



# SIXPENCE 2014-2015 Evaluation Report September 2015



**Interdisciplinary Center For Program Evaluation** 

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# **PROGRAM DESCRIPTION**

### What is Sixpence?

The Sixpence Early Learning Fund is a public-private partnership that is used primarily for grants to school districts to provide programs and services for infants and toddlers who are most at risk. The purpose of the Sixpence Programs is to help promote children's opportunities to experience positive environments that provide for their healthy growth and development during their earliest years. The Sixpence Programs promote community level partnerships that focus on meeting the developmental needs of very young children and support parents as their child's first and most important teacher, helping to ensure their child's success in school and later in life.

In the 2014-2015 program year, the Sixpence Early Learning Fund supported 25 programs across the state. Programs were funded through a combination of sources, including Sixpence, federal, state and local funds. This was Sixpence's seventh year of serving young children in Nebraska.

Each Sixpence program adopted one of three models: family engagement services, center-based infant/toddler care, or a combination of the two. Family engagement services included weekly individualized sessions in the family's home. For some families, the individualized services were provided in a community location. Many of the family engagement services also included group socializations, which were opportunities for children and families to gather together in learning activities. The majority of the center-based programs provided full-day services. All of the center-based programs used strategies to engage parents in their child's education program and conducted home-visits with the family. Most of the children (64%) participated in family engagement services. Sixpence sponsored programs in rural and urban communities with the majority of the children (67%) served in rural communities.



### Programs implemented one of the following models:

- Center-based care (6).
- Family engagement services (17).
- Family engagement and center-based care (2).

25 programs were funded across 25 school districts in 22 counties.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> (Cohort 1 funded Summer 2007, Cohort 2 funded Summer 2013 and Cohort 3 funded January 2014)

# CHILD AND FAMILY DEMOGRAPHICS

### Who were the children and families served?

In 2014-2015, Sixpence served 871 children and 804 families across 25 programs. Mothers of 11% (98) of the children participating in Sixpence this year were enrolled during their pregnancy.

Sixpence Programs serve infants and toddlers (birth to age three) who are most at risk of failure in school. The children served must have at least one of the five qualifying risk factors:

- Poverty, as defined by Federal guidelines for free or reduced lunch
- Born prematurely or at low birth-rate
- English is not the primary language spoken in the home (ELL, English Language Learner)
- Parents who are younger than 18
- Parents who have not completed high school.

Parents who fall into one of the qualifying risk categories can be served during the mother's pregnancy. Six additional risk factors were tracked: single parents, incarcerated parents, parent's absence due to death or military deployment, foster care or CPS involvement, child witnessing violence in home or community, and family mental health issues. The graph below shows the most common risk factors Sixpence families experience.

# Low income is the leading risk factor facing Sixpence families.



Of the five qualifying risk factors to participate in Sixpence, premature birth or low birth weight was the least common, with 10% of the children meeting this criteria. Sixpence is serving more children at high risk than ever before. The rate of children with three or more risk factors has increased from 57% last year to 68% this year.

### Trauma plays a role in the lives of 46% of the children in Sixpence

Additional risk factor data was collected on 610 families in the spring of 2015 to assess trauma children experience.

- 34% of the children had parents with mental health problems, including drug or alcohol abuse
- 14% experienced parent absence during the program year due to death or military deployment
- > 13% had an incarcerated parent.
- ▶ 10% were living in foster care or had a CPS referral
- 9% had witnessed violence

### **Child Demographics:**

Sixpence served slightly more males (52%) than females (48%). A total of 7% of the children were enrolled in the Early Development Network. The majority of the children (64%) were under the age of one at the time of intake. This is a decrease from the previous year when 79% of the children enrolled under the age of one.

### Most of the children served were minorities.



### **Parent Education:**

Nearly half of the mothers (43%) did not have a high school degree or GED at intake. In the spring, program staff received updates on the educational status of 220 of these mothers. By June, 43% had earned their diploma or GED and 26% were still enrolled in high school or working towards a GED. About a third (31%) were no longer pursuing any education. Results indicate that most Sixpence mothers worked on achieving their goal to obtain an education.

A smaller number of fathers, (30%) did not have a high school degree. Program staff collected educational updates for 174 of these fathers. By June, 40% had attained their diploma or GED, 9% were still working toward a diploma, and 51% were no longer pursuing any education.

# What was the retention rate of families in the program?

This year, Sixpence retained 79% of the enrolled children, meaning they stayed in the program through June 30, 2015 or until the age of 3. 80% of the children who exited early withdrew in the first year of service.

