FIRST 5 KERN

Annual Report 2019-2020

Submitted February 3, 2021

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Acknowledgments

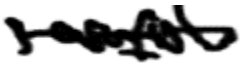
This report contains evaluation findings from 39 programs that received over $10 million of state investment to support early childhood services in Kern County. Following the state statute, assessment data are collected through collaboration of First 5 Kern staff, service providers, and parents or guardians to address the requirement of results-based accountability from Proposition 10, the California Children and Families First Act of 1998.

The report completion is also guided and/or assisted by the following professionals and organizations:

- Commissioners: Lucinda Wasson (Chair), Al Sandrini (Vice Chair), Dena Murphy (Treasurer), Jennie Sill (Secretary), Michelle Curioso, Russell Judd, Susan Lerude, John Nilon, Kelly Richers, Zack Scrivner, 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
  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
- The Institutional Review Board led by Drs. Chandra Commuri and Isabel Sumaya at California State University, Bakersfield (CSUB).
- The Technical Advisory Committee (TAC).

TAC Members are recognized in Appendix B. Alternate Commissioners are listed in Exhibit 1. While acknowledging their indispensable contributions, I conducted the data analyses and shall be fully responsible for any inaccuracies in this report.

Jianjun "JJ" Wang, Ph.D.



Professor of Research Design and Statistics
Principal Investigator

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Executive Summary

In November 1998, California voters approved the California Children and Families First Act (Proposition 10) to levy a 50 cent-per-pack tax on cigarettes and other tobacco products. In the subsequent month, Kern County Board of Supervisors created the Kern County Children and Families Commission (First 5 Kern) to administer the state trust funds in early childhood services. The state statute stipulates that 80% of the tax revenue be distributed across counties according to the rate of live births. As a result, First 5 Kern received $10,186,676 tobacco tax funds in Fiscal Year (FY) 2019-2020.

In this report period, First 5 Kern adjusted its program funding in these focus areas:

- In *Child Health*, Successful Application Stipend (SAS) was initially designed to claim revenue share for the federal Medi-Cal Administrative Activities (MAA). After the MAA completion, SAS was discontinued as of June 30, 2019.
- In *Family Functioning*, a preschool program of Taft City School District was replaced by West Side Outreach and Learning Center (WSOLC) to continue case management, parent education, and family support services in the western Kern.
- In *Child Development*, Bakersfield City School District phased out a program, *Supporting Parents and Children for School Readiness*, due to service overlap, which saved the state funding for other services.

In addition, Ready to Start (R2S) was a local Summer Bridge program that received First 5 Kern support for five years. Because the funding started in summer 2015, R2S ended in summer 2019. Thus, no new data were gathered this year. Based on these changes, this annual report is delimited to evaluation of the remaining 39 programs (see Appendix A) in FY 2019-2020 to justify Outcome-Based Accountability (a.k.a., Results-Based Accountability, or RBA) on the state investment.

Per requirement of the state statute, the RBA commitments are fulfilled 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 in local service programs under a pretest and posttest setting, (3) partnership analyses to evaluate the strength and scope of service integration, (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, 2019). This report structure is aligned with a Statewide Evaluation Framework (First 5 California, 2005) to delineate the impact of state funding across four focus areas of *Child Health, Family Functioning, Child Development,* and *Systems of Care.*

New Developments

Prior to the unexpected outbreak of Coronavirus (COVID-19) pandemic, First 5 Kern gathered a good portion of the evaluation data in the first three quarters. Built on the persistent effort, new developments in evaluation have been addressed in two fronts:

1. Consent Form Revision to Meet an IRB Protocol Requirement

First 5 Kern has been maintaining a research protocol with the Institutional Review Board (IRB) of California State University, Bakersfield (CSUB) to ensure compliance of its

evaluation data collection according to laws and/or regulations at the federal, state, and local levels. Based on feedback from the last IRB review, the evaluation team worked on revision of the existing consent form. As a result, English and Spanish versions of the consent form were updated to conform to the new IRB template.[1]

2. Missing Data Treatment to Avoid Report Bias

COVID-19 caused partial closure of First 5 Kern-funded programs during the third and fourth quarters. The unexpected interruption impacted regular data collection and resulted in more missing observations. To address this issue, multiple imputation (MI) is incorporated in data analyses to avoid biased findings. As indicated by the most recent literature, MI is an optimal method to fill missing data and account for the uncertainty associated with missing data imputations (Wang & Johnson, 2019).

Summary of Evaluation Pursuits

Based on the RBA model (see Friedman, 2005), First 5 Kern gathered performance indicators on (1) how much has been done and (2) how well each service provider performed. In supporting service integration across programs, a NetDraw software was employed to configure the network of service providers in focus areas of *Child Health, Family Functioning*, and *Child Development*. The quantitative and qualitative results are triangulated by four-fold evaluation approaches:

1. Articulating success stories of First 5 Kern to track the service impact between adjacent years

First 5 Kern collected 25 success stories last year. The results were analyzed by a new R package, *Quantitative Analysis of Text Data*, in text analytics (Wang, 2020a). In FY 2019-2020, 33 program stories were downloaded from First 5 Kern website[2] to compare the findings between adjacent years. Plots of (a) top-impact words, (b) keyword dispersions, (c) token-word relations, and (d) word clouds were created to summarize the service outcomes from various programs. The results showed consistent appearances of keywords, such as *children, students, parents,* and *families*, in the impact stories to reconfirm the program focus on primary stakeholders.

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

First 5 Kern monitored state investment in 10 service areas of the annual report glossary.[3] In Child Health, First 5 Kern invested $752,600 in *Early Intervention,* $669,591 in *General Health Education and Promotion*, $943,708 in *Oral Health Education and Treatment,* and $530,477 in *Prenatal and Early Childhood Home Visiting*. In Family Functioning, the Commission spent $1,959,081 on *General Family Support* and $1,066,916 on *Intensive Family Support*. In Child Development, First 5 Kern used $682,756 for *Quality Early Learning Supports* and $1,211,196 for *Early Learning Programs*. In *Systems of Care*, $1,095,649 was invested in enhancing *Policy and Public*

[1]https://www.csub.edu/grasp/Research%20Compliance/IRB/HumanSubProtocol/Sample%20Forms/Sample%20Consent%20Forms/Online-Consent-Form-Template-2019.pdf
[2] https://www.first5kern.org/about-us/success-stories/
[3] First 5 Kern's annual report to the State Commission.

Advocacy and $62,627 was devoted to supporting *Programs and Systems Improvement Efforts*. In comparison to last year, First 5 Kern increased a total of $427,218 investment in five areas, *Early Intervention, General Health Education and Promotion*, *Oral Health Education and Treatment, Intensive Family Support*, and *Policy and Public Advocacy*.

3. Comparing findings from different instruments to assess program effectiveness in multiple aspects

Over a dozen instruments have been incorporated to collect information on program effectiveness. More specifically, this report was based on analyses of data from (1) Ages and Stages Questionnaire-3 (ASQ-3) on child growth across 19 programs; (2) Ages and Stages Questionnaire: Social-Emotional, Version 2 (ASQ:SE-2) for early detection of potential social or emotional problems in five programs; (3) Adult-Adolescent Parenting Inventory-2 (AAPI-2) on parenting outcomes from six programs; (4) Child Assessment-Summer Bridge (CASB) on preschool learning in four programs; (5) Core Data Elements (CDE) and Birth Survey results from 27 programs; (6) Family Stability Rubric (FSR) from 14 programs; (7) Desired Results Developmental Profile (DRDP)-Infant/Toddler from infants/toddlers in three programs; (8) DRDP-Fundamental View from preschoolers in three programs; (9) DRDP-Comprehensive View from preschoolers in four programs; (10) Parenting Survey from Nurturing-Parenting workshops across six programs; and (11) Program-specific surveys from Be Choosy Be Healthy (BCBH), North Carolina Family Assessment Scale for General Services (NCFAS-G), and Dyadic Assessment of Naturalistic Caregiver-Child Experiences (DANCE) across focus areas.

4. Analyzing the network strengths to facilitate program partnership building

Organizational data were collected from the Integration Service Questionnaire (ISQ) to assess the scope and depth of partnership building. Partnership features were analyzed in multiple dimensions, including direct/indirect support, unilateral/reciprocal connection, and primary/non-primary collaboration. A 4C (Co-Existence, Collaboration, Coordination, and Creation) model was used to examine the strength of service integration.

Altogether, First 5 Kern funded 12 programs in *Child Health*, 18 programs in *Family Functioning*, and nine programs in *Child Development* in FY 2019-2020 (see Appendix A). In addition, *Service Integration* has been identified as the fourth focus area in First 5 Kern's (2019) strategic plan to enhance the *Systems of Care*. Outcomes of the evaluation support need to be addressed in these focus areas because of the state statute to "use Outcome-Based Accountability to determine future expenditures" (Proposition 10, p. 4).

Outcomes of the Evaluation Support

Meaningful evaluation findings are inseparable from well-designed data collection and management. Following the IRB protocol, data security training was offered to 216 program staff and eight site visits were conducted to monitor potential adverse effects from data gathering. The Commission also updated several important documents, including the Confidentiality and Intake Protocol Handbook, confidentiality training materials, and other assessment instruments, such as Family Stability Rubric, Birth Survey, Core Data Elements Survey, Nurturing Parenting Survey, and Client Surveys for Guardianship Caregiver Project (GCP) and Domestic Violence Reduction Project (DVRP).

In preparation for the missing data treatment, the evaluator received training on MI to become a certified Bayesian statistician.[4] As a result of the evaluation support, First 5 Kern has

1. completed an annual report to address RBA of 43 programs in the prior year across four focus areas of First 5 Kern (2019) strategic plan. The report was published by the Education Resources Information Center (ERIC) of the U.S. Department of Education at https://files.eric.ed.gov/fulltext/ED602896.pdf;
2. supported improvement of the threshold setting for ASQ:SE-2 according to Classic Test Theory and Item Response Theory. A measurement issue was fixed by this research in social emotional screening;
3. prepared analytic tools for addressing missing data issues due to the COVID-19 pandemic. The Bayesian approach is embedded in MI for missing data imputation in this report;
4. implemented all recommendations from last year to (1) continue supporting program enrollments for all children ages 0-5 and their families across Kern County, regardless of their social stratum affiliations; (2) establish and strengthen program network across different service providers; and (3) sustain First 5 Kern's IRB protocol for assessment data gathering.

Policy Impact in Local Communities

Per state requirement, the annual report guidelines include a policy impact section in the *County Evaluation and Summary* part.[5] In FY 2019-2020, First 5 Kern chose to highlight its policy impact on trauma-informed care (TIC). With the program coverage from prenatal services to kindergarten readiness, First 5 Kern supported TIC in four domains, *Health and Wellness, Parent Education and Support Services, Early Childcare and Education,* and *Integration of Services*.

In *Health and Wellness*, Help Me Grow (HMG) referred children for mental health services after ASQ:SE-2 screenings. Programs in *Parent Education and Support Services* also played an important role in TIC services for children because "having a caring adult in their life is shown to have mitigating effects on trauma" (Shepard, 2020, p. 4). In *Early Childcare and Education*, First 5 Kern funded special-needs programs to support a broad vision of First 5 California (2019) to "ensure all children have equitable access to quality early learning settings" (p. 11). In *Service Integration*, the commission funded the Medically Vulnerable Care Coordination Project (MVCCP) to offer TIC trainings for 17 agencies and 94 service providers (First 5 Kern, 2020). Through partnership building, MVCCP recruited a $20,000 grant from Kaiser Permanente to cover part of the training cost in 2019.[6] More recently, it was revealed that "COVID-19 has had disproportionate contagion and fatality in Black, Latino, and Native American communities and among the poor in the United States" (Fortuna, Tolou-Shams, Robles-Ramamurthy, & Porche, Michelle, 2020, p. 1), which demanded more of First 5 Kern support for minority-focused programs, such as Black Infant Health.

Besides offering professional trainings on TIC and the potential pathway for recovery (Thibault, 2018), First 5 Kern funded effective programs like DVRP to reduce

[4] https://www.csub.edu/~jwang/Bayesian.pdf
[5] http://www.ccfc.ca.gov/pdf/partners/data_systems/ar/Annual_Report_Guidelines_FY_2019-20.pdf
[6] https://www.first5kern.org/kaiser-permanente-announces-2019-grant-for-trauma-informed-kern-county-training/

domestic violence and GCP to support legal guardianship for children ages 0 to 5. The service delivery has led to improvement of community thinking and reaction to local residents who *experienced* or *were at risk of experiencing* trauma. Unlike an isolated program to treat specific trauma-related symptoms, the impact of First 5 Kern fit the original purpose of Proposition 10 to offer "glue money" for establishing a broad spectrum of coalitions across "health care, law enforcement, child care, education, and social service" (Bodenhorn & Kelch, 2001, p. 156).

In retrospect, Governor Newsom allocated $60 million for trauma screening (Rubio, 2019). But "An issue providers face is what to do when a patient is found to have childhood trauma" (Shepard, 2020, p. 4). Through its strategic planning, First 5 Kern offered TIC-related services in multiple ways to strengthen the long-term impact of program funding on early childhood development.

Report Structure

To streamline the result presentation, the report content 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 focus areas of *Child Health, Family Functioning*, and *Child Development*. Chapter 3 is devoted to social network analyses across programs to evaluate effectiveness of partnership building in the fourth focus area, *Systems of Care*. Chapter 4 focuses on improvement on common service indicators across programs to describe the "Turning the Curve" effects between adjacent years (Friedman, 2005). The report ends with a "Conclusions and Future Directions" chapter to review past recommendations and adduce new recommendations for the next year. Consistency of the report structure has been maintained since FY 2010-2011 with ongoing improvement of research methodology every year. All past reports have been peer-reviewed and disseminated in the ERIC database.

Chapter 1: First 5 Kern Overview

Kern County is located at the southern California Central Valley. Established in 1866, it extends west to the edge of the Coastal Ranges. The eastern part reaches the southern slope of Sierra Nevada range, including parts of Mojave Desert, Indian Wells Valley, and Antelope Valley. Over half of the children live in rural regions. Thus, it takes more resources for First 5 Kern to deliver services in these isolated communities. However, no additional consideration was given by Proposition 10 on the extra cost of extensive program outreach. As 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)

Due to the need of gathering more resources to meet the service demands, First 5 Kern advocated service integration while maintaining a frugal financial plan in program management. The administrative budget adds to $639,516 this year, less than 6.28% of the Commission share of Proposition 10 funding (Ibid. 3). According to the ordinance of the county board of supervisors, "eight percent (8%) of the annual fund allocation" was designated for Commission operation each year (Ord. G-6637, 1999). Hence, First 5 Kern underspent its operation budget to save resources for direct program services.

Since its inception, the Commission represents a unique asset in Kern County because few private foundations have reached the valley, mountain, and desert communities to sponsor programs that are strategically designed to improve child health, early learning, and family support. Brown Armstrong Accountancy Corporation (2020), an auditing agency for the county, acknowledged that "The 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. 3).

Focus Area Designation

In Kern County, top priorities of community health are (1) *housing and homelessness,* (2) *mental health*, and (3) *access to health care* (Valley Children's Hospital, 2019). According to Healthy People 2020[7], improving the wellbeing of young children and mothers is an important health goal because of its impact to families, communities, and the health care system. To prioritize program investment, First 5 Kern (2019) set a focus area in *Health and Wellness* to sustain program support in child health.

Kern County is also known for its highest rate of overweight children across California Central Valley (Valley Children's Hospital, 2019). "Since children are dependent on adults for their dietary options, it remains important for parents to make good decisions for themselves as well as their children" (Constantine & Jonah, 2017, p. 34). Hence, the

[7] https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health

issue of child health is deeply rooted in family functioning, which leads Kern 5 Kern to designate a focus area in *Parent Education and Support Services*.

In this fiscal year, a new report from Harvard University confirmed great benefit from early childhood service programs (Oh & Adamy, 2019). It was reported that for every $1 of investment in health care and education for children, taxpayers received a $1.47 return over time. The result is particularly relevant to Kern County because a seven-year trend study of First 5 Kern-funded programs has generated the same benefit-cost ratio (Wang & Sun, 2018). The triangulation of research findings offers a consistent support for designation of First 5 Kern's third focus area in *Early Childcare and Education*.

As a leading catalyst of early childhood programs, First 5 Kern upholds its fourth focus area in *Integration of Services* to pursue a systematic and sustainable solution. The partnership building, coupled with the impact of COVID-19 and other factors, has supported budget savings, and as a result, "Contributions to agents were $1,452,168 less than budgeted due to contracts being executed under budget" (Brown Armstrong Accountancy Corporation, 2020, p. 4). In addition, Brown Armstrong Accountancy Corporation (2020) acknowledged, "Some expenditures were less than budgeted due to the direction of management and an administrative review of costs" (p. 4). Savings related to the management part include (Brown Armstrong Accountancy Corporation, 2020):

- Payroll and employee benefits were under budget by $267,927 and $85,883;
- Administrative Costs (County of Kern) were under budget by $19,782;
- Professional and specialized services were under budget by $88,734.

Per stipulation of the Health and Safety Code of California, the State Commission shall be responsible for "Providing technical assistance to county commissions in adopting and implementing county strategic plans for early childhood development" (No. 130125). In fulfilling its responsibility, First 5 California 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."[8] In its current strategic plan, First 5 Kern (2019) 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).

The 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

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

Vision Statement

Silard and Gaskins (2019) noted, "Every child deserves a chance to thrive. That's California's promise to our children" (p. 1). Following the state-mandated RBA, First 5 California (2019) announced its vision to *have all children receive the best possible start in life and thrive*. Similar to the focus area alignment in Table 1, First 5 Kern (2019) incorporated the statewide vision statement and added a key phrase of "supportive, safe, and loving homes and neighborhoods" to relate the local context. As a result, First 5 Kern (2019) stated its mission as:

> All Kern County children will be born into and thrive in supportive, safe, loving homes and neighborhoods and will enter school healthy and ready to learn. (p. 2)

This 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. However, the local need is not stagnant. For instance, during the pandemic, Aguilera (2020) reported that Latino children suffered a higher rate of COVID-19 than other groups. Thus, minority health becomes more important this year. Per requirement of Proposition 10, First 5 Kern conducts an annual review to update its strategic plan through public hearings.

Mission Statement

Smith et al. (2009) noted, "While many entities purportedly provide care coordination, there is a lack of communication among the multiple agencies serving the same child" (p. 7). Proposition 10 offered a unique opportunity to advocate and bridge comprehensive early childhood support with sustainable fund appropriation (Jacobson, 2018). Through its broad-based strategic planning, First 5 Kern adopts both proven and innovative practices to create, leverage, and maximize local funding for early childhood services. The partnership building has led First 5 Kern to embrace 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, 2019, p. 1)

By design, the mission is outcome-driven to support the best possible start for all young children. In FY 2019-2020, First 5 Kern funded a wide-ranging spectrum of programs in each focus area. In addition, "combining these programs and their funding streams could reduce administrative costs, reduce transactions costs for parents and improve educational quality by increasing the stability of program participation" (Barnett & Masse, 2007, p. 115). Hence, the mission statement attached great importance to articulating early childhood supports across different programs. It is the dual emphases of the mission statement on *program funding* and *service integration* that differentiate First 5 Kern from other organizations with a similar vision statement.

Commission Leadership

The Commission leadership has a balanced representation of key stakeholders,

including elected officials, service providers, program administrators, community volunteers, and First 5 Kern advocates (Exhibit 1). "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, 2020, p. 3). Commissioner appointments followed the California Health and Safety Code (Section 130140), i.e., "The county commission shall be appointed by the board of supervisors and shall consist of at least five but not more than nine members."

Exhibit 1: First 5 Kern Commission Members

Commissioner	Affiliation
Lucinda Wasson (Chair)	Retired Kern County Director of Nursing
Al Sandrini (Vice Chair)	Retired School District Superintendent
Dena Murphy (Treasurer)	Director, Kern County Department of Human Services
Jennie Sill (Secretary)	Children's System of Care Administrator, Behavioral Health and Recovery Services
Michelle Curioso	Director of Nursing and MCAH, Kern County Department of Public Health Services
Russell Judd	Chief Executive Officer, Kern Medical
Susan Lerude	Retired Division Director, Juvenile Probation
John Nilon	Retired County Administrative Officer of Kern
Kelly Richers	Superintendent, Wasco Union School District
Zack Scrivner	Supervisor, County of Kern
Debbie Wood	Retired Coordinator of Health, Bakersfield City School District

*The list of Commissioners above includes all Commissioners who served in FY 2019-2020.

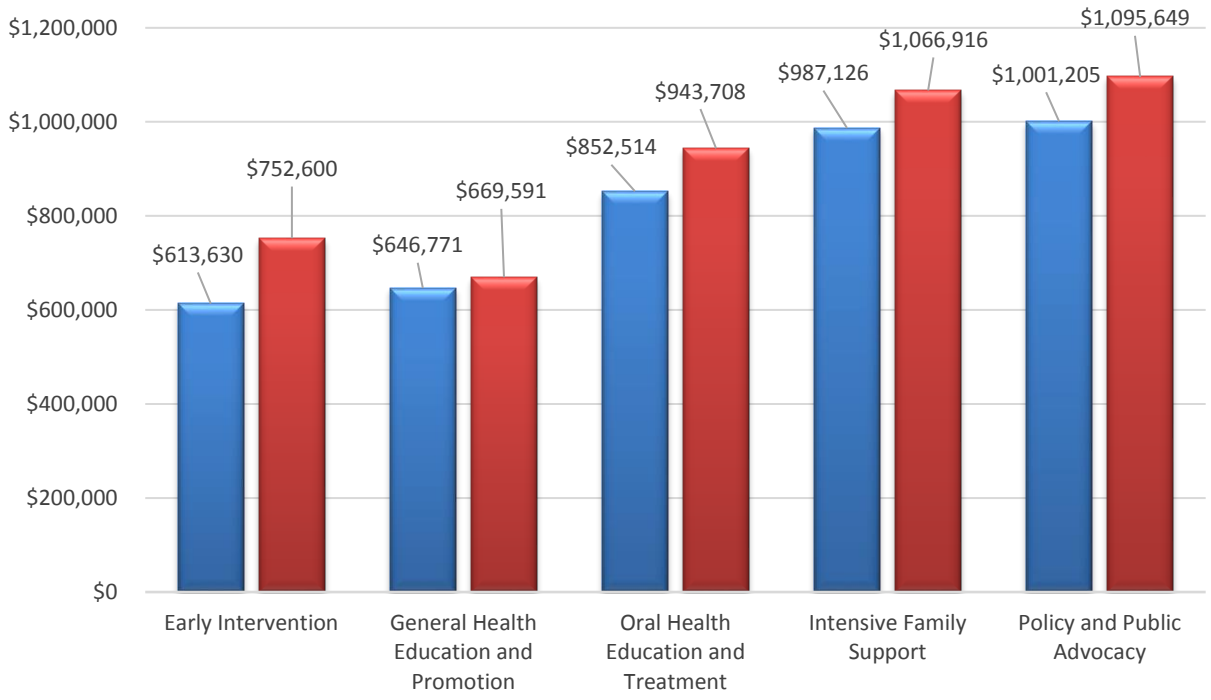
Four committees, *Budget and Finance Committee* (BFC), *Executive Committee* (EC), *Personnel Committee* (PC), and *Technical Advisory Committee* (TAC), are composed under the Commission leadership. BFC is led by the Treasurer and three Commissioners to guide the Commission and the Executive Director on budgetary and financial planning. EC consists of the Commission 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 Commission Vice-Chairperson and three Commissioners to attend all personnel matters, including employment, evaluation, compensation, and discipline of Commission employees. TAC includes four Commissioners and 14 community representatives to advise on all matters 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. 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. Repeat of the training is scheduled every two years. Commissioners also fill out a government document (i.e., Form 700) to declare no conflict of interest in the funding decisions. The Commission in Kern County collectively brings more than two decades of experience in building and improving Systems of Care for young children across various communities.

Under the Commission leadership, the strategic planning has resulted in increasing program investment and strengthening of partnership building. In particular, First 5 Kern devoted more money to addressing service needs in five categories, *Early Intervention, General Health Education and Promotion, Oral Health Education and Treatment, Intensive Family Support,* and *Policy and Public Advocacy* (Figure 1). In comparison to last year, funds augmented in these categories reached a total of $427,218 this year.

Figure 1: Increase of First 5 Kern Funding in Five Service Categories



Source: First 5 Kern annual reports to the state.

To enhance the fund protection, First 5 Kern partnered with CSUB to maintain an IRB protocol for evaluation data collection. In this year, data security training was offered to 216 program staff and eight site visits were conducted to monitor potential adverse effects from data gathering. Extensive efforts have been made to update the Confidentiality and Intake Protocol Handbook, confidentiality training materials, and other assessment instruments, including Family Stability Rubric, Birth Survey, Core Data Elements Survey, Nurturing Parenting Survey, and Client Surveys for GCP and DVRP.

Due to COVID-19, additional preparation has been made in support of missing data treatments, which led to the evaluator training on MI to become a certified Bayesian statistician (Ibid. 4). As a result, First 5 Kern has:

1. completed an annual report to address RBA of 43 programs in the prior year across four focus areas of First 5 Kern (2019) strategic plan. The report was published by the Education Resources Information Center (ERIC) of the U.S. Department of Education at https://files.eric.ed.gov/fulltext/ED602896.pdf;
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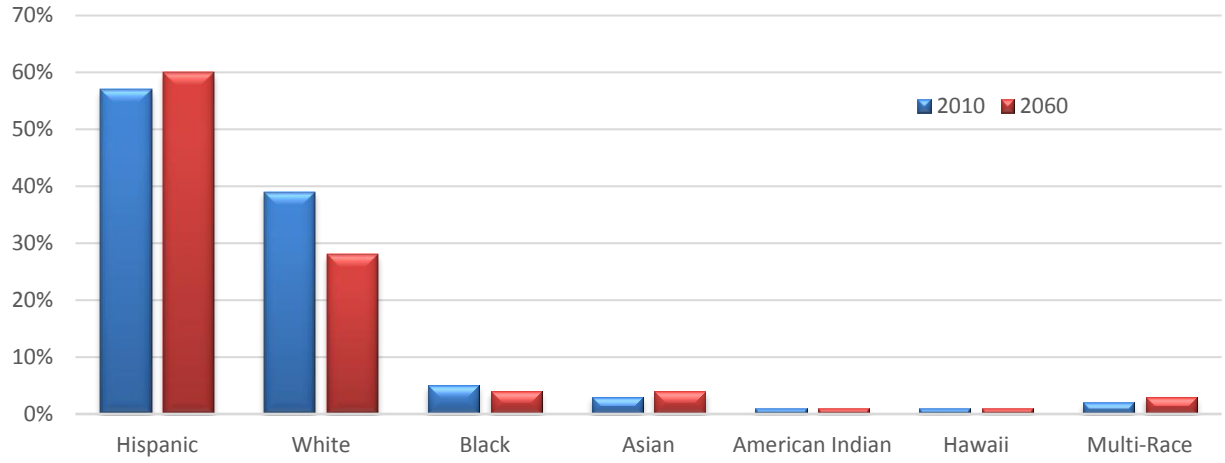
4. implemented all recommendations from last year to (1) continue supporting program enrollments for all children ages 0-5 and their families across Kern County, regardless of their social stratum affiliations; (2) establish and strengthen program network across different service providers; and (3) sustain First 5 Kern's IRB protocol for assessment data gathering.

Profile of Young Children in Kern County

By 2020, Kern County population reached 912,316.[9] With 8.1% of the local population under age 5,[10] an increase of Latino/Hispanic population has been projected in the next four decades (Figure 2). In particular, approximately 40% of children in Kern County have a foreign-born parent,[11] and thus, language barrier is a key factor of child profiling in Kern County. In this context, First 5 Kern funded programs, such as 2-1-1 Kern County, to offer services in both English and Spanish languages.

Figure 2: Proportion of Kern Population by Race in 2010 and 2060



Source: UC Davis Center for Regional Change (2017).

Following First 5 Kern's (2019) strategic plan, local programs are grouped in different focus areas to address essential needs. In *Child Health*, nutrition, breastfeeding, and safety education are classified in a service category of *General Health Education and Promotion*. In addition, the *Early Intervention* category includes care coordination and

[9] https://worldpopulationreview.com/us-counties/ca/kern-county-population
[10] https://data.census.gov/cedsci/profile?g=0500000US06029
[11] https://www.first5kern.org/about-us/about-kern/

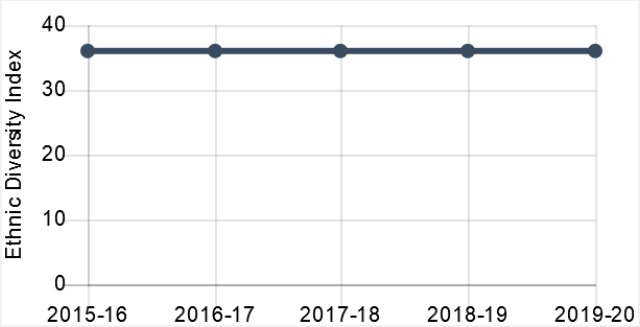
mild-to-moderate support services. Nurse Family Partnership fit in the *Perinatal and Early Childhood Home Visiting* category. First 5 Kern also funded *Oral Health Education and Treatment* services. Altogether, 12 programs received funding in the *Health and Wellness* focus area.

The census data show a rate of high school graduation at 73.8% in Kern County while the national average is 87.7%.[12] The issue of workforce education has exacerbated family resources for early childhood development (Hamilton, Keough, Ratnatunga, & Wong, 2015). Although the county has fertile soil and extensive mineral deposits to support petroleum and agriculture industries, the plummeting oil price undercut economic benefits. Consequently, 37% of the county children under 5-years-old live in poverty, much higher than the state rate of 22% (Ibid. 12). To ameliorate the family resource gap, First 5 Kern funded 18 programs in *Parent Education and Support Services.*

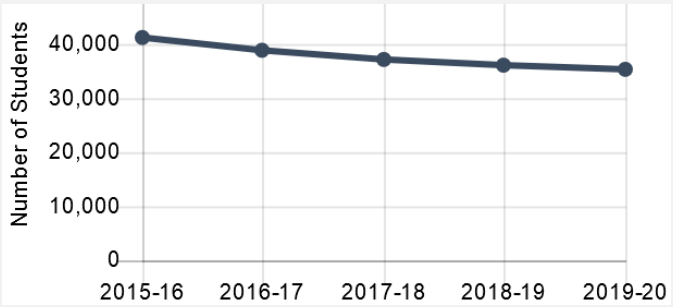
In *Child Development*, expansion and improvement of early childhood education opportunities are recommended as a system change strategy in Kern County (UC Davis Center for Regional Change, 2017). The median age of Kern population is nearly five years younger than the state median.[13] The skewed age distribution suggests needs for more program funding in early childhood development. To facilitate improvement in pre-kindergarten education, the Commission followed its strategic plan (First 5 Kern, 2019) to fund nine programs in *Early Childcare and Education*.

According to Jones (2017), Latino students face large inequities in educational achievement compared to white peers. While the issue surfaced in school, "gaps between the advantaged and disadvantaged open up early in the lives of children" (Heckman, 2017, p. 50). In this funding cycle, ethnic diversity remains steady in Kern County population. However, the percent of English learners drops from above 20% to below 20% (Table 2). Preschool education seems to have contributed to the reduction of English learner count through academic preparations for kindergarten entry.

Table 2: Trends of Diversity and English Learner Counts in 2015-2020

INDICES	PATTERN
Ethnic Diversity Index	

[12] https://data.census.gov/cedsci/profile?g=0500000US06029
[13] https://www.sierrahealth.org/assets/pubs/SJVHF_Kern_County_Report_Oct_2017.pdf

INDICES	PATTERN
English Learner Count	

Source: http://www.ed-data.org/county/Kern

In summary, children are vulnerable and early childhood services are vital to transforming the valley, mountain, and desert neighborhoods into prosperous, healthy, equitable, and sustainable communities. Through strategic planning, "Tracking child population helps project a community's potential needs for education, child care, health care, and other services for children."[14] Based on the characteristics of Kern County children, First 5 Kern sponsored family-focused, culturally appropriate, and community-based service deliveries in *Health and Wellness, Parent Education and Support Services,* and *Early Childcare and Education.* Information about the 39 service providers is released online[15] to maintain transparency of program funding.

Enhancement of Local Community Support

First 5 Kern relies on its service providers, such as Family Resource Centers (FRC), for program delivery in local communities. Historically, FRC had to piece together funding through private donations, county general funds and the shrinking Proposition 10 investment (Ellis, 2019). On October 2, 2019, Governor Gavin Newsom signed Senate Bill 436 (SB 436) to formalize FRC as a key delivery network of services and as conduits to strengthening families via family-centered, community-based and culturally sensitive services that include cross-system collaboration with the goal of helping to prevent child abuse and strengthening family connections. Thus, First 5 Kern funding has bridged the transition of FRC support to strengthen local family support. In fact, "The only Valley-based entity with written support for the bill [SB 436] was First 5 Kern County" (Ellis, 2019, p. 2).

