



# South Carolina First Steps to School Readiness Parents as Teachers External Evaluation FY16-17 to FY18-19

Prepared by:  
Institute for Families in Society,  
University of South Carolina  
and  
Pacific Research & Evaluation, LLC

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lower than high school graduation (27.8% of participants), and having a teenaged custodial parent (15.4% of participants). Importantly, when averaged across all participants, children of adults who participated in the PAT program during the evaluation period had an average of 3.4 risk factors ( $SD = 1.7$ ). This suggests that children served by PAT in this evaluation sample are experiencing a substantial number of risk factors for poor educational outcomes.

With regard to PAT program delivery, the average length of enrollment was 1.7 years, which suggests good congruence with the PAT Essential Requirements for PAT Affiliates of at least two years of services

that focuses on parents as agents of change; thus, changes in parenting are particularly important program outcomes. Importantly, and consistent with the prior external evaluation of PAT impact, positive changes were seen over time in program recipients. Specifically, t

Participation in group parenting meetings was less common. The current evaluation identified positive change in important proximal factors related to school succ



With regard to receipt of PAT services, the majority of families served are enrolling in PAT services when children are at an early age, with 84.5% of the current sample enrolling when children are age two and younger. Furthermore, the average length of service is 1.7 years, approaching the PAT standard of two years. Families received an average of 2.3 home visits per month, exceeding the expected standard of 2 visits per month. On average, families are receiving 17.9 home visits per year, which may be an underestimate as this annual average includes families who were enrolled for only part of a fiscal year. Overall, visitation data suggests that that trained PAT home visitors are able to support and guide families at a high level of intensity during a most critical period of child development.

Among families served by PAT, and consistent with the prior experience



participation in well-child services affords the opportunity for preventive healthcare and early identification of factors that can negatively impact child health, well-being, and school success. This is a novel finding, as to our knowledge, there are no prior published studies that examined PAT impact on well child visits.

Lastly, with regard to involvement in child protective services, no differences were seen between children served by PAT and similar peers with regard to the number of reports of child maltreatment either made or substantiated. Importantly, children who received PAT services have a trained parent educator conducting home visits for a substantial amount of time and attended a greater percentage of recommended well-child visits. Thus, families receiving PAT are under a higher degree of external surveillance relative to like peers, which provides more opportunities for maltreatment to be identified and reported

the referral was made as a result of an identified developmental delay or for other reasons), and the outcome of those referrals, can be useful for both practice with families as well as for program evaluation.

5. It is recommended that a detailed codebook be created for PAT program data that includes value labels recorded for key variables of interest. A detailed codebook would enhance clarity and ease interpretation of data elements captured for the PAT program and would support future program evaluations.
6. Given that the majority of families participated in relatively few group meetings that are offered as part of PAT, it is important to examine barriers to participation in these services by families.
7. First Steps has established strong internal standards for PAT service delivery that are consistent with the National PAT program standards. It is recommended that implementation data continue to be collected regarding the timing, content, and length of program delivery to assure ongoing adherence to these high standards. Additionally, further consideration of how enrollment (and unenrollment, following the end of services) dates are tracked is recommended, as enrollment data were particularly complex, with many cases of separate but overlapping enrollment time periods within a family.

### **Recommendations to Support Future Research**

1. Further research is recommended to assess impacts of PAT services on academic performance later in elementary school, in addition to assessing impact in kindergarten using the KRA.
2. A number of protective factors relevant for child maltreatment prevention are targeted by PAT, including knowledge of child development, social support, and parental mental health. Further research is recommended to assess the impact of these factors on program outcomes.

written project plans, with a timeline, are mutually established to assure on-time delivery of accurate data for analysis.









## FINDINGS

The current evaluation was designed to examine both the reach of PAT services through SCFS and to evaluate the impact of PAT services on children and families. Specific research questions are listed below.

### POPULATION OF CHILDREN AND FAMILIES SERVED

What population of children and families did PAT serve through local partnerships between FY17 and FY19?