The Sixpence retention rate was 79%

Of the 181 children who left the program prematurely, the most common reasons were a family move (27%), poor attendance (24%), and family issues that made it difficult to participate (23%). This year 6 children left the program before age three because their parent graduated from high school and they were no longer eligible to attend the early childhood center reserved for children whose parents are enrolled in the high school. While this counts as a premature exit of Sixpence, it is actually a success because the parents met their goal of graduating from high school.

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# **EVALUATION FINDINGS**

A comprehensive evaluation process was conducted to monitor the implementation of the Sixpence programs and assess progress towards identified program outcomes. Information was collected and reported uniformly across programs. Data was shared with programs throughout the year to support program improvement.

The findings are reported in four areas: Program Quality Outcomes, Child Outcomes, Health Outcomes and Family Outcomes. For each outcome, we report the percentage meeting the Sixpence program goal. When there is fall and spring data, we present change over time. We also report the impact of four factors: family language, family risk factors, length of time in Sixpence, and type of program, on child and family outcomes.

#### **Program Impacts**

To quantify program impacts, we report all pre and post measures relative to significance (were the results statistically significant) and if so, what was the magnitude of the change (effect size). Effect sizes are either reported as a Cohen's d or  $\eta^2$ . To understand effect size and to place it in context, Cohen (1988) suggests the values of *d*=0.20 to be small, *d*=0.50 to be medium, and *d*=0.80 to be a large effect. More recently, Hattie (2009) uses a concept called "zone of desired effects" that starts

at a medium effect size, 0.40. Effect sizes can be greater than 1.0; however, they are less common and are therefore not shown on the graphic. Effect sizes tend to be smaller with very young children, so some recommend that the zone of desired effects to begin at around .20. With younger students (infant through kindergarten), lower value effect sizes are recommended because the range of measurement error is larger with very young children (Burchinal, 2008). For this report, a value of 0.20 will be considered in the zone of desired



Zone of Desired Effects (Hattie 2009)

results since we are assessing young children. Interpreting effect sizes using a  $\eta^2$  is different than Cohen's d. The guideline for effect size with One Way ANOVA is  $\eta^2$ : small=0.01, medium=0.059, and large=0.138 (Cohen, 1988).



# **PROGRAM QUALITY OUTCOMES**

### What was the quality of center-based services?

Two tools were chosen to evaluate the quality of Sixpence classrooms, the Classroom Assessment Scoring System (CLASS) and the Infant/Toddler Environment Rating Scales-Revised (ITERS-R). According to its authors, the CLASS "is a rating tool that provides a common lens and language focused on what matters—the classroom interactions that boost student learning" (LaParo, Hamre, & Pianta, 2012). The ITERS-R assesses classroom quality, with a focus on classroom structure, activities, and play materials. Newer teachers were assessed using the ITERS-R while teachers who had been a part of the Sixpence program previously, and already met quality benchmarks on the ITERS-R in prior years, were assessed using the CLASS. A random sampling of half of the classrooms (or a minimum of two classrooms for smaller programs) was assessed per program.

### **Classroom Assessment Scoring System (CLASS) Results**

CLASS scoring was based on a two-hour videotape of classroom interactions. Both the Infant and Toddler CLASS rate teacher-child relationships based on social-emotional supports. The Toddler CLASS has an additional domain, Engaged Support for Learning, to measure how teachers engage the children in discovery, promote critical thinking, and provide rich language experiences. Scoring is based on a 7 point scale with 7 indicating highest quality. The CLASS results for 17 classrooms are presented below.

# Sixpence center-based teachers consistently created emotionally supportive and caring environments in their classrooms.



Engaged Support for Learning was of moderate quality.

Sixpence classrooms demonstrated high quality in the area of teacher-child relationships. The teachers were consistently warm, responsive, flexible, and supportive towards children. Over 85% of the classrooms scored above a 5 in this area. Sixpence classrooms created an environment of mutual respect between teachers and children and in peer to peer interactions. Engaged support for learning was in the moderate range. In this domain, 50% of the classrooms scored above a 5.

In the area of socialemotional support, over 85%

> of the classrooms met the quality benchmark

# Over time, toddler classrooms remained in the high quality range and infant classrooms in the high-end of the moderate quality range for emotionally supportive environments.

Although Toddler Engaged Support for Learning is in the moderate quality range, scores have risen from the past year.