In FY 2019-2020, First 5 Kern also contributed $97,279 for COVID-19 relief. The money was added to fund contributions of California Family Resource Association to buy supplies from Supply Bank and Sysco Ventura. While "leveraging funding to sustain the system of care" (Ibid. 5), First 5 Kern enhanced local community support through partnership building. Table 3 shows the leveraged fund amount of $4,314,648 from 30 external sources this year, far above the corresponding amount of $2,805,558 from 27 sources last year.

[14] http://kern.org/kcnc/wp-content/uploads/sites/43/2018/08/2018-Important-Facts-About-Kern_s-Children.pdf
[15] https://www.first5kern.org/programs-and-initiatives/funded-programs/

Table 3: Sources and Leveraged Funds for Program Support in FY 2019-2020

SOURCE	LEVERAGED FUNDS
California Bar Association	$13,665.00
California Department of Education	$565,869.00
California Department of Public Health	$972,911.00
California Department of Social Services	$40,850.00
California Department of Social Services (COVID-19)	$59,198.00
California Emergency Management Agency	$142,506.00
Chevron	$19,519.00
County of Kern	$619,891.00
Desert Lake Community Services District	$840.00
Dignity Healthcare	$49,633.00
Anonymous or Individual Donation	$50,417.00
Corporate Donation – Corporate	$145,156.00
Emergency Food and Shelter Program	$54,276.00
Fees/Tuition	$60,641.00
Fundraiser	$45,921.00
Kaiser Permanente	$35,000.00
Kern Community Foundation	$40,500.00
Kern County Aging & Adult Services	$29,963.00
Kern Family Health Care	$13,400.00
Kern Regional Center	$106,896.00
McKinney Vento	$8,882.00
Medi-Cal	$12,339.00
Medical Administrative Activities	$53,864.00
Network for a Healthy California	$36,972.00
Other Organizations	$785,532.00
Southwest Healthcare District	$65,000.00
Successful Application Stipend	$500.00
Targeted Case Management	$37,081.00
Title V	$92,934.00
United Way	$154,492.00

Across 58 counties in the state, Kern ranked 57 on both *health factors* and *health behaviors* in 2020.[16] During the COVID-19 pandemic, many parents were struggling to support families while filling the void of in-person schooling and/or day care service (Doocy, Kim, & Montoya, 2020). First 5 Kern offers essential programs of *child health, early learning*, and *family support* to address the local needs. In FY 2019-2020, the Commission served as an active participant in 33 countywide undertakings (Table 4). In addition, First 5 Kern held three TAC[17] and seven Commission meetings[18] that were open to the general public for information dissemination and input gathering.

[16] https://www.countyhealthrankings.org/app/california/2020/rankings/kern/county/outcomes/overall/snapshot
[17] https://www.first5kern.org/meetings/tech-advisory-meetings/
[18] https://www.first5kern.org/meetings/commission-meetings/

Table 4: First 5 Kern's Participation in Local Undertakings

- 34th Street Neighborhood Partnership
- 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
- Delano Neighborhood Partnership
- Early Childhood Council of Kern
- East Bakersfield Community Collaborative
- East Kern Collaborative
- Kern County Network for Children – General Collaborative
- Good Neighbor Festival Committee
- Greenfield H.E.L.P.S (Healthy Enriched Lives Produce Success) Collaborative
- Head Start – Policy Council
- Health Net Kern Community Advisory Committee
- Indian Wells Valley Collaborative
- Keep Bakersfield Beautiful
- Kern Complete Count Committee (Census 2020)
- Kern County Nutrition Action Plan
- Kern River Valley Collaborative
- Lost Hills Community Collaborative
- McFarland Collaborative
- Medically Vulnerable Care Coordination Committee
- Medically Vulnerable Children Resource Fair Planning Committee
- Oildale Community Collaborative
- Richardson Special Needs Collaborative
- Safe Sleep Coalition of Kern County
- Safely Surrendered Baby Coalition
- Shafter Healthy Start Collaborative
- South Chester Partnership Collaborative
- Southeast Neighborhood Partnership General Collaborative
- South Valley Neighborhood Partnership Arvin/Lamont/Weedpatch Collaborative
- West Side "Together We Can" Collaborative
- Wasco Community Collaborative

In First 5 Kern (2019) strategic plan, partnership building was designed to enhance "Community strengthening efforts that support education and community awareness" (Objective 4.4). In FY 2019-2020, the community support is reflected by program savings from replacing *Supporting Parents and Children for School Readiness* with district-sponsored services at Bakersfield City School District (BCSD). Along with less program billings due to the unexpected pandemic interruption, the service provider substitute

contributed to $387,792 savings in program spending. Altogether, Table 5 lists 56 outreach services at the community, county, and state levels.

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

Event	Initiator	Participant
Community	• First 5 Kern Newsletter • First 5 Kern Strategic Plan • First 5 Kern Website • First 5 Kern Weekly Headlines e-blast • Safely Surrender Campaign • COVID Diaper Delivery to Family Resource Centers • Operation School Bell Celebration	• Community Fairs – Exhibit Booth • Radio interviews on KERN Radio to promote First 5 Kern initiatives • Television appearance on Telemundo to promote Help Me Grow Kern County • Television appearance on KERO and KGET to promote supporting child care providers during the COVID-19 pandemic • Rotary Groups • Gatsby Gala Sponsorship • Alliance Against Family Violence Purple Soul Celebration Sponsorship • Tehachapi Learning and Edu-Care Seminar Sponsorship
County	• Ages and Stages Questionnaire Trainings • First 5 California – purchased and coordinated personal protective equipment and cleaning supplies for child care and other programs • First 5 Express – Mojave, CA • Kern County - Child Assessment Team • Kern County Child Development Conference • News Conferences • Nurturing Parenting – Trainings • Medically Vulnerable Care Coordination – Trauma Informed Care Trainings • Purchased and coordinated personal protective equipment and cleaning supplies for distribution to nearly 200 child care providers during COVID-19 pandemic.	• Chamber of Commerce Governmental Review Council • Kern County Child Death Review Team • Fetal Infant Mortality Review • Kaitlyn's Law: Purple Ribbon Month Committee • Kern Association for the Education of Young Children • Kern Community Foundation – Kern Pledge Kinder Readiness Work Group • Kern Complete Count 2020 Census • Kern Council for Social Emotional Learning • Kern County Board of Supervisors Meetings • Kern County Breastfeeding Coalition • Kern County Homeless Collaborative – Coordinated Entry and Assessment Committee • Kern County Infant Toddler Seminar • Kern County Network for Children Governing Board • Kern Early Stars Consortium • Kern Early Stars Marketing Committee • Kern Medical Safe Home, Safe Baby • Memorial Hospital's Safe Sleep Gold Certification Celebration

Event	Initiator	Participant
		• Nurse Family Partnership Community Advisory Board • Outreach, Enrollment, Retention, Utilization Committee (OERUC) • Safe Sleep Coalition of Kern • Safely Surrendered Baby Committee • Tobacco Free Coalition of Kern County
State	• First 5 Kern Legislative Visits	• Early Learning Childhood Development Select Hearing • First 5 IMPACT Hub – Region 5 • Central Valley Regional Meeting • First 5 California Child Health, Education, and Care Summit • First 5 California Meetings • First 5 Association of California Meetings • First 5 California Statewide Communications Region Representative • Local meetings with state representatives • Quality Counts California Consortium

Summary of Commission Evaluation Activities

Based on the RBA model (see Friedman, 2005), First 5 Kern gathered performance indicators on (1) how much has been done and (2) how well each service provider performed. In supporting service integration across programs, a NetDraw software was employed to configure the network of service providers in the focus areas of *Child Health, Family Functioning*, and *Child Development*. The quantitative and qualitative results are triangulated by four-fold evaluation pursuits:

1. Articulating success stories of First 5 Kern to track the service impact between adjacent years

First 5 Kern expanded its qualitative data collection to aggregate 25 success stories last year. The results were analyzed by a new R package, *Quantitative Analysis of Text Data*, in text analytics (Wang, 2020a). In FY 2019-2020, 33 program stories were downloaded from First 5 Kern website[19] to compare the findings between adjacent years. Plots of (a) top-impact words, (b) keyword dispersions, (c) token-word relations, and (d) word clouds were created to summarize the service outcomes from various programs. The results showed consistent appearances of keywords, such as *children, students, parents,* and *families*, in the impact stories to reconfirm the program focus on the primary stakeholders.

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

[19] https://www.first5kern.org/about-us/success-stories/

First 5 Kern monitored state investment in 10 service areas of the annual report glossary (Ibid. 3). In Child Health, First 5 Kern invested $752,600 in *Early Intervention,* $669,591 in *General Health Education and Promotion*, $943,708 in *Oral Health Education and Treatment,* and $530,477 in *Prenatal and Early Childhood Home Visiting*. In Family Functioning, the Commission spent $1,959,081 on *General Family Support* and $1,066,916 on *Intensive Family Support*. In Child Development, First 5 Kern used $682,756 for *Quality Early Learning Supports* and $1,211,196 for *Early Learning Programs*. In *Systems of Care*, $1,095,649 was invested in enhancing *Policy and Public Advocacy* and $62,627 was devoted to supporting *Programs and Systems Improvement Efforts*. In comparison to last year, First 5 Kern increased a total of $427,218 investment in five areas, *Early Intervention, General Health Education and Promotion*, *Oral Health Education and Treatment, Intensive Family Support*, and *Policy and Public Advocacy*.

3. Comparing findings from different instruments to assess program effectiveness in multiple aspects

Over a dozen instruments have been incorporated to collect information on program effectiveness. More specifically, this report was based on analyses of data from (1) ASQ-3 on child growth across 19 programs; (2) ASQ:SE-2 for early detection of potential social or emotional problems in five programs; (3) AAPI-2 on parenting outcomes from six programs; (4) CASB on preschool learning in four programs; (5) CDE and Birth Survey from 27 programs; (6) FSR from 14 programs; (7) DRDP-Infant/Toddler from infants/toddlers in three programs; (8) DRDP-Fundamental View from preschoolers in three programs; (9) DRDP-Comprehensive View from preschoolers in four programs; (10) Parenting Survey from Nurturing-Parenting workshops across six programs; and (11) Program-specific surveys from BCBH, NCFAS-G, and DANCE in different focus areas.

4. Analyzing the network strengths to facilitate program partnership building

ISQ data were collected to assess the scope and depth of partnership building. Partnership features were analyzed in multiple dimensions, including direct/indirect support, unilateral/reciprocal connection, and primary/non-primary collaboration. A 4C (Co-Existence, Collaboration, Coordination, and Creation) model was used to examine the strength of service integration.

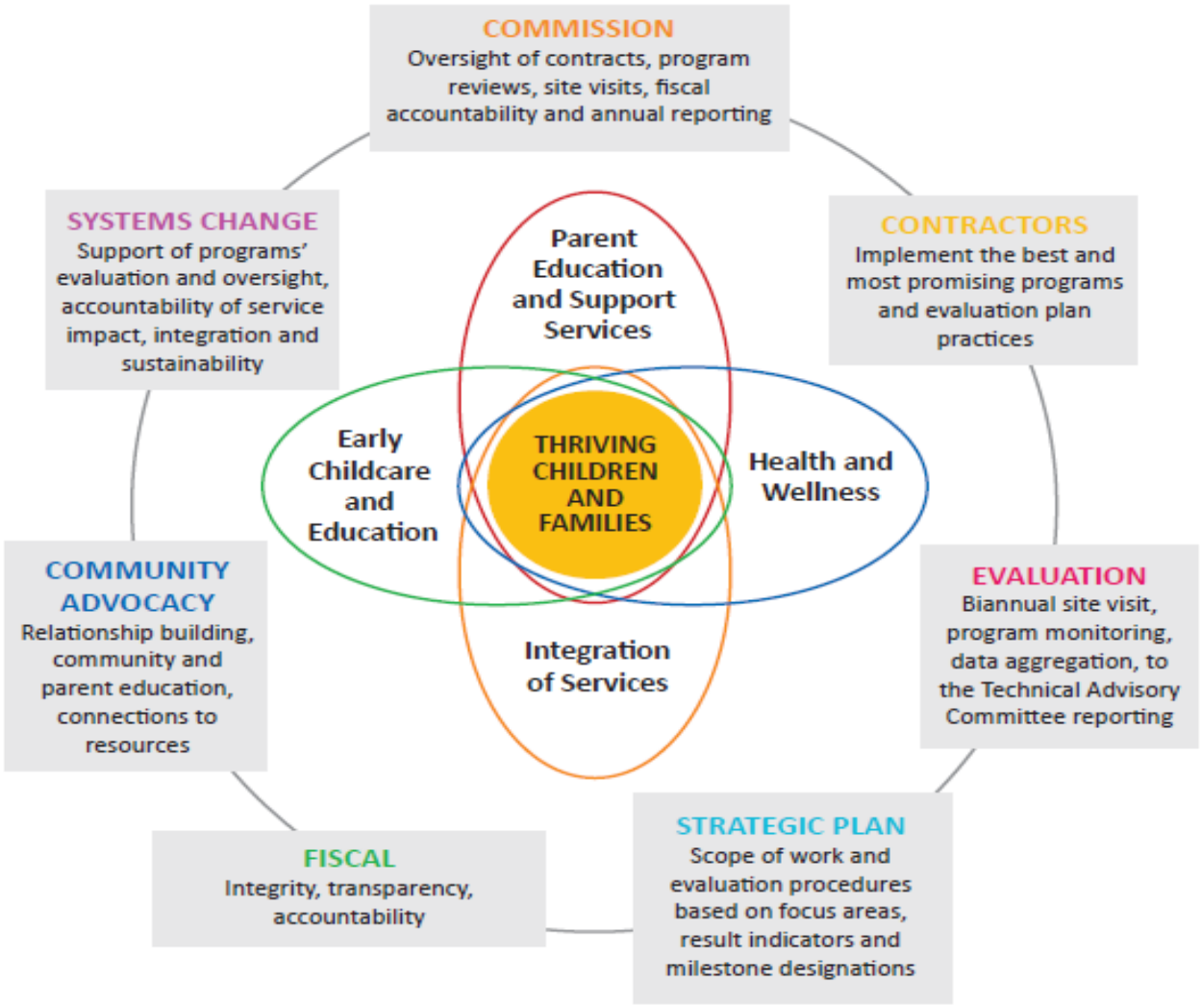
In summary, First 5 Kern funded 12 programs in *Child Health*, 18 programs in *Family Functioning*, and nine programs in *Child Development* in FY 2019-2020 (see Appendix A). In addition, *Service Integration* has been identified as the fourth focus area in First 5 Kern's (2019) strategic plan to enhance the *Systems of Care*. Outcomes of the evaluation support need to be addressed in these focus areas because of the state statute to "use Outcome-Based Accountability to determine future expenditures" (Proposition 10, p. 4).

Description of the Evaluation Framework

FY 2019-2020 is the final year of the current funding cycle under a five-year strategic plan. First 5 Kern followed the mandates of Proposition 10 to collect program data for demonstrating results. To support both *needs-based assessment* and *asset-based assessment*, a coherent system has been established to combine service evaluation

with program administration in Exhibit 2 that places "Thriving Children and Families" at the center of the commission operation.

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



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 (2015b) 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).

As an important part of strategic planning, evaluation mechanism is fully incorporated in First 5 Kern's daily operation to facilitate assessment of program performance in *Child Health*, *Family Functioning*, and *Child Development*, and sustain

partnership building for 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 an important 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.

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, 2019).

Altogether, the report structure is aligned with a Statewide Evaluation Framework (First 5 California, 2005) 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 2019-2020, 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 *Program Administration and Evaluation System* in Exhibit 2.

Chapter 2: Impact of First 5 Kern-funded Programs

California ranks on top of the nation for supporting health and wellbeing of young children with statewide comprehensive programs (Jacobson, 2020). As part of the backbone support, Proposition 10 investment is designed to amend gaps in early childhood services (Bodenhorn & Kelch, 2001). Accordingly, First 5 Kern funding is prioritized to sponsor pivotal services. Contrary to the overall decrease of California population[20], Kern County had "scarce availability of pre-k slots while experiencing rising counts of young children" (Manship, Jacobson, & Fuller, 2018, p. 6). In addition, some Kern communities are short of necessities, such as clean air and water, healthy food, high quality schools and health care.[21] This chapter is devoted to reporting the impact of Proposition 10 funding in *Child Health, Family Functioning*, and *Child Development*.

The state report glossaries (First 5 Association of California, 2013) include 10 service domains for describing local programs funded by First 5 Kern. Two of the domains, *Policy and Public Advocacy* and *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 program beneficiaries, including children and caregivers. In addition, First 5 Kern's (2019) mission includes support for service providers in partnership building. Table 6 contains the number of beneficiaries in each report domain.

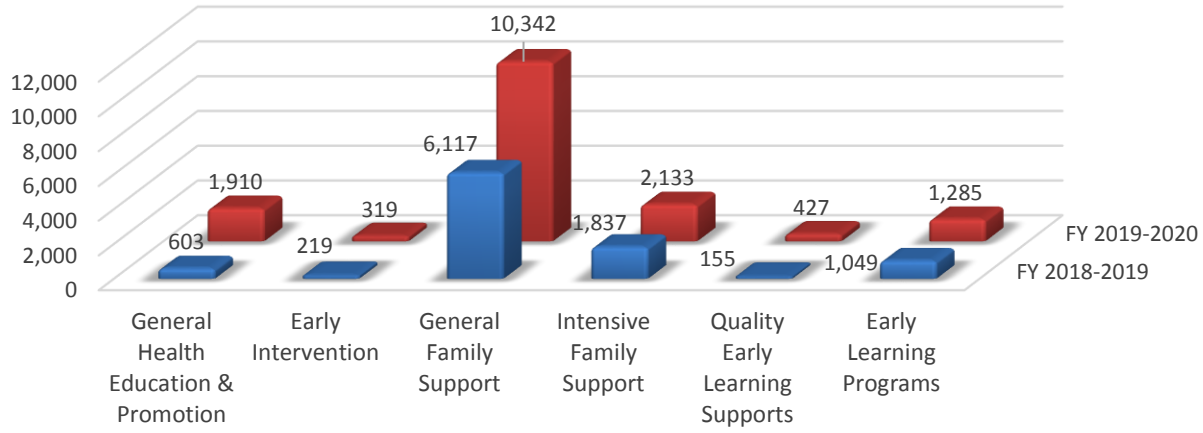
Table 6: Counts of Service Beneficiaries Across Report Domains

Report Domains	Number of Beneficiaries
General Health Education/Promotion	1,513 children; 1,910 caregivers
Oral Health Education/Treatment	2,428 children; 217 caregivers
Perinatal/Early Childhood Home Visiting	109 children; 161 caregivers
Early Intervention	1,230 children; 319 caregivers
General Family Support	3,730 children; 10,342 caregivers; 115 providers
Intensive Family Support	2,881 children; 2,133 caregivers
Quality Early Learning Supports	3,757 children; 427 providers
Early Learning Programs	1,116 children; 1,285 caregivers; 27 providers

In comparison to last year, the number of child beneficiaries in FY 2019-2020 increased from 967 to 1,230 in *Early Intervention* and from 3,720 to 3,730 in *General Family Support*. The expansion of service coverage is driven by child population growth. Meanwhile, 6,436 more caregivers, including parents, grandparents, and/or other family members, received services in six domains (Figure 3). The service count includes 1,399 more referrals for caregivers in 2-1-1 Kern County (2-1-1). In addition, Community Health Initiative of Kern County (CHI), Differential Response (DR), Greenfield School Readiness (GSR), and McFarland Family Resource Center (MFRC) served more caregivers this year. Despite the program interruption from COVID-19, the number of service providers increased from 114 last year to 115 this year in *General Family Support*.

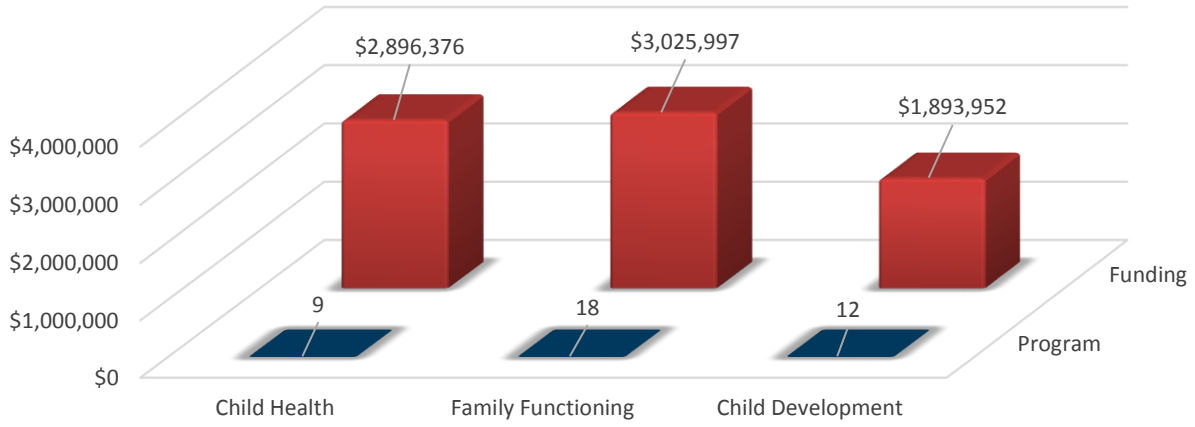
[20] https://www.nbclosangeles.com/news/population-shrinks-in-california-still-most-populous-state/2355776/
[21] https://www.sierrahealth.org/assets/pubs/SJVHF_Kern_County_Report_Oct_2017.pdf

Figure 3: Increase of Caregivers Between Adjacent Years



In this report, affiliation of First 5 Kern-funded programs is based on the primary service features in *Child Health, Family Functioning*, and *Child Development*. In terms of the program cost, Bui et al. (2017) noted that "newborn care was one of the top 5 conditions in terms of total hospitalization costs" (p. 186). Thus, health programs tend to cost more, and the pattern is reflected in the overall investment across three focus areas (Figure 4).

Figure 4: Commission Investments and Program Counts in Three Focus Areas



Source: State annual Report 2019-2020.

Depending on the scope of work, many programs are designed to offer multiple services across focus areas. For instance, service count for Result Indicator (RI) 1.1.1[22] shows that 340 families received support for health insurance applications from five programs, Arvin Family Resource Center (AFRC), Buttonwillow Community Resource Center (BCRC), Community Health Initiative of Kern County (CHI), Greenfield School Readiness (GSR), and Lamont/Vineland School Readiness Program (LVSRP). Except for

[22] https://www.first5kern.org/wp-content/uploads/2019/06/strategic-plan-booklet-2019-20-press.pdf

CHI, other programs are not classified in the focus area of *Child Health*. Similarly, Health Literacy Program (HLP) and Indian Wells Valley Family Resource Center (IWVFRC) provided nutrition and/or fitness education to 91 parents/guardians (RI 1.5.2), but IWVFRC was affiliated in *Family Functioning*.

Due to the structure of RI coverage, state focus areas of *Child Health, Family Functioning*, and *Child Development* are used interchangeably in this report with First 5 Kern's (2019) focus areas of *Health and Wellness, Parent Education and Support Services*, and *Early Childcare and Education* to streamline the result presentation. In particular, First 5 Kern made adjustments in its program funding this year:

- In *Child Health*, Successful Application Stipend (SAS) was initially designed to claim revenue share for the federal Medi-Cal Administrative Activities (MAA). After the MAA completion, SAS was discontinued as of June 30, 2019.
- In *Family Functioning*, an FRC of Taft City School District is replaced by WSOLC to continue case management, parent education, and family support services in the western Kern.
- In *Child Development*, BCSD phased out a program, *Supporting Parents and Children for School Readiness*, due to service overlap, which saved the state funding for other services.

In addition, Ready to Start (R2S) was a local Summer Bridge program that received First 5 Kern support for five years. Because the funding started in summer 2015, R2S ended in summer 2019. Thus, no new data were gathered this year. Based on these changes, this annual report is delimited to evaluation of the remaining 39 programs (see Appendix A) in FY 2019-2020 to justify results-based accountability on the state investment.

In this chapter, the program impacts are described according to service deliveries for children ages 0-5 and their families. Meanwhile, assessment data are gathered to examine improvement of the program outcomes under a pretest and posttest setting. The leveraged funds are summarized at end of this chapter to evaluate the capacity building effort in each program. Built on the program-specific findings, the fourth focus area, *Systems of Care*, is addressed in Chapter 3 to report effectiveness of service integration across First 5 Kern-funded programs.

(I) Service Improvement in *Child Health*

Surrounded by mountains on three sides, with a major transportation corridor running through the county, Kern communities endure some of the worst air quality in the United States, including the highest density of particulate matter (PM 2.5). To protect vulnerable young children in this region, *Child Health* is established as a focus area of early childhood services in Kern County.

In FY 2019-2020, First 5 Kern funded programs in four service domains of the state report glossary under the *Child Health* category (First 5 Association of California, 2013):

[1] Early Intervention
[2] General Health Education and Promotion
[3] Oral Health Education and Treatment

[4] Perinatal and Early Childhood Home Visiting

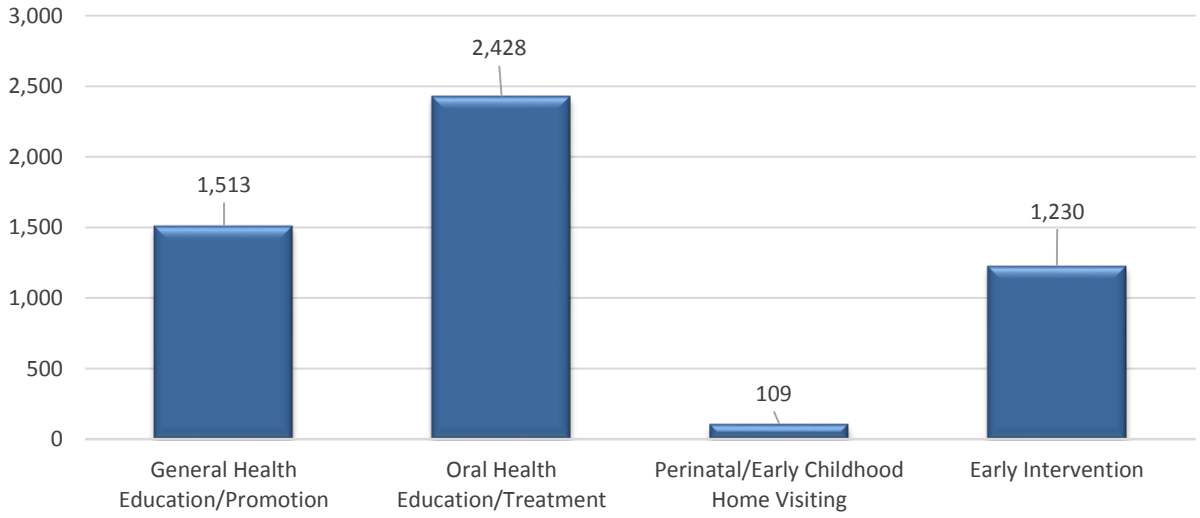
In First 5 Kern's (2019) strategic plan, **six objectives** are identified to support a common goal in *Health and Wellness*, i.e., "All children will have an early start toward good health" (p. 6). Table 7 shows connections between state glossary domains and local service objectives.

Table 7: Association between State 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]

This year First 5 Kern invested $752,600 in Early Intervention (EI) and $530,477 in Perinatal and Early Childhood Home Visiting (PECHV). Meanwhile, $669,591 was devoted to General Health Education and Promotion (GHEP) and $943,708 was designated to Oral Health Education and Treatment (OHET). Because PECHV involved services of nurse professionals, the door-to-door home visiting could be time-consuming and expensive. The head count in Figure 5, albeit a relatively small number for home visiting programs, demonstrated fulfillment of First 5 Kern responsibility to sponsor critical services that are otherwise not available through for-profit organizations.

Figure 5: Client Counts in Four Domains of *Child Health*



Across the state, home visiting is part of the policy agenda and early intervention strategy for early childhood investment (Ibid. 22). In other domains, the improvement of child health support is demonstrated by First 5 Kern's increased investments of

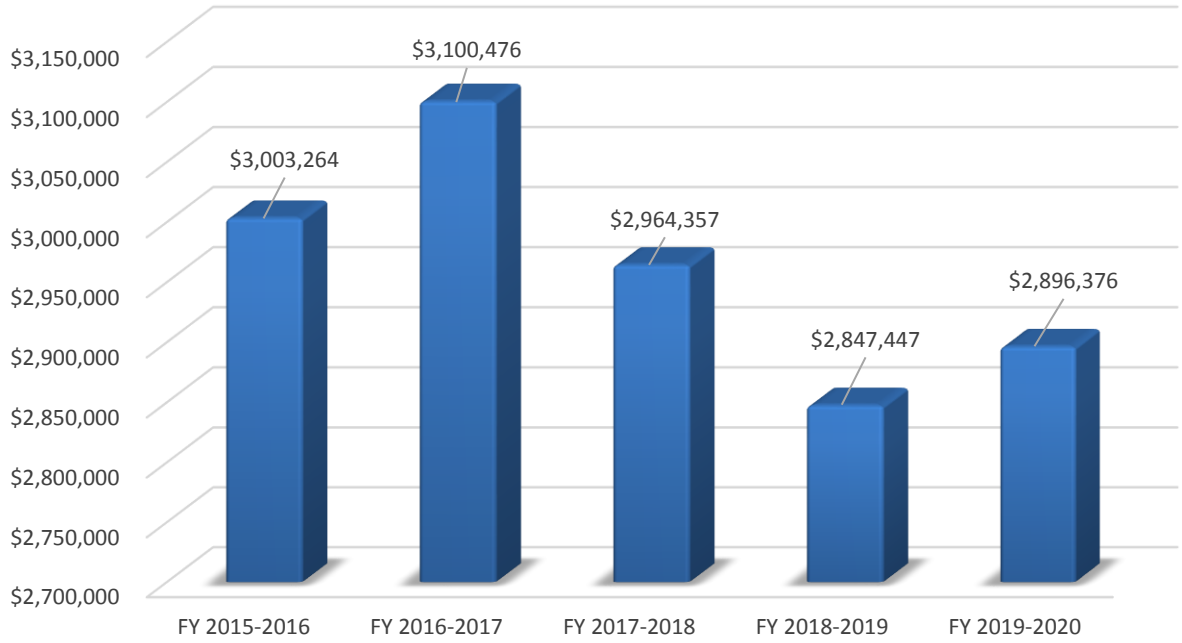
- $138,970 in EI to promote care coordination and mild/moderate special services
- $22,820 in GHEP to support nutrition, breastfeeding, and safety education
- $91,194 in OHET to strengthen oral health education and treatments

Due to its program specialty, the EI service count is lower than the head counts of GHEP or ORET for the general population (Figure 5).

Adjustments of State Revenue Spending

Figure 6 displays a trend of the local investment in *Health and Wellness* across this funding cycle. The spending increase this year is related to more service demands. A total of 263 child beneficiaries are added this year beyond the baseline count of 967 children in FY 2018-2019. The trend the lowest of $7,229,714 funding from the state last year. Kern County's share of the tobacco revenue increased to $10,186,676 this year, making it possible for more investment in program support.

Figure 6: Trend of First 5 Kern Spending in Health and Wellness



In terms of the service scope, *Child Health* has more countywide programs than *Family Functioning* and *Child Development*. Program deliveries across the widely scattered communities often raised the per-service cost. Through careful contract implementation, particularly in Quarter 4 with COVID-19 impact, all service providers stayed within their annual budgets this year. Table 8 shows the budget savings across 11 programs that add to $529,347.04 in *Health and Wellness*.

Table 8: Budget Savings across Programs in *Health and Wellness*

Program*	Budget Savings
BIH	$38,531.21
CMIP	$29,707.75
HMG	$10,974.87
KCCDHN	$155,729.07
KVAP	$842.26
MAS	$4,213.20
MVCCP	$1,279.02
MVCCP-KC	$16,340.35
MVIP	$31,457.01
NFP	$210,412.36
RSNC	$29,859.94

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

Capacity of Program Support in *Health and Wellness*

Kern is the 11th most populous county in California, larger than the combination of South Dakota, North Dakota, Alaska, Vermont, and Wyoming. Its land area is as large as New Jersey. The extensive service delivery and program outreach are aligned with result indicators (RI) through strategic planning. Service outcomes are accumulated in this section to address the impact of First 5 Kern funding in *Health and Wellness*.

Depending on program offerings, health insurance enrollment (**Objective 1**), healthy habit development (**Objective 5**), and safety education for injury prevention (**Objective 6**) are linked to service capacities at both *child* and *family* levels (i.e., RI 1.1.1-1.1.7, 1.5.1, 1.5.2, 1.6.1-1.6.4 of the strategic plan[23]). **Objective 3** in Table 7 relies on delivery of various clinic services. The corresponding result indicators represent the number of children being served (RI 1.3.1-1.3.8, 1.3.11-1.3.13), as well as the program capacity on service coverage (RI 1.3.9, 1.3.10). **Objectives 2** and **4** address services for *mothers in pregnancy* and *children with special needs*, respectively. Therefore, result indicators are developed for prenatal care (RI 1.2.1-1.2.7) and special need identification (RI 1.4.1, 1.4.2) to match the service features.

