDP measures.

Table 39: Data Sizes for Measures of DRDP-IT View

Measure	Program	$N_{Pretest}$	$N_{Posttest}$	$N_{tracking}$
ALT-REG	BCDC	16	19	7
	SSCDC	33	18	2
COG	BCDC	16	18	7
	SSCDC	33	18	1
LLD	BCDC	16	19	7
	SSCDC	33	2	3
PDHLTH	BCDC	16	18	7
	SSCDC	33	7	0
SED	BCDC	16	19	7
	SSCDC	33	18	2

- **Indicators of DRDP Essentials View**

HLP offers services to children ages 0-5. Thus, data are gathered from both IT and PS Essential Views of DRDP. Similar to Table 39, Table 40 shows an issue of data tracking. Hence, observations of pretest and posttest measures are treated as two groups of data, instead of matched observations. As a result, the *IT Essential* data indicate significantly better performance in the posttest measures of *Language and Literacy Development* (LLD) [t(13.882)=2.27, p=.040] and *Cognition, Including Math and Science* (COG) [t(13.435)=3.74, p=.002]. The degrees of freedom equal 13.882 and 13.435, rather than integers, because of rejection of the *Equality of Variances* hypothesis in Levene's tests. The corresponding effect sizes for LLD and COG are 1.26 and 2.07, suggesting a strong impact of HLP on these DRDP measures.

Table 40: Data Sizes for Indicators of HLP Essentials View

Measure	Program	$N_{Pretest}$	$N_{Posttest}$	$N_{tracking}$
PS Essential	COG	29	10	6
	ELD	29	10	7
	LLD	6	1	1
	SED	30	10	8
IT Essential	COG	11	6	6
	LLD	11	6	6
	SED	11	6	6

Based on the DRDP-PS data from *Essential View*, significantly better performance has been found in the posttest result on the *Social and Emotional Development* (SED) measure [t(38)=2.14, p=.039]. The effect size is 0.69, indicating a moderate impact of HLP on the SED outcome. No other DRDP measures in Table 40 suggest significantly better findings from the posttest group. The lack of data tracking, accompanied by duplication of assessment measures on the same children, could have caused the data similarity between pretest and/or posttest groups, which led to insignificant differences in most DRDP measures.

- **Indicators of DRDP-PS Fundamental View**

SFP and WWP employed *DRDP-PS Fundamental View* to track development levels of preschool children under a pretest and posttest setting. Due to sample attrition (see Table 41), observations of pretest and posttest measures are treated as two groups of data in statistical analyses. Significantly better performance has been found in the posttest group on *Approaches to Learning–Self-Regulation* (ALT-REG) [t(78)=3.18, p=.002], *Cognition, Including Math and Science* (COG) [t(75)=3.33, p=.001], *English Language Development* (ELD) [t(75)=2.31, p=.024], and *Social and Emotional Development* (SED) [t(78)=2.56, p=.012]. The effect sizes are 0.72, 0.77, 0.53, and 0.58 for ALT-REG, COG, ELD, and SED, respectively. Thus, moderate impacts have been found from SFP and WWP on these DRDP measures. The results are insignificantly different on measures of LLD and PDHLTH, the two categories in Table 41 with the least success in data tracking.

Table 41: Data Sizes for Measures of DRDP PS Fundamental View

Measure	Program	$N_{Pretest}$	$N_{Posttest}$	$N_{tracking}$
ALT-REG	SFP	20	9	4
	WWP	33	18	15
COG	SFP	19	7	3
	WWP	33	18	14
LLD	SFP	18	8	2
	WWP	33	18	15
PDHLTH	SFP	17	8	2
	WWP	33	7	5
SED	SFP	20	9	3
	WWP	33	18	15

- **Indicators of DRDP-PS Comprehensive View**

DRDP-PS Comprehensive View has been adopted by four programs. While DSR tracked over 90% of the cases, the data tracking occurred to no child in DDCCC, only three children in SSCDC, and merely one child in SSEC (see Table 41). In terms of the amount of data across programs, DSR data, including the ones from missing cases, account for 42% of the *Comprehensive View* database. To retain the remaining 58% information, an independent sample t test is conducted across the four programs based on the fact that the majority of cases have not been tracked. The result shows performance of the posttest group significantly better than the pretest group in the *Social and Emotional Development* (SED) category [t(53)=2.50, p=.016]. The effect size is 0.69 for a moderate impact on SED from these four programs.

In summary, the DRDP results across five instruments hinge on data collection. Among the eight programs in Table 38, DRDP measures are not rigorously tracked. Meanwhile, duplication of pretest or posttest measures has undermined an assumption of independent sampling, which might have skewed the data variability in statistical testing. To cope with this issue, an attempt has been made in the data analyses to include all available data from the pretest and posttest groups. The results revealed significant impacts of First 5 Kern-funded programs on at least one measure of each DRDP View. The findings are confirmed by medium values of effect size that are less sensitive to the sample size variation.

3. Child Assessment-Summer Bridge Results

A statewide need has been identified to fund "Programs of all types (e.g., classes, home visits, summer bridge programs) that are designed to support the kindergarten transition for children and families" (First 5 California, 2015b, p. 58). In the effort of supporting school readiness, First 5 Kern funded Summer-Bridge programs to enrich early learning experiences of preschoolers prior to their kindergarten entry. Sample sizes are listed for Child Assessment-Summer Bridge (CASB) data from five programs in Table 42.

Table 42: CASB Data Sizes from Five Programs

Source	DSR	GSR	MFRC	OFRC	SHS
Pretest	13	30	15	17	18
Posttest	13	30	18	21	19
Matched Pair	13	30	15	15	17

Based on 90 pairs of matched data this year, Table 43 shows better performance in posttest than pretest on the average assessment scores of Motor Skills (MS), Social Emotional Skills (SES), Communication Skills (ComS), Self-Help Skills (SS), Scientific Inquiry (SI), and Cognitive Skills (CS) with exception of the CS from DSR. Communication has occurred for DSR to either *align its preschool activities with the CS measure* or *adopt a different instrument* that makes the outcome more sensitive to its educational activities.

Table 43: CASB Indicator Comparison Between Pretest and Posttest

Program	Assessment	MS	SES	ComS	SS	SI	CS
DSR	Pretest	4.23	4.46	3.69	4.46	6.54	56.69
	Posttest	4.69	5.00	3.85	4.46	6.92	55.31
GSR	Pretest	3.60	3.67	4.10	4.10	6.43	32.70
	Posttest	4.40	3.87	4.20	4.23	7.67	41.47
MFRC	Pretest	3.00	4.60	4.53	3.27	5.67	33.13
	Posttest	4.07	4.93	4.87	3.67	6.93	44.80
OFRC	Pretest	3.13	4.60	4.60	3.87	7.20	48.40
	Posttest	3.47	4.67	4.73	3.87	7.67	55.87
SHS	Pretest	3.00	3.12	3.59	4.06	5.88	30.35
	Posttest	4.00	4.71	4.29	4.18	6.82	35.00

*Program acronyms are listed in Appendix A.

When the CASB data are aggregated across these Summer-Bridge programs, Table 44 shows significant improvement of all CASB indicators at α=.05. The effect sizes for MS, SES, SI, and CS are larger than 0.80 to confirm a strong practical impact on child skill improvement in these school readiness domains. Moderate improvements are suggested by the effect size findings on the ComS and SS indicators.

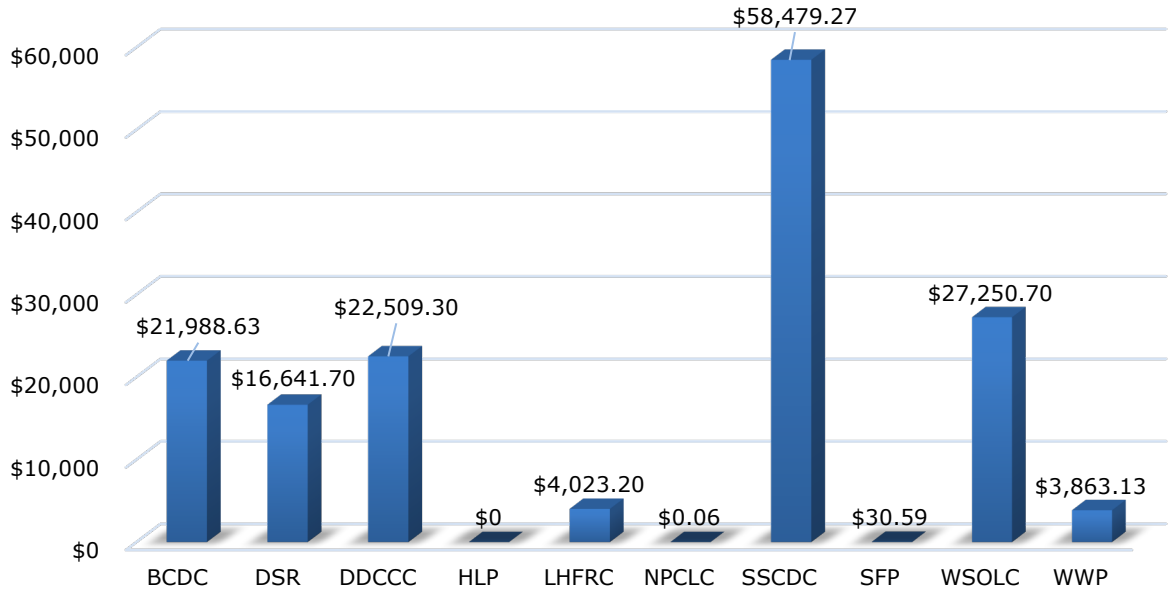
Table 44: Improvement of MS, SI, and CS Skills in Summer Bridge Programs

Skills	df	Pretest Mean	Posttest Mean	t	p	Effect Size
MS	89	3.40	4.16	5.21	<.0001	1.10
SES	89	3.99	4.50	3.86	.0002	0.82
ComS	89	4.10	4.37	3.09	.0027	0.67
SS	89	3.97	4.10	2.52	.0135	0.53
SI	89	6.34	7.28	6.23	<.0001	1.32
CS	89	38.41	45.20	7.90	<.0001	1.67

In retrospect, First 5 Kern (2021) has strategically filled the void with a clear goal in the focus area of *Child Development*, i.e., "Early childcare and education services will be accessible" (p. 6). Prior to the passage of Proposition 10, few private foundations reached the valley, mountain, and desert communities to sponsor programs that were strategically designed for comprehensive improvement of child health, early learning, and family support. No strategic plan was developed in Kern County for early childhood services, nor did the service integration become a focus area to enhance sustainability of local programs for children ages 0-5 and their families. "To fully appreciate the effect that First 5 has had, it is necessary to understand the many roles that are served by First 5 – roles that were not being addressed or not fulfilled sufficiently before First 5 was created" (First 5 Association of California, 2009, p. 7).

More importantly, the service delivery was completed cost-effectively, and all programs operated within their budgets. In particular, seven programs in this focus area saved $154,786.58 from the original annual budget (Figure 16), far more than the corresponding savings of $81,333.46 in the year prior to COVID-19.

Figure 16: Program Budget Savings in *Early Childcare and Education*

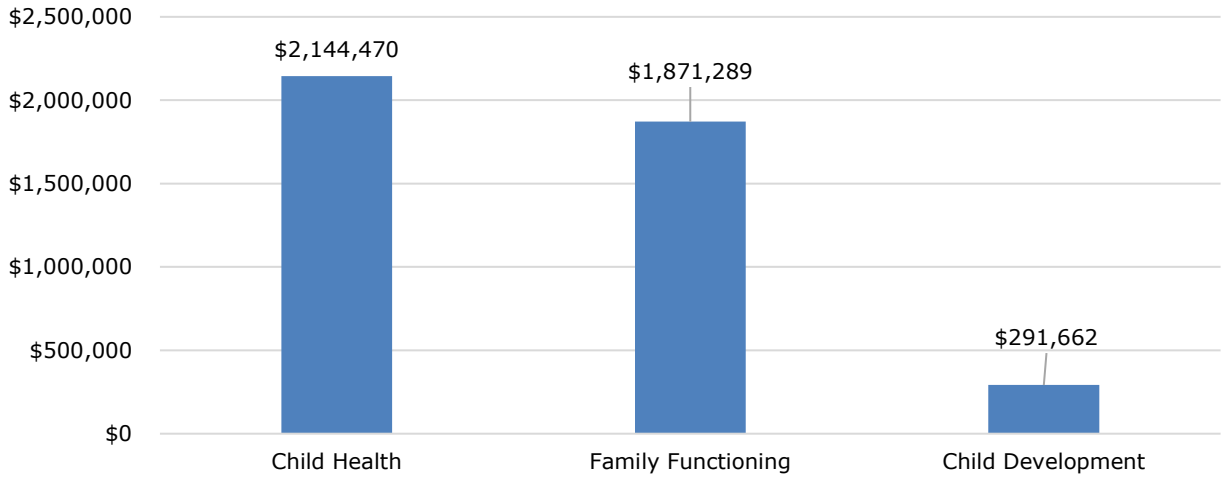


In summary, the systematic data tracking in this chapter conforms to the Statewide Evaluation Framework (First 5 California, 2005). More specifically, descriptive data are summarized to indicate the extent of early childhood service delivery in each focus area.

Value-added assessments are conducted to monitor improvement of program outcomes under a pretest and posttest setting. Altogether, this chapter not only elaborates on the scope of services in each focus area, but also incorporates extensive analyses of positive changes resulted from First 5 Kern-funded programs using AAPI-2.1, ARA, ASQ-3, ASQ:SE-2, BCBH, CASB, DANCE, DRDP, FCP, and NCFAS-G instruments.

To channel more Proposition 10 funding into direct services, First 5 Kern maintained a frugal budget in the office operation. As Brown Armstrong Accountancy Corporation (2022) reported, "Payroll and employee benefits were under budget by $108,042 and $57,181 respectively, due to the cost-of-living adjustment being lower than budgeted, and employee benefits increases being lower than anticipated" (p. 5). In pursuing improvement of program effectiveness, most service providers used Proposition 10 investment as the seed money to strengthen program sustainability through external partnership building. In FY 2021-2022, service providers leveraged external funds totaling $4,307,421 (see Figure 17). Built on the partnership efforts, more results are presented in Chapter 3 to report the outcomes of service integration at the commission level.

Figure 17: Sustainability Funds Leveraged in Program-Affiliated Focus Areas



Chapter 3: Effectiveness of Service Integration

Built on program evaluation findings in Chapter 2, the fourth focus area of First 5 Kern's (2021) strategic plan, *Integration of Services*, is addressed in this chapter across programs in the first three focus areas of *Child Health, Family Functioning*, and *Child Development*. According to NAEYC (2020), integration of early childhood services should include "everything discernible about the social and cultural contexts for each child, each educator, and the program as a whole" (p. 7). To gain the overall picture, an Integration Service Questionnaire (ISQ) is employed by First 5 Kern to assess the systemic program support. A computer software package, *NetDraw*, is adopted to examine the network composition *within* and *between* focus areas, as well as configure strength of the partnership links.

It was stipulated by Proposition 10 that "No county strategic plan shall be deemed adequate or complete until and unless the plan describes how programs, services, and projects relating to early childhood development within the county will be integrated into a consumer-oriented and easily accessible system" (p. 10). Meanwhile, program partnerships may help sustain the platform of service delivery (Purcal, Muir, Patulny, Thomson, & Flaxman, 2011) in case the state tobacco tax dwindles down.

In the state report glossary, two result domains, *Policy and Public Advocacy* and *Programs and Systems Improvement Efforts*, are designated to document county commission efforts in the system building (First 5 Association of California, 2013). While *Policy and Public Advocacy* depend on coordinated endeavors across the state, *Programs and Systems Improvement Efforts* hinge on partnership development among service providers. To address the second part that is under the commission control, network analyses are conducted in this chapter to assess partnership capacity among First 5 Kern-funded programs. In addition, the IMPACT (Improve and Maximize Programs so All Children Thrive) project of the state commission has been incorporated as a partner to support child development. Articulation of the internal and external network connections fits a long-standing policy agenda of First 5 Association of California (2017), i.e., "Invest in and improve coordination across Systems of Care to efficiently connect young children to early intervention" (p. 5).