Although the average Toddler CLASS Emotional and Behavioral Supports score has declined slightly over time, averages remain in the high quality level. Engaged Support for Learning scores increased from the previous year. In the area of Engaged Support for Learning, average scores were in the moderate range, and improved from last year (i.e., a .62 gain). Mid-range scores indicate that teachers were not utilizing top tier strategies or they were not consistent in using these strategies. For example, at times teachers facilitated development by ensuring active engagement, by providing assistance to help children gain new understanding, and by connecting familiar words to new vocabulary. At other times, teachers were less likely to use these strategies. The Infant CLASS averages showed almost no change, moving from 5.92 last year to 5.91 this year.

Although there have been slight changes in CLASS scores, both negative and positive, there is no statistical significance to these changes. This indicates that classroom quality has remained relatively constant over time.

#### Infant/Toddler Ratings Scales-revised (ITERS-R) Results

The ITERS-R was used in programs that were new to Sixpence, in classrooms with a new teacher or a new setting, or in classrooms that had not met the quality indicators in the previous year. The ITERS-R is based on a three-hour, in-person observation. Scoring is based on a 7 point scale with 7 indicating highest quality.

The following graph shows ITERS-R subscale and overall averages of a random sampling (n=8) of participating classrooms. Sixpence classrooms continue to rate highly on the ITERS-R and consistently meet state quality benchmarks in almost every subscale, with Personal Care Routines being the one exception.

In 2014-15, Sixpence classrooms on average met or exceeded the Sixpence program goal in all subscales and overall.



All of the classrooms met the overall rating for quality in the 2014-15 program year based on the ITERS. A majority (63%) met the quality criteria across all seven subscales. The only area a portion (37%) of the programs did not reach the program goal was in Personal Care Routines, which is traditionally a more challenging subscale. The highest average scores were in the areas of Interactions and Parents/Staff.



Environmental Scale Ratings (ITERS-R) continued to follow the same pattern as in previous years.



Overall, classrooms continue to follow the same pattern as in previous years, showing exceptional classroom quality that is consistently maintained across program years.

### What was the quality of family engagement services?

The Home Visit Rating Scales-Adaptive and Extended (HOVRS-A+ v.2) assesses the quality of family engagement sessions based on a video of a family engagement session. It is scored on a 7 point scale, with 7 indicating high quality. The HOVRS-A+ v.2 results are reported in two domains. The first, Home Visit Practices, measures the home visitor's responsiveness to the family and how the visitor facilitates parent-child interaction, builds relationships with the family, and uses non-intrusive approaches. The second domain, Family Engagement, measures parent-child interaction and the level of parent and child engagement within the activities of the home visit.

In 2014-2015, 36 home visitors were assessed, and of these home visitors, 12 were new to the program. The results of the HOVRS-A+ v.2 indicated that the majority of home visitors met the quality benchmark (i.e., score of 5) indicating а incorporation of best practices during their sessions. The quality was high even with a significant number (33%) of new home visitors.

# The majority of home visitors consistently used best practices to support families.



As shown in the following chart, the average scores in 2014-2015 for Home Visit Practices and the Family Engagement domains exceeded the quality benchmark of 5.0. The Home Visit Practice score was 5.59 and the Family Engagement score was 6.39.

In the Home Visit Practices domain, three of the four subscales met the quality benchmark. Home visitors showed the greatest strength in building relationships with families. A high rating on this scale indicates the home visitor and family are frequently engaged in

### Sixpence home visitors, on average, met the quality benchmarks

t strength in building relationships with families. A high rating on this scale indicates the home visitor and family are frequently engaged in warm, positive behaviors during the home visit. The average score for the Home Visitor Facilitation of Parent-Child Interaction subscale fell slightly below the benchmark.

In the Family Engagement domain, all subscales met the quality benchmark. The greatest strength was in the area of Child Engagement. A high rating on this scale indicates that the child frequently displayed behaviors that indicate engagement and interest in the home visit.

### Home Visitors have built strong relationships with their families.

Facilitation of Parent-Child Interaction is an area for growth as it fell just below the quality benchmark.



The chart below reports the average HOVRS-A+ v.2 scores for both the Family Engagement and Home Visit Practices scales over the past two years. Family Engagement scores have been consistently higher than Home Visit Practices scores; however, the average scores on both scales exceeded the quality benchmark of 5.0. Scores in both areas were higher in 2014-2015.



### Home Visitor practices have been consistently high quality over time.

## **CHILD OUTCOMES**

### What were the children's language outcomes?

Two standardized assessments were administered to monitor the children's language outcomes. The McArthur-Bates Communicative Development Inventories (CDI), a parent report assessment measuring language production and comprehension, is given to children ages 8 to 30 months. The Peabody Picture Vocabulary Test–IV (PPVT-IV), a direct child assessment measuring vocabulary, is given to children at age 3. The Sixpence program goal is a standard score of 100, the midpoint of the average range. The chart below indicates the percentage of children who met the program goal after at least 6 months of participation in Sixpence.