According to Gearhart (2016), "Kern County often ranks as one of the poorest providers of healthcare in the country. … Not only is our population in ill health, but the county does not have the healthcare resources to alleviate these issues" (p. 13). To meet the dual challenges in *Child Health*, Glossary Domains [1] and [4] are adopted to address special program needs of young children and their families. Additional services are funded in Domains [2] and [3] to support health education, general treatment, and dental care. The alignment between RI designation and service description is presented in Table 9.

To support *Health Insurance Enrollment* in **Objective 1**, CHI offered workshops to inform 53 parents/guardians of health and wellness services (RI 4.1.2). BIH, CHI, MVCCP, and MVIP arranged training or other educational services in *Health and Wellness* for 254 providers (RI 4.1.3), an increase of 123 participants beyond the total target count.

[23] https://www.first5kern.org/wp-content/uploads/2019/06/strategic-plan-booklet-2019-20-press.pdf

Table 9: 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 Domain [1] of the state report glossary, early interventions are introduced by MVIP to incorporate case management services for medically vulnerable infants and their families. Meanwhile, Richardson Special Needs Collaborative (RSNC) offered case management services, parental education, and referrals. A Family Resource Library was sponsored by RSNC to disseminate information about children with special needs. Special Start for Exceptional Children (SSEC) expanded its support in non-traditional hours to accommodate special childcare needs in local communities. The broad spectrum of services reflected varieties of program offerings across *medical and mental health treatments*, *infant and toddler services*, and *different hours of program operation*.

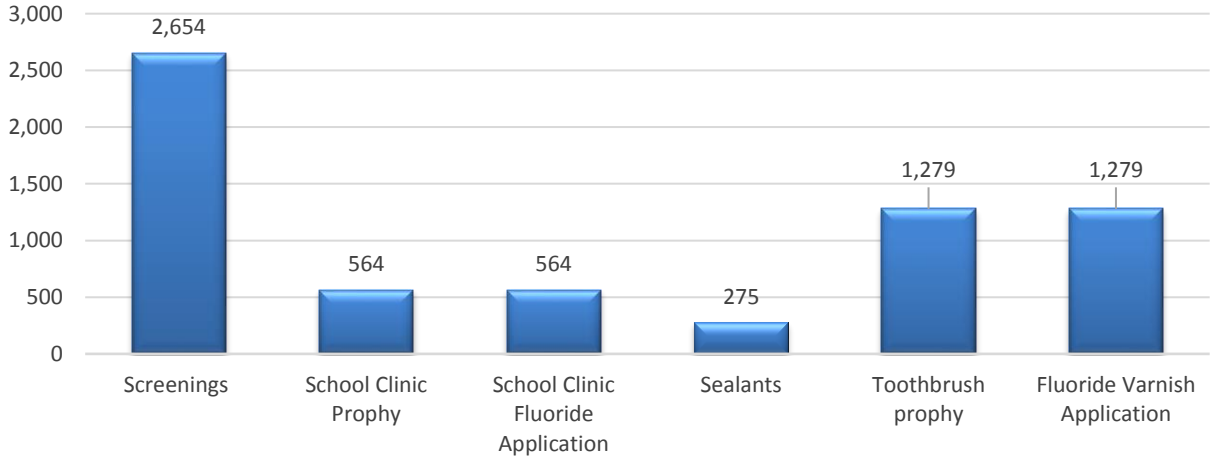
This year, coronavirus killed Hispanic, Black and American Indian children at much higher numbers than their White peers (Wan, 2020). To address the issue of minority health, a program has been designated to help *African American mothers* acquire knowledge about pregnancies, babies, parenting, and local resources. In the Black Infant Health (BIH) program, 38 mothers received social service referrals (RI 2.4.1) and seven providers attended trainings or other educational services related to *Health and Wellness* this year (RI 4.1.3). BIH also provided 57 pregnant women and mothers with information on prenatal care, substance abuse, tobacco cessation, and general case management services, as prescribed in **Objective 2**. One hundred and one pregnant women and/or mothers were visited by nurses from Nurse Family Partnership (NFP) to obtain information and education on prenatal care, postnatal care, and breastfeeding (RI 1.2.4; 1.2.7), exceeding the target count of 58 this year. Through the service alignment with State Domain [4], BIH, Children's Mobile Immunization Program (CMIP), and NFP offered education on the importance of prenatal care to 241 mothers (RI 1.2.3), surpassing the total annual target of 148 for these programs.

In preparation for kindergarten admission, First 5 Kern funded provision of vaccines against serious infections and diseases. California law requires children to be immunized.[24] The literature indicated that "Childhood vaccines prevent 10.5 million diseases among all children born in the United States in a given year and are a cost-effective preventive measure" (Medi-Cal Managed Care Division, 2013, p. 54). To meet the school enrollment requirement, 123 clinics of CMIP completed immunizations for 747 children ages 0-5 (RI 1.3.10, 1.3.11). CMIP also offered health screenings for 374 children this year (RI 1.3.2), above the target count of 216. These efforts are aligned with program description in Domain [2] of the state glossary.

[24] https://www.cde.ca.gov/ls/he/hn/cefimmunization.asp

Clinic Services in Child Health compose another core component of **Objective 3**. First 5 Kern funded dental services because tooth decay ranked among the most common reasons for chronic absenteeism in kindergarten (First 5 Association of California, 2017). Originally launched in December 2001, Kern County Children's Dental Health Network (KCCDHN) is one of the longest service programs in *Child Health*. The program collaborates with preschools and elementary schools throughout the county to provide mobile services in dental screening, cleaning, treatment, fluoride varnish, and parent education at 58 dental clinics (RI 1.3.9). Despite the impact of COVID-19, the program offered a total of 6,615 preventative treatments and 1,952 restorative treatments. The preventative treatment counts are plotted in Figure 7 across different services (RI 1.3.4).

Figure 7: Service Count across Preventative Dental Treatments



Meanwhile, 116 children received dental exams (RI 1.3.6), and restorative treatments were given to 169 children (RI 1.3.7), surpassing the corresponding count of 143 children last year. KCCDHN also case-managed 1,071 children to ensure successful dental treatments. A six-month reminder was sent to families to continue the services after dental home establishment. With the needs of continuing case monitoring, 90 cases were followed after age 5 (Figure 8). Depending on birthday dates, age 6 is considered as a category bordering ages 0-5, and prolonged treatments might occur for special cases starting at age 5. Less than 1.29% of the KCCDHN funding was designated to the case tracking up to age 7 this year (Figure 9). Hence, First 5 Kern has been collaborating with the dental program to primarily focus on supporting children ages 0-5.

Figure 8: Number of Children Case-Managed for Oral Health

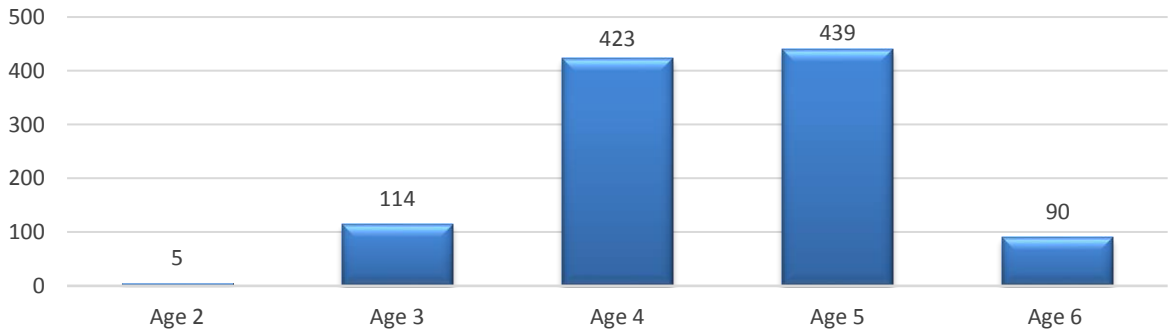
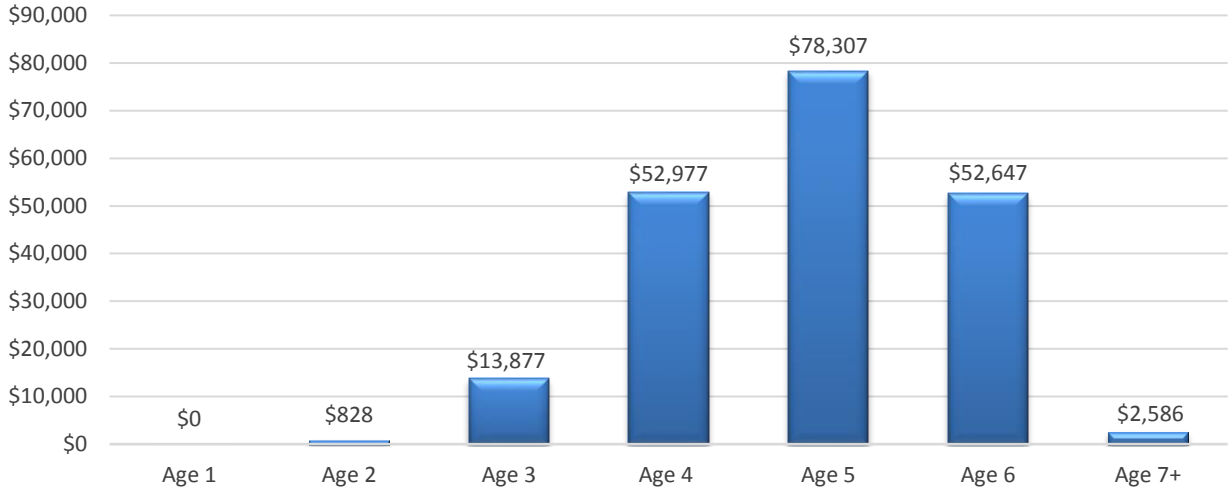


Figure 9: Fund Allocation for Oral Health Case Management



In FY 2019-2020, KCCDHN provided dental homes for 427 children, larger than its target count of 130 (RI 1.1.6). The program also referred 1,072 children to pediatric dentists (RI 1.3.8). These services generated positive outcomes in Domain [3] of the state report glossary (see Table 7) to streamline the offering of effective oral health treatments for young children.

Beyond *General Health Education and Promotion*, "Care coordination is especially critical for children with special health care needs" (Children Now, 2018, p. 35). In particular, Medically Vulnerable Care Coordination Program (MVCCP) and MVCCP Kern County (MVCCP KC) partnered on case identification and referrals to address *Special Needs Referrals* in **Objective 4**. MVCCP started in 2008 as a Kern County Medically Vulnerable Workgroup to address the complex needs of medically vulnerable children and their families. In November 2018, First 5 Kern teamed up with Kaiser Permanente, Kern Family Health Care, and Health Net to sponsor the annual MVCCP conference that was attended by healthcare professionals, social workers, case managers, parents, and childcare providers. The funding was intended to bring together different partners working across a service network. Throughout FY 2019-2020, MVCCP convened partners bi-weekly for supporting medically vulnerable children. As a result, MVCCP offered training and education in *Health and Wellness* for 82 service providers and supported 247 program staff to attend educational events on early childhood topics (RI 4.4.1). There service counts were much higher than the corresponding target counts of 45 and 175, respectively. HMG also addressed RI 4.4.1 by supporting 65 service providers to participate in events of early childhood education. Education on substance abuse (RI 1.2.5) and tobacco cessation (RI 1.2.6) was completed by 57 pregnant women in BIH.

Together with BIH, CHI, MVIP, and NFP, MVCCP-KC created medical homes for 1,029 children (RI 1.5.1), an increase from 953 children last year. MVIP and MVCCP-KC also assisted 932 children with special needs in service access (RI 1.4.2), surpassing 859 children in FY 2018-2019. Blanton Child Development Center (BCDC) and HMG offered developmental screenings to 255 children, surpassing the target of 25 for BCDC (RI 1.3.1). 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).

Across California, First 5 county commissions have been recognized as the largest funders of home visiting programs (First 5 Association of California, 2017). Effectiveness of NFP support has been demonstrated through randomized trials across the nation (Heckman, 2014). In addition, BIH is another program that has a proven record of success across 13 counties and two cities in California. It reduces infant mortality in African-American communities. In combination, the *group-based education in BIH* and *home-based consultation in NFP* 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).

Success stories of *Child Health* service are disseminated from early interventions. For example, First 5 Kern funded the Health Literacy Program (HLP) within the Child Development Center of Bakersfield Adult School. The importance of eating healthy and staying active has been emphasized in parent/child workshops. The activities are focused on educational and physical development of children, including (1) introduction to new vegetables, (2) maintaining the children's garden, and (3) hosting monthly parent education events. Parents also learned to read to children and promote health literacy at home. These services not only facilitated *Healthy Habit Development* under **Objective 5**, but also addressed the glossary definition of program support in Domain [2] on core elements of *healthy weight and height*, *basic principles of healthy eating*, *safe food handling and preparation*, and *tools to help organizations incorporate physical activity and nutrition* (First 5 Association of California, 2013).

KVAP and MAS are programs of *Safety Education* in **Objective 6**. 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 trainings on different devices in remotely located Weldon and densely populated Bakersfield. In FY 2019-2020, outcomes in Domain [2] of the state report glossary were reflected by swim lesson completion by 547 children (RI 1.6.2). Meanwhile, 23 parents or guardians participated in swim lessons (RI 1.6.3) and 77 parents or guardians received training for first aid/Cardiopulmonary Resuscitation in both programs (RI 1.6.4). KVAP also offered water safety education for 76 children (RI 1.6.1).

In summary, young children are "the most likely to experience severe injury or death" (Kern County Network for Children, 2017, p. 10). Parent education on hazard prevention, such as water safety, is particularly important for maintaining health and wellness of infants, toddlers, and preschoolers. In addition, CMIP, CHI, and HLP expanded the local immunization coverage, family literacy, and healthcare access. In traditionally underserved communities with special needs, oral, medical, and mental health services were provided by BIH, KCCDHN, MVIP, NFP, RSNC, and SSEC. The systems of care further incorporated two programs (MVCCP and MVCCP KC) for case identification and service coordination. With the addition of MVCCP from *Integration of Services*, over a dozen programs collectively addressed six objectives of *Health and Wellness*:

(1) Health insurance enrollment was assisted by CHI;
(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, MVCCP KC, MVIP, RSNC, and SSEC;
(5) Early health education was offered by HLP for both children and parents;
(6) Injury prevention and water safety were addressed by KVAP and MAS.

Built on First 5 Kern funding, service providers in *Health and Wellness* raised $1,878,824.12, more than doubling $892,825.89 from last year. Primary features in the enhancement of program sustainability are categorized in four domains to differentiate the *health education*, home visiting, *oral health*, and *early intervention* services for children ages 0-5 (Table 10).

Table 10: Program Features in *Health and Wellness*

Domain	Program	Primary Services	Age
General Health Education and Promotion	CHI	Health Insurance Enrollment and Training	0-5
	CMIP	Mobile Program for Immunizations	0-5
	HLP	Health Education	0-5
	KVAP	Safety Education in Weldon	0-5
	MAS	Safety Education in Bakersfield	0-5
	MVCCP KC	Quality Health Systems Improvement	0-5
Prenatal/Infant Home Visiting	BIH	Maternal/Child Healthcare	0-2
	NFP	Maternal/Child Healthcare	0-2
Oral Health	KCCDHN	Mobile Program for Oral Healthcare	0-5
Early Intervention	MVIP	Targeted Intensive Intervention	0-2
	SSEC	Targeted Intensive Intervention	0-2
	RSNC	Targeted Intensive Intervention	3-5

Improvement of Program Outcomes across Service Providers

In FY 2019-2020, improvement in *Health and Wellness* has been tracked at the program level across multiple services, including oral health support, parent education, and behavioral health intervention. In each domain, service outcomes are gathered to evaluate the benefit for local children ages 0-5 and their families.

1. Support of Healthy Child Development

With dual foci on *thriving children and families* as major outcomes of the Evaluation Framework (see Exhibit 2), results of early childhood development are compared against age-specific thresholds of the ASQ-3 in MVIP and NFP. Table 11 contains the percent of children with performance levels above the ASQ-3 thresholds in *Communication* (COM)*, Gross Motor* (GM)*, Fine Motor* (FM)*, Personal-Social* (PerS), and *Problem Solving* (ProS) domains. Despite interruption of data collection due to COVID-19, both programs gathered more data than last year.

NFP continued its home visiting services to support low-income, first-time mothers at prenatal and infant care stage. The program arranged nurse visits 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. Topics of the home consulting included newborn care, parenting preparation, baby-friendly environment setting, referral assistance, and healthy pregnancy. The program also offered communications in both English and Spanish to ensure proper parental engagement. By design, the service outreach extended to communities of Bakersfield, Lamont, Ridgecrest, Rosamond, Shafter and Wasco. The broad impact is represented by a positive trend in child development, and a higher percent of children demonstrated their performance significantly above the ASQ-3 thresholds than last year.

MVIP was redesigned from a project, *High Risk Infant Program*, to promote family-centered, community-based, coordinated care for children with special health care needs. Clinica Sierra Vista received a Title V grant in June 2000 to offer nurse visits and case management services for over 2,000 infants in Kern County. The program maintained foci 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. Although these early childhood services have been sustained in Kern County for 20 years, COVID-19 had a profound impact on medically vulnerable children, as illustrated by a lower percent of child performance above the ASQ-3 threshold in COM, GM, FM, PerS, and ProS domains since last year (Table 11).

Table 11: Percent of Children with Performance Level above ASQ-3 Threshold

Program	Fiscal Year	N	COM	GM	FM	PerS	ProS
MVIP	2018-2019	29	100	86.2	93.1	89.7	100
	2019-2020	35	82.9	45.7	71.4	71.4	85.7
NFP	2018-2019	60	96.7	88.3	98.3	96.7	91.7
	2019-2020	61	98.4	93.4	98.4	98.4	100

Despite the result gap between programs, statistical testing shows child performance significantly above the ASQ-3 thresholds at α=.05 (Table 12). In last year, the minimum effect size was 4.09 for MVIP and 4.40 for NFP. Due to the COVID-19 influence, the minimum effect size for MVIP reached 0.79 this year, still close to 0.80 for strong intervention impact (Cohen, 1988). For NFP, the program impact remains strong, as illustrated by a minimum effect size of 4.92 across the ASQ-3 domains.

Table 12: ASQ-3 Results from MVIP and NFP

ASQ-3 Domain	MVIP		NFP	
	2018-2019	2019-2020	2018-2019	2019-2020
COM	df=28, t=14.51	df=34, t=6.58	df=58, t=14.70	df=60, t=19.43
GM	df=28, t=11.59	df=34, t=2.29*	df=59, t=16.92	df=60, t=20.81
FM	df=28, t=10.81	df=34, t=2.97*	df=59, t=20.80	df=60, t=20.22
PerS	df=28, t=11.96	df=34, t=4.82	df=58, t=16.00	df=60, t=21.98
ProS	df=28, t=17.18	df=34, t=4.46	df=55, t=16.82	df=60, t=19.05

*The t test shows significant difference at α=.05 in these cells; for the remaining cells in this table, α=.0001.

2. Outcomes of Oral Health Service

In this funding cycle, First 5 Association of California (2017) developed a policy agenda to "Expand access to preventative and restorative oral health services and oral health education" (p. 5). In Kern County, KCCDHN delivered oral health services. In FY 2019-2020, KCCDHN tracked plaque indices during initial and recheck visits for 65 children. The program impact was indicated by a drop of Average Plaque Index (API) from 70.60 in pretest to 46.65 in posttest. The improvement of oral health was statistically significant [$t(64)=7.28$, $p<.0001$]. The effect size reached 1.82, suggesting a strong program impact (Cohen, 1988). The service is important because "Tooth decay is the most common chronic illness among children" (Children Now, 2018, p. 39).

3. Improvement of Parent Health Literacy

Reiley (2019) reported, "There's been a boom in unhealthy foods and beverages for children 6 months to 3 years old" (p. 1). At the seat of Kern County, HLP offered health literacy services for 81 parents (RI 2.3.2). In a posttest survey, the program tracked responses of 43 parents about the content of the *Be Choosy, Be Healthy* (BCBH) instrument this year. Before the workshops, 13.95% of the parents indicated that they knew "less than some" of the BCBH content while 30.23% respondents knew "a lot". After the workshops, all parents knew "some" or "a lot" about the BCBH content, and 53.49% of all the participants claimed to know "a lot" . In the end, 100% of the parents indicated that they would practice at least some of the concepts from the workshops.

It should be noted that the pretest data contained 71 observations, larger than the size of 43 parents in the posttest. To maximize the data utilization, child gender, ethnicity, language type, and date of birth are employed to conduct five rounds of data imputations. As a result, five complete data are generated and Rubin's (1987) rule is applied for aggregating the BCBH outcomes. The results show 13.95% of the parents with BCBH knowledge at a "less than some" level before the workshops. After the workshops, all parents are above that level and 33.40% of the participants are in the category of knowing "a lot" about the BCBH content. The Bayesian approach also reconfirms a rating that all parents would practice at least some of the BCBH concepts. The enhancement of health literacy has addressed RI 1.5.2 of First 5 Kern's (2019) strategic plan, i.e., "Number of parents/guardians who received nutrition and/or fitness education" (p. 5).

4. 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 parent-infant interaction. The golden standards of the DANCE *Sensitivity and Responsivity* scale[25] are listed in Table 13 to evaluate the effect of parent-infant interaction on 37 infants.

Table 13: DANCE Results on the Sensitivity and Responsivity Scale

Scale of Sensitivity and Responsivity	NFP Result	Golden Standard
1. Positioning	97.2%	100%

[25] The DANCE Coding Sheet: Sensitivity and Responsivity Dimension http://cittdesign.com/dance/sites/default/files/1107_12M_1_0.pdf

Scale of Sensitivity and Responsivity	NFP Result	Golden Standard
2. Visual Engagement	87.7%	95%
3. Pacing	93.9%	90%
4. Negative Touch	0%	0%
5. Non-Intrusiveness	94.5%	90%
6. Responsiveness	93.4%	85%

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

On the DANCE scale for *Emotional Quality and Behavioral Regulation*, results in Table 14 show caregiver performance above the golden standard on *Verbal Connectedness* for supporting communication with young children. In comparison to last year, the rating increased from 88.7% to 91.9%. Similarly, in terms of *expressing positive affect*, the rating increased from 94.5% last year to 98.8% this year. Improvement also occurred on the scale of *Caregiver's Affect Complements Child's Affect*. Verbal Quality was the only domain that showed a drop of 0.9% from last year. Although these quality ratings were below the corresponding golden standards, all the gaps were less than 2%.

Table 14: DANCE Results on Emotional Quality and Behavioral Regulation

Scale of Emotional Quality and Behavioral Regulation	NFP Result	Golden Standard
1. Expressed Positive Affect	98.8%	100%
2. Caregiver's Affect Complements Child's Affect	98.1%	100%
3. Verbal Quality	98.6%	100%
4. Verbal Connectedness	91.9%	75%

In summary, findings in Tables 13 and 14 were near or above the golden standards[26] to indicate the positive program impact on healthy parent-infant interaction in both cognitive and emotional domains.

5. Coordination of Infant Medical Services

To strengthen the support for network building, MVCCP and 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). Other organizations, such as Adventist Health, Kaiser Permanente, Kern Family Health Care, Lucile Packard Foundation for

[26] http://www.cittdesign.com/dance/sites/default/files/Practice5_19M_1_0.pdf

Children's Health of Palo Alto, and Health Net, contributed funding to support the MVCCP effort in the past.

Under a theme of "Building Momentum: Spreading Trauma-Informed Care Coordination Throughout Kern County", the ninth annual MVCCP conference was held on November 7, 2019 to (1) gain greater understanding of diverse resources for Medically Vulnerable children that are available in Kern County, (2) assist coordination of health care and support services for Children and Youth with Special Health Care Needs, (3) achieve greater efficiency and effectiveness of the system of health care services in Kern as a Trauma-Informed County.

Feedback was gathered from 97 attendees. Results in Table 15 were based on a 10-point scale with 1 for poor conference quality and 10 for excellent quality. The average ratings were 9.07 or above, indicating positive conference quality across the *attaining objectives, adequacy, utility, applicability,* and *appropriateness* dimensions.

Table 15: MVCCP Conference Attendee Responses on a 10-Point Scale

	Topic	N	Mean
1. Met the Stated Objectives	Latest Results of TIKC Initiative	93	9.37
	System Sustainability	94	9.22
	Kern Coalitions and New Initiatives	92	9.07
	ACEs, Resilience, and Self Care	97	9.23
	Case Review Exercises	93	9.39
	Provider Update	90	9.49
	Panel Discussion on 2020 Planning	83	9.35
2. Adequacy of the panelists' mastery of their subjects		87	9.49
3. Utilization of appropriate teaching methods and materials		89	9.38
4. Applicability or usability of new information		89	9.46
5. Appropriateness and usability of presentations (if applicable)		87	9.45

Prior to First 5 Kern, few organizations offered systematic coordination of medical services for infants with serious health conditions in Kern County. 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."[27] To fill the void of service coordination, MVCCP serves the purpose of identifying medically vulnerable infants for case management and healthcare service in much-needed areas. In terms of the program capacity, the two care coordination programs not only supported medically vulnerable children ages 0-5, but also promoted system building across service providers.

In summary, California's economy and civil society ultimately depend on offering a broad spectrum of services, "from quality, affordable child care to a rigorous education to health coverage to safety" (Children Now, 2018, p. 3). With the focus on *Health and Wellness*, program features were classified by *service types* (e.g., dental care, mental health, insurance application, parental education), *child conditions* (general support vs.

[27] http://first5association.org/overview-of-proposition-10/

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 result-based accountability on these dimensions, service outcomes were triangulated across different sources of data (e.g., ASQ-3, BCBH, DANCE) and service providers (KCCDHN, HLP, and MVCCP). As First 5 Kern (2019) 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 enhancement of service quality in *Health and Wellness* across Kern County.

(II) Program Enhancement in *Family Functioning*

Good parenting is critical because "Parents are the medium through which child behavior and family functioning are influenced" (Van As, 1999, p. 48). During the COVID-19 pandemic, disparities of family wellbeing are demonstrated by the fact that minority children are more likely than their White peers to experience crowded living conditions, food and housing insecurity, as well as a lack of money for insurance, child care, and transportation (Bixler, Miller, Mattison, et al., 2020). Therefore, community-based programs are needed to close the gap and strengthen family resilience for all children.

The dual emphases of *parent education* and *community support* are grounded on research literature in early childhood research. Briscoe (2019) pointed out, "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" (p. 1). Because of the vital needs, First 5 Kern (2019) designated a focus area on *Parent Education and Support Services* to strengthen family functioning across different households in Kern County.

In 2020, reduction of child abuse and neglect is achieved in Kern County by local programs (Harrington, 2020), such as Differential Responses (DR), DVRP, and GCP. In addition, Community Action Partnership of Kern (CAPK) receives funding from First 5 Kern to offer 2-1-1 and HMG for service referral and developmental screening. The mission of 2-1-1 is to connect families to medical facilities, family resource centers, legal assistance programs, and other community support systems. First 5 Kern also funds 13 center-based programs, including 12 FRCs and Women's Shelter Network (WSN), to deliver *general parenting workshops, court-mandated parent education*, and *case management* services. Collaborating with the community-based programs of health care, early intervention and education, HMG offers family support to address various needs of child development.

In FY 2019-2020, First 5 Kern invested $3,025,997 in *Family Functioning*. Despite cost inflation and wage increase, program spending in this focus area has been strictly controlled within the original annual contract. The budget savings add up to $137,180.23 across 14 programs in Table 16.

Table 16: Program Savings in *Parent Education and Support Services*

Program	Budget Savings
AFRC	$18,082.09
BCRC	$5,894.88
DR	$12.54
DVRP	$3,344.98
EKFRC	$11,777.05
GSR	$12,989.53
IWVFRC	$10,307.45
LVSRP	$111.05
MCFRC	$3,213.39
MFRC	$416.04
SHS	$20,263.48
SENP	$12,807.11
WSOLC	$12,960.64
WSN	$25,000.00

Altogether, 18 programs are designated in *Family Functioning* 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, 2019, 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 17 shows a match between these service domains and the four objectives of *Parent Education and Support Services*.

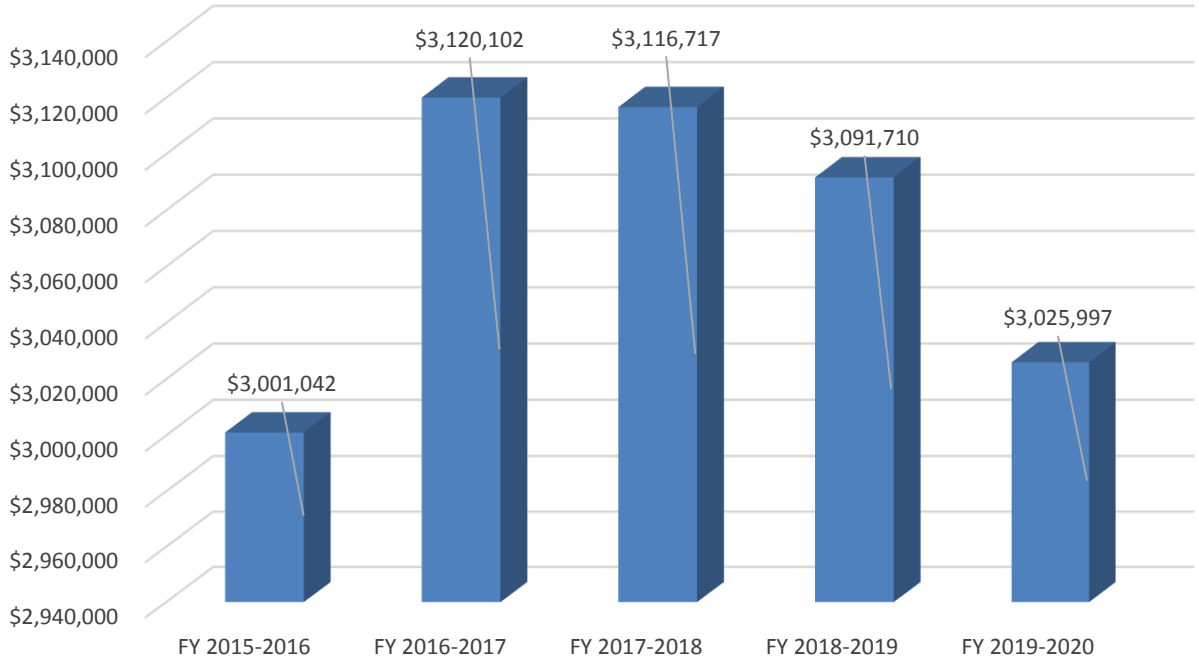
Table 17: Service Domains and Objectives in Family Functioning

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]

First 5 Kern made a contract switch in *Family Functioning* this year. West Side Community Resource Center (WSCRC) was replaced by West Side Outreach and Learning Center (WSOLC) to continue case management, parent education, and family support services in West Side Recreation and Park District.[28] This change saved over $11,000 of program budget allocation. As shown in Figure 10, program spending fluctuates across this funding cycle, which demands ongoing adjustments of service funding to meet the local needs.

[28] https://www.first5kern.org/wp-content/uploads/2019/07/CFC-Agenda-080719-sent-to-staff-073019.pdf

Figure 10: Funding Pattern in *Parent Education and Support Services*



Capacity of Program Support to Strengthen Family Functioning

The focus area of *Parent Education and Support Services* contains four objectives in First 5 Kern's (2019) strategic plan. *Targeted and/or clinical supports* in **Objective 1** are linked to service deliveries at both child (RI 2.1.1-2.1.3, 2.1.7-2.1.9, Ibid. 22) and family (RI 2.1.4-2.1.6, Ibid. 22) levels. **Objectives 2-4** depend on implementation of education and social services for enhancement of parenting. Therefore, multiple result indicators have been developed to evaluate the attainment of **Objectives 2-4**:

1. Court-mandated parent education, group parenting education, and educational workshops (RI 2.2.1-2.2.3, Ibid. 22) are assessed to reflect family support in **Objective 2**;
2. Reading strategy development and literacy workshops (RI 2.3.1, 2.3.2, Ibid. 22) are evaluated to address parent/guardian education in **Objective 3**;
3. Program referrals and transportation services (RI 2.4.1, 2.4.2, Ibid. 22) are adopted to support program outreach in **Objective 4**.