Enhancement of Early Childhood Supports through Service Integration

Quality of early childhood support depends on professional training of service providers. In FY 2021-2022, collaboration of FCP and MVIP fulfilled RI 4.1.3 in *Child Health* by training 58 parents, larger than the target of 52 parents. FCP also held two workshops to disseminate information about its health and wellness services to parents/guardians (RI 4.1.2). Two programs (CASA and SSEC) in *Child Health* and six programs (BCDC, DDCCC, HLP, SSCDC, SFP, and WWP) in *Family Functioning* offered training for 76 service providers to improve early childcare and education in *Child Development* (RI 4.3.1), exceeding the target of 63. Altogether, 12 service providers attended collaborative meetings of CMIP and HMG (RI 4.2.2), doubling the original target of 8.

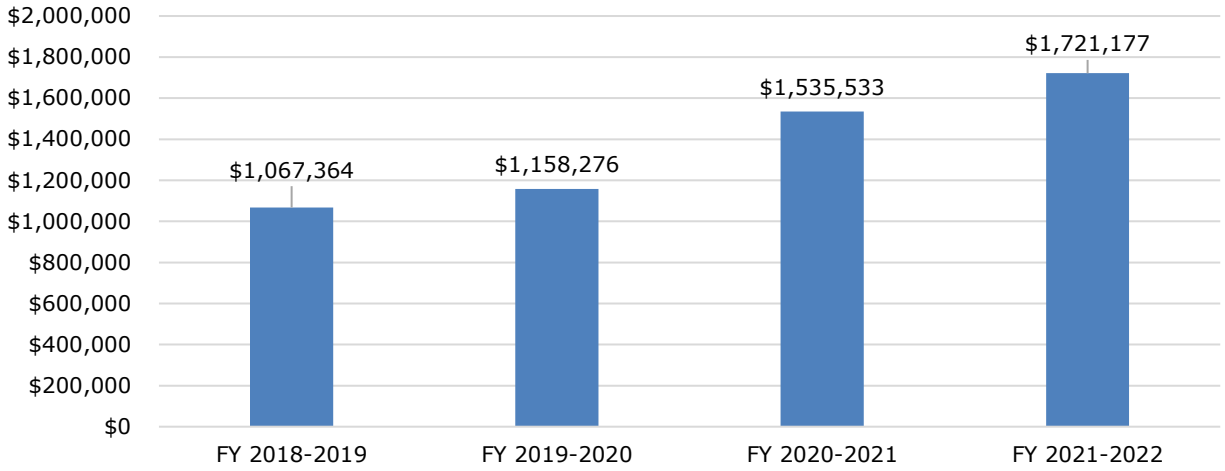
"In the childcare industry, there are two main populations involved — the children and the providers" (Morgan, 2019, p. 1). First 5 Kern has funded programs to support both stakeholders. These service counts were above the corresponding target counts of 14 for RI 4.3.3 and 45 for RI 4.3.2. In addition, 11 commission-led training workshops were conducted by 2-1-1 and OFRC (RI 4.4.3). The effort on service integration has

guided organization of 21 articulation meetings (RI 4.3.3) with 63 participants (RI 4.3.2) to develop transition plans for incoming kindergartners in eight programs. Staff of 15 programs attended 114 collaborative meetings (RI 4.2.1), more than 108 meetings in the annual target, and 10 service providers participated in HMG-led educational events on early childhood topics (RI 4.4.1).

Besides the grant administration, county commissions are expected to "facilitate the creation and implementation of an integrated, comprehensive, and collaborative system of information and services to enhance optimal early childhood development" [Proposition 10, Section 5(a)]. Among 39 programs funded by First 5 Kern, 21 service providers share the responsibility of child or infant services, 26 programs collaborate on parental supports, 20 programs feature services of case management, nine program cover early learning, and three programs carry pivotal functions in service referral system (Ibid. 1). The program funding reflects an overall goal of service integration to establish a "well-integrated system of services for children and families" (First 5 Kern, 2021, p. 6).

In retrospect, Figure 18 shows a steady increase of First 5 Kern support in service integration over the past four years. The enhancement of partnership building echoes what was known about service integration from research literature, i.e., "families generally report higher satisfaction with services given comprehensive Systems of Care" (Doll et al, 2000, p.4), including articulation of direct treatments with referral service networks.

Figure 18: First 5 Kern Funding in Service Integration



In summary, First 5 California (2015a) confirmed, "One result area, Improved Systems of Care, differs from the others; it consists of programs and initiatives that support program providers in the other three result areas" (p. 10). In the local capacity building, First 5 Kern funded service provider training to sustain a learning community with collaborative responsibilities in early childhood service, parental support, case management, school-readiness preparation, and program referral support (Ibid. 1).

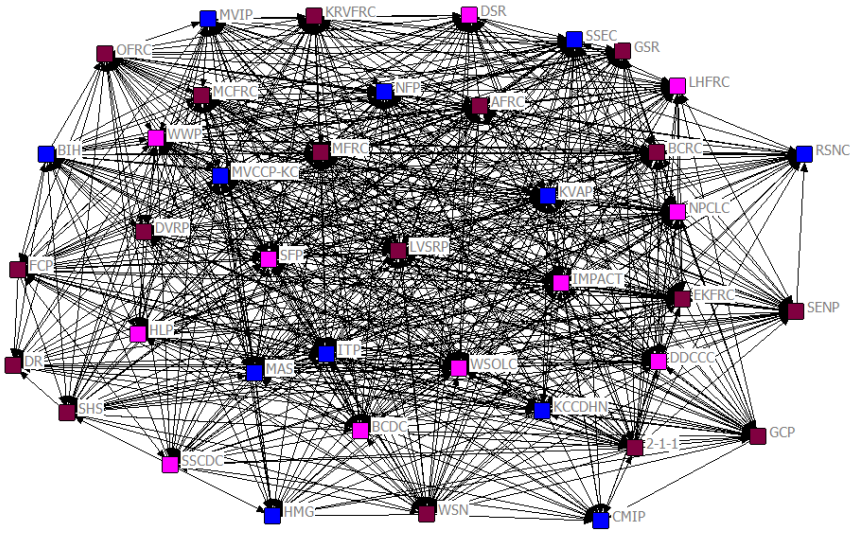
Strengthening of Partnership Network among Service Providers

In the ISQ data collection, each service provider is asked to identify partners from a list of First 5 Kern-funded programs. This process follows a *saturation sampling*

technique (see Carolan, 2014) for collecting whole-network data. The inclusive coverage of all service providers is beneficial for gaining a more complete picture of the network structure than other approaches (Wasserman & Faust, 1994).

With 40 service providers, including IMPACT, receiving Proposition 10 funding, each program could have 39 potential partners, composing 1,560 network links (i.e., 40X39). At the baseline level, program connections can be characterized as *Co-Existence* without outreach effort. The partnership analysis indicates 1,187 links at the *Co-Existing* level, accounting for 67.05% (i.e., 1,046/1,560) of all possible links in the ISQ database. In Figure 19, blue, brown, and pink colors are used to differentiate program nodes in *Child Health, Family Functioning*, and *Child Development* with IMPACT denoted in pink for supporting the QRIS system. The overall pattern across all 40 service providers shows an approximately even spread of the network connections with an overall density of 1.34. The network findings, obtained from PROC NETWORK in Statistical Analysis System (SAS), also suggest an approximate 26.15 links per program across focus areas.

Figure 19: Density of Program Networking at the *Co-Existing* Level

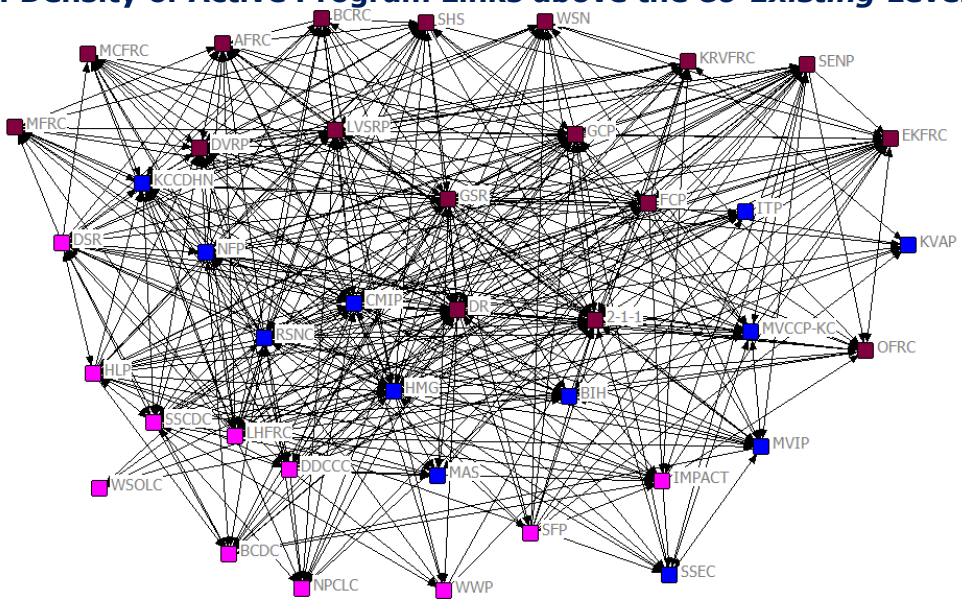


Beyond the *Co-Existing* level, more active links are plotted in Figure 20 for 513 connections involving program outreach. Due to the demand for program outreach, links in Figure 20 are sparser than the network of program *co-existence* in Figure 19. Density of the active network is 65.77% with an average of 12.83 links per node. In FY 2020-2021, a similar network of active connections had 11.13 links per node. Hence, First 5 Kern-funded programs have expanded their outreach efforts in partnership building as reflected by a higher network density this year.

Among the active links in Figure 20, 2-1-1 referral partnership is solicited by 28 programs. Dental health support from KCCDHN is included in a service network with 22 programs. Programs with no ethnic exclusion or geographic delimitation, such as CMIP, HMG, MVIP, and NFP, demonstrate more connections than programs for relatively small populations (e.g., BIH, SFP). Countywide programs like DR have more links than local service providers in remote communities (e.g., WSOLC and WWP). Due to its specialty in supporting early education, IMPACT actively connects to two programs in *Child Health* (HMG and SSEC), three programs in *Family Functioning* (KRVFRC, EKFRC, and OFRC), and five programs in *Child Development* (BCDC, DDCCC, DSR, SFP, and SSCDC). IMPACT is

also reciprocally identified as a partner of nine First 5 Kern-funded programs (CMIP, DDCCC, DR, FCP, GSR, HLP, HMG, SENP, and SFP). Hence, First 5 Kern's focus area of service integration is supported by an extensive network for active partnership building. Because program links above the *Co-Existing* level often involve initiators, mutual partnership connections need to be further examined in the next section.

Figure 20: Density of Active Program Links above the *Co-Existing* Level



Reciprocal Partnership Connection beyond Co-Existence

Partnership building can be unilateral or reciprocal. Reciprocal links occur when a network connection is concurrently confirmed by both parties. In general, "reciprocation rate is inversely related to the barrier level in these networks" (Singhal et al., 2013, p. 1). Hence, improvement of service integration is accompanied by elimination of partnership barriers and expansion of reciprocal connections (Borgatti, Everett, & Johnson, 2018). At the baseline level, 335 pairs of reciprocal links (or 73.61%) are identified from 1,046 program connections at the *Co-Existing* level. In this section, reciprocal relations are examined in focus areas of *Child Health*, *Family Functioning*, and *Child Development*.

In Kern County, services in *Child Health* are intended to meet a wide range of special needs, such as immunizations, health insurance coverage, medically vulnerable infant support, nurse-family partnership, and water safety education. These programs offer joint support of dedicated nurses, hospital employees, and mental health professionals in different organizations. Based on Proposition 10, partnership building is aimed at reducing program redundancy and strengthening service integration for well-rounded care provision. Therefore, active partnerships are needed to examine the service voids and enhance the complementary supports.

In addition, programs of *Child Development* are rooted in specific communities. Outreach efforts may facilitate exchanges of service experiences from different program settings. Service providers in *Family Functioning* consist of both local FRCs and countywide child protection services, such as DR, DVRP, and GCP. It also includes referral services from 2-1-1 to facilitate program networking.

Following First 5 Kern's (2021) strategic plan, service integration is expected for all programs. Table 45 shows more links in *Family Functioning* because it contains more service providers. Based on the commission program classification (Ibid. 1), 64 pairs of active links are mutually acknowledged by service partners within each focus area, larger than 58 reciprocal links last year. For complementary program support, 32 active links feature mutual connections across focus areas (Table 45).

Table 45: Number of Active Reciprocal Links Beyond the Co-Existing Level

Link Nature	Focus Area	Link Count
Within a focus area	Child Health	15
	Family Functioning	40
	Child Development	9
Between focus areas	Child Health <-> Family Functioning	15
	Child Health <-> Child Development	16
	Child Development <-> Family Functioning	1

These links reflect the establishment of joint partnerships among programs in *Child Health, Family Functioning,* and *Child Development*. While several programs offer multiple services in parent education, early care, child protection, and school readiness preparation (Ibid. 1), countywide programs often network with local service providers to identify and address child needs in family settings. Table 45 indicates more active reciprocal links *within* a focus area than *between* focus areas, an indication of coherent service provider classification in First 5 Kern's (2021) strategic plan.

In summary, the reciprocal network among First 5 Kern-funded programs includes 96 pairs of mutually-confirmed partnerships above the *Co-Existing* level. Since the results are delimited to network counts, it should be noted that "not everything that counts can be counted".[35] To analyze the capacity of service integration, strength of the partnership connections is assessed by a *Co-Existing, Collaboration, Coordination*, and *Creation* (4C) model in the next section.

Justification of Model Selection for Partnership Evaluation

Depending on local conditions, program features may vary across Kern County's valley, mountain, and desert communities, so do the strength of network connection. Sometimes programs could have legitimate reasons to reciprocate their relationship at the *Co-Existing* level. For instance, Kern Valley Aquatics Program (KVAP) offers water safety and injury prevention education in Kern River Valley. Programs in Lost Hills, such as LHFRC, are not expected to transport children 100 miles away to access KVAP services. Hence, program *Co-Existence* could be grounded in the *Scope of Work and Evaluation Plan* pertinent to fulfillment of service delivery under First 5 Kern's (2021) strategic plan.

In examining network characteristics, Cross, Dickman, Newman-Gonchar, and Fagen (2009) argued, "Evaluating interagency collaboration is notoriously challenging because of the complexity of collaborative efforts and the inadequacy of existing methods" (p. 310). To simplify the undertaking, Project Safety Net of Palo Alto (2011) suggested a five-level model for network categorization that featured "formal communication" as a

[35] www.quotationspage.com/quote/26950.html

characteristic of *cooperation*. Because communications could be described as *frequent, prioritized,* and/or *trustworthy*, this model did not resolve the entanglement of cooperation features.

Besides the consideration of mutual exclusiveness, partnership categorization needs to comprehensively cover different strength levels. In this regard, First 5 Fresno (2013) treated coordination and collaboration as the highest levels of program interaction, which could have inadvertently left no room for partnership improvement. Therefore, the Fresno approach inherited two problems: (1) It did not conform to Bloom's taxonomy that labeled creation as another level above integration (Airasian & Krathwohl, 2000), and (2) It downplayed the adequacy of *Co-Existing* partnerships for program referrals.