### More than half of the children met the program goal for comprehension.

Most of the children did not meet the goal for vocabulary and production.



### % of Children Meeting Sixpence Language Goals

Comprehension was the strongest language skill with 53% of the children meeting the goal. Far fewer children met the goal in vocabulary (37%) and production (30%). These results are similar to child language outcomes in 2014.

# Type of program made a difference

Children in family engagement programs had better comprehension outcomes than children in center-based programs

### Comparisons: Family engagement programs and Centerbased programs.

A one-way between subjects ANOVA was conducted to compare the language outcomes of children enrolled in the two types of Sixpence programs. Children in family engagement settings scored significantly higher in comprehension [F=17.698, *p*<.001] than those served in center-based programs. The effect size was medium ( $\eta^2$ =0.112).

# Child language outcomes were not significantly different based on the number of risk factors, the length of time in Sixpence or the child's primary language.

#### Comparison: Low and high risk, Time in Sixpence and Child's primary language

A one-way between subjects ANOVA was conducted to assess if risk factors (high or low), time in Sixpence (less than or greater than a year), or child's primary language (English or English Language Learner) resulted in differences in language outcomes. The analyses found that there were no significant differences in outcomes for children based on these three groupings.

### A home visitor shares her client's story

Janie is a senior at Aurora public schools and when she entered the program she had a 15 month old son with another boy due in September. Her son Timmy was highly active with little communication skills, and for a teen mom, a lot to handle. With the months spent working with Janie and Timmy, she has become a great mother. We even got Timmy the help he needed as we referred him for services at 17 months old and he now receives speech therapy. Without Sixpence who knows when Timmy would have received these services. We both were able to witness his first "clear" word just a couple weeks ago during a visit; it was "Yeah". He said it loud and clear and mom was super proud in that moment. Every week I see great changes in Timmy and his mom. When I first started serving them, Timmy had not been in contact with many books. Now it's his favorite thing to do with his mom!



### What were the social-emotional outcomes of the children?

In the fall and spring, parents or classroom teachers completed the Devereux Early Childhood Assessment (DECA), a standardized social-emotional assessment that meaures children protective factors in the areas of Initiative, Attachment and Self-Regulation. A total of 391 children had fall and spring assessments.



Sixpence children were on target for social-emotional competencies. Children showed significant improvement from fall to spring in all areas.

By spring, Sixpence children, on average, scored above the national mean for social-emotional competencies. Sixpence children met the program goal across all areas. The program goal is the national mean (i.e., 100).

#### Comparison: Change over time

Paired samples analyses were completed to measure change in standard scores over time. Children made significant improvements in the three subscales and in Total Protective Factors:

Initiative: Fall (M=108; SD=10.33)/Spring (M=110; SD=8.99), p<.001, d=0.21; Attachment: Fall (M=105; SD=9.94)/Spring (M=108; SD=8.36), p<.001, d=0.23; Self-Regulation: Fall (M=99; SD=10.68)/Spring (M=101; SD=9.35), p=.009, d=0.19; Total Protective: *Factors*: Fall (M=106; SD=10.24)/Spring (M=109; SD=8.46) *p*<.001, *d*=0.21.

These results represent a small effect size that falls within the zone of desired effects.

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of the children met the program goal for social-emotional competencies

# Family language made a difference

ELL children had higher social-emotional outcomes than English speakers

#### **Comparison: ELL and English speakers**

A one-way between subjects ANOVA was conducted to compare the social-emotional outcomes of the ELL children to their non-ELL peers. Children who were ELL scored significantly higher in Total Protective Factors [F=4.550, *p*=.033] than their English speaking peers. The effect size was small ( $\eta^2$ =0.008).<sup>[1]</sup> It is important to note that both groups demonstrated strong social emotional skills with average scores above the national mean.

# Type of program made a difference

Children in family engagement programs had higher social-emotional outcomes than children in center-based programs

# Comparison: Family engagement and Center-based programs

A one-way between subjects ANOVA was conducted to compare the social-emotional outcomes of children enrolled in the two types of Sixpence programs. Children in family engagement settings scored significantly higher in Total Protective Factors [F=20.177, *p*<.001] than those served in center-based programs. The effect size was small ( $\eta^2$ =0.044). Again, both groups met the program goal and had average scores above the national mean.

# Neither the number of risk factors nor the length of time in Sixpence contributed to significant differences in social-emotional outcomes.