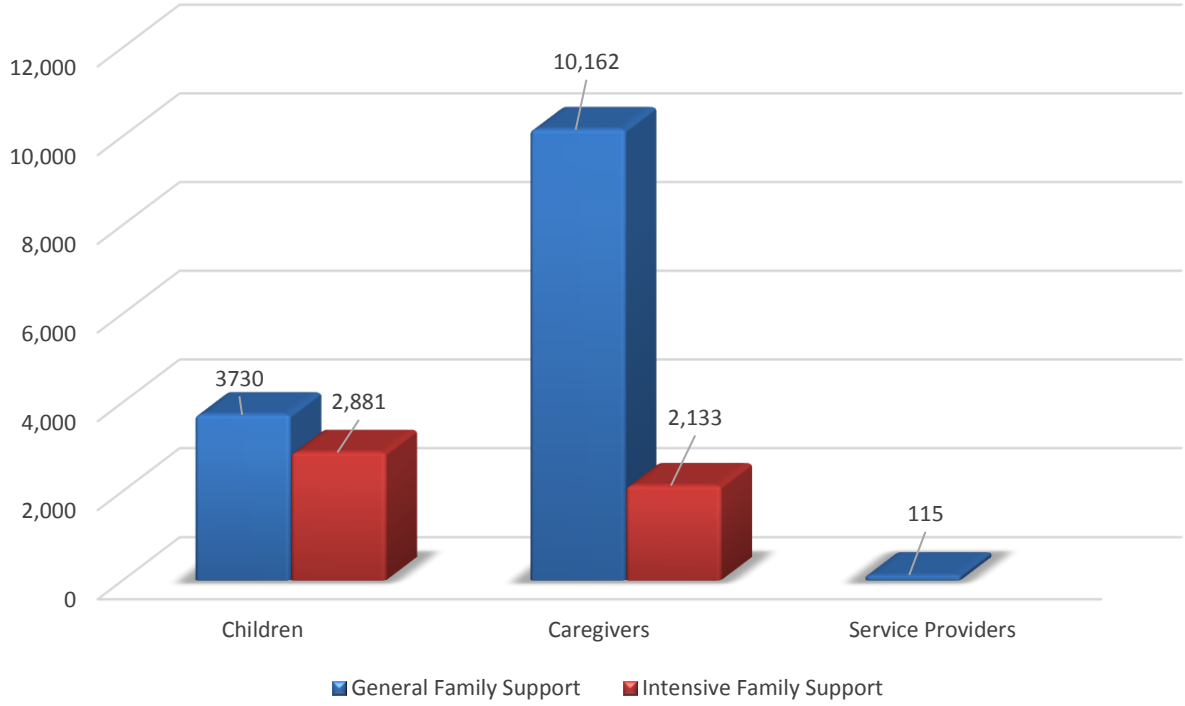
The alignment between RI designation and service capacity is presented in Table 18.

Table 18: 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 reference to state report domains (see Table 17), First 5 Kern funded special services in Domain [2] to restore and/or improve the home environments. General services in Domain [1] were offered through parent education and social support. More importantly, service networking has been established through program referrals (e.g., 2-1-1 and HMG) and collaborations (e.g., WSN with DR, DVRP, and GCP). The beneficiary counts are depicted in Figure 11 to show the impact of First 5 Kern support for local children, caregivers, and service providers in these two domains.

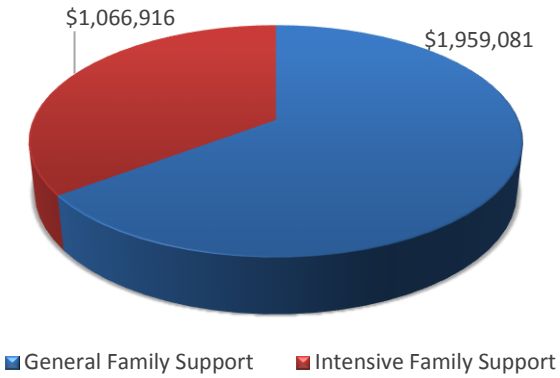
Figure 11: Capacity of General Family Support and Intensive Family Support



In comparison, *General Family Support* (GFS) includes services of family resource centers. Hence, the caregiver number is much larger in that category because the beneficiaries include parents and guardians (Figure 11). The need for service consultation has increased during the unprecedented COVID-19 pandemic. As a result, the caregiver count changed from 6,117 last year to 10,162 this year. Meanwhile, the program spending in GFS was controlled at $1,959,081, less than $2.1 million in FY 2018-2019.

In *Intensive Family Support* (IFS), 2,375 children and 1,610 caregivers were served last year. Figure 11 shows a beneficiary increase this year. In expanding special need services pertaining to child abuse and neglect, the child count increased 21.31% and caregiver count increased 32.48% over last year. Without additional funding from the state, First 5 Kern collaborated with local programs to serve more children and families. Meanwhile, the program expenditure in IFS was curtailed at $1,066,916, an 8.08% increase of the investment over last year (Figure 12). Hence, the service count increases have outpaced the spending increase by a large margin.

Figure 12: Fund Allocation in Domains of Parent Education and Support Services



In addition, service providers in *Parent Education and Support Services* raised $1,870,814.91 to enhance program sustainability. 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). 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)

Besides integration of service offerings within a family resource center (FRC), 2-1-1 is a referral program to expand the collaboration across service providers. As part of a nationwide network connecting over 14 million people to services each year, the local 2-1-1 program provides information about community services 24 hours a day, seven days a week across Kern County. In FY 2019-2020, 2-1-1 responded to a total of 2,550 unduplicated callers for social service referrals, 1,815 of them with children ages 0-5 and 301 having a pregnant woman in the household. As a result, 610 callers expressed interest in receiving a developmental screening for their child or children from HMG. Without the referral support, families could have been misguided, and service delays might occur to young children with special needs of program access.

Both referral and screening services are essential to program connections. First 5 Association of California (2017) advocated that "100% of California children receive recommended developmental screening and appropriate referrals" (p. 7). With the referral information on program offerings, screening results indicate the need from the client side. As an innovative service model, HMG has been implemented across 17 states to serve families in need of social support for their young children.[29] Within Kern County, HMG assisted 610 families with social service referrals this year.

In combination, capacity building occurred in both referral support and direct services to create communication networks between what is needed and what is available

[29] http://www.first5alameda.org/files/funding/HMG_developmental_supports.pdf

in *Parent Education and Support Services*. The emphases on parent 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 combination of program collaboration and community support that has sustained service deliveries for more children ages 0-5 and their families across Kern County.

Overview of Program Alignment with the Strategic Plan

While children are born equal, family characteristics may vary. To improve parenting skills for all children, First 5 Kern (2019) strategically funded programs to enrich caregiver knowledge about early childhood development, childrearing strategies, and community services. 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).

For child protection, DR examines reports of child abuse and neglect based on information from Child Protective Services (CPS). DR case managers meet weekly with service supervisors to discuss family assessments, care plans, service delivery strategies, as well as positive and negative implications to child development. Intensive home visitations are conducted to reduce the recurrence rate. Case closures are dependent on mitigation of risk factors that has been confirmed by DR supervisors.

During COVID-19, extra stressors were added to families due to an economic shutdown that led to unemployment in low-income households. Although the family strains may cause potential child abuse or neglect (Hager, 2020), social distancing has made it more difficult to reveal child abuse cases. Through strength-based, family-centered support, DR combines First 5 Kern funding with state resources to offer family services, such as counseling, parent education, job training, food, utility, housing assistance and transportation. Throughout this year, DR served about 4,300 Kern children a year to avoid their entry in the child welfare system.

As the DR provider, "Kern County Network for Children [KCNC] serves many functions benefiting children and families in Kern County."[30] Its leadership roles are illustrated by six projects (Table 19). The capacity building supported partnerships with nine county agencies, 15 community-based organizations, 21 family resource centers, and five funders of local child services.[31] In FY 2019-2020, DR completed case management services and home visits to 1,684 families (RI 2.1.5) that impacted 2,525 children ages 0-5 (RI 2.1.8). In addition, 635 parents received social service referrals from DR (RI 2.4.1).

Table 19: 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

[30] http://kern.org/kcnc/about/
[31] http://kern.org/kcnc/links/

Roles	Projects
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

DVRP is a DR partner to provide legal assistance and representation for victims of domestic violence. In particular, children ages 0 to 3 are most likely to experience severe injuries due to abuse or neglect (KCNC, 2017). DVRP addresses the need of early protection in multiple communities, including Bakersfield, Delano, Frazier Park, Mojave, and Shafter, for court document preparation, legal consulting, safety planning, victim representation, and resource referral (Abood, 2015).

GCP further strengthens family support and/or reduces attachment problems, mental anxiety, and psychological depression among young children (Duke, Pettingell, McMorris, & Borowsky, 2010). The program assists grandparents and non-parent caregivers to obtain guardianship for children in need of stable and loving homes. The new settlement is critical to discontinuation of physical, mental, and emotional harm to child victims of domestic violence. Other child protection services are related to 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. Through case management services, GCP supports medical homes, health insurance applications, dental services, mental health interventions, and preschool enrollments after successful guardianship placements.

Both DVRP and GCP are affiliated with a non-profit organization, Greater Bakersfield Legal Assistance, Inc. (GBLA). Along with GBLA's launch of a Community Homeless Law Center Project, WSN offered family counseling, group therapy, parent education, and medical or legal support in family shelters. Altogether GCP, DVRP, and WSN served 399 children (RI 2.1.9) and 316 parents or guardians (RI 2.1.6) this year. These services contributed to prevention of domestic violence and alleviation of substantiated child abuse/neglect, which, in turn, reduced the burden of foster care facilities.

Across the state, "Half of kids in foster care have endured four or more adverse childhood experiences" (Children Now, 2018, p. 49). In Kern County, Corson (2017) noted, "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). To deal with the widespread issue, 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. Indian Wells Valley Family Resource Center (IWVFRC)
6. Kern River Valley Family Resource Center Great Beginnings Program (KRVFRC)
7. Lamont Vineland School Readiness Program (LVSRP)
8. McFarland Family Resource Center (MFRC)
9. Mountain Communities Family Resource Center (MCFRC)
10. Shafter Healthy Start (SHS)
11. Southeast Neighborhood Partnership Family Resource Center (SENP)

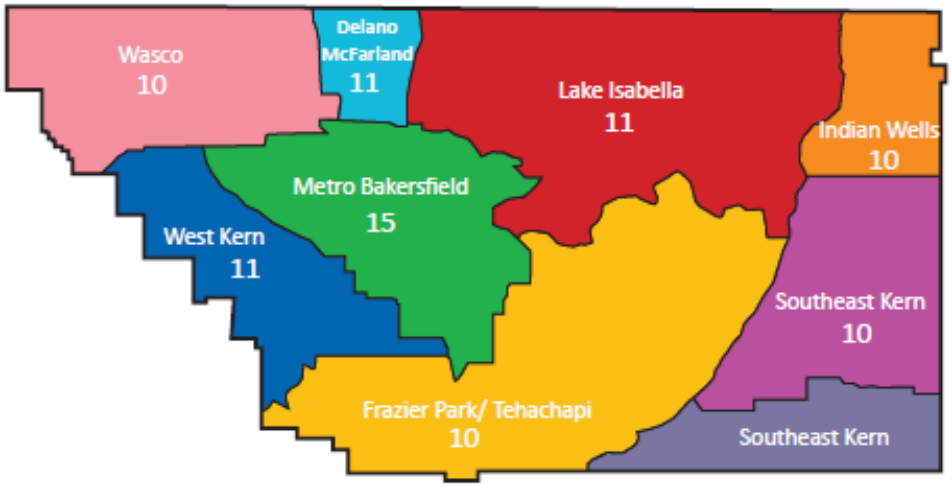
Three additional programs are funded in *Focus Area III: Early Childcare and Education* that share the scope of work in *Parent Education and Support Services*:

1. Delano School Readiness (DSR)
2. Lost Hills Family Resource Center (LHFRC)
3. Neighborhood Place Community Learning Center (NPCLC)

All these FRCs are set at central community locations to increase service accessibility. Resources from the National Association for the Education of Young Children (NAEYC) are employed to enrich culturally relevant parent education and support services. In remote communities, IWVFRC also offered transportation to serve 12 parents and/or guardians (RI 2.4.2). WSOLC also delivered support services for 21 parents (RI 2.4.3).

In designing service provision, Kern Council of Governments (KCOG) designated nine subareas according to local housing development.[32] While 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. Through strategic planning, a strong presence of 10 or more programs has been identified from *Focus Areas II* and *III* to extend parent education services across various locations (Figure 13). For instance, 49 children received group therapy from WSN in *Focus Area II* and Small Steps Child Development Center (SSCDC) in *Focus Area III* (RI 2.1.1). Due to the overlap of program supports across focus areas, parent education outcomes in *Focus Area II* are presented in the next three sections. The last part of this chapter is devoted to reporting evaluation findings in *Focus Area III, Early Childcare and Education*.

Figure 13: Distribution of Parent Education Programs in Kern County*



*Numbers are aggregated across countywide and local programs.

Establishment of Parenting Beliefs against Child Maltreatment

FRC offers parent education to help replace abusive parenting patterns with positive ones. Depending on the program capacity, the service includes court-mandated parent education, nutrition instruction, financial training, school readiness preparation, nurse consultation, transportation support, and legal assistance. Besides First 5 Kern, nearly

[32] http://www.co.kern.ca.us/planning/pdfs/he/HE2008_Ch1.pdf

two-dozen partners are listed 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.

In FY 2019-2020, court-mandated parent education was offered to 150 parents/guardians to promote changes of parental belief according to the positive norms for nurturing parenting (RI 2.2.1). 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). To assess the extensive impacts, researchers identified a norm-referenced Adult-Adolescent Parenting Inventory-2 (AAPI-2) for measuring the program impact on psychological constructs that negatively undermined parent-child interactions (Berg, 2011; Moore & Clement, 1998). AAPI-2 incorporated assessment of five parent beliefs pertaining to 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

The instrument was recommended by California Evidence-Based Clearinghouse for Child Welfare (2014). Besides First 5 Kern, at least nine other First 5 county commissions employed AAPI-2 to evaluate effectiveness of parent education.[33]

Bocanegra (2014) pointed out, "A critical factor in buffering 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" (p. 3). Hence, reverse of negative parental beliefs is not only crucial in *Family Functioning*, but also important for *Child Development*. First 5 Kern funded court-mandated parent education in center-based settings: (1) East Kern Family Resource Center (EKFRC), (2) Indian Wells Valley Family Resource Center (IWVFRC), (3) Kern River Valley Family Resource Center (KRVFRC), (4) Neighborhood Place Community Learning Center (NPCLC), (5) Shafter Healthy Start (SHS), and (6) Southeast Neighborhood Partnership Family Resource Center (SENP).

In FY 2019-2020, AAPI-2 data are gathered from a pretest and posttest setting to track responses of 69 parents across six programs that offer court-mandated parent education services. EKFRC and KRVFRC had six and nine observations, respectively. Nonetheless, effect sizes were found much larger than 0.80, suggesting strong practical improvement of Constructs A, B, and C. For EKFRC, statistical testing also showed significant differences between pretest and posttest in these constructs at α=.05 (Table 20). Both programs belong to Focus Area II, *Parent Education and Support Services*.

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

Table 20: AAPI-2 Results from EKFRC and KRVFRC

Construct	Program	Results
Environment	EKFRC	t(5)=2.84, p=.0362; Effect Size=2.54
	KRVFRC	t(8)=2.27, p=.0531; Effect Size=1.61
Parental Empathy	EKFRC	t(5)=4.75, p=.0051; Effect Size=4.25
	KRVFRC	t(8)=5.29, p=.0007; Effect Size=3.74
Physical Punishment	EKFRC	t(5)=3.05, p=.0285; Effect Size=2.73
	KRVFRC	t(8)=2.30, p=.0508; Effect Size=1.63

In addition, sample sizes from IWVFRC, SHS, SENP, and NPCLC are either 13 or 14, larger than the ones from EKFRC and KRVFRC. Results in Table 21 show significant improvement of Constructs A, B, and C in the four programs at α=.05. For the last two constructs, *Parental Empathy* and *Physical Punishment*, IWVFRC and SENP also reached the significance level. Apparently, the results reconfirmed sensitivity of statistical testing to the sample size variations. Hence, effect size is employed as a better indicator to assess the practical impact from these court-mandated parent education programs. All six programs in Tables 20 and 21 demonstrated effect sizes in the strong impact range.

Table 21: Impact of Court-Mandated Parent Education in Focus Areas II & III

Construct	Program	Results
Expectations of Children	IWVFRC	t(13)=9.49, p<.0001; Effect Size=5.26
	SENP	t(13)=2.95, p=.0113; Effect Size=1.64
	SHS	t(12)=3.27, p=.0067; Effect Size=1.89
	NPCLC	t(12)=9.27, p<.0001; Effect Size=5.35
Parental Empathy	IWVFRC	t(13)=7.07, p<.0001; Effect Size=3.92
	SENP	t(13)=3.68, p=.0028; Effect Size=2.04
	SHS	t(12)=4.41, p=.0008; Effect Size=2.55
	NPCLC	t(12)=5.12, p=.0003; Effect Size=2.96
Physical Punishment	IWVFRC	t(13)=5.00, p=.0002; Effect Size=2.77
	SENP	t(13)=3.30, p=.0057; Effect Size=1.83
	SHS	t(12)=3.60, p=.0036; Effect Size=2.54
	NPCLC	t(12)=5.21, p=.0002; Effect Size=1.61
Parent-Child Roles	IWVFRC	t(13)=5.58, p<.0001; Effect Size=3.10
	SENP	t(13)=3.46, p=.0042; Effect Size=1.92
	SHS	t(12)=1.93, p=.0781; Effect Size=1.11
	NPCLC	t(12)=5.31, p=.0002; Effect Size=3.07
Child Power and Independence	IWVFRC	t(13)=9.69, p<.0001; Effect Size=5.38
	SENP	t(13)=5.20, p=.0002; Effect Size=2.88
	SHS	t(12)=3.07, p=.0096; Effect Size=1.77
	NPCLC	t(12)=2.27, p=.0531; Effect Size=1.31

Restoration of Family Functioning for Child Protection

While FRC fulfills its role in parent education to restore family functioning, external intervention is sometimes needed 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)

In this funding cycle, First 5 Kern funded four programs to support restoration of family functioning for early childhood protection. The result tracking is reported in this section to assess program effectiveness.

1. DR Service to Strengthen Child Protection

To strengthen child protection, DR combines state funding with First 5 Kern support to create partnerships across 45 agencies at both county and community levels. Built on its strength-based, family-centered interventions, the program serves around 4,000-6,000 kids every year throughout Kern County, which substantially reduces the burden of child welfare system.

In FY 2019-2020, DR continued adopting 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*. As a broad-based family functioning measure, NCFAS-G indicators were tracked between pretest and posttest. Cronbach's alpha index was computed from 313 observations on the gain scores, and the result reached .92 to confirm consistency of the measurement outcomes.

Due to the large sample size, statistical testing has been conducted to examine significance of the DR impact. Table 22 showed significant enhancement of family functioning across all eight domains of NCFAS-G assessment. In addition, effect size values were computed to confirm practical impacts from the program intervention. The results were larger than 0.80, indicating strong program effects in the eight scale domains of NCFAS-G.

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

Scale Domain	Results	
Environment	t(313)=10.60, p<.0001;	Effect Size=1.20
Parental Capabilities	t(313)=10.28, p<.0001;	Effect Size=1.16
Family Interactions	t(313)=11.61, p<.0001;	Effect Size=1.31
Family Safety	t(313)=10.73, p<.0001;	Effect Size=1.21
Child Well-Being	t(313)=11.90, p<.0001;	Effect Size=1.35
Social/Community Life	t(313)=9.39, p<.0001;	Effect Size=1.06
Self-Sufficiency	t(313)=12.86, p<.0001;	Effect Size=1.45
Family Health	t(312)=11.10, p<.0001;	Effect Size=1.26

2. DVRP Support to Reduce Domestic Violence

DVRP created a comprehensive protocol to provide a full range of legal assistance for child protection. Upon case identification, DVRP assigned a supervising attorney and a paralegal to examine the issue of a child's exposure to domestic violence. Feasible plans

were implemented to protect children and other victims with *substantiated abuse* experiences. The service also included interpretation support for clients in 21 languages.[34] In FY 2019-2020, DVRP supported 125 parents or guardians and 160 children in preventing domestic violence, child abuse and/or neglect.

At end of the DVRP services, 46 victims of domestic violence responded to a program survey. All of them 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;
- 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.

Since "Child abuse and neglect present serious threats to children's well-being" (Children Now, 2018, p. 45), DVRP played an important role in reducing child victimization and repairing family functioning pertaining to RI 2.1.6 and 2.1.9 of First Kern (2019) strategic plan.

3. GCP Services for Child Protection

While legal procedures were established to serve adult victims from domestic violence, "increasing attention is now focused on the children who witness domestic violence" (Bragg, 2003, p. 5). GCP assisted 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 and filing guardianship petitions, (2) responding to objections, (3) planning for mediations and guardianship hearings, and (4) completion of post-hearing letters and orders. In FY 2019-2020, GCP offered services to 163 guardians and 195 children to prevent domestic violence, child abuse and/or neglect.

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%.[35] GCP has maintained quality services in this much-needed region. In FY 2019-2020, exit survey data were gathered from 72 clients and all respondents "agreed" or "strongly agreed" to a statement that "I am more knowledgeable about the duties, rights, and responsibilities of legal guardianship." In addition, 71 participants confirmed that:

- 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); and
- The child(ren) in the household are not subjected to abuse and/or neglect.

GCP's direct legal services to grandparents and caregivers have created guardianship for children to avoid neglect and physical or sexual abuse. The case management enhanced economic and family stability, and supported family access to

[34] http://gbla.org/about-gbla/history/
[35] www.Kidsdata.org

medical homes, health or mental health services, and preschool education. As Children Now (2018) suggested, "A child that has a stable placement or finds a permanent home, through reunification with parents, guardianship or adoption, is more likely to receive the services and supports they need to heal and thrive" (p. 47).

4. Case Management Services for General Family Support

First 5 Kern funded 20 programs to extend general case management support for children and families across focus areas. Except for NFP in *Child Health*, all programs in Table 23 delivered case management services at the family level, which justified more emphasis of the result reporting in *Parent Education and Support Services*. Altogether, 1,021 families (RI 2.1.4) and 867 children (RI 2.1.7) received general case management supports in FY 2019-2020, surpassing 992 families and 795 children last year.

Table 23: General Case Management Support across Twenty Programs

Focus Area	Program	Family Count	Child Count
Child Health	BIH	57	21
	CHI	63	--
	KCCDHN	217	--
	MVIP	55	--
	NFP	--	91
	RSNC	41	41
Family Functioning	AFRC	38	58
	BCRC	20	23
	EKFRC	29	37
	GSR	81	89
	IWVFRC	32	40
	KRVFRC	99	114
	LVSRP	48	84
	MCFRC	22	31
	MFRC	30	35
	SHS	47	47
	SENP	66	97
	WSCRC/WSOLC	16	24
Child Development	DSR	26	35
	LHFRC	34	--

5. Collaborative Interventions on Family Support

In last year, Ages and Stages Questionnaires®: Social-Emotional, second edition (ASQ:SE-2) was employed to help home visiting, early intervention, and child welfare agencies screen and assess infants and young children in the area of social-emotional development. Children who are identified with social-emotional challenges can be referred to in-depth evaluation and intervention. This year, ASQ:SE-2 data were employed to track alleviation of emotional difficulties for 143 children in five programs. As a result, Table 24 showed that over three quarters or more of the children scored below the threshold. These children do not need mental health referrals.

Table 24: Percent of Children with Screening Results below Referral Thresholds

Program	Descriptive Statistics		Statistical Testing			
	N	Percent	df	t	p	Effect Size
HMG	122	75.4	121	5.73	<.0001	1.04
IWVFRC	13	92.3	12	6.86	<.0001	3.96
NFP	82	97.6	81	20.26	<.0001	4.50
SSCDC	25	88.0	24	6.89	<.0001	2.81
WSN	23	82.6	22	3.95	.0007	1.68

In comparison, both HMG and NFP follow national models to detect developmental and behavioral delays in children for early interventions, while IWVFRC, SSCDC, and WSN are created locally for center-based services. By strengthening protective factors in families, HMG generally supports parents and caregivers to better understand and promote their child's developmental milestones and improve school readiness. NFP is a more specialized program with involvement of nurse practitioners to primary serve children under age 3. In Table 23, NFP demonstrates a higher percent of children with no need for mental health referrals.

Among the center-based programs, WSN offered a shelter for children who experienced domestic violence. Its rate below the referral thresholds was lower than the ones for IWVFRC and SSCDC that typically had less family issues. Despite the difference in program intervention and early childhood status, statistical testing revealed that children in these programs performed significantly below the thresholds for social emotional concerns at α=.001. Although the sample sizes varied from 13 in IWVFRC to 122 in HMG, all effect sizes in Table 24 were larger than .8 to confirm strong practical impact from First 5 Kern-funded programs.

Implementation of Nurturing Parenting Curriculum in Parent Education

In family support, researchers maintained that "investments in high-quality parenting education will be among the best investments any community can make" (Bowman, Pratt, Rennekamp, & Sektnan, 2010, p. 8). In particular, the Nurturing Parenting (NP) curriculum is considered as a high-quality program and has been employed in both court-mandated and non-court-mandated parent education settings.

Stephen Bavolek (2000), the NP developer, asserted that parenting patterns were learned in childhood and replicated later in life when children became parents. Thus, negative experiences may engulf children in parenting models of abuse, neglect, exploitation, and victimization. In Kern County, NP workshops were offered this year 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).

In FY 2019-2020, six FRCs 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. 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. Due to its positive impact on improving parenting skills, the Departments of the Army and Navy utilized 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).

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 206 parents participated in these workshops at six program sites (RI 2.2.2). 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 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 4.57 and 5.00. The result reconfirmed usefulness of workshop contents.

Table 26: Mean Ratings on the Usefulness of NP Workshops

Workshop	N	Mean
1	130	4.62
2	79	4.80
3	84	4.74
4	68	4.69
5	47	4.91
6	7	4.86
7	21	4.57
8	20	5.00
9	11	5.00
10	39	4.77

The 10 workshops were also offered in sequence. In the beginning phase, workshop 1 was attended by 130 parents. The feedback survey included two special questions on practicing the concept of nurturing parenting at the introduction stage:

- 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 3.8, below a scale value of four for the "some/a lot" category. After the first workshop, the value increased to 4.60, approaching "a lot" of practice at the highest level. As a result of the 10th workshop, parents reported that they gained "some" or "a lot of" ability to handle own stress in positive ways. More importantly, the value increased from 4.15 to 4.67 to lean toward the "a lot" category for helping child handle stress.

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

Item	N	Mean
Practice nurturing parenting before Workshop 1	130	3.80
Practice nurturing parenting after Workshop 1	130	4.60
Ability to handle own stress after Workshop 10	39	4.15
Ability to help child handle stress after Workshop 10	39	4.67

While Workshops 1 and 10 served as the introduction and conclusion sessions, Workshop 9 was designed to increase parents' awareness of alternative ways to disciplining children besides spanking. The data were reversely scaled with 1 representing "Children should never be spanked" and 5 indicating "Children should be spanked every time they do something wrong, no matter how small". The data from 11 participants showed reduction of the scaled average from 2.00 to 1.18. The result against spanking was significant [$t(10)=3.11$, $p=.0111$] at $\alpha=.05$ with an effect size of 1.97.

For Workshops 2-8, Table 28 showed significant improvement of participant knowledge. Similar to Workshop 9, the size of Workshop 6 was small (i.e., N=7). Effect sizes were computed to assess the practical impact of workshop training beyond statistical testing. Except for a moderate effect in Workshop 4 that addressed communication of feeling between parents and children, all of the remaining effect sizes were larger than 0.80, suggesting strong impact of these workshops this year.

Table 28: Increase of Participant Knowledge on the Content of Workshops 2-8

Workshop	N	Pretest Mean	Posttest Mean	t	p	Effect Size
2	79	3.63	4.54	8.41	<.0001	1.90
3	84	2.71	4.15	11.87	<.0001	2.61
4	68	3.04	3.56	2.49	.0153	0.61
5	47	3.21	4.85	14.18	<.0001	4.18
6	7	3.29	4.71	7.07	.0004	5.77
7	21	2.71	3.90	4.51	.0002	2.02
8	20	4.30	4.75	2.27	.0351	1.04

In summary, through the NP workshop offerings, positive impacts occurred in parent education to support child development. First 5 Kern funding has been employed to reach an original goal of the State Commission 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).

In summary, service effectiveness has been evaluated in *Family Functioning* across 18 programs. To equip local parents with childrearing skills, First 5 Kern sponsored court-mandated and non-court-mandated parent education at 13 FRCs across Kern County. A total of 2,249 parents participated in educational workshops offered by 14 programs across three focus areas (RI 2.2.3). AAPI-2 and NP workshop data were analyzed to evaluate the services for supporting early childhood development in the home setting. "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).

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 also illustrated by the NCFAS-G results. In addition, ASQ:SE-2 data were analyzed from NFP and HMG to determine the need for further social-emotional referrals. As a result, the program support has kept child performance significantly below the cutoff scores of ASQ:SE-2. Based on these findings, children are not only well-protected in the home environment, but also fully-supported in social emotional development.

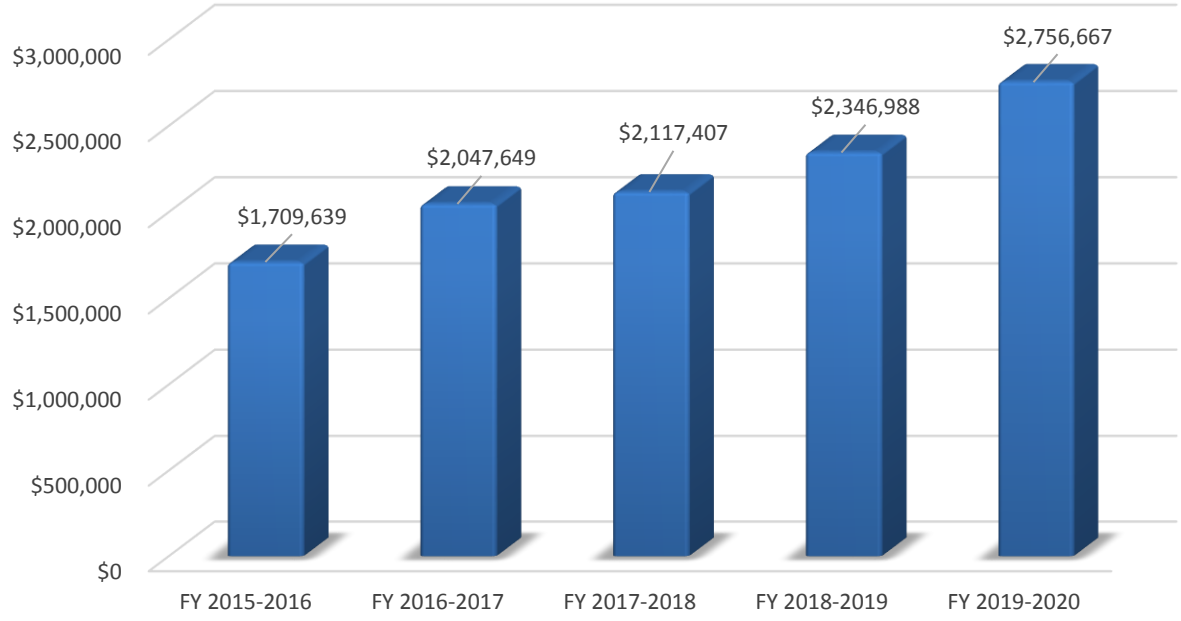
(III) Funding Impact in *Child Development*

During the first eight months of the pandemic, more than 741,000 children in the United States have tested positive for the coronavirus, and some 40 percent of U.S. daycares have closed (Le, 2020). Consequently, many children from low income families are left with no access to quality early education. While school failure is less common for children higher up the income ladder, the general population is not equally split between the rich and the poor. As Miller (2019) reported, 93% of fathers and 72% of mothers with children at home are in the labor force. Thus, support for early childcare and education is needed for most working families.

The state report glossaries offer two general domains to categorize First 5 Kern funded services in *Early Childcare and Education*: [1] Quality Early Learning Supports (QELS) and [2] Early Learning Programs. The early childhood support is particularly important this year because "parents are being hit especially hard by the coronavirus pandemic, and as far as job losses go, mothers and fathers are faring equally poorly" (Rabouin & Pandey, 2020, p. 1).

Prior to the pandemic, California already had a low share of women working and high cost of child care (Miller, 2019). Families on average spend more on childcare costs than on housing, healthcare, food, and college (Bonello, 2019). To lower the burden, First 5 Kern channeled $862,715 of IMPACT (Improve and Maximize Programs so All Children Thrive) grant money from the state commission to expand the number of high-quality early learning settings, including supporting and engaging families in the early learning process, in the QELS domain. In Domain [2], First 5 Kern devoted $1,893,952 to fund nine programs in *Early Childcare and Education*. Including the investment from IMPACT, the total program spending in FY 2019-2020 adds to $2,756,667, larger than any other years in the current funding cycle (Figure 14).

Figure 14: Increase of First 5 Kern Funding in *Early Childcare and Education*



Altogether, local service providers delivered early learning support for 4,173 children this year. Between last year and this year, the number of caregivers increased from 1,049 to 1,285 and the service provider count increased from 205 to 454 (Ibid. 3). Since IMPACT is not guided by the local strategic plan, outcomes in Domain [1], QELS, are excluded from this annual report. In Domain [2], South Fork Preschool (SFP) and Wind in the Willows Preschool (WWP) provided education services for three and four-year-olds in rural communities of Lake Isabella and Mojave Desert. BCDC, Discovery Depot Child Care Center (DDCCC), and SSCDC are funded to support early childcare for families with special needs.