#### 1. How many children and families were served between FY17 and FY19?

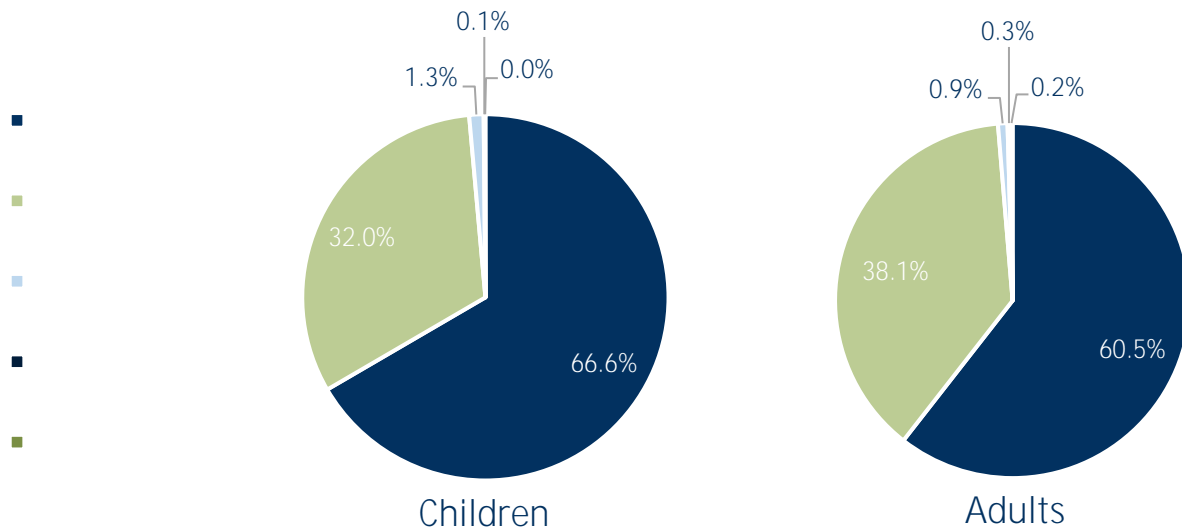
The PAT program served a total of 2,150 adults from FY17 to FY19. While most



**White/Caucasian (n = 832).** A total of 1.3% of children served were reported as Asian (n = 33), and less than 1.0% of children served were reported as Indian/Native American or Polynesian. A total of 13.1% (n = 341) of children were reported as Hispanic. Children ranged in age at enrollment from prenatal to five years old, as shown in Figure 3. The exact number of expectant mothers could not be determined because the data provided did not present age in values less than zero. Importantly, SCFS PAT Accountability Standards require that at least 70% of the newly enrolled families have an expectant mother and/or a child under 36 months of age. SCFS appears to be exceeding this standard; indeed, 84.5% of enrolled families contain expectant mothers and/or children less than 36 months of age.

Of the adults (parents/caretakers) served in the evaluation period whose demographic data were shared with the research team (n = 2,148), 96.2% (n = 2,067) were female and 3.8% (n = 81) were male. As shown in Figure 2 and similar to children served, a total of **66.7% of adults served were reported as Black/African American (n = 1,432), while an additional 31.8% of adults served were reported as White/Caucasian (n = 684).** A small percentage of adults served were reported as Asian (1.3%, n = 28), Indian/Native American (less than 1.0%), and Polynesian (less than 0.1%). A total of 12.4% (n = 266) of adults were reported as Hispanic. The adults served ranged in age at enrollment from 12 to 77 years old, as shown in Table 1. A total of 242 participants (11.2%) who were included as parents/caretakers were ages 12 to 20, representing a significant portion served who were adolescents or emerging adults themselves. This is important, as having a teenage mother is considered one of the risk factors for early school failure that is targeted in SCFS eligibility criteria for the PAT program.

*Figure 2. Race of Children (N = 2,602) and Adults (N = 2,148) Served from FY17 to FY19*



*Figure 3. Age at Enrollment of Children Served from FY17 to FY19 (N = 2,602)*

*Table 1. Age at Enrollment of Adults Served from FY17 to FY19 (N = 2,146)*

Age Group	Count	Percent
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Table 2. Region and County of Participants Served (N = 2,148)

Region	County	Number of Participants	Region	County	Number of Participants
Catawba	Cherokee	0	Pee Dee	Chesterfield	0
	Chester	44		Darlington	31
	Fairfield	45		Dillon	89
	Lancaster	0		Florence	31
	Newberry	44		Lee	15
	York	96		Marion	0
Coastal	Berkeley	156	Piedmont	Marlboro	46
	Charleston	113		Abbeville	55
	Colleton	44		Aiken	49
	Dorchester	48		Edgefield	0
	Georgetown	12		Greenwood	25
	Horry	83		McCormick	33
	Williamsburg	0		Saluda	0
Lowcountry	Allendale	52	Upstate	Anderson	0
	Bamberg	36		Greenville	0
	Barnwell	0		Laurens	27
	Beaufort	38		Oconee	24
	Hampton	20		Pickens	61
	Jasper	52		Spartanburg	0
	Calhoun	82		Union	80
	Clarendon	7.03 76.8			

Midlands

Among the 21 key risk factors for early school failure that SCFS considers for PAT program eligibility for children and families, the most frequently experienced risk factors for PAT program participants during the evaluation period were:

**Figure 10: Key Risk Factors for PAT Program Participants (n=100)**

or preschool settings (0.4%). Please note that lower frequency should not be interpreted as lower severity of risk for these children and their families.



