EARLY LEARNING VENTURES
Early Head Start–Child Care
PARTNERSHIP MODEL

FINAL EVALUATION REPORT

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ACKNOWLEDGMENTS

EXECUTIVE SUMMARY

In February 2015, **Early Learning Ventures (ELV)**, a Denver-based not-for-profit organization, was awarded a federal Early Head Start–Child Care (EHS–CC) Partnership grant. Through the grant, ELV partnered with 32 child care providers in four Colorado counties to provide Early Head Start (EHS) services to 240 children younger than 3. ELV used an enhanced version of a shared services model it developed, which combined business consulting, innovative uses of technology, coaching, professional development, and other supports to help child care providers meet Head Start Program Performance Standards.

Several program, classroom, and family measures were evaluated using a pre/post research design during the first year of implementation. The average time between baseline and follow-up measurement was 10 months. During the short study period, providers in the ELV EHS–CC Partnership model showed significant improvement on several important indicators of business capacity and provider quality. On average, providers improved foundational business practices and operations and increased the number of collaborative partnerships with local social services agencies, allowing them to offer services to children and families to meet the Head Start standards. Overall, parents reported a high degree of satisfaction with the services they received from ELV and the child care partners. In addition, compensation levels for teachers increased along with the professional development support they received. Classroom quality also improved, specifically in teacher–child interactions, the dimension of quality most critical to child development and learning.

Little or no improvement was observed in the employment benefits and qualifications of teachers; workplace environment of child care centers; or some elements of business practices for family child care providers. As ELV continues to refine its EHS–CC Partnership model, it will be important to focus improvement efforts on the areas that showed less consistently strong results. In addition, given that this evaluation studied the model at the earliest stage of implementation, future research efforts should analyze the impact of the model in later stages of implementation with more sophisticated methods and include an analysis of child outcomes.

Although conducted only with a simple pre/post design, this evaluation is an important first step in documenting the significant impact of the ELV EHS–CC model on provider quality and the overall impact of EHS–CC Partnership models more generally, particularly when coupled with a robust shared services approach. As demonstrated by the baseline data, many child care programs struggle to meet a high standard of quality. However, within a year of receiving supports and services through the ELV EHS–CC Partnership grant, providers made demonstrable gains in multiple areas, better equipping them to provide services that support child development and overall school readiness.

INTRODUCTION

In February 2015, **Early Learning Ventures (ELV)**, a Denver-based not-for-profit organization, was awarded a federal Early Head Start–Child Care (EHS–CC) Partnership grant. Since the award, ELV has used $2.9 million in annual Head Start funding combined with Child Care and Development Block Grant (CCDBG) subsidy funding to improve the quality of child care for families living in poverty. Each year of the grant, ELV has provided EHS services to 240 children younger than 3 by partnering with 32 child care providers in four Colorado counties—Arapahoe, Mesa, Garfield, and Pueblo. ELV used its innovative shared services model—which combines business development, innovative uses of technology, coaching, professional development and other supports—to help child care providers meet Head Start Program Performance Standards (HSPPS). This report evaluates ELV's EHS–CC Partnership model across several program, classroom, and family measures.

The Administration for Children and Families within the U.S. Department of Health and Human Services awarded $500 million in EHS–CC Partnership and EHS expansion grants ranging in size from $200,000 to $14.9 million. ELV was one of 275 organizations from across the country to win a Partnership grant in the first round of competition. Within this first cohort, ELV was a unique EHS–CC Partnership model. Nearly all the Partnership grantees initially funded were Head Start programs that proposed to partner with child care providers in their community. In contrast, ELV began with a network of child care providers and became an Early Head Start grantee to help providers achieve the high levels of quality outlined in the HSPPS. ELV's technology platform, organizational capacity, and relationships with state- and county-level partners allowed it to implement the model throughout a 9,000-square mile area in communities that were most in need of services.

Goals of the Evaluation

Given the unique nature of the ELV EHS–CC Partnership model and the importance of documenting the successes and challenges of local Partnership grants, ELV funded an evaluation of the model. This report examines changes in several program, classroom, and family level indicators over time. The report provides the results of analyses comparing data collected on the child care partners at the start of the grant to data collected 10 to 14 months later, depending on the measure. As discussed in more detail below, several measures were used to track changes in provider quality, including compliance to the HSPPS, measures of business capacity, workplace climate, classroom quality, and the ability to meet the social service needs of the families served. In examining these indicators, the evaluation had three goals: (1) to improve program implementation; (2) to document changes in provider quality resulting from the model; and (3) to inform federal policy.

Improving Implementation

The primary goal of this research was to provide information to the ELV leadership team to support program improvement during the grant and beyond. For example, the baseline assessments of the child care partners were used to provide feedback to ELV on key areas of need. This information was then used to guide the allocation of grant resources, training, and technical assistance to support the providers.

Documenting Quality Improvement

Recipients of EHS–CC Partnership grants were charged with improving the quality of the child care partners as measured by compliance with the HSPPS and other quality measures. In accordance with the federal goals of the grant funding, this research measured the progress of providers in meeting Head Start regulations and other changes in provider quality that are important to school readiness and child well-being.

Informing Federal Policy

Since ELV was in the first cohort of EHS–CC Partnership grant awards, it has a unique opportunity to demonstrate proof-of-concept of the federal EHS–CC approach and provide evidence of the strength of ELV as an implementation partner. This aspect of the research is particularly important given that the EHS–CC Partnerships are difficult to implement, requiring the coordination of two major federal funding streams (i.e., EHS and CCDBG) and compliance with hundreds of Head Start regulations. As such, the evaluation provides lessons learned from implementing the Partnerships using a shared services approach that can support improvements to the EHS–CC model at the federal level.

The Early Learning Ventures EHS–CC Partnership Model

Prior to the implementation of the EHS–CC Partnership grant, ELV operated a child care shared services model dedicated to expanding access to high-quality, affordable child care. Founded by the David and Laura Merage Foundation in 2009, ELV created a shared services model that streamlines the business operations of child care providers and supports their ability to function as financially stable, sustainable businesses. Prior to the grant, ELV had created a network of approximately 500 family child care and independent center-based child care providers in Colorado to share business functions, including purchasing, procurement, marketing, human resources, and other operations. While participating in the shared services model, providers retain their autonomy but attain economies of scale through participation in the network. Much of the work is conducted through a technological platform called *Alliance CORE*™, a cloud-based system that streamlines or automates a host of operations related to child care management including child enrollment; attendance monitoring; tracking of professional development and family service activities; and report generation.

The grant allowed ELV to infuse a higher level of quality into providers in the network and to add a number of new providers to the network. **Figure 1.1** shows the locations of the child care providers that participated in the EHS–CC Partnership during the study period.[i] Provid-

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[i] Since the study period concluded, Southside Children's Center, Little People, and Futures Family Child Care are no longer participating in the model and a new provider partner, Faith Lutheran, has been added.

Figure 1.1 ELV EHS–CC Partners by County
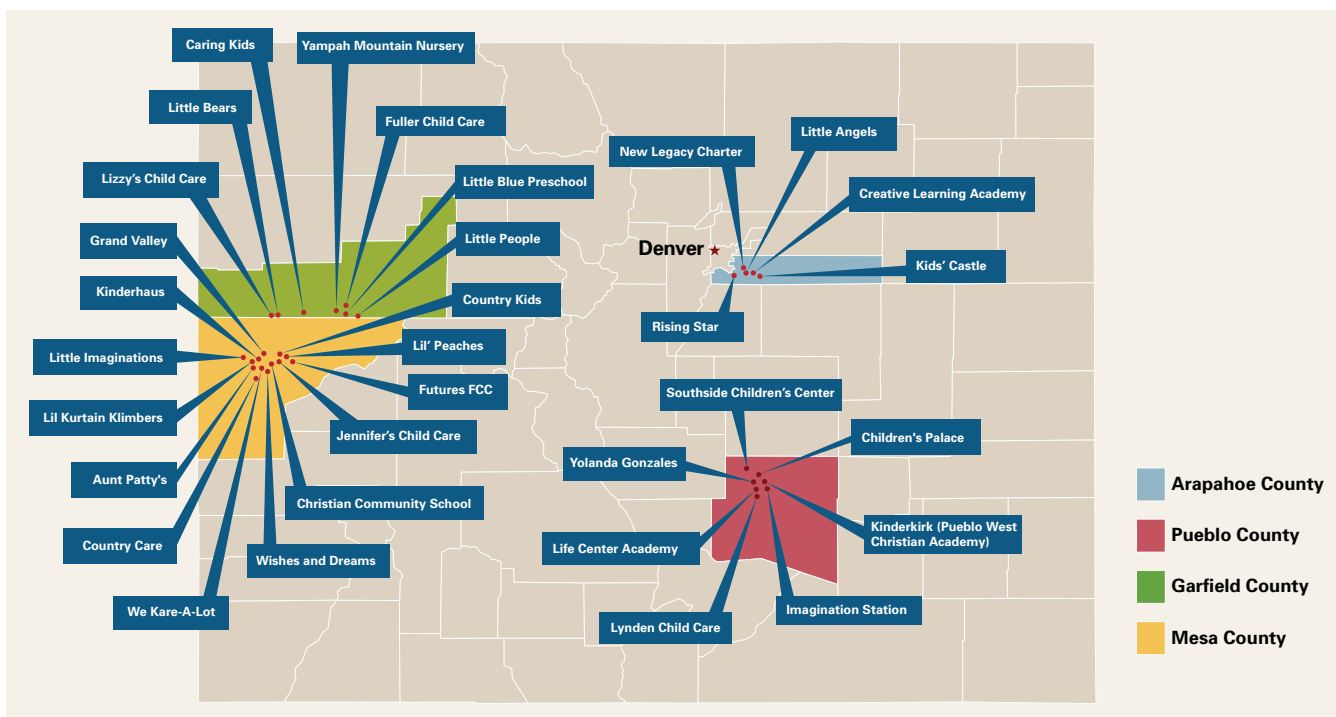
ers that were interested in being an EHS–CC partner applied to ELV and were vetted against criteria that assessed their capacity to implement the HSPPS (e.g., presence of recordkeeping system, use of curriculum, etc.) From this assessment, ELV engaged in a selection process and providers were chosen for participation in the model. Of the 32 providers ultimately selected to participate, six had previous experience implementing the ELV shared services model and 26 were new to ELV. After the partners were selected, each provider entered into a contract with ELV that included a scope of work and clearly outlined the roles and responsibilities of both ELV and the provider partners. (See **Appendix A** for a sample Scope of Work). The grant funded important supports both within the ELV organization and at the provider level that were designed to support compliance with the HSPPS, strengthen the business practices of the providers, engage families, and promote child development and learning. The supports included:

Quality Improvement Specialists. Experienced early childhood program managers were hired by ELV as Quality Improvement Specialists to provide on-site support for the child care partners. Each Specialist was trained on the history and goals of Early Head Start, the HSPPS, leadership development, and how to implement a quality improvement process. Initial training of the Specialists was conducted by staff from Clayton Early Learning in Denver, a National Head Start Center of Excellence. Each Specialist was assigned to support between five and nine child care providers. Specialists worked with the center directors or family child care owners on at least a weekly basis; the specific intensity depended on the capacity and needs of the partner. Each Specialist guided the providers through a continuous quality improvement process that addressed nine specific components of program quality:

- overall operations,

- education and child development services,

- parent engagement,

- health services,

- nutritional services,

- disabilities and mental health services,

- physical environment and facilities,

- professional development, and

- reporting and on-going monitoring.

Each provider developed a quality improvement plan that included program objectives and action steps for each of the above areas. Progress toward the objectives was assessed monthly throughout the study period and the intensity with which the Specialists worked with each provider was determined by program needs at these checkpoints.

In addition to facilitating the continuous quality improvement process, the Specialists also supported the execution of professional development plans for leadership and staff, including the facilitation of a cohort of provider leaders to obtain an Aim4Excellence National Director Credential offered by the McCormick Center for Early Childhood Leadership at National Louis University.[ii] Finally, Quality Improvement Specialists also offered training on specific Head Start topics including an orientation to the HSPPS and a specific, more in-depth training on the Head Start health and safety standards.

Family Support Specialists. Individuals with case management experience or experience working with families in poverty were hired by ELV as Family Support Specialists. Family Support Specialists worked to help families enroll in EHS and connect them to other services. In addition, these Specialists supported the development of Family Partnership Agreements, which outline a family's action plan to meet educational, employment-related, or other goals determined by the family. During the study period, an average caseload for a Family Support Specialist was 27 families but varied significantly across the Specialists. In cases where an individual served as both the Family Support Specialist and the Quality Improvement Specialist, the caseload was much smaller—18 families per Specialist, on average. Family Support Specialists having only one role had larger caseloads—between 30 and 40 families. A cohort of eight ELV Family Support Specialists began working toward

a National Family Development Credential® during the study period, which will be completed in September 2017.[iii]

At the beginning of the grant, the Family Support Specialists focused on the Eligibility, Recruitment, Selection, Enrollment and Attendance (ERSEA) process of Head Start to fill the 240 funded slots. Once ELV reached full enrollment, the Family Support Specialists worked with families to develop voluntary Family Partnership Agreements. By December 2016, 197 families had voluntarily worked with a Family Support Specialist to develop a Family Partnership Agreement.

Supplemental Funding. In addition to the support provided by the Quality Improvement Specialists and the Family Support Specialists, ELV also used EHS–CC grant funding to provide additional financial assistance to the provider partners in the form of monthly reimbursements on a per child basis. This assistance was allocated based on the monthly enrollment of EHS children at each provider site and was used to support increasing staff salaries, paying substitutes during staff trainings; diapers, formula and wipes; home visits, and other critical supplies and activities required as part of providing high-quality early childhood services. ELV provided $646 per enrolled child per month to the providers in unrestricted funds; $30 per child per month for diapers, wipes, and formula; $75 per day (five days maximum) per teacher for substitutes; and other funding to pay for home visits and child care at parent meetings. Family Support Specialists also worked to enroll eligible children at the provider sites in the Colorado Child Care Assistance program, which provided additional revenue to the child care partners. By the end of the study period (January 2017), roughly 75 percent of all EHS children in the model were also receiving child care subsidies. The supplemental funding provided by the grant and the additional subsidy funding amounted to an increase in the revenue of well over $7,500 per child for the EHS children participating in the model.

The work of the Quality Improvement Specialists and Family Support Specialists as well as the supplemental funding and shared services supports were organized around five targeted areas of child care provider development:

Business Development. A core principle of ELV's shared services approach is that it is difficult for a child care provider to improve in quality without a strong business foundation. Given that most child care providers who serve low-income families operate as fragile businesses, an important goal of the ELV EHS–CC Partnership model during the study period was to strengthen the business infrastructure of participating child care providers. Accordingly, the child care providers received "Tier II" shared services from ELV, which included access to a bulk purchasing resource platform and the Alliance CORE™ child care data management system. In addi-

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iii For more information about the FDC credential see: http://www.familydevelopmentcredential.org/Plugs/default.aspx

tion, the ELV Quality Improvement Specialist supported the development and implementation of a strategic business plan with action steps for high-quality programming, and the creation of an EHS–CC Partnership budget that included competitive wages for teachers and teaching assistants. **Appendix B** includes a business plan template used as part of the Partnership model.

Leadership Development. As noted above, a Quality Improvement Specialist was assigned to work with each child care center director and family child care owner with the goal of promoting provider quality through strong leadership. Because of coaching from the Quality Improvement Specialist, nearly every child care director or owner—26 out of the 32—agreed to work toward the Aim4Excellence™ National Director Credential. The credential focuses on several key leadership capabilities including recruiting and selecting staff, building a sound business strategy, and evaluating program quality.

Professional Development. The most important aspect of child care quality is the frequency and nature of the interactions that young children have with adults. As such, the ELV EHS–CC Partnership model invested heavily in the professional development of staff including the provision of scholarships to obtain a Child Development Associate (CDA) credential (or equivalent), or to pursue a degree in child development. In addition, each teacher and teaching assistant received at least 30 hours of coaching a year in the topics of child development and best practices. Providers also received training on the *Classroom Assessment Scoring System®* (*CLASS®*), curriculum implementation, observation-based assessment, health and safety practices, and other early learning and development topics. By the end of the study period, 96 teachers in the ELV model (91 percent of the 106 teachers required to run the program) met the EHS teacher requirements.

Community Partnership Development. Early Head Start grantees are not expected to provide comprehensive child development services on their own. Instead, grantees are expected to create partnerships to leverage community resources in support of the children and families in the EHS program. ELV hired a Community Collaboration Coordinator to manage the community partnerships across the four counties. This Coordinator worked to leverage community resources by contracting with service coordinators within important social service agencies or organizations in each county, and supporting the co-location of staff in these county organizations. Service coordinators helped connect providers to translation services; dental, vision, and hearing screenings; health services; child care licensing; and other services. In many cases, a Memorandum of Understanding (MOU) was created to outline the nature of the relationship between ELV and the service provider. More than 30 MOUs were developed with different agencies and organizations across the four counties. The relationships included:

- In Mesa County, contracting with a service coordinator at the County Health Department and co-locating the Quality Improvement Specialist within the Health Department.

- In Garfield County, contracting with a service coordinator at the Early Childhood Network, the local Child Care Resource and Referral Agency (CCR&R), and co-locating both the Quality Improvement Specialist and Family Support Specialist at the CCR&R.

- In Arapahoe, using the Community Collaboration Coordinator to engage in 10 MOUs with service agencies (e.g, Arapahoe Community College, Mountain Dental Hygiene Services, LLC, etc.).
- In Pueblo, contracting with a service coordinator and locating both the Quality Improvement Specialist and Family Support Specialist at Children's First, the Pueblo Early Childhood Council, housed at Pueblo Community College.

In some cases, comprehensive services were extended to children who were not directly enrolled in EHS but were in a classroom with others who were. For example, in Arapahoe County, ELV partnered with Adventure Dental Vision and Orthodontics to provide vision and dental screenings to all children in EHS classrooms (regardless of whether the child was funded through EHS).

Family Development. In addition to supporting families in the development of their Family Partnership Agreement, the Family Service Specialist provided support to families with ongoing mentoring and research-based training to enhance their understanding of child development, effective parenting techniques, and advocating for their child. Providers conducted monthly meetings with families to help build peer networks and provide learning opportunities.

"Spillover" Effects. While the grant funded 240 EHS slots across the 32 providers, ELV deliberately attempted to spread the slots across the providers to allow the benefits of the model components to "spill over" to children not covered by the grant. Within center-based child care programs, there was an average of 11 EHS-funded children per site (range: 3–24 children) within an average of three infant or toddler classrooms per site. There was an average of three children per site in family child care homes (range: 1–6 children). Children who received EHS funding were spread out across classrooms (rather than designating "EHS classrooms" and "non-EHS classrooms" within a center). In this way, children who were not directly receiving EHS funding could also benefit from the infusion of EHS resources and supports (e.g., better trained teachers, improved learning environments, high-quality curriculum, etc.). To meet HSPPS, providers had to ensure that group size did not exceed eight children (with a caregiver–child ratio of at least one to four)[iv]. This means that with an average of three to four EHS-funded children per classroom or family child care home, the remaining half of the children in the classroom benefited from the "spillover" effects of the model (assuming full capacity). Beyond the children in these classrooms, it is likely that all 1,700 children cared for by the provider partners benefited in some way from the additional revenue and higher standards that accompanied the grant, the professional development offered to administrators and teachers, and the quality improvements to the classroom and family child care home environments.
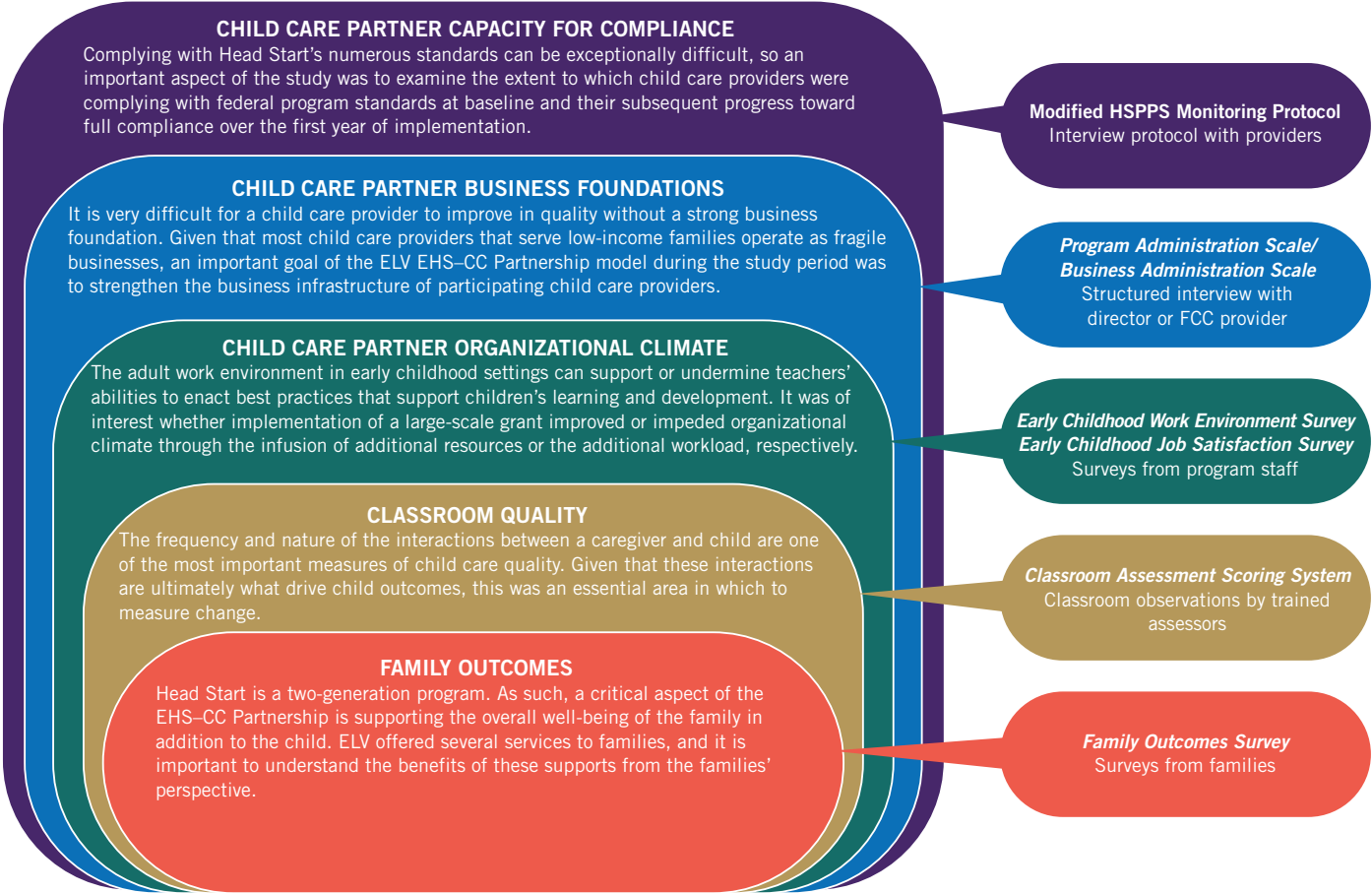

[iv] Colorado child care licensing standards require caregiver–child ratios of 1:5 to 1:8 for infant and toddler classrooms depending on the age of the child, meaning that the 1:4 ratio required by HSPPS for all children under 3 represented a significant shift for programs.

METHODOLOGY

This report utilizes grantee, provider, classroom, and family-level data to track changes in the capacity and quality of the child care partners and the benefits of the model to families. **Figure 1.2** illustrates the different levels of data and the measures that were used. Data were collected at the start of the intervention to obtain baseline levels, and again approximately one year later. See **Figure 1.3** for a timeline of data collection and program implementation.
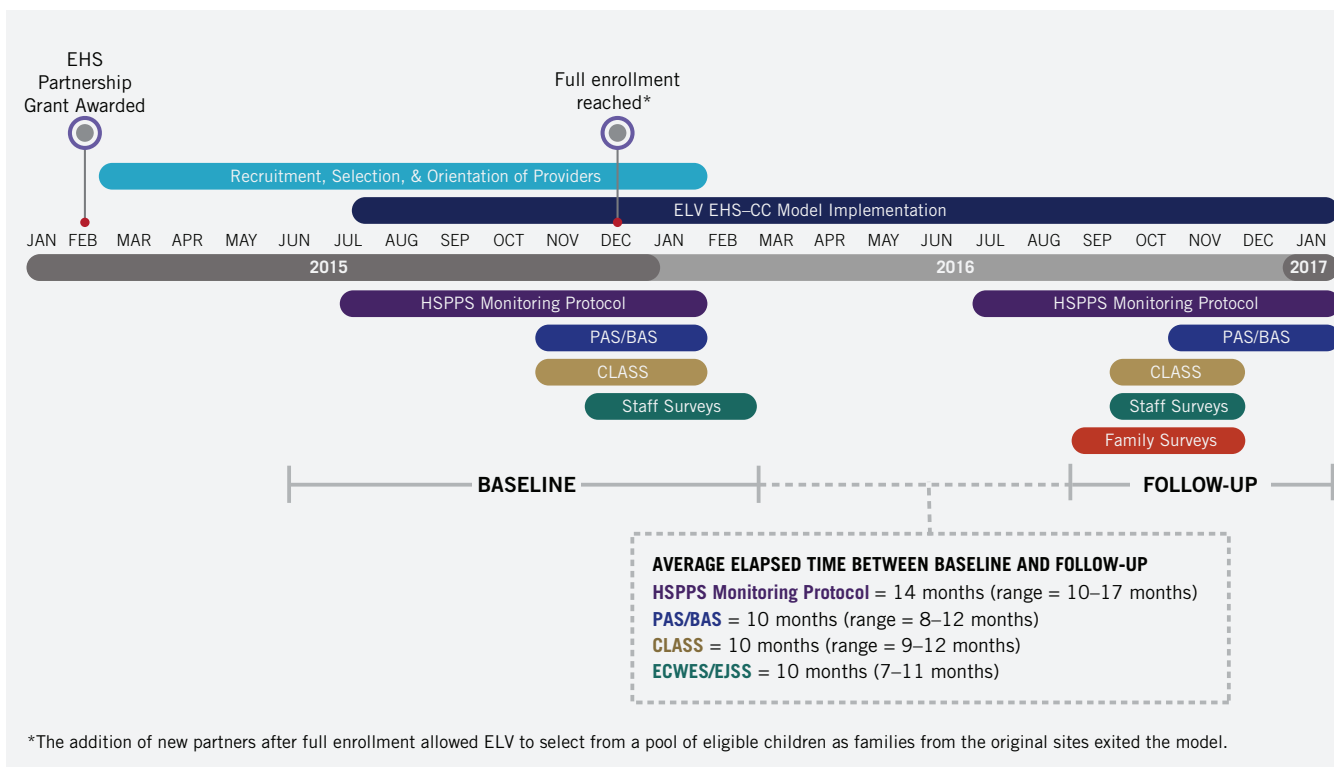
Modified Head Start Monitoring Protocol[2]. ELV core staff (e.g., Partnerships Director, Quality Improvement Coordinator, Family Support Specialists, and Quality Improvement Specialists) interviewed the director and/or owner of each child care partner at baseline and follow-up using a modified version of the HSPPS Monitoring Protocol. The protocol asked specific questions about current compliance with key elements of the Head Start program performance standards, including program governance, management systems, comprehensive services, family engagement, and other factors (see **Appendix C**). This protocol was adapted from the *FY 2015 Head Start Key Indicator-Compliant (HSKI-C) Monitoring Protocol*[3], a tool used to determine whether Head Start grantees require additional monitoring based on their degree

Figure 1.2 Levels of Data Collection in the ELV EHS–CC Partnership Evaluation

CHILD CARE PARTNER CAPACITY FOR COMPLIANCE
Complying with Head Start's numerous standards can be exceptionally difficult, so an important aspect of the study was to examine the extent to which child care providers were complying with federal program standards at baseline and their subsequent progress toward full compliance over the first year of implementation.