In addition, three preschool programs also received funding to facilitate kindergarten transition:

1. Delano School Readiness (DSR)
2. Lost Hills Family Resource Center (LHFRC)
3. Neighborhood Place Community Learning Center (NPCLC)

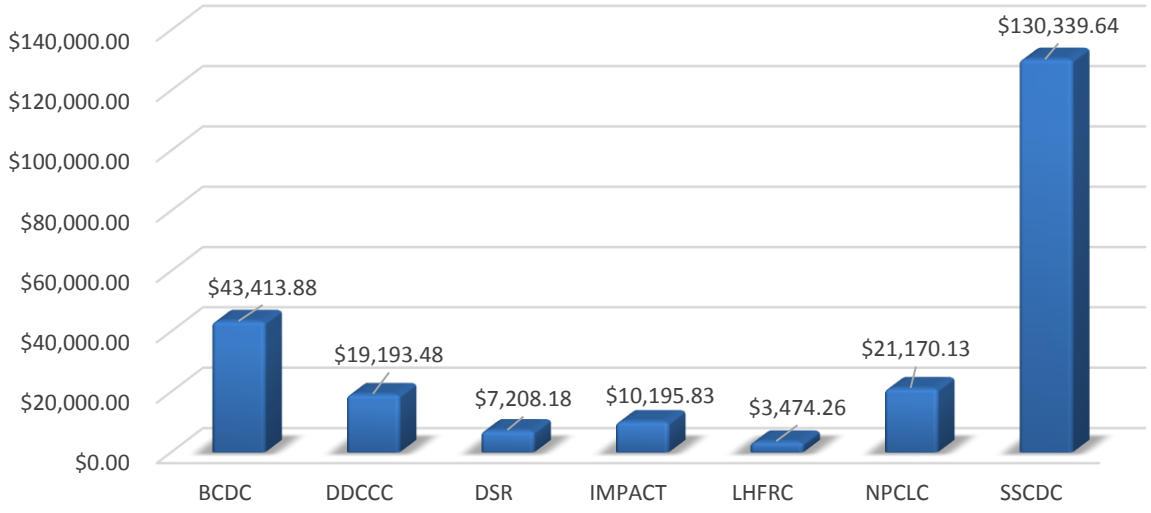
In retrospect, DSR and LHFRC originated from a First 5 California School Readiness Initiative (SRI). SRI also sponsored development of Summer-Bridge classes across seven programs in Focus Area II: *Parent Education and Support Services*:

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. Shafter Healthy Start (SHS)

Due to COVID-19, only DSR, EKFRC, GSR, LVSRP, MFRC and SHS offered Summer-Bridge programs this year.

Through strategical planning, all programs in this focus area operated within their budgets. In particular, seven programs saved $234,995.40 from the original annual budget (Figure 15), far more than the corresponding savings of $81,333.46 last year. In addition, service providers in *Early Childcare and Education* raised $ 841,999.59 to enhance program sustainability.

Figure 15: Program Budget Savings in *Early Childcare and Education*



In summary, First 5 Kern's support in *Early Childcare and Education* has addressed two objectives of the local strategic plan: (1) Children will enter school prepared as a result of their participation in early childhood education and childcare services, and (2)

Special population children (e.g. non-traditional hours and/or children with special needs) will have access to early childhood education and childcare services (First 5 Kern, 2019). Multiple Result Indicators (RI) have been specified in the strategic plan to link **Objective 1** to service outcomes of home-based, center-based, and Summer-Bridge programs (RI 3.1.1-3.1.3, Ibid. 22). **Objectives 2** targets on the service access by children with special needs (RI 3.2.1, 3.2.2, Ibid. 22) and/or during non-traditional hours (RI 3.2.3, Ibid. 22).

The alignment between RI designation and service description is summarized in Table 29. Service outcomes are examined in the following sections to assess effectiveness of center-based, home-based, and Summer-Bridge programs, as well as the support services for children with special needs.

Table 29: 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

Capacity of Program Support in Child Development

Program capacities are interconnected and multiple services are delivered by First 5 Kern funded programs 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 30, center-based service counts are listed for 18 programs across focus areas.

Table 30: Delivery of Early Education Services on Center-Based Platforms

Focus Area	Program	Child Count	
		Target	Total
Child Health	HLP	80	88
Family Functioning	AFRC	25	25
	BCRC	20	22
	EKFRC	25	27
	GSR	120	127
	LVSRP	15	20
	MCFRC	5	5
	MFRC	20	26
	SHS	40	42
Child Development	BCDC	25	30
	DSR	30	32
	DDCCC	50	56
	LHFRC	20	27
	NPCLC	166	260
	SSCDC	35	28
	SFP	24	33
	WSOLC	20	30
	WWP	34	38

All Summer-Bridge programs in *Early Childcare and Education* provided center-based education. In addition, half of the programs offered child education services, and

one program in *Child Health* organized education workshops to support healthy literacy development. These center-based programs provided education services for 916 children (RI 3.1.1) while the total target count was 819. Therefore, the overall service targets have been surpassed this year.

First 5 Kern also funded home-based education services. Three programs, i.e., EKFRC, DSR, and LHFRC, are located near the border of Kern County. In FY 2019-2020, these programs delivered home-based education for 66 children (RI 3.1.2), exceeding the total target count of 50 children in Table 31. SSEC also served 31 children in educational center-based activities during non-traditional hours (RI 3.2.3). Together with SFP, SSEC served 44 children with special needs in educational center-based activities (RI 3.2.1).

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

Focus Area	Program	Child Count	
		Target	Total
Family Functioning	EKFRC	15	38
Child Development	DSR	15	8
	LHFRC	20	20

For children with special needs, ages 0-5 is a critical period to close developmental gaps. Because a child's brain undergoes dramatic growth at this stage, gaps in one area could impact child wellbeing in other areas. The outcome connection supports service integration across focus areas. With its program affiliation in *Family Functioning*, LVSRP assisted children from 124 families with health insurance applications and offered preschool learning activities to 24 children.

Special needs have also been addressed in *Child Health* for 932 children through MVIP and MVCCP programs [see Section I of this chapter]. In Table 32, a target was set for additional programs to support a total of 55 children with *special needs*. This year a total of 76 children received center-based education during regular and/or non-traditional hours. The commitment to *special-needs* services fit a broad vision of First 5 California to "build a quality system of early care and education with access for all".[36]

Table 32: Counts of Children Receiving Center-Based, Special-Need Services

Service Type	Focus Area	Program	Child Count	
			Total	Target
Regular Hours	Child Development	SFP	4	0
	Child Health	SSEC	40	37
Non-Traditional Hours	Child Development	LHFRC	3	0
	Child Health	SSEC	29	18

To prepare preschoolers for kindergarten, First 5 Kern (2019) set a result indicator on *the number of children who participated in Summer Bridge center-based activities*. In FY 2019-2020, six programs in Table 33 served a total of 88 preschool-aged children (RI 3.1.3). Due to COVID-19, the count was below the 155 total enrollment target.

[36] http://ccfc.ca.gov/pdf/F5CAFOCUSUG2017.pdf

Table 33: Participant Counts in Summer-Bridge Programs

Focus Area	Program	Child Count	
		Target	Total
Family Functioning	EKFRC	10	11
	GSR	50	21
	LVSRP	20	20
	MFRC	20	7
	SHS	25	17
Child Development	DSR	30	12

In summary, First 5 Kern led countywide efforts to champion the wide-ranging support for early childhood education across the vast 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. The early childcare services have addressed persistent issues of program access by children *with special needs* and *in remote locations*.

Assessment of Program Outcomes in Early Childhood Education

To track the improvement of program performance, assessment data have been gathered from pretest and posttest settings using several instruments, including Ages and Stages Questionnaire-3 (ASQ-3), Child Assessment-Summer Bridge (CASB), Desired Results Developmental Profile (2015) - Infant/Toddler View (DRDP-IT), Desired Results Developmental Profile (2015) – Preschool/Fundamental View, and Desired Results Developmental Profile (2015) – Preschool/Comprehensive View. The instrument features are listed in Table 34 to support data analyses in early childhood development.

Table 34: 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-Infant/ Toddler View	Indicators of *Approaches to Learning – Self-Regulation, Cognition, Language and Literacy Development, Physical Development-Health, and Social and Emotional Development*.	Infant or Toddler
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

1. ASQ-3 Findings

ASQ-3 outcomes include child growth indicators in *Communication*, *General Motor*, *Fine Motor*, *Personal-Social*, and *Problem Solving* domains. Among programs funded by First 5 Kern, 19 service providers tracked child growth against age-specific thresholds for 1,661 children during Months 2-60. In Section (I) of this chapter, ASQ-3 findings were reported for 96 children from MVIP and NFP programs in *Health and Wellness*. This section is devoted to reporting ASQ-3 findings from 1,575 children, 1,285 from 13 programs in *Focus Areas II: Parent Education and Support Services* and 290 children from four programs of *Focus Areas III: Early Childcare and Education* (Table 35). Despite the interruption of data collection due to COVID-19, the ASQ-3 data sizes were larger in AFRC, BCRC, KRVFRC, MCFRC, SHS, and LHFRC this year, contributing a total of 116 additional cases to the database.

Table 35: Scope of ASQ-3 Data Collection in Focus Areas II & III

Focus Area	Program	Months	Sample Size
II	AFRC	2-60	109
	BCRC	2-60	85
	EKFRC	2-60	64
	GSR	2-60	105
	HMG	2-60	160
	IWVFRC	2-60	31
	KRVFRC	2-60	234
	LVSRP	2-54	79
	MCFRC	2-60	53
	MFRC	33-60	54
	SENP	2-60	206
	SHS	48-60	82
	WSN	2-60	23
III	BCDC	2-27	47
	DSR	36-60	29
	LHFRC	18-60	86
	NPCLC	2-60	128

Table 36 showed that a couple of programs reached a 100% rate for surpassing the ASQ-3 thresholds in *Communication* (COM), *Fine Motor* (FM), and *Problem Solving* (ProS) domains. These domains also included relatively low rate below 80%, which made the percent ranges larger. In contrast, ranges of the domain passing rate were 11.6 in *Personal-Social* (PerS) and 17.9 in *Gross Motor* (GM) domains, much smaller than the ranges for COM, FM, and ProS. The results indicated that young children started developing these skills at different paces. Hence, it is important to design age-appropriate program features to close learning gaps at the early stage.

Table 36: Percent of Children with Performance Level above ASQ-3 Threshold

Focus Area	Program	COM	GM	FM	PerS	ProS
II	AFRC	99.1	93.6	90.8	96.3	96.3
	BCRC	100	94.1	84.7	98.8	98.8
	EKFRC	92.2	93.8	79.7	90.6	96.9
	GSR	91.4	87.6	74.3	92.4	96.2

Focus Area	Program	COM	GM	FM	PerS	ProS
II	HMG	87.5	81.9	72.5	86.3	88.8
	IWVFRC	96.8	96.8	93.5	96.8	93.5
	KRVFRC	91.4	86.3	85.9	89.7	94.4
	LVSRP	97.5	94.9	94.9	96.2	97.4
	MCFRC	94.3	83.0	86.8	96.2	100
	MFRC	94.4	85.2	66.7	92.6	100
	SENP	94.7	87.9	93.7	96.1	97.6
	SHS	93.9	87.8	61.0	93.9	89.0
	WSN	91.3	91.3	100	91.3	91.3
III	BCDC	87.2	80.9	91.5	87.2	89.4
	DSR	75.9	82.8	69.0	89.7	79.3
	LHFRC	98.8	98.8	94.2	98.8	100
	NPCLC	97.7	93.0	72.7	93.0	96.9

Based on the performance assessment data, statistical testing has been conducted to examine whether the level of child development was significantly above the corresponding ASQ-3 thresholds. The test statistic from single sample t tests was listed in Table 37. All t values were significant at α=.01. Effect sizes were larger than 0.80, indicating a strong program impact on all five ASQ-3 outcome measures across 17 programs.

Table 37: Test Statistic (t) for Significant Results in 17 Programs

Focus Area	Program	COM	GM	FM	PerS	ProS	Effect Size
II	AFRC	25.93	23.36	20.12	22.58	25.21	>3.87
	BCRC	21.84	33.78	20.09	21.10	29.51	>4.38
	EKFRC	11.02	15.13	9.85	13.09	15.54	>2.48
	GSR	15.85	19.55	16.22	16.16	17.51	>3.11
	HMG	12.77	19.45	15.65	15.58	13.96	>2.03
	IWVFRC	14.08	15.65	14.48	11.48	13.11	>4.19
	KRVFRC	24.17	25.77	24.62	21.24	26.90	>2.78
	LVSRP	21.57	25.67	25.39	23.14	24.29	>4.88
	MCFRC	12.63	13.04	12.66	15.36	17.11	>3.50
	MFRC	12.71	14.76	9.19	15.23	13.12	>2.52
	SENP	29.99	33.22	34.65	36.50	33.97	>4.19
	SHS	14.46	20.78	9.89	8.16	14.80	>1.81
	WSN	7.03	12.61	12.28	6.67	7.99	>2.84
III	BCDC	10.70	12.96	12.01	9.16	14.19	>2.70
	DSR	4.45	5.30	5.67	2.95	6.68	>1.11
	LHFRC	24.15	36.85	24.16	29.18	28.80	>5.24
	NPCLC	23.97	26.67	13.99	21.28	23.94	>2.48

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 23 in WSN to 234 in KRVFRC (see Table 35), which may have different impacts on the result attainment to 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). Effect sizes were reported in Table 37 to confirm the strong practical program impact.

2. Desired Results Developmental Profile-Infant/Toddler Indicators

In FY 2019-2020, the *Desired Results Developmental Profile (2015) [DRDP (2015)]: Infant/Toddler* (IT) *View* was used as a formative assessment instrument to inform instruction and program improvement in early childhood support. The IT View was part of a universal design of DRDP to represent the full continuum of child development from early infancy to kindergarten entry. In companion with the Preschool (PS) View, child competencies are rated in four categories, *Responding, Exploring, Building*, and *Integrating* to indicate if children are able to (1) differentiate responses, (2) explore objects, (3) build relationships, and (4) combine strategies for problem solving (California Department of Education, 2015). Depending on the IT performance at *Earlier, Middle*, or *Later* levels within these developmental categories, the local DRDP data were scaled for five indicators on *Approaches to Learning – Self-regulation* (ATL-REG), six indicators on *Cognition* (COG), five indicators on *Language and Literacy Development* (LLD), eight indicators on *Physical Development-Health* (PDHLTH), and five indicators on *Social and Emotional Development* (SED) (Table 38).

Table 38: Domain Coverage of DRDP Assessment-IT

Domain	Knowledge and Skill Indicators
ALT-REG	(1) Attention Maintenance, (2) Self-Comforting, (3) Imitation, (4) Curiosity and Initiative in Learning, (5) Self-Control of Feelings and Behavior.
COG	(1) Spatial Relationship, (2) Classification, (3) Number Sense of Quantity, (4) Cause and Effect, (5) Inquiry Through Observation and Investigation, (6) Knowledge of the Natural World.
LLD	(1) Understanding of Language, (2) Responsiveness to Language, (3) Communication and Use of Language, (4) Reciprocal Communication and Conversation, (5) Interest in Literacy.
PDHLTH	(1) Perceptual-Motor Skills and Movement Concepts, (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.
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.

In the area of infant and toddler development, First 5 Kern funded HLP in *Child Health* to educate parents on developmental milestones and behavioral norms, as well as facilitating parent-child interaction through its monthly workshops. The IT View data were also gathered from BCDC and SSCDC in the focus area of *Child Development*. BCDC is designed to assist parenting teens in childcare and education. SSCDC works with victims of domestic violence to support early childhood development. Excluding one case from BCDC with no ratings, data from IT View contain 69 records across three programs, two-third of them belong to pretest assessment.

To evaluate child development, the data analysis is built on additional tracking efforts to link child pretest records from last year with posttest data this year. As a result of the case matching, 34 pairs of the records, 20 from BCDC, 4 from HLP, and 10 from

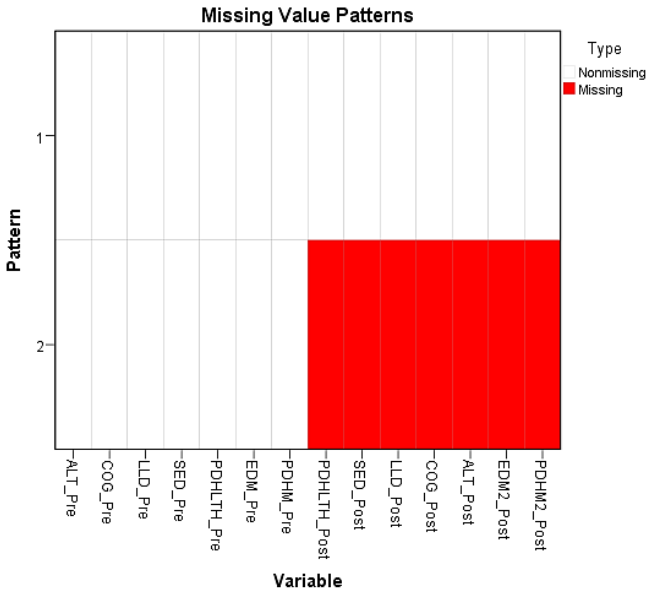
SSCDC, were retained to assess infant/toddler development. Table 39 shows significant improvement of child performance in ATL-REG, LLD, PDHLTH, and SED dimensions at α=.01. Effect sizes for IT View indicators are larger than 0.80, suggesting a strong practical impact across BCDC, HLP, and SSCDC programs.

Table 39: Results from DRDP-IT Matched Cases Across Five Scales

Domain	N	t	p	Effect Size
ALT-REG	34	3.19	.0031	1.11
COG	34	3.04	.0046	1.06
LLD	34	3.43	.0016	1.19
PDHLTH	34	2.83	.0079	0.99
SED	34	3.29	.0024	1.15

To support missing value imputation, two patterns have been identified in the IT View data (Figure 16). Pattern 1 is linked to complete data tracking results in Table 39. Pattern 2 contains missing values from posttest assessment, which corresponds to the program closedown period during the pandemic. Given the fact that missing data occurred consistently in the posttest with no confounding variables, multiple imputation (MI) has been implemented to fill missing data five times using the available data from IT View.

Figure 16: Partition of the DRDP-IT Data Between Available and Missing Groups



Results from the five sets of complete data are pooled for reporting using the Bayesian approach. Rubin's (1987) rule is employed to account for the imputation uncertainty in statistical inference. The choice of five imputations was recommended by Rubin (1987), and has been incorporated as a default in SPSS. As a result, the sample sizes with data imputations are much larger (see Table 40). Meanwhile, the statistical significance level has been raised from α=.01 in Table 39 to α=.0001 in Table 40. The effect size values are less sensitive to the sample size change, and only show minor adjustments. But the results are still in a range above 0.80 to confirm a strong practical impact from these programs on the DRDP-IT indicators.

Table 40: Results from DRDP-IT from the Multiple Imputation Approach

Domain	N	t	p	Effect Size
ALT-REG	78	4.54	<.0001	1.03
COG	71	4.70	<.0001	1.12
LLD	73	5.03	<.0001	1.19
PDHLTH	85	4.74	<.0001	1.03
SED	68	3.93	<.0001	0.96

Following the DRDP manual, two measures were constructed to assess *Early Childhood Development* and *Physical Development/Health*. According to the California Department of Education (2015), "These measures should be used if they assist teachers and service providers in planning a child's learning activities and supports, and documenting progress" (p. 4). The results in Table 41 demonstrated strong (i.e., Effect Size>0.8) and significant enhancements on *Physical Development/Health* and *Early Childhood Development* at α=.005. Data imputation was attempted for these two scales. In *Early Childhood Development*, the imputed sample size (N=124) was more than three times of the original data size (N=34). The excessive missing data imputation is likely to make the results unstable (Wang & Johnson, 2019). On the other hand, the imputed samples for *Physical Development/Health* had a size of 53, slightly larger than the original data size. The results showed an improvement of significance level from α=.005 to α=.001, while effect size remains in a strong impact range (i.e., effect size>.80).

Table 41: Results from DRDP-IT Matched Cases on Two Scales

Data	Domain	N	t	P	Effect Size
Original	Early Childhood Development	34	3.23	.0028	1.12
	Physical Development/Health	34	3.03	.0047	1.05
Imputed	Early Childhood Development	124	0.93	.3540	0.17
	Physical Development/Health	53	3.57	.0010	0.99

4. Desired Results Developmental Profile-Preschool (PS) Summary

For preschool children, the DRDP instrument contains two versions: Fundamental View and Comprehensive View. The indicator structure for Comprehensive View is listed in Table 42. Fundamental View is a simplified version that does not include HSS, VPA, and Indicators 8-11 for Cognition (COG). The number of levels on each indicator depends on the competencies that are appropriate for the developmental continuum. Categories are set to differentiate early, medium, and later phases of the four stages, *Responding, Exploring, Building*, and *Integrating*, in the result rating.

Table 42: Domain Coverage of DRDP-PS Assessment

Domain	Knowledge and Skill Indicators
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

Domain	Knowledge and Skill Indicators
	Investigation, (10) Documentation and Communication of Inquiry, (11) Knowledge of the Natural World.
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.
HSS	(1) Sense of Time, (2) Sense of Place, (3) Ecology, (4) Conflict Negotiation, (5) Responsible Conduct as a Group Member.
VPA	(1) Visual Art, (2) Music, (3) Drama, (4) Dance.

In comparison, preschoolers are more mature than infants/toddlers in language development. DRDP includes four indicators 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.[37]

In FY 2019-2020, HLP, SFP, and WWP gathered Fundamental View data from 152 children. SFP did not collect follow-up data, and thus, its 19 cases from initial assessments cannot be used to track child development over time. The HLP and WWP data contained 32 and 31 cases from follow-up assessments, respectively. Effort has been made to match them with the initial assessment records. The ELD scale was excluded because it did not fit respondent's background. Results of statistical testing on the outcome improvement are listed in Table 43 to show significant impacts on child development in both programs at α=.0005. The effect sizes also indicate strong program effects on DRDP indicators.

Table 43: Test of the Result Change in the DRDP PS Fundamental Assessment

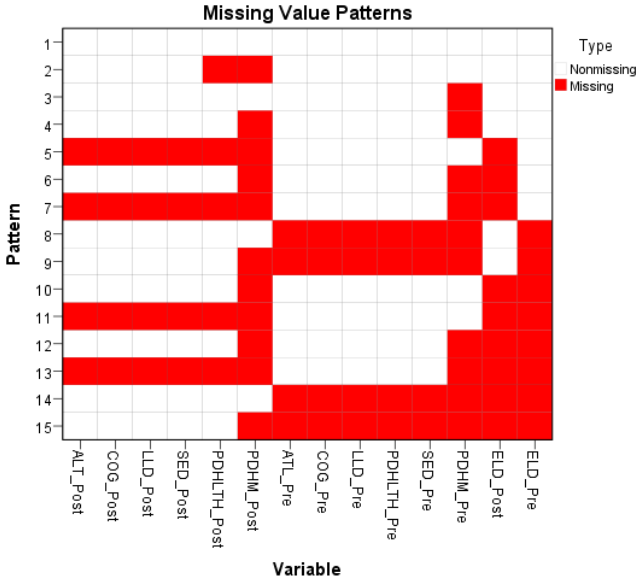
Program	DRDP Indicator	N	t	p	Effect Size
HLP	ALT-REG	19	6.87	<.0001	3.24
	COG	19	6.92	<.0001	3.26
	LLD	19	7.25	<.0001	3.42
	PDHLTH	19	6.80	<.0001	3.21
	SED	19	6.20	<.0001	2.92
WWP	ALT-REG	18	6.74	<.0001	3.27
	COG	18	7.63	<.0001	3.70
	LLD	18	6.76	<.0001	3.28

[37] https://www.desiredresults.us/sites/default/files/docs/forms/DRDP2015_PSC_Combined-20200123RatingRecorg.pdf

Program	DRDP Indicator	N	t	p	Effect Size
	PDHLTH	17	5.21	<.0001	2.61
	SED	18	7.56	<.0001	3.67
	PDH	17	4.75	.0002	2.38

Data structure in Figure 17 showed 15 patterns of missing data from pretest and posttest assessments. Besides the zero missing count in Pattern 1, Pattern 2 involved missing observations on two posttest variables and Pattern 3 had missing data on one pretest variable. The remaining 12 missing patterns occurred with a various set of variables across pretest and posttest assessments, which made it unclear on whether the data can be assumed as missing at random (MAR). MAR is a fundamental assumption of MI computing (Wang, 2020b). To avoid violation of the assumption, the Fundamental View results are based on the available data without multiple imputations.

Figure 17: Patterns of the DRDP-PS/Fundamental View Data



The results revealed significant improvement of child performance in HLP and WWP across DRDP indicators at α=.0005. The effect sizes were larger than 0.80, indicating strong program impacts on the indicator improvement. The program outcome highlighted the need for program access. As indicated by Proposition 10, "There is a further compelling need in California to ensure that early childhood development programs and services are universally and continuously available for children until the beginning of kindergarten" (p. 1).

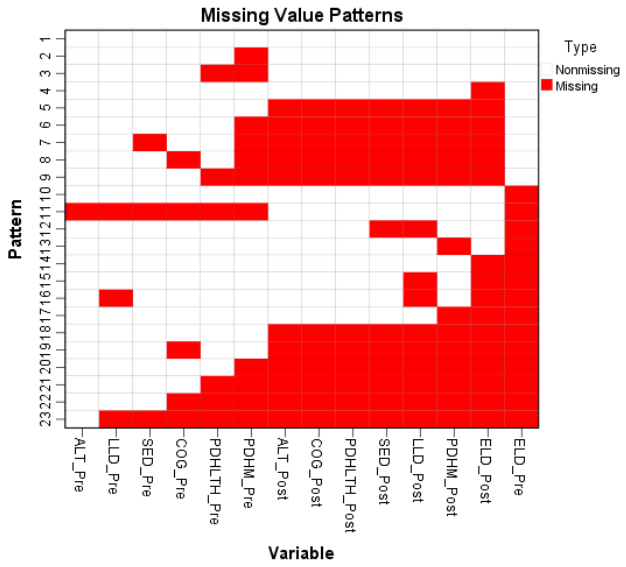
In FY 2019-2020, four programs participated in DRDP data collection using the Preschool Comprehensive View scale. Partially due to COVID-19, the data indicated small data sizes in follow-up assessment across DDCCC, SSCDC, and SSEC programs (Table 44). DSR was an exception for no sample attrition. In addition, its data size was much larger than the combined sample of the other three programs in the follow-up assessment. Hence, the data tracking among the four programs primarily reflects findings from DSR in the community of Delano, the second largest city of Kern County.

Table 44: Data Sizes of the DRDP PS Comprehensive Assessment

Session	DDCCC	DSR	SSCDC	SSEC
Pretest	24	32	9	8
Follow-up	4	32	4	2

The Comprehensive View data demonstrated 23 missing patterns, including Pattern 1 for no missing data on any variables (Figure 18). Given the complex of data structure variation, the missing mechanism might not be solely dependent on the existing data. Unlike the data from DRDP-IT View, the missing pattern cannot be simply explained by a universal missing of posttest data due to COVID-19. Hence, additional confounding factors might undermine the MAR condition for multiple data imputations. Similar to the analytic decision on the Fundamental View data, available data are used with imputation to report findings from the Comprehensive Views instrument.

Figure 18: Patterns of the DRDP-PS/Comprehensive View Data



Due to the service continuation, some of the preschoolers in the follow-up data had their initial assessment completed before this year. Hence, initial records from last year are merged with new data from this year to identify a total of 46 matched cases in both initial and follow-up assessments. The results show significant child development on the ALT-REG, COG, LLD, PD, SED, and PDH scales of the Comprehensive View at α=.005 (Table 45). In addition, Cohen's d is calculated to indicate effect size for practical significance. The results in Table 45 are all above 0.80 to confirm strong program impacts on the Comprehensive View scales.

Table 45: Paired Pretest/Posttest Results of DRDP PS Comprehensive View

Domain	N	t	p	Effect Size
ALT-REG	46	3.09	.0035	0.92
COG	46	7.11	<.0001	2.12
LLD	43	9.85	<.0001	3.04
PD	45	5.97	<.0001	1.80

Domain	N	t	p	Effect Size
SED	45	9.12	<.0001	2.75
PDH	40	3.29	.0021	1.05

In summary, different impacts occurred from COVID-19 to hammer collection of complete data in DRDP assessments. Nonetheless, results in Tables 39 and 41 showed strong program impacts across the seven DRDP-IT domains. The results in Table 39 were reconfirmed by additional findings from multiple imputations in Table 40. Due to the MAR condition, no imputation was conducted in analyzing DRDP data at the preschool level from Fundamental View and Comprehensive View instruments. The available data from Fundamental View revealed significant improvement of child performance in HLP and WWP programs at α=.0005 (Table 43). The effect sizes were larger than 0.80, indicating strong program impacts on the indicator improvement. Similarly, significant findings were obtained from the Comprehensive View scales at α=.005 (Table 45) with large effect sizes to reconfirm strong program impacts.

5. Child Assessment-Summer Bridge Results

In preparing for school readiness, First 5 California (2015b) indicated the need for funding "Programs of all types (e.g., classes, home visits, summer bridge programs) that are designed to support the kindergarten transition for children and families" (p. 58). In FY 2019-2020, First 5 Kern funded Summer-Bridge programs to enrich early learning experiences of preschoolers prior to their kindergarten entry. Last year, service outcomes were assessed by Child Assessment-Summer Bridge (CASB) data from 11 programs. Due to COVID-19, pretest data were gathered from 36 cases this year across four programs, half of the programs without data from posttest.

Accompanied by the reduction of Summer Bridge program offerings was less data tracking using the CASB instrument. Consequently, sparsity of the posttest data is illustrated by one observation in SHS and three observations in MCFRC. Sample sizes and 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) are listed in Table 46.

Table 46: CASB Indicator Comparison Between Adjacent Years

Program	Year	N	MS	SES	ComS	SS	SI	CS
GSR (Pretest)	2018-2019	50	3.72	4.22	4.04	4.06	5.50	28.88
	2019-2020	8	4.63	4.88	4.38	4.50	7.88	65.75
MCFRC (Pretest)	2018-2019	5	3.60	5.00	4.80	4.00	7.40	38.20
	2019-2020	5	3.00	4.80	4.40	4.80	7.40	25.40
MCFRC (Posttest)	2018-2019	5	5.00	5.00	4.60	3.80	8.00	69.80
	2019-2020	3	4.33	5.00	5.00	4.67	7.67	62.00
MFRC (Pretest)	2018-2019	18	3.94	4.61	4.67	4.33	6.67	26.33
	2019-2020	7	2.14	4.86	4.71	4.00	8.00	35.00
SHS (Pretest)	2018-2019	23	4.09	4.65	5.00	4.52	6.96	38.26
	2019-2020	16	4.13	4.63	4.75	4.00	7.19	41.38
SHS	2018-2019	16	4.81	5.00	5.00	4.94	7.81	74.88

Program	Year	N	MS	SES	ComS	SS	SI	CS
(Posttest)	2019-2020	1	5.00	5.00	4.00	4.00	8.00	36.00

Although the small data were inadequate for statistical inference this year, children in MCFRC seemed to performance better in posttests than pretests on five out of six CASB indicators (Table 46). The pretest outcome deals with preexisting conditions that cannot be credited to the program impact. However, it demonstrates child preparation upon the program entry. From this perspective, GSR showed better child performance across all CASB indicators. Although no posttest data were gathered in GSR, the last year findings indicated significant and practical impacts [t(28)=2.96, p=.0062; effect size=1.10]. "Good beginning is half done".[38] With better student preparation at the GSR program entry, one might expect good school readiness preparation through the data extrapolation.

MCFRC was the only program that gathered data for computing the average posttest results from CASB indicators. MCFRC served in a remote community and the sample size was also very small last year. But the effect size reached 4.65 to indicate strong practical impact from the center-based program. The result this year reconfirmed better average scores on all CASB indicators, except for a slightly lower measure of self-help skills (SS). No speculation can be made on the result improvement in MFRC or SHS due to the lack of data tracking indicators in the posttest assessment.

In summary, data imputations have been considered in analyzing BCBH, DRDP, and CASB results. While it has successfully amended missing information for BCBH in *Child Health* and DRDP-IT in *Child Development*, the method was not applied in DRDP Preschool and CASB data for different reasons. In the DRDP Preschool data, it was intended to avoid potential violation of the MAR assumption for multiple imputation. In CASB, the issue of missing seven Summer-Bridge programs from last year, in addition to inadequate observations in each existing program, has offered an insufficient foundation to launch data imputation. Nonetheless, the preliminary findings, particularly the ones from MCFRC, seemed to signify positive impact of the Summer-Bridge programs on multiple indicators of child growth.

First 5 Kern (2019) has strategically designated a clear goal in the focus area of *Child Development*, i.e., "Early childcare and education services will be accessible" (p. 6). As First 5 Association of California (2009) suggested, "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" (p. 7). Prior to the passage of Proposition 10, no Strategic Plan was developed for early childhood services in Kern County, nor did the service integration become a focus area to enhance sustainability of local programs for children ages 0-5 and their families. As a result of First 5 Kern support this year, 10,332 parents received social service referrals from 25 programs across Kern County (RI 2.4.1).

Besides the center-based support, First 5 Kern funded family-based general case management services and home visits (RI 2.1.4). A total of 1,021 parents/guardians received the services across 20 programs (Table 47), surpassing the annual target count of 795. The service providers are affiliated in different focus areas to address the program

[38] https://en.bab.la/dictionary/english-chinese/a-good-beginning-is-half-done

needs in *Health and Wellness, Parental Education and Support Services,* and *Early Childcare and Education*.