# PROGRAM SERVICES PROVIDED

What PAT program services were provided through local partnerships from FY17 to FY19?

## 1. How long were participants enrolled in PAT program services?

PAT services are designed to be delivered over a two-year period. To understand the total length of time participants were enrolled in the PAT program, the research team examined program entry and exit dates for each adult who participated sometime within the evaluation period of FY17 to FY19. The latest possible exit month was considered to be June 2019, representing the end of evaluation period.

### METHODOLOGY NOTE

There were an abnormally high number of duplicate entries within enrollment time data (i.e., numerous entry and exit dates per adult), perhaps due to the structure of the data system. To resolve duplicates, the research team first removed all rows that represented a complete duplicate with another row (i.e., no unique information between rows). Next, if entry dates matched between two or more rows within a single adult's data, the longer total enrollment time was selected. The same was performed for exit dates: if exit dates matched between two or more rows within a single adult's data, the longer total enrollment time was selected. Next, following consultation with SCFS staff, when any adult had multiple rows with less than three months' difference between entry dates or exit dates, the longer enrollment time was selected. After following these steps, a total of 131 adults still had duplicate rows. These duplicates were examined manually, during which the research team selected the longer enrollment period fo

Following all duplicate resolution procedures, outliers were examined. Any total enrollment time over 10 years was removed, resulting in 7 data points removed. Following all data cleaning procedures, **enrollment time data were available for a total of 1,774 adults. The average total enrollment time was 1.7 years ( $SD = 1.5$  years). The median enrollment time was 1.3 years.** This average enrollment time is close to the desired two-year length of program enrollment as included in the SCFS PAT Accountability Standards and in alignment with the national standards for PAT. Theoretically, one would expect to see increased program impact with a greater length of enrollment.

## 2. How many home visits were provided to participants?

### KEY FINDING

**A total of 61,969 home visits were successfully conducted** between FY17 and FY19 for 2,116 families.

On average, visits were just over **one hour long** ( $M = 1.1$  hours;  $SD = 0.3$  hours; median = 1 hour).

An additional 1,764 home visits were attempted (but not successful) between FY17 and FY19.

The PAT program had a goal of 24 home visits per family per fiscal year. The average number of home visits per family per fiscal year was 17.9 ( $SD = 9.7$ ).

A total of 9.1% of participants had 6 or more risk factors

**For those families that received at least one visit:**

The median number of home visits per family per f7 26.r0( )] TJETQQ115.82 541b62 9.96



Table 4 shows frequencies for visits per month for those families that received at least one home visit.

*Table 4. Frequencies of Home Visits Per Family Per Month*

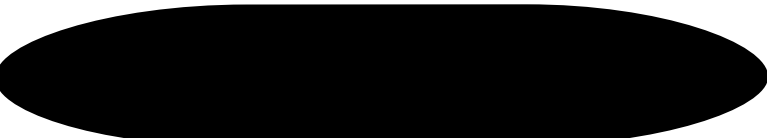
Visits per Month	Count	Percent
1 visit	182	0.7%
2 visits	2,797	10.3%
3 visits	16,624	61.4%
4 visits	5,010	18.5%
5 visits	1,897	7.0%
6 visits	385	1.4%
7 visits	83	0.3%
8 visits	28	0.1%
9 visits	30	0.1%
10+ visits	46	0.2%

## 2. How many Group Connections were made?

Group parent education meetings augment home visitation for families involved in PAT; SCFS PAT Accountability Standards note that 12 such group meetings are offered each year (one per month). From FY17 to FY19, participants attended a **total of 1,000 such group meetings**. Of the total 2,116 participants whose home visit data were made available to the research team, 17.7% ( $n = 374$ ) attended at least one group meeting. Table 5 shows frequencies for number of group meetings per family over the total evaluation period for those that attended at least one group meeting.


*Table 5. Frequencies of Group Meetings Per Family Across FY17 to FY19*

Meetings per Family	Count	Percent
1 meeting	147	39.3%
2 meetings	72	19.3%
3 meetings	60	



The evaluation team received additional data detailing the providers and the type of resource to which participants were referred. The most common types of referrals were for **family events/activities** (n = 4,420 referrals), **early education programs** (n = 1,071 referrals), **library resources** (n = 1,045 referrals), **family connection** (n = 511 referrals), and **housing resources** (n = 437 referrals).