CHILD CARE PARTNER BUSINESS FOUNDATIONS
It is very difficult for a child care provider to improve in quality without a strong business foundation. Given that most child care providers that serve low-income families operate as fragile businesses, an important goal of the ELV EHS–CC Partnership model during the study period was to strengthen the business infrastructure of participating child care providers.

CHILD CARE PARTNER ORGANIZATIONAL CLIMATE
The adult work environment in early childhood settings can support or undermine teachers' abilities to enact best practices that support children's learning and development. It was of interest whether implementation of a large-scale grant improved or impeded organizational climate through the infusion of additional resources or the additional workload, respectively.

CLASSROOM QUALITY
The frequency and nature of the interactions between a caregiver and child are one of the most important measures of child care quality. Given that these interactions are ultimately what drive child outcomes, this was an essential area in which to measure change.

FAMILY OUTCOMES
Head Start is a two-generation program. As such, a critical aspect of the EHS–CC Partnership is supporting the overall well-being of the family in addition to the child. ELV offered several services to families, and it is important to understand the benefits of these supports from the families' perspective.

Modified HSPPS Monitoring Protocol
Interview protocol with providers

Program Administration Scale/ Business Administration Scale
Structured interview with director or FCC provider

Early Childhood Work Environment Survey Early Childhood Job Satisfaction Survey
Surveys from program staff

Classroom Assessment Scoring System
Classroom observations by trained assessors

Family Outcomes Survey
Surveys from families

Figure 1.3. Timeline of ELV EHS–CC Partnership Implementation and Data Collection

AVERAGE ELAPSED TIME BETWEEN BASELINE AND FOLLOW-UP
HSPPS Monitoring Protocol = 14 months (range = 10–17 months)
PAS/BAS = 10 months (range = 8–12 months)
CLASS = 10 months (range = 9–12 months)
ECWES/EJSS = 10 months (7–11 months)

*The addition of new partners after full enrollment allowed ELV to select from a pool of eligible children as families from the original sites exited the model.

of compliance to the HSPPS. The tool was adapted by the ELV EHS–CC Partnership study evaluation team to only include items that addressed compliance at a high level (e.g., "Does your program have a committee of parents of currently enrolled children that take part in program decision making?") rather than the more granular level of detail included in the HSKI-C tool (e.g., "Ask the Policy Council to describe the composition of its membership and share relevant documentation that confirms that the Policy Council has the appropriate composition and members are elected.").[v]

The Program Administration Scale (PAS)/Business Administration Scale (BAS)[5]. The *PAS* and *BAS* were used to measure the business and professional practices of providers participating in the model. The *PAS* uses 25 items to measure *center-based providers* in 10 program areas. The *PAS* uses 10 items to measure the business and professional practices of *family child care providers*. Certified assessors (an independent consultant and a member of Qualistar's Rating and Assessment Team) administered the *PAS* and *PAS*, which included a tour of the center/home, an interview with the program director/provider, and a review of program documentation. The *PAS* and the *PAS* provide relevant, valid, and reliable information about the business and professional practices of center-based and family child care programs respectively. The *PAS* has good internal consistency (Cronbach's a=.85–.86)[6] and the *PAS* has acceptable internal consistency (Cronbach's a=.77)[7].

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v It should be noted that since the conclusion of this study, a new (FY 2016) version of the HSKI-C Monitoring Protocol was released to reflect the revised HSPPS.

Early Childhood Work Environment Survey (ECWES)/Early Childhood Job Satisfaction Survey (ECJSS)[8]. Numerous aspects of the child care partners' organizational climate including collegiality, innovativeness, and opportunities for professional growth were assessed through the *ECWES* and the *ECJSS*. At both baseline and follow-up, Family Support Specialists employed by ELV distributed the survey to staff in the center-based programs.[vi] The surveys were completed by provider staff and returned to the Family Support Specialists. The *ECWES* and the *ECJSS* provide relevant, valid, and reliable information about the organizational climate and job satisfaction of center-based programs. The *ECWES* has excellent internal consistency (Cronbach's a=.93–.95) and the *ECJSS* has good internal consistency (Cronbach's a = .81). Although the two instruments measure similar constructs, the test developers report generally moderate levels of correlations between the measures, suggesting that they measure distinct constructs.

Classroom Assessment Scoring System (*CLASS*)[10, 11]. Classroom quality was measured using the *Classroom Assessment Scoring System (CLASS)*. *CLASS* is an observation-based instrument that assesses how teachers engage and relate to young children and provide learning opportunities within activities and routines. Either the infant or the toddler version of the *CLASS* was used based on the ages of a *majority* of the children in the classroom or home-based setting.[vii] Certified assessors observed classrooms and home-based settings and rated the teachers' practices. At baseline, assessors from an independent organization (Clayton Early Learning) administered the *CLASS*. At follow-up, ELV EHS–CC classroom coaches performed the ratings. Although the coaches had a vested interest in the results, no coach was assigned a program they had worked in and all *CLASS* raters passed a rigorous certification process to achieve reliability. Though the *CLASS* is not typically used in family child care settings, assessors followed best practice guidelines for use in theses settings as outlined in a white paper on this subject.[12] The *CLASS Infant* and *CLASS Toddler* provide relevant, valid, and reliable information about teacher–child interactions within the range of formal and informal early childhood classroom settings serving infants and toddlers. The *CLASS Infant* has acceptable to excellent internal consistency (Cronbach's a=.73–.97)[13] and the *CLASS Toddler* has excellent internal consistency across its two domains (Cronbach's a = .89 for Emotional and Behavioral Support; a = .94 for Engaged Support for Learning)[14].

The Family Outcomes Survey[15]. *The Family Outcomes Survey* measures how parents and families benefit from participation in a Head Start/Early Head Start program. The survey indicators are derived from the outcomes identified in *The Head Start Parent, Family, and Community Engagement Framework* published by the Office of Head Start within the U.S. Department of Health and Human Services. The survey was only administered at follow-up because it was intended to measure the impact of the fully implemented model on perceptions of the benefits of the program. The *Family Outcomes Survey* provides relevant, valid, and reliable information about families' satisfaction with program services. The *Family Outcomes Survey* has acceptable to excellent internal consistency (Cronbach's a=.72–.92)[16].

[vi] Only staff from center-based programs participated in the survey because there was not an analogous survey available for home-based settings.

[vii] The publisher of the *CLASS* designates children 6 weeks to 18 months as infants and children approximately 15 to 36 months old as toddlers.

RESULTS

Understanding the Findings from this Report

The sections below present the changes that were recorded from baseline to follow-up using the different measures. The effect size and the statistical significance for each measure are presented so the reader can determine both the magnitude of the change and the level of statistical confidence in the finding. Effect sizes comparing changes in mean scores from baseline and follow-up are reported in terms of Cohen's d where .20 represents a small effect size, .50 is moderate, .80 is large, and 1.30 is very large.[17] Effect sizes for analyses examining changes in dichotomous variables are reported in terms of Cramer's phi (φ) where .10 represents a small effect size, .30 is moderate, and .50 is large. Statistical significance is reported using $p \leq .05$ as the threshold for significance and $p \leq .10$ as the threshold for a trend in significance. Additionally, to put the findings in context, averages from norming samples or large-scale studies are provided if available. The inclusion of these comparison data allows for a better understanding of the relative capacity and quality of the child care provider partners both before and after the study period.

There are a few points to keep in mind when considering the findings presented below.[viii] First, due to budgetary and logistical constraints, the research design for this project is a simple pre-post study. This research design makes it difficult to attribute the changes in the measures specifically to the ELV intervention. Second, although every effort was made to measure changes at the individual level (i.e., comparing Program A at baseline to Program A at follow-up), in some cases this was not possible and alternate methods of analysis were used (see the workplace environment and classroom quality results sections below for a more detailed discussion). Third, it is important to note that the ELV EHS–CC Partnership model was still in the early stages of implementation during the follow-up assessment. Given the intensity of the start-up phase and the relatively short amount of time working with the provider partners, it would be expected that the quality of the providers would continue to improve as ELV continues to build relationships with the partners and provides additional support over a longer period. (See **Appendix D** for a longer discussion of the study methodology.)

Progress Toward Compliance with Head Start Program Performance Standards

Chi-square analyses were performed to compare the percentage of programs who met a compliance item at baseline to the percentage that met the same compliance item at follow-up. Two of the child care partners participating in the model did not receive baseline interviews, as they joined the Partnership project after the initial interviews were completed. All 32 programs participating in the model during the study period (17 center-based and 15 family child care programs) completed follow-up interviews. Key results are described in the sections below including:

- Overall compliance (aggregate measure),

[viii] See Appendix D for a thorough discussion of study limitations.
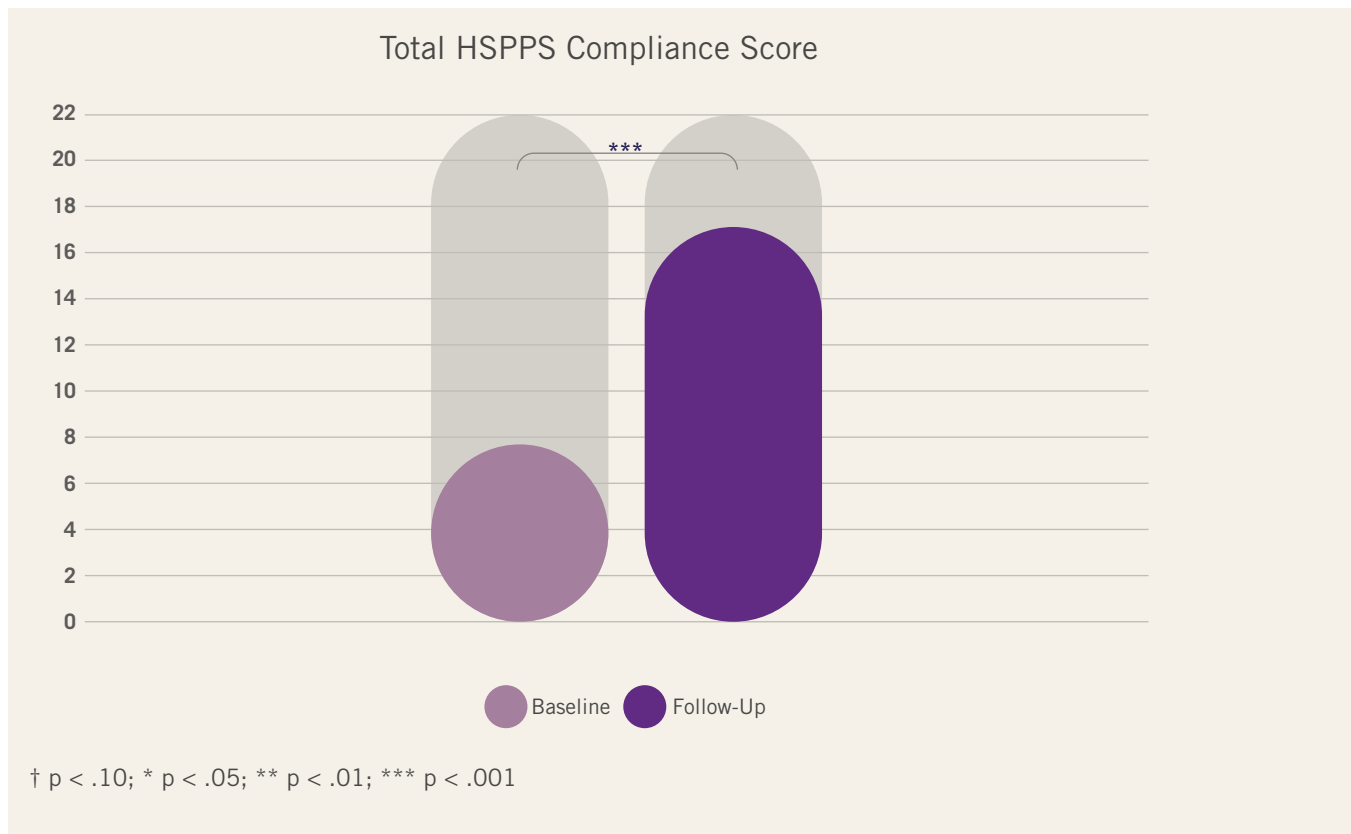
- Recordkeeping,

- Comprehensive services,

- Business foundations,

- Program governance and leadership,

- Teacher compensation, and

- Interagency coordination.

Table 1 of **Appendix E** provides the full set of results.

**Overall Compliance.** To monitor general progress toward compliance with the HSPPS, 22 items from the interview were summed into a composite score[ix]. Programs received one point for each item that was scored "yes" (staff salaries were re-coded for this purpose and scored as "yes" if the average annual salary was reported to be $25,000 or more, and the interagency agreements item was scored as "yes" if either informal coordination or formal agreements were in place). As can be seen in **Figure 2.1**, there was a significant increase in the average number of items on which programs were compliant at follow-up ($M = 7.5$; range = 2.0–17.0), compared to baseline ($M = 17.1$; range: 11.0–21.0), with a very large effect size ($d = 2.53$).

Figure 2.1 Total HSPPS Compliance Scores at Baseline and Follow-up

Total HSPPS Compliance Score

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Baseline   Follow-Up

† p < .10; * p < .05; ** p < .01; *** p < .001

[ix] Although this measure has not been validated, summing the items into a composite score seemed a useful indicator of the overall extent of programs' compliance to the HSPPS.

Figure 2.2 Percent of Programs Using Recordkeeping Tools

Recordkeeping

† p < .10; * p < .05; ** p < .01; *** p < .001
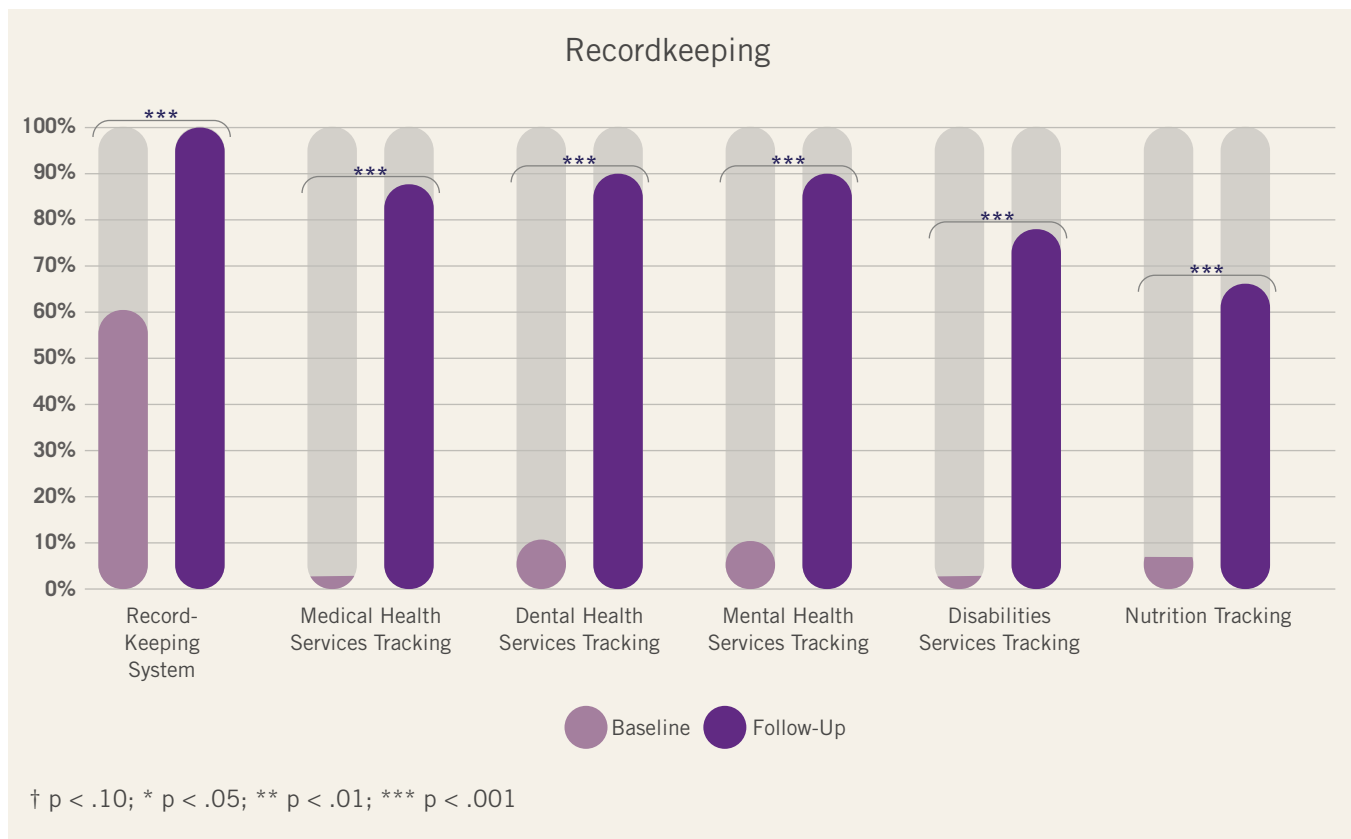
Recordkeeping. At the beginning of the grant, only 60 percent of the child care providers had a recordkeeping system of any kind, with few providers tracking the key health services required by the HSPPS. As seen in **Figure 2.2**, providers significantly increased their use of tracking systems with large effect sizes for health (φ=.78), dental (φ=.87), mental health (φ=.81), disabilities (φ=.76), and nutrition services (φ=.61). By follow-up, every provider was implementing a recordkeeping system and a large percentage of providers were tracking each of the key health areas required by the HSPPS. The large and statistically significant increases for each of the recordkeeping areas were likely due to providers' access to and training on the *Alliance CORE*™ child management system.

Comprehensive Services. A distinguishing feature of the Head Start program is the requirement to provide comprehensive services for children and families (e.g., services that support family education and engagement, mental health, and school readiness). **Figure 2.3** shows changes in comprehensive service provision from baseline to follow-up. Although many child care partners reported providing parent education and engagement opportunities at baseline, all partners were offering these types of experiences by the follow-up interview. Changes from baseline to follow-up were statistically significant in both areas with moderate effect sizes (φ=.43 for parent education and φ=.45 for parent engagement). Between baseline and follow-up, significant changes with moderate effect sizes were found in the provision of mental health supports, such as staff and parent education (φ=.45), activities supporting children's mental wellness (φ=.48), and on-site mental health consultation (φ=.37). Regarding school readiness

Figure 2.3 Percent of Programs Providing Comprehensive Services

Comprehensive Services

† p < .10; * p < .05; ** p < .01; *** p < .001
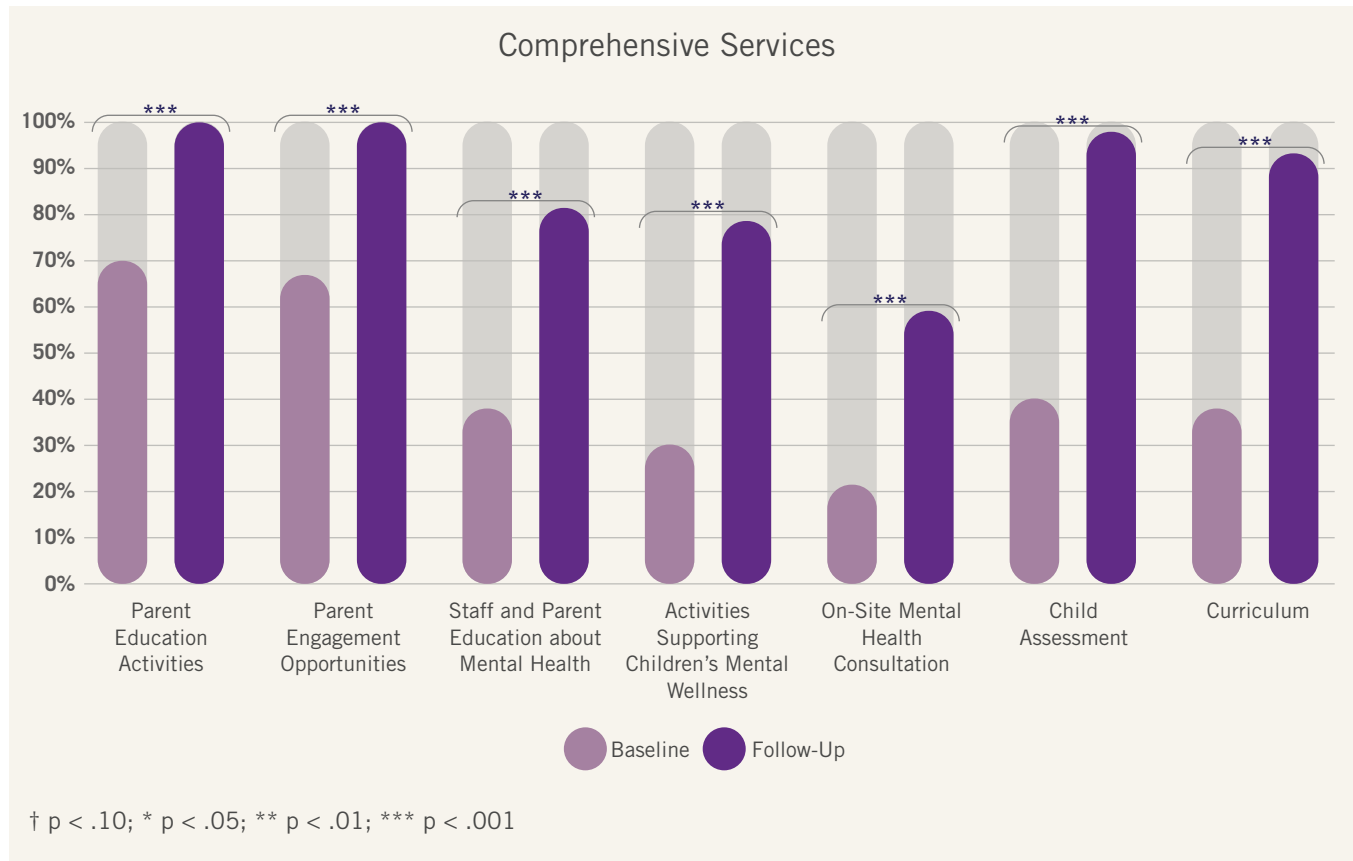
services, fewer than half of child care partners used child assessment or a curriculum in their infant and toddler classrooms at baseline. By follow-up, nearly all providers were implementing them to support children's development and learning, representing large, statistically significant changes in both areas (φ=.62 for child assessment and φ=.60 for curriculum).

Business Foundations. There were significant improvements in the business operations of the child care providers over the course of the EHS–CC Partnership grant (see **Figure 2.4**). Most notably, significantly more child care providers engaged in planning efforts (i.e., developing a business or strategic plan) with a moderate effect size (φ=.49). Although not statistically significant, more providers reported having an annual report, having an employee handbook, and conducting employee criminal background checks at follow-up. It is important to note that there was a high percentage of providers with an employee handbook and conducting background checks at baseline, which may explain why the increase was not significant at follow-up.

Program Governance and Leadership. Although not statistically significant, there were increases in the percentage of child care partners that reported having a governing board to whom they are accountable and a parent committee that is involved in program decision making (see **Figure 2.5**). In addition, initially, fewer than half of the center directors or family child care owners had received leadership or management training. This percentage increased to 75 percent by follow-up, a statistically significant change representing a moderate effect size (φ=.35).