#### Comparison: Low and high risk and Time in Sixpence

A one-way between subjects ANOVA was conducted to assess if risk factors (high or low) or if time in Sixpence (less than or greater than a year) resulted in differences in social-emotional outcomes. The analyses found that there were no significant differences in outcomes for children based on these two groupings.



<sup>[1]</sup> Note interpreting effect sizes using a  $\eta^2$  is different than Cohen *d*. The guideline for effect size with One Way ANOVA is  $\eta^2$ : small=0.01, medium=0.059, and large=0.138. (Cohen, 1988).

### What were the developmental outcomes for the children?

Teaching Strategies (TS) GOLD, an authentic developmental assessment, was adopted by the Nebraska Department of Education to assess all children receiving services in school district funded programs. The child outcome areas in this assessment include: cognitive, language, fine motor, social-emotional, literacy, and math. TS GOLD established widely held expectations for each age group. These expectations include the skills that children at a given age group would obtain based on research in the field. Assessments were completed on an ongoing basis. For this report, 94% of the spring checkpoint data were analyzed to monitor children's progress children were gaining towards achieving widely-held expectations as well as monitoring skills at the expected growth across these outcome areas. Data for this report was collected for all children (i.e., typically developing and those with IEPs and growth rate IFSPs). A total of 457 children had assessment data collected in the

# By spring, high percentages of children were meeting widely held expectations across developmental areas.



Lower percentages of children were meeting expectations in math and literacy.

The majority of the children were meeting widely-held expectations across all developmental areas. Strengths were in the areas of cognitive and physical development with fewer children achieving expectations in math and literacy. Across the year, children were progressing as anticipated based on the growth expectations of the TS GOLD assessment.

spring.

### **HEALTH OUTCOMES**

### What were the health outcomes of the children?

### Nearly all of the children met every Sixpence health indicator.

Sixpence immunization rates were 13 % points above the state rate of 79%.



In the spring, health and risk factor updates were collected for 610 families.

Results indicate that in nearly every category, Sixpence families made healthful choices for their children. Nearly every family had a consistent medical provider who they saw for regular checkups and immunizations, as opposed to using the emergency room for routine health needs. While most of the children were in good health, 9% had a chronic medical condition such as asthma. The only health indicator where Sixpence fell short was in child exposure to smoke. Programs may want to consider ways to promote smoking cessation classes for families who qualify.



### A parent reflects on Sixpence

I love the program! My child and I have grown and the material and activities are very beneficial. I find myself now more aware of what my son needs and follow his lead. We spend more time together and we do things that encourage his development. This program helped me find my "mom" voice and encouraged me to be my son's first teacher.

# What were the health outcomes for the pregnant mothers and newborn babies?

Of the 98 children whose mothers received Sixpence prenatal services, 79 were born in the 2014-2015 program year. A spring health survey was collected for 37 of these mothers.

### Nearly all of the pregnant mothers received consistent prenatal care. Most mothers avoided risky behavior but 27% smoked during their pregnancy.



Results indicate that Sixpence mothers engaged in a number of healthy practices to promote the health of their infant, including consistent prenatal care and breast feeding their infants. Most of the babies were born full-term with healthy birth weights. Most of the mothers abstained from risky behaviors while pregnant. An area of prenatal health that falls well below the program goal is the rate of mothers who smoke while pregnant. Smoking cessation support for pregnant women in Sixpence could be a focus for services in the coming year. Another area of focus could be breast feeding support. While most new mothers initiated breast feeding, less than a third continued to breast feed for four months or longer.

### **81%**

of the mothers initiated breast feeding

### 30%

continued to breast feed for 4 months or longer

## **FAMILY OUTCOMES**

### How did Sixpence impact parenting practices?

The Keys to Interactive Parenting Scale (KIPS) measures parenting behaviors across three areas: Building Relationships, Promoting Learning and Supporting Confidence, based on a videotape of a parent playing with his or her child. Scores are based on a 5 point scale with 5 being high quality. A total of 181 families had fall-spring KIPS.



Sixpence made a difference in improving parent-child interactions.

Families made significant improvements in Building Relationships, Promoting Learning and in overall parent-child interactions.

Sixpence families demonstrated strong skills in building relationships with their children. On average, they met the program goal in this area. They demonstrated more moderate skills in the other subscales but also showed meaningful improvements which indicated that Sixpence is making a positive difference in parenting skills. By spring, half of the parents met the program goal for overall parent child interactions and 76% met the goal in building relationships. Fewer parents meet the goal in promoting learning (42%). Just over a third (39%) of the parents met the goal in supporting confidence. Results found that additional factors influenced parent-child interaction, including the language status of the family, risk status of the family and time in program.



of parents were highly skilled in building relationships with their child

#### Comparison: Change over time

Paired samples analyses were completed to measure change over time. Families made significant improvements in:

Building Relationships: Fall (M=4.03; SD=.73)/Spring (M=4.27; SD .74), *p*<.000, *d*=0.20 Promoting Learning: Fall (M=3.46; SD=.90)/Spring (M=3.64; SD=.90), *p*=.013, *d*=0.19; and Overall: Fall (M=3.72; SD=.76)/Spring (M=3.90; SD=.77), *p*=.005, *d*=0.21.