Many organizations and programs that participants were referred to are listed in the referrals list under multiple names and in



multiple names and in some cases, the true number of referrals to a particular program. For example, the STAR parenting program was often referred with other services (e.g., Cayce-West Columbia Library, Lexington County First Steps).

# FIRST STEPS ARRAY OF SERVICES

How does PAT service provision fit within the service array provided by SC First Steps local partnerships and key early childhood partners?

## 1. How many families receiving PAT program services were also receiving childcare scholarships?

Out of the total 2,150 adults who participated within the evaluation period of FY17 to FY19, a total of **364** families received childcare scholarships (16.9%).

Of the 704 total scholarships provided across 364 families, the majority (n = 521, 74.0%) were full-time scholarships. An additional 13.6% (n = 96) were part-



KIPS scores ranged from 1 to 5, as expected. **The average score across all 4,696 KIPS scores was 3.46 ( $SD = 0.78$ )**, representing “moderate-quality parenting” on the KIPS scoring system. It is important to note that



ACIRI data were available for a total of 1,159 families

Promoting Interactive Reading and Supporting Comprehension	1.51	<b>1.94</b>	1.50	2.00	0.77	0.74
Using Literacy Strategies	1.21	<b>1.67</b>	1.25	1.75	0.82	0.85









# IMPACT OF DEVELOPMENTAL STATUS

How does the developmental status of the child influence both school readiness and future academic success?

## 1. How many children served during the evaluation period (FY17 to FY19) were identified as being at risk for or having developmental delays?

Children experiencing developmental delays are at risk of facing future challenges in school performance. Thus, SCFS and the PAT program assess children's developmental status using the Ages and Stages Questionnaire (ASQ). The ASQ is made up of different sets of questionnaires that screen for developmental delays based on a child's age. One set of questionnaires targets developmental screening (ASQ-3), and another targets social-emotional screening (ASQ:SE or ASQ:SE-2). Developmental screening on the ASQ-3 assesses five skill areas: communication, gross motor, fine motor, problem solving, and personal-social. Social-emotional screening on the ASQ:SE-2 addresses self-regulation, compliance, communication, adaptive behaviors, autonomy, affect, and interaction with people. Scores are designed to be grouped into four categories: on track, potential delay, delay, and out of range.

**ASQ-3 data were available for a total of 1,856 families, and ASQ:SE or ASQ:SE-2 data were available for a total of 1,793 families.** Within the PAT program, the ASQ is completed for all children in the home that are ages birth through five years old. As such, families may have data for multiple children and multiple measurement occasions, or for a single child and a single measurement occasion. **In total, 6,131 ASQ-3 assessments and 4,974 ASQ:SE or ASQ:SE-2 assessments were included in the evaluation data.**

A summary of the results of all 6,131 ASQ-3 assessment results provided to the evaluation team is provided in Figure 7. The majority of ASQ-3 assessment results showed that children were on track for typical development, with **86.9% to 91.8% of all ASQ-3 assessments resulting in "on track" status across**

Summaries of the results of all 4,974 ASQ:SE and ASQ:SE-2 assessments provided to the evaluation team are provided in Figures 8 and 9. Results were available for 1,529 ASQ:SE assessments and 3,347 ASQ:SE-2 assessments. The majority of assessment results showed that children were not experiencing developmental delays, with 82.1% to 86.1% of assessments resulting in “on track” status. Once again, it is important to note that the evaluation team was not able to examine the number of children these data represent, as families may have scores for multiple children.

*Figure 8. Social-Emotional Status on ASQ:SE Assessment (N = 1,529 ASQ:SE Assessments)*

*Figure 9. Social-Emotional Status on ASQ:SE-2 Assessment (N = 3,347 ASQ:SE-2 Assessments)*

## **2. How many children served during the evaluation period (FY17 to FY19) were also classified as receiving special education services in kindergarten?**

A total of 538 children that were receiving PAT services and were five years old were included in the Department of Education data provided to the evaluation team. **Of these 538 children, 60 (11.2%) were classified as receiving special education services. Thus, the majority of children served by PAT in this sample were being served in regular educational services.** To place this number of children in context, in FY17, FY18, and FY19, the number of five-year-old children receiving special education services statewide ranged from 4,630 to 4,

# IMPACTS ON KINDERGARTEN READINESS

What is the impact of PAT services on school readiness as assessed by the South Carolina Kindergarten Readiness Assessment (KRA)?