Table 47: Count of Service Recipients in General Case Management

Focus Area	Program	Target Count	Actual Count
Child Health	BIH	70	57
	CHI	0	63
	KCCDHN	175	217
	MVIP	45	55
	RSNC	40	41
Family Functioning	AFRC	40	38
	BCRC	20	20
	EKFRC	30	29
	GSR	50	81
	IWVFRC	40	32
	KRVFRC	50	99
	LVSRP	40	48
	MCFRC	18	22
	MFRC	30	30
	SHS	30	47
	SENP	40	66
	WSCDC/WSOLC	32	16
Child Development	DSR	25	26
	LHFRC	20	34

The systematic data tracking in this chapter conforms to the Statewide Evaluation Framework (First 5 California, 2005). In this chapter, 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 elaborate 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, ASQ-3, ASQ:SE-2, BCBH, CASB, DANCE, DRDP, and NCFAS-G instruments.

In addition to 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 2019-2020, service providers leveraged funds from 30 external sources totaling $4,314,648 (see Table 3). In particular, 23 of the partners pledged constant support since last year and five increased the partnership investment.[39] Built on the network expansion, more results are aggregated in Chapter 3 to report the outcomes of service integration at the Commission level.

[39] These partners are California Department of Public Health, Emergency Food and Shelter Program, Kern Family Health Care, Southwest Healthcare District, and Targeted Case Management.

Chapter 3: Effectiveness of Service Integration

Partnership building represents an important capacity of service delivery, particularly in the early childhood and family service sector (Purcal, Muir, Patulny, Thomson, & Flaxman, 2011). According to Proposition 10, "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). Following the statutory mandate, First 5 Kern set the fourth focus area on *Integration of Services* to improve the early childhood support system for a well-rounded care provision.

To evaluate the impact of service integration, this chapter is devoted to assessment of partnership building among First 5 Kern-funded programs. The emphasis on network connection fit a 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). The state report glossary has designated two result domains, *Policy and Public Advocacy* and *Programs and Systems Improvement Efforts*, to document county commission support for system building (First 5 Association of California, 2013).

While *Policy and Public Advocacy* depends on coordinated endeavors across the state, *Programs and Systems Improvement Efforts* hinge on partnership development among service providers. This chapter begins with a description of joint supports across service providers to address result indicators of service integration in First 5 Kern's strategic plan. The Integration Service Questionnaire (ISQ) is employed to gather information on program networking. A computer software, *NetDraw*, is adopted to analyze different partnership strengths *within* and *across* focus areas of *Child Health, Family Functioning*, and *Child Development*.

Enhancement of Early Childhood Supports through Service Integration

"In the childcare industry, there are two main populations involved — the children and the providers" (Morgan, 2019, p. 1). Built on the direct service impact on children and families in Chapter 2, this section focuses on partnership enhancement among service providers. Depending on the program affiliation, three result indicators have been designated in First 5 Kern's (2019) strategic plan to support service provider training in *Child Health* (RI 4.1.3), *Family Functioning* (RI 4.2.3), and *Child Development* (RI 4.3.1). Although the target number of providers in *Child Health* was set as 131 for FY 2019-2020, BIH, CHI, MVCCP, and MVIP trained 254 service providers. In addition, DDCCC and SSCDC had four providers in parent education and supportive services. BCDC, DDCCC, SSCDC, and WWP also participated in 23 trainings or other educational services pertaining to early childcare and education. Service integration is illustrated by involvement of DDCCC and SSCDC in service training to support children and families across focus areas.

According to Proposition 10, 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" [Section 5(a)]. This year, 73 service providers in seven programs attended 30 articulation meetings (RI 4.3.2, 4.3.3) to establish or review a standardized transition plan for incoming kindergartners (Table 48). HMG and MVCCP organized 311 service providers to attend educational events on early childhood topics (RI 4.4.1).

Table 48: Number of Service Providers Attending Articulation Meetings

Focus Area	Program*	Meeting Count	Provider Count
Family Functioning	BCRC	2	13
	EKFRC	1	5
	GSR	3	6
	MFRC	1	5
	SHS	11	25
Child Development	DSR	1	6
	LHFRC	11	13

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

In addition, School Readiness Articulation Survey (SRAS) data were gathered from 26 teachers, school administrators, and community members this year to assess the impact of local services on child development. Past responses were retrieved from 85 stakeholders last year to compare changes in the percent of "agree" and "strongly agree" responses. The results showed increases of the positive ratings on six items of the SRAS instrument (Table 49). In particular, 92.31% of the respondents *agreed* or *strongly agreed* on an SRAS item, "community programs integrated services for children and families". The rate substantially increased from 76.47% last year.

Table 49: Percent of "Agree" or "Strongly Agree" Responses to SRAS Items

SRAS Items	2018-2019	2019-2020
Children have an early start toward good health	44.70	69.23
Parents know about early childhood learning	34.11	46.15
Parents know about community resources	44.71	80.77
Education programs provide quality early childhood education	85.88	100
Community programs integrate services for children and families	76.47	92.31
Overall, children are well prepared for kindergarten	34.53	46.15

Throughout the year, collaborative meetings were held among the funded contractors to support service integration. First 5 Kern's (2019) strategic plan designated RI 4.2.1 to represent the number of collaborative meetings among key stakeholders. Altogether, 87 collaborative meetings were held by 15 programs (RI 4.2.2) (Table 50).

Table 50: Number of Collaborative Meetings Held by Service Providers

Focus Area	Program	Count
Child Health	NFP	3
	RSNC	2
Family Functioning	AFRC	8
	BCRC	3
	EKFRC	5
	GSR	7
	IWVFRC	6
	KRVFRC	7
	LVSRP	8
	MFRC	8
	SHS	9
	SENP	7

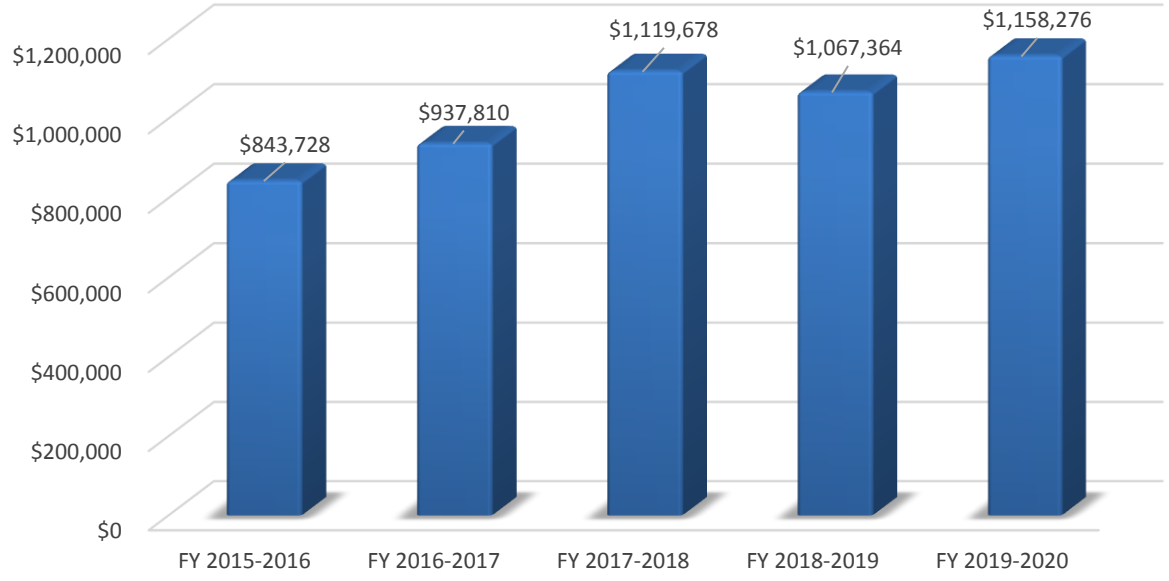
Focus Area	Program	Count
Child Development	DSR	8
	LHFRC	2
	WSOLC	4

In response to COVID-19, First 5 Kern's investment in service integration and partnership collaboration reached the highest this year (Figure 19). Across the county, three dozen First 5 Kern-funded programs and over 200 child care facilities co-sponsored six distribution events since April 2020. First 5 Kern funding was used to cover the cost of:

- 3,064 bottles of liquid hand soap,
- 216 gallons of bleach,
- 3,546 bottles of all-purpose cleaner,
- 158,000 pairs of gloves,
- 22,350 kids masks,
- 72,900 adult masks,
- 6,322 bottles of hand sanitizer,
- 3,425 packs of baby wipes,
- 4,650 cases of diapers,
- 1,032 boxes of tissues,
- 8,320 rolls of toilet paper,
- 540 rolls of paper towel, and
- 625 lbs. of laundry detergent.

The partnership support has addressed critical supply shortages for local service providers. Eventually, many of the supplies were passed on to young children and their families through FRCs and home-visiting programs across the county.

Figure 19: First 5 Kern Funding in Service Integration



Long before the pandemic, it was well-known that "families generally report higher satisfaction with services given comprehensive systems of care" (Doll et al, 2000, p.4).

The impact was demonstrated by an early childcare story this year. In a local community, a child was found to have cavities. After x-ray examinations by a contracted pediatric dentist, clearance was requested from the child's medical doctor for dental treatment. With First 5 Kern funding, KCCDHN adopted a systematic approach to first remove tonsil tissues through a surgery and then fill cavities per nurse referral. The collaboration offered seamless supports from the physician, surgeon, dentist, and nurse to reach an effective solution to the entangled health and dental problems.

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 expanding the *Systems of Care*, First 5 Kern followed its strategic plan to address all four objectives of service integration across *Child Health, Family Functioning*, and *Child Development*:

1. C*ollaborative workshops and trainings* occurred in BIH, CHI, MAS, MVCCP, and MVIP (RI 4.1.2, 4.1.3) to enhance "*Community health improvement efforts that support integration of services for the health and wellness of children and their families*" (First 5 Kern, 2019, **Objective 1**);
2. Supportive services of BCRC, DSR, EKFRC, GSR, LHFRC, MFRC, and SHS in Table 48 met the requirement of strengthening "*Community supportive services improvement efforts that support integration of services for parent education and support services*" (First 5 Kern, 2019, **Objective 2**);
3. Collaborative meetings of DSR, LHFRC, and WSOLC in Table 50 sustained "*Community improvement efforts that support integration of services for early childcare and education*" (First 5 Kern, 2019, **Objective 3**);
4. The SRAS data further indicated "*Community strengthening efforts that support education and community awareness*" (First 5 Kern, 2019, **Objective 4**).

Strengthening of Partnership Network among Service Providers

Among 39 programs funded through First 5 Kern, the Improve and Maximize Programs so All Children Thrive (IMPACT) grant belongs to First 5 California, and is not under the local Commission control. To describe improvement of network building under the local strategic plan, ISQ data are analyzed from the remaining programs to examine strength and pattern of partner connections. With differentiation between case identification (MVCCP) and referral support (MVCCP-KC) in medically vulnerable child care coordination, ISQ data were gathered from a total of 39 service providers. Each program rated its partnership strength with the remaining 38 programs to evaluate the network structure. As a result, service providers reported 1,482 (or 39X38) connections. At the baseline level, *Co-Existing* relations were considered passive for not requiring program outreach with one another. Despite discontinuation of four programs this year[40], 486 active partnerships were established among 39 service providers. Additionally, 88 program links were acknowledged as active partnerships by one of the partners, which left the rate of *Co-Existing* relationships at 61.3% in FY 2019-2020. The rate of passive links was reduced from 65.9% last year (Wang, 2020a), and hence, First 5 Kern has increased active connections among its service providers for service integration.

[40] No annual data collection occurred in R2S, SAS, SPCSR, and WSCRC.

Reciprocal Partnership Building beyond Co-Existence

Partnership building can be reciprocal 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). Improvement of service integration is accompanied by elimination of partnership barriers and expansion of reciprocal connections. In this section, reciprocal relations are examined in focus areas of *Child Health*, *Family Functioning*, and *Child Development*. Active links are featured by service provider networks beyond the level of program *Co-Existence*.

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 supports from dedicated nurses, hospital employees, and mental health professionals in different service sectors. Because most programs are countywide in this focus area, active partnership building is crucial to the service outreach. Thus, it is desired to increase the number of reciprocal links across different service providers beyond the *Co-Existing* level.

In comparison, programs of *Child Development* are rooted in specific communities. Outreach efforts are needed to facilitate exchanges of service experiences across different program settings. Service providers in *Family Functioning* consist of both neighborhood-based 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.

In First 5 Kern's (2019) strategic plan, service integration is promoted as a focus area parallel to direct service deliveries in *Child Health*, *Family Functioning*, and *Child Development*. Altogether, 56 reciprocal links are found in active program networks (Table 51). Clearly, First 5 Kern's (2019) advocacy for service integration received positive responses at the program level. Thus, the focus area with more programs (i.e., Family Functioning) also contained more links.

Meanwhile, 43 active links are identified for connecting programs across focus areas (Table 51). These links reflect service overlaps among programs of *Family Functioning* and *Child Development*. Several programs offer multiple services in parent education, early care, child protection, and school readiness preparation. In addition, countywide programs often network with local service providers to identify and address child needs in different communities. Table 51 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 strategic plan.

Table 51: Number of Active Reciprocal Links Beyond the Co-Existing Level

Link Nature	Focus Area	Link Count
Within a focus area	Child Health	14
	Family Functioning	37
	Child Development	5
Between focus areas	Child Health <-> Family Functioning	23
	Child Health <-> Child Development	19
	Child Development <-> Family Functioning	11

In summary, the reciprocal network among First 5 Kern-funded programs included 109 mutually-confirmed relations above the *Co-Existing* level. Although the results were based on counts of active relationship, Albert Einstein was quoted for making a statement that "not everything that counts can be counted".[41] 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

In general, program features vary across Kern County's valley, mountain, and desert communities, so does the strength of network connection. For the baseline configuration, programs could have a reciprocal 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 on the scope of work pertinent to the fulfillment of First 5 Kern's (2019) 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 characteristic for *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 on 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 52 illustrates a one-to-one match between the SOLO taxonomy and the 4C model for service integration.

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

Table 52: 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 presented at the 2013 annual meeting of the National Association for the Education of Young Children (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 network building. Structure of service integration is illustrated by *NetDraw* plots through network analysis.

Evaluation of Network Strength According to the 4C Model

Results in Table 53 demonstrated a hierarchical feature of the 4C model – The reciprocal partnership count dropped as the connection 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 support enhancement of service integration.

Table 53: Distribution of Mutual Partnership Counts of Different Strengths

Scope	Strength	Partnership Count	Subtotal
Partnership within the same strength level	Creation Coordination Collaboration Co-Existing	3 28 44 284	359
Partnership across different strength levels	Involving Co-Existence Above Co-Existence	87 94	181

Above the level of program *Co-Existence*, a total of 75 pairs of active connections were reciprocated by partners in *Collaboration, Coordination,* and *Creation* categories. Still, far more partners served non-reciprocal roles, making the connections asymmetrical (Hansen, 2009). Table 53 showed that the mutual connections were rated at different strength levels above *Co-Existence* in 94 pairs of active partnerships. In contrast, 87 program connections involved *Co-Existence*. Hence, more service providers established

active program links through program outreach at the *Collaboration, Coordination,* or *Creation* levels.

It should be noted that an effective program partnership did not have to be confined within the category of mutual connections. In *Child Health*, MVCCP partnered with MVCCP-KC for case identification and referral. The referral service belonged to the *Collaboration* category of the 4C model because it did not stipulate new service creation, nor did the one-to-one phone call involve a third-party intervention at the *Coordination* level. In another example, First 5 Kern funded KVAP in *Child Health*, KRVFRC in *Family Functioning*, and SFP in *Child Development* to support multiple service deliveries in the same area. The multilateral supports were at the *Coordination* level to integrate different services across focus areas. In combination, the network examination revealed various partnership structures. 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).

Improvement of the network building is expanded on a time dimension. For program connections at the *Co-Existing* level, the number of inactive links was 717 last year (Wang, 2020a). Table 53 shows 284 *Co-Existing* links this year. Although different program counts could be a factor, that variable alone was unlikely to explain the dramatic decline of passive program connections. On the contrary, the partnership comparison between adjacent years indicated an increase of active partnerships among First 5 Kern-funded programs in FY 2019-2020.

In the ISQ data collection, service providers were asked to identify primary collaborator(s), and 39 service providers identified 139 primary connections. The total number of reciprocal links was 20 in the primary partner network (Table 54), and no reciprocal links were left at the lowest *Co-Existing* level. This result was substantially different from the large numbers of links at the *Co-Existing* level within the general networks (Table 53). In addition, similar to the findings from last year (Wang, 2020a), the majority of reciprocal program links were developed at the *Coordination* level (Table 54) for involving three or more service providers. Due to maturity of the primary networking, new partnership creation and primitive program collaboration remained at a minimum count of one in Table 54.

Table 54: Counts of Reciprocal Primary Partnerships

Scope	Strength	Partnership Count	Subtotal
Primary partnership within the same strength level	Creation	1	12
	Coordination	10	
	Collaboration	1	
	Co-Existing	0	
Primary partnership across different strength levels	Involving Co-Existence	3	8
	Above Co-Existence	5	

Although "reciprocity is a common property of many network" (Garlaschelli, & Loffredo, 2004, p. 4), partners often report different strengths of connection (e.g. Antonucci & Israel, 1986; Shulman, 1976). In Table 54, 17 out of the 20 primary links were reported at a level above *Co-Existence*. The remaining eight links were assessed with different strengths by mutual partners, including five pairs above the *Co-Existence* level. This finding reconfirmed a result of Table 53, i.e., more service providers have

made active outreach efforts, such as partnership *Collaboration, Coordination,* and *Creation*, in the network building. The asymmetry structure of primary partnerships, as represented by the non-reciprocal connections, is further examined in the next section to guide the relation adjustments for network improvement (Kuhnt & Brust, 2014).

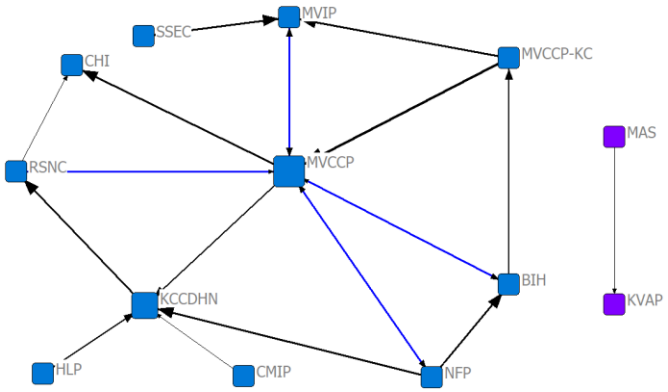
Examination of Primary Partnerships for Service Integration

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, primary partnership structure, including both reciprocal and unilateral links, is analyzed with the *NetDraw* software to construct network plots across programs of *Child Health, Family Functioning*, and *Child Development*.

Network Structure within Each Focus Area

Figure 20 showed a network structure of primary partnership within *Child Health*. Reciprocal links were represented by blue lines. Thickness of the lines indicates strength of the connections. As illustrated by the number of links to MVCCP and KCCDHN, service providers in medical and dental health played key roles in the network building. Meanwhile, all reciprocal links were networked with MVCCP, indicating its mutual understanding of partnership strength with BIH, MVIP, NFP, and RSNC. In general, "Networks that are highly centralized can spread information and resources effectively from the influential members" (Ramanadhan et al., 2012, p. 3). In addition, RSNC offered mental health services, and was concurrently linked to the centroids of MVCCP and KCCDHN in Figure 20.

Figure 20: Network Structure among Primary Partners in *Child Health*

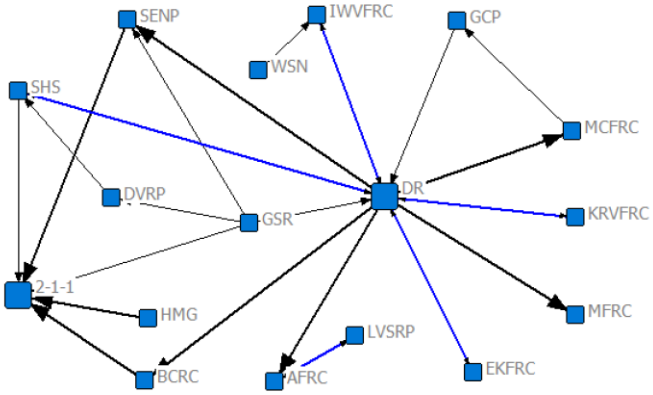


It should also be noted that "when links among organizations are not confirmed, this does not necessarily reflect the absence of a link" (Provan et al., 2005, p. 607). For instance, MVCCP-KC's service referral depended on case identification from MVCCP, instead of vice versa. Despite the unilateral connection, the strength was relatively stronger than other program links. In other parts of this report, their services were considered as a joint program function to reflect the seamless service delivery for medically vulnerable children.

In Figure 20, all programs in *Child Health* participated in primary partnerships. Albrectsen (2017) argued that an impactful service network should be embedded in program features. For example, the dyads of KVAP and MAS shared a service focus on water safety education. In addition, the majority of service providers were connected with three or more partners to support multilateral service coordination (Figure 20). It was the extensive program links within the same focus area that forged a learning community of service outreach in the system building.

In *Family Functioning*, 18 programs took part in partnership building (Figure 21). Programs for social service referral (2-1-1) and child protection (DR) had more connections than other programs. In the network plots, line thickness indicated different partnership strengths. While 2-1-1 was recognized as a primary partner by other programs for service referral, DR actively extended its connections to its partners. Blue lines also represented reciprocal links between DR and FRCs, including EKFRC, IWVFRC, KRVFRC, and SHS. Through incorporation of various program supports in child protection, family support, and service referral, the partnership building demonstrated characteristics of *Systems of Care* in the local community.

Figure 21: Network Structure among Primary Partners in *Family Functioning*

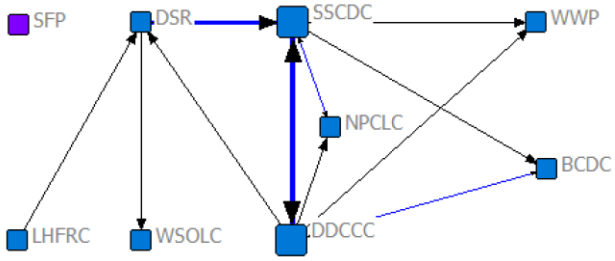


In *Family Functioning*, HMG and 2-1-1 were sponsored by Community Action Partnership of Kern, and their connection was among the strongest links. In addition, AFRC and LVSRP were located in two neighboring communities to serve similar populations. Their reciprocal links confirmed mutual program supports. Across the entire network, nearly all FRCs were linked to either referral services (2-1-1) or child protection support (DR, DVRP, GCP, WSN). In comparison, DR showed more network connections because of its general function in reducing service burden for CPS (Bedell, 2019). DVRP, GCP, and WSN were designed for supporting domestic violence reduction, guardianship establishment, and living shelter accommodation. Their connections were not as wide as DR for controlling child abuse and/or neglect.

In *Child Development*, active program connections beyond the *Co-Existing* level were plotted in Figure 22. The network appeared much sparser than Figures 20 and 21 for at least two reasons. First, although most programs participated in the active partnership building, the total number of links was much less than the ones in *Family Functioning* because of fewer programs in *Child Development*. Secondly, most programs were community-based in Figure 22. Thus, their primary responsibility was to offer

supports for local children and families. For instance, there was no issue for SFP to co-exist with programs in other communities without establishing active partnerships.

Figure 22: Structure of Active Network among Partners in *Child Development*



In *Child Development*, unilateral and reciprocal links were found among other programs beyond *Co-Existence* (Figure 22). In particular, SSCDC and DDCCC featured *special needs* services for unstable families and demonstrated active, reciprocal partnerships in the network. As Krebs (2011) pointed out, "What really matters is where those connections lead to – and how they connect the otherwise unconnected!" (¶. 4). BCDC also collaborated with DDCCC and SSCDC to address the special needs of parenting teens. Likewise, singular links of WSOLC and LHFRC played a critical role to extend active partnerships in Taft and Lost Hills. DSR served the community in Delano, the second largest city of Kern County. The program influence was illustrated by direct links with four partners, including reciprocal connections to and from SSCDC. WWP is located in an isolated community. With DDCCC and SSCDC as its partner, *special needs* services were integrated with preschool offerings for young children in that area.

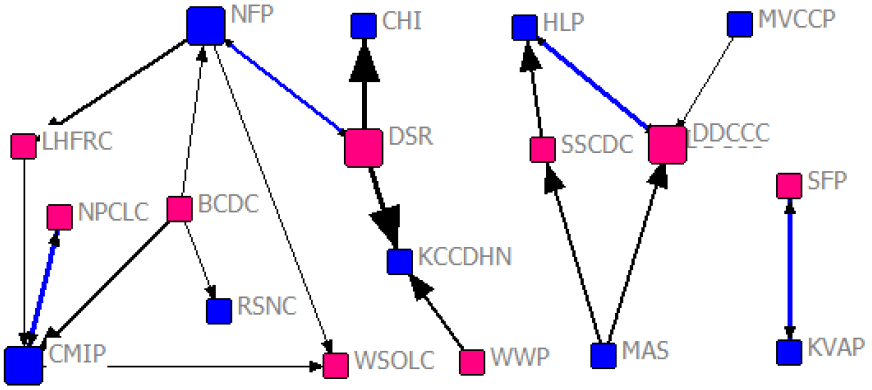
In summary, as Nichols and Jurvansuu (2008) noted, "There is currently movement internationally towards the integration of services for young children and their families, incorporating childcare, education, health and family support" (p. 117). While creation of *Systems of Care* depends on active program outreach within each focus area, more descriptions are needed in the partnership building to depict expansion of the program networks across focus areas. That perspective can lead to revealing additional network support for self-contained programs like SFP in remote communities.

Network Structure between Focus Areas

Programs in different focus areas often serve complementary roles. Simpson (1951) cautioned that patterns within a group tended to disappear in patterns between groups. This phenomenon was termed as *Simpson's Paradox* in the current research literature (Kock & Gaskins, 2016). Based on First 5 Kern's (2019) strategic plan, programs in different focus areas may have diverse responsibilities. In this section, program nodes were labeled by green, brown, and pink colors to differentiate their focus area affiliations in *Child Health, Family Functioning*, and *Child Development*, respectively.

In Figure 23, primary partnerships were drawn between programs in *Child Health* (blue nodes) and *Child Development* (pink nodes). The *Simpson effect* was visible in the network connections involving MVCCP. In Figure 20, MVCCP was connected to seven primary partners. In Figure 23, MVCCP only showed one unilateral link. It had few primary partners in *Child Development* because of its delimited coordination role in *Child Health*.

Figure 23: Primary Partnerships Between *Child Health* and *Child Development*



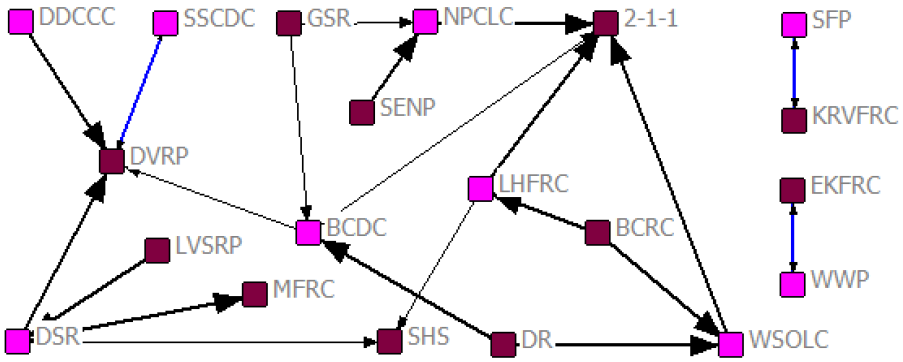
Similarly, SFP showed no active connections to other service providers in Figure 22. However, Figure 23 contained its reciprocal partnership with KVAP in *Family Functioning*. Both KVAP and SFP served the South Fork community. Their partnership was based on complementary responsibilities for local children in preschool preparation and water safety education. In addition, CMIP did not demonstrate extensive connections with programs in *Child Health* (Figure 20). In Figure 23, it networked with four programs as primary partners to support delivery of mobile immunization services. HLP and MAS also expanded their primary links in Figure 23 to partner with more programs in *Child Development* beyond the *Co-Existing* level.

Still, BCDC, DDCCC, DSR, and SSCDC reconfirmed their comparable links *within* and *between* the focus areas (Figures 22 & 23). Hence, the *Simpson effect* did not spread to all the program connections. NFP also retained its multiple network connections in Figures 20 and 23. NPCLC and CMIP agreed on the strength of their reciprocal link to reconfirm reciprocal connections.

Altogether, Figure 23 depicted a service system that included programs in healthcare (CMIP and NFP), dental health (KCCDHN), and mental health (RSNC). The primary partnership also covered programs in rural communities of Lost Hills (LHFRC), South Fork (SFP), Taft (WSOLC), and Mojave Desert (WWP) to integrate service impacts between countywide and community-based programs. Both program quality and broad impact are featured in the network connections to make the links between focus areas (Figure 23) more extensive than the ones in Figures 20 and 22.

In Figure 24, all nine programs in *Child Development* (pink nodes) networked with programs in *Family Functioning* (brown nodes). Although Figure 22 contained a single link for LHFRC and WSOLC in *Child Development*, both programs were deeply involved in parent education, and thus, showed multiple partnerships with service providers in *Family Functioning* (Figure 24). To a great extent, parent education and child development were inseparable. As parents were considered as the first teacher for children (Price, 2017), the service connections may support seamless child preparations for kindergarten entry.

Figure 24: Network Structure in *Family Functioning* and *Child Development*



In comparison, DR had 11 primary partners in *Family Functioning* (Figure 21). The number reduced to two in Figure 24. GCP was a partner of DR for child protection, but did not show a primary connection in Figure 24. In part, this was because child development programs primarily focused on creating positive environment in preschool, rather than fixing negative settings of child abuse and/or neglect at home. For that reason, DDCCC and SSCDC were designed to support children in unstable families. Both programs recognized DVRP as a primary partner to minimize the impact of domestic violence (Figure 24).

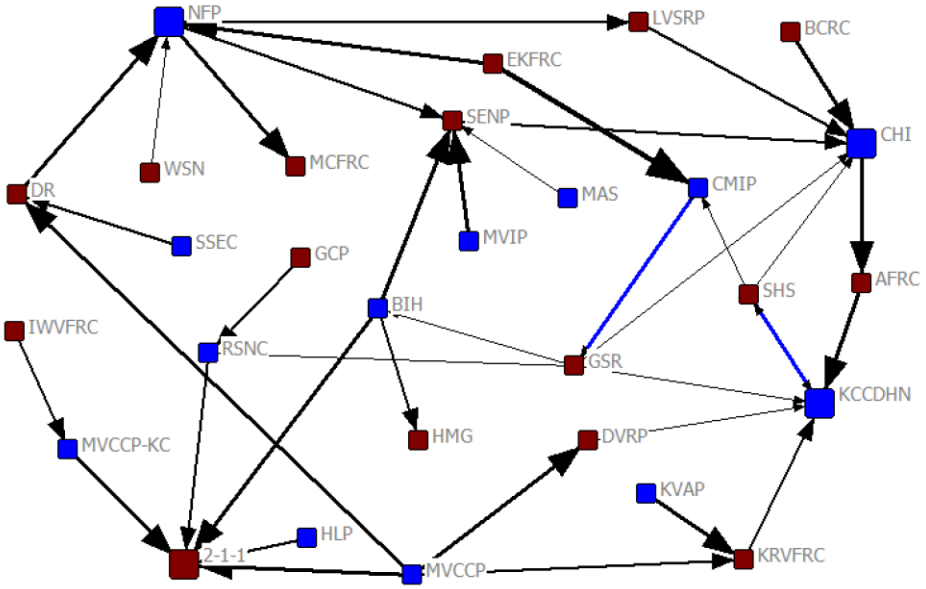
In summary, Figures 21, 22, and 24 demonstrated certain *Simpson effects* in the network structure pertaining to child protection programs. It should also be noted that 2-1-1 and DSR maintained their primary partnership capacities in these network plots. In Figure 24, DSR showed primary partnerships with LVSRP, MFRC, and SHS for delivering parent education and early learning services in the valley communities. Likewise, 2-1-1 retained its central role of program connection by offering referral services.

The network connection also depended on the nearby community settings. KRVFRC worked in the same community with SFP to provide parent education. Reciprocal dyads surfaced in Figure 24 to represent the primary partnerships between them. In the eastern Kern County, EKFRC and WWP were reciprocally linked as primary partners to serve young children and their families in two neighboring communities. Although the network showed 16 primary partners of countywide programs, such as 2-1-1, DR, and DVRP, Figure 24 also indicated local service providers as the primary partners for service integration in East Kern and South Fork. It is important to accommodate the partnership diversity in remote communities.