Figure 2.4 Percent of Programs Engaging in Specific Business Practices

Business Foundations

Baseline | Follow-Up

† p < .10; * p < .05; ** p < .01; *** p < .001
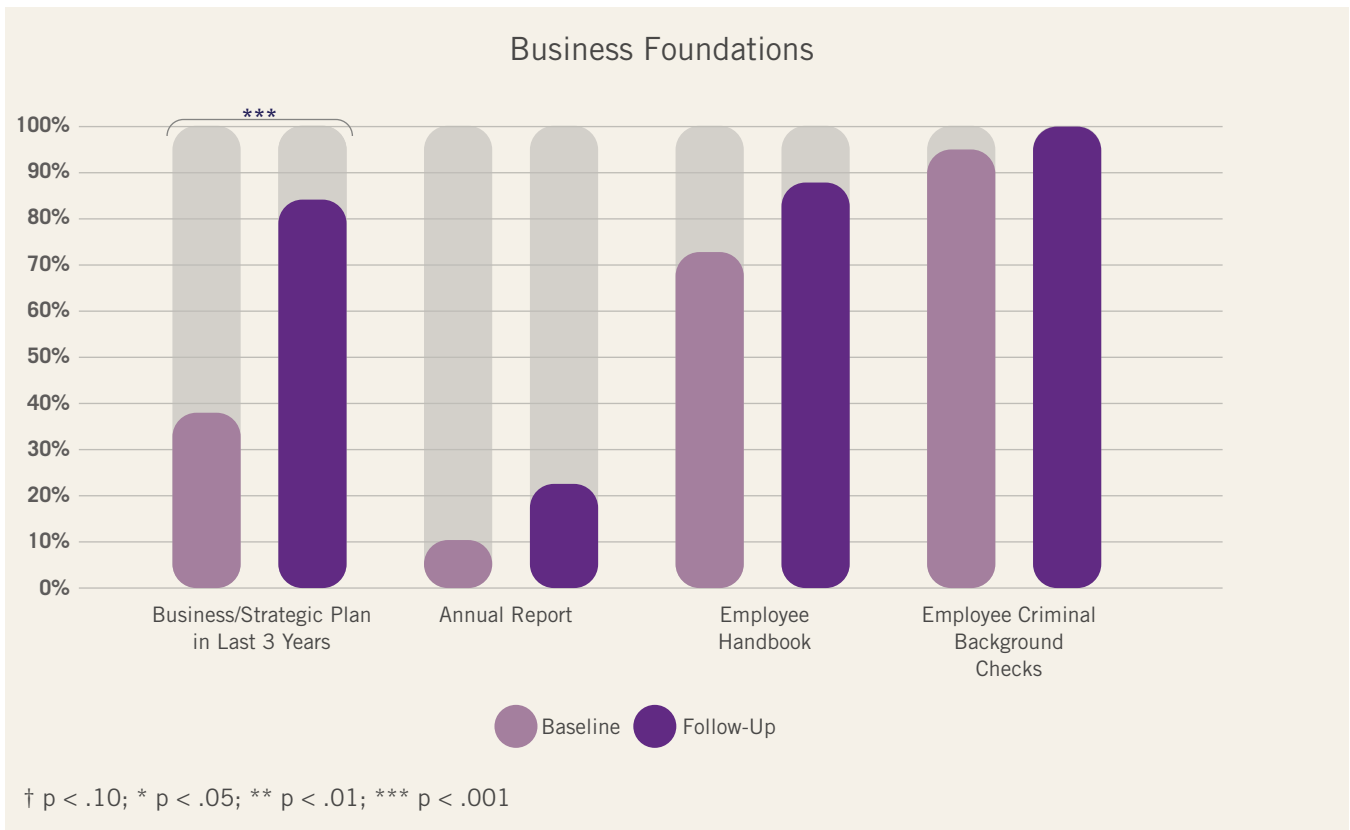
Figure 2.5 Percent of Programs Engaging in Governance and Leadership Practices

Governance & Leadership

Baseline | Follow-Up

† p < .10; * p < .05; ** p < .01; *** p < .001
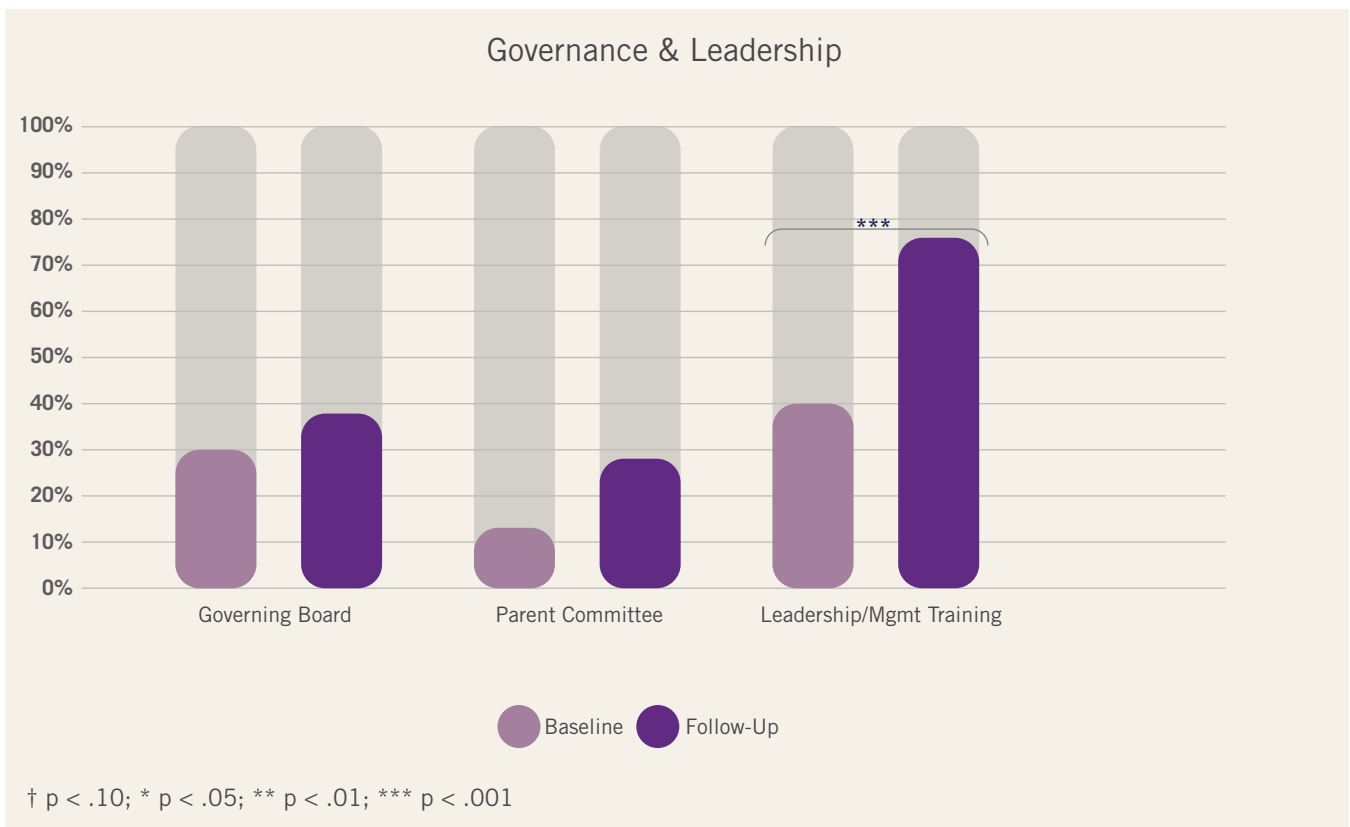
**Figure 2.6** Percent of Programs with Varying Levels of Full-Time Teacher Salaries
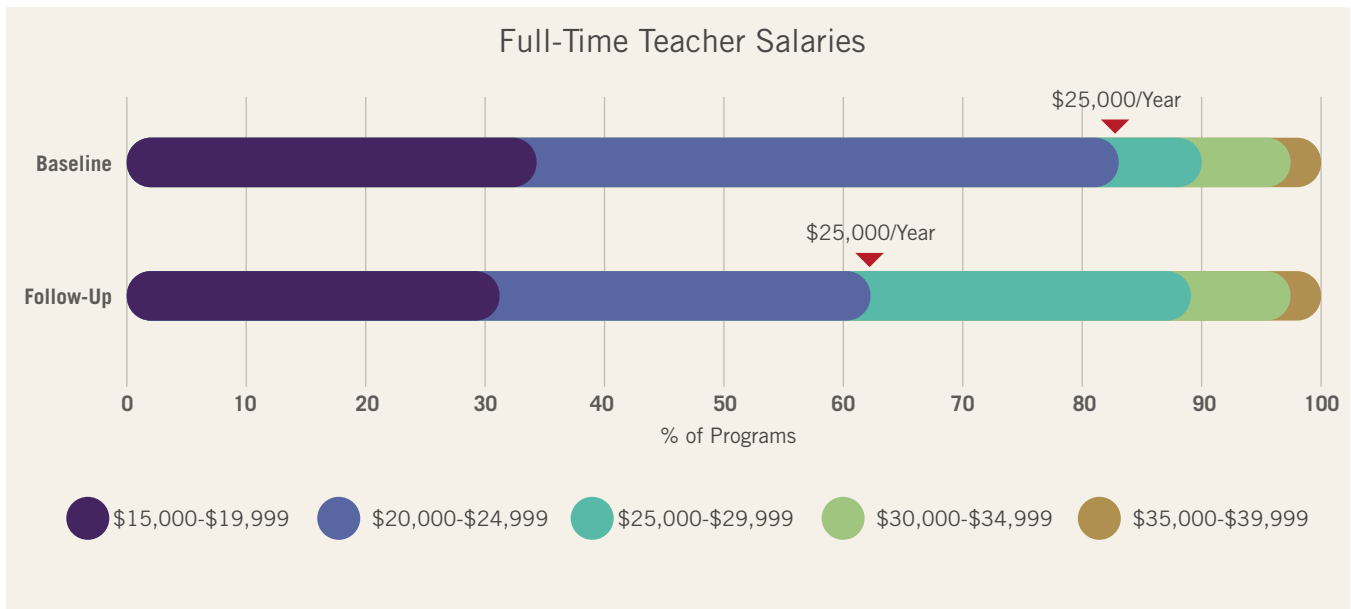
Teacher Compensation. At baseline, only 16.7 percent of programs reported full-time teacher salaries of more than $25,000 per year (see **Figure 2.6**). At follow-up, this percentage more than doubled to 37.4 percent. This increase is most likely due to the additional per child funding allocation available through the EHS–CC Partnership grant and the business planning supported by the ELV Quality Improvement Specialist. The result was a statistically significant increase in the percentage of child care partners offering higher average annual salaries to full-time teachers (less than $25,000 versus $25,000 or more; small effect size, φ=.23). It should be noted that this item applied to all teachers within a program, not just those in classrooms receiving EHS funding.

Interagency Coordination. An important responsibility of each provider of Head Start services is to reach out to local social service agencies and work to connect Head Start children and families to services like income supports, housing, transportation, and other local community services. This important responsibility is accomplished by coordinating either formally through an MOU with social service agencies or by forming less formal referral processes. At baseline, 67 percent of child care partners in the model did not engage in any formal partnerships or informal coordination with other agencies (see **Figure 2.7**). However, by follow-up, this percentage decreased significantly to only six percent (large effect size, φ=.63). The number of providers with at least one informal agreement significantly increased from 17 percent to 59 percent, representing a moderate effect (φ=.44). The number of providers with at least one formal relationship with a community agency significantly increased from 17 percent to 41 percent, representing a small effect (φ=.26).

Overall, initial interviews revealed that there were many gaps in compliance at baseline. However, these gaps were significantly narrowed by the follow-up interview period. Results from the modified HSPPS monitoring protocol indicate significant improvement in foundational business practices such as recordkeeping, developing a business strategic plan, participat-

Figure 2.7 Percent of Programs Engaging in Interagency Coordination

Baseline

Follow-Up

17%
17%
66%

6%
41%
59%

● No Coordination   ● Informal Agreements   ● Formal Partnerships
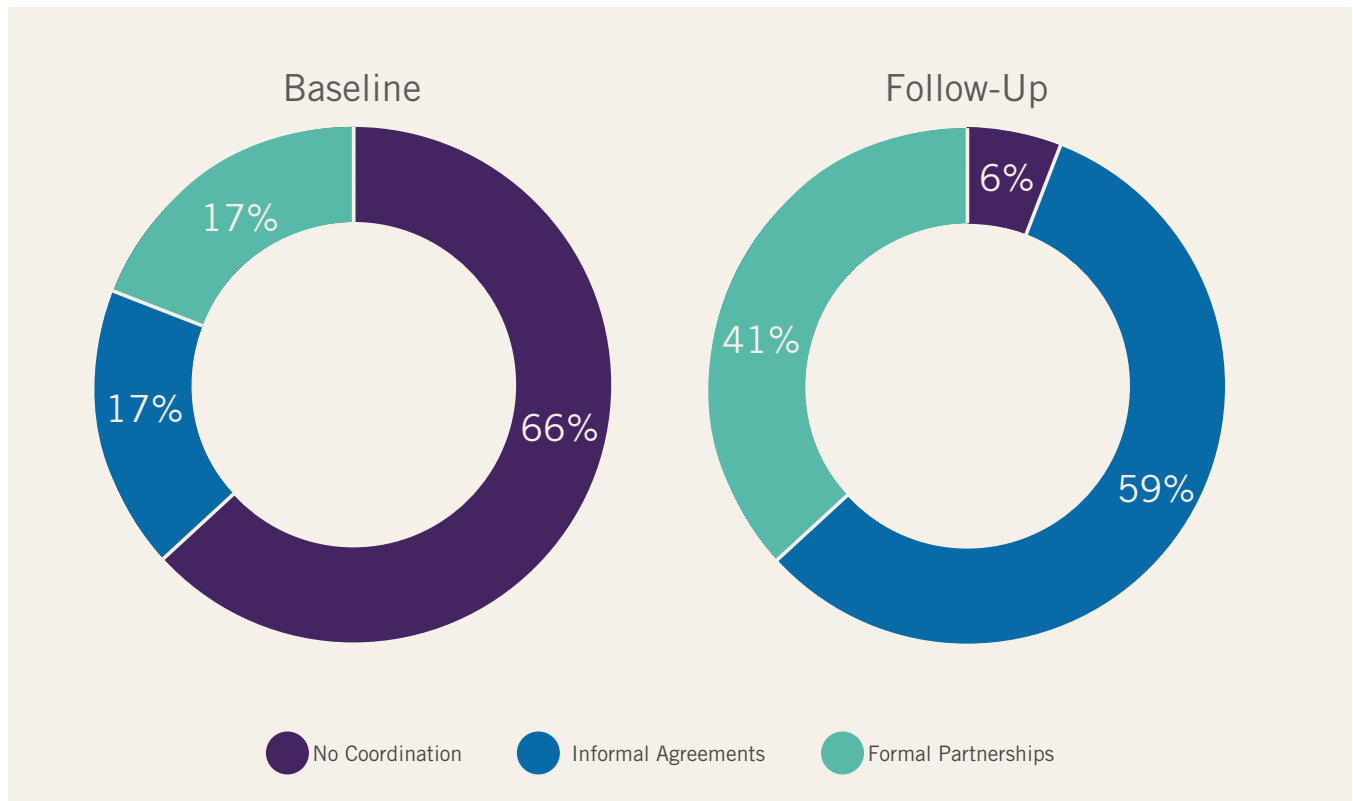
ing in leadership and management training, and increasing teacher salaries. In addition, the provision and tracking of comprehensive services significantly increased, supported by the development of collaborative relationships with local social services agencies. Areas in which significant change was not seen include providers' use of annual reports, employee handbooks, governing boards, parent committees, and employee background checks (although this area was very high baseline).

Business and Professional Practices

Program Administration Scale. The *PAS* was administered to the 17 center-based providers participating in the ELV EHS–CC Partnership model at baseline and follow-up. This measure consists of 25 indicators organized into 10 sub-areas[x], with possible values ranging from 1 to 7 (1 = *Inadequate*; 3 = *Minimal*; 5 = *Good*; 7 = *Excellent*). The sub-areas include:

- human resources development,
- personnel cost and allocation,
- center operations,
- child assessment,
- fiscal management,

[x] Because the 10 subscales are used only as convenient headings for clustering items and not as separate indicators of organizational effectiveness, mean scores were not calculated for subscales.

- program planning and evaluation,

- family partnerships,

- marketing and public relations,

- technology, and

- staff qualifications.

It should be noted that all data reflect the entire center rather than just the classrooms receiving EHS funding. **Figures 3.1–3.4** below and **Tables 2** and **3** in **Appendix E** provide paired-samples *t*-tests results comparing baseline and follow-up, as well as comparisons to a large-scale norming sample[xi, 18] using independent-samples t-tests.

Overall PAS Scores. Programs made significant improvement in their overall *PAS* scores from baseline to follow-up, with a very large effect size ($d = 2.07$). At baseline, the centers averaged a score of 2.46, which falls below the threshold of 3.00 which is considered a "minimal" level of quality. In fact, at baseline, only one program averaged *above* 3.00 across the measured indicators. At follow-up, the average score of the centers was 3.85, which was a statistically

**Figure 3.1** Overall PAS Scores at Baseline and Follow-Up
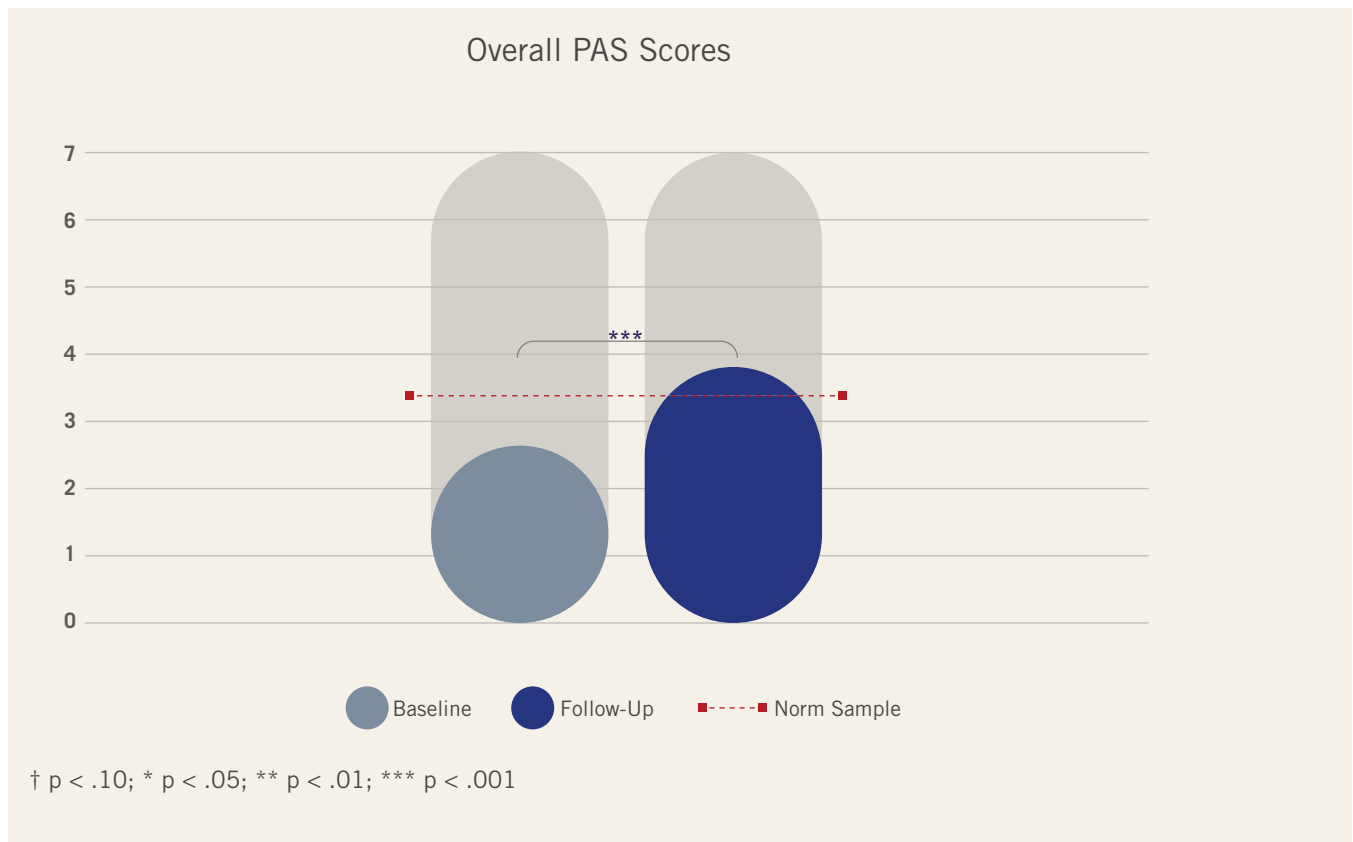
† p < .10; * p < .05; ** p < .01; *** p < .001

significant increase and no providers fell *below* a 3.00. Moreover, the overall average *PAS* score for ELV providers was significantly lower than the norm sample at baseline. By follow-up, ELV providers had closed the gap and had scores that mirrored the norm sample (i.e., not statistically different than the norm sample; see **Figure 3.1** and **Table 3** in **Appendix E**). Results suggest a significant improvement in business and professional practices for center-based programs after participation in the first year of the ELV intervention.

PAS Item Scores.

Human Resources Development Item Scores: This area is measured by examining the staff orientation process; the methods for staff supervision and performance appraisal; and staff development. Child care programs made significant gains in all areas of Human Resources Development. There was a very large effect size on improvements to Staff Orientation ($d = 1.71$), a large effect size for the improvements to Supervision and Performance Appraisal ($d = .93$), and a moderate effect size for improvements to Staff Development ($d = .70$). At baseline, the average scores for ELV providers on the Human Resources Development items were all significantly below national averages. By follow-up, the providers had again closed the gap, with scores not significantly different than the norm sample for Performance Appraisal and Staff Development and significantly exceeding the norm sample for Staff Orientation (see **Figure 3.2** and **Table 3** in **Appendix E**). Taken together, these results suggest that providers made significant progress in supporting the ongoing professional growth and development of their staff.

Figure 3.2 PAS Item Scores at Baseline and Follow-Up

† p < .10; * p < .05; ** p < .01; *** p < .001
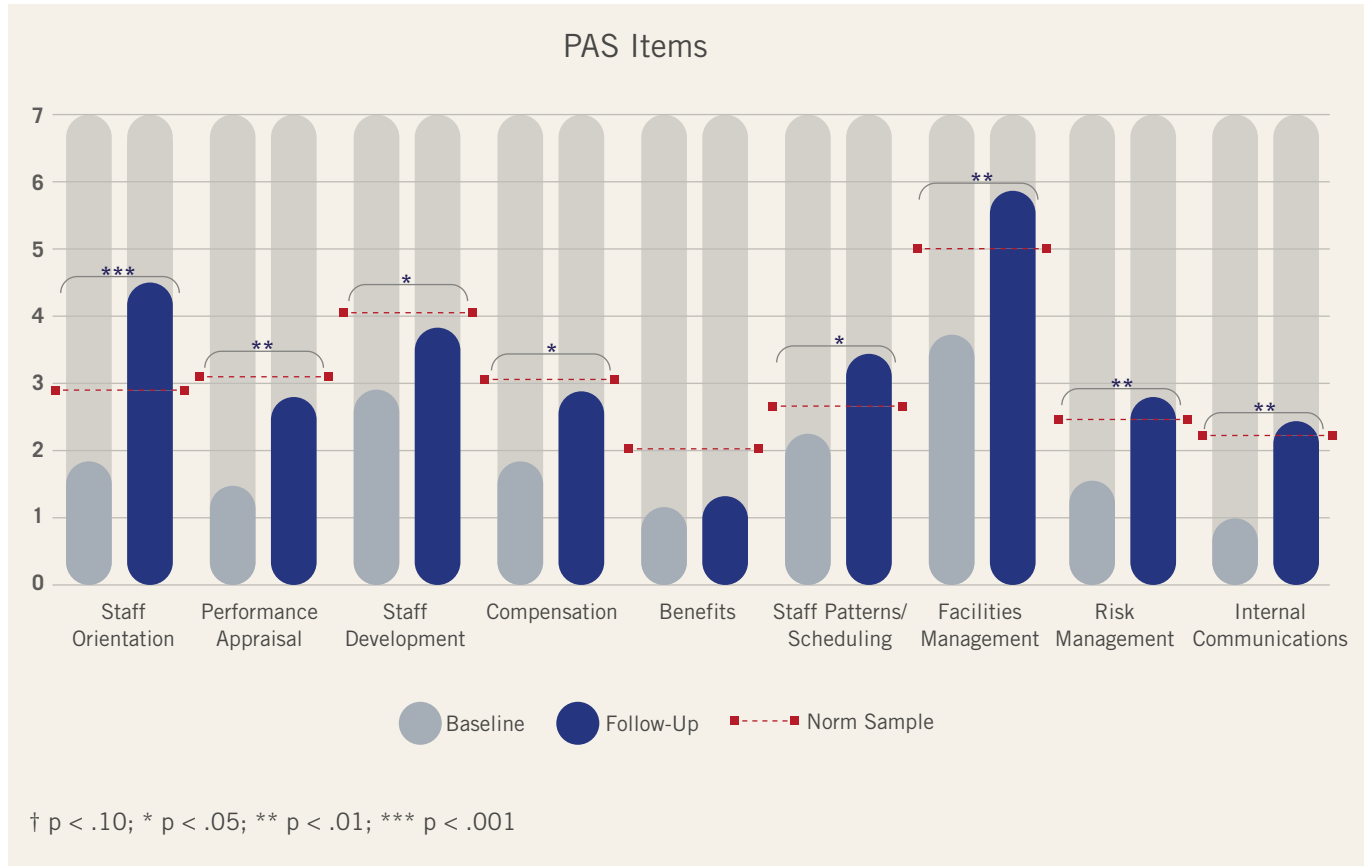
Personnel Cost and Allocation Item Scores: Personnel Cost and Allocation is measured by examining each center's compensation, benefits, staffing patterns and scheduling. Unlike the compensation variable measured in the HSPPS protocol (which measured actual compensation levels) the *PAS* measured the presence of a written salary scale, salary parity across similar positions within and outside the organization, the frequency of salary increases, and the benefits provided. Staffing patterns and scheduling focused on areas like paid planning and preparation time, the clarity and quality of staffing plans, and appropriate staffing to maintain the required ratios. Programs made significant gains in the areas of compensation and staffing patterns and scheduling. Effect sizes were medium for both areas ($d = .74$ and $.52$, respectively). Although there was a slight increase in the benefits score, it was not statistically significant. At baseline, compensation for ELV providers was significantly below the norm sample, though by follow-up, the ELV providers were approaching the norm sample with no significant differences. Benefits scores were significantly below norm sample levels at both baseline and follow-up, and Staffing Patterns and Scheduling scores were not significantly different from norm sample scores at either time point (see **Figure 3.2** and **Table 3** in **Appendix E**). These findings suggest that providers were able to make changes that better enable teachers to engage in high-quality teaching practices (e.g., providing paid planning time and better ratios) and increase their compensation. However, they were not able to make gains in other areas that provide more long-term supports or require additional external resources (e.g., contracting with a health insurance or retirement plan provider).

Center Operations Item Scores: The *PAS* measures center operations using items that focus on facilities management (e.g., safe facility maintained regularly), risk management (e.g., emergency procedures for both natural and medical emergencies), and internal communications (e.g., staff meetings, dispute resolution, etc.). Significant changes were found from baseline to follow-up in all areas of Center Operations. There was a very large effect size for Facilities Management ($d = 1.05$) and Internal Communications ($d = 1.11$), as well as a large effect size for Risk Management ($d = .97$). At baseline, ELV provider scores were significantly below norm sample averages on all these items. By follow-up, these gaps had diminished with no significant differences observed (see **Figure 3.2** and **Table 3** in **Appendix E**). Overall, providers significantly improved the day-to-day operations of their businesses to levels consistent with norm sample averages.

Child Assessment Item Scores: The *PAS* child assessment items measure the screening and identification of children with special needs and formative assessment of child development and learning. Programs made significant progress in utilizing both types of child assessment with large effect sizes in the areas of Screening ($d = 1.01$) and Assessment in Support of Learning ($d = 1.25$). At baseline, scores in both these areas were significantly below norm sample averages. By follow-up, ELV provider scores were not significantly different than the norm sample averages (see **Figure 3.3** and **Table 3** in **Appendix E**). These results suggest that providers improved their capacity to determine the learning and development needs of children in their program, closing the initial gaps between the ELV sample and norm sample averages.

Fiscal Management Item Scores: The *PAS* measures fiscal management by examining program budget planning processes and accounting practices. There was a statistically significant increase in Budget Planning and a trend for an increase in Accounting Practices, with moderate

effect sizes ($d = .63$ and $.50$, respectively). ELV provider scores did not differ from norm sample averages at either baseline or follow-up (likely due to the relatively large degree of variation within the norm sample averages; see **Figure 3.3** and **Table 3** in **Appendix E**). These findings indicate that providers made significant gains in their financial management practices, a key target of the ELV model.

Program Planning and Evaluation Item Scores: Program planning and evaluation were measured by *PAS* items that examine how staff and parents evaluate the program and an assessment of a program's strategic planning process, if any. The child care programs in the model showed significant gains from baseline to follow-up in both areas of Program Evaluation and Strategic Planning with moderate effect sizes observed in both areas ($d = 1.03$ and $.89$, respectively). ELV provider scores were lower than the norm sample average for Program Evaluation at baseline, but by follow-up the differences were not significant. There were no significant differences from the norm sample average in Strategic Planning at baseline or follow-up. (see **Figure 3.3** and **Table 3** in **Appendix E**). These results suggest significant improvements in program planning and evaluation efforts, with both areas at comparable levels to norm sample averages at follow-up.