These results represent a small effect size that falls within the zone of desired effects.

# Family language made a difference

Parents whose primary language was English had significantly higher parentchild interaction scores

## Risk factors made a difference

Parents with higher risk had significantly lower parent-child interaction scores

# Time in Sixpence made a difference

Parents served for more than a year had significantly higher parent-child interaction scores

#### Comparison: ELL and English speakers

A one-way between subjects ANOVA was conducted to compare the parent-interaction outcomes of ELL parents and their non-ELL peers. Parents whose primary language was English scored significantly higher than ELL parents [F=6.247, p=.013] on parentchild interaction scores. The effect size was small ( $\eta^2$ =0.021).

### Comparison: Low and High risk

A one-way between subjects ANOVA was conducted to compare the parent-interaction outcomes of parents with high and low risk factors. Parents with three or more risk factors scored significantly lower overall than parents with fewer risk factors [F=6.907, p=.009]. The effect size was small (n<sup>2</sup>=0.023).

#### Comparison: Less than a year or More than a year in Sixpence

A one-way between subjects ANOVA was conducted to compare the parent-interaction outcomes parents who had less than or greater than one year of participation in Sixpence. Parents with one or more year in Sixpence scored significantly higher parentchild interaction scores than parents with less than one year [F=5.032, p=.026]. The effect size was small (n<sup>2</sup>=0.017).

# How did Sixpence impact parent's protective factors?

In the fall and spring, families completed the FRIENDS Protective Factors Survey (PFS), a measure of family well-being. The survey assesses five areas: family resiliency, social supports, concrete supports such as access to housing, child development knowledge, and nurturing and attachment. A total of 399 families completed the PFS in the fall and spring. The PFS is based on a 7 point scale with 7 suggesting strong protective factors. No program goal has been set as this is the first year of assessment in this area.



Sixpence families demonstrated strong protective factors across all areas, particularly in nurturing and attachment.

Protective factors remained stable over time.

The results indicate that Sixpence families have strong protective factors, approaching the top of the scale in nurturing and attachment and in knowledge of child development. Paired sample t-tests were conducted to determine if there were significant changes over time. Results indicated that there were not significant changes from fall to spring. This is not surprising because the high scores in the fall meant there was limited opportunity for growth. Two areas increased and trended toward significance, falling just above the p<.05 indicator:

Nurturing and Attachment: Fall (M=6.58; SD=.549,)/Spring (M=6.65, SD=.670), *p*=.08; Child Development Knowledge: Fall (M=6.13, SD=.763)/Spring (M=6.21, SD=.866), *p*=.10.

# Family language made a difference

Outcomes for two PFS scales varied significantly based on family language

### Comparison: ELL and English speakers.

A one-way between subjects ANOVA was conducted to compare the protective factors outcomes of E:: parents and their non-ELL peers. Parents whose primary language was English scored significantly higher than ELL parents in the area of concrete supports [F=28.203, *p*<.001]. The effect size was small ( $\eta^2$ =0.048). In contrast, ELL parents scored significantly higher than English speakers in the area of nurturing and attachment [F=5.728, *p*=.017]. The effect size was small ( $\eta^2$ =0.010).

# Risk factors made a difference

Families with higher risk had significantly lower scores in family resiliency

### Comparison: Low and High risk

A one-way between subjects ANOVA was conducted to compare the protective factors outcomes of parents with low or high risk factors. Parents with three or more risk factors scored significantly lower overall in the area of family resilience than parents with fewer risk factors [F=12.394, p<.001]. The effect size was small ( $\eta^2$ =0.026).

# Time in Sixpence made a difference

Parents served for more than a year had significantly lower nurturing and attachment scores and child development knowledge scores

# Comparison: Less than a year or More than a year in Sixpence

A one-way between subjects ANOVA was conducted to compare the protective factors outcomes of parents who had participated in Sixpence for less than or greater than one year. Parents with one or more year in Sixpence scored significantly lower on nurturing and attachment [F=4.587, *p*=.033] and on knowledge of child development [F=3.928, *p*=.048]. The effect sizes were small ( $\eta^2$ =0.020 and  $\eta^2$ =0.016, respectively). There is no clear explanation for this difference between groups. It is important to note that both groups had strong positive results in both areas with scores averaging above 6.0.