In Figure 25, primary partnerships were displayed between programs of *Child Health* (blue nodes) and *Family Functioning* (brown nodes). Immunization (CMIP) and dental health (KCCDHN) programs were involved in reciprocal links. The remaining primary partnerships featured unilateral connections. According to Kuhnt and Brust (2014), lack of reciprocal partnerships "is only found in relations of exploitation maintained through asymmetries of power" (p. 1). For instance, GCP offered services to establish grandparent guardianship. The legal process did not involve programs in *Child Health* as primary partners. Consequently, GCP was not recognized as a primary partner in Figure 25. Although five programs extended connections to 2-1-1 as primary partners, the links remained unilateral because 2-1-1 did not reciprocate the partnership to impact the

program autonomy. Similarly, both CMIP and KCCDHN maintained mobile service deliveries across the county. All the links were asymmetrically extended to them, rather than vice versa, by local service providers.

Figure 25: Network Structure in *Child Health* and *Family Functioning*



As another indicator of *Simpson effect*, DR's primary partner count was reduced from 11 in Figure 21 to three in Figure 25. This was because programs in *Child Health* were not primarily designed to solve child neglect issues. Meanwhile, strong connections among nearby programs have been reconfirmed by links of AFRC and LVSRP in Figure 21, as well as KVAP and KRVFRC in Figure 25. Singular partnerships also played indispensable roles in connecting service providers in isolated communities, such Buttonwillow (BCRC), South Fork (SFP), Frazier Park (MCFRC), and Indian Wells Valley (IWVFRC).

In summary, network analyses are adopted in this section as a useful tool to "examine indicators of service integration" (Gillieatt et al., 2015, p. 338). Based on the ISQ data, network strengths have been classified in *Co-Existing, Collaboration, Coordination*, and *Creation* categories according to the 4C model. The network analyses were expanded in several dimensions, including active versus co-existing links, reciprocal versus unilateral partners, as well as singular, dyad, and multilateral connection structures. Comparison of the structural differences was intended to evaluate the whole picture of service integration across different programs in *Child Health, Family Functioning,* and *Child Development*. As the State Commission stipulated, "Evaluation should be conducted in such a way that it provides direct feedback to the County Commission and to the community as a whole" (First 5 California, 2010, p. 17).

As postulated by an axiom that the whole could be larger than the sum of its part, partnership building has strengthened the service capacity for young children and their families in Kern County (see Tables 50-52). 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 20-25 are unilateral. Carmichael and MacLeod (1997) noted that asymmetric links, as represented by unilateral

connections, were more likely to break the equilibrium and create stronger networks during the process of service system building.

The Commission has led the partnership efforts to attain its strategic goal of Focus Area 4, i.e., "A well-integrated system of services for children and families will exist" (First 5 Kern, 2019, p. 7). Hence, monitoring the network patterns represents a viable approach to guide the future enhancement of service integration. On the time dimension, First 5 Kern (2019) is also expected to "facilitate turning the curve on result indicators" (p. 2). Built on the summary of partnership building in Chapter 3, aggregated findings of child wellbeing and family conditions are presented in Chapter 4 to delineate improvement of service outcomes between last year and this year.

Chapter 4: Turning the Curve

Per requirement of Results-Based Accountability, "Turning the Curve" refers to a data pattern that depicts "What success looks like if we do better than the baseline" (Friedman, 2011, p. 3). This chapter contains the data pattern descriptions for evaluating improvement of service effectiveness on the time dimension to compare annual service outcomes against the baseline indicators of family functioning and child wellbeing. In FY 2019-2020, the Core Data Elements (CDE) survey was conducted to gather information on child wellbeing across 27 programs. The Family Stability Rubric (FSR) was employed to collect trend indicators on family functioning from 14 programs. The data tracking documented the effect of "Turning the Curve" to support the accountability justification of First 5 Kern funding.

According to First 5 Kern (2019) strategic plan, "a results-based accountability framework was employed 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). In support of the result indicator identification, a research protocol is maintained with IRB of CSUB, which ensures compliance of the data collection to federal, state, and local regulations. As the specific measures, consent forms are administered prior to data collection. Confidentiality trainings are offered multiple times throughout the year to meet the protocol requirement. In addition, evaluation site visits are conducted regularly to monitor adverse effects across programs.

Exercises of the 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.

Improvement of Child Wellbeing between Adjacent Years

Following the spirit of local control in Proposition 10, First 5 Kern funded programs to support young children and their families across valley, mountain, and desert communities in Kern County. It is important to note that the state statute delimits the service population in ages 0-5. "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). To adhere to the age boundary, the service population is refreshed annually. In particular, five-year-olds from last year have reached age 6 this year and newborns within the past 12 months have been added to the service population. 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 service recipients 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 include *breastfeeding, home reading*, and *preschool attendance* were gathered from 1,983 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 impact of First 5 Kern on improvements of child wellbeing in Kern County.

Well-Child Checkup

It is important to start well-child checkups within a few days after birth to ensure healthy growth (Bedner, 2018). The checkup visits also provided 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). However, it was reported that "Too few California kids are receiving the health screenings they need" (Children Now, 2018, p. 29). In 2020, DeTrempe noted, "Across the country, … some families are choosing to forgo or delay their children's routine pediatric well-visits during the COVID-19 pandemic" (p. 1).

To address the negligence, First 5 Kern 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 88.2% to 93.3% between the adjacent years (Table 55). The service outcome was impacted 1,888 children this year. In particular, BCDC, IWVFRC, and WSN achieved a rate of 100% completion on well-child checkup.

Table 55: Percent of Children with Annual Well-Child Checkup

Program*	FY 2018-2019		FY 2019-2020	
	N	Percent of Children	N	Percent of Children
BIH	26	50.0	15	60.0
BCDC	35	97.1	43	100
BCRC	63	96.8	65	98.5
DR	963	90.2	625	90.7
DSR	159	96.2	116	97.4
DDCCC	52	76.9	54	88.9
EKFRC	83	88.0	71	93.0
GSR	178	89.9	160	90.6
HLP	105	95.3	124	96.8
IWVFRC	68	95.6	54	100
LVSRP	83	91.6	71	98.6
MFRC	95	85.3	70	87.1
MVIP	23	87.0	41	92.7
NFP	96	90.6	121	95.0
RSNC	78	96.2	68	98.5
SENP	132	94.7	121	95.0
WWP	72	88.9	37	97.3
WSN	41	78.0	32	100

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

Immunization

In 2015, lawmakers approved Senate Bill 277 to exclude personal beliefs from the list of reasons for parents to skip vaccinating their children (Wiley, 2020). In preparation for kindergarten entry, First 5 Kern funded CMIP to provide immunizations across the county. Since its purchase of a service mobile unit in 2012, CMIP continues its services to raise immunization rates in Kern County. The support from immunization clinics has been treated as an important result indicator (RI 1.3.10) in First 5 Kern's (2019) strategic plan.

Table 56 listed the percent of children who completed *all immunizations* across 14 programs. The average percent increased from 89.5% in last year to 93.6% this year. This improvement was demonstrated by the CDE data from 1,121 children this year. BCDC, DSR, LVSRP, and LHFRC showed 100% completion of the recommended immunizations in FY 2019-2020. The improvement is worth noting because a decline in vaccination rates was reported across the nation during the pandemic (DeTrempe, 2020).

Table 56: Completion of All the Recommended Immunizations

Program	FY 2018-2019		FY 2019-2020	
	N	Percent of Children	N	Percent of Children
AFRC	71	94.4	85	95.3
BCDC	35	91.4	43	100
BCRC	63	93.7	65	96.9
DSR	159	95.0	116	100
EKFRC	83	72.3	71	85.9
IWVFRC	68	95.6	54	100
KRVFRC	107	82.2	151	84.8
LVSRP	83	98.8	71	100
LHFRC	58	98.3	86	100
MFRC	95	96.8	70	98.6
NPCLC	163	90.8	134	95.5
NFP	96	90.6	121	94.2
SFP	19	89.4	22	90.9
WSN	41	63.4	32	68.8

Insurance Coverage

It is well-known that "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 (2019) identified seven result indicators in its strategic plan:

- Number of families assisted with health insurance applications
- Number of children successfully enrolled into a new health insurance program
- Number of children who were successfully enrolled into a health insurance program and received well-child check-ups
- Number of children successfully renewed into a health insurance program
- Number of children with an established medical home
- Number of children with an established dental home

- Number of families referred to a local enrollment agency for health insurance (p. 4)

The CDE data showed an increase in the percent of insurance coverage across 12 programs (Table 57). More specifically, the average percent of children *with insurance coverage* increased from 94.3% in last year to 98.2% this year according to the CDE data from 1,364 children. BIH, BCDC, DDCCC, and WSN achieved a rate of 100% insurance coverage this year.

Table 57: Percent of Insurance Coverage

Program	FY 2018-2019		FY 2019-2020	
	N	Percent of Covered Children	N	Percent of Covered Children
BIH	26	88.5	15	100
BCDC	35	94.3	43	100
DR	963	97.3	625	97.6
DSR	159	95.0	116	98.3
DDCCC	52	98.1	54	100
IWVFRC	68	95.6	54	98.1
LVSRP	83	96.4	71	98.6
MCFRC	38	92.1	41	92.7
NPCLC	163	95.7	134	97.0
NFP	96	95.8	121	99.2
SSEC	37	94.6	58	96.5
WSN	41	87.8	32	100

Dental Care

First 5 Kern (2019) 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 of 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 the parents. Children identified as needing further treatment are then scheduled to meet dentists in their offices.

Table 58 contains the percent of children *with annual dental checkups* across 16 programs. On average, the overall percent increased from 51.6% last year to 59.5% this year. Because infants were recommended to have the first dental visit by the first birthday,[42] dental care is generally applicable to most children ages 0-5. The results are supported by CDE data from 1,726 children this year.

Table 58: Percent of Children with Annual Dental Checkups

Program	FY 2018-2019		FY 2019-2020	
	N	Percent of Children	N	Percent of Children
AFRC	71	49.3	85	58.8
BCDC	35	45.7	43	48.8
BCRC	63	65.1	65	75.4

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

Program	FY 2018-2019		FY 2019-2020	
	N	Percent of Children	N	Percent of Children
DR	963	49.8	625	51.5
GSR	178	71.9	160	75.6
IWVFRC	68	58.8	54	63.0
LVSRP	83	67.5	71	81.7
LHFRC	58	69.0	86	70.9
MCFRC	38	55.3	41	65.9
MVIP	23	4.3	60	5.0
NPCLC	163	61.3	134	67.2
NFP	96	5.2	121	16.5
SHS	78	73.1	90	80.0
SFP	19	52.6	22	72.7
WWP	72	66.7	37	75.7
WSN	41	29.3	32	43.8

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 59, program information was gathered to track the percent of children *participating in preschool activities* on a regular basis. On average, the rate increased from 25.9% in last year to 34.5% this year. The positive change is demonstrated by the CDE data from 1,581 children across 14 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 59: Regular Attendance of Preschool Since the Third Birthday

Program	FY 2018-2019		FY 2019-2020	
	N	Percent of Children	N	Percent of Children
AFRC	71	12.7	85	29.4
DR	963	26.5	625	27.7
EKFRC	83	21.7	71	28.2
GSR	178	8.4	160	15.0
IWVFRC	68	48.5	54	55.6
LVSRP	83	47.0	71	57.7
LHFRC	58	32.8	86	57.0
MCFRC	38	28.9	41	29.3
MFRC	95	32.6	70	35.7
MVIP	23	0	60	5.0
NPCLC	163	18.4	134	26.1
SSCDC	43	32.6	34	44.1
SSEC	37	37.8	58	41.4
WSN	41	14.6	32	31.3

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 60 contains information about home reading activities between adjacent years. Seventeen 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 98.9% in last year to 99.1% this year. This outcome is supported by the CDE data from 1,171 children this year (Table 60). 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 60: Children Being Read to Twice or More Times in Last Week

Program	FY 2018-2019		FY 2019-2020	
	N	Percent of Children	N	Percent of Children
AFRC	71	98.6	85	100
BIH	26	92.3	15	93.3
BCDC	35	100	43	100
BCRC	63	100	65	100
DSR	159	100	116	100
DDCCC	52	100	54	100
IWVFRC	68	100	54	100
KRVFRC	107	100	151	100
LVSRP	83	100	71	100
MCFRC	38	97.4	41	99.2
MFRC	95	100	70	100
RSNC	78	100	68	100
SHS	78	98.7	90	98.9
SENP	132	97.0	121	97.5
SSEC	37	97.3	58	96.5
WWP	72	100	37	100
WSN	41	100	32	100

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 smoking cessation campaign. As a result, the CDE data indicated decline in the proportion of *mothers smoking during pregnancy* from 8.5% in last year to 3.4% this year. These 15 programs in Table 61 provided services for 1,336 newborns this year, and eight of the programs reported no smoking issues in FY 2019-2020.

Table 61: Percent of Mothers Smoking During Pregnancy

Program	FY 2018-2019		FY 2019-2020	
	N	Percent	N	Percent
AFRC	61	1.6	65	0.0

Program	FY 2018-2019		FY 2019-2020	
	N	Percent	N	Percent
BIH	26	11.5	15	0.0
BCDC	15	0.0	15	0.0
BCRC	24	0.0	19	0.0
DR	791	20.9	725	16.3
EKFRC	71	7.0	53	5.7
HLP	47	6.4	43	2.3
IWVFRC	34	14.7	12	0.0
KRVFRC	42	23.8	61	16.4
LHFRC	30	0.0	20	0.0
MCFRC	15	6.7	22	0.0
NPCLC	132	5.3	92	0.0
RSNC	23	13.0	32	3.1
SHS	60	5.0	88	4.6
SENP	78	11.5	74	2.7

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 62 showed that the rate of *full-term pregnancy per program* increased from 76.5% in last year to 84.9% this year across 17 service providers. Altogether, these programs served 1,344 children in FY 2019-2020. Meanwhile, BCDC and IWVFRC demonstrated a rate of 100% full-term pregnancy. 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 62: Increase of Full-Term Pregnancy Between Two Adjacent Years

Program	FY 2018-2019		FY 2019-2020	
	N	Percent	N	Percent
AFRC	61	88.5	65	90.8
BIH	26	73.1	15	73.3
BCDC	15	93.3	15	100
DR	791	85.3	725	86.9
DSR	104	86.5	61	86.9
EKFRC	71	80.3	53	90.6
HLP	47	85.1	43	93.0
IWVFRC	34	85.3	12	100
KRVFRC	42	88.1	61	88.5
LVSRP	40	95.0	48	95.8
MFRC	61	86.9	41	87.8
MVIP	23	0.0	58	15.5
SSCDC	24	75.0	16	93.8

Program	FY 2018-2019		FY 2019-2020	
	N	Percent	N	Percent
SFP	20	90.0	22	95.5
SENP	78	89.7	74	91.9
SSEC	12	16.7	13	61.5
WIW	22	81.8	22	90.9

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".[43] Consequently, Kern County is ranked at sixth and eighth positions across the state for LBW and obesity.[44] Because "More babies were born at low birth weight" in Kern County (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 – 5lbs 7oz*, *5lbs 8oz – 7lbs 15oz*, *8lbs or more*, *unknown*, and *no response*. Table 63 showed reduction of the average LBW rate from 20.9% in last year to 14.1% this year in 14 programs. These programs served a total of 1,195 children this year. Two programs showed no LBW issue in FY 2019-2020.

Table 63: Proportion of Cases for Decreasing Low Birth Weight

Program	FY 2018-2019		FY 2019-2020	
	N	Percent	N	Percent
AFRC	61	6.6	65	4.6
BCDC	15	6.7	15	0.0
DDCCC	32	15.6	44	13.7
DR	791	10.5	725	8.1
EKFRC	71	12.7	53	5.7
IWVFRC	34	5.9	12	0.0
KRVFRC	42	14.3	61	11.5
MVIP	23	95.7	58	82.8
NPCLC	132	6.1	92	5.4
NFP	51	5.9	35	5.7
RSNC	23	30.4	32	18.8
SSCDC	24	29.2	16	12.5
SENP	78	19.2	74	5.4
SSEC	12	33.4	13	23.1

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

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 good 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.[45] In this report, responses to a breastfeeding question was grouped in *yes, no, unknown*, and *no response* categories. In Table 64, the average breastfeeding rate across 13 programs increased from 70.0% in last year to 82.8% this year. This change supported healthy growth of 518 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). Four programs reached a rate of 100% in FY 2019-2020.

Table 64: Increase in Breastfeeding Rate Between Two Adjacent Years

Program	FY 2018-2019		FY 2019-2020	
	N	Percent	N	Percent
BIH	26	80.1	16	100
DSR	104	73.1	61	75.4
EKFRC	71	70.4	53	75.5
HLP	47	74.5	43	83.7
IWVFRC	34	73.5	12	100
KRVFRC	42	64.3	61	73.8
LVSRP	40	60.0	48	72.9
LHFRC	30	66.7	20	85.0
NFP	51	92.2	35	100
RSNC	23	56.5	32	68.8
SHS	60	56.7	88	68.2
SSCDC	24	70.8	16	100
WSN	41	70.7	33	72.7

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 92.2% in the last year to 96.4% this year across 14 programs that served 1,251 families (Table 65). Five programs reached 100% this year.

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

Table 65: Percent of Mothers Receiving Prenatal Care

Program	FY 2018-2019		FY 2019-2020	
	N	Percent of Mothers	N	Percent of Mothers
BIH	15	100	26	100
BCRC	24	95.8	19	100
DR	791	91.9	725	93.9
EKFRC	71	91.6	53	96.2
IWVFRC	34	94.1	12	100
KRVFRC	42	90.5	61	93.4
LVSRP	40	87.5	48	95.8
MCFRC	15	93.3	22	95.5
NPCLC	132	87.1	92	91.3
NFP	51	96.1	35	100
RSNC	23	82.6	32	96.9
SHS	60	90.0	88	90.9
SSCDC	24	100	16	100
SFP	20	90.0	22	95.5

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 55-65, 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 2019-2020

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 66). For completion of this annual report, First 5 Kern started the FSR data collection from the baseline quarter of Fall, 2019 to monitor improvement of the home supporting environment in 1,190 families. The data size for each program is listed in Table 66. Despite the impact from COVID-19, the sample sizes increased over last year in AFRC, BCRC, EKFRC, GSR, KRVFRC, SHS, and LHFRC. In particular, LHFRC increased its data size from 68 in last year to 132 this year.

Table 66: Scope of FSR Data Collection

Focus Area	Program	Data Size
Health and Wellness	RSNC	102
Parent Education and Support Services	AFRC	85
	BCRC	44
	EKFRC	41
	GSR	123
	IWVFRC	73

Focus Area	Program	Data Size
	KRVFRC	146
	LVSRP	82
	MCFRC	38
	MFRC	95
	SHS	53
	SENP	140
Early Childcare and Education	DSR	37
	LHFRC	131

In this section, household conditions, including the shortage of *food, childcare,* and *housing* supports, 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, 162 families in eight programs indicated stress on food spending. The data tracking showed reduction of the family count to 105 and 59 in months 3 and 6, respectively (Table 67). The improvement is important in child health because Kern County is ranked at eighth position across the state for child obesity (Ibid. 41), 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 67: Number of Families with Stress on Food Spending

Program	Initial	3rd Month	6th Month
AFRC	21	19	11
BCRC	13	12	5
DSR	12	8	5
EKFRC	7	3	3
GSR	56	23	4
MCFRC	13	7	4
MFRC	15	10	10
RSNC	25	23	17

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 2019-2020, 19 families in eight programs indicated unmet nutrition needs. The family count decreased to 7 and 2 in the third and sixth month, respectively. Six programs showed elimination of the nutrition concern within half a year (Table 68). 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 68: Number of Families with Unmet Nutrition Needs

Program	Initial	3rd Month	6th Month
AFRC	5	1	0
BCRC	0	0	0
DSR	1	1	0
GSR	4	1	0
IWVFRC	0	0	0
KRVFRC	6	2	1
MCFRC	1	0	0
RSNC	2	2	1

Free/Reduced Lunches

The count of free/reduced lunches is considered as 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 2019-2020, nine programs tracked the number of families that qualified for free/reduced lunch services. At the initial stage of program access, 179 families reported needs for free or reduced lunches for children in the households across eight programs. The family count dropped to 126 and 77 in months 3 and 6, respectively. The data pattern in Table 69 portrays a positive trend on family support for child wellbeing because "poverty adversely affects structural brain development in children" (p. 1).

Table 69: Number of Families Needing Free/Reduced Lunches

Program	Initial	3rd Month	6th Month
AFRC	26	24	11
BCRC	17	17	6
DSR	11	8	4
GSR	49	23	5
KRVFRC	19	13	11
MCFRC	8	2	2
MFRC	21	17	17
SENP	28	22	21

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 10 programs. Initially, 41 families reported unmet housing needs. The number subsequently dropped to 27 in third month and 19 in sixth month. Within half a year, seven programs showed no families living in temporary facilities (Table 70).

Table 70: Number of Families Living in Temporary Facilities

Program	Initial	3rd Month	6th Month
AFRC	2	1	1
BCRC	1	0	0
EKFRC	2	2	0
GSR	8	1	0

Program	Initial	3rd Month	6th Month
KRVFRC	4	1	0
LVSRP	2	2	1
LHFRC	0	0	0
MFRC	0	0	0
RSNC	1	1	0
SENP	21	19	17

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 2019-2020, FSR data were gathered to track family burden from housing expenses in seven programs. Upon the program entry, the results indicated a total of 129 families facing spending cut due to housing cost. At the end of month 3, the number decreased to 82. By the midyear, the number was reduced to 41 (Table 71). 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 71: Number of Families Cutting Spending Due to Housing Cost

Program	Initial	3rd Month	6th Month
AFRC	21	20	10
BCRC	14	12	6
DSR	10	5	4
EKFRC	4	3	2
GSR	50	18	1
MCFRC	12	7	4
RSNC	18	17	14

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 eight programs. At the program entry, the issue of *unmet insurance needs* were reported by

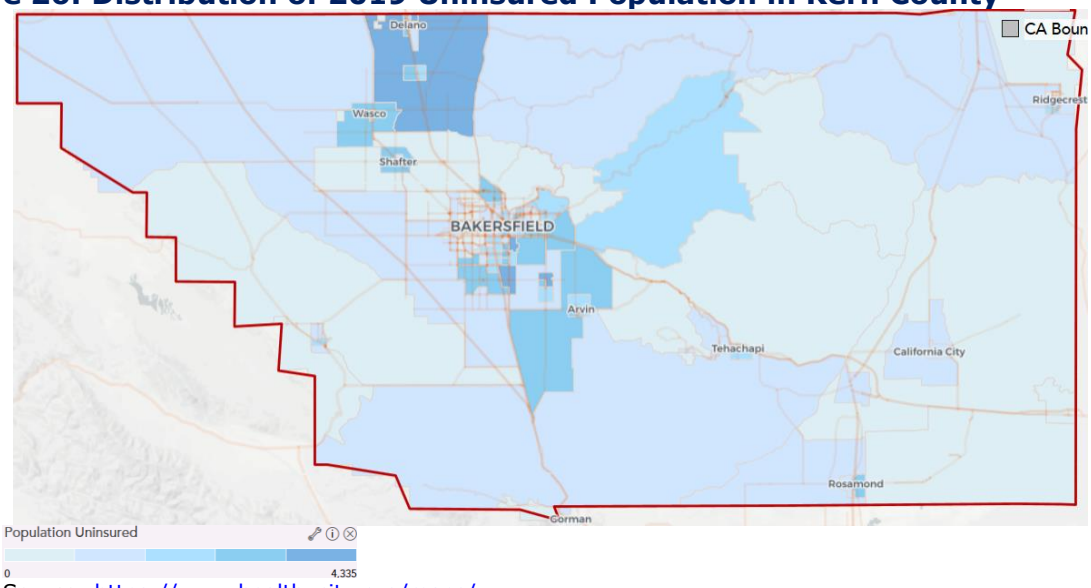
47 families. In months 3 and 6, the total family count dropped to 26 and 13, respectively. The number of families with unmet insurance support became zero in three programs within half a year (Table 72).

Table 72: Number of Families without Medical Insurance

Program	Initial	3rd Month	6th Month
AFRC	7	3	0
BCRC	4	1	1
DSR	2	1	0
GSR	15	9	2
IWVFRC	1	1	0
LHFRC	12	8	8
MCFRC	3	1	1
SENP	3	2	1

In the Delano School Readiness (DSR) program, the zero count in month 6 particularly meaningful. As shown in Figure 26, Delano has more uninsured population than any other areas of Kern County. The program support has facilitated the *turning the curve* effect to reverse the situation for children ages 0-5 in that regions.

Figure 26: Distribution of 2019 Uninsured Population in Kern County



Source: https://www.healthycity.org/maps/

Stress on Medical Premium/Copay

Most medical insurance policies require premium or copayment for the service access. While it is designed to make people more sensitive to the 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 85 at the beginning. In months 3 and 6, the number dropped to 57 and 28, respectively. Despite the ongoing premium hike with the Affordable Care Act (Morse, 2019), four programs indicated no copayment stress in the midyear (Table 73).

Table 73: Number of Families with Stress on Medical Premium/Copay

Program	Initial	3rd Month	6th Month
AFRC	10	8	2
BCRC	1	0	0
DSR	7	4	0
GSR	21	10	1
IWVFRC	0	0	0
KRVFRC	20	15	11
MCFRC	7	3	1
RSNC	19	17	13

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 nine programs. The issue was reported by 57 families upon the program entry. The family count was reduced to 28 at end of the first quarter and 17 by the midyear. In particular, the responses from three programs indicated no issue of unemployment at the end of the sixth month (Table 74).

Table 74: Number of Families with Unemployment Issue

Program	Initial	3rd Month	6th Month
AFRC	9	2	1
BCRC	3	2	1
DSR	6	3	2
EKFRC	5	1	0
GSR	7	2	0
LVSRP	7	6	5
MCFRC	8	1	0
MFRC	4	3	2
RSNC	8	8	6

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 75 were derived from the FSR data in nine programs. At the program entry, 18 families indicated unmet childcare needs. The result declined to 9 and 4 in months 3 and 6, respectively. No family reported unmet childcare needs in six programs by midyear.

Table 75: Number of Families with Unmet Childcare Needs

Program	Initial	3rd Month	6th Month
AFRC	1	1	0
BCRC	0	0	0
EKFRC	2	0	0
IWVFRC	0	0	0
KRVFRC	6	2	1
LVSRP	3	1	1
MCFRC	2	2	0
RSNC	4	3	2
SHS	0	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 nine programs, 91 families indicated no convenient childcare provider at the program beginning. The family count was reduced to 55 in the first quarter and 37 in the second quarter of FY 2019-2020. Four programs reported no shortage of convenient childcare in the sixth month (Table 76). 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 76: Number of Families without Convenient Childcare Providers

Program	Initial	3rd Month	6th Month
AFRC	15	11	6
BCRC	0	0	0
DSR	7	3	0
EKFRC	6	1	0
IWVFRC	0	0	0
KRVFRC	26	17	15
MFRC	7	4	2
RSNC	11	8	7
SENP	19	11	7

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 2019-2020, 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 end of the first and second quarters, the number was reduced to 17 and 6, respectively. Eleven programs showed elimination of this issue within six months (Table 77).

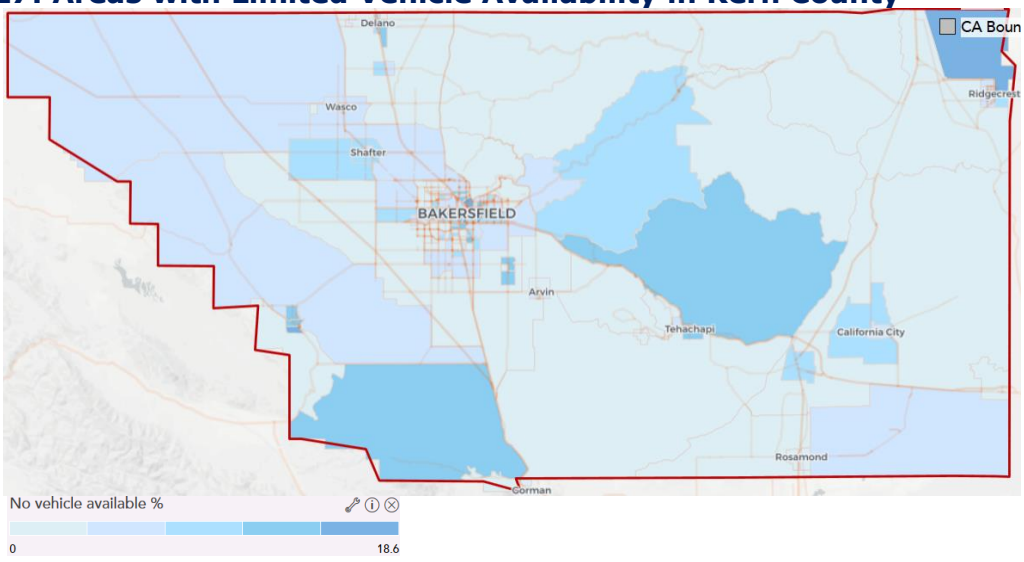
Table 77: Number of Families Missed Work/School for Childcare

Program	Initial	3rd Month	6th Month
AFRC	1	0	0
BCRC	0	0	0
DSR	3	2	0
EKFRC	1	0	0
GSR	2	0	0
IWVFRC	0	0	0
KRVFRC	3	0	0
LVSRP	0	0	0
MCFRC	3	3	0
MFRC	2	2	0
RSNC	6	4	4
SHS	3	0	0
SENP	6	6	2

Unmet Transportation Needs

Unmet transportation needs are considered as an indicator of lacking family resources (Bixler, Miller, Mattison et al., 2020). In Figure 27, 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"[46].

Figure 27: Areas with Limited Vehicle Availability in Kern County



It was confirmed by the FSR data from FY 2019-2020 that 39 families indicated *unmet transportation needs* prior to their service access to seven programs. Improvement of this issue occurred by end of the first quarter when the family count dropped more than half to 29. At midyear, 20 families reported *unmet transportation needs*. The FSR data

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

showed that three programs eliminated transportation issues at end of sixth month (Table 78).

Table 78: Number of Families with Unmet Transportation Needs

Program	Initial	3rd Month	6th Month
BCRC	2	0	0
EKFRC	4	2	1
GSR	8	5	0
IWVFRC	0	0	0
MCFRC	3	3	2
RSNC	7	5	4
SENP	15	14	13

Missing Work/School Due to Transportation

Table 79 contains the number of families with members *missing work or school due to transportation*. The results from nine programs showed that 38 families reported transportation needs before receiving First 5 Kern-funded services. The family count decreased to 25 in month 3 and 14 at midyear. Five programs reported no families *missing work or school for transportation reasons in month 6*. 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 79: Number of Families Missed Work/School for Transportation

Program	Initial	3rd Month	6th Month
AFRC	3	1	0
BCRC	1	0	0
EKFRC	5	0	0
GSR	4	2	0
IWVFRC	0	0	0
LVSRP	2	2	1
LHFRC	2	1	1
RSNC	11	10	5
SENP	10	9	7

Burden of Transportation Expenditure

Rural households spend a much larger portion of their budgets on transportation than urban households. In FY 2019-2020, FSR data were gathered to track the number of families *with financial burden for transportation*. The initial figure showed 57 families with the financial burden before service access in six programs. The family number dropped to 36 and 18 in months 3 and 6, respectively. Two of the programs showed zero family count by midyear (Table 80). The trend of improvement is important for child service access in remote communities.

Table 80: Number of Families with Financial Burden for Transportation

Program	Initial	3rd Month	6th Month
BCRC	4	2	0
GSR	19	8	0

Program	Initial	3rd Month	6th Month
LHFRC	4	2	1
MCFRC	6	4	2
MFRC	6	3	2
RSNC	18	17	13

In summary, local programs made extensive contributions to improvement of child wellbeing in FY 2019-2020. 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 67-80 demonstrated improvement of family functioning on 14 indicators in FY 2019-2020. 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 55-80). 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

Results in the first four chapters indicated that First 5 Kern has strategically funded services in full compliance 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*. Chapter 3 clarified service partnership building in *Systems of Care*. Improvement of child wellbeing and family functioning was summarized in Chapter 4 to document the *turning the curve* process on 26 indicators (see Tables 55-80). Altogether, First 5 Kern abided by the state guidelines to ensure quality service deliveries for young children and their families in each focus area.

The data-based evaluation led to a conclusion of Chapter 5, 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, 2019, p. 2). In this chapter, more quantitative results are aggregated to highlight improvement of the service impact across different focus areas. Two additional sections, *Dissemination of the Evaluation Findings* and *Policy Impact of Evaluation Outcomes*, are created to describe success stories following the state report template.[47] The entire report ends with a review of the past recommendations and an introduction to new recommendations for the next fiscal year.