Figure 3.3 PAS Item Scores at Baseline and Follow-Up (continued)

† p < .10; * p < .05; ** p < .01; *** p < .001
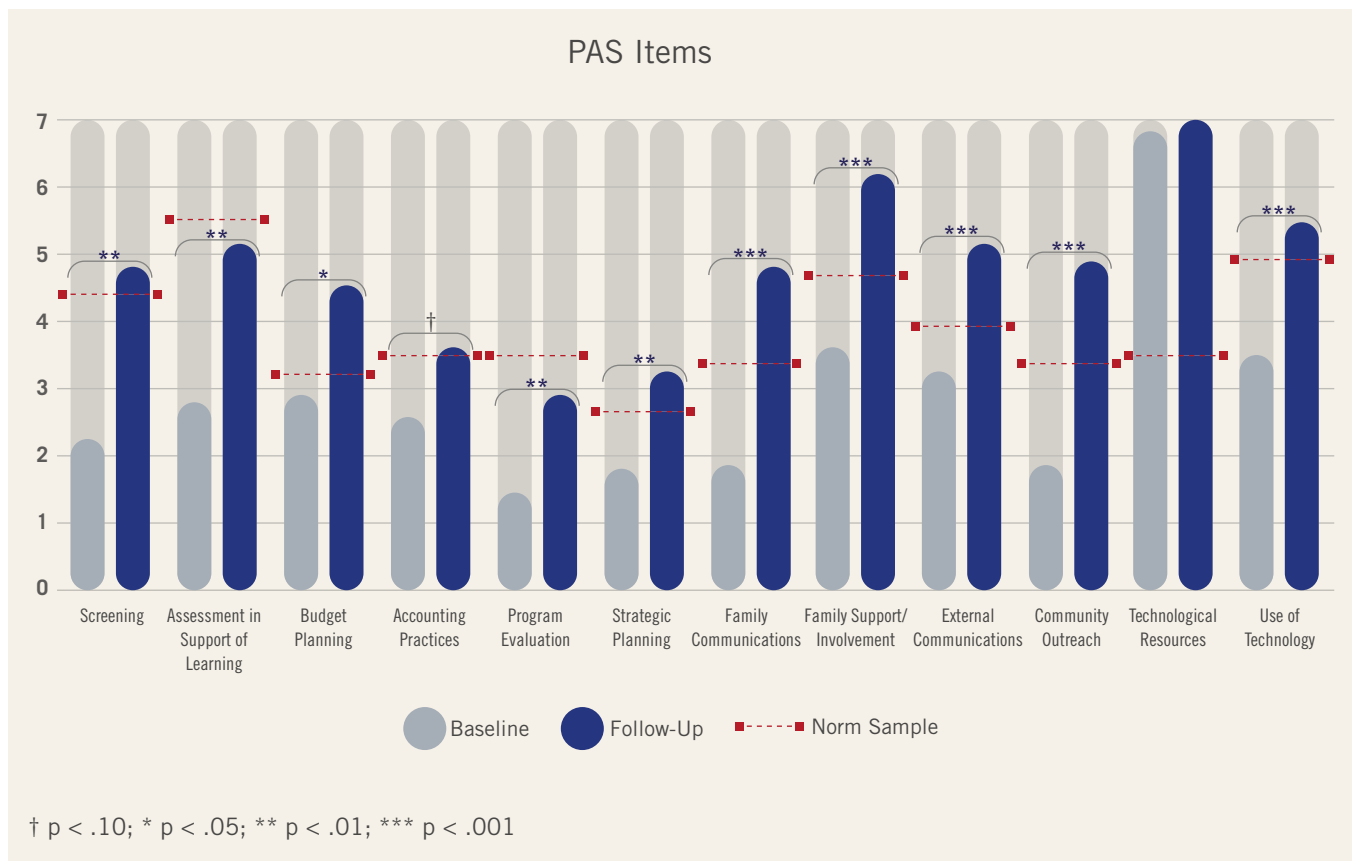
Family Partnerships Item Scores: Family partnerships were measured in the *PAS* by the frequency and nature of the communication with parents; sensitivity to families' home culture and language; and supports that are offered to families like adult classes and home visiting. Programs made significant gains in the areas of Family Communications and Family Support & Involvement, with very large effect sizes in both areas (d = 1.93 and 1.68). Whereas at baseline ELV provider scores were significantly below norm sample averages on both items, by follow-up provider scores had significantly surpassed norm sample averages (see **Figure 3.3** and **Table 3** in **Appendix E**). This indicates significant progress in family partnerships, notably surpassing norm sample averages at follow-up.

Marketing and Public Relations Item Scores: Marketing and Public Relations were measured by *PAS* items that assessed the external communication/public relations tools used by each program and the extent of the program's community outreach. Significant changes were observed in External Communications and Community Outreach from baseline to follow-up with very large effect sizes in both areas (d = 1.31 and 2.03). At baseline ELV provider scores were significantly below norm sample averages in both areas. By follow-up, ELV scores were significantly higher than norm sample averages (see **Figure 3.3** and **Table 3** in **Appendix E**). Results suggest significant improvement in marketing and public relations, going from below norm sample averages at baseline to above these benchmarks at follow-up.

Technology Item Scores: Technological capacity was measured within the *PAS* by staff access to computers, printers, and the Internet and the *use* of technology by administrators and staff. The child care programs in the ELV model showed significant progress in their use of technology with a very large effect size (d = 1.33). In contrast, there was not a statistically significant improvement in *access* to technological resources, which in part may be because this score at baseline was already exceptionally high. In fact, ELV provider scores around Technological Resources were significantly higher than norm sample averages at baseline (and follow-up). In contrast, ELV scores were significantly lower than norm sample averages in Use of Technology, but by follow-up provider scores were not significantly different than the norm sample average (see **Figure 3.3** and **Table 3** in **Appendix E**). This suggests that although gains were not made in the availability of technology, providers did change how they used technological resources, which may be connected to providers' access to and training on ELV's *Alliance CORE™* system.

Staff Qualifications Item Scores: Staff qualifications were measured within the *PAS* by examining the general education, specialized training, experience, and other characteristics of key staff in the program[xii]. It should be noted that scores on these items reflect the qualifications of the entire center staff (rather than just those in EHS classrooms). The only position in which significant gains were achieved was in the qualifications of the lead teacher, albeit with a small effect size (d = .47). Although qualifications for lead teachers were significantly below norm sample averages at both time points, the gains made by providers represent a change in the right direction.

[xii] In this measure, Lead Teacher is defined as "The individual with the highest professional qualifications assigned to teach a group of children and who is responsible for daily lesson planning, parent conferences, child assessment, and curriculum planning. A Teacher is a member of the teaching team who shares responsibility with the Lead Teacher for the care and education of an assigned group of children. An Assistant Teacher is a member of the teaching team assigned to a group of children who works under the direct supervision of the Lead Teacher and/or Teacher."

Figure 3.4 PAS Item Scores at Baseline and Follow-Up (continued)

Staff Qualifications

Legend: Baseline, Follow-Up, Norm Sample

† p < .10; * p < .05; ** p < .01; *** p < .001
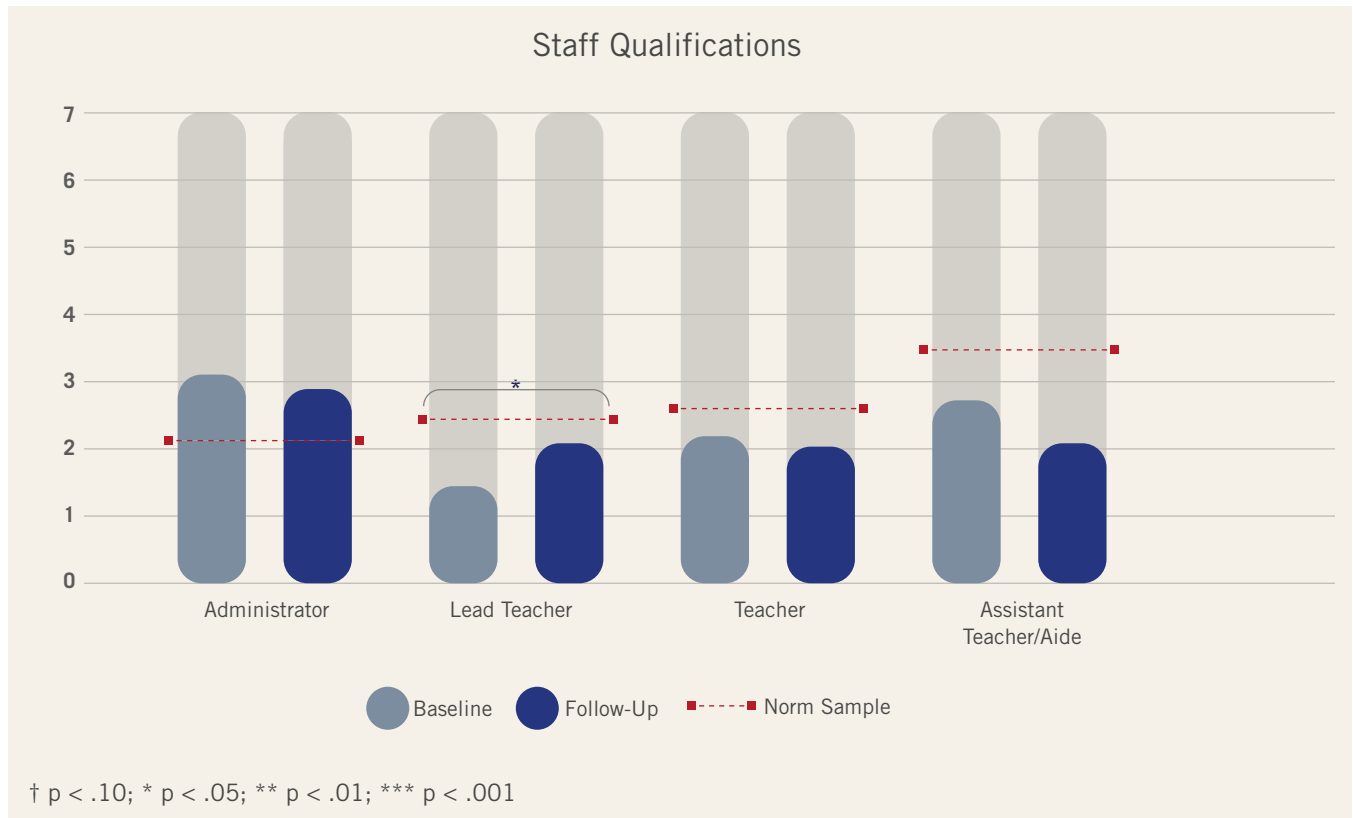
Administrator qualifications were significantly above norm sample averages at both baseline and follow-up. It is possible that administrators who were more qualified than usual may have been more likely to be ready and willing to participate in a relatively intensive intervention such as the Partnership model.

Although there were no significant differences from norm sample averages in qualifications for teachers and assistant teacher/aides at baseline, at follow-up these qualifications were significantly lower than norm sample averages (though not significantly lower than baseline; see **Figure 3.4** and **Table 3** in **Appendix E**). In understanding these findings, it is important to note that while the number of *lead teachers* stayed relatively constant (N = 94 at baseline, N = 86 at follow-up), the number of *teachers* substantially increased (N = 34 at baseline, N = 59 at follow-up) and the number of *assistant teachers* substantially decreased (N = 82 at baseline, N = 54 at follow-up). Since EHS standards call for 1:4 adult-to-child ratios, many assistants moved into a co-teacher role in order to staff a group of eight children with two qualified teachers. However, EHS qualifications are still far below what is required to move the score on the *PAS*. Thus, while many EHS teachers have received a significant amount of formal education and training on infant/toddler development and best practices during the course of the Partnership, it would take a few years of these activities to see movement on *PAS* scores (assuming low turnover rates).

Overall, providers made significant gains across the PAS in terms of progress from baseline to follow-up and closing gaps in areas in which they started out below norm sample averages. The

few exceptions to these global improvements were in the areas of staff benefits and qualifications. Change in these areas may require more time beyond the first year of implementation.

Business Administration Scale. The BAS was administered to the 15 family child care providers participating in the ELV EHS–CC Partnership model at baseline and follow-up. This measure includes 10 items, with possible values ranging from 1 to 7 (1 = *Inadequate*; 3 = *Minimal*; 5 = *Good*; 7 = *Excellent*). The items include:

- provider qualifications and professional development,
- income and benefits,
- work environment,
- fiscal management,
- recordkeeping,
- risk management,
- provider-parent communication,
- community resources,
- marketing and public relations, and
- the provider's capabilities as an employer of staff.

Figures 3.5 and **3.6** below and **Tables 4** and **5** in **Appendix E** provide paired-samples t-tests results comparing baseline and follow-up, as well as comparisons to a norm sample[xiii, 19] using independent-samples t-tests.

Figure 3.5 Overall BAS Scores at Baseline and Follow-up

† p < .10; * p < .05; ** p < .01; *** p < .001

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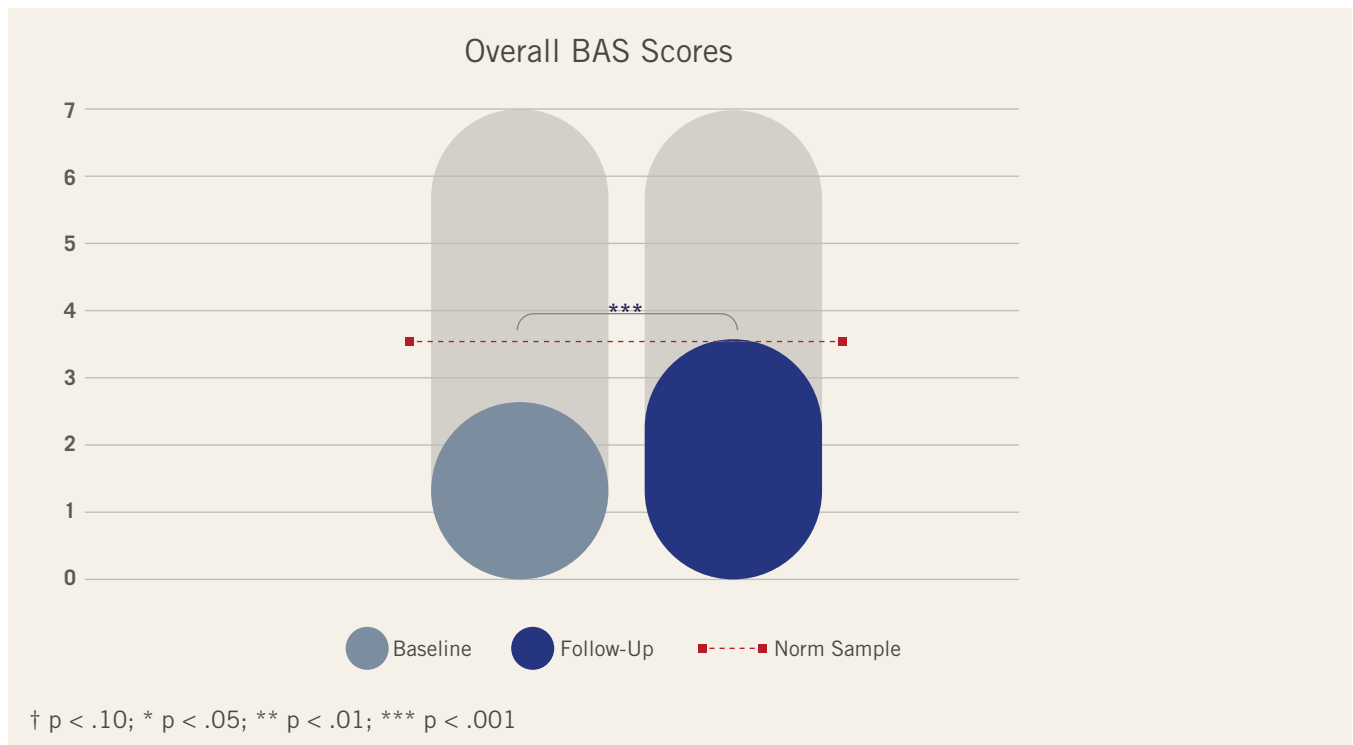
[xiii] The normative sample consisted of 83 family child care providers in four states.

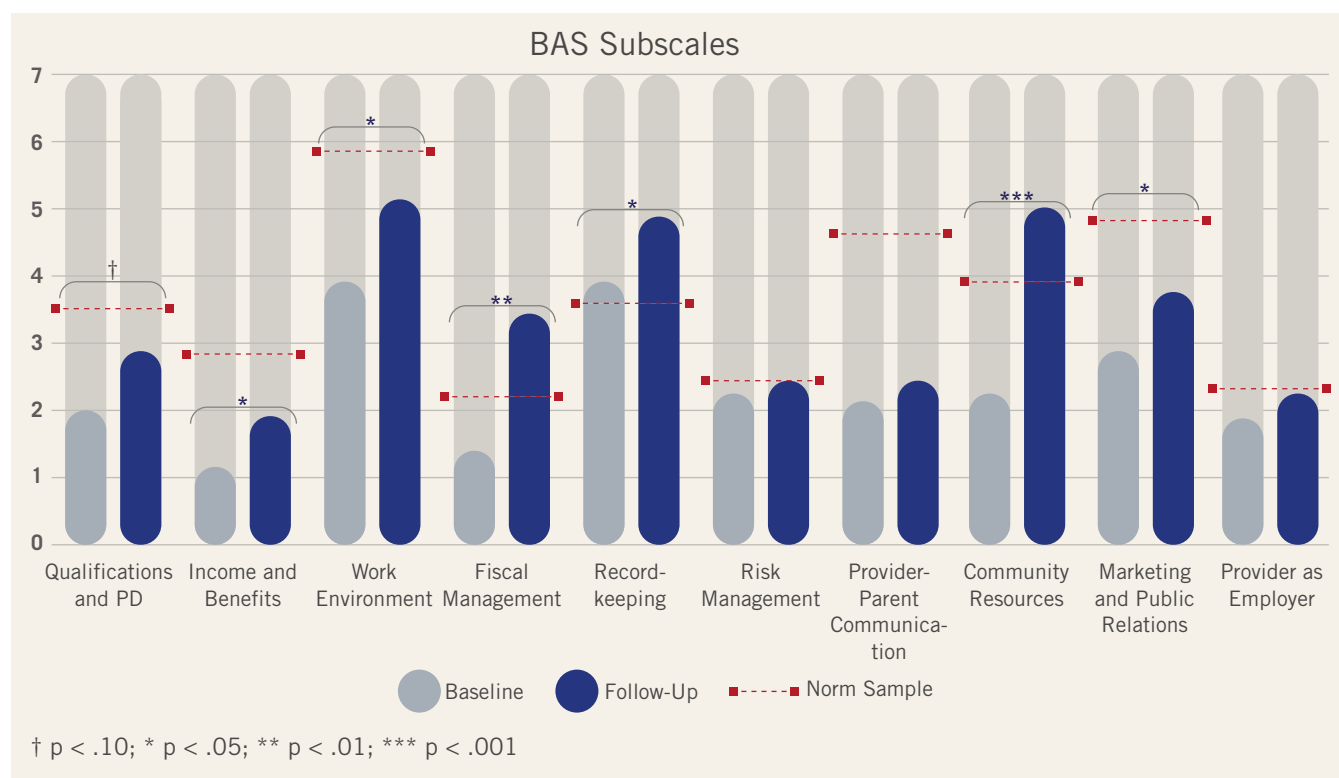**Figure 3.6** BAS Item Scores at Baseline and Follow-Up

BAS Subscales

† p < .10; * p < .05; ** p < .01; *** p < .001

Overall BAS Scores: On average, family child care providers in the ELV model made significant progress in their overall BAS ratings from baseline to follow-up, with a large effect size (d = .86). Family child care providers had an overall average *BAS* score of 2.41 at baseline compared to 3.47 at follow-up. Although the total average score of ELV providers at baseline was significantly lower than the norm sample of family child care providers, by follow-up this gap had been closed and no significant differences were observed (see **Table 5** in **Appendix E**).

BAS Item Scores: On average, family child care providers made significant gains across the *BAS* items. Follow-up scores on every item were higher than baseline scores. However, the increases on the Risk Management, Provider–Parent Communications, and Provider as Employer scales were substantively small and not statistically significant. Effect sizes were small for Qualifications and Professional Development (d = .43), Work Environment (d = .46), and Marketing and Public Relations (d = .47). Moderate effect sizes were observed for Income and Benefits (d = .54) and Recordkeeping (d = .65). There was a large effect size for Fiscal Management (d = .97) and a very large effect size for Community Resources (d = 1.44).

At baseline, ELV providers were below norm sample averages on the items of Qualifications and Professional Development, Income and Benefits, Work Environment, Provider–Parent Communication, Community Resources, and Marketing and Public Relations. Among these items at follow-up, ELV providers scored significantly higher than norm sample averages on Community Resources and had closed the gap in Qualifications and Professional Development and Work Environment. Scores remained significantly below measure norms for Income and Benefits, Provider–Parent Communication, and Marketing and Public Relations. At baseline, ELV provid-

er scores were not significantly different than norm sample averages for Fiscal Management, Recordkeeping, Risk Management, and Provider as Employer. All these items remained similar to norm sample levels at follow-up except for Fiscal Management, which was significantly higher than the norm sample at follow-up (See **Table 5** in **Appendix E**).

The areas in which the largest impacts were seen were Fiscal Management and Community Resources, where there were large and very large effect sizes, respectively, with follow-up scores surpassing those of the norm sample. The weakest area seemed to be Provider-Parent Communication, where no significant gains were made and follow-up levels remained well below norm sample averages. Overall, the results for family child care providers were not as robust as those observed for center-based providers.

Organizational Climate

Every center-based staff member in both EHS and non-EHS classrooms was asked to complete a work environment survey. At baseline, 62 classroom staff (e.g., teachers, assistant teachers; 47 of whom were in EHS-funded classrooms) and 15 program-level staff (e.g., directors, education coordinators, cooks, administrative assistants) took the survey. At follow-up, 67 classroom staff (28 of whom were in EHS-funded classrooms) and 18 program-level staff took the survey.

Of these 131 total individuals (77 at baseline and 85 at follow-up), only 31 participants took the survey at both baseline and follow-up, meaning that 100 individuals only took the survey at one timepoint (46 at baseline and 54 at follow-up). It is unknown how much of this uneven pattern of responses was due to job turnover and new hires and how much was due to individuals opting to complete the survey only once at either baseline or follow-up. Ideally each participant's responses would have been compared from baseline to follow-up using a paired-samples *t*-test. However, rather than lose more than half the survey data, all baseline and follow-up data were used, treating the two groups as independent samples. This method allows for the observation of patterns of change across the broader sample of program staff. However, results should be interpreted with appropriate caution as violating the non-independence assumption of the independent samples t-test can result in a greater probability of a Type I error (i.e., obtaining a "false positive" result). Additionally, it is possible that differences between baseline and follow-up may be due to variation between the two groups of respondents rather than to changes that occurred over the course of EHS–CC Partnership implementation). It should be noted that, as presented in **Table 6** in **Appendix E**, the baseline and follow-up samples were similar on all demographic measures. No statistically significant differences were found in respondents' age, gender, highest level of education, experience in early childhood, length of time in current position, program role, full- or part-time status, or county.

Early Childhood Work Environment Survey. The *Early Childhood Work Environment Survey* (*ECWES*) measures 10 areas of the work environment including:

- collegiality,

- professional growth,

- supervisor support,

- clarity,

- reward system,

- decision-making,

- goal consensus,

- task orientation,

- physical setting, and

- innovativeness.

Each of the 10 areas has 10 items that can be endorsed, with items summed to derive a sub-scale score ranging from 0 to 10. **Figure 4.1** below presents the results and **Tables 7** and **8** of **Appendix E** presents subscale means, *t*-test results, and comparisons to a large-scale norming sample.[20, xiv]

Figure 4.1 ECWES Subscale Scores

† p < .10; * p < .05; ** p < .01; *** p < .001

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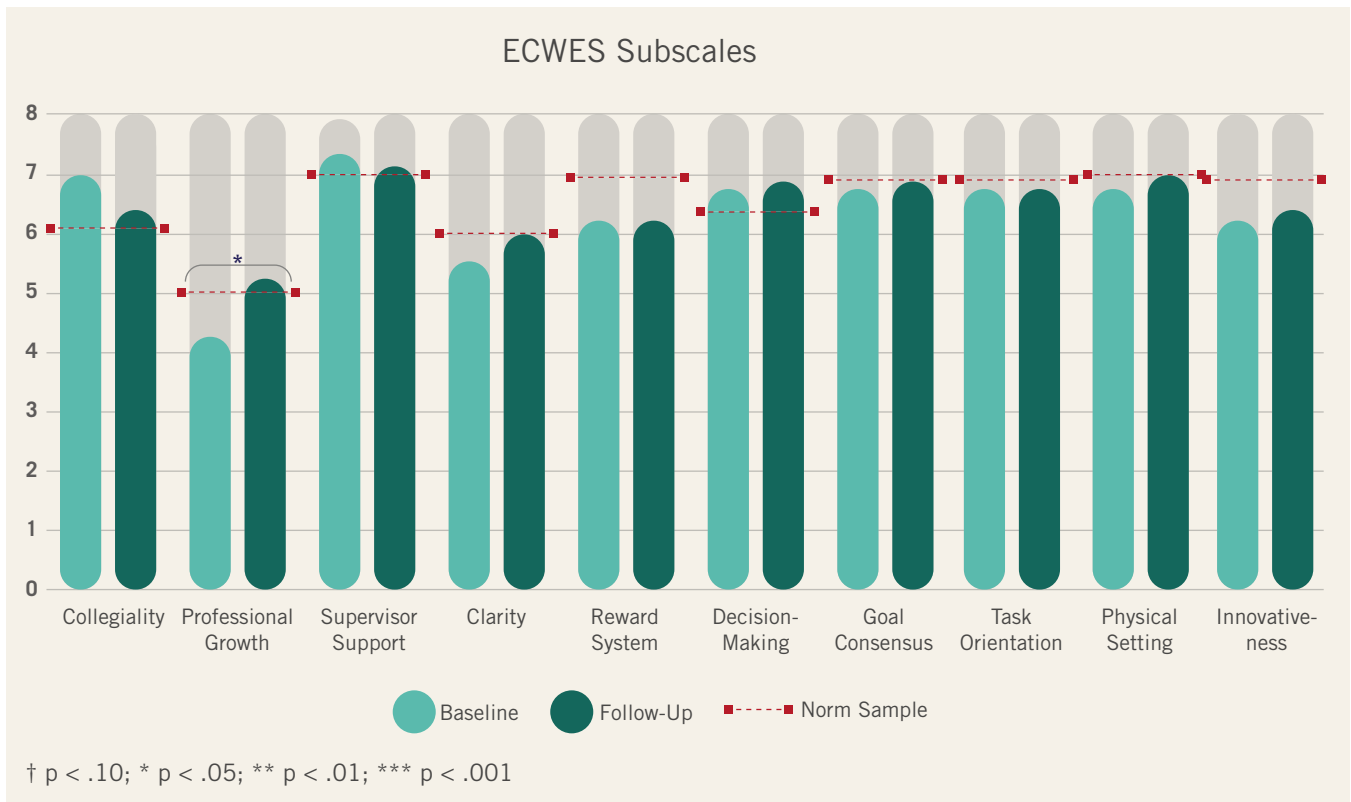
xiv The ECWES norming sample consisted of 3,980 early childhood administrators and teachers working in 363 public and private nonprofit and for-profit centers in 20 states.

ECWES Subscale Scores. There were no statistically significant changes from baseline to follow-up on the ECWES subscales, with the exception of the Professional Growth indicator. Staff working in child care centers reported significant increases in opportunities for professional growth, albeit with a small effect size ($d = .32$).

Although none of the other changes were statistically significant, most of the indicators increased slightly or remained the same (apart from Collegiality and Supervisor Support). The subscales of Professional Growth and Reward System were significantly lower than norm sample averages at baseline. By follow-up, the gap was closed in Professional Growth, but Reward System remained significantly lower than the norm sample average. Although Collegiality started out significantly higher than the norm sample average at baseline, by follow-up ELV provider scores were not significantly different than norm sample averages. The remainder of the subscales did not differ significantly from norm sample averages at baseline or follow up, with the exception of Decision Making, which was significantly higher than norm sample averages by follow-up (see **Table 8** in **Appendix E**).