## 1. Does PAT program participation impact South Carolina Kindergarten Readiness Assessment (KRA) performance?

The South Carolina Kindergarten Readiness Assessment (KRA) is an instrument that measures a child's school readiness in the areas of social foundations, language/literacy, mathematics, and physical well-being<sup>18</sup>. It serves as a snapshot of a student's abilities at the start of the kindergarten school year. The assessment contains scores for each component, as well as an overall score, which ranges from 202 to 298. A higher score indicates a higher level of readiness for kindergarten. Scores are grouped into three categories: Emerging Readiness (202-257), Approaching Readiness (258-269), and Demonstrating Readiness (270-298).

The evaluation team was provided with an overall KRA score for a total of 215 children whose families participated in the PAT program during the evaluation period. Importantly, the KRA was not given in FY17, so the sample size was limited to only two fiscal years (i.e., FY18 and FY19). Additionally, because the KRA is given at the start of kindergarten, the sample size was also limited by the age of children from PAT families—only a small portion of children whose families were enrolled in PAT were old enough to have received the KRA during FY18 or FY19. As shown in Figure 3 of thi2 0 612 7W\*nitw, (po)-6(nl2(1)-2(5)-.2(5)-% pr)-3(o)-3(f)-2(c)4(hilDr)-12(e)5(n)-3(o)-3(f)-f2(a)-5(m)-3(ili)3(e)



# IMPACTS ON STUDENT ABSENTEEISM

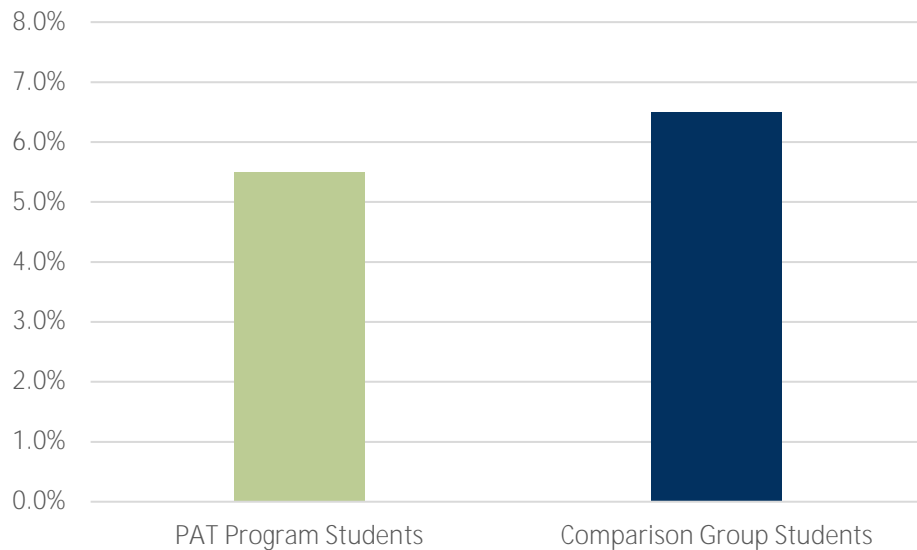
What is the impact of PAT services on chronic school absenteeism?

## 1. Does PAT program participation impact chronic school absenteeism?

Chronic absenteeism is defined as missing more than 10% of the total school days for which a student is enrolled. The evaluation team was provided with absenteeism data for 263 children whose families participated in the PAT program between FY17 and FY19. To evaluate whether participation in the PAT program impacted absenteeism, data from these 263 children from the PAT program (“treatment group”) were compared with data from a comparison group of children whose families did not participate in the PAT program (“comparison group”). Note that the sa



Figure 10. Average Percentage of School Days Missed by Group



Additionally, a chi-square test comparing *chronic* absenteeism (i.e., whether a child missed more than 10% of school days) between treatment and control groups was conducted. **Results showed that there was no significant difference in the proportion of students experiencing chronic absenteeism in the treatment and comparison groups,  $\chi^2(1, N = 1,745) = 0.00, NS$ . In other words, PAT program students did not experience chronic absenteeism more frequently than control group students; they kept up with the control group.** A logistic regression model predicting chronic absenteeism from intervention condition mirrored the results of the chi-square, showing no significant relationship between intervention participation and chronic absenteeism,  $B = 0.005, SE = .15, NS$ . Once again, it is important to note that these data are cross-sectional. It may be that there are impacts on chronic absenteeism over a longer period than a single year, but the evaluation team was unable to test any longitudinal models due to the low number of students with multiple years of absenteeism data.