To amend these issues, service integration is conceived in this report from the context of institutional learning. The model itself is grounded on a well-established SOLO [Structure of the Observed Learning Outcome] taxonomy (Atherton, 2013; Biggs & Collis, 1982) that defines four levels of learning outcomes above the pre-structure baseline (see Smith, Gorden, Colby, & Wang, 2005). Each level has been clearly delineated with specific benchmarks to support the measure of ongoing improvement. The SOLO taxonomy was employed in several profound studies before, including a validity study of the national board certification (see Smith et al., 2005). The alignment in Table 46 illustrates a one-to-one match between the SOLO taxonomy and the 4C model for service integration.

Table 46: Alignment between SOLO Taxonomy and the 4C Model

SOLO	The 4C Model
Uni-Structural: Limited to one relevant aspect	Co-Existing: Confined in a simple awareness of Co-Existence
Multi-Structural: Added more aspects independently	Collaboration: Added mutual links for partnership support
Relational: United multiple parts as a whole	Coordination: United multiple links with structural leadership
Extended Abstract: Generalized the whole to new areas	Creation: Expanded capacity beyond existing partnership

Like the SOLO taxonomy, the 4C paradigm incorporates levels of classification that are both comprehensive and mutually exclusive. The literature-based 4C model was first presented at the 2013 annual meeting of NAEYC in Washington, DC (Wang, Ortiz, & Schreiner, 2013) and the 2015 annual meeting of the American Educational Research Association in Chicago (Wang, Ortiz, Maier, & Navarro, 2015). Subsequently, the 4C model was employed to disseminate research findings in a nationally refereed journal (Wang et al., 2016).

Tom Angelo (1999), former director of the National Assessment Forum, maintained, "Though accountability matters, learning still matters most" (¶. 1). In the following section, the 4C model is adopted to assess strength of service integration for enhancing partnership building. Structure of service integration is illustrated by *NetDraw* plots through social network analysis.

Evaluation of Network Strength According to the 4C Model

Results in Table 47 demonstrated a hierarchical feature of the 4C model – The

reciprocal partnership count dropped as the network strength increased across the *Co-Existing*, *Collaboration, Coordination*, and *Creation* hierarchy, ending with the smallest number at the top level of new partnership creation. Built on the network classification, partnership strength can be assessed to report enhancement of service integration.

Table 47: Distribution of Mutual Partnership Counts of Different Strengths

Scope	Strength	Partnership Count	Subtotal
Partnership within the same strength level	Creation Coordination Collaboration Co-Existing	1 15 58 335	409
Partnership across different strength levels	Involving Co-Existence Above Co-Existence	150 43	193

Above the level of program *Co-Existence*, a total of 117 pairs (i.e., 1+15+58+43) of active connections are reciprocated by partners in the *Collaboration, Coordination,* and *Creation* categories. In reality, far more links are non-reciprocal to feature asymmetric connections (Hansen, 2009). Table 47 shows that the mutual connections are rated for 43 pairs of active partnerships at different strength levels above *Co-Existence*. In contrast, 150 pairs of asymmetric connections involve *Co-Existence*. These reciprocal links may have one partner at the *Co-Existing* level and the other partner at another C level for a more active connection.

In FY 2021-2022, four pairs of the primary links are reciprocated at the same strength level in Table 48, and none of them are mutually connected at the highest *Creation* level to further enrich the existing partnership features. This result echoes the hierarchy of partnership categorization in Table 47 that shows the smallest number of reciprocal links at the *Creation* level. In addition, reciprocal links occur less frequently in primary partnerships (Table 48) than in a general network in Table 47, particularly at the *Co-Existing* level. Structure of the network seems more stable because around half of the primary links are reciprocally identified by the mutual partners at the same strength level.

Table 48: Counts of Reciprocal Primary Partnerships

Scope	Strength	Partnership Count	Subtotal
Primary partnership within the same strength level	Creation Coordination Collaboration Co-Existing	0 1 3 0	4
Primary partnership across different strength levels	Involving Co-Existence Above Co-Existence	8 3	11

It should be noted that effective program partnerships could have different strengths. For instance, referral services belong to the *Collaboration* category of the 4C model because it does not stipulate new service *creation*, nor does the one-to-one phone call involve a third-party intervention at the *Coordination* level. In another example, First 5 Kern funds KVAP in *Child Health*, KRVFRC in *Family Functioning*, and SFP in *Child Development* to support multiple service deliveries in the same region. The multilateral supports are at the *Coordination* level to integrate different services across focus areas. In combination, service integration is grounded on different partnership structures to meet local needs. As Provan, Veazie, Staten, and Teufel-Shone (2005) observed, "In the

academic literature, network analysis has been used to analyze and understand the structure of the relationships that make up multiorganizational partnerships" (p. 603).

Although "reciprocity is a common property of many network" (Garlaschelli, & Loffredo, 2004, p. 4), asymmetric strengths may exist in network connections of primary partners (Antonucci & Israel, 1986; Shulman, 1976). The strength difference needs to be further examined in the next section because unilateral connections often lead to relation adjustments for network improvement (Kuhnt & Brust, 2014).

Examination of Primary Partnerships for Service Integration

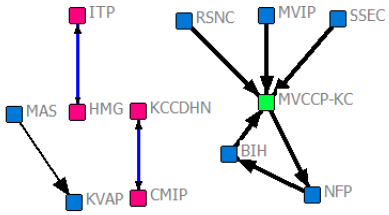
In the field of network analysis, "Existing research has demonstrated that two primary features of networks, *network structure* and *the strength of ties*, have distinct effects on outcomes of interest" (Cross et al., 2009, p. 311). In this section, the primary partnership structure, including both reciprocal and unilateral links, is aggregated to construct network plots across programs of *Child Health, Family Functioning*, and *Child Development*.

Network Structure within Each Focus Area

While a *saturation sampling technique* was adopted to construct the comprehensive network in Figures 15 and 16, not all the partners were of equal importance. Thus, an examination of primary partnership building is needed to simplify the overall structure. With division of program affiliation in different focus areas, the network of primary partners is expected to have a much smaller density.

Figure 21 shows primary partnerships of service providers within *Child Health*. Program nodes are red-colored to highlight reciprocal links. The line thickness indicates strength of the connections at different C levels. With 11 links connecting 12 nodes in Figure 21, the network computing in SAS indicates an average of 0.92 links per node.

Figure 21: Network Structure among Primary Partners in *Child Health*



Inspection of Figure 21 reveals mutual connections of CMIP and KCCDHN at a collaboration level for maintaining mobile service deliveries across Kern County. HMG reciprocally collaborates with Infant and Toddler Program (ITP), also known as *CASA of Kern County* in Chapter 2, for sharing their *Scope of Work and Evaluation Plan* on supporting developmental screening. Water safety education is held by MAS and KVAP, forming a foundation for the partnership outreach of MAS, the program receiving First 5 Kern funding before KVAP.

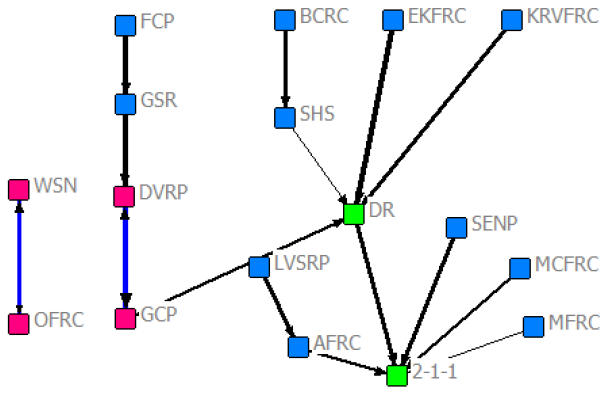
As Albrectsen (2017) suggested, an impactful service network should be built on program features. Hence, interpretation of the reciprocal links is inseparable from

configuration of result indicators for each program. For instance, CMIP and KCCDHN incorporate comparable indicators of screening services on child wellbeing (RI 1.3.2) and dental health (RI 1.3.4). Likewise, the mutual connection of ITP and HMG is supported by similar result indicators on provider training (RI 4.3.1 and 4.4.1). MAS considers KAVP as a primary partner because both programs offer Cardiopulmonary Resuscitation (CPR) education and swimming lessons for children and parents/guardians (RI 1.6.2-1.6.4).

Besides the collaboration patterns in each of the dyads, MVCCP-KC is highlighted at the center of six primary partners. Network strength at the coordination level is represented by thicker links in Figure 21. In particular, NFP is a home-based program. It partners with BIH, a center-based program, to form a triangle with MVCCP-KC in support of service coordination on infant health. According to Ramanadhan et al. (2012), "Networks that are highly centralized can spread information and resources effectively from the influential members" (p. 3). MVCCP-KC is the centroid to attract partnership support from MVIP, RSNC, and SSEC, three influential network members in addressing special medical and mental health needs. KVAP is the only program that shows no outreach primary link to other programs. It is called a "leaf" node for discontinuing network extension. It is no surprise for KVAP given its *Scope of Work and Evaluation Plan* within Kern River Valley.

In *Family Functioning*, 2-1-1 is a centroid for serving as a primary partner for five programs (Figure 22). DR is solicited by four programs for its child protection services that are much-needed by FRCs. Network members involving in *reciprocal links* are highlighted in red color. One pair of reciprocal links occur with nearby partners of WSN and OFRC. WSN provides group therapy and education for child protection that can mutually benefit with home-based support from OFRC (RI 3.1.2).

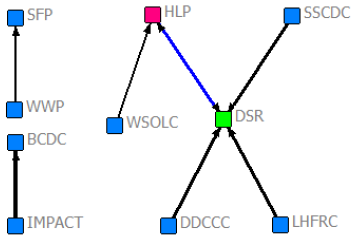
Figure 22: Network Structure among Primary Partners in *Family Functioning*



In addition, Figure 22 shows DVRP and GCP as primary partners in offering preventative services for parents/guardians (RI 2.1.6) and children (RI 2.1.9). GCP connects to a centroid DR in a network of 15 programs that not only offers positive family-based support, but also controls negative impacts of the domestic environment for child protection. Altogether, the primary partnership in Figure 22 contains 17 nodes and 17 links with an average of 1 link per node. Its connectivity is slightly stronger than Figure 21 for having no leaf node in the network. In part, this is because health programs are separated by specialties with different result indicators, but most service providers in *Family Functioning* are family resource centers and it is more suited to incorporate comparable result indicators for the network building.

By design, programs in *Child Development* are community-based with local children and families as the major service recipients. In Figure 23, 10 programs are networked by eight links, yielding an average of 0.8 links per node. DSR is highlighted in Figure 23 as a centroid of the network. The primary partnership pattern also reveals two leaf nodes (SFP and BCDC) for offering no outreach connection to other nodes.

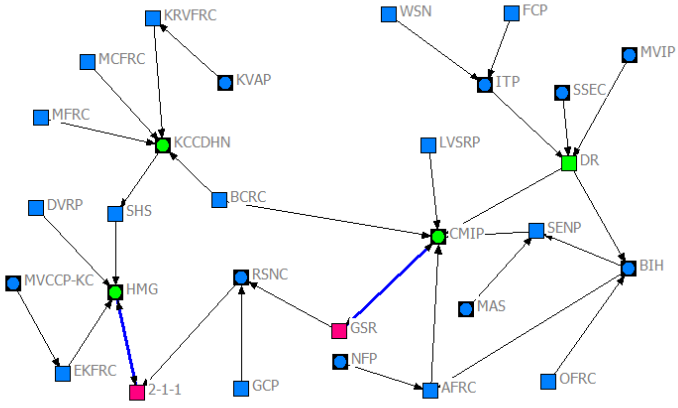
Figure 23: Network Structure among Primary Partners in *Child Development*



Despite less connectivity in this network, a pair of reciprocal relations are found between HLP and DSR. The impact of network building depends on communities in which programs deliver their services. HLP is located in Bakersfield and DSR is situated in Delano. Their partnership is worth noting for serving the two largest cities in Kern County. Both programs sponsor group-based education for activities (RI 1.5.2 and 2.3.2 for HLP; RI 2.2.2 for DSR). Meanwhile, they feature center-based activities (RI 3.1.1) to fulfill service outcomes in First 5 Kern (2021) strategic plan. These two programs maintain multiple node connections with nearby programs of DDCCC, SSCDC, LHFRC and WSOLC.

As Krebs (2011) pointed out, "What really matters is where those connections lead to – and how they connect the otherwise unconnected!" (¶. 4). In Kern River Valley, SFP is the only First 5 Kern-funded program to support *Child Development*. Likewise, WWP provides early childhood education in Boron near the east border of Kern County. Without these service providers, these hard-to-reach communities are unlikely to have program support in early childhood education. WWP received funding before SFP and partnered with SFP to extend the service coverage. In addition, BCDC organizes school readiness activities, making it a primary partner of IMPACT, a program for enhancing quality of early childhood education.

Figure 24: Network between *Family Functioning* and *Child Health*



The partnership outreach fits a general trend of program network building across focus areas. As Nichols and Jurvansuu (2008) noted, "There is currently movement

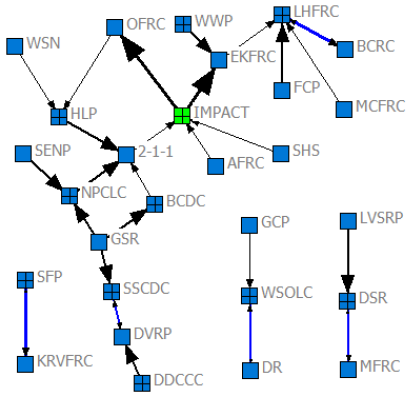
internationally towards the integration of services for young children and their families, incorporating childcare, education, health and family support" (p. 117). Hence, further investigation is needed to examine different network features *between* focus areas. In Figure 24, program links are drawn to describe the structure of primary partnerships between *Family Functioning* and *Child Health*.

Programs in *Child Health* are labeled by circle-in-box nodes. Square nodes are employed to represent programs in *Family Functioning*. The primary partnership between focus areas includes 29 service providers with 33 links, resulting in an average 1.14 links per node. Frequently-connected nodes are highlighted in green color. Countywide programs, such as CMIP, DR, HMG, and KCCDHN, assume a centroid role for offering direct services. Delimited by its referral function, 2-1-1 shows a reciprocal connection with HMG. In part, this is because HMG offers a remote screening option with support from a Development Specialist through 2-1-1 networking (Ibid. 1).

Unlike a centroid role of MVCCP-KC in Figure 21, patterns in Figure 24 no longer reflect primary partnerships within *Child Health*, and thus, MVCCP-KC shows only one link with EKFRC and no program in *Family Functioning* chooses it as a primary partner. The network difference confirms existence of Simpson's Paradox (see Kock & Gaskins, 2016) that requires more information from the partnership comparison beyond a single focus area.

Collaborative meetings are expected tasks for both CMIP (RI 4.2.2) and GSR (RI 4.3.2). Their reciprocal links demonstrate mutual collaboration in provider preparation for information exchange and service integration. Although not all the links in Figure 24 are reciprocal, Provan et al. (2005) noted that "when links among organizations are not confirmed, this does not necessarily reflect the absence of a link" (p. 607). For unilateral links, programs in *Child Health* recognize at least one primary partner in *Family Functioning*. It reflects the fact that family support is essential for a proper function of any programs in *Child Health*.

Figure 25: Network between *Child Development* and *Family Functioning*



In Figure 25, IMPACT is labeled by a box node like other 10 programs in *Child Development*. Similar to Figure 24, 17 programs in *Family Functioning* are represented by square nodes. This network contains 31 primary partnerships among 28 nodes. Thus, the average link per node is 1.11, larger than 1 for the network within *Family Functioning* and 0.8 for the network within *Child Development*. In particular, Simpson's Paradox

resurfaces on DR's role from network comparisons – It was a centroid in Figures 20 and 22, but only shows one link in Figure 25. In addition, the role of IMPACT was not a centroid in Figure 23, but becomes the centroid in Figure 25 for having more links than any other nodes. IMPACT also recognizes primary partnerships with two FRCs at the highest C level. These differences reconfirm the value of network comparisons between focus areas.