# Type of program made a difference

Parents in center-based programs had significantly higher nurturing and attachment scores than parents in family engagement programs

# Comparison: Family engagement and Center-based programs

A one-way between subjects ANOVA was conducted to compare the protective factors outcomes of parents enrolled in the two different types of Sixpence programs. Parents in the center-based programs scored significantly higher on nurturing and attachment [F=3.203, p=.005]. The effect size was small ( $\eta^2$ =0.015).

# **CONCLUSIONS AND IMPLICATIONS**

**Program Description:** Sixpence programs, whose purpose is to help young children at risk experience positive environments to support healthy development, is completing its 7<sup>th</sup> year of implementation. There were 25 programs located in 22 Nebraska counties. The majority of the programs have adopted a family engagement model (17), with others serving children in center-based programs (6) or a combination of both (2). A total of 871 children and 804 families were served. The majority of children were served in rural communities (67%) and in family engagement services (64%). This year, Sixpence served a higher risk population this past year with 68% of the families having three or more risk factors; last year the rate was 57%. Poverty was the leading risk factor. Program retention rates were high with 79% of families staying in Sixpence to the end of the program year. Of children who exited prematurely, 80% left in the first year of participation.

**Next Steps:** Identify strategies to keep families engaged in the program for the first year. The data indicate that once families complete a year of service they are highly likely to stay in Sixpence until their child ages out.

**Program Outcomes:** All classrooms met the overall quality benchmarks for providing quality environments for infants and toddlers with 63% of the classrooms meeting the quality criteria across all seven subscales. For those programs that met this indicator last year, their performance on the CLASS suggested that teachers consistently created emotionally supportive and caring classrooms. Their use of effective strategies to engage the children in learning received a moderate rating.

**Next Steps**: Consider ways to build teacher skills in engaging children in learning through the adoption of evidence-based instructional practices. This area has seen little growth over the past three years.

Family engagement practices have consistently been of high quality over the past three years. The strengths of the program have been the family engagement in the home visits with 94% meeting the quality benchmark. Fewer home visitors (75%) met the quality indicator for instructional practices. In this area, strengths were in the development of relationships with the parents they serve. Home visitors showed less skill in supporting parent-child interactions.

**Next Steps**: Continue to provide technical assistance to home visitors to support their coaching of parents specifically related to enhancing the parent-child interactions.

**Child Outcomes**: Overall, the majority (range of 73% to 92%) of the children in Sixpence were meeting the widely-held expectations across all developmental areas (social emotional, physical, language, cognitive, literacy and math) with fewer children meeting these expectations in math (73%) and literacy (76%). Sixpence has set a high standard for the program goal, that children will acquire comprehension, vocabulary, production and protective factor skills at the midpoint of average or higher. Over half of the children met this goal with respect to comprehension skills with fewer meeting the goal for vocabulary (37%) or for production skills (30%). Children in family engagement programs demonstrated higher comprehension skills than children in center-based settings.

A strong majority (72%) of children met the program goal for social-emotional protective factors. Across the year, significant improvements were made with respect to children's initiative, attachment, and self-regulation skills, suggesting that the program is making a difference in these areas of development. Children whose primary language was not English and children in family engagement programs demonstrated the strongest social-emotional competencies.

**Next Steps:** Identify additional strategies to support children's language and math skills.

**Health Outcomes**. Health outcomes continue to be very positive with nearly every child meeting Sixpence health indicators. Most notably, 98% of the children have a medical home. An area of concern is the rate of children regularly exposed to cigarette smoke (14%). Prenatal outcomes indicate that nearly all of the mothers abstained from risky behaviors and received prenatal care. A majority (80%) of the mothers breast fed their babies and 30% continued for at least four months. Just over a quarter (27%) of the women smoked during their pregnancy.

**Next Steps:** Consider new strategies to increase education about the harms of exposing children to cigarette smoke and support smoking cessation for pregnant mothers and others in the family.

**Family Outcomes:** Sixpence programs made a significant impact on parent-child interactions. Parents had a strong relationship with their children and demonstrated significant improvements in overall parent-child interactions as well as in building relationships and supporting their children's learning. Parents who were associated with lower risk factors (<3), were in Sixpence for more than one year or whose language was English demonstrated the highest level of parenting skills.