Overall, not much change was seen in staff perceptions of workplace climate with the exception of Professional Growth. This finding is aligned with the ELV EHS–CC model as this subscale specifically measures the provision of on-site professional development; individualized learning plans to support teachers' growth; the use of coaches and/or mentors, and subsidizing expenses such as workshop fees, college tuition, and the cost of professional books and other teaching resources. The lack of significant findings in other areas may indicate that other elements of workplace climate may take more time to show demonstrable gains, or that these areas may require a more targeted intervention that is more closely tied to these goals.

Early Childhood Job Satisfaction Survey. The *Early Childhood Job Satisfaction Survey* (ECJSS) measures five key aspects of fulfillment in a job including:

- co-worker relations,
- supervisor relations,
- satisfaction with the work,
- working conditions, and
- pay and promotion opportunities.

The average value for each subscale has a possible range of 10 to 50. **Tables 9** and **10** in **Appendix E** presents subscale means, t-test results, and comparisons to a large-scale norm sample.[21, xv]

ECJSS Subscale Scores: The only trend for significant improvement in job satisfaction was in the Pay and Promotion Opportunities subscale. Although the effect size was small ($d = .31$), staff perceptions of pay and promotion were significantly higher than the norm sample average at follow-up (whereas this subscale was not significantly different from the norm sample average at baseline). No other statistically significant changes were observed from baseline to follow-up or in comparison to norm sample averages.

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xv The ECJSS norming sample consisted of 3,579 early child educators representing all 50 states and the District of Columbia.

Figure 4.2. ECJSS Subscale Scores

† p < .10; * p < .05; ** p < .01; *** p < .001
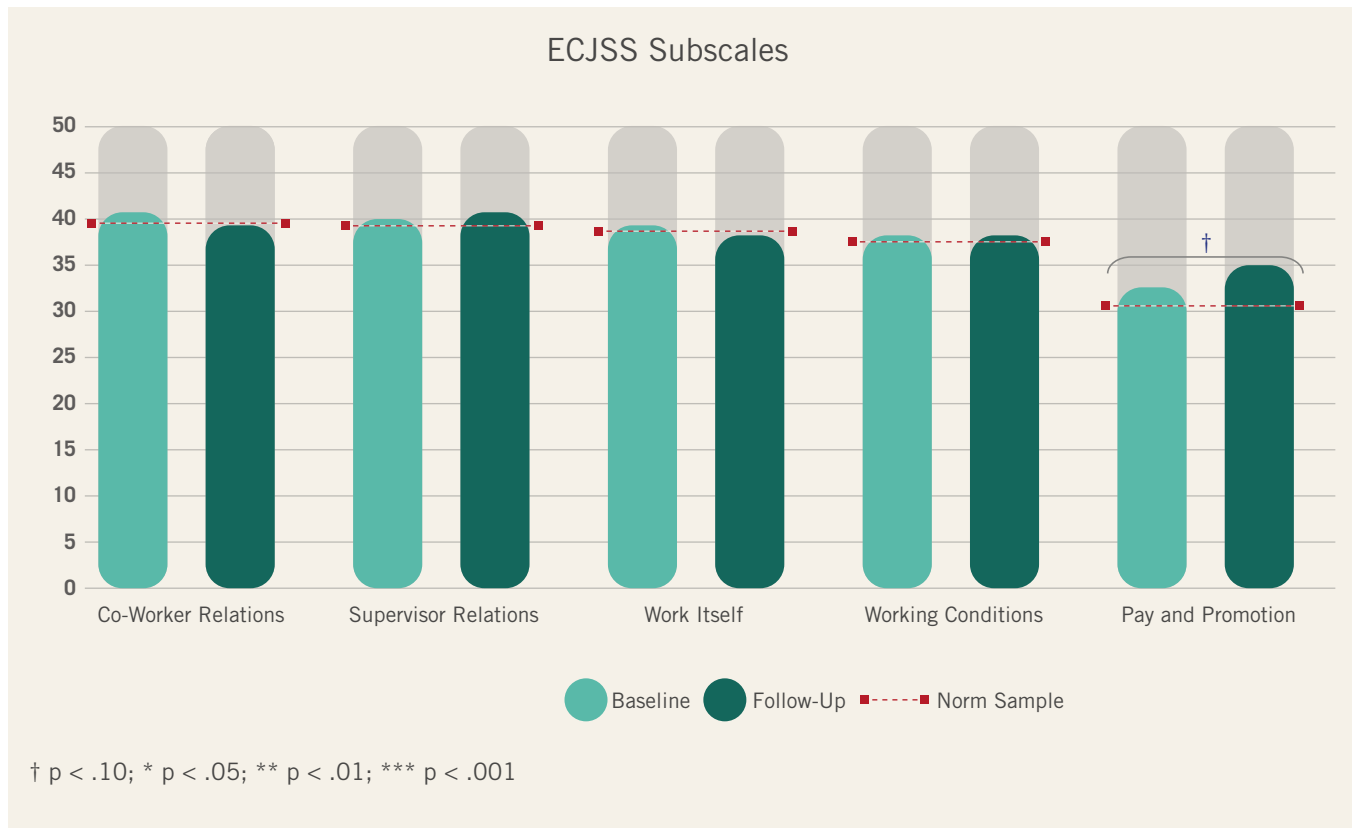
The trend for significance in Pay and Promotion is consistent with the HSPPS Monitoring Protocol findings that documented an increase in teacher salaries. Like the ECWES, the minimal progress observed in other areas may indicate that more time or a more targeted intervention might be necessary to see substantive change.

Classroom Quality

At baseline, the *Infant CLASS* and *Toddler CLASS* were administered as appropriate in 60 classrooms (25 infant and 35 toddler) across 30 child care programs. The follow-up assessment included 59 classrooms (15 infant and 44 toddler) in 32 child care programs. Only 46 classrooms (13 infant and 33 toddler) had data for both baseline and follow-up time points because: 1) Eleven classrooms were assessed with the infant version at baseline and the toddler version at follow-up because children aged out of the infant tool (and comparisons across tools is not possible); 2) Two programs joined the Partnership after baseline data had been collected; and 3) Three classrooms were dropped to accommodate new ratio/group size requirements.

Additionally, it is important to note that within the 46 classrooms that had baseline and follow-up data, 16 had different teachers present during the observations at baseline and follow-up (the remaining 30 classrooms had at least one teacher that was consistent from baseline to follow-up). Ideally, classrooms should be directly compared from baseline to follow-up with the same teaching staff present. However, it was often the case that even if a teacher was not in

the same classroom at both baseline and follow-up, she or he was present in another classroom at follow-up, thus capturing data about any changes in this individual's teaching practices over the course of EHS–CC implementation.

Given the constraints of the data sample, we opted to conduct t-tests treating the baseline and follow-up classrooms as independent samples. As mentioned previously, this method may increase the likelihood of Type I errors, so results should be interpreted with appropriate caution. Despite the limitations to this approach, this method allowed us to capture the entire sample (rather than a subset of classrooms and programs) and document the changes in quality experienced by the children in the classrooms (regardless of whether the same teaching staff were present).

Infant CLASS. The *Infant CLASS* consists of one domain, Responsive Caregiving, which is made up of four dimensions of teacher–child interactions:

- **Relational Climate:** how a provider builds emotional connections and shows respect to children in various ways such as making eye contact, showing affection, smiling and laughing, speaking in a calm voice, and avoiding irritation and other negative behaviors.
- **Teacher Sensitivity:** how a provider is attentive to infants' verbalizations, body language, and other cues, and consistently, quickly, and effectively responds.
- **Facilitated Exploration:** how a provider builds on the interests of the infants and provides intentional support that guides further engagement and promotes children's development.
- **Early Language Support:** how providers expose infants to language and encourage and expand on infants' communication.

Possible values on each dimension of the Responsive Caregiving domain range from 1 to 7. **Figure 5.1** presents the findings and *CLASS* validation study sample averages[23, xvi] and **Tables 11** and **12** in **Appendix E** includes subscale means and *t*-test results.

Infant CLASS, Responsive Caregiving Domain: The child care providers showed statistically significant improvement in the dimensions of Facilitated Exploration (large effect size, *d* = .86) and Early Language Support (moderate effect size, .76) from baseline to follow-up. Slight gains were also seen in the Relational Climate and Teacher Sensitivity domains, although these changes were not statistically significant. At baseline, ELV provider classrooms were not significantly different from validation study sample averages. By follow-up, scores on every dimension of Responsive Caregiving were significantly higher than the validation study sample average (See **Table 12** in **Appendix E**).

Infant CLASS scores of 3 to 5 are considered "mid-range" quality whereas scores of 6 to 7 are considered "high quality." Accordingly, at follow-up, ELV providers were, on average, approaching the "high-quality" range in the dimensions of Relational Climate (*M* = 5.79) and

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xvi The *Infant CLASS* validation study consisted of a pilot of 30 infant classrooms in Virginia.

Figure 5.1 *Infant CLASS, Responsive Caregiving Domain*

Infant CLASS Scores

Legend: Baseline, Follow-Up, Validation Study Average

† p < .10; * p < .05; ** p < .01; *** p < .001
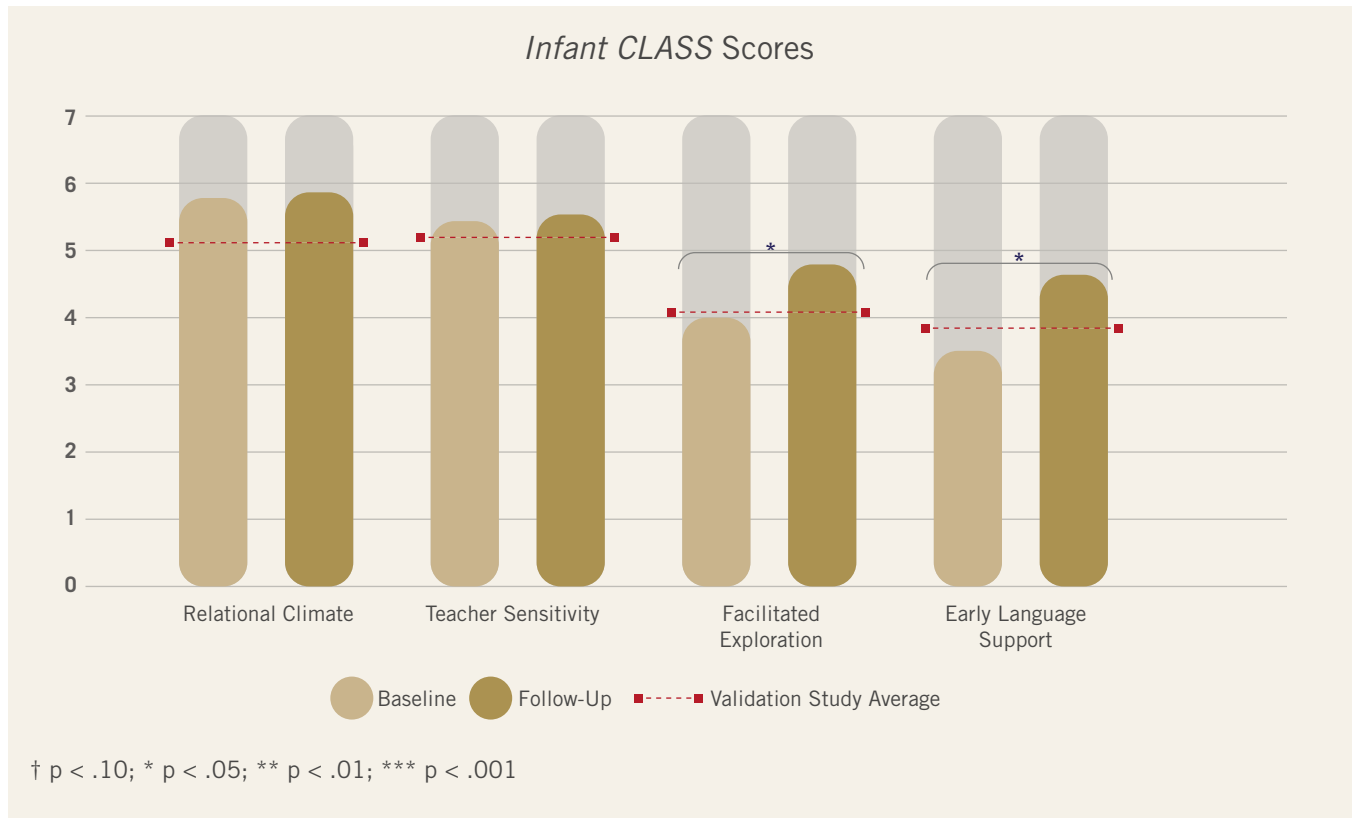
Teacher Sensitivity (*M* = 5.74) and were considered mid-range for Facilitated Exploration (*M* = 4.80) and Early Language Support (*M* = 4.57).

It is also important to note that variation in quality across the child care providers (as indicated by standard deviations, see **Table 11** in **Appendix E**) decreased from baseline to follow-up across all dimensions except Early Language Support. This suggests that at follow-up, the quality scores were more tightly clustered around the average with less variability in quality across classrooms. In other words, children had more similar experiences in terms of teacher–child interaction quality regardless of the program they attended.

Overall, these results suggest that providers made the greatest gains in areas focused on facilitating children's exploration, learning, and language development. In contrast, no gains were seen in dimensions examining the relational climate and teacher sensitivity within classrooms, though it should be noted that baseline averages in these areas were relatively high.

Toddler CLASS. The *Toddler CLASS* consists of eight dimensions of teacher–child interactions across two domains: Emotional and Behavioral Support and Engaged Support for Learning. The dimensions of Emotional and Behavioral Support include:

• **Positive Climate:** how a provider engages in warm, supportive, attentive relationships with toddlers and treats them with respect.

• **Negative Climate:** how a provider avoids negative behaviors and emotions like anger, frustration, aggression or acting disrespectfully towards toddlers.

Figure 5.2 *Toddler CLASS* Subscale Scores

Figure: *Toddler CLASS* Scores — bar chart with y-axis from 0 to 7. Categories: Positive Climate, Negative Climate, Teacher Sensitivity, Regard for Child Perspectives, Behavior Guidance (Emotional & Behavioral Support Domain); Facilitation of Learning and Development, Quality of Feedback, Language Modeling (Engaged Support for Learning Domain). Legend: Baseline, Follow-Up, Baby FACES Average. *** shown over Facilitation of Learning and Development, Quality of Feedback, and Language Modeling.

⁺ p < .10; * p < .05; ** p < .01; *** p < .001

Baden, E., Aikens, N., Vogel, C. A., Boller, K., & Murphy, L. (2014). Observed quality and psychometric properties of the *CLASS-T* in the Early Head Start Family and Child Experiences Survey (No. 1017ea36a704 4079911975a2123bc79e). Mathematica Policy Research.

- **Teacher Sensitivity:** how a provider is attentive to toddlers' words, body language, and other cues, and consistently, quickly, and effectively responds to children's needs.

- **Regard for Child Perspectives:** how a provider emphasizes children's interests, motivations, and points of view and promotes independence.

- **Behavior Guidance:** how a provider supports children's positive behaviors and helps them to understand expectations, and develop self-regulation skills.

The dimensions of Engaged Support for Learning include:

- **Facilitation of Learning and Development:** how a provider facilitates learning and development by guiding and meaningfully connecting classroom experiences, and builds upon the children's current knowledge and skills.

- **Quality of Feedback:** how a provider responds to toddlers as they learn and how they provide hints and information, to enable expanded understanding, persistence, and sustained attention.

- **Language Modeling:** how a provider intentionally encourages, responds to, and expands on toddlers' language in various ways including through meaningful conversations and by repeating words and asking follow-up questions .

Like the *Infant CLASS* each dimension is measured on a scale ranging from 1 to 7. **Figure 5.2** below presents the results and averages from the Early Head Start Family and Child Experiences Study (Baby FACES)[25, xvii], and **Tables 13** and **14** in **Appendix E** provides the subscale means and *t*-test results.

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xvii The Baby FACES study included 220 Early Head Start classrooms serving young children.

Toddler CLASS, Emotional & Behavioral Support Domain: Overall, no statistically significant gains were found for any of the dimensions within this domain. At baseline, ELV classroom scores in this domain were not significantly different than Baby FACES averages. At follow-up, ELV scores were significantly higher than Baby FACES averages in Teacher Sensitivity and Regard for Child Perspectives, while remaining not significantly different for the rest of the dimensions[6]. At follow-up, average scores within the Emotional & Behavioral Support domain were all considered within the "mid-range" of quality, with the Positive Climate (M = 5.81) and Negative Climate (M = 1.27) dimensions approaching the "high quality" range. It should be noted that the Negative Climate dimension is reverse scored, so ELV providers' low scores in this area are a positive indicator of quality, suggesting a general lack of adult negativity overall.

Toddler CLASS, Engaged Support for Learning Domain: Programs showed strong, statistically significant gains across all dimensions within this domain. There was a large effect size for Facilitation of Learning and Development (d = 1.08) and Language Modeling (d = .80) and a very large effect size for Quality of Feedback (d = 1.60).

Although at baseline, programs were, on average, in the "low quality" range (scores under 3) for Quality of Feedback (M = 2.15) and Language Modeling (M = 2.89) and on the border of being low quality for Facilitation of Learning and Development (M = 3.08), by follow-up, programs demonstrated average scores in the "mid-range" of quality across all dimensions (M = 4.18, 3.61, and 3.71 respectively). At baseline, ELV provider scores were significantly lower than Baby FACES averages for Facilitation of Learning and Development and Quality of Feedback; by follow-up these gaps had closed. Language Modeling was not significantly different from Baby FACES data at either time point.

Overall, these results suggest that providers made the greatest gains in the Engaged Support for Learning domain. No significant gains were observed in the Emotional Support for Learning domain, though some progress was made to meet or exceed averages in other studies.
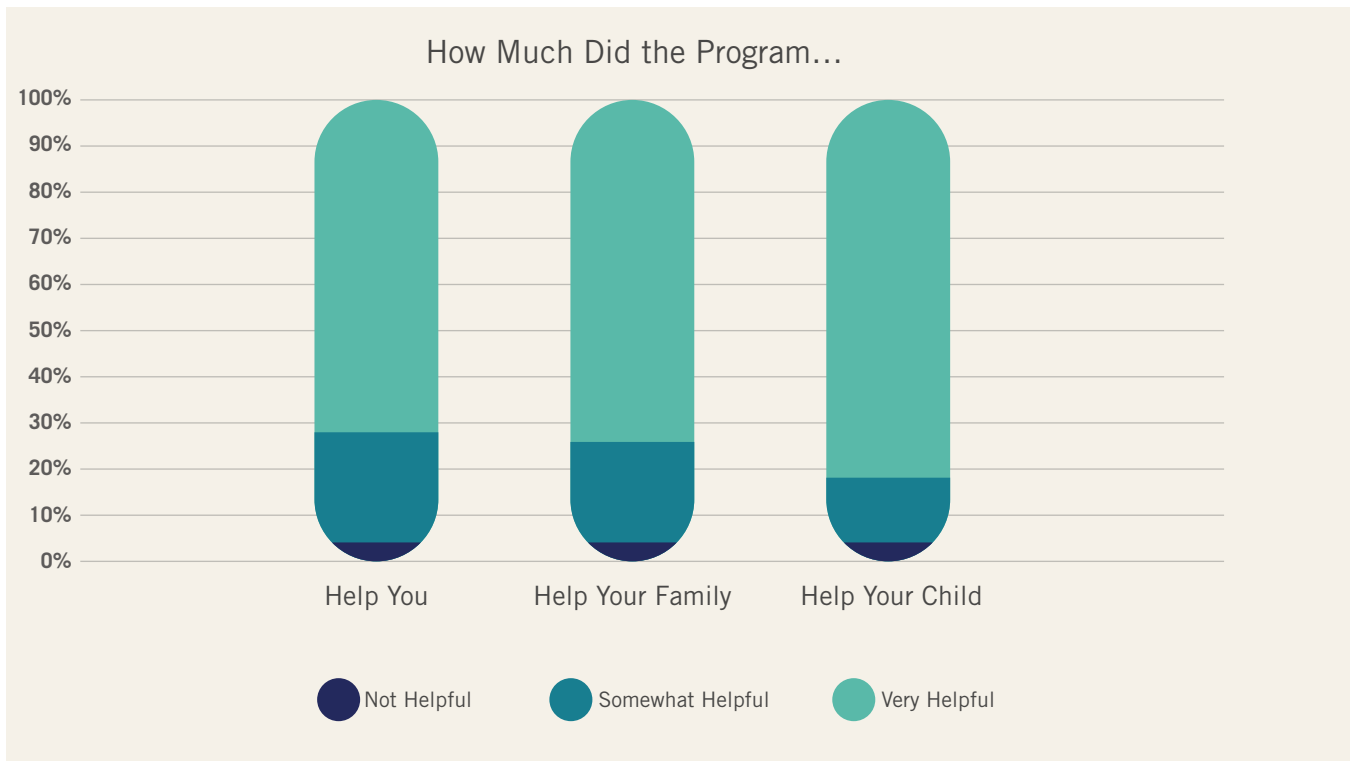
Family Needs

"This program has made it possible for me to finish my education so that we will be able to provide a stable financial future for our family—it has helped us immensely."

"We really enjoyed the budgeting class. We also like the rainbow snacks. Hopefully soon we will have our youngest evaluated for delays and see if we need help…"

A total of 188 families completed a satisfaction survey (93 percent mothers, 3 percent fathers, 3 percent grandparents, 1 percent foster parents and 0.5 percent legal guardians). Of these families, 105 families were enrolled through EHS; the remaining 83 families had children in EHS classrooms but were not funded through EHS. **Figures 6.1** and **6.2** present the findings from the survey, and **Table 15** in **Appendix E** provides chi-square statistics comparing families enrolled in the program through EHS and those who have children in EHS classrooms but who are not funded by EHS. These comparison analyses were conducted to explore differences in experiences between these two groups as well as examine any "spillover effects" (i.e., effects on families who did not receive EHS funding, but may benefit from the Partnership through the higher standards, professional development for staff, and other classroom and program quality improvements).

Figure 6.1 Overall Program Satisfaction

How Much Did the Program…

Legend: Not Helpful, Somewhat Helpful, Very Helpful

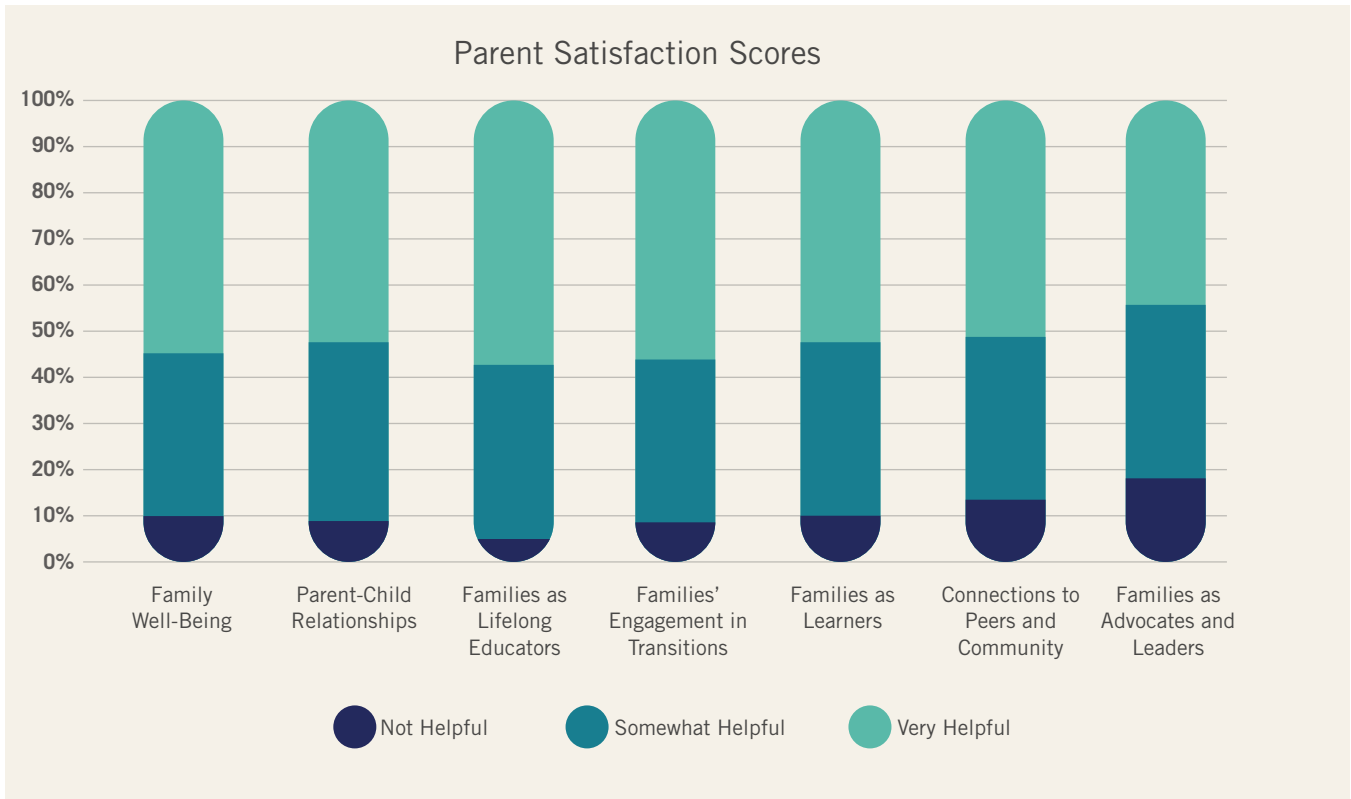Categories: Help You, Help Your Family, Help Your Child

In addition, the survey asks open-ended questions regarding how the programs have benefited families and what could be done to improve services. The complete set of parent comments is presented in **Table 16** in **Appendix E**. Selected comments that relate to the themes of each subscale are presented in the narrative below.

Family Outcomes Survey. *The Family Outcomes Survey* captures how much parents and families benefit from participation in a Head Start/Early Head Start program. The survey asks parents to provide overall ratings on how much the program has helped their child, their family, and themselves. In addition, families are asked to rate the benefits they received from the program in 49 distinct areas related to family well-being as either *very helpful*, *somewhat helpful*, or *not helpful*. Families can also indicate that they did not need help in an area. Since not all families need help in every area, these results are focused on the reports of families who needed help in a specific area (i.e., the number of responses analyzed for each item varied based on how many participants stated they "did not need help"). The results of 49 items are summarized in seven subscales, each representing an outcome area identified by *The Head Start Parent, Family, and Community Engagement Framework*. The seven scales are:

- Family Well-Being
- Parent–Child Relationships
- Families as Life-Long Educators
- Family Engagement in Transitions

Figure 6.2 Parent Program Satisfaction by Subscales

Parent Satisfaction Scores

Legend: Not Helpful, Somewhat Helpful, Very Helpful

Categories: Family Well-Being, Parent-Child Relationships, Families as Lifelong Educators, Families' Engagement in Transitions, Families as Learners, Connections to Peers and Community, Families as Advocates and Leaders

- Families as Learners

- Family Connection to Peers and Community

- Families as Advocates and Leaders

Overall Program Satisfaction. Overall, most parents rated the program as "very helpful" for their child (81.8 percent), their family (74.1 percent), and themselves (72.3 percent). For the questions pertaining to the child and parent, families in EHS were more likely to rate the program as "very helpful" and less likely to describe the program as "not helpful" than families not participating in EHS.