For programs with reciprocal links, SSCDC provides early childcare and education to children whose mothers are victims of domestic violence. Thus, it establishes a primary partnership with DVRP for mutual service coordination. Likewise, both SFP and KRVFRC recognize each other as mutual partners for serving the same community of Kern River Valley. The asymmetric strength should also be noted – While SFP considers KRVFRC as a partner at the highest C level, the strength of KRVFRC's reciprocal link is rated at a co-existing level. This pattern might hinge on a fact that *Child Development* support depends more on program services in *Family Functioning*, instead of vis versa. Similar asymmetric strength occurs with reciprocal links of DSR-MFRC and DR-WSOLC.

For another pair of mutual links in Figure 25, LHFRC and BCRC share a result indicator of collaboration meeting (RI 4.2.1) and both include group-based parent education. To recap the overlap in *scope of work*, common result indicators are gathered in Table 49 based on the primary partnership connections between *Focus Area II: Family Functioning* and *Focus Area III: Child Development* to reveal the network foundation.

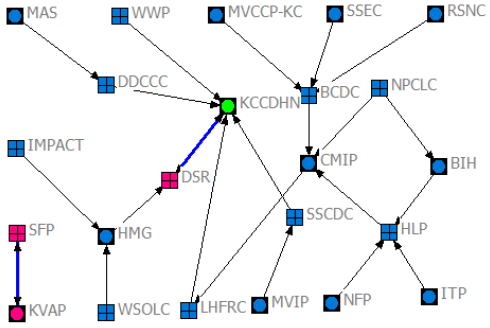
Table 49: Common RI Attained by Partners in Focus Areas II and III

Primary Partners	Result Indicators
AFRC-HLP	1.3.1. Seventy-two children received developmental screenings
BCRC-LHFRC	2.1.4. Forty-one parents/guardians received general case management services, including home visits 2.1.7. Forty-four children received general case management services, including home visits 3.1.2. Thirty-three children participated in educational home-based activities
LVSRP-DSR-MFRC	2.1.4. Seventy-three parents/guardians received general case management services, including home visits 2.1.7. Ninety-six children received general case management services, including home visits 2.4.3. Twenty-two hundred, ninety-seven parents/guardians received support services
SENP-NPCLC	2.2.1. Seventy-one parents/guardians received court-mandated parent education
KRVFRC-SFP	2.2.3. Sixty parents/guardians participated in educational workshops
GSR-BCDC -HLP -NPCLC -SSCDC	3.1.1. Two hundred, seventy-six children participated in educational center-based activities
WWP-EKFRC	3.1.1. Forty-four children participated in educational center-based activities

In Figure 26, programs in *Child Development* are labeled by box nodes. Circle-in-box nodes are employed to represent programs in *Child Health*. The network contains 23

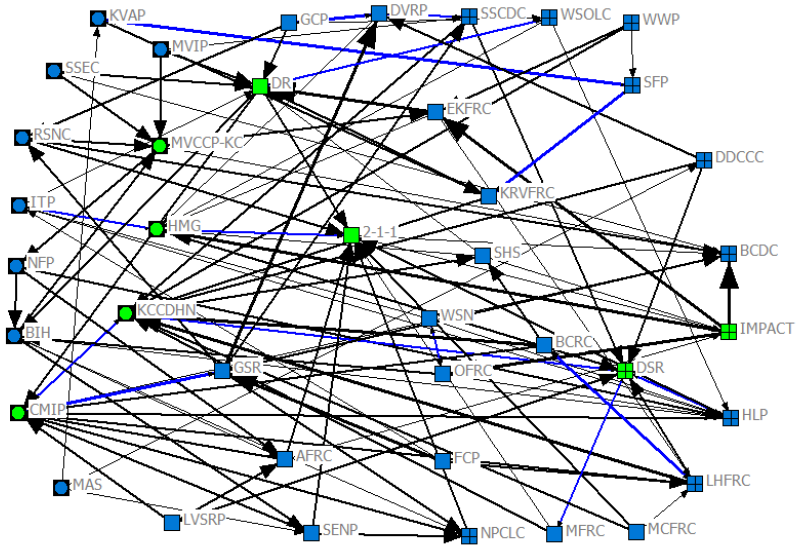
nodes with 24 primary partnerships. On average, each node has 1.04 links, larger than 0.92 primary partnerships within *Child Health* and 0.8 for the network within *Child Development*. With no exception, each program in *Child Development* recognizes at least one program in *Child Health* as a primary partner. The asymmetric pattern seems to imply that health services form an essential foundation for program support in *Child Development*.

Figure 26: Network between *Child Development* and *Child Health*



Mutual links in Figure 26 also show complementary program roles in reciprocal relations. Working in the same rural community, KVAP and SFP are partner dyads to deliver services at the same location. In the other reciprocal link, KCCDHN is solely focused on dental health, and extends its partnership to DSR through one-to-one collaboration. DSR, as an FRC, also partners with HMG for screening child development. Thus, DSR rates its partnership with KCCDHN and HMG at a coordination level. MVCCP-KC only shows one link in Figure 26, no longer retaining its centroid position from Figure 21. As another example of Simpson's Paradox, KCCDHN was not a centroid in Figure 21, and becomes a new centroid for the network in Figure 26 between focus areas.

Figure 27: The Overall Primary Partnerships across Focus Areas



In comparison to the networks within each focus area (i.e., Figures 21-23), more nodes are involved in Figures 20-22 for network construction between focus areas. The corresponding changes are not only reflected by the centroid switch, but also indicated by

an increase on the number of links per node. Figure 27 shows the entire network of primary partners in *Child Health* (circle-in-box nodes), *Family Functioning* (square nodes), and *Child Development* (box nodes). Centroids from Figures 21-26 are highlighted in green color. Apparently, all centroids are countywide programs except for DSR that serves the second largest city in Kern County. Moreover, the centroids also play an essential role in dental health (KCCDHN), immunization support (CMIP), developmental screening (HMG), medical service coordination (MVCCP-KC), child protection (DR), program referral (2-1-1), and quality assurance of early education (IMPACT). The entire network shows 124 primary partnerships among 40 service providers, including IMPACT funded by the state commission. On balance, the average number of links per program is 3.1, above the corresponding index for the sub-networks in Figures 21-26.

It should be noted that most connections in Figure 27 are not reciprocal. According to Kuhnt and Brust (2014), a lack of reciprocal partnerships "is only found in relations of exploitation maintained through asymmetries of power" (p. 1). The asymmetry is obvious in the network connections to 2-1-1 that outnumber the links to other nodes. To quantify the network development beyond the network of primary partnerships, Laramore (2020) recommended *network density* as a summary index to measure node connectivity. By definition, network density is configured as *a ratio between the number of links and the maximum number of possible links*. It is used to measure the connectivity of nodes within the network. Table 50 contains density indices of active partnership connection through the network computing of the original ISQ data.

Table 50: Network Density for Active Partnership Connections

Network	Density
Focus Area I: Child Health	0.40
Focus Area II: Family Functioning	0.42
Focus Area III: Child Development	0.34
Focus Area I – Focus Area III	0.18
Focus Area II – Focus Area III	0.12
Focus Area I – Focus Area II	0.15
Focus Areas I, II, and III	0.20

Although networks in Figures 24-26 show more links per node than Figures 21-23 due to an increase of the primary partner count, network enhancement depends on active partnership building across all programs beyond an idle *Co-Existing* level. The network density computing shows more active links for programs *within each focus area* than *between focus areas* (Table 50). In particular, the outreach effort seems to be more vigorous in *Child Health* and *Family Functioning* that involve countywide service providers. These programs actively support services in *Child Development*, and thus, demonstrate a higher density than the network within Focus Area III.

For these networks between focus areas, the number of nodes is maximized. However, the density remains at 0.20 for fewer increases in the link count (see Table 50). As illustrated by Simpson's Paradox in primary partnership analysis, the network scope could impact information extraction for service integration. The density comparison among active networks shows stronger need of partnership building across programs in different focus areas.

In summary, ISQ data analyses are extended in this chapter on several dimensions, including active versus co-existing links, reciprocal versus unilateral partners, as well as leaf node, dyad, and centrality of the connection structures. Network strengths have been further classified at *Co-Existing, Collaboration, Coordination*, and *Creation* levels to conform to the 4C model. As NAEYC (2020) insisted, "All domains of child development are important; each domain both supports and is supported by the others" (p. 9). Based on an axiom that the whole could be larger than the sum of its part, partnership building can help strengthen the service capacity for young children and their families in Kern County.

Built on the summary of partnership building, First 5 Kern (2021) is expected to "facilitate turning the curve on result indicators" (p. 2). Accordingly, the examination of network structure is intended to monitor the overall progress of service integration throughout this funding cycle. While it is believed that "reciprocal links play a more important role in maintaining the connectivity of directed networks than non-reciprocal links" (Zhu et al., 2014, p. 5), most primary links in Figures 21-26 are unilateral. Carmichael and MacLeod (1997) noted that asymmetric links are more likely to break the equilibrium and create stronger networks during the process of service system building. In response to the *whole-child* and *whole-family* agenda from First 5 Association of California (Ibid. 9), aggregated findings of *child wellbeing* and *family conditions* are presented in Chapter 4 to delineate additional improvement of service outcomes on the time dimension.

Chapter 4: Turning the Curve

The model of Results-Based Accountability refers "Turning the Curve" as a data pattern that depicts "What success looks like if we do better than the baseline" (Friedman, 2011, p. 3). First 5 Kern (2021) has incorporated this concept in its strategic plan "to facilitate turning the curve on those result indicators that most accurately represent the developmental needs of Kern County's children ages prenatal through five and their families" (p. 3). Accordingly, program effectiveness is examined in this chapter to report improvement of annual service outcomes of family functioning and child wellbeing. In FY 2021-2022, the Core Data Elements (CDE) survey is conducted to gather information on child wellbeing across 28 programs. A Family Stability Rubric (FSR) is employed to collect trend indicators on family functioning from 15 programs. The data tracking is linked to an ongoing effort of sustaining the momentum of systematic progress in support of young children and their families on a time dimension.

The information gathering is protected by a research protocol that has been maintained with IRB of CSUB to ensure compliance of the data collection to federal, state, and local laws and regulations. As general guidance, consent forms are administered prior to data collection. Confidentiality training is offered multiple times throughout the year to meet the protocol requirement. Evaluation site visits are conducted regularly to monitor adverse effects across programs. Exercises of due diligence are critical because "The Children and Families Act of 1998 mandates the collection of data for the purpose of demonstrating result" (First 5 Kern, 2019, p. 2).

In this chapter, the FSR data are analyzed on a quarterly basis to show the strengthening of family functioning through the *turning the curve* process. To fit the timeframe of annual reporting, indicators of child wellbeing from last year are treated as a baseline in the CDE data analyses to assess improvement of child wellbeing this year. The dual foci on child and family wellbeing are pertinent to First 5 Kern's status as *Kern County Children and Families Commission*.

Improvement of Child Wellbeing between Adjacent Years

Following the spirit of local control in Proposition 10, First 5 Kern defines its service population as children ages 0-5 in Kern County. "During this period, the brain shapes key abilities for long-term wellness, such as forming trusting relationships, being open to learning, and regulating emotions" (Briscoe, 2019, p. 1). In this context, five-year-old children from last year have reached age 6 this year and newborns within the past 12 months have been added to the service population. Thus, the legislative restriction demands refreshing the program recipients annually within the age boundary. Although the baseline characteristics, such as birth weight and ethnicity, are invariant at any two points in time, result tracking is needed to reflect the ongoing change of child composition each year.

In terms of the service scope, First 5 California (2016) noted, "First 5 Child Health services are far-ranging and include prenatal care, oral health, nutrition and fitness, tobacco cessation support, and intervention for children with special needs" (p. 15). Under these broad domains, indicators of child health and development, including *breastfeeding, home reading*, and *preschool attendance*, were gathered from 2,429 children in the CDE data. In addition, child protection is illustrated by program support for *dental care, immunization*, and *smoking cessation*. In this section, CDE results are reported across

programs to document the systematic impact of First 5 Kern on improvements of child wellbeing in Kern County.

Well-Child Checkup

Medical experts recommend well-child checkups within a few days after birth to ensure healthy growth (Bedner, 2018). The checkup visits also provide opportunities to foster communication between parents and doctors on a variety of health care topics, including safety, nutrition, normal development, and general health care (Medi-Cal Managed Care Division, 2013). The service is often overlooked when "Too few California kids are receiving the health screenings they need" (Children Now, 2018, p. 29).

To fill this void, First 5 Kern has designated a result indicator on well-child checkup in its strategic plan (RI 1.1.3). On average, 18 programs indicated an increase in the percent of children with an *annual well-child checkup visit* from 89.1% to 94.7% between the adjacent years (Table 51). The service outcome impacted 1,853 children this year. In particular, BCDC, MVIP, RSNC, and SSCDC achieved a rate of 100% completion on well-child checkup.

Table 51: Percent of Children with Annual Well-Child Checkup

Program*	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
AFRC	64	89.1	30	93.3
BIH	22	77.3	27	77.8
BCDC	32	100	28	100
BCRC	32	96.8	65	98.5
DR	758	85.9	906	88.2
GSR	67	91.0	75	92.0
LHFRC	77	77.9	47	97.9
MCFRC	39	69.2	38	94.7
MFRC	47	83.0	103	85.4
MVIP	57	96.5	46	100
NFP	68	97.1	74	97.3
NPCLC	68	91.2	90	96.7
OFRC	12	91.7	61	91.8
RSNC	43	88.4	40	100
SENP	107	95.3	103	97.1
SFP	19	84.2	30	96.7
SSCDC	34	94.1	44	100
SSEC	46	95.7	46	97.8

*Program acronyms are listed in Appendix A. This applies to all tables in this chapter.

Immunization

In preparation for kindergarten entry, First 5 Kern funded CMIP to extend immunization service across the county. Since its purchase of a service mobile unit in 2012, CMIP has been enhancing the program outreach to raise immunization rates in different communities. The support from immunization clinics is treated as an important result indicator (RI 1.3.10) in First 5 Kern's (2021) strategic plan.

Table 52 listed the percent of children who completed *all immunizations* across 12 programs. The average percent increased from 84.1% last year to 86.9% this year. This improvement was demonstrated by the CDE data from 1,540 children this year. BCDC, BCRC, and SFP showed 100% completion of the recommended immunizations in FY 2021-2022. The improvement is worth noting because a decline in vaccination rates was reported across the nation during the pandemic (DeTrempe, 2020).

Table 52: Completion of All the Recommended Immunizations

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
AFRC	64	89.1	30	93.3
BIH	22	0	27	7.4
BCDC	32	100	28	100
BCRC	32	96.9	65	100
DR	758	73.1	906	75.3
EKFRC	58	83.9	66	90.9
GSR	67	98.5	75	98.7
MFRC	47	91.5	103	95.1
MVIP	57	87.7	46	91.3
NFP	68	97.1	74	98.6
NPCLC	68	91.2	90	92.2
SFP	19	100	30	100

Insurance Coverage

In general, "Quality affordable health insurance helps kids access timely, comprehensive health care, and supports their overall well-being" (Children Now, 2018, p. 33). To meet this important need, First 5 Kern (2021) identified two result indicators in its strategic plan:

- Number of families assisted with health insurance applications
- Number of children who were successfully enrolled into a health insurance program (p. 3)

The CDE data showed an increase in the percent of insurance coverage across 16 programs (Table 53). More specifically, the average percent of children *with insurance coverage* increased from 95.1% last year to 98.9% this year according to the CDE data from 879 children. A total of 11 programs achieved a rate of 100% insurance coverage this year. BCDC, MVIP, NFP, SSCDC, SSEC, and WWP have been maintaining the perfect record in consecutive years.