## 2. How do child, family, and program characteristics relate to chronic school absenteeism?

Similar to the evaluation team's limitations in working with KRA data, many child, family, and program characteristics were unable to be linked to absenteeism data due to differences in how data are stored at the child and family levels (i.e., child data often could not be matched with family data). However, the evaluation team was able to examine the relationship between age at enrollment and absenteeism percentage. Results showed that age at enrollment was not a significant predictor of absenteeism,  $B = 0.005, SE = .003, \beta = .005, NS$ . In other words, age at enrollment was not significantly related to absenteeism within PAT program participants. **Future research would benefit from the ability to connect more child, family, and program characteristics to external data sources, like absenteeism.**



As a follow-

Sample sizes by age group and condition are presented in Table 12, along with the percentage of the



## EVALUATION SUMMARY

South Carolina First Steps to School Readiness (SCFS) was created by legislation in 1999 to lead the state's efforts in supporting school readiness for young children. SCFS is both a state agency and a non-profit organization, consisting of a state-level office and a network of 46 county-based Local Partnership offices. Supporting school readiness is a complex undertaking that requires a range of approaches, as multiple factors at the individual, family, and community levels affect the ability of children to benefit from educational opportunities. In recognition of the critical role of parenting in child development, parenting and family support programs represent one of the most significant categories of expenditure for SCFS Local Partnership offices. Parents As Teachers is the most common parenting program delivered or supported by SCFS (used by 27 of 46 Local Partnerships) and represents the largest fiscal investment in parenting programs by SCFS. In light of this significant investment, SCFS is legislatively required to evaluate prevalent programs on a five-year schedule (SC State Code § 59-152-50). The current evaluation of PAT was conducted to meet this legislative requirement.

The current evaluation of PAT was designed to examine program reach and impacts on key factors related to school success using quantitative data from FY16-17 through FY18-19. The time frame selected excludes FY19-20, the fiscal year during which the COVID-19 pandemic disrupted services and fundamentally altered life and services world-wide. This evaluation builds upon a prior external evaluation of PAT for SCFS by COMPASS that used data from FY08-09 to FY15-16. This prior evaluation focused on the establishment and implementation of PAT services within SCFS and determined that the program was being implemented according to both National PAT as well as SCFS program requirements. The prior evaluation also examined the impact of PAT services on both child and adult (parenting) outcomes; parenting outcomes showed some improvement over time while child outcome findings were mixed. Specifically, small differences were seen on a measure of school readiness (CIRCLE) between children who received PAT as compared to a large sample of children in public school who did not receive PAT, and no differences were seen between these groups in later grade retention. The current evaluation builds on this work by focusing exclusively on outcomes of PAT services at the child and parent level, using similar measures but with a more targeted comparison group of children that was created using propensity score matching, a statistical approach used to create comparison groups who are similar to the target group of children. For this report, children were selected for the comparison group based on their similarity to children whose families received PAT services in terms of geographic location (county), poverty level, race,







In sum, the evaluation identified strengths in PAT program delivery by SCFS PAT-trained parent educators, including high rates of home visitation services and average enrollment approaching two years. Participation in group parenting meetings was less common. The current evaluation identified positive change in important proximal factors related to school success, namely parenting skills (as assessed by two different measures) over the course of PAT enrollment. A dose-response effect was seen, in that increased time of enrollment was associated with higher scores on these parenting measures. Additionally, children/families who received PAT services participated in significantly more well-child visits as compared to a group of similar children who did not. While differences were not seen on KRA performance between children who received PAT services and similar peers who did not, the current evaluation did not examine the potential for changes in school performance or behavior later in elementary school. Importantly, the children receiving PAT are experiencing a significant number of known risk factors for poor educational outcomes whereas the number and type of risk factors experienced by the comparison group could not be examined due to data limitations.

## Evaluation Limitations

As with all evaluation approaches, the current evaluation is not without limitations. The quantitative data selected for inclusion in this evaluation were truncated due to concerns about data gathered in the fiscal years impacted by the COVID-19 pandemic; thus, sample sizes were smaller than would ideally have been used for analyses, due to the more limited number of years included in this evaluation (i.e., three fiscal years), as compared to the previous evaluation (i.e., eight fiscal years of data). While regular evaluations that span shorter time periods represent a highly valuable approach that has potential to impact the usefulness of evaluation results (e.g., ability to more regularly apply findings to program practices), the shorter time span also introduces limitations worth noting (e.g., smaller sample size).