Parent Satisfaction Scores. Most parents described their program as *very helpful* or *somewhat helpful* across subscales, with the highest rates of satisfaction in Families as Lifelong Educators and the lowest rates for Families as Advocates and Leaders. As can be seen in **Table 15** in **Appendix E**, compared to non-EHS families, EHS families were significantly more likely to find the program helpful in the areas of Families as Lifelong Educators and Families as Advocates and Leaders. There were trends in significance in the same direction for Family Well-Being and Families' Engagement in Transitions.

Family Well-Being. This subscale focused on how the program promotes the safety, health, and economic security of families (e.g., meeting emergency needs, learning to budget money, finding/keeping a job, accessing services such as health care or housing supports). Ninety percent

of parents in the ELV EHS–CC model found the program to be *very helpful* or *somewhat helpful* in supporting family well-being.

Positive Parent–Child Relationships. This subscale examined how the program supports warm, nurturing parent-child relationships that promote a child's learning and development (e.g., helping parents encourage play at home, establish consistent family routines, and respond positively to children's challenging behaviors). Ninety-two percent of parents in the ELV EHS–CC model found the program to be *very helpful* or *somewhat helpful* in promoting a positive relationship with their child.

Families as Lifelong Educators. This subscale focused on how the program supports and empowers parents to embrace the role of being their child's first and most important teacher (e.g., helping parents learn their strengths as a parent, giving them confidence to talk with their child's teacher, encouraging parents to read and do other learning activities at home, giving them confidence that their child will succeed in elementary school). Ninety-five percent of parents in the ELV EHS–CC model found the program to be *very helpful* or *somewhat helpful* in empowering them to embrace the role of being their child's first and most important teacher.

Families' Engagement in Transitions. This subscale measured how the program supports families as they transition into new learning environments (e.g., giving parents resources to help children deal with stress, adjust to a new school). Ninety-one percent of parents in the ELV EHS-CC model found the program to be *very helpful* or *somewhat helpful* in supporting the transitions to new learning environments.

Families as Learners. This subscale focuses on how the program supports the educational aspirations of the parent through education, training, and other experiences that help parenting, career advancement, and other life goals (e.g., helping parents set educational or career goals, create long-term financial goals, understand child's learning). Ninety-one percent of parents in the ELV EHS-CC model found the program to be *very helpful* or *somewhat helpful* in supporting their own education aspirations.

Connections to Peers and Community. This subscale examines how the program fosters connections between parents that are supportive and enhance social well-being and community life (e.g., helping parents meet other families, encourage families to volunteer). Eighty-seven percent of parents in the ELV EHS-CC model found the program to be *very helpful* or *somewhat helpful* in connecting them to other parents and the community.

Families as Advocates and Leaders. This subscale measures how the program fosters leadership development and includes families in program policy development and decision making (e.g., help parents participate in the Policy Council, give parents opportunities to lead a group). Eighty-two percent of parents in the ELV EHS-CC model found the program to be *very helpful* or *somewhat helpful* in these areas.

Summary and Implications for ELV

Providers in the ELV EHS–CC Partnership model showed significant quality improvements on many key indicators during the study period. Overall, providers made significant improvement in foundational business practices and operations. In addition, the provision and tracking of comprehensive services significantly increased, supported by the development of collaborative partnerships with local social services agencies. Family engagement efforts also increased and overall parents reported a high degree of satisfaction with the services they received. Supports for teachers also increased, notably compensation levels and the professional development they received. Classroom quality also increased over the implementation of the Partnership model, particularly in areas related to teacher–child interactions that promote learning and development. Areas in which less progress were seen over the course of the study include teacher benefits and qualifications, the workplace environment, and some business practices for family child care providers.

Figure 7.1 summarizes the effect sizes for each indicator in the study organized by the five areas of support that were the focus of the ELV model:

1. Business development
2. Leadership development
3. Professional development
4. Community Partnership development
5. Family development

Results and implications in each of these areas are discussed in more detail below.

Business Development

A core principle of the ELV model is that a strong business infrastructure is the foundation for providing high-quality services to children and families. Unlike a typical Head Start program, which is usually a not-for-profit organization that is funded with Head Start funding and other federal grants, many child care providers are small businesses that rely primarily on parent fees and child care subsidies to remain in operation.

Results from the modified HSPPS Monitoring Protocol and the *PAS* and *BAS*, demonstrate that child care providers significantly improved business practices after the first year of participating in the ELV intervention. There were consistently moderate to very large effect sizes in programs' effective use of technology and the implementation of various recordkeeping and tracking systems, likely due to the introduction of ELV's Alliance CORE™ platform. Positive moderate to large effects were observed on measures of fiscal management and program planning and evaluation, which is likely the result of the individualized support provided by ELV's Quality Improvement Specialists.

Figure 7.1 Effect sizes across ELV EHS–CC model components
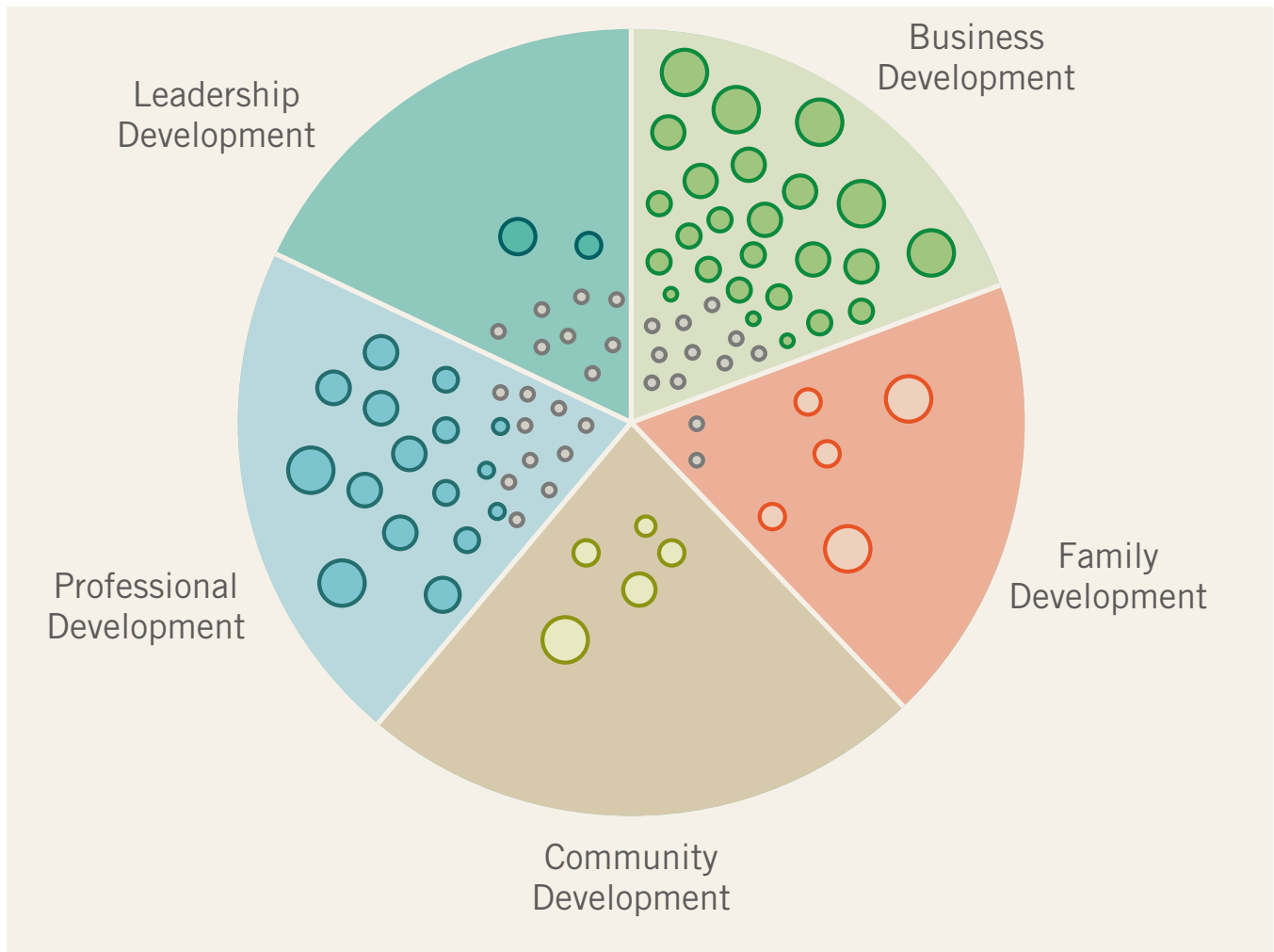
Less consistent improvements were observed in the areas of marketing and public relations, center operations, and facilities. Within these areas, larger effects were seen for center-based providers than family child care homes, indicating that a stronger focus on family child care providers might be an area to address moving forward.

Compensation of child care providers is a critical issue. National studies have shown that child care providers are poorly compensated, which results in high provider turnover and lower child care quality[27]. Accordingly, a key initiative within the ELV model was increasing compensation, a goal which was borne out in the results across study indicators. The compensation results from the modified HSPPS Monitoring Protocol indicated that a larger percentage of staff were receiving salaries of $25,000 or more per year; *PAS* data indicated that more providers were using a salary scale and that salary parity improved; and staff self-reported improvement in Pay and Promotion on the *ECJSS*. The only area in which significant progress in this area was not observed was the Rewards System subscale on the *ECWES*, the other self-report measure of organizational climate. Though these two subscales were similar, the Pay and Promotion subscale items (on the *ECJSS*) were rated on a five-point Likert scale, whereas the Rewards System (on the *ECWES*) subscale included a set of dichotomous *agree/disagree* items, which

may have been less sensitive to detecting change. Although improvement in compensation was a pattern found across multiple measures, no improvements in staff benefits were observed, which may indicate that programs may need additional funding or logistical support (e.g., help contracting with a health insurance or retirement plan provider) to improve this aspect of workplace supports.

Leadership Development

A second key aspect of the ELV model is to enhance directors' understanding of how to impact program quality with sound leadership. At baseline, less than half of program directors or owners had received any kind of leadership or management training. By follow-up, this number had nearly doubled. As part of the intervention, directors of child care centers and owners of family child care homes participated in a rigorous training program geared toward leadership and sustaining their child care business, which included support from a designated Quality Improvement Specialist. Additionally, a large effect was observed for supervision and performance appraisals for center-based programs. However, no significant effects were found for the establishment of a governing board, staff perceptions of leadership in the workplace (for center-based programs), or provider as employer (for family child care).

It is possible that the more foundational changes such as having directors complete leadership training and establishing processes for supervision and performance reviews will eventually translate into more pronounced effects for other measures of leadership. For example, as observed on the *ECWES* and *ECJSS*, staff perceptions of supervisor support and relationships; program decision-making; goal consensus among staff; work ethic within the program; and innovativeness of the program did not show significant changes. However, these are all elements of a more systemic workplace culture that may take more time to show demonstrable gains. It is also possible that the stagnant results in these areas may be an indication of the burden and stress placed on provider staff resulting from the implementation of a complicated federal program. To support retention and continuous improvement of providers in the model, this is an area that ELV should be aware of and work to address, potentially through the work of the Quality Improvement Specialists.

Professional Development

Across the model, there were moderate to very large effects for the gains in classroom quality in areas that emphasized the ways in which teachers support children's learning and exploration (i.e., the Facilitated Exploration and Early Language Support dimensions on the *Infant CLASS* and the Engaged Support for Learning domain of the *Toddler CLASS*). Research indicates that teachers typically tend to score lower in these areas than in areas of emotional and behavioral support (i.e., the Relational Climate and Teacher Sensitivity dimensions of the *Infant CLASS* and the Emotional and Behavioral Support domain of the *Toddler CLASS*)[28, 29],

so it is notable that teachers in this study made gains in these areas. Although no significant gains were observed within the emotional and behavioral support areas, it should be noted that scores exceeded other study averages in this area at baseline.

The gains in classroom quality are likely attributable to the many teacher supports that were provided as part of the ELV EHS–CC Partnership model. For example, the HSPPS monitoring protocol and PAS indicated moderate to large effects for the number of programs using a formal curriculum, child assessment, staff and parent education about mental health, and mental health consultation. Additionally, teachers received at least 30 hours of coaching on important topics in child development and teaching practices. Both teachers and coaches received training on *CLASS* dimensions of classroom quality. Small to moderate effects were observed for professional development for staff, with a very large effect for staff orientation in family child care homes.

Additionally, the ELV EHS–CC Partnership model supported and assisted early childhood educators with enrollment, attendance, and funding for early childhood college courses. Through the model, 88 teachers met the qualifications of an EHS teacher by the end of the study period. This focus on increasing the understanding of child development and implementation of research-based best practices among classroom staff likely contributed to the dramatic gains seen in classroom quality. These findings are consistent with *PAS* scores that show improved lead teacher qualifications. However, the *PAS* also revealed a trend toward lower qualifications in other staff roles within the provider partners, including administrators, teachers, and teaching assistants. Although only small and non-significant effects were observed for these roles, it is possible that these measures may have under-estimated the effects of the model. For example, these measures applied to all child care staff, not just those in EHS classrooms. Furthermore, attainment of certain credentials such as a CDA may not be adequately captured in *PAS* items, which only capture ECE semester hours or ECE degrees. Nonetheless, ELV should further examine this trend and address it accordingly.

Family Engagement

A distinguishing feature of the Head Start program is the requirement to provide comprehensive services for children and families. Head Start programs are required to provide services that address areas of family education, engagement, and economic security; mental health supports; and school readiness. Moderate effects were observed for the indicators that measured programs' implementation of parent education and engagement activities and educational opportunities around mental health issues. It should be noted that although the percentage of providers offering child mental health consultation tripled from baseline to follow-up, 40 percent of providers were still not offering this service. Given the importance of mental health

consultation for children, it is an area that ELV must continue to work on with the remaining provider partners. Very large effect sizes were found for increases in family communications and family support and involvement in center-based programs.

Equally important, most families who participated in the parent survey reported very high levels of satisfaction with the program in meeting their needs. There were a few areas in which families with a child enrolled in EHS reported higher levels of satisfaction than those families who were not enrolled in EHS but who were in an EHS classroom (significant differences in Families as Lifelong Educators and Families as Advocates & Leaders and trends for Family Well-Being and Families' Engagement in Transitions). These differences may have arisen as a result of the individualized mentoring and case management services provided by ELV Family Support Specialists to families enrolled in EHS. Overall, findings suggest that many benefits also accrued for non-EHS families, which speaks to the power of the model to have "spillover" effects. For example, non-EHS families had access to monthly parent engagement and education opportunities and the option to participate in Policy Council and Parent Committees. Other benefits available to EHS families might be available to non-EHS families from site-to-site or county-to-county depending on how resources are managed. For instance, EHS families also benefit from parent-teacher conferences, home visits, health and developmental screenings, family goal setting/planning, having teachers engage in ongoing authentic assessment for their children, etc., all of which have been made available to non-EHS families to varying degrees from site-to-site and county-to-county.

Community Partnerships

Strong community partnerships across agencies create a foundation of support for children and families. As noted above, it is impossible for Head Start programs to meet all the HSPPS on their own. Accordingly, an important responsibility of each provider of Head Start services is to reach out to local social service agencies and work to connect Head Start children and families to services like income supports, housing, transportation, and other local community services. This important responsibility is accomplished by coordinating either formally through an MOU with social service agencies or by forming less formal referral processes. At baseline, two-thirds (67 percent) of child care partners did not engage in any formal interagency partnerships or informal coordination with other agencies. By follow-up, the number of providers that were not engaging in any interagency collaboration was down to six percent. Through these partnerships with community agencies in each of the four counties, focused educational opportunities and supplemental consultation can be afforded to parents and center staff, ensuring children's basic health, dental, mental health, nutrition, and other needs are met. To date, ELV has established partnerships with numerous agencies across the state to provide day-to-day support to children, families, and programs.

As an illustration, several strong partnerships have been forged in Mesa County. The Mesa County Health Department (MCHD) has collaborated to provide space for EHS–CC Partnership staff and cross-training with child care licensing and health inspection. One of the ultimate goals of this collaborative relationship is greater efficiency in reducing the number of people that come into a program for site visits. The MCHD also helps coordinate the provision of comprehensive services (e.g., medical services, dental screening, mental health consultation, nutrition, hearing/vision screening, developmental screens) and any follow-up needed (e.g.,

formal evaluation if developmental screen is positive). Through the Partnership, MCHD has also brought in a nurse consultant who monitors child data to ensure that immunizations, well-child visits, etc. are up-to-date and flags issues for ELV and child care staff to talk with families (e.g., if an immunization is due). Another partnership has been formed with Colorado Mesa University. Thus far, two cohorts of teachers (approximately 60 total) have enrolled at this institution to satisfy EHS teacher qualification requirements and continuing professional development. This is particularly notable given that, previously, child care programs in Mesa County were struggling to even meet licensing requirements (which are more basic than EHS standards); now participating programs are in compliance with 80 to 90 percent of the HSPPS. Finally, the Mesa County Partnership for Children and Families provides individual teacher coaching around curriculum, assessment, and best practices for participating child care programs.

Implications for Federal Policy and Future Research

In addition to the overarching implications for ELV highlighted by the report, this evaluation also touches on several outcomes that may continue to be of ongoing interest at a federal level. Initial baseline results indicated that most child care providers were operating at levels of quality well-below HSPPS—a finding reflective of the general status of child care quality across the country. Despite this heavy lift, the ELV EHS–CC Partnership model showed tremendous promise in the significant progress providers made across multiple areas of quality. However, this intervention was intensive and multi-faceted. The model intentionally focused on strengthening the infrastructure of provider partners (e.g., improving business practices, training on the HSPPS, and other compliance-related activities) and the capacity of multiple individuals within the model (e.g., coaching and training for teachers; *CLASS* training for coaches, Aim4Excellence credentialing program for directors; national family development credentialing for family support specialists; tailored training for quality improvement specialists).

Programs also received supplemental funding from the grant and additional subsidy funding amounting to an increase in revenue of over $7,500 per child enrolled in EHS. This assistance was used to support increasing staff salaries, paying substitutes during staff trainings; diapers, formula and wipes; home visits, and other critical supplies and activities required as part of providing high-quality early childhood services. It is notable that the provision of unrestricted funds likely drove the teacher salary increase. This may have implications for state Quality Rating and Improvement Systems (QRIS). In QRIS, wage supplements are typically provided directly to teachers and tend to be quite small. The findings in this study suggest that when funding is given to programs and demands for quality are increased, owners and directors appear to pay their teachers more to meet quality standards.

Despite increases in teacher compensation and other supports (e.g., training, coaching, teaching resources), commensurate changes in teacher benefits and other indicators of positive organizational climate were not observed. It may be that to improve elements of the work climate, a more targeted intervention is necessary (e.g., a center-wide staff development program that focuses on team-building or a leadership training specifically focused on supervision and problem-solving).[xviii] It is also possible that changes related to the ELV EHS–CC model were not observed during the short study period. Experts note that intervention strategies of a duration shorter than a year often do not result in significant changes in workers' perceptions of organizational climate[30]. Future research may illuminate what essential ingredients are to move the needle in this area and whether they can be incorporated into models such as the ELV EHS–CC Partnership.

One of the main intents of the federal EHS–CC Partnership grants was to more efficiently and effectively raise the quality of care for larger numbers of children. The ELV EHS–CC Partnership model serves as an important proof-of-concept for this vision as the grant affected well more than the 240 children funded through EHS. Indeed, all 1,700 children cared for by the 32 provider partners benefited from the additional revenue and higher standards that accompanied the grant as well as the improved business practices of providers. All children in the infant and toddler classrooms receiving EHS funding benefited from the increased levels of classroom quality and supports such as high-quality curriculum and assessment practices. Additionally, many children and families beyond those enrolled in EHS benefited from the community partnerships and comprehensive services (e.g., screening) and family engagement efforts. This spillover of benefits speaks to the promise of policy solutions such as the EHS–CC Partnerships to effectively leverage Head Start funding to improve child care quality.

Future research should continue to examine the impact of the ELV model on provider quality in more advanced stages of implementation and include child outcomes measures as part of the research design.

Conclusion

Data across multiple measures indicated significant improvements in the quality and capacity of child care providers during the first year of implementation of the ELV EHS–CC Partnership grant. At a foundational level, ELV helped child care partners develop stronger business practices and form a strong network of connections to other community agencies. These building blocks supported programs in strengthening their capacity to deliver comprehensive services to children, offer meaningful family engagement opportunities, and develop their staff through

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[xviii] See Bloom (2010) for examples of interventions that have demonstrated positive change on the ECWES and ECJSS.

high-quality professional development and increased compensation. In turn, these changes were likely the drivers behind the improvements in classroom quality and high ratings of parent satisfaction—the ultimate goals of the model. It is also worth noting that this project's reach exceeded beyond those children who were directly funded through EHS dollars. All families enrolled at the site benefit from program-wide continuous improvement planning, more qualified teachers, curriculum implemented to fidelity, an enhanced learning environment, and parent engagement and education opportunities.

As ELV moves forward with implementation of their EHS–CC Partnership model, it will be important to explore areas that showed a lack of progress or inconsistent results such as staff benefits and qualifications, business practices of family child care providers, and the organizational climate of child care centers. Future research efforts may examine whether effects are maintained and the impact on child outcomes.

Although this study had limitations, including the lack of a control group and the use of less robust analysis methods for some measures[xix], this effort is an important first step in documenting the tremendous potential of EHS–CC Partnership models, particularly when coupled with a robust shared services model. As demonstrated by the baseline data in this study, many child care programs across the state struggled to meet standards of quality. However, within a year of receiving supports and services through the ELV EHS–CC Partnership grant, programs made demonstrable gains in multiple areas of quality, better equipping them to provide meaningful services to children and families.

[xix] See Appendix D for a thorough discussion of study limitations.

APPENDIX A

Scope of Work Document for Child Care Provider Partners

PURPOSE

The purpose of this agreement is to collaborate with **Program name** to support the delivery of a high quality early childhood program for **#**, but not to exceed **#** children living in **County name** enrolled in Early Head Start (EHS), that is licensed to provide child care by the State of Colorado, and meets Early Head Start regulations. The second purpose is to provide effective, comprehensive services to families and to develop supportive relationships to encourage them to achieve goals of self-sufficiency, and develop skills that support their child's long-term success.

BACKGROUND

As an Early Head Start (EHS)–Child Care Partnership grantee, Early Learning Ventures (ELV) combined the comprehensive nature of Early Head Start services with our Stronger Business Practices to create a unique service delivery model. This model affords an equitable distribution of resources for participating child care providers and family child care homes that, simultaneously, supports programs in five areas that are key to program quality: business development; leadership development; professional development; family development; and community development.

The intent of this service delivery model is to strengthen the foundation for supporting children's development and potential as successful learners. This unique model allows ELV to achieve four long term goals:

1. To increase access to high quality services in areas where there is an overwhelming disparity between need and available services.

2. To significantly enhance the child development and early learning outcomes of children who receive comprehensive services and family support through this model.

3. To improve the quality of child care for providers in the network to benefit not only the children who are funded under this proposal, but also other children receiving care within the child care partner sites.

4. To promote, support and encourage quality continuous improvement as a fundamental operating strategy with all EHS participating programs for the full utilization of ELV's Alliance Core and the Resource Platform to support competent and confident small business leaders.

Program Description

ROLES AND RESPONSIBILITIES

Early Learning Ventures and **Program** as Contractor, agree to establish sustainable systems within **Program** that will allow them to meet all EHS Performance Standards while providing comprehensive EHS services. In order for the Contractor to meet all EHS Performance Standards, ELV and the Contractor agree to thoroughly evaluate the Contractor's program and develop a continuous improvement plan ensuring that the Contractor fully meets all EHS Regulations annually. All services will be delivered within the following parameters.

At a minimum, ELV will provide tuition support to Contractor for **#**, but not to exceed **#** children, at an annual rate of not less than, **$amount** per child and reimburse the Contractor monthly for services delivered the prior month. Additionally, ELV will secure vendors to deliver the provision of all comprehensive services, including physical, mental and oral health, nutrition, disabilities, and parent engagement for all enrolled EHS children, delivered in accordance with the EHS performance standards. Moreover, ELV will provide appropriate supports to Contractor to ensure that directors and teachers are able to fully participate in all required professional development activities, including but not limited to, training, coaching and completion of college level courses.

Contractor Operation Procedures

- Contractor will work with ELV to actively and fully utilize the Alliance CORE and Resource Platform.

- Contractor, in accordance with the EHS Performance Standards, will provide full-day, full-year high quality early childhood educational services for **#**, but not to exceed **#** EHS children, for a minimum of six (6) hours per day and 230 days per year. Contractor also agrees to ensure that of the **#**, but not to exceed **#** EHS children, no less than 2 EHS children are assigned to a classroom, and that they will not be disenrolled from the Contractor's program due to loss of CCAP and/or other layer one funding.

- Contractor will designate which learning environments will serve EHS enrolled children that include two classrooms to serve EHS infants and two classrooms to serve EHS toddlers.

- Contractor, with ELV, will implement program planning and a quality improvement plan to establish and maintain organizational systems that adequately support the program and meet the EHS Performance Standards.

- Contractor will work with ELV to ensure that program policies and procedures pertaining to parents and staff are consistent with the EHS Performance Standards, are communicated to staff and parents, and are in a clearly written format.

- Contractor, with stipends from ELV, will provide diapers and wipes as well as formula for all EHS children and families.

- Contractor will ensure that a minimum of 1 EHS qualified teacher is working with every 4 infants and toddlers.

- Contractor will ensure that no more than eight infants and toddlers will be placed in any one group in classrooms in which EHS children will be enrolled.

- Contractor will work with ELV and local Department of Human Services to determine best approach for working with CCAP parent fees.

- Contractor will ensure that ELV staff has access to all pertinent documents needed to enroll children into their program, maintain open communication with ELV staff, and actively participate in recruitment and enrollment.

Education / Child Developmental Services

- Contractor will implement an evidence-based curriculum that is developmentally appropriate for infants and toddlers.

- Contractor, utilizing Teaching Strategies Gold, will conduct ongoing assessment on EHS children, a minimum of three times per year, to inform the planning for the facilitation of individualized learning for each child.

- Contractor will ensure the educational environment is developmentally and linguistically appropriate and supports all children's social and emotional development, cognitive, language, and physical skills.

- Contractor will ensure that parents are involved in the development of the individual child's curriculum and approach to child development and education.

- Contractor will provide and arrange for sufficient equipment, toys, materials, and furniture to meet the needs and facilitate the participation of children and adults.

Parent Engagement

- Contractor will work with ELV to ensure parents are engaged and included in the full range of child development and family support services that are available and appropriate for each family. At minimum, this will include partnering with the Family Support Specialist to plan and host regularly occurring parent activities.

- Contractor will support active family involvement, policy council participation, the implementation of relevant goals to strengthen families, and to support linkages developed within the community.

- Contractor will conduct a minimum of two (2) parent teacher conferences and two (2) home visits for all EHS designated children enrolled in their program.

- Contractor will ensure that parents have opportunities to observe their children and to share their assessments with staff to plan learning experiences.

Health Services

- Contractor will actively participate in ELV coordinated health services.

- Contractor will work with ELV to ensure that contracted vendors have access to children, families and staff to conduct a minimum of dental, hearing and vision screenings on each child annually.

- Contractor will work with ELV to support parents in maintaining child immunizations.