Table 53: Percent of Insurance Coverage

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BIH	22	90.9	27	96.3
BCDC	32	100	28	100
BCRC	32	90.6	65	100
DSR	76	98.7	107	100

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BIH	22	90.9	27	96.3
MCFRC	39	82.1	38	92.1
MVIP	57	100	46	100
NFP	68	100	74	100
NPCLC	68	98.5	90	98.9
SENP	107	98.1	103	99.0
SFP	19	84.2	30	100
SHS	77	94.8	75	96.0
SSCDC	34	100	44	100
SSEC	46	100	46	100
WSOLC	36	97.2	32	100
WSN	15	86.7	28	100
WWP	44	100	46	100

Home Reading

Reading activities at home are crucial for child development. First 5 California (2018) reported that "Babies who are talked to and read to from the time they're born are better prepared by the time they start school" (p. 1). Table 54 contains information about home reading activities between adjacent years. Seven programs demonstrated increases in the percent of children who had *home-reading activities* at least once per week. On average, the percent across these programs increased from 80.5% last year to 89.4% this year. This outcome is supported by the CDE data from 354 children this year (Table 56). In particular, RSNC and WWP attained a rate of 100% in their service communities. The home reading indicator also has broad implications in effective parenting. "When a child reads alongside an adult, there are plenty of opportunities for that adult to model and support self-control (such as sustaining attention) and problem-solving" (Barrett, 2019, p. 2).

Table 54: Children Being Read to Twice or More Times in Last Week

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BIH	22	43.5	27	63.0
LVSRP	54	72.2	49	83.7
NFP	68	82.3	74	89.5
NPCLC	68	92.6	90	93.3
RSNC	43	93.0	40	100
WSN	15	80.0	28	96.4
WWP	44	100	46	100

Preschool Attendance

Studies show children enrolled in preschools are 50 percent less likely to require special education and 29 percent more likely to graduate from high school (Hutchins, 2020). In Table 55, program information was gathered to track the percent of children *participating in preschool activities* on a regular basis. On average, the rate increased from 31.3% last year to 39.0% this year. The positive change is demonstrated by the

CDE data from 1,295 children across eight programs. Improvement on this indicator is important because "Decades of evidence show that children who attend preschool are more prepared for kindergarten than children who do not" (Weiland, Unterman, Shapiro, & Yoshikawa, 2019, p. 1).

Table 55: Regular Attendance of Preschool Since the Third Birthday

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BIH	22	0	27	3.7
DR	758	21.0	906	22.8
DSR	76	38.2	107	45.8
LHFRC	77	53.2	47	85.1
LVSRP	54	29.6	49	36.7
MCFRC	39	35.9	38	36.8
SHS	77	15.6	75	22.7
SSEC	46	56.5	46	58.7

Dental Care

First 5 Kern (2021) designated Result Indicator 1.1.6, "Number of children with an established dental home", to track oral health conditions. Because "children with poor dental health are almost three times as likely to miss school as their peers" (American Institutes for Research, 2012, p. 14), dental care is directly related to school readiness. Since December 2001, KCCDHN has been teaming up with preschools and elementary schools throughout the county to perform oral health screenings, fluoride and/or sealant applications, as well as a prophylaxis - all at little or no cost to parents. Children identified as needing further treatment are then scheduled to meet dentists in their offices.

Table 56 contains the percent of children *with annual dental checkups* across 14 programs. Because infants were recommended to have the first dental visit by the first birthday,[36] dental care is generally applicable to most children ages 0-5. On average, the overall percent increased from 51.6% last year to 63.4% this year. The results are supported by new CDE data from 1,602 children this year.

Table 56: Percent of Children with Annual Dental Checkups

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
AFRC	64	37.5	30	43.3
BIH	22	0	27	3.7
BCDC	32	37.5	28	46.4
BCRC	32	62.5	65	64.0
DR	758	44.3	906	50.2
KRVFRC	91	35.2	85	37.6
LHFRC	77	61.0	47	91.5
MCFRC	39	43.6	38	57.9
NPCLC	68	73.5	90	77.8

[36] http://www.aapd.org/assets/2/7/GetItDoneInYearOne.pdf

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
AFRC	64	37.5	30	43.3
BIH	22	0	27	3.7
SENP	107	95.3	103	97.1
SFP	19	31.5	30	80.0
SHS	77	62.3	75	74.7
WSOLC	36	58.3	32	78.1
WWP	44	79.5	46	84.8

Prenatal Smoking

Although children ages 0-5 are too young to smoke, "Secondhand smoke puts young children at risk for respiratory illnesses, including Sudden Infant Death Syndrome (SIDS), middle ear infections, impaired lung function, and asthma" (American Institutes for Research, 2012, p. 14). According to Proposition 10, the public should be educated "on the dangers caused by smoking and other tobacco use by pregnant women to themselves and to infants and young children" (p. 3).

To facilitate child protection, First 5 Kern actively supports the local smoke cessation campaign. On average, the CDE data indicated decline in the proportion of *mothers smoking during pregnancy* from 12.2% last year to 7.4% this year. These 17 programs in Table 57 provided services for 1,468 newborns this year. Eight of the programs reported no smoking issues in the end. BCDC, MCFRC, NFP, SSCDC, and WWP maintained the perfect record in adjacent years.

Table 57: Percent of Mothers Smoking During Pregnancy

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BCDC	20	0	10	0
BCRC	11	9.1	7	0
DR	747	16.5	884	14.4
DSR	43	4.7	57	0
DDCCC	14	35.7	25	28.0
EKFRC	40	12.5	53	5.7
HLP	5	20.0	54	7.4
KRVFRC	20	40.0	52	34.6
MCFRC	28	0	19	0
MFRC	25	4.0	71	1.4
MVIP	39	5.1	39	2.6
NFP	16	0	28	0
NPCLC	36	2.8	47	0
SHS	79	6.3	68	5.9
SSCDC	13	0	17	0
SSEC	2	50.0	16	25.0
WWP	23	0	21	0

Full-Term Pregnancy

Every week of pregnancy counts for baby health (Galvin, 2019). Nonetheless, LaVoice (2016) observed, "many new moms might not have people or resources in their life to help them through such an important time" (¶. 8). Early and regular prenatal care is important for the health of an inexperienced mom and her infant. Program support from First 5 Kern is reflected by a high rate of full-term pregnancy through stress reduction.

In the CDE survey, data on whether a child had a full-term pregnancy were coded in categories of *full-term, premature, unknown*, or *no response*. Table 58 showed that the rate of *full-term pregnancy per program* increased from 76.5% last year to 86.8% this year across 13 service providers. Altogether, these programs served 1,373 children in FY 2021-2022. The improvement implied a substantial social cost decrease because "The average first-year medical costs are about 10 times greater for preterm infants than full-term infants" (Wasson & Goon, 2013, p. 28).

Table 58: Increase of Full-Term Pregnancy Between Two Adjacent Years

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BIH	22	72.7	26	73.1
DDCCC	14	85.7	25	88.0
DR	747	86.3	884	88.0
EKFRC	40	85.0	53	86.8
HLP	5	60.0	54	98.1
KRVFRC	20	70.0	52	98.1
NFP	16	75.0	28	85.7
NPCLC	36	83.3	47	93.6
RSNC	29	72.4	26	73.1
SENP	53	81.1	64	87.5
SFP	19	94.7	30	96.7
SHS	79	78.5	68	91.2
SSEC	2	50.0	16	68.8

Low Birth Weight

Low birthweight (LBW) is a term for describing babies who weigh less than 2,500 grams (5 pounds, 8 ounces) at birth. Although prenatal care could help increase full-term pregnancies, LBW has been identified as a potential cause for medical complications (Ponzio, Palomino, Puccini, Strufaldi, & Franco, 2013). Recent research also linked LBW to low educational attainment and high prevalence of socio-emotional and behavioral problems in later years (Chen, 2012). When LBW occurred in poor families, scientists indicated that "nutritionally deprived newborns are 'programmed' to eat more because they develop less neurons in the region of the brain that controls food intake".[37] Consequently, Kern County is ranked at sixth and eighth positions across the state for LBW and obesity.[38] Because "More babies were born at low birth weight" in Kern County

[37] http://www.sciencedaily.com/releases/2011/03/110310070311.htm
[38] http://www.kidsdata.org

(Golich, 2013, p. i), the trend needs to be reversed by effective programs, such as the ones funded by First 5 Kern.

To address these issues, First 5 Kern supported *Systems of Care* that offered a combination of education, prevention, and intervention services in prenatal care. As an outcome measure, child birth weight was coded in six categories, *less than 3lbs 4oz*, *3lbs 5oz – 5 lbs 7oz*, 5lbs 8oz – 7lbs 15oz, *8lbs or more*, *unknown*, and *no response*. Table 59 showed reduction of the average LBW rate from 16.0% last year to 9.5% this year in seven programs. These programs served a total of 1,032 children this year. BCRC showed no LBW issue in FY 2021-2022.

Table 59: Proportion of Cases for Decreasing Low Birth Weight

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BIH	22	18.2	26	15.4
BCRC	11	18.2	7	0
DR	747	11.1	884	10.5
LVSRP	13	15.4	21	9.5
MCFRC	28	10.7	19	5.3
NFP	16	18.8	28	10.7
NPCLC	36	19.4	47	14.9

Breastfeeding

Because "Breast milk is rich in a chemical that combats infant infections" (Dorking, 2019, p. 1), breastfed babies are known to have plenty of beneficial bacteria for immunity. As an optimal source of nutrition, breast milk is beneficial under premature birth conditions (Zimlich, 2019). Vinopal (2019) reported that "Breastfeeding babies for at least two months cuts their risk of Sudden Infant Death Syndrome almost in half" (p. 1).

Built on the research consensus, the Children's State Policy Agenda included a target to increase the breastfeeding rate (First 5 California, 2015b). The U.S. federal government also set a national objective in 2011 to have at least 46% of children breastfed in the first three months.[39] In this report, responses to a breastfeeding question was grouped in *yes, no, unknown*, and *no response* categories. In Table 60, the average breastfeeding rate across 16 programs increased from 59.5% last year to 72.5% this year. This change supported healthy growth of 1,407 children in Kern County. Furthermore, the improvement has enhanced the nurturing parenting process as "Babies benefits from the closeness [with mothers] during breastfeeding" (Robison-Frankhouser, 2003, p. 28). BCRC reached a rate of 100% in FY 2021-2022.

Table 60: Increase in Breastfeeding Rate Between Two Adjacent Years

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
AFRC	52	73.1	28	75.0
BCRC	11	72.3	7	100
DR	747	44.2	884	47.3

[39] www.kidsdata.org/export/pdf?cat=46

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
AFRC	52	73.1	28	75.0
DSR	43	69.8	57	70.2
DDCCC	14	35.7	25	40.0
GSR	34	70.6	65	83.1
KRVFRC	20	65.0	52	69.2
LVSRP	13	69.2	21	71.4
MCFRC	28	82.1	19	94.7
NPCLC	36	77.8	47	83.0
OFRC	11	54.5	51	60.8
RSNC	29	55.2	26	80.8
SENP	53	62.3	64	75.0
SSCDC	13	53.8	17	88.2
SSEC	2	0	16	50.0
WSN	15	66.7	28	71.4

Prenatal Care

"For a variety of reasons, high-risk mothers may delay or avoid prenatal care" (Wasson & Goon, 2013, p. 28). To combat this issue, the "Number of pregnant women referred to prenatal care services" is listed as RI 1.1.2 in First 5 Kern's (2019) Strategic Plan. Programs received Proposition 10 funding to provide education and service access to pregnant mothers. As a result, prenatal care was coded to represent survey responses in *yes, no, unknown*, and *no* response categories. The average rate of *monthly prenatal care* increased from 87.8% in the last year to 96.5% this year across 19 programs that served 1,538 families (Table 61). Seven programs reached 100% this year. BCDC, MFRC, and SSCDC upheld the perfect record for two years.

Table 61: Percent of Mothers Receiving Prenatal Care

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BIH	22	92.9	26	95.5
BCDC	20	100	10	100
BCRC	11	90.9	7	100
DR	747	91.0	884	94.9
EKFRC	40	90.0	53	96.6
HLP	5	80.0	54	96.3
KRVFRC	20	65.0	52	86.5
LVSRP	13	76.9	21	100
MFRC	25	100	71	100
MVIP	39	92.3	39	100
NPCLC	36	94.4	47	97.9
RSNC	29	89.7	26	96.2
SENP	53	92.5	64	96.9
SFP	19	89.5	30	93.3
SHS	79	88.6	68	94.1
SSCDC	13	100	17	100

Program	FY 2020-2021		FY 2021-2022	
	N	Percent of Children	N	Percent of Children
BIH	22	92.9	26	95.5
SSEC	2	50.0	16	87.5
WSOLC	36	88.9	32	96.9
WWP	23	95.7	21	100

In summary, improvement of child wellbeing has been revealed through the CDE data analyses. Besides alleviation of healthcare issues pertaining to *preterm pregnancy, low birth weight, prenatal care*, and *prenatal smoking* at the child level, enhancement of family functioning supported *breastfeeding, well-child checkup, up-to-date immunizations*, and *insurance coverage*. Progress in early childhood education was demonstrated by expansion of *home reading activities* and *preschool learning opportunities*. As indicated by results in Tables 51-61, the value-added assessments show better service outcomes this year to support an assertion in First 5 Kern's (2019) Strategic Plan, i.e., "Working in partnership with its service providers in communities throughout Kern County, it [the Commission] has been able to positively impact the lives of thousands of children and their families" (p. 8).

Strengthening of Family Functioning in FY 2021-2022

Due to the service overlap, FSR data collection is not confined with service providers in *Parent Education and Support Services*. Programs in *Health and Wellness* and *Early Childcare and Education* are also involved in the data gathering (Table 62). For completion of this annual report, First 5 Kern started the FSR data collection from the baseline quarter of Fall, 2021 to monitor improvement of the home supporting environment in 777 families. The data size for each program is listed in Table 62. LHFRC is omitted in this chapter for having a single observation this year.

Table 62: Scope of FSR Data Collection

Focus Area	Program	Data Size
Health and Wellness	RSNC	69
Parent Education and Support Services	AFRC	29
	BCRC	38
	EKFRC	35
	GSR	42
	KRVFRC	96
	LVSRP	61
	MCFRC	41
	MFRC	102
	OFRC	47
	SENP	120
	SHS	25
	WSOLC	24
Early Childcare and Education	DSR	47
	LHFRC	1

In this section, household conditions, including the shortage of *food, childcare,* and *housing* support, are tracked by multiple indicators in the FSR database. Based on Maslow's hierarchy, Cherry (2013) asserted that "Once these lower-level needs have been

met, people can move on to the next level of needs, which are for safety and security" (¶. 2). Therefore, additional indicators of *job security* and *transportation* are analyzed within the first six months of First 5 Kern support. The period setting is intended to avoid widespread ceiling effects in the trend description.

Food Needs

First 5 Kern monitored financial burden on food spending in FSR data collection. At the program entry, 187 families in 14 programs indicated stress on food spending. The data tracking showed reduction of the family count to 91 and 61 in months 3 and 6, respectively (Table 63). Six programs reached a zero count in half a year. LHFRC and WSOLC maintained the best record across the three checking points. The improvement is important in child health because Kern County's child obesity rate is among the highest in California (Schmitt, 2022), and "Children who are food insecure may go to bed hungry. Food insecurity is paradoxically related to both hunger and obesity" (Children Now, 2018, p. 43).

Table 63: Number of Families with Stress on Food Spending

Program	Initial	3rd Month	6th Month
AFRC	15	2	0
BCRC	3	3	2
DSR	11	10	7
EKFRC	9	2	0
GSR	23	4	0
KRVFRC	21	16	6
LHFRC	0	0	0
LVSRP	8	6	5
MCFRC	11	6	2
MFRC	23	16	15
OFRC	14	2	2
SENP	39	24	22
SHS	10	0	0
WSOLC	0	0	0

Nutrition Considerations

First 5 Kern funded programs to alleviate family financial burdens in childcare, and thus, allowed families to use their resources for nutrition considerations. At the beginning of FY 2021-2022, 33 families in 13 programs indicated unmet nutrition needs. The family count decreased to 11 and 6 in the third and sixth months, respectively. Eleven programs showed elimination of the nutrition concern within half a year (Table 64), and four of them maintained the record during the data tracking. The index change is critical for young children because "addressing health and nutrition needs in the early years of life has important effects on children's long-term development" (Golden, 2016, p. 3).