While most analyses relied on sample sizes that were large enough to facilitate confidence in the accuracy and generalizability of findings, one result of the limited years of data selected for this evaluation was that some analyses performed had especially small sample sizes. Specifically, the analyses performed regarding the impact of PAT services on KRA performance contained a sample of 215 children out of the 2,602 children served by PAT in the evaluation period. These 215 children were the only children served by PAT in the evaluation time frame who appeared in the KRA data set obtained from the SC Department of Education (via RFA). The majority of the 2,602 children served by PAT in the evaluation sample were well below age 5, and thus had not yet reached kindergarten. Additionally, the KRA was not given in FY17, so data were available only for FY18 and FY19, further limiting sample sizes. Another impact of small sample sizes was that some analyses were unable to be conducted in the planned manner. For example, while absenteeism data were requested for all three fiscal years included in the evaluation, the evaluation team received multiple years of absenteeism data for only 86 children in the PAT program intervention group. The research team thus determined that the sample size was too small for a rigorous longitudinal analysis, as was planned during evaluation scoping. See Appendix D for additional information regarding sample sizes of external data files.

With regard to the analytic approach, during analyses of child outcomes, we compared children exposed to PAT services to a propensity score matched comparison sample whenever possible. However, children in the comparison sample were able to be matched based only on location (county), gender, race, poverty

status, and age. These indicators, while important and relevant, do not represent the full spectrum of risk factor data available for children from PAT-enrolled families, as the PAT program collects much more detailed data than is available in the state-level data systems from which the comparison group was drawn. Children served by PAT during the evaluation period experienced a substantial number of risk

risk factors seen, the higher the likelihood of a poor educational outcome, especially as the number of risk factors exceeds three or more.

With regard to receipt of PAT services, the majority of families served are enrolling in PAT services when children are at an early age, with 84.5% of the current sample enrolling when children are age two and younger. Furthermore, the average length of service is 1.7 years, approaching the PAT standard of two years. Families received an average of 2.3 home visits per month, exceeding the expected standard of 2 visits per month. On average, families are receiving an 17.9 home visits per year, which may be an underestimate as this annual average includes families who were enrolled for only part of a fiscal year. Overall, visitation data suggests that that trained PAT home visitors are able to support and guide families at a high level of intensity during a most critical period of child development.

Among families served by PAT, and consistent with the prior external evaluation of PAT for First Steps, the current evaluation found positive changes over time on parenting factors important to healthy child development and school success—the quality of the parent-child relationship and parent-child interactive reading skills—which increased as length of program involvement increased. Children are also receiving important developmental screenings; the vast majority of children were found to be “on track” developmentally. External referrals are being made for additional services at a high rate.

While this evaluation did not identify significant differences between children served by PAT and a matched sample of like peers on the KRA, the limited sample size of children in the PAT group for this analysis precluded our ability to reach a firm conclusion regarding impact of PAT services on kindergarten readiness. Importantly, this finding is somewhat consistent with the prior external evaluation of PAT on a different measure of school readiness (CIRCLE), in which only small differences were noted between children who received PAT and children who did not. Extant peer-reviewed research on PAT has identified significant impact of PAT services on later academic achievement and school behavior;<sup>19</sup> however, there are no published studies of PAT impact on measures of school readiness that can be used as a comparison for the results of this evaluation.

In addition to examining measures of school readiness like the KRA, it is also important to examine other factors that can impact a child’s academic performance such as attendance. The current evaluation showed that the average percentage of days absent for a PAT program student was significantly lower than the average percentage of days absent for students in the comparison group. Finding lower rates of absence is consistent with prior research<sup>19</sup> and is an important finding, as attending school is a prerequisite for being able to perform well in school. That said, no differences were seen in rates of chronic absenteeism (i.e., missing 10% or more of total days enrolled in school) between children who received PAT and like peers.

Extending analysis of PAT program impact, the current evaluation examined the impact of PAT services on well child visits, an important indicator of child health and well-being. Children who received PAT services did participate in well child visits at a higher rate than similar children who did not; this higher level of participation in well-child services affords the opportunity for preventive healthcare and early identification of factors that can negatively impact child health, well-being, and school success. This is a novel finding, as to our knowledge, there are no prior published studies that examined PAT impact on well child visits.