Parents in Sixpence had high levels of protective factors that remained stable over time. Subgroup comparisons found that parents who were ELL or were in center-based settings demonstrated higher nurturing and attachment skills. Parents whose primary language was English had a better system of concrete supports. Parents who were in the program less than a year demonstrated higher skills in child development knowledge and nurturing and attachment. Risk factors had a negative impact on parent protective factors.

**Next Steps:** Identify additional strategies that can support parents who are at high risk and ELL to adopt high quality parent-child interaction skills. Continue to support parents to maintain their high level of protective factors.



# ASSESSMENTS

Assessment	Authors	Scoring	Subject	Content
Program Quality Measures				
ITERS-R Infant/Toddler Environmental Rating Scale - Revised	Harms, Cryer, & Clifford, 2006	Scale 1-7 1 = inadequate 3 = minimal 5 = good 7 = excellent 39 Items, 7 subscales	Infant/Toddler classroom	Classroom layout, health & safety, play activities, teacher- child interactions, & program administration
Toddler CLASS Infant CLASS Classroom Assessment Scoring System	LaParo, Hamre, & Pianta, 2012 Hamre, et.al., 2014	Scale 1-7 1-2 = low range 3-5 = mid-range 6-7 = high range	Infant or Toddler classroom	Emotional support, & instructional support (Toddler only)
HOVRS-A+ v.2 Home Visit Rating Scales – Adapted & Extended	Roggman, Cook, et. al., 2012	Scale 1-7 1 = needs training 7 = excellent	Home visitor	Home visit practices and family engagement during home visits
Child Outcome Measu	ures			
MacArthur-Bates CDI Communications Development Inventories	Fenson, Marchman, et. al., 2007	Percentile Rank	8 to 30 months of age	Comprehension and production of language
<b>PPVT-IV</b> Peabody Picture Vocabulary Test	Dunn & Dunn, 2007	Standard Score 85-115 Average range	30 months of age and older	Receptive vocabulary
DECA-IT, DECA P Devereux Early Childhood Assessment Infant/Toddlers, Preschool	LeBuffe & Nagliere, 1999	Standard Score 41-59 Average range	4 months of age and older	Measures social- emotional protective factors & behavior concerns
Parent Outcome Measures				
FRIENDS PFS Protective Factors Survey	National Center for Community- Based Child Abuse Prevention, 2011	Scale 1-7 7 = highest rating, most protective factors Five areas	Parent Survey	Family resiliency, social supports, concrete supports, child development, nurturing & attachment
<b>KIPS</b> Keys to Interactive Parenting Scale	Comfort & Gordon, 2008	Five point Likert Scale, 12 items/3 domains	Parent and child age 4 months & up	Parent child play interactions and social, emotional & cognitive support

# REFERENCES

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Ann was a teen who grew up in Nebraska. Unfortunately, she did not have a positive family environment due to being in foster care the majority of her life. Ann came to the Sixpence program when she was 2 months pregnant. "I know I want to keep my baby, but I have no idea on how to go about it. I know I can't go to my mother for help and feel completely lost. Being pregnant is the most terrifying experience of my life," stated Ann.

Our first priority was to have Ann see a doctor for prenatal visits. Ann believed that going to prenatal doctor appointments was a waste of time and money due to looking up everything she wanted to know about the baby on the Internet. After a discussion of how important doctor visits are, she agreed to go if she could get insurance. We were able to help her apply for benefits so she could get the medical attention she needed.

As a Sixpence coordinator, I found it was beneficial to talk to Ann about not what is best for her, but for her unborn child. She would state many times, "I am not doing this because I want to, but because it is best for my daughter." Ann began attending her doctor appointments. She loved hearing the heartbeat or seeing the ultrasound.

It was time to help Ann get ready for baby and her biggest task was finding a place to live that was safe to raise a newborn. Two months before baby's arrival she was able to find a two-bedroom apartment in a low income apartment complex. She was so excited to finally have a place to call home that was just her own.

The last task we had to accomplish was helping Ann feel comfortable reading to her child. I entered her apartment one spring morning to find Ann on the floor surrounded by books with tears in her eyes. After sitting in silence for some time, Ann disclosed to me that growing up she never stayed in a home or school long enough for anyone to teach her how to read. It was at that visit that I taught Ann what it meant to picture read. From then on we started and ended every visit practicing picture reading. When the baby came, Ann could not read, but was able to picture read all kinds of different books and was an amazing storyteller!

Ann's little girl celebrated her 1st birthday this year and mom is proud to announce that they are both happy and healthy, physically and emotionally. They still reside in their same location and mom is attending classes at a local agency to help her learn how to read. She currently is able to read at the 2nd grade reading level and is continuing to better herself so she can carry on teaching her daughter.





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