Table 64: Number of Families with Unmet Nutrition Needs

Program	Initial	3rd Month	6th Month
AFRC	1	0	0
DSR	0	0	0
EKFRC	1	1	0

Program	Initial	3rd Month	6th Month
GSR	2	1	0
KRVFRC	4	0	0
LHFRC	0	0	0
LVSRP	7	4	3
MFRC	4	0	0
OFRC	1	1	0
RSNC	0	0	0
SENP	12	3	3
SHS	0	0	0
WSOLC	1	1	0

Free/Reduced Lunches

The count of free/reduced lunches is considered an indicator of family poverty (Brown, Kirby, & Botsko, 1997). Even at the county seat, Bakersfield still ranked among the nation's worst in childhood poverty (Comen, 2019). In FY 2021-2022, nine programs tracked the number of families that qualified for free/reduced lunch services. At the initial stage of program access, 199 families reported need for free or reduced lunches for children in the households across 14 programs. GSR, MCFRC, SHS, and WSOLC reached a zero count in half a year. The family count dropped to 93 and 55 in months 3 and 6, respectively. The data pattern in Table 65 portrays a positive trend on family support for child wellbeing because "poverty adversely affects structural brain development in children" (p. 1).

Table 65: Number of Families Needing Free/Reduced Lunches

Program	Initial	3rd Month	6th Month
AFRC	13	4	1
BCRC	14	11	8
DSR	10	8	7
EKFRC	9	1	1
GSR	27	2	0
KRVFRC	19	15	6
LHFRC	0	0	0
LVSRP	11	9	7
MCFRC	9	6	0
OFRC	16	3	3
RSNC	20	19	10
SENP	23	15	12
SHS	13	0	0
WSOLC	15	0	0

Unmet Housing Needs

Strong links have been found in research literature between housing conditions and child development (Dockery, Kendall, Li, & Strazdins, 2010). The FSR data within the first six months tracked the number of families in temporary facilities across 15 programs. Initially, 48 families reported unmet housing needs. The number subsequently dropped to 23 in the third month and 12 in the sixth month. Within half a year, 10 programs

showed no families living in temporary facilities (Table 66). BCRC, LHFRC, and WSOLC maintained the perfect record for the entire period.

Table 66: Number of Families Living in Temporary Facilities

Program	Initial	3rd Month	6th Month
AFRC	3	0	0
BCRC	0	0	0
DSR	1	0	0
EKFRC	1	1	0
GSR	1	1	0
KRVFRC	1	0	0
LHFRC	0	0	0
LVSRP	3	2	1
MCFRC	1	0	0
MFRC	3	2	1
OFRC	3	1	1
RSNC	2	2	1
SENP	28	14	8
SHS	1	0	0
WSOLC	0	0	0

First 5 Kern designated a focus area in Family Functioning to recognize the fact that stable housing is foundational to children's growth and well-being. In particular, as Gaitán (2019) pointed out, housing quality is associated with symptoms of child depression, anxiety, and aggression. Results of social emotional screenings offered by First 5 Kern programs cannot be accurately interpreted without the household information.

Burden on Housing Expenditure

During the pandemic, social disparities are reflected by many factors, including housing insecurity, crowdedness of living conditions, and parents who cannot work from home as essential workers (Bixler, Miller, Mattison et al., 2020). The burden of housing expenditure inevitably impacts childrearing practice. Although house prices in Kern County are not as high as most coastal regions of California, the local income is also much lower than the average income across the state. As Schumacher (2016) reported, "Parents with low- and moderate-incomes often struggle to stay afloat, balancing the soaring cost of child care against the high price of housing and other expenses" (p. 1).

First 5 Kern's program support may have helped families save money to cover housing expenditures. In FY 2021-2022, FSR data were gathered to track family burden from housing expenses in seven programs. Upon the program entry, the results indicated a total of 146 families facing spending cut due to housing cost. At the end of month 3, the number decreased to 62. By the midyear, the number was reduced to 40 (Table 67). Six programs reached a zero count in half a year, and LHFRC maintained the record across the checking points. The results addressed the burden of housing spending because "unaffordable housing affects children most during early childhood via its adverse impact on the family's ability to access basic necessities" (Dockery, Kendall, Li, & Strazdins, 2010, p. 2).

Table 67: Number of Families Cutting Spending Due to Housing Cost

Program	Initial	3rd Month	6th Month
AFRC	14	2	0
BCRC	4	3	3
DSR	10	9	7
EKFRC	5	1	1
GSR	16	1	0
KRVFRC	17	10	7
LHFRC	0	0	0
LVSRP	8	8	5
MCFRC	10	5	2
MFRC	19	11	6
OFRC	14	2	0
SENP	20	10	9
SHS	5	0	0
WSOLC	4	0	0

Unmet Medical Insurance Needs

It was reported that "Children without health insurance are less likely to get the medical care they need" (American Institutes for Research, 2012, p. 15). To evaluate program support for child wellness, First 5 Kern gathered health insurance data from 14 programs. At the program entry, the issue of *unmet insurance needs* was reported by 71 families. In months 3 and 6, the total family count dropped to 29 and 14, respectively. The number of families with unmet insurance support became zero in eight programs within half a year (Table 68). WSOLC maintained the perfect record for the entire period.

Table 68: Number of Families without Medical Insurance

Program	Initial	3rd Month	6th Month
AFRC	6	1	0
BCRC	10	4	3
DSR	3	2	1
EKFRC	3	1	0
GSR	11	1	0
KRVFRC	2	0	0
LHFRC	1	0	0
MCFRC	7	2	0
MFRC	8	7	7
OFRC	8	4	1
RSNC	5	4	1
SENP	4	3	1
SHS	3	0	0
WSOLC	0	0	0

Stress on Medical Premium/Copay

Most medical insurance policies require premium or copayment for service access. While it is designed to make people more sensitive to service costs (McKinnon, 2016), the copayment burden could add stress to families in poverty. First 5 Kern tracked FSR data from eight programs on the copayment impact. The number of families feeling the stress

from medical premium was 228 at the beginning. In months 3 and 6, the number dropped to 108 and 66, respectively. Despite the ongoing premium hike with the Affordable Care Act (Morse, 2019), five programs indicated no copayment stress in the midyear (Table 69).

Table 69: Number of Families with Stress on Medical Premium/Copay

Program	Initial	3rd Month	6th Month
AFRC	22	4	1
BCRC	9	5	4
DSR	13	10	8
EKFRC	16	3	0
GSR	18	1	0
KRVFRC	14	8	1
LHFRC	1	0	0
LVSRP	14	7	6
MCFRC	12	4	2
MFRC	12	11	8
OFRC	18	5	3
RSNC	22	20	8
SENP	43	30	25
SHS	11	0	0
WSOLC	3	0	0

Job Security

Unstable employment often results in inadequate family income for early childhood support (Hill, Morris, Gennetian, Wolf, & Tubbs, 2013). Consequently, "Children who experience poverty during their preschool and early school years have lower rates of school completion than children and adolescents who experience poverty only in later years" (Brooks-Gunn & Duncan, 1997, p. 55). The unemployment issue was followed in the FSR data collection across 12 programs. The issue was reported by 79 families upon the program entry. The family count was reduced to 29 at the end of the first quarter and 17 by the midyear. In particular, the responses from five programs indicated no issue of unemployment at the end of the sixth month (Table 70).

Table 70: Number of Families with Unemployment Issue

Program	Initial	3rd Month	6th Month
AFRC	8	3	1
EKFRC	10	2	0
GSR	3	0	0
KRVFRC	15	6	3
LHFRC	0	0	0
LVSRP	6	3	2
MCFRC	4	1	0
MFRC	8	4	4
OFRC	10	5	4
RSNC	7	5	3
SHS	4	0	0
WSOLC	4	0	0

Unmet Childcare Needs

While center-based programs delivered childcare services for a group of families, "For many working parents, hiring a caregiver to work in their home is the best solution for their child care and household needs" (Child Care Inc., 2012, p. 1). In either case, "childcare expenses were among the most uncomfortable financial topics identified by respondents" (Holmes, 2019, p. 2). As a *turning the curve* indicator, program effectiveness is reflected by a decreasing number of households with unmet childcare needs. Results in Table 71 were derived from the FSR data in 15 programs. At the program entry, 323 families indicated unmet childcare needs. The result declined to 155 and 102 in months 3 and 6, respectively. No family reported unmet childcare needs in four programs by midyear.

Table 71: Number of Families with Unmet Childcare Needs

Program	Initial	3rd Month	6th Month
AFRC	22	4	1
BCRC	15	12	9
DSR	14	11	8
EKFRC	19	3	1
GSR	37	4	0
KRVFRC	25	22	10
LHFRC	1	0	0
LVSRP	14	10	7
MCFRC	17	5	2
MFRC	32	24	23
OFRC	22	10	7
RSNC	24	23	10
SENP	36	27	24
SHS	21	0	0
WSOLC	24	0	0

Availability of Convenient Childcare

Child care is often unaffordable, inadequate or unavailable to address the needs of nonstandard work schedules (Stipek, 2018). "Without access to affordable and convenient childcare, many parents—mostly mothers—will find it increasingly untenable, financially and logistically, to work outside the home" (Vesoulis, 2020, p. 4). Based on responses from 15 programs, 246 families indicated no convenient childcare provider at the program beginning. The family count was reduced to 107 in the first quarter and 53 in the second quarter of FY 2021-2022. Five programs reported no shortage of convenient childcare in the sixth month (Table 72). To the credit of First 5 Kern funding, local programs offered convenient childcare while other providers discontinued the service during the pandemic (Moorthy & Raya, 2020).

Table 72: Number of Families without Convenient Childcare Providers

Program	Initial	3rd Month	6th Month
AFRC	15	4	1
BCRC	3	0	0
DSR	9	6	6
EKFRC	18	4	1

Program	Initial	3rd Month	6th Month
GSR	35	4	0
KRVFRC	28	22	10
LHFRC	1	0	0
LVSRP	15	10	7
MCFRC	12	4	1
MFRC	18	10	8
OFRC	25	9	3
RSNC	23	21	8
SENP	21	13	8
SHS	12	0	0
WSOLC	11	0	0

Missing Work/School Due to Childcare

As states loosen stay-at-home orders, families across the nation are finding themselves unable to return to work due to childcare needs. As a result, parents or other family members might have to miss work or school for lacking childcare, which could reduce job security and cause family instability. In FY 2021-2022, 13 programs showed improvement on the issue of *missing work or school due to childcare*. At the beginning, the issue was acknowledged by 30 families. At the end of the first and second quarters, the number was reduced to 8 and 0, respectively. All programs showed elimination of this issue within six months (Table 73). BCRC, GSR, LHFRC, and LVSRP maintained the perfect record for the entire period.

Table 73: Number of Families Missed Work/School for Childcare

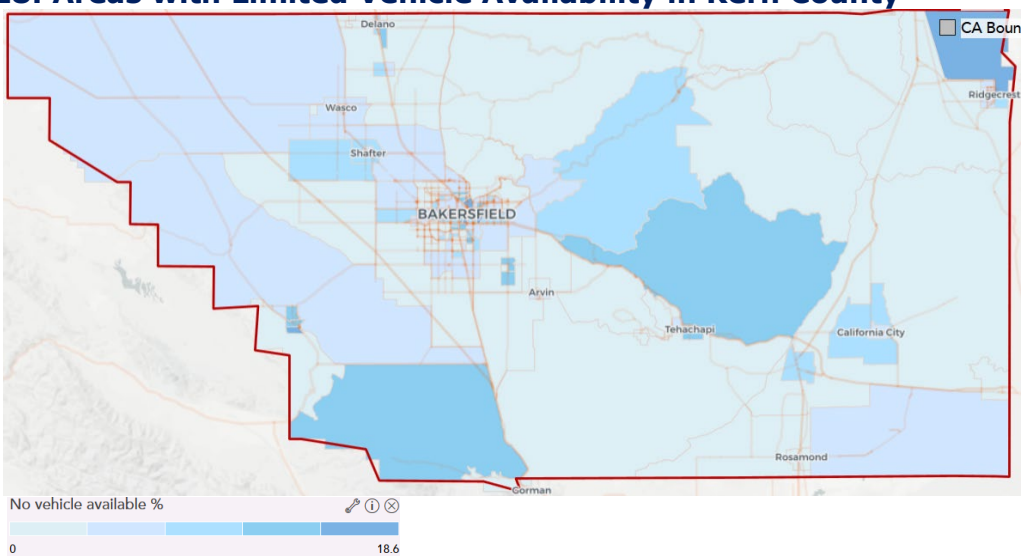
Program	Initial	3rd Month	6th Month
AFRC	1	0	0
BCRC	0	0	0
DSR	1	1	0
EKFRC	1	1	0
GSR	0	0	0
KRVFRC	6	1	0
LHFRC	0	0	0
LVSRP	0	0	0
MCFRC	2	0	0
OFRC	7	2	0
SENP	9	3	0
SHS	1	0	0
WSOLC	2	0	0

Unmet Transportation Needs

Unmet transportation needs are considered an indicator of lacking family resources (Bixler, Miller, Mattison et al., 2020). In Figure 28, dark-colored areas highlight rural communities having limited vehicle availability and public transportation. Families with young children encounter difficulties in service access due to the need of "Broader and more frequent transportation services for medical appointments, dental appointments,

and other services are needed".[40]

Figure 28: Areas with Limited Vehicle Availability in Kern County



It was confirmed by the FSR data from FY 2021-2022 that 55 families indicated *unmet transportation needs* prior to their service access to 12 programs. Improvement of this issue occurred by the end of the first quarter when the family count dropped more than half to 21. At midyear, nine families reported *unmet transportation needs*. The FSR data showed that eight programs eliminated transportation issues at the end of sixth month (Table 74). WSOLC upheld the zero count across three checking points.

Table 74: Number of Families with Unmet Transportation Needs

Program	Initial	3rd Month	6th Month
AFRC	2	0	0
BCRC	1	0	0
EKFRC	2	1	1
GSR	5	1	0
KRVFRC	9	7	2
LHFRC	0	0	0
LVSRP	3	3	1
MCFRC	4	1	0
OFRC	16	2	0
SENP	12	6	5
SHS	1	0	0
WSOLC	0	0	0

Missing Work/School Due to Transportation

Table 75 contains the number of families with members *missing work or school due to transportation*. The results from 10 programs showed that 27 families reported transportation needs before receiving First 5 Kern-funded services. The family count decreased to 9 in months 3 and 1 at midyear. Nine programs reported no families *missing*

[40] http://www.first5kern.org/wp-content/uploads/2018/01/Ridgecrest-Area-6-Town-Hall-Recap-071317.pdf

work or school for transportation reasons in month 6. BCRC, LHFRC, and WSOLC maintained the zero count for the entire period. Improvement in this front is particularly relevant to delivery of First 5 Kern-funded services because "In rural areas, public transportation options are scarce and have limited hours of service" (Waller, 2005, p. 2).

Table 75: Number of Families Missed Work/School for Transportation

Program	Initial	3rd Month	6th Month
AFRC	2	0	0
BCRC	0	0	0
EKFRC	2	1	0
GSR	5	1	0
LHFRC	0	0	0
LVSRP	3	1	0
MCFRC	3	0	0
SENP	10	6	1
SHS	2	0	0
WSOLC	0	0	0

Burden of Transportation Expenditure

Rural households spend a much larger portion of their budgets on transportation than urban households. In FY 2021-2022, FSR data were gathered to track the number of families *with financial burdens for transportation*. The initial figure showed 96 families with the financial burden before service access in 12 programs. The family number dropped to 36 and 17 in months 3 and 6, respectively. Eight of the programs showed zero family count by midyear (Table 76), and no family in LHFRC reported the burden across the checking points. The trend of improvement is important for child service access in remote communities.