- Contractor will utilize ELV's CORE data Management system to track and report all child related health information, including but not limited to child immunizations, health and dental screenings and completion of physical exams.

- Contractor must ensure that sleeping arrangements must use firm mattresses and avoid soft bedding materials.

- Contractor will promote and practice of effective preventative dental care with all children.

Nutritional Services

- Contractor will work with ELV to identify children's nutritional needs and ensure appropriate accommodations are made, when applicable.

- Contractor will participate in the CACFP program and deliver nutritional services in accordance with USDA guidelines and all applicable nutrition standards.

Disabilities and Mental Health Services

- Contractor will work with ELV to establish and implement a referral process that will address the needs for children with identified disabilities and/or potential developmental delays. At minimum, this process will include an observation from a trained professional with expertise, communication with parents, and involvement and consultation for classroom teachers.

- Contractor will support ELV to ensure all EHS children receive a developmental screening within 45 days of each child's enrollment into the program.

- Contractor will ensure that an individualized family service plan is developed for EHS children identified through formal evaluation within 90 days of the child's screening.

- Contractor will participate in a trans-disciplinary approach to assess needs, develop common goals, and implement a single, cross-disciplinary plan for each identified EHS child and family.

- Contractor will ensure that community vendors have access to classrooms to conduct observations as well as time to provide guidance to teachers.

Physical Environment and Facilities

- Contractor will work with ELV to ensure that all Head Start Program Performance Standards, including requirements for square footage, health and safety, age appropriate sleep arrangements, and facilities are met.

- Contractor will consult with ELV to assess and remedy all health and safety issues identified in the facility and each learning environment designated to serve EHS children.

Professional Development

- Contractor will ensure that teachers with the primary responsibility of caring for EHS infants and toddlers, meet the minimum credentialing requirement of a current and active Child Development Associate (CDA) credential for Infant and Toddler Caregivers; an equivalent credential that addresses comparable competencies; or have implemented an individual professional development plan for the teacher to meet the minimum EHS credentialing requirements within 12 months of hire.

- Contractor will work with ELV to develop and implement professional development plans for all teachers working with EHS infants and toddlers, and to ensure that these staff are able to participate in all required activities that will foster the skills necessary to develop consistent, stable, and supportive relationships with young children, such as methods for communicating effectively with infants and toddlers, their parents, and other staff members.

Reporting / Ongoing Monitoring

- Contractor will work with ELV to fully utilize CORE for monitoring compliance of EHS regulations and reporting program data in accordance with ELV policies and procedures and EHS regulations. At minimum, this will include complete child files, complete staff files, monthly attendance reports, CACFP, regular health and safety checks, enrollment and attendance analysis, program enrollment, professional development status, budget status, and regular assessment of the program's systems.

- Contractor, with support of ELV, will complete monthly attendance reports from CORE as well as participate in regular meetings with ELV to review and evaluate progress of this scope of work.

- Contractor will maintain good standing with the Colorado Office of Early Childhood and the Colorado Department of Public Health and Environment requirements. Additionally, Contractor will provide to ELV a copy of all inspection reports conducted on the program and work with ELV to prepare responses on how identified issues will be addressed.

Kids' Castle
A Colorado Licensed In-Home Child Care

Strategic Plan
2016 – 2021

A Family-Centered Child Care with Emphasis on Quality Care and Learning for Every Child

Created (Date)

(Name), (Title)
(Name), (Title)
Kids' Castle's Vision

Kids' Castle opened in January 2010 as a 6 +2 in-home family child care with a vision to provide quality care for all children within our community. Positive early childhood development in a multi-age group classroom environment consisting of infants, toddlers and preschoolers has been our focus. Kids' Castle experienced a significant amount of interest in children's enrollment and applied with the Colorado Office of Early Childhood, Child Care Licensing and Administration, for a large in-home family license. License was granted in 2011. In April 2011, Kids' Castle began providing care for 12 children on a daily basis, becoming a thriving private in-home child care and preschool program.

As the business evolved, a larger-picture vision of supporting families and school readiness became a critical piece of our philosophy. Overwhelming evidence confirms that early childhood experiences strongly influence a child's future growth, health, development and learning. Brain development is greatest during the early years and for children to achieve their full potential, they must have a strong start during this formative time. Kids' Castle owners, Roger and Stephanie Olson, along with their teacher's assistant, Sandy Schneweis, have led this trend of promoting a birth to age 5 focus on several aspects of child development including physical social-emotional, language and cognitive in an in-home child care environment.

Kids Count in Colorado – Colorado Statistics

Kids Count 2016 report shows some developments that will help tip the scale toward the positive for many children: More Colorado children are covered by health insurance than at any point in recent history. Fewer children are living with the daily stresses of poverty. More children have access to full-day kindergarten and preschool programs.

"But for too many of our state's children, the odds remain weighted against them. Despite the decline in our state's child poverty rate, more than 190,000 Colorado children still lived in poverty in 2014, with 82,000 living in extreme poverty. Colorado school districts identified nearly 25,000 students who were experiencing homelessness. More than 240,000 children lived in households that were uncertain about whether they would have enough food for their families." (Kids Count, 2016, p. 2) The strategic business plan of Kids' Castle is to increase our support for lower income families' need for and right to quality child care with an emphasis on education.

Reference: Kids Count in Colorado. (2016). Futures in the Balance. Retrieved on 12/31/16 at http://www.coloradokids.org/wp-content/uploads/2016/03/2016-Kids-Count-final-low-res.pdf.

(Company) Goals

Goal 1:

Goal 2:

Goal 3:

Goal 4:

Goal 5:

Goal 6:

Outcomes: *(Company Name) owners will maintain a record of goals, objectives and action steps progression by typing updates in italics and highlighting in green.*

Goals & Action Steps

Goal 1:

Objective 1:

Action Steps:

Outcome:

Objective 2:

Action Steps:

Outcome:

Goal 2:

Objective 1:

Action Steps:

Outcome:

Goal 3:

Objective 1:

Action Steps:

Outcome:

Objective 2:

Action Steps:

Outcome:

Goal 4:

Objective 1:

Action Steps:

Strategic Plan
2016 – 2021
Created 12/31/16

A Family-Centered Child Care with Emphasis on Quality Care and Learning for *Every Child*

By:_____, Dated: _____
    (Name)

By:_____, Dated: _____
    (Name)

Reviewed by:

By:_____, Dated:_____
    (Name)

By:_____, Dated:_____
    (Name)

By:_____, Dated:_____
    (Name)

APPENDIX C

EHS-CC Monitoring Protocol

Program and Interview Information

1. ELV Staff Interviewer

2. Date of Interview

3. Name of Program

4. Name & Position of Interviewees

	Name	Program Role
Interviewee 1		
Interviewee 2		
Interviewee 3		
Interviewee 4		

5. Which county?

Mesa
Garfield
Pueblo
Arapahoe

Program Information

6. Is your program a:

☐ Center

☐ Family Child Care

7. How many classrooms of each type listed below do you have?

Infant/toddler classrooms

Preschool classrooms

School-age classrooms

8. Please include the number of children in your various classrooms:

Infants/toddlers

Preschoolers

School-age children

Total amount

9. Please include the number of teaching staff you currently have in the various classrooms:

	Working with infants/toddlers	Working with preschoolers	Working with school-age children
Teachers			
Assistant Teachers			

Program Governance Structure

10. Do you have a Board to whom you are accountable?

○ Yes

○ No

11. Describe the governance structure for your program (e.g., who are the major decision makers and stakeholders?)

Parent Involvement in Program Planning

12. Does your program have a committee of parents of currently enrolled children that take part in program decision making?

Committee of parents?

☐ Yes

☐ No

What does this committee do?

Did the parents receive any training to support them in the program decision making?

☐ Yes

☐ No

What, if any, program information is shared with the parents to assist in program decision making?

13. In the last three years, has your program developed a strategic plan or a business plan?

☐ Yes

☐ No

What goals were set? Were there areas within that the program hoped to improve?

14. Was the strategic/business plan required?

Was the strategic/business plan required by another entity?

Yes ○

No ○

If it was required, who required you to develop a strategic or business plan (e.g., mandated as part of HB 13-1291)?

15. Is there an employee handbook or another document that contains procedures outlining the monitoring of operations and staff?

○ Yes

○ No

Could you share that with us?

Management Systems

16. Do you conduct a criminal background check on individuals before you hire them?

☐ Yes

☐ No

Do you have the background checks on file for each staff member? Can we have access to these records for reporting purposes?

17. Does your program maintain a record-keeping system that supports the delivery of services to children and families, including:

- ☐ Consistent collection and recording of data in an accurate and timely manner for children, families, and staff

- ☐ Generating reports to inform planning, communication, and ongoing monitoring

- ☐ Making information accessible to appropriate parties

- ☐ Maintaining confidentiality

Notes on record-keeping systems

18. Does your program publish and make available to the public an annual report that contains:

- ☐ An explanation of the budgetary expenditures and proposed budget for the fiscal year

- ☐ An explanation of the agency's efforts to prepare children for kindergarten

- ☐ Does not public an annual report

19. What types of financial reports and records does your program produce or participate in?

☐ Fiscal audits

☐ Non-profit reports

☐ USDA/Child and Adult Care Food Program (CACFP) reports

☐ Other

[   ]

20. What funding sources does your program access (e.g., CCCAP, USDA/Child and Adult Care Food Program [CACFP], etc.)

[   ]

21. What are your average full-time teacher's salaries?

☐ $15,000-19,999

☐ $20,000-24,999

☐ $25,000-29,999

☐ $30,000-34,999

☐ $35,000-39,999

☐ $40,000-44,999

☐ $45,000+

22. Please describe your current staff time card system. How do staff record their hours? Who approves these hours and what is that process?

Tracking of Health Services

23. Do you have a system for helping parents find health services (i.e., referral processes), such as:

	Do not have system for tracking	System tracks dates of services	System tracks types of screenings, assessments, and referrals	System tracks results and outcomes
Medical services	☐	☐	☐	☐
Dental health services	☐	☐	☐	☐
Mental health services	☐	☐	☐	☐
Disabilities services	☐	☐	☐	☐
Nutrition	☐	☐	☐	☐
Enter an	☐	☐	☐	☐
Enter an	☐	☐	☐	☐

Which staff members are responsible for keeping this system up-to-date?

Which staff members are responsible for keeping this system up-to-date?

(Check if no system is in place)

☐ N/A

How often is the system updated?

How often is the system updated?

(Check if no system is used)

☐ N/A

Do you have any additional notes about tracking health services?

24. Does your program provide educational opportunities for parents to enhance their parenting skills, including:

☐ Strategies to support their children's development, including development of individual children's goals and strategies for preparing children for school

☐ Ensuring the health and safety of their children

☐ Providing input and sharing concerns regarding their children

☐ Sharing information about their children's progress

25. Please describe the ways in which your program provides opportunities for developing parenting skills and knowledge in the above areas.

26. Does your program ever hold parent meetings? If so, describe frequency, typical attendance, agenda, etc.

Parent Engagement around Behavioral Health

27. Does your program staff currently work with parents to:

☐ Educate them about how to strengthen and nurture supportive environments for, and relationships with, their children

☐ Identify appropriate responses to children's behaviors

☐ Encourage them to share concerns and observations about their children's mental health

☐ Share their observations with parents regarding their children's behavior and development

☐ Seek parents' input to clarify their understanding of the child's development

28. Please describe the ways in which your program provides opportunities for engaging families around issues of children's emotional and behavioral health in the above ways.

Mental Health Program Services

29. Does your program have a system for ensuring that mental health services available for parents and staff that include:

☐ Staff and parent education on mental health issues

☐ Activities promoting children's mental wellness

☐ On-site mental health consultation with mental health professionals

Please describe the types of educational resources, related to mental health issues, that your program provides for staff and parents, and how these resources are shared.

What types of activities does your program engage in to promote children's mental health?

Describe how the program uses the services of mental health professionals to identify and provide interventions to address mental health concerns and how frequently these consultations occur.

Interagency Agreements and Coordination

30. Does your program coordinate with and/or have current Interagency Agreements in place with Local Education Agencies (LEAs; e.g., school districts) and other agencies (Part C) within the service area?

Coordination efforts might include referrals for evaluations, Individualized Education Program/Individualized Family Service Plan meetings, and placement decisions; transition planning; and file and resource sharing (e.g., school readiness goals and assessment information)

- ☐ Have formal Interagency Agreements

- ☐ Coordinate with other agencies, but no formal agreements are in place

- ☐ No coordination efforts or agreements exist at this time

Please describe your formal Interagency Agreements or informal coordination efforts. If there is no coordination with other agencies exists, discuss why not or any previous efforts to date to establish partnerships.

31. Please describe any other partnerships you have with other organizations that help your children and families access health, mental health, nutrition, family resources, and parent education services:

School Readiness Goals

32. Does your program use a child assessment instrument?

Use of assessment instruments?

☐ Yes

☐ No

Check all statements that apply:

☐ Is child level data collected at least three times a year using data from one or more valid and reliable assessment tools

☐ Is assessment data combined with input from parents/families to determine each child's status and progress

☐ Are the results of children's progress shared with families

Is the use of child assessment required by another entity (e.g., Results Matter, CPP?)

○ No

○ Yes (describe)

Additional notes on child assessment.

Does your program make improvements based on its analysis of the child assessment data in any of the following areas:

- ☐ Curriculum and instruction (individualizing instruction, monitoring progress)

- ☐ Professional development

- ☐ Program design

- ☐ Other program decisions

- ☐ Does not use child assessment data to inform other areas of program functioning

Please include your notes on how the program uses assessment for formative purposes in the above examples (include examples and document them).

33. Please describe how your program supports dual language learners in making progress toward the school's readiness goals and learning English.

Curriculum

34. Does your program use an early childhood curriculum? If yes, could you tell me the curriculum for each age group you serve?

	None (mark "X")	Curriculum	Additional Curriculum	Additional Curriculum
Infants and Toddlers				
Preschool				
School-age				

35. Does the infant/toddler curriculum (for ELV staff to decide):

☐ meet the criteria for "evidence-based"?

☐ link to ongoing assessment?

☐ include developmentally appropriate and measurable developmental/learning goals?

36. Include any additional notes about curriculum.

Staff Supports

37. What supports are available for teachers (e.g., planning time, subs and paid time for professional development, training on curriculum and assessment, etc.)

38. Describe your professional development plans for staff (e.g., what trainings do they have access to? do they receive coaching and/or mentoring?, etc.)

39. Has the program director received any leadership or management training?

   ○ Yes

   ○ No

40. If yes, describe leadership or management training opportunities:

> [blank text field]

Additional Information

41. Any additional notes or information:

> [blank text field]

Staff Qualifications

42. Do you have current staff that would serve as Early Head Start teachers?

○ Yes

○ No

43. Highest level of completed education

What are your potential EHS staff's highest levels of completed education?

Teacher 1

| High School/GED |
| Associate's degree |
| Bachelor's degree |
| Master's degree |
| Doctorate |

Teacher 2

| High School/GED |
| Associate's degree |
| Bachelor's degree |
| Master's degree |
| Doctorate |

Teacher 3

| High School/GED |
| Associate's degree |
| Bachelor's degree |
| Master's degree |
| Doctorate |

44. Please input information about your general education.

Are you currently enrolled in a bachelor's degree program?

☐ Yes

☐ No

What is the total amount of semester hours you have of completed college coursework?

[   ]

45. Please comment on your education in specialized coursework.

Are you currently enrolled in ECE/CD college coursework?

☐ Yes

☐ No

What is the total amount of semester hours of completed ECE/CD coursework that you have?

[   ]

46. Please check the credentials that you have obtained.

☐ CDA

☐ State Teacher Certification

47. Please list the number of years and/or months of teaching experience that you have.

[   ]

APPENDIX D

Study Limitations

The research design for this project is a simple pre-post study. Data were collected before the implementation of ELV's EHS–CC model and then again roughly a year into implementation. As such, the design allows us to reasonably assess, with the caveats discussed below, the change in several measures across the study period. However, using this design, it is difficult to attribute the changes in the measures specifically to the ELV intervention. Without the benefit of a control group to determine the progress that would have been made by similar providers in the absence of the ELV model, it is possible that the providers simply "matured" and improved in quality on their own. This scenario is highly unlikely, given the initial low quality of the providers and the intensity and design of the ELV model. At the very least, the relationship between the intervention and changes in quality measures has strong face validity across the measures (i.e., based on the nature and intensity of the intervention, we saw the expected changes in quality). It will be important to validate these findings with more sophisticated research methods in the future.

Second, it is also important to note that it was very difficult to pair the results of specific classroom quality and job satisfaction measures at baseline and follow-up even after only a year of implementation. Because this is a real-world study, it is a reality that teachers are reassigned to different classrooms or leave for a different job altogether, and that children age out of classrooms. Accordingly, as noted in the Results section, the analyses examine the change in the average among teachers and classrooms at baseline compared to the average at follow-up. In some cases, the groups at baseline and follow consist of different individuals. Where possible, we examined the demographic characteristics of the pre- and post-test groups to identify potential changes in groups' composition that may impact the results. At the same time, the presence of individuals who did have data at both time points causes concern for the assumption of independence between samples, increasing the potential of a Type I error.

Third, ELV staff participated in the data collection on some measures. Although ELV core staff conducted the HSPPS monitoring protocol interviews, the questions were mainly dichotomous items indicating the presence or absence of a program element (e.g., whether a program had a curriculum or policy committee), leaving little room for bias or subjectivity. Although ELV classroom coaches administered the *CLASS* at follow-up, all participated in a rigorous training and certification process and no coach was assigned a classroom in which they had worked.

Fourth, the data on family supports and workplace climate/job satisfaction were drawn from survey measures. Families and teachers were asked to fill out surveys and many families and teachers responded. However, since not every parent or teacher returned a survey, the results likely reflect those who had stronger feelings and were more motivated to complete the survey.

Finally, it is important to note that ELV's EHS–CC Partnership model was still in the early stages of implementation during the follow-up assessment. During the study period, ELV hired administrative staff; recruited, assessed, and selected child care provider partners; created scopes of work and business plans; engaged the providers in a CQI process; developed MOUs with partner agencies in communities across four counties; and provided training, technical assistance, and financial support to the child care provider partners, all while participating in an evaluation. Given the intensity of the start-up phase and the relatively short amount of time working with the provider partners, it would be expected that the quality of the providers would continue to improve as ELV continues to build relationships with the partners and provides additional support over a longer period.

Data Tables

Table 1. Modified Head Start Program Performance Standards Monitoring Protocol

	BASELINE $N = 30$	FOLLOW-UP $N = 32$	t/χ^2 value	p-value
Overall Compliance				
Aggregate Score	7.47 (4.43)	17.10 (3.07)	-13.62	<.001
Program Governance				
Governing Board	30.0%	37.5%	0.39	.533
Parent Committee	13.3%	28.1%	2.04	.153
Program Planning & Management Systems				
Business/Strategic Plan in Last 3 Years	36.7%	84.4%	14.85	<.001
Employee Handbook	73.3%	87.5%	1.99	.158
Employee Criminal Background Checks	96.7%	100.0%	1.08	.298
Record-Keeping System	60.0%	100.0%	15.87	<.001
Annual Report	10.0%	21.9%	1.61	.204
Full-Time Staff Salaries				
$15,000 – $24,999	83.3%	62.6%	3.38	.066
$25,000 – $39,999	16.7%	37.4%		
Health Tracking Systems				
Medical Health Services	10.0%	87.5%	29.09	<.001
Dental Health Services	3.3%	90.6%	39.12	<.001
Mental Health Services	10.0%	90.6%	32.01	<.001
Disabilities Services	3.3%	78.1%	28.27	<.001
Nutrition	6.7%	65.6%	17.04	<.001
Family Engagement				
Parent Education Activities	70.0%	100.0%	11.23	.001
Parent Engagement Opportunities	66.7%	100.0%	12.72	<.001
Mental Health Supports				
Staff and Parent Education	36.7%	81.3%	12.79	<.001
Activities Supporting Children's Mental Wellness	30.0%	78.1%	14.48	<.001
On-Site Mental Health Consultation	23.3%	59.4%	8.26	.004
Interagency Agreements				
Formal Partnerships	16.7%	40.6%	4.31	.038
Informal Coordination	16.7%	59.4%	11.90	.001
No Coordination/Partnerships	66.7%	6.3%	24.69	<.001
School Readiness Supports				
Child Assessment	40.0%	96.9%	23.57	<.001
Curriculum	36.7%	93.8%	22.53	<.001
Leadership Development				
Director Received Leadership/ Management Training	40.0%	75.0%	7.79	.005

Table 2. *Program Administration Scale* (*PAS*) Data

	ELV Baseline *N* = 17	ELV Follow-Up *N* = 17	*t*-value	*p*-value
Human Resources Development				
Staff orientation	1.82 (1.51)	4.53 (1.66)	-6.34	<.001
Performance appraisal	1.59 (0.94)	2.76 (1.52)	-3.52	.003
Staff development	2.94 (1.43)	3.82 (1.07)	-2.76	.014
Personnel Cost and Allocation				
Compensation	1.76 (1.71)	2.88 (2.45)	-2.51	.023
Benefits	1.12 (0.33)	1.29 (0.85)	-1.38	.188
Staffing patterns and scheduling	2.29 (1.96)	3.41 (2.35)	-2.27	.037
Center Operations				
Facilities management	3.59 (2.21)	5.76 (1.92)	-3.69	.002
Risk management	1.53 (0.80)	2.82 (1.70)	-3.58	.002
Internal communications	1.00 (0.00)	2.47 (1.88)	-3.23	.005
Child Assessment				
Screening	2.29 (2.17)	4.71 (2.57)	-3.39	.004
Assessment in support of learning	2.65 (2.26)	5.12 (1.65)	-3.81	.002
Fiscal Management				
Budget planning	2.88 (2.37)	4.47 (2.70)	-2.54	.022
Accounting practices	2.53 (2.37)	3.65 (2.12)	-1.86	.081
Program Planning and Evaluation				
Program evaluation	1.47 (0.94)	2.88 (1.69)	-3.99	.001
Strategic planning	1.71 (1.10)	3.24 (2.17)	-3.10	.007
Family Partnerships				
Family communications	1.82 (1.29)	4.82 (1.78)	-7.14	<.001
Family support/involvement	3.65 (1.80)	6.18 (1.13)	-5.77	<.001
Marketing and Public Relations				
External communications	3.29 (1.10)	5.06 (1.56)	-4.44	<.001
Community outreach	1.71 (0.99)	4.94 (2.02)	-7.47	<.001
Technology				
Technological resources	6.82 (0.73)	7.00 (0.00)	-1.00	.332
Use of technology	3.47 (1.37)	5.35 (1.46)	-5.69	<.001
Staff Qualifications				
Administrator	3.18 (1.29)	2.89 (1.11)	1.10	.289
Lead Teacher[†]	1.49 (1.20)	2.06 (1.25)	-2.38	.030
Teacher[†]	2.33 (1.03)	2.00 (1.26)	0.54	.611
Assistant Teacher/Aide[†]	2.71 (1.23)	2.23 (1.64)	1.10	.292
Average PAS Item Score	**2.46 (0.69)**	**3.85 (0.65)**	**-9.51**	**<.001**

Data is presented as: mean (standard deviation)
[†] For ELV sample (baseline/follow-up), *n* = 94/86 lead teachers, *n* = 21/59 teachers; *n* = 70/54 assistant teachers; *ns* = non-significant; * *p* < .05; ** *p* < .01; *** *p* < .001

Table 3. *Program Administration Scale* (*PAS*) Data Compared to Norm Sample Data[1]

	Norm Sample *N* = 564	ELV Baseline *N* = 17	ELV Follow-Up *N* = 17	*t*-values Norm Sample vs. Baseline	*t*-values Norm Sample vs. Follow-up
Human Resources Development					
Staff orientation	2.88 (1.97)	1.82 (1.51)	4.53 (1.66)	2.20*	-3.42***
Performance appraisal	3.37 (2.10)	1.59 (0.94)	2.76 (1.52)	3.48***	1.19
Staff development	4.01 (2.12)	2.94 (1.43)	3.82 (1.07)	2.07*	0.37
Personnel Cost and Allocation					
Compensation	3.04 (2.22)	1.76 (1.71)	2.88 (2.45)	2.36*	0.29
Benefits	2.00 (1.61)	1.12 (0.33)	1.29 (0.85)	2.25*	1.81[†]
Staffing patterns and scheduling	2.85 (1.97)	2.29 (1.96)	3.41 (2.35)	1.15, *ns*	-1.15, *ns*
Center Operations					
Facilities management	4.99 (1.93)	3.59 (2.21)	5.76 (1.92)	2.93**	-1.62, *ns*
Risk management	2.50 (1.70)	1.53 (0.80)	2.82 (1.70)	2.34*	-0.76, *ns*
Internal communications	2.40 (1.83)	1.00 (0.00)	2.47 (1.88)	3.15**	-0.16, *ns*
Child Assessment					
Screening	4.50 (2.55)	2.29 (2.17)	4.71 (2.57)	3.53***	-0.33, *ns*
Assessment in support of learning	5.50 (2.21)	2.65 (2.26)	5.12 (1.65)	5.24***	0.70, *ns*
Fiscal Management					
Budget planning	3.35 (4.41)	2.88 (2.37)	4.47 (2.70)	0.44, *ns*	-1.04, *ns*
Accounting practices	3.61 (2.45)	2.53 (2.37)	3.65 (2.12)	1.79, *ns*	-0.07, *ns*
Program Planning and Evaluation					
Program evaluation	3.62 (2.30)	1.47 (0.94)	2.88 (1.69)	3.84***	1.32, *ns*
Strategic planning	2.81 (2.33)	1.71 (1.10)	3.24 (2.17)	1.94, *ns*	-0.61, *ns*
Family Partnerships					
Family communications	3.26 (2.24)	1.82 (1.29)	4.82 (1.78)	2.64**	-2.84**
Family support/involvement	4.84 (1.98)	3.65 (1.80)	6.18 (1.13)	2.45*	-2.78**
Marketing and Public Relations					
External communications	3.97 (1.64)	3.29 (1.10)	5.06 (1.56)	1.70**	-2.70**
Community outreach	3.58 (2.05)	1.71 (0.99)	4.94 (2.02)	3.75***	-2.70**
Technology					
Technological resources	3.68 (2.35)	6.82 (0.73)	7.00 (0.00)	-5.50***	-5.82***
Use of technology	4.90 (2.18)	3.47 (1.37)	5.35 (1.46)	2.69**	-0.85, *ns*
Staff Qualifications					
Administrator	2.22 (1.63)	3.18 (1.29)	2.89 (1.11)	2.41*	1.68[†]
Lead Teacher[†]	2.65 (1.42)	1.49 (1.20)	2.06 (1.25)	7.15***	1.69[†]
Teacher[†]	2.78 (1.82)	2.33 (1.03)	2.00 (1.26)	1.60, *ns*	1.75**
Assistant Teacher/Aide[†]	3.50 (2.20)	2.71 (1.23)	2.23 (1.64)	0.55, *ns*	2.36*
Overall Average Score	**3.72** (0.96)	**2.39** (0.66)	**3.85 (0.65)**	**4.63***	-0.55, *ns*

Data is presented as: mean (standard deviation)
[†] For ELV sample (baseline/follow-up), *n* = 94/86 lead teachers, *n* = 21/59 teachers; *n* = 70/54 assistant teachers;
  For norm sample, *n* = 2,589 lead teachers, n = 1,724 teachers; n = 1,027 assistant teachers
Red = below norm sample; **Green** = above norm sample; **Black** = no significant difference
ns = non-significant; * *p* < .05; ** *p* < .01; *** *p* < .001