Lastly, with regard to involvement in child protective services, no differences were seen between children served by PAT and similar peers with regard to the number of reports of child maltreatment either made or substantiated. Importantly, children who received PAT services have a trained parent educator

4. It is recommended that consistent, standardized details regarding referrals made by PAT home

correct data to support this evaluation. Thus, it is recommended that direct meetings occur between RFA and researchers at the inception of research/evaluation projects, and that detailed written project plans, with a timeline, are mutually established to assure on-

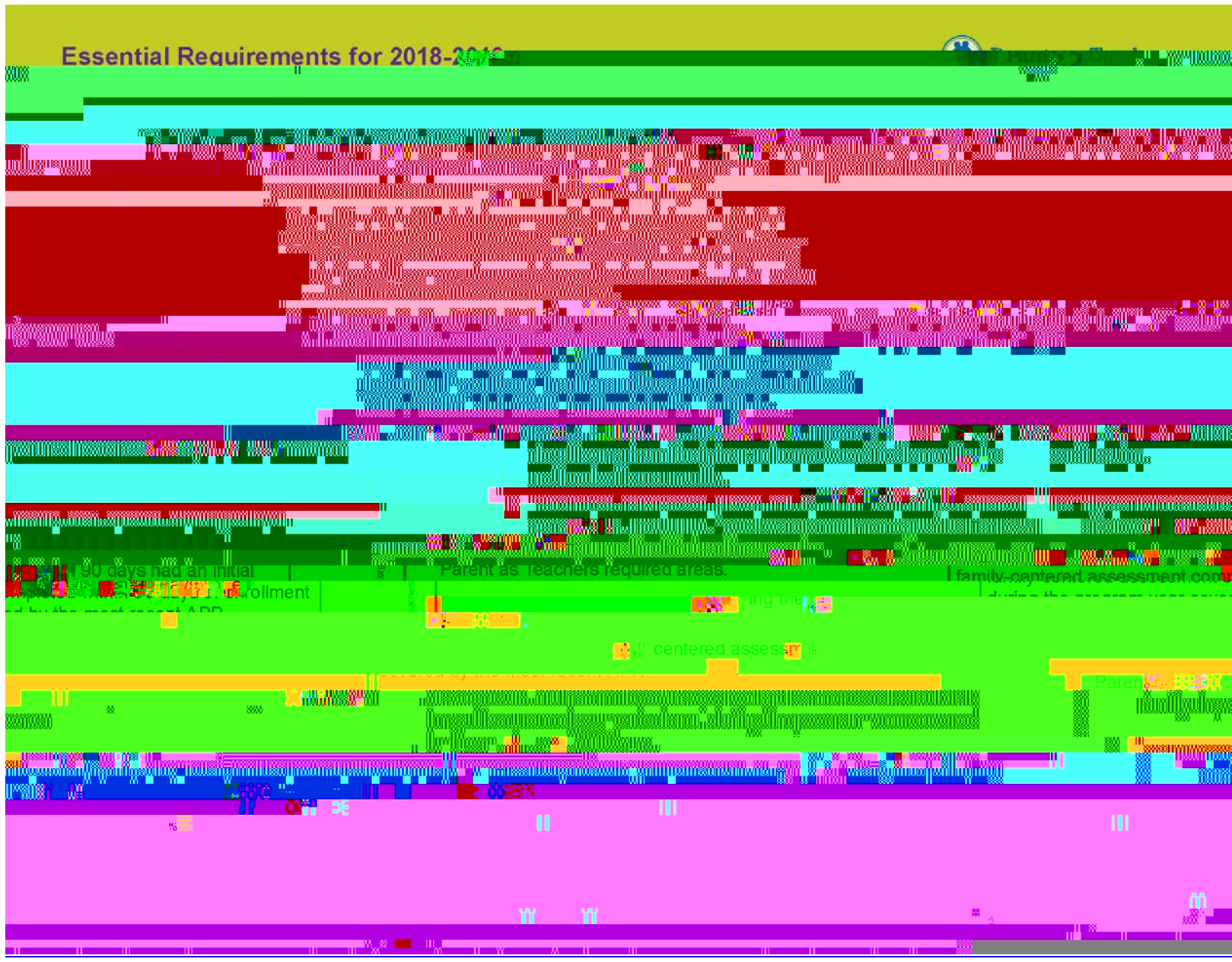
# APPENDIX A: SCFS PROGRAM ACCOUNTABILITY STANDARDS

# Attachment 1 PAT Essential Requirements

The table content is almost entirely obscured by severe digital corruption, appearing as a chaotic mix of colors and pixelated patterns. No text or data is legible within this area.



# Essential Requirements for 2018-2019







## APPENDIX B: Parents As Teachers LOGIC MODEL



## APPENDIX C: Parent and Child Level Data Availability