Table 76: Number of Families with Financial Burden for Transportation

Program	Initial	3rd Month	6th Month
AFRC	11	0	0
BCRC	1	1	0
DSR	3	2	0
EKFRC	4	1	0
GSR	10	1	0
KRVFRC	19	15	8
LHFRC	0	0	0
MCFRC	8	4	1
OFRC	18	2	2
SENP	19	10	6
SHS	2	0	0
WSOLC	1	0	0

In summary, local programs made extensive contributions to improvement of child wellbeing in FY 2021-2022. By saving family expenditures on early childhood support, the entangled issues of inadequate *food supply, childcare, job security, housing*, and *transportation* have been alleviated within the first six months of program service. The FSR findings in Tables 63-76 demonstrated improvement of family functioning on 14 indicators in FY 2021-2022. The support is particularly important for narrowing the equity

gap because childcare costs have exceeded federal subsidy payments to low-income parents (Murrin, 2019).

In the RBA model, *Turning the Curve* is a key concept for "Defining success as doing better than the current trend or trajectory for a measure" (Lee, 2013, p. 10). Based on systematic analyses of FSR and CDE data in this chapter, ongoing improvement of child wellbeing and family support has been summarized on multiple aspects and across different program sites (see Tables 51-61, 63-76). The result triangulation reconfirmed the positive impact of First 5 Kern-funded services to support the *Turning the Curve* process on the time dimension.

Chapter 5: Conclusions and Future Directions

Empirical results have been presented in the first four chapters to indicate full compliance of First 5 Kern funding to Proposition 10 requirement. Built on description of the commission leadership in Chapter 1, Chapter 2 contained assessment findings to address the results-based accountability across programs in *Child Health, Family Functioning*, and *Child Development*. Outcomes of network building were reported in Chapter 3 to delineate partnership enhancement in *Systems of Care*. Improvement of child wellbeing and family functioning was summarized in Chapter 4 to document the *turning the curve* process on 25 indicators (see Tables 51-61, 63-76). Altogether, compelling evidence has been triangulated to reach a well-grounded conclusion, i.e., the commission has sponsored "local programs that promote early childhood development in the areas of health and wellness, early childcare and education, parent education and support services, and integration of services" (First 5 Kern, 2021, p. 2).

Per stipulation of First 5 California (2010), "Evaluation should be conducted in such a way that it provides direct feedback to the County Commission and to the community as a whole" (p. 17). In this chapter, more holistic stories are synthesized from qualitative data to highlight improvement of the service impact across different focus areas. One additional section, *Policy Impact of Evaluation Outcomes*, is created to address result dissemination following the state report template.[41] The entire report ends with a review of the past recommendations and an introduction to new recommendations for the next fiscal year.

Impact of First 5 Kern-Funded Programs

Sources of the impact stories are listed in Table 77 to clarify program categorization in FY 2021-2022. The program affiliation is based on features of the primary responsibilities for each service provider. Many stories indicate that well-rounded services have been performed at a level above and beyond the Scope of Work and Evaluation Plan for a specific program.

Table 77: Sources of Success Stories across Programs and Focus Areas

Focus Area	Program
Child Health	Black Infant Health Program
	CASA Infant/Toddler Program
	Children's Mobile Immunization Program
	Help Me Grow Kern County
	Kern County Children's Dental Health Network
	Kern Valley Aquatics Program
	Make A Splash
	Medically Vulnerable Care Coordination Project of Kern County
	Medically Vulnerable Infant Program
	Nurse Family Partnership Program
	Richardson Special Needs Collaborative

[41] http://www.ccfc.ca.gov/pdf/partners/data_systems/ar/Annual_Report_Guidelines_FY_2018-19.pdf

Focus Area	Program
	Special Start for Exceptional Children
Family Functioning	2-1-1 Kern County
	Arvin Family Resource Center
	Buttonwillow Community Resource Center
	Differential Response Services
	Domestic Violence Reduction Project
	East Kern Family Resource Center
	Family Caregivers Project
	Greenfield School Readiness
	Guardianship Caregiver Project
	Kern River Valley Family Resource Center
	Lamont/Vineland School Readiness Program
	McFarland Family Resource Center
	Mountain Communities Family Resource Center
	Oasis Family Resource Center
	Shafter Healthy Start
	Southeast Neighborhood Partnership Family Resource Center
	Women's Shelter Network
Child Development	Blanton Child Development Center
	Delano School Readiness
	Discovery Depot Child Care Center
	Health Literacy Program
	Lost Hills Family Resource Center
	Neighborhood Place Community Learning Center
	Small Steps Child Development Center
	South Fork Preschool
	West Side Outreach and Learning Center
	Wind in the Willows Preschool
First 5 California	Improve and Maximize Programs so All Children Thrive

In *Child Health*, MVIP is funded to provide home-based, medical case management. When a nurse visited an infant as a pre-term patient, additional issues were identified beyond medical assistance. Because the mother had Morquio's Syndrome and could not provide primary care, the nurse worked with a maternal aunt to establish legal guardianship and help the family apply for services from various organizations. Referrals were sought to gain financial assistance from community supporters. As a result, the family successfully avoided overdue bills for food, rent, utility, and other expenditures. The maternal aunt was also trained as a caregiver for infants under serious medical conditions. The mother expressed appreciation for the in-home support – "I'm glad I have a nurse helping to guide me so I can get all the services my child needs" (Ibid. 4).

In addition to home-based assistance, First 5 Kern funded SSEC to provide center-based support for children under special circumstances. For example, Caring Corner served a 3-year-old girl. She was pre-termed at 23 weeks gestation, and had a reactive airway symptom, developmental delay, a chronic lung disease, seasonal allergies, retinopathy, and eczema. SSEC offered comprehensive services to facilitate her progress in multiple fronts, including learning American Sign Language, practicing commonly-used words, eating foods in small bite-sized pieces, using adaptive seating, and walking carefully on tiptoes. The center environment was conducive to establishing meaningful peer interactions. In this year, she started babbling during music activities and developing expressive language with words such as "ball", "toy", "colors", and "mom" (Ibid. 4).

In *Family Functioning*, First 5 Kern funded programs at FRCs to create a support system for young children and their families across the county. Impact stories reflected critical services in difficult circumstances, including (1) senior grandparents taking care of four children; (2) a single, pregnant mother new to this region during prenatal care; (3) a single mother in need of family adoption to support children; (4) a bilingual girl never attended a preschool before; (5) a hospitalized father with a young child; (6) a child abandoned at the hospital by both bio-parents; (7) a case-managed family with a father succumbed to COVID; (8) a young mother moved back to Kern County after losing her job during the pandemic; (8) a child experiencing delay in social skill development; (9) a divorced mother unable to support two kids; (10) a single pregnant mother with a three-year-old child as victims of domestic violence; (11) a young child in an individualized education program (IEP) for speech and comprehension issues; (12) a single mother of six children with inadequate help from Child Protective Services; and (13) a mother with marriage issues and job pressure from her ex-husband (Ibid. 4).

While improvement of family functioning demands broad-based support, child protection requires more case tracking because it typically takes 7 attempts for a victim to permanently leave their abuser (Ibid. 4). In a story of WSN, a mother had to return to the shelter with her daughter because her abuser was about to be released from jail. The service provider spent some time with the little girl who had witnessed violence and was extremely attached to her mother. After earning her trust, the staff was able to reduce the girl's anxiety about separation. Meanwhile, the program arranged group activities and field trips to increase exposure of the girl to other people. By the end of their stay, she could spend time in the childcare room without mom. WSN provided a peaceful living environment for child growth and protection.

In *Child Development*, BCDC served a mother who lost her home and job due to the COVID-19 outbreak. Benefiting from the past enrollment of her first child, she approached BCDC as the daycare provider for her 2-year-old son and 4-year-old daughter. The service allowed her to complete courses for employment at a medical office. The mother reported that she was able to support her child growth with a stable job this year. This example shows that Proposition 10 funding has been used to create resilient, self-sufficient, and safe platforms for young children to thrive in Kern County (Ibid. 4)

The support network covers remote communities where poverty is rampant, and no other resources are available to assist children with special needs. With funding from First 5 Kern, SFP provides quality childcare and early education to children ages 3 to 5 in the Kern River Valley area. A boy was identified for issues with activity transition. Interventions have been designed to change his behavior of running around arbitrarily.

The specific measures included (1) providing a 5-minute warning prior to activity transition, (2) posting a visual schedule on the wall to show daily class activities, and (3) alerting him about the preparation to work with other kids. A timer was placed near him to track the period he had for each activity. After a few months, the boy not only learned to transit from one activity to another, but also improved his sense of self with teacher's encouragement. The systematic approach has effectively supported the policy agenda of First 5 Association of California to fill service gaps for all young children to thrive (Ibid. 9).

Extraction of Qualitative Outcomes from Text Analytics

While examples of the impact description illustrate authentic and in-depth stories on the extensive services funded by First 5 Kern, result aggregations are needed to justify the overall accountability of the state investment in all local programs. Repeated listing of individual stories, albeit the genuine details endorsed by grounded theories for qualitative investigation, is delimited to subjective interpretation, and does not achieve the goal of information summary.

In this section, natural language processing (NLP) is applied to transform unstructured text from impact stories into normalized data suitable for analysis by machine learning algorithms. It is well-known that "Today's natural language processing systems can analyze unlimited amounts of text-based data without fatigue and in a consistent, unbiased manner."[42] The text analytics has overcome seemingly insurmountable issues of qualitative inquiry and inductive reasoning that hinder replicability of data extraction (Sarkar, 2019).

The methodology advancement is spearheaded by an R package, Quantitative Analysis of Text Data (quanteda). According to Benoit et al. (2018),

> quanteda is an R package providing a comprehensive workflow and toolkit for natural language processing tasks ... Using C++ and multithreading extensively, quanteda is also considerably faster and more efficient than other R and Python packages in processing large textual data. (p. 774)

To date, the R package application has been widely adopted by large-scale assessment projects of the federal government (Caro & Biecek, 2017; Matta, Rutkowski, Rutkowski, & Liaw, 2018).

To analyze overall features of the impact stories, R scripts are developed to complete *tokenization, stopping-word/punctuation cleaning*, and *dictionary stemming* of NLP. The quanteda package is used to create a Lexical Dispersion plot to compare frequently-mentioned words across individual stories. In Figure 29, keywords stemmed from "child" or "children" were mentioned in the stories of every program, except for BIH that used "infant" or "infants". Clearly, the impact stories of First 5 Kern funding were all about young kids in the community. In the contextual support, "mother(s)", "parent(s)", "family/families", or "home(s)" were included in the impact stories at least once to highlight the importance of family functioning. In comparison, "student" was mentioned a couple of times to report school readiness services at GSR, MFRC, and NPCLC (Ibid. 4).

[42] https://www.linguamatics.com/what-text-mining-text-analytics-and-natural-language-processing

Figure 29: Frequently-Mentioned Words in Impact Stories at the Program Level

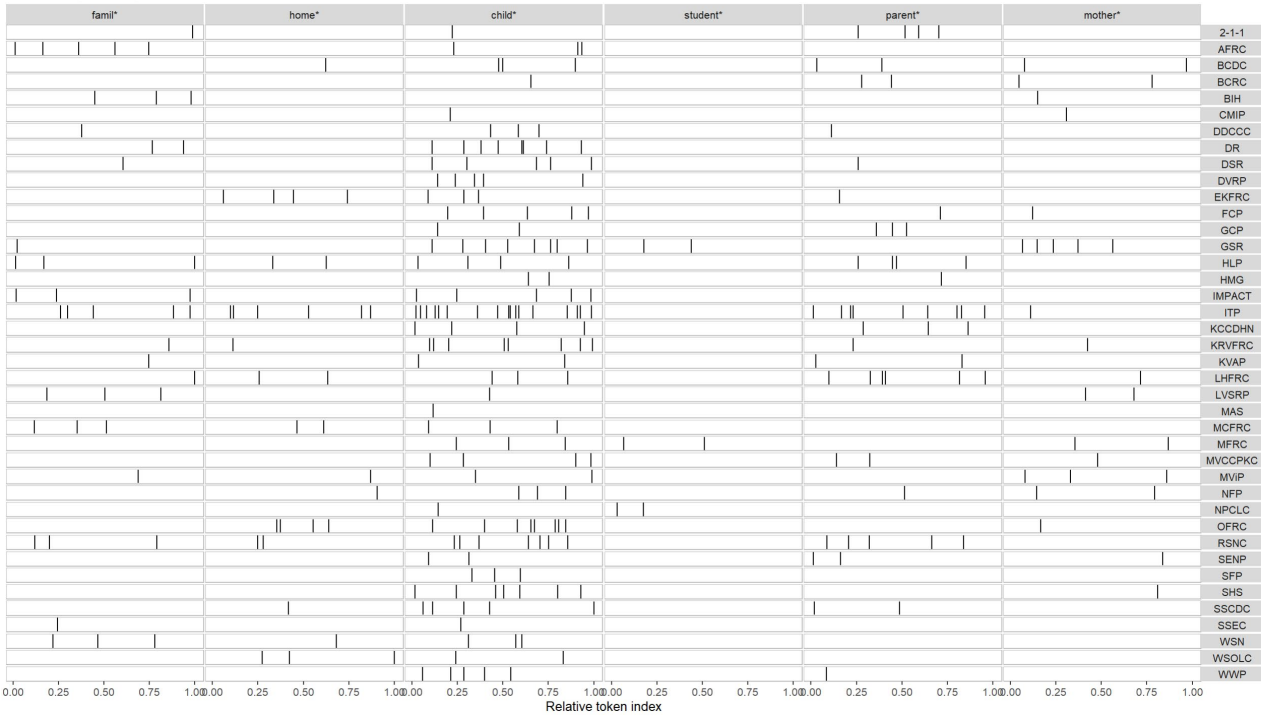
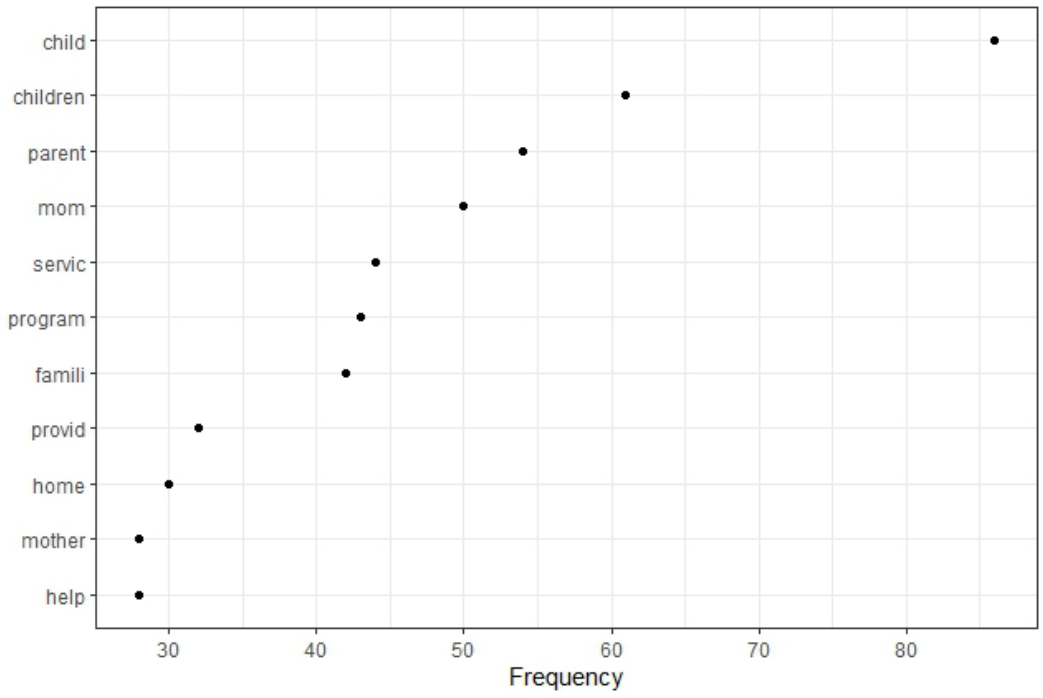


Figure 30: Top-Impact Words across Impact Stories

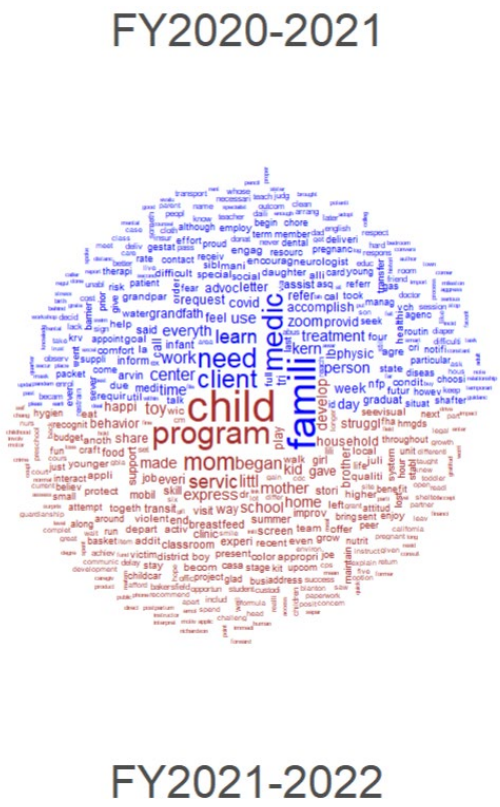


Built on the information highlights for individual programs, top-impact words were stemmed to reduce the term matrix sparsity, and Figure 30 has been created to plot frequencies of word appearance across these impact stories. In the stemming process, for instance, the NLP function has truncated "families" as "famili" and "providers" as

"provid" for common token aggregation. As a result, Figure 30 showed that *child* and *children* as the top impact words appeared more than 140 times in the impact stories. *Parent* and *mom* also appeared 104 times. With no exception, the remaining top-impact words conveyed provisions of program services and/or help for families and mothers in home settings. The results are aligned with the recognition of *child* and *family* as the primary entity of support in Proposition 10.