Table 4. *Business Administration Scale* (*BAS*) Data

	Baseline *N* = 15	Follow-Up *N* = 15	*t*-value	*p*-value
Qualifications and Prof. Dvmt.	2.07 (1.98)	2.87 (1.77)	-1.82	.090, †
Income and Benefits	1.27 (0.80)	1.93 (1.53)	-2.20	.045, *
Work Environment	3.93 (2.15)	5.20 (1.90)	-2.39	.031, *
Fiscal Management	1.40 (1.55)	3.40 (2.47)	-3.33	.005, **
Recordkeeping	3.93 (1.28)	4.73 (1.16)	-2.57	.022, *
Risk Management	2.27 (1.44)	2.60 (1.84)	-0.89	.388, *ns*
Provider–Parent Communication	2.20 (1.08)	2.60 (1.60)	-1.10	.288, *ns*
Community Resources	2.27 (1.79)	5.00 (2.00)	-4.64	<.001, ***
Marketing and Public Relations	2.73 (1.75)	3.60 (1.92)	-2.98	.010, *
Provider as Employer	1.83 (1.17)	2.20 (1.10)	-1.00	.374, *ns*
Overall Average Score	**2.41 (1.09)**	**3.47 (1.35)**	**-4.58**	**<.001, *****

Data is presented as: mean (standard deviation)
ns = non-significant; †* *p* < .05; ** *p* < .01; *** *p* < .001

Table 5. *Business Administration Scale* (*BAS*) Data Compared to Norm Sample Data[2]

				t-values	
	Norm Sample *N* = 83	Baseline *N* = 15	Follow-Up *N* = 15	Norm Sample vs. Baseline	Norm Sample vs. Follow-up
Qualifications and Prof. Dvmt.	3.60 (1.73)	2.07 (1.98)	2.87 (1.77)	**3.08****	**1.50, *ns***
Income and Benefits	2.93 (1.96)	1.27 (0.80)	1.93 (1.53)	**3.22****	**1.87†**
Work Environment	5.87 (1.67)	3.93 (2.15)	5.20 (1.90)	**3.96*****	**1.40, *ns***
Fiscal Management	2.31 (2.15)	1.40 (1.55)	3.40 (2.47)	**1.56, *ns***	**-1.76†**
Recordkeeping	3.83 (2.09)	3.93 (1.28)	4.73 (1.16)	**0.18, *ns***	**1.62, *ns***
Risk Management	2.84 (1.62)	2.27 (1.44)	2.60 (1.84)	**1.27, *ns***	**0.52, *ns***
Provider–Parent Communication	4.83 (2.08)	2.20 (1.08)	2.60 (1.60)	**4.77*****	**3.94*****
Community Resources	3.99 (2.05)	2.27 (1.79)	5.00 (2.00)	**3.04****	**-1.76†**
Marketing and Public Relations	4.88 (1.64)	2.73 (1.75)	3.60 (1.92)	**4.63*****	**2.71****
Provider as Employer	2.48 (1.57)	1.83 (1.17)	2.20 (1.10)	**1.51, *ns***	**0.66, *ns***
Overall Average Score	**3.78 (1.03)**	**2.41 (1.09)**	**3.47 (1.35)**	**4.70*****	**1.02, *ns***

Data is presented as: mean (standard deviation)
Red = below norm sample; **Green** = above norm sample; **Black** = no significant difference
ns = non-significant; †* *p* < .05; ** *p* < .01; *** *p* < .001

Table 6. Staff Demographics for Center-Based Program Staff (*ECWES* & *EJSS* Respondents)

Demographic Variables	Baseline	Follow-Up	Test Statistics
Female gender (*N* = 77, 84)	100.0%	100.0%	---
Average age (*N* = 76, 78)	36.24 yrs	35.55 yrs	$t(152)=0.31$, *ns*
Highest level of education (*N* = 76, 83)			$\chi^2(4)=2.14$, *ns*
High school or GED equivalent	10.5%	14.5%	
Some college	53.9%	47.0%	
Associate's degree	7.9%	13.3%	
Bachelor's degree	21.1%	18.1%	
Master's degree	6.6%	7.2%	
Experience in ECE (*N* = 75, 83)	8.44 yrs	8.42 yrs	$t(156)= 0.02$, *ns*
Experience in Current Position (*N* = 71, 82)	3.11 yrs	3.22 yrs	$t(156)=-0.16$, *ns*
Employment Status (*N* = 77, 84)			$\chi^2(1)=2.34$, *ns*
Full-time	79.2%	88.1%	
Part-time	20.8%	11.9%	
Program Role (*N* = 77, 84)			$\chi^2(3)=0.84$, *ns*
Assistant teacher or aide	25.0%	19.3%	
Teacher	54.2%	59.0%	
Director/Assistant director	15.3%	16.9%	
Other (coordinator, administrative assistant, cook, etc.)	5.6%	4.8%	
County (*N* = 77, 84)			$\chi^2(3)=3.53$, *ns*
Arapahoe	28.6%	31.0%	
Garfield	7.8%	16.7%	
Mesa	33.8%	28.6%	
Pueblo	29.9%	23.8%	

Sample sizes reported as (N at Baseline, N at Follow-Up)

Table 7. *Early Childhood Workforce Environment Survey* (*ECWES*) Data

	ELV Baseline *N* = 68–77	ELV Follow-up *N* = 79–84	*t*-value	*p*-value
Collegiality	6.94 (2.07)	6.49 (2.15)	1.34	0.182, *ns*
Professional Growth	4.38 (2.75)	5.24 (2.52)	-2.08	0.039, *
Supervisor Support	7.48 (1.92)	7.26 (2.16)	0.67	0.502, *ns*
Clarity	5.55 (2.76)	5.99 (2.77)	-1.00	0.318, *ns*
Reward System	6.31 (1.90)	6.30 (2.03)	0.03	0.978, *ns*
Decision-Making	6.72 (2.08)	6.86 (2.12)	-0.41	0.682, *ns*
Goal Consensus	6.66 (2.59)	6.78 (2.19)	-0.30	0.762, *ns*
Task Orientation	6.57 (2.54)	6.54 (2.35)	0.07	0.947, *ns*
Physical Setting	6.64 (2.74)	6.99 (2.25)	-0.87	0.385, *ns*
Innovativeness	6.39 (2.19)	6.46 (2.34)	-0.17	0.863, *ns*

Data is presented as: mean (standard deviation)
ns = non-significant; [†] < .10; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 8. *Early Childhood Workforce Environment Survey* (*ECWES*) Compared to Norm Sample Data[3]

	Norm Sample N = 3,980	ELV Baseline N = 68–77	ELV Follow-up N = 79–84	t-values Norm Sample vs. Baseline	Norm Sample vs. Follow-up
Collegiality	6.39 (2.27)	6.94 (2.07)	6.49 (2.15)	-2.15*	-0.40, *ns*
Professional Growth	5.06 (2.53)	4.38 (2.75)	5.24 (2.52)	2.33*	-0.64, *ns*
Supervisor Support	7.02 (2.41)	7.48 (1.92)	7.26 (2.16)	-1.43, *ns*	-0.89, *ns*
Clarity	6.05 (2.40)	5.55 (2.76)	5.99 (2.77)	1.81, *ns*	0.22, *ns*
Reward System	6.98 (2.19)	6.31 (1.90)	6.30 (2.03)	2.51*	2.79**
Decision-Making	6.32 (2.42)	6.72 (2.08)	6.86 (2.12)	-1.41, *ns*	-2.00*
Goal Consensus	6.82 (2.31)	6.66 (2.59)	6.78 (2.19)	0.59, *ns*	0.15, *ns*
Task Orientation	6.80 (2.24)	6.57 (2.54)	6.54 (2.35)	0.86, *ns*	1.04, *ns*
Physical Setting	7.09 (2.25)	6.64 (2.74)	6.99 (2.25)	1.71, *ns*	0.40, *ns*
Innovativeness	6.80 (2.25)	6.39 (2.19)	6.46 (2.34)	1.55, *ns*	1.35, *ns*

Data is presented as: mean (standard deviation)
Red = below norm sample; **Green** = above norm sample; **Black** = no significant difference
ns = non-significant; †* $p < .05$; ** $p < .01$; *** $p < .001$

Table 9. *Early Childhood Job Satisfaction Survey* (*ECJSS*) Data

	ELV Baseline N = 72–76	ELV Follow-up N = 77–83	t-value	p-value
Co-Worker Relations	40.74 (5.82)	39.19 (6.70)	1.47	0.144, *ns*
Supervisor Relations	39.97 (7.43)	40.13 (7.79)	-0.13	0.895, *ns*
Work Itself	39.59 (5.70)	38.49 (5.45)	1.21	0.216, *ns*
Working Conditions	38.51 (7.04)	38.55 (7.27)	-0.03	0.974, *ns*
Pay and Promotion	32.74 (8.27)	35.27 (7.81)	-1.92	0.056, †

Data is presented as: mean (standard deviation)
ns = non-significant; † $< .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 10. *ECJSS* Compared to Norm Sample Data[4]

	Norm Sample N = 3,579	ELV Baseline N = 72–76	ELV Follow-up N = 77–83	Norm Sample vs. Baseline	Norm Sample vs. Follow-up
Co-Worker Relations	39.73 (6.72)	40.74 (5.82)	39.19 (6.70)	-1.30, *ns*	0.71, *ns*
Supervisor Relations	39.25 (8.54)	39.97 (7.43)	40.13 (7.79)	-0.47, *ns*	0.91, *ns*
Work Itself	39.10 (5.42)	39.59 (5.70)	38.49 (5.45)	-0.78, *ns*	1.00, *ns*
Working Conditions	38.17 (6.91)	38.51 (7.04)	38.55 (7.27)	-0.42, *ns*	0.49, *ns*
Pay and Promotion	31.73 (7.86)	32.74 (8.27)	35.27 (7.81)	-1.08, *ns*	-3.98***

Data is presented as: mean (standard deviation)
Red = below norm sample average; **Green** = above norm sample average; **Black** = no significant difference
ns = non-significant; † $< .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 11. *Infant Classroom Assessment Scoring System* (*CLASS*) Data

	ELV Baseline $N = 24$	ELV Follow-up $N = 16$	t-value	p-value
Relational Climate	5.67 (1.04)	5.79 (0.97)	-0.37	0.717, *ns*
Teacher Sensitivity	5.61 (1.32)	5.74 (1.03)	-0.32	0.752, *ns*
Facilitated Exploration	3.98 (1.13)	4.80 (1.03)	-2.32	0.026, *
Early Language Support	3.47 (1.28)	4.57 (1.30)	-2.64	0.013, *

Data is presented as: mean (standard deviation)
ns = non-significant; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 12. *Infant CLASS* Compared to Validation Study Data[5]

	Validation Study $N = 30$	ELV Baseline $N = 24$	ELV Follow-up $N = 16$	Validation Study vs. Baseline	Validation Study vs. Follow-up
Relational Climate	5.07 (0.98)	5.67 (1.04)	5.79 (0.97)	**-1.49, *ns***	**-2.38***
Teacher Sensitivity	5.13 (0.93)	5.61 (1.32)	5.74 (1.03)	**-1.04, *ns***	**-2.04***
Facilitated Exploration	4.02 (1.08)	3.98 (1.13)	4.80 (1.03)	**0.45, *ns***	**-2.37***
Early Language Support	3.89 (1.02)	3.47 (1.28)	4.57 (1.30)	**1.59, *ns***	**-1.96†**

Data is presented as: mean (standard deviation)
Red = below national average; **Green** = above national average; **Black** = no significant difference
ns = non-significant; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 13. *Toddler Classroom Assessment Scoring System* (*CLASS*) Data

	ELV Baseline $N = 37$	ELV Follow-up $N = 44$	t-value	p-value
Positive Climate	5.60 (1.02)	5.81 (0.82)	-1.01	.31 , *ns*
Negative Climate	1.15 (0.24)	1.27 (0.58)	-1.16	.252, *ns*
Teacher Sensitivity	5.26 (1.29)	5.46 (0.97)	-0.77	.441, *ns*
Regard for Child Perspectives	5.04 (1.15)	5.26 (0.84)	-0.97	.336, *ns*
Behavioral Guidance	4.95 (1.06)	4.91 (1.13)	.151	.349, *ns*
Facilitation of Learning & Dev.	3.08 (0.97)	4.18 (1.07)	-4.81	<.001, ***
Quality of Feedback	2.15 (0.74)	3.61 (1.06)	-7.04	<.001, ***
Language Modeling	2.89 (1.05)	3.71 (1.00)	-3.60	.001, **

Data is presented as: mean (standard deviation)
The version of the *CLASS* Toddler used in this national study did not include Quality of Feedback.
ns = non-significant; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 14. *Toddler CLASS* Compared to Baby FACES Study Data[i]

	Baby FACES $N = 220$	ELV Baseline $N = 37$	ELV Follow-up $N = 44$	FACES vs. Baseline	FACES vs. Follow-up
Positive Climate	5.60 (0.12)	5.60 (1.02)	5.81 (0.82)	**0.00, *ns***	**-0.66, *ns***
Negative Climate	1.30 (0.04)	1.15 (0.24)	1.27 (0.58)	**1.31, *ns***	**0.27, *ns***
Teacher Sensitivity	4.80 (0.10)	5.26 (1.29)	5.46 (0.97)	**1.56, *ns***	**-2.47***
Regard for Child Perspectives	4.70 (0.09)	5.04 (1.15)	5.26 (0.84)	**1.28, *ns***	**-2.33***
Behavioral Guidance	4.80 (0.10)	4.95 (1.06)	4.91 (1.13)	**0.52, *ns***	**-0.41, *ns***
Facilitation of Learning & Dev.	3.90 (0.12)	3.08 (0.97)	4.18 (1.07)	**2.37***	**-0.88, *ns***
Quality of Feedback	3.50 (0.18)	2.15 (0.74)	3.61 (1.06)	**2.62****	**-0.23, *ns***
Language Modeling	3.40 (0.16)	2.89 (1.05)	3.71 (1.00)	**1.11, *ns***	**-0.73, *ns***

Data is presented as: mean (standard error)
Red = below Baby FACES average; **Green** = above Baby FACES average; **Black** = no significant difference
ns = non-significant; * $p < .05$; ** $p < .01$; *** $p < .001$

Table 15. *CCR Family Outcomes Survey*

	Not Helpful	Somewhat Helpful	Very Helpful	χ^2 value	*p*-value
How Much Did the Program Help Your Child?					
Non-EHS Families	7.4%	14.7%	77.9%	7.73	.021
EHS Families	0.0%	15.7%	84.3%		
Overall	**2.9%**	**15.3%**	**81.8%**		
How Much Did the Program Help Your Family?					
Non-EHS Families	7.6%	21.2%	71.2%	3.07	.216
EHS Families	2.0%	22.0%	76.0%		
Overall	**4.2%**	**21.7%**	**74.1%**		
How Much Did the Program Help You?					
Non-EHS Families	9.2%	21.5%	69.2%	6.68	.035
EHS Families	1.0%	24.8%	74.3%		
Overall	**4.2%**	**23.5%**	**72.3%**		
Family Well-Being					
Non-EHS Families	11.8%	38.6%	49.6%	4.80	.091
EHS Families	8.8%	33.1%	58.1%		
Overall	**9.8%**	**34.9%**	**55.3%**		
Positive Parent–Child Relationships					
Non-EHS Families	10.0%	41.4%	48.6%	3.95	.139
EHS Families	6.8%	37.1%	56.1%		
Overall	**8.0%**	**38.6%**	**53.4%**		
Families as Lifelong Educators					
Non-EHS Families	5.7%	42.1%	52.2%	7.45	.024
EHS Families	5.3%	33.0%	61.7%		
Overall	**5.4%**	**36.3%**	**58.3%**		
Families' Engagement in Transitions					
Non-EHS Families	10.0%	41.7%	48.3%	4.98	.083
EHS Families	8.3%	30.9%	60.8%		
Overall	**8.9%**	**34.7%**	**56.4%**		
Families as Learners					
Non-EHS Families	11.8%	42.0%	46.2%	3.94	.140
EHS Families	8.4%	34.5%	57.1%		
Overall	**9.5%**	**37.0%**	**53.5%**		
Families' Connections to Peers and Community					
Non-EHS Families	14.7%	40.0%	45.3%	1.79	.408
EHS Families	12.8%	32.4%	54.7%		
Overall	**13.5%**	**35.0%**	**51.6%**		
Families as Advocates and Leaders					
Non-EHS Families	28.9%	46.7%	24.4%	11.09	.004
EHS Families	13.5%	33.3%	53.1%		
Overall	**18.4%**	**37.6%**	**44.0%**		

Table 16. *CCR Family Outcomes Survey* – Benefits and Areas for Improvement

Please tell us how your family has benefited from the program:
Taught my child skills for preschool; social skills; trying new foods; has made my transition back to work easier
[Program] has been a great learning environment for our daughter
We have received wonderful, high-quality child care for both of our children. We are so lucky and so grateful.
Peace of mind that our daughter is in a loving, caring environment
I don't believe we were involved with the program
Having good and educated teachers that make me feel comfortable leaving him here with them
Children have adjusted well to the new location and caregivers and do well together, instead of in separate classrooms
[Provider] is extraordinary with our kids. She is patient with our son who needs extra attention. Best child care we've ever had
Child care I don't have no one to take care of them
Being supportive
This program has united our family and kept us involved at daycare. We have learned about health and education
I didn't really know we were a part of this program. I thought we didn't qualify. So I do not feel like I have used any of this
Communication with the teachers is more helpful. They have a better knowledge of how and why the child acts or learns a certain way, good and bad
We put a child in the [program] for him to learn and be social
[Program] is the first place our son has looked forward to attending. He's learned so much in his short time there.
All around helpful
This program has helped my daughter behaviorally. She use to bite. Educationally--she is speaking more, drawing, and engaging with other children. I have open communication with the staff.
Did not go through program
It was good helpful and stuff
The program has helped my child reach many of his age-appropriate milestones and allowed my husband and I to both work so my child can live comfortably
Although my child does not qualify for the Head Start program, the daycare helps meet all of his needs by activities, learning, growing, and healthy eating
We've benefited greatly by knowing our child was extremely well cared for while we are at work
My son loves it
Has been an invaluable source of support
My family benefits by having my child come home happy from child care and not stressed about having to go to child care
Helped me understand I'm not alone
They really helped us to transition into child care for my new baby. I didn't work with my son until he was two and a half so they have really helped us keep breastfeeding going and helped us with combo feeding
My child comes home happy and confident
My boys have made little friends and learned a lot to help them grow
My son enjoys his time in the program and I love bringing him to [provider] every day
[Providers] have been incredible with their program. My son feels safe & happy & has learned SO much from being there. [Provider] creates a loving, faithful, safe environment.
We've all become closer
[Child] works well with others better and he learns lots at [provider's] school
This program has made it possible for me to finish my education so that we will be able to provide a stable financial future for our family--it has helped us immensely
Learning new ways to deal with certain situations
I have a safe place for my children so I can work
The program has helped me with many things and the children; mostly financially and health advice
We haven't been in the program long. I'm a single mom so making the meetings is a little hard along with my load of school work. I would love to attend one though.
Program is amazing. It's helped my kids so much.

My family has benefited from the program because I see all the skills my children are learning
I love the program!
Haven't really started anything with this program yet, besides diapers at day care which have helped a lot!
The biggest benefit has been with learning new ways to incorporate education with play. New ideas to help them grow within their own learning style
The financial assistance was a great help, as we did not budget the expenses since we were new foster parents
Increased socialization skills with children her own age. Not as clingy as she once was. Increased independence
This is the first time I've filled a survey out while they've attended [program]. I do not know much about the program specifically
We enjoy the homework backpacks with [Child]
Everything the program offers
I had an immediate need for child care and they filled it with practically no notice
There seems to be more educational toys/materials at the daycare. They now offer monthly parent learning activities.
We have benefited from the program in many ways. Mostly, we have learned how to eat better and have a daily schedule. Also, how to help our children learn and grow!
[Child] is in a great place with a great provider. He learns a lot and is very engaged.
Helps [Child] learn more and play with the other children while learning
[Provider] helped my daughter a lot while she is there at her house. She is like a second mother to me.
We really enjoyed the budgeting class. We also like the rainbow snacks. Hopefully soon we will have our youngest evaluated for delays and see if we need help more.
Getting more information on my child's development and growth
Providing diapers, wipes, and food has been very helpful financially. The extra activities during and outside of daycare have only helped myself as a parent and my son grow positively.
We have come closer as a family and work together with the kids
At times when I work a lot, the program at child care has made sure my child gets the attention he needs
This program has helped me and my child grow as a person and teaches my child her needs
The program has helped me with financial support and lets me know my child is somewhere safe where she is happy
I have more knowledge as to where my child is with her learning development
Having the extra help when a question or problem occurs
The program provided me with resources and helpful parenting books
We have found family in the program with the teachers
Well we started realizing he could pretty much sing his ABC's and we say grace before our meals and we have started counting to 5.
We don't worry about somewhere for him to be while at work. He communicates so much with us now and he gets structure and a daily routine. [Program] has been a blessing for me and [Child].
Our family has benefited by [Child] being able to be around kids her age and around kids that are willing to learn to communicate in her language (ASL)
The boys have come a long way since we first got them! I appreciate everything you do
Have not yet participated
This program has helped us find resources on the process of immigration and also the progression of our child as he entered and started daycare
Free child care
We eat healthy and learned to deal with family issues
Having my children enrolled in a program that is educational as well as health-conscious gives me the peace of mind of knowing that they are learning every day and preparing for school
Just emotional assistance
My son has grown leaps and bounds. He has improved in speech tenfold. Behavior is good at school, working on home life still, but he has an older sibling.
When my child is safe I am happy. I have learned about so many places I can get help in the community through this program.
Helped me with furthering my career goals and education
I am not real sure how much [Child] gets from school. She's always been very bright. She loves it there and her favorite is music. I feel like the program is very supportive and I feel confident that [Child] is getting more than she would without school

I have not attended any of these classes so I didn't receive any help
Helped grow and taught our 2 little ones
Thanks to this program I have been able to continue my studies, and I am very thankful for that
[Child] has been learning how to deal with emotions
This program benefits my family by giving me lots of good information
We have a healthy day care that [Child] learns a lot from and both [Child] and I are confident that he's safe when I'm at work
Have not had anyone help me with any of the above questions. I am, however, freshly enrolled in the program and don't think it is on purpose. I still have appointments to finish paperwork
This has helped me obtain a stable job to provide for my family. I feel [Child] is safe and being cared for when I am away
I feel my child has learned to interact with other kids and adults. She learned how to speak full sentences and respond back and she is only 23 months. This program has helped me and my family very much. I'm looking forward to education with [program].
Learning a lot
We just started so not very much but I know it's going to be good!
My family benefited from the program because we got stuff out of it a lot of learning
Able to go to school, work, give time with kids individually, handle appointment stress free-- kids in a safe, inviting, flexible, healthy, learning environment. Foundation to transition better to preschool/elementary
Without the program I would not have been able to afford child care while I went back to school
Helped us with creative new ways to play
The ladies are amazing!
In the few months that we have been enrolled my child has thrived in development
It has given us a starting point on how and where to deal with the kids and how to do positive activities to help the kids learn. Has encouraged us to open up and talk about things
Her emotional and social skills have improved. Would like more info on the other stuff I marked
[Child] loves her preschool and learns a lot at EHS. We are very thankful!
We also benefited by [Child] receiving a great early education. Very thankful for this program.
This program has helped our family financially. The cost of daycare was starting to get to our family.
Program has done a lot to help me financially and offer great support. They work with my work schedule and provide a safe environment for my child.
I love that [Child] is learning to count, learn shapes. She surprises me every day
With the help of the program we have been able to put our older kids into an afterschool program that allowed me to get more hours at work.
Definitely financially. The help with diapers and parent fees are huge. Also has helped with recognizing certain behaviors and how to proactively deal with them (80)
My children are very advanced and I am very pleased with the program. I'm confident my children will do very well when it's time to start school
[Child] has learned a lot with the program; he talks a lot better, plays with other kids a lot better ,and knows how to play with toys the right way

What could the program do better to support your family?

Nothing everything is good and it's very helpful
Nothing! Thanks for all you do for us
Nothing, [provider] is great
More home connection activities
N/A It's amazing already!
Doing good
At this time I can't think of any shortcomings of the program
More handouts for recipes or creative play
Help him with ABC's and counting, help with potty training when time comes
They let us know when certain things occur; i.e., Section 8 so I can't think of anything
It would be nice to have live streaming videos so I can check in on my child throughout the day and to receive more information about what he should be able to do at what age
I figured this was just about our child receiving care and that helps immensely

None
Nothing
We barely make too much for CCAP by 100 to 200 dollars so we have to pay for the program out of pocket which means we struggle financially to pay for it and our other finances suffer
Speech class
Nothing. We are very happy!
At this time I cannot think of anything. The program my daughter attends is wonderful and a blessing to find a daycare that truly cares and loves the children as much as they do.
What specific educational requirements are necessary to succeed in kindergarten in D-70 at Cedar Ridge
More emails and fewer pieces of paper
Doing just fine!
Adapt a little more on scheduling for care times
More communication/notice about how to be involved with the program
We love the program! Just keep teaching about healthy lifestyles and how to help our children learn! It really helps!
I don't really know what the program offers
I would love more flexibility in the times we meet or do trainings or activities
Find places to stay that are not shelters but low-income
Nothing. This program has done everything to help me and my family
More resources for care on evenings & weekends!
Help with knowing how to help my child move forward in school
Check in more
Provide healthier snacks at the daycare
I already love the way the program is, no need to improve on anything really.
They meet our every needs with the best care
Nothing at this time
Better teachers
Program was very helpful as it is
I think the program is doing great right now. Nothing to say but thank you.
Tell us about the activities done during the day
Give notice of these classes
The program is doing great. I wouldn't want anything changed
Nothing--doing an awesome job!
I'm happy with our day care opportunities
I would say providing hot or warm lunches. But I do know they are working on this.
Keep up the good work!!
Have more school meetings and have a visitor and keep us up to date what's going on
Make sure each individual is safe and helped
Take into consideration some parents/families may have illness, disabilities, and special needs that could limit the required time that child must be present in classroom--makes it difficult when you need the resource but challenges in daily life make it hard to get or keep child there. It is stressful to worry you or your child will get dropped!
This program is already doing good. Just keep with everything you already are doing
They are doing great!
I don't know
They have done a lot and even go on to offer additional things even if I personally might not need them. No complaints thus far.
My fiance is looking for a job here in Grand Junction. Just received his communications degree from Western State. Any help this program can do would help our family tremendously, thanks.
Any help for those who make too much for government services but still have trouble making ends meet (Christmas, food, heat, etc.)
I haven't really been involved enough to know
I feel that the program is doing a good job and that I need to put in more effort to know what could be improved
Can't currently think of anything
Nothing at the moment

My family does not need much extra support. From what I see of the program, it has excellent resources for those with greater needs than my own
I think the staff is doing great
Keep being incredible
Unsure; was very helpful
Supply books or supplies for activities with my daughter
I can't think of anything--everyone has gone above and beyond for the care of our children
We think keeping families involved is important
We have not yet done much with program but I look forward to it
Nothing I can think of right now! We are in a lot of transition at the moment so just making sure my son is okay while at school!

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