Summary of Program Impact

Allen (2004) pointed out, "Value-added assessment generally involves comparing two measurements that establish baseline and final performance" (p. 9). The value-added approach revealed 20 changes in local communities:

A. Within FY 2019-2020, improvements were made on nine aspects:

1. Screening of Child Development

   Nineteen programs tracked the developmental growth of 1,661 children in months 2-60. Child performance was found significantly above the age-specific thresholds across all ASQ-3 domains (see Tables 12 and 37);

2. Assessment of Parent Education

   Pretest and posttest data were gathered from 69 families in six court-mandated parent-education programs. The results showed significant improvements of parenting constructs in *Expectations of Children, Parental Empathy, Physical Punishment*, and *Parent-Child Roles*. The effect sizes were larger than 0.80 to confirm strong practical impact from these programs (see Table 21);

3. Enhancement of Child Protection

   The DR program demonstrated strong impacts on child protection across dimensions of *Environment, Parental Capabilities, Family Interactions, Family*

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

Safety, Child Well-Being, Social/Community Life, Self-Sufficiency, and *Family Health*. The DR data tracked 313 children in Kern County using the NCFAS-G instrument (see Table 22);

4. Satisfaction of Parent Workshops

   A total of 206 participants attended 10 Nurturing-Parenting workshops at six program sites. Participants increased practice of nurturing parenting concepts after the first workshop (see Table 27);

5. Reduction of Plaque Index

   Average Plaque Index was monitored by KCCDHN during initial and recheck visits of 65 children. Enhancement of oral health was demonstrated by significant index reduction at α=.0001 (see the "Outcomes of Oral Health Service" section of Chapter 2);

6. Improvement of Health Literacy

   HLP assessed the knowledge of 43 parents about the BCBH content. Before the workshops, 13.95% of the parents indicated that *they knew "less than some" of the content*. After the workshops, all parents were above that level. In particular, 33.40% of the participants were in a category of *knowing "a lot"* about the training content (see the "Improvement of Parent Health Literacy" section of Chapter 2).

7. Demonstration of Desired Development

   Three versions of the DRDP (2015) instrument were adopted to assess child development. Positive growth outcomes were demonstrated by 25 infants or toddlers in BCDC, HLP, and SSCDC (Tables 41 and 42). Data from *DRDP Comprehensive* and *Fundamental View* instruments also showed significant performance improvement of 26 preschoolers in DDCCC and DSR (see Table 45), as well as 78 preschoolers in HLP, SFP, and WWP (see Table 43).

8. Support for Kindergarten Transition

   Although CASB data were too small for statistical inference due to COVID-19, children in MCFRC seemed to performance better in posttests than pretests on five out of six CASB indicators (Table 46). GSR also showed better pretest scores this year than last year to confirm better preparations across all CASB indicators.

9. Quality of Caregiver-Infant Interaction

   The DANCE assessment was conducted on 37 infants. The results showed that caregivers surpassed the golden standards in *Non-Intrusiveness, Pacing,* and *Responsiveness* domains (Table 13). Table 14 indicated caregiver performance above the golden standard on *Verbal Connectedness*.

B. In comparison to last year, programs improved services on 11 aspects:

Through program funding, First 5 Kern articulated early childhood services in a *consumer-oriented* and *easily accessible* system. As a result, the following improvement has been made in multiple programs between two adjacent years:

1. Expansion of Prenatal Care Coverage

   On average, the rate of *monthly prenatal care* increased from 92.2% last year to 96.4% this year in 14 programs. These programs served 1,251 families in FY 2019-2020 (Table 65). Five programs reached 100% this year;

2. Practice of Home Reading Activities

   The number of children *read at least once per week* was tracked by a sample of 1,171 child data in 17 programs. The rate increased from 98.9% in last year to 99.1% this year (Table 60);

3. Implementation of Well-Child Checkup

   The proportion of families *having annual well-child checkup* increased across 18 programs from 88.2% last year to 93.3% this year. The outcome measures were based on the CDE data from 1,888 children in FY 2019-2020 (Table 55). Three programs achieved 100% completion of well-child checkup;

4. Increase of Full-Term Pregnancy

   The percent of full-term pregnancy increased from 76.5% last year to 84.9% this year across 17 programs. These programs served 1,344 newborns in FY 2019-2020 (Table 62). Two programs demonstrated 100% full-term pregnancy;

5. Decline of Low-Birth Weight

   The rate of low-birth weight decreased from 20.9% in last year to 14.1% this year in 14 programs. These programs served a total of 1,195 children in FY 2019-2020 (Table 63). Two programs showed no LBW issue in FY 2019-2020;

6. Fulfillment of Immunization Requirements

   The percent of children *receiving all immunizations* increased across 14 programs from 89.5% in the last year to 93.6% this year. This improvement was demonstrated by the CDE data from 1,121 children in Kern County (Table 56). Four programs showed 100% completion of the recommended immunizations in FY 2019-2020;

7. Expansion of Breastfeeding

   The average breastfeeding rate across 13 programs increased from 70.0% in last year to 82.8% this year. This change illustrated balanced nutrition for 518 children in Kern County in FY 2019-2020 (Table 64);

8. Increase of Dental Checkups

   The percent of children *with annual dental checkups* increased from 51.6% in last year to 59.5% this year in 16 programs. The results are supported by 1,726 child data from the CDE survey in FY 2019-2020 (Table 58);

9. Reduction of Prenatal Smoking

   The rate of *prenatal smoking* was reduced from 8.5% in last year to 3.4% this year across 15 programs. The result impacted 1,336 newborns this fiscal year (Table 61);

10. Expansion of Insurance Coverage

    The rate of insurance coverage expanded from 94.3% in last year to 98.2% this year across 12 programs. The progress is indicated by the CDE data from 1,364 children in FY 2019-2020. Four programs achieved 100% insurance coverage this year (Table 57);

11. Increase of Preschool Participants

    The rate of *child participation in preschool activities* grew from 25.9% in last year to 34.5% this year across 14 programs (Table 59). The positive change is demonstrated by CDE data from 1,581 children in FY 2019-2020.

Based on the result aggregation, young children and their families are clearly better off with the services funded by First 5 Kern. The ongoing improvements between adjacent years were systematically pursued under the guidance of First 5 Kern (2019) strategic plan to "facilitate turning the curve on result indicators that most accurately represent the developmental needs of Kern County's children ages prenatal through five and their families" (p. 3).

Dissemination of the Evaluation Findings

Besides the data tracking, First 5 Kern posted qualitative stories online[48] with authentic descriptions of the service outcome in *Child Health, Family Functioning*, and *Child Development*. The stories spanned across 33 programs in three focus areas (Table 81). In *Child Health*, First 5 Kern offered programs to address critical needs in local families. As an example, a first-time mother was unemployed while sharing a living space with her parents and other family relatives. She was also morbidly obese for Type 1 diabetes. After enrolling in BIH, she was connected to a nutritionist certified by Kern County Public Health. The service helped her establish healthy lifestyle, including mindful food and drink selections, as well as cooking methods for blood pressure control. She also started to take insulin regularly for blood sugar control and continued proper physical exercises during her pregnancy. With expansion of her access to community resources, she eventually delivered a healthy child, re-gained employment, and found an apartment to support child growth.

[48] https://www.first5kern.org/about-us/success-stories/

In *Family Functioning*, service providers provided essential supports for child protection. For instance, a mother of four children sought assistance from DVRP to obtain a restraining order and child custodies. She was violently attacked by her boyfriend who threatened to kill her in front of the children. DVRP offered various legal assistance. As a result, the abusive relationship discontinued, and her boyfriend was charged three felonies based on the violent assault and criminal threats. Child protection was enhanced due to improvement of family functioning.

Table 81: Sources of Success Stories across Programs and Focus Areas

Focus Area	Program
Child Health	Black Infant Health Program
	Community Health Initiative of Kern County
	Health Literacy Program
	Kern County Children's Dental Health Network
	Make A Splash
	Medically Vulnerable Care Coordination Project
	Medically Vulnerable Infant Program
	Nurse Family Partnership Program
	Richardson Special Needs Collaborative
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
	Greenfield School Readiness
	Guardianship Caregiver Project
	Indian Wells Family Resource Center
	Kern River Valley Family Resource Center
	Lamont/Vineland School Readiness Program
	Mountain Communities Family Resource Center
	Shafter Healthy Start
	Southeast Neighborhood Partnership Family Resource
	Women's Shelter Network
Child Development	Blanton Child Development Center
	Delano School Readiness
	Discovery Depot Child Care Center
	Neighborhood Place Community Learning Center
	Small Steps Child Development Center
	Lost Hills Family Resource Center
	West Side Outreach and Learning Center

In *Child Development*, local programs assisted young children to thrive under difficult circumstances. In SSCDC, a child was identified to have an Individualized Family Service Plan (IFSP) upon the program entry. After his enrollment in a toddler classroom, the child had several therapy sessions for early intervention. Initially, he had a lot of solitary play with minimal peer interactions. The program offered him opportunities to work on the sensory table with peers, share toys in parallel plays, and control the pacifier usage within nap time. Through collaborative efforts of teachers, the mother, and a therapist, he started to develop interaction skills in classroom communications. He was able to ask for help, express needs, indicate wishes, and partner with peers. Similarly, another preschool student spoke very little English, and was quiet in the NPCLC program. After a few months, he demonstrated the skills to respond to prompts appropriately, interact with others friendly, and follow class procedures amiably.

These stories vividly show explicit improvements of child wellbeing in First 5 Kern-funded programs. At the Commission level, the impact stories need to be further aggregated for justification of the overall results-based accountability. Repeated listing of the separate stories, while feasible, does not achieve the goal of result summary. While qualitative descriptions incorporate grounded theories for subjective interpretations, the findings are rarely replicable by different researchers. Due to the importance of result reconfirmation, new inquiry methods are needed to synthesize findings beyond inductive inquiries for justification of results-based accountability.

In the 21st century, advancement of machine learning has generated new computing technology to expand text analytics for qualitative data aggregation. The mixed method approach 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)

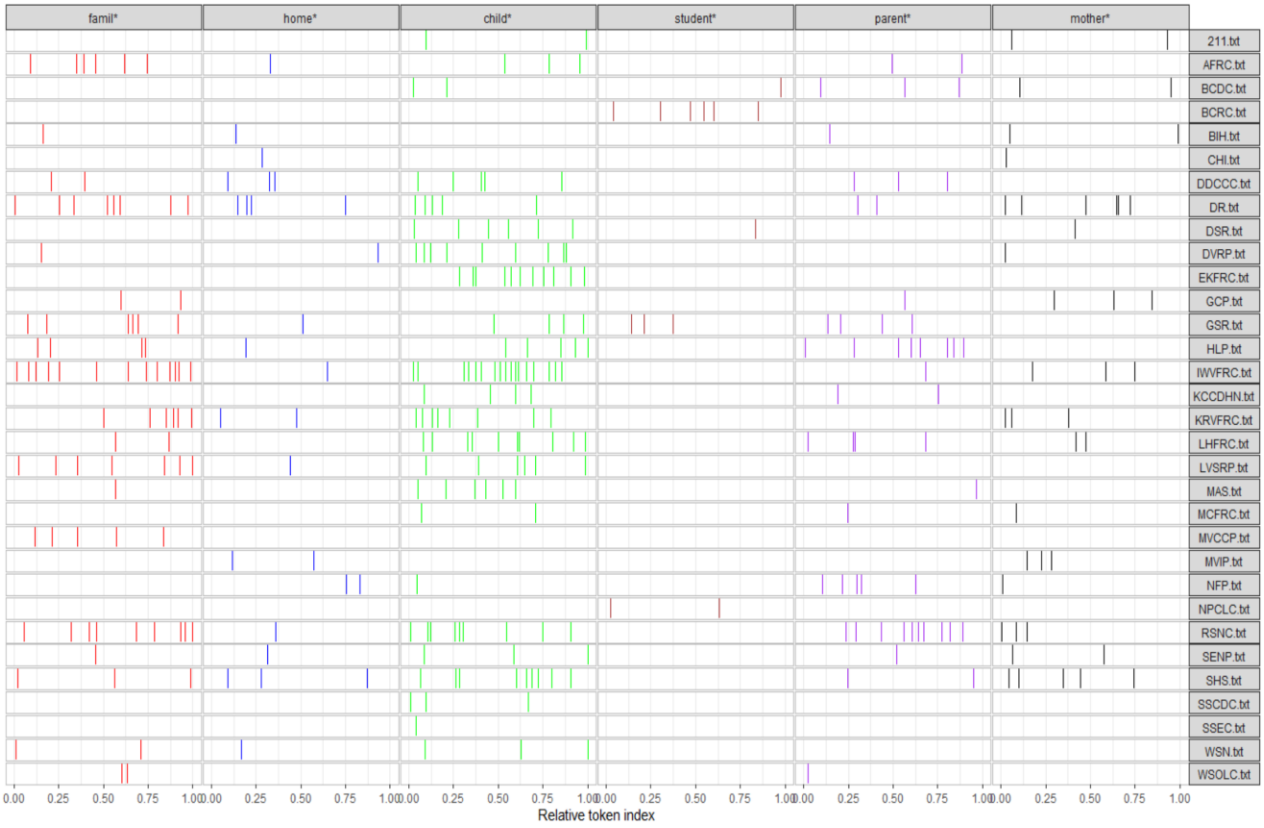
The R-based approach is aligned with the methodology advancement of international and national assessment projects funded by the federal government (Caro & Biecek, 2017; Matta, Rutkowski, Rutkowski, & Liaw, 2018).

Built on the quanteda platform, R scripts are developed for information extraction. After a process of *tokenization, stopping-word/punctuation cleaning*, and *dictionary stemming*, a Lexical Dispersion Plot has been drawn from the text data to compare frequently-mentioned words in individual stories. Overall, keywords stemmed from "family", "child", "parent", and "mother" were reported more frequently than other words in Figure 28, which confirmed alignment of the service emphases with the program foci on children and parents in these stories.

Because most programs offered multiple services, results in Figure 28 depended on the story choice. For instance, the impact stories of BCRC and NPCLC were focused on student learning within preschool settings. Thus, "student" was the frequently-mentioned word. SSEC served a child who was born pre-maturely with medical complications, and "child" became a keyword to describe the program impact. All the remaining 30 stories involved multiple keyword selections to reflect their broad impacts to service stakeholders.

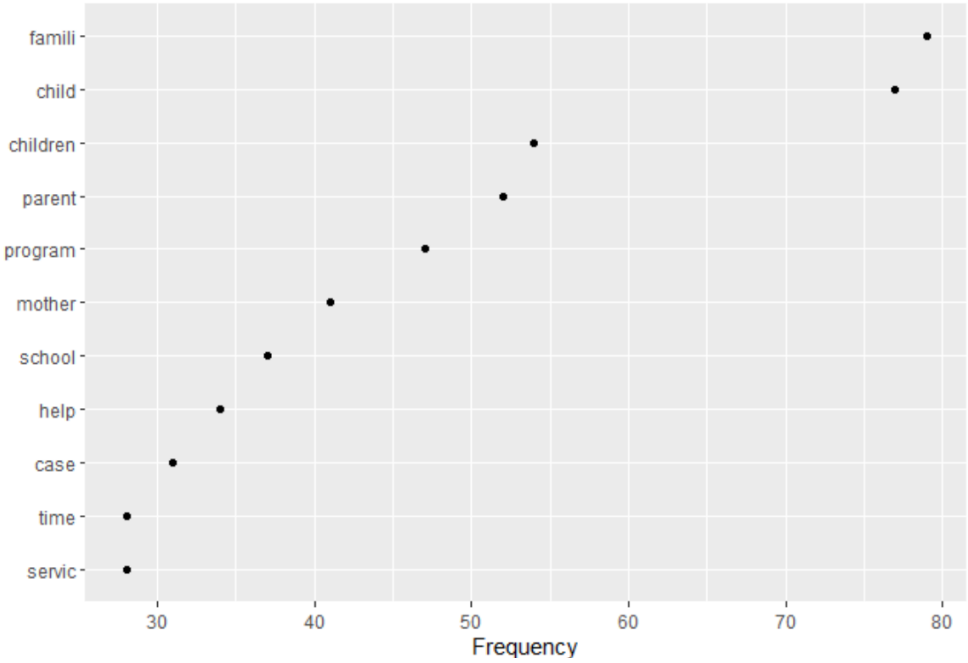
The story highlight also illustrated program features. For instance, IWVFRC served the Indian Wells Valley community. As a one-stop support center, its impact story included keywords in both "family" and "child" categories. Meanwhile, Figure 28 showed "family" as the frequently-mentioned word in a service coordination story of MVCCP due to the need of family support for medically vulnerable children. Infants also demanded more family attention as indicated by keywords *mothers, parents, family*, and *home* in BIH stories. In comparison, the impact story of DVRP contained more "child" than "family" or "home" to reflect the risk of child victimization in unstable households.

Figure 28: Frequently-Mentioned Words in Impact Stories at the Program Level



Beyond information highlights for individual programs, top-impact words were stemmed to plot Figure 29 across these 33 stories (Ibid. 48). As a result, "families" was truncated as "famili". The plot showed that "children" and "child" were mentioned 131 times, followed by "family" that was mentioned 79 times. In addition, "mother" and "parent" were cited over 93 times. "Program" and "school" were mentioned 84 times (Figure 29). With no exception, all these top-impact words echoed key stakeholder identification at the program level to address result indicators of First 5 Kern (2019) strategic plan.

Figure 29: Top-Impact Words across Thirty-Three Stories

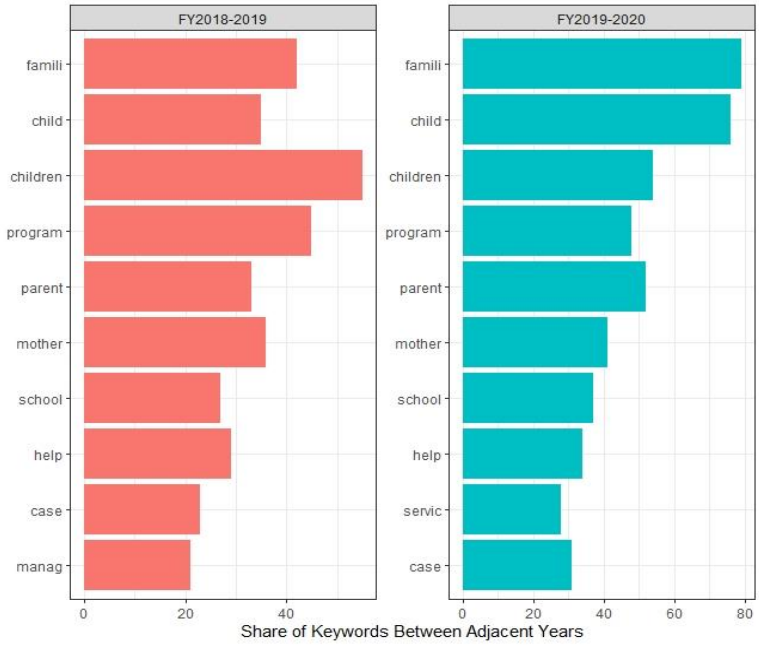


Including all tokenized terms into consideration, a word cloud plot in Figure 30 captured the overall features of First 5 Kern impact. In particular, "child" and "family" had a central position with the largest font. Figure 30 also showed "parent" and "program" in a relatively large font because (1) family support depended on parent education and (2) child development needed program service. As a result, "Program" also took a central location in the plot. Other service features were brought to light by keywords of *case management, preschool support*, *service referral*, *resource provision*, and *service enrollment*. The examination of word cloud structure reflected the essence of Proposition 10 funding in Kern County.

Figure 30: Word Cloud Plot of Keywords in Impact Stories

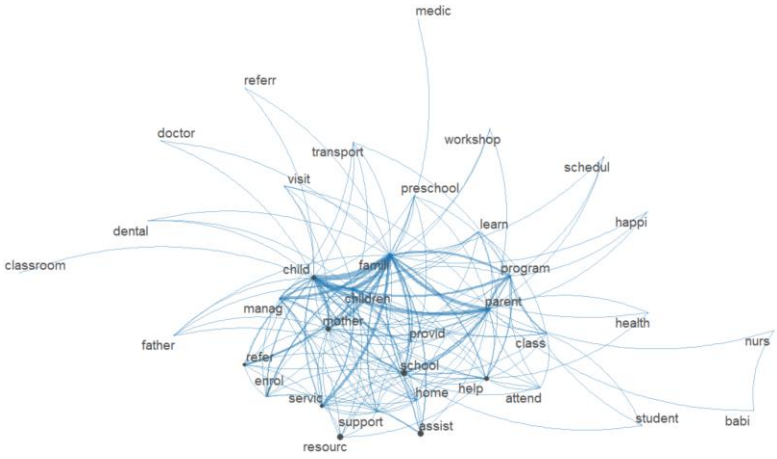
On the time dimension, consistency of First 5 Kern support was indicated by shared keywords of impact stories between last year and this year. Top 10 shared words across impact stories were plotted in Figure 31. Nine of the words were common between the adjacent years. The top eight tokenized words were identical despite the variation of story choices each year.

Figure 31: Overlap of the Shared Keywords of Impact Stories



More importantly, these programs did not act alone. A plot of the token-indicator relations revealed conceptual connections across the impact stories (Figure 32). Based on thickness of the network lines, "parent", "child", and "family" formed strong links. For the "parent" part, "mother" demonstrated much stronger links to "child" than "father". Figure 32 also contained a strong link between "school" and "parent". Other stemmed words were related to service types (medical, dental, referral, transportation, home visit, and program enrollment), settings (preschool, class, classroom, schedule, workshop), caregivers (doctor, nurse) and beneficiaries (baby, student).

Figure 32: Token Indicator Relations Behind the Impact Stories



In summary, success stories not only offered descriptions of the positive impact at the program level (Figure 28), but also illustrated persistent service emphases guided by First 5 Kern's (2019) strategic plan at the Commission level (Figures 29 and 30). Despite differences in the story choice, the shared words between adjacent year were nearly identical to confirm the Commission commitment to helping young children and families through program support (Figure 31). The pattern of tokenized data was depicted in a token-indicator relation plot (Figure 32) to gain an overall understanding of the important components for service integration. Based on the qualitative story description and quanteda text analytics, First 5 Kern has sustained its success in improving child wellbeing and family support as intended by Proposition 10.

Policy Impact in Local Communities

Per state requirement, the annual report template includes a policy impact section in the *County Evaluation and Summary* part (Ibid. 5). In FY 2019-2020, First 5 Kern chose to highlight its policy impact on trauma-informed care (TIC). With the program coverage from prenatal services to kindergarten readiness, First 5 Kern supported TIC in four domains, *Health and Wellness, Parent Education and Support Services, Early Childcare and Education,* and *Integration of Services*.

In *Health and Wellness*, Help Me Grow referred children for mental health services after ASQ:SE-2 screenings. Programs in *Parent Education and Support Services* also played an important role in TIC services for children because "having a caring adult in their life is shown to have mitigating effects on trauma" (Shepard, 2020, p. 4). In *Early Childcare and Education*, First 5 Kern funded special-needs programs to support a broad vision of First 5 California to "ensure all children have equitable access to quality early learning settings" (First 5 California, 2019, p. 11). In *Service Integration*, the commission funded the Medically Vulnerable Care Coordination Project (MVCCP) to offer TIC trainings for 17 agencies and 94 service providers (First 5 Kern, 2020). Through partnership building, MVCCP recruited a $20,000 grant from Kaiser Permanente to cover part of the training cost in 2019 (Ibid. 6). More recently, it was revealed that "COVID-19 has had disproportionate contagion and fatality in Black, Latino, and Native American communities and among the poor in the United States" (Fortuna, Tolou-Shams, Robles-Ramamurthy, & Porche, Michelle, 2020, p. 1), which demanded more of First 5 Kern support for minority-serving programs, such as Black Infant Health.

Besides offering professional trainings on TIC and the potential pathway for recovery (Thibault, 2018), First 5 Kern funded effective programs like DVRP to reduce domestic violence and GCP to support legal guardianship for children ages 0 to 5. In addition, the service delivery has led to improvement of community thinking and reaction to local residents who *experienced* or *were at risk of experiencing* trauma. Unlike an isolated program to treat specific trauma-related symptoms, the impact of First 5 Kern fit the original purpose of Proposition 10 to offer "glue money" for establishing a broad spectrum of coalitions across "health care, law enforcement, child care, education, and social service" (Bodenhorn & Kelch, 2001, p. 156).

In retrospect, Governor Newsom allocated $60 million for trauma screening (Rubio, 2019). But "An issue providers face is what to do when a patient is found to have childhood trauma" (Shepard, 2020, p. 4). Through its strategic planning, First 5 Kern

offered TIC-related services in multiple ways to strengthen the long-term impact of program funding on early childhood development.

Past Recommendations Revisited

In the last annual report, three recommendations were made for First 5 Kern to:

1. Continue supporting program enrollments for all children ages 0-5 and their families across Kern County, regardless of their social stratum affiliations;
2. Establish and strengthen program network across different service providers;
3. Sustain First 5 Kern's IRB protocol for assessment data gathering.

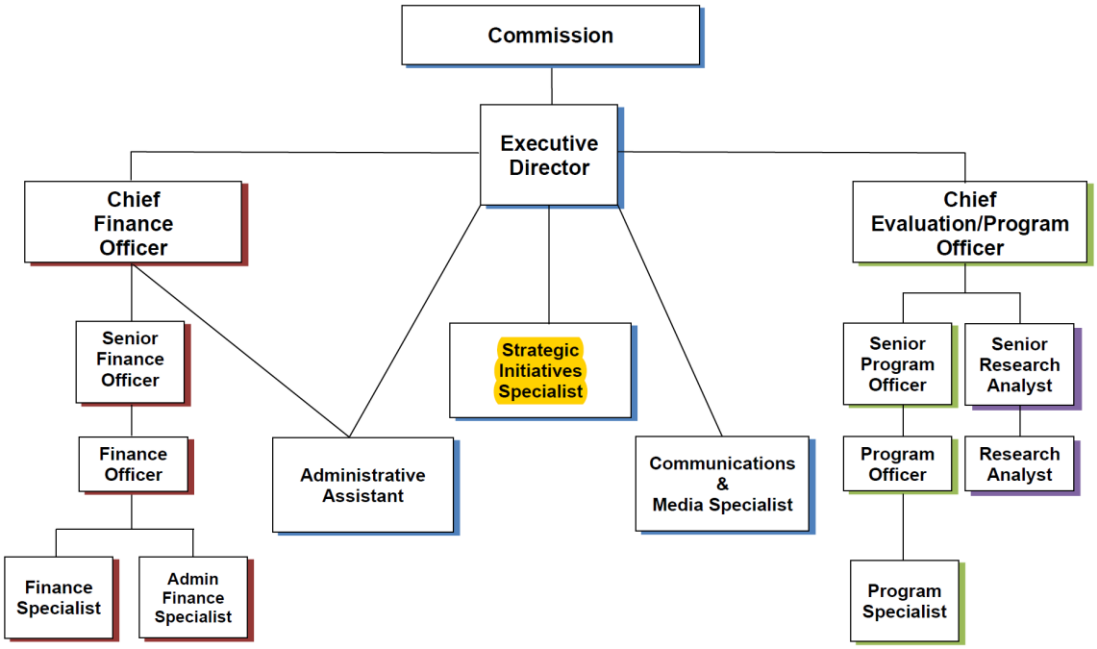
In FY 2019-2020, First 5 Kern led five programs, including CHI in *Child Health* and AFRC, BCRC, GSR, and LVSRP in *Family Functioning*, to assist completion of insurance enrollment application (RI 1.1.1). The services have supported healthcare access by 340 families, surpassing the annual target of 190 families for these programs. Regarding the social stratum affiliation, AFRC and LVSRP served young children in Arvin and Lamont where over 90% of the population had Hispanic origin. The corresponding rate at Buttonwillow, a community BCRC served, was above 87%. GSR served the Greenfield community that had over 56% of the population with Hispanic origin. In addition, CHI, MVCCP, MVIP, and NFP offered medical home access to 1,008 children, exceeding the target count of 105 (RI 1.1.5). KCCDHN also provided dental home access to 427 children, above its target of 130 for the year (RI 1.1.6). With the partnership between countywide (CHI, KCCDHN, MVCCP, MVIP, NFP) and community-based (AFRC, BCRC, GSR, LVSRP) programs across focus areas, First 5 Kern has addressed the first recommendation of supporting program enrollments for all children in different communities.

To strengthen the program network across different service providers, First 5 Kern created a new position, *Strategic Initiatives Specialist*, with a clear goal to "Develop early childhood system change initiatives that build on existing infrastructure and relationships while incorporating new funding, new partners and innovative methodologies to achieve the intended result".[49] This move followed a consultant recommendation (Altmayer, 2019) to expand the organizational capacity in supporting *Systems of Care* (Figure 33). Thus, the Commission has adopted the second recommendation on network building.

First 5 Kern was able to maintain an IRB protocol throughout this funding cycle. In compliance to a review requirement for the protocol renewal, First 5 Kern changed its consent form according to an IRB template for the new funding cycle. The instrument was also translated from English to Spanish by professional contractors to avoid misunderstanding of the content due to low reading levels of parents and/or guardians. Throughout the year, additional measures, such as confidentiality trainings and site visits, were conducted to eliminate potential adverse effects from the data collection and management. Hence, First 5 Kern has carried out the third recommendation from last year to sustain the IRB protocol for assessment data gathering.

[49] https://www.first5kern.org/wp-content/uploads/2020/05/CFC-June-2020-Packet.pdf [first5kern.org]

Figure 33: Organization Chart with Addition of Strategic Initiatives Specialist



In summary, all three recommendations from FY 2018-2019 have been fully adopted by First 5 Kern. Implementation of the first recommendation has supported service access by young children and their families, especially these culture and language barriers. The second recommendation has led to creation of a new position for partnership building (Figure 33). The third recommendation enhanced protection of data security according to laws and/or regulations at the federal, state, and local levels.

New Recommendations

When California voters passed Proposition 10 in 1998, it was envisioned as an extraordinary experiment to renovate the support system for young children and their families across various communities. The state statute stipulates that "Funds must supplement, not supplant, existing service levels" (Behrman, 2001, p. 152). Thus, Proposition 10 revenues were considered as the "glue money" by Rob Reiner, the founding chair of the State Commission, to partner program deliveries with various service providers (Bodenhorn & Kelch, 2001).

This year, the Commission accepted BCSD's request to discontinue a program, *Supporting Parents and Children for School Readiness*, because of service duplication with existing programs. This progress fit the Proposition 10 requirement of not supplanting existing services. It also freed the funding resources for new partnership planning. Therefore, the first recommendation is for First 5 Kern to **continue optimizing the "glue money" function of Proposition 10 in new partnership development**. The budget savings is particularly important in the new funding cycle as "The children's share of the federal budget is projected to drop from 9.2% to 7.5% over the next decade" (Doleatto, 2019, p. 1).

Following First 5 Kern's (2019) strategic plan, result indicators have been assigned to each service provider. While an additional indicator (RI 2.4.3) was included in the strategic plan, it was addressed only by services of the new WSOLC program this year. Meanwhile, RI 1.1.2 and 1.1.4 were designed only for SAS that no longer received funding from First 5 Kern. Other discontinued programs, i.e., R2S, SPCSR, and WSCRC, also contributed services to address one, eight, and 10 result indicators, respectively. As First 5 Kern updates its strategic plan next year, the second recommendation is on **adjustment of the result indicators to reflect service deliveries of the currently-funded programs**. More specifically, unique indicators, such as RI 1.1.2 and 1.1.4, can be considered for deletion unless another partnership has been established to replace the past services of SAS. Remapping result indicators across the existing program may help address additional service needs derived from the unprecedented influence of COVID-19.

Table 82: Extra Result Indicators for Potential Service Providers

No.	Result Indicators Yet to Be Addressed by the Existing Programs
1.1.2*	# of children successfully enrolled in a new health insurance program
1.1.4*	# of children successfully renewed into a health insurance program
1.1.7	# of families referred to a local enrollment agency for health insurance application assistance
1.2.1	# of pregnant women referred to family resource centers
1.2.2	# of pregnant women referred to prenatal care services
1.3.3	# of children who received vision screenings
1.3.5	# of children who received mental health screenings
1.3.12	# of children who received asthma/respiratory services
1.3.13	# of children who accessed a pediatric dentist
1.5.1	# of children who received nutrition and/or fitness education
2.1.2	# of children who received individual therapy
2.1.3	# of children who received family therapy
2.3.1	# of parents/guardians who received reading strategies
3.2.2	# of special needs children who participated in educational home-based activities
4.1.1	# of providers trained as certified application assisters
4.4.2	# of parents/guardians who attended educational events on early childhood topics
4.4.3	# of providers who attended Commission-led trainings or workshops
4.5.1	# of providers who attended Commission-led Ages and Stages Questionnaire trainings
4.5.2	# of partnering agencies providing Ages and Stages Questionnaire screenings

*Indicators exclusively linked to SAS.

In the current strategic plan, First 5 Kern (2019) seemed to have included result indicators it wished to address in future strategic planning. Table 82 showed 19 indicators that were not covered by the Scope of Work - Evaluation Plan (SOW-EP) of any service providers. The third recommendation is for **reviewing these result indicators based on the new program funding structure in next funding cycle**. "First 5 Kern has built a strong reputation in the community as an expert and advocate for children, from prenatal through age five and their families" (First 5 Kern, 2019, p. 2). The Commission can benefit from the indicator and service match to strengthen evaluation of program effectiveness according to the new strategic plan.

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Appendix A – Index of Program Acronyms

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Appendix B – Technical Advisory Committee

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Chief Executive Officer, Kern Medical

Susan Lerude (Commissioner)
Retired Division Director, Juvenile Probation

John Nilon (Commissioner)
Retired CAO, County of Kern

Pritika Ram
Director of Administration, Community Action Partnership of Kern

Kelly Richers (Commissioner)
Wasco Elementary School District, Superintendent

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

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