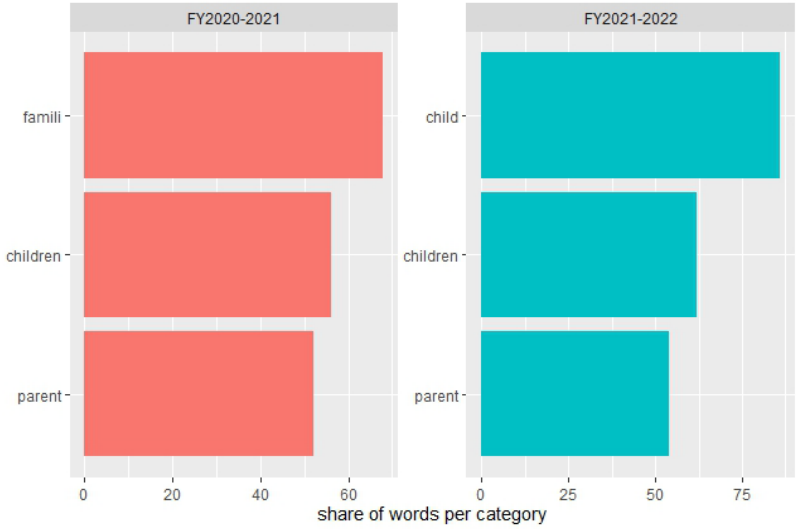
It should be noted that early childhood services and family supports are inseparable aspects of the *Systems of Care* (Kyle, 2000). Most programs funded by First 5 Kern extend support to both children and families. Impact stories could be gathered from either aspect, causing result variations each year. In comparison, top-impact words were *families* and *parents* followed by *child* and *children* last year (Wang, 2022b). A word cloud plot in Figure 31 confirms relatively more impact stories from early childhood services this year.

Figure 31: Word Cloud Plot of Tokenized Keywords



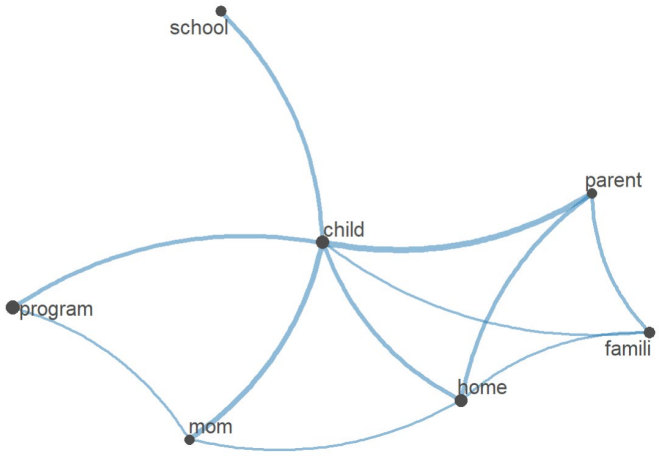
Regardless of story variations on the time dimension, children ages 0-5 are too young to take care of themselves, and thus, parents have a key role to play for well-rounded child development. The top three tokens featuring the impact stories between adjacent years are plotted in Figure 32. Besides reconfirming a change of the story emphasis from *families* to *children* between adjacent years, the token extraction repeatedly highlights *parent* as a core component of program support with approximate 50 frequency counts. The information extraction reinforces First 5 Kern's (2021) designation of *Parent Education and Support Services* as a local focus area to match the result domain of *Family Functioning* in the state strategic plan (First 5 California, 2019).

Figure 32: Featured Tokens in Impact Stories Between Adjacent Years



A plot of the token-indicator relations is drawn to reveal conceptual connections across the impact stories (Figure 33). The network contains seven nodes. *Child* is at a centric location with connections to all other nodes. *Home* is the second most connected node networking with *mom*, *parent,* and *famili* [stemmed from *families*]. *Parent* and *famili* also form an inseparable triangle of guardianship with *child* at the center. Another triangle involves program connections to mom and child as service recipients. *School* is positioned as a leaf node with *child* as the only target of network support. The tokenized terms have 11 pairs of links across seven nodes with an average 3.14 links per node. The entire network density is 0.52 with the majority of connections toward the centrality node, *child*. Other nodes with multiple links are tokenized terms of *program, mom, home, famili*, and *parent*. Therefore, extraction of the overall story pattern fits the spirit of Proposition 10 to provide network support for families and children through integration of services across multiple aspects.

Figure 33: Token-Indicator Relations Behind the Impact Stories



In summary, text analytics not only offered a summary description of service emphasis at the program level (Figure 29), but also illustrated the overall features of First 5 Kern support across the impact stories (Figures 30-32). The qualitative data mining has

depicted a token-indicator relation plot (Figure 33) to clarify indispensable components in the *System of Care*. Based on the story highlighting and text parsing, First 5 Kern has sustained success in grant administration to address all focus areas of its strategic plan.

Policy Impact of First 5 Kern Funding

School entry policy depends on social and emotional readiness. To monitor child development, ASQ:SE-2 is employed by First 5 Kern-funded programs. When a screening score is above the age-specific threshold, consideration should be given to mental health referrals. Inspection of the screening mechanism revealed a threshold fluctuation in ASQ:SE-2. First 5 Kern fixed the inconsistency issue from excessive missing data in the original instrument scaling.

According to the instrument developers, "The alteration of a screening cutoff score by one or two raw score points might significantly impact a referral decision for a child and family and might determine very different developmental trajectories for the child" (Yovanoff & Squires, 2006, p. 48). First 5 Kern's research caused a 20-point scale adjustment (Wang, 2022a), which could affect school entry decisions for numerous children across the nation.

In summary, First 5 Kern's policy impact is not only reflected by its support for local service delivery, but also illustrated by the effort on result dissemination to promote the best practice in the profession. Transparency of First 5 Kern evaluation is further demonstrated by its annual report that has been peer-reviewed by Education Resources Information Center (ERIC) of the United States Department of Education each year. A search of the ERIC database with keywords "First 5" and "Proposition 10" reveals top 15 reports in the ERIC library, and 10 of the contributions come from First 5 Kern.

Past Recommendations Revisited

In the annual report FY 2020-2021, three recommendations were made for First 5 Kern to:

1. Monitor the progress of data gathering according to the Scope of Work and Evaluation Plan for each program;
2. Minimize the COVID-19 impact through capacity building;
3. Offer professional development opportunities for the commission staff and program employees.

According to the strategic plan of First 5 Kern (2021), "The California Children and Families Act of 1998 mandates the collection of data to demonstrate results" (p. 2). In particular, "Value-added assessment generally involves comparing two measurements that establish a baseline and final performance" (Allen, 2004, p. 9). Due to the pandemic impact last year, inadequate data collection occurred in several programs (Wang, 2022b). This year, "due to the lingering limitations of COVID-19, many providers were unable to provide direct services" (Brown Armstrong Accountancy Corporation, 2022, p. 5). Nonetheless, First 5 Kern managed to collect impact stories from 40 programs, 39 from the county commission plus the IMPACT program funded by the state commission. In comparison, the impact story count was 38 last year. In addition, more programs resumed regular data gatherings, such as information collection of DSR from Nurturing-Parenting

workshops, DDCCC and SSCDC from ASQ:SE-2 screening, OFRC from ASQ-3 screening, and program count increases in FSR and CDE. Hence, First 5 Kern has made an adequate effort to address the first recommendation.

To address the second recommendation, First 5 Kern responded to the state commission's strategic plan to "Strengthen the capacity of First 5 county commissions and other local partners to accomplish specific goals and address collaborative early childhood systems building" (First 5 California, 2019, p. 12). As a result, a three-unit course was created on Infant/Toddler Development at the Larry E. Reider Education Center with state funding from the Improve and Maximize Programs so All Children Thrive (IMPACT) project. With its involvement of 77 service sites (RI 4.6.1), the IMPACT service included delivery of 30 workshops (RI 4.6.3) to support early learning of 618 children (RI 4.6.2). The outcome of this capacity building is documented by the following impact story:

> One of our family childcare providers has had exceptional growth in the area of higher education. When this provider began participating with IMPACT six years ago she did not feel higher education was something she needed to improve quality with her program. … In 2022, we have received an email from her stating that she will be completing her Bachelor's degree in early childhood education next year and that her professors have asked her to go on and get her Master's Degree because they would like for her to become an adjunct faculty at their university.

The track record of supporting professional development was not interrupted by COVID-19. On the contrary, the pandemic has created a chance to strengthen resilience of program support. The capacity building was demonstrated by result reports from (1) four programs on RI 1.3.1, (2) 15 programs on RI 2.1.4, (3) 17 programs on RI 2.1.7, (4) four programs on RI 2.2.2, and (5) four programs on RI 3.1.2. As illustrated by the capacity building with childcare providers, First 5 Kern has met the second recommendation.

In the past, First 5 Kern offered staff training on several fronts, including IRB training on consent form administration and ACEs training to support Resilient Kern Initiative (Wang, 2022b). This year, First 5 Kern funded the Oputa Diversity Group to offer professional development opportunities for the commission staff and program employees. According to pages 43-46 of the commission minutes[43], the learning activities were designed to (1) improve a culture of diversity and inclusion, (2) increase employee skills, and (3) provide tools to serve clientele more effectively. On September 20, 2021, the training occurred at a TAC meeting. "Afterward, Dr. Oputa split the committee and staff into groups, posed questions, and wanted each Committee member and staff, upon return, to an open forum to share their discussion with the group".[44] Hence, First 5 Kern has addressed the third recommendation on professional development opportunities for the commission staff and program employees.

In summary, actions have been taken by the commission to address all three recommendations from last year. The attempt to address the first recommendation was built on First 5 Kern collaboration with local partners. The second recommendation led to the enhancement of program quality in early childhood education. Implementation of the third recommendation demonstrated the commission's commitment to supporting diversity and inclusion in staff professional development.

[43] https://www.first5kern.org/wp-content/uploads/2021/07/August-CFC-agenda-packet-080421.pdf
[44] https://www.first5kern.org/wp-content/uploads/2022/06/MINUTES-092121.pdf

New Recommendations

Proposition 10 requires strategic planning on the ending products prior to program funding. To address the statutory demand on Results-Based Accountability, target counts must be set to track program performance annually. In FY 2021-2022, the service data indicate no target count for result indicators 36 times. Without the target setting for service providers, no criterion-referenced assessment can be made for the result tracking. At the commission level, needs have also been identified to justify the program benefit from Proposition 10 investment (Wang & Sun, 2018). Therefore, the **first** recommendation is for First 5 Kern to **complete the RI target setting for justification of Results-Based Accountability at both program and commission levels**.

The strategic plan is a *work in progress* that requires annual reviews and updates. Thus, it is expected to have less than 100% indicator coverage for all service deliveries in each focus area. Meanwhile, an effort needs to be made to minimize the gap to ensure adequate and meaningful guidance from strategic planning. The **second** recommendation is on **increasing the percent of result indicator coverage by First 5 Kern-funded programs**. According to the state statute,

> The [Proposition 10] moneys allocated and appropriated to county commissions shall be deposited in each local Children and Families Trust Fund administered by each county commission, and shall be expended only for the purposes authorized by this act and in accordance with the county strategic plan approved by each county commission.[45]

This recommendation may strengthen alignment of the strategic plan with both local needs and legislative purposes.

A key component of results-based accountability hinges on ascertaining whether service recipients are better off (Friedman, 2011). Thus, data tracking is needed to assess the program impact. This year, eight programs participated in DRDP data collection in pretest and posttest settings. Results in Chapter 2 indicate insufficient data tracking. Consequently, one program had unconnected pretest and posttest assessments for two different groups of children. In addition, duplications of the assessments occurred in nearly all eight programs, undermining the result conciseness with unwarranted data redundancy. The **third** recommendation is for First 5 Kern to **adopt feasible measures of quality control on DRDP data collection to evaluate effectiveness of eight programs in *Child Development***. This recommendation is grounded on a clear commitment from the commission strategic plan, i.e., "The results-based accountability model, as adopted by First 5 California, requires the collection and analysis of data and a report of findings in order to evaluate the effectiveness of funded programs" (First 5 Kern, 2021, p. 2).

[45] https://www.ccfc.ca.gov/pdf/about/organization/policy/about_legislation_prop_10.pdf

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Appendix A – Index of Program Acronyms

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Appendix B – Technical Advisory Committee

Alexis Shaw
Prevention Services Facilitator, Kern County Network for Children

Dr. Ana Mena
Behavioral Health Unit Supervisor, Kern Behavioral Health and Recovery Services

Ami Moser
Manager, Early Learning Services, Kern County Superintendent of Schools

Commissioner Brynn Carrigan
Director, Kern County Public Health Services Department

Chad Casto
Public Health Project Specialist

Christina Staricka
Principal of John L. Prueitt Elementary School, WUESD

Commissioner Debbie Wood
Retired – Bakersfield City School District

Hilda Nieblas-Valenzuela
Dreamers Resource Center & MAGEC Coordinator, Cal State University of Bakersfield

Isabel C. Silva
Manager of Health Education and Disease Management, Kern Health Systems

Jennifer Wood-Slayton
Coordinator, South Valley Neighborhood Partnership

Commissioner Kelly Richers
Superintendent, Wasco Union Elementary School District

Natalie Erickson
Valley Children's Healthcare

Noelia Irwin
Behavioral Health Unit Supervisor, Kern Behavioral Health and Recovery Services

Supervisor Mike Maggard
Board of Supervisor, 3rd District

Pritika Ram
Director of Administration, Community Action Partnership of Kern

Rosalinda Chairez
Principal, Pruett Elementary School

Commissioner Russell Judd
CEO, Kern Medical Center

Dr. Tiffany Pierce
Family Physician, Kaiser Permanente Stockdale Offices

Tiffany T. Apple
Kaiser Permanente, Assistant Department Administrator