INTRODUCTION
The earliest years of a child’s life, beginning before birth, are among the most impactful in influencing the child's lifespan potential and outcomes. This means that a child’s environment should include positive factors to encourage development, as well as buffer against life’s inevitable stressors [1, 2]. This data book serves to share information about the environmental factors impacting children, ages 8 and under, in South Carolina, compared to North Carolina, Georgia, and the United States as a whole. In 2017, South Carolina had a population of a little over 5 million, of which 1.1 million were under the age of 18 [3]. Children under the age of 5 comprised 26 percent of the child population with 291,414 individuals [3]. This report provides a snapshot of the well-being of these youngest citizens of the state.
METHODS
This Data Brief focuses on indicators reported in the full *South Carolina Early Childhood Data Report* related to Cognitive Development. The full report utilizes four domains of indicators. Table 1 below highlights the four major categories of indicators in this report, along with sub-categories on indicator types.

*Table 1: Early Childhood Well-Being Indicators*

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<th>Family Environment</th>
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<th>Emotional Well-Being</th>
<th>Cognitive Development</th>
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<td>Family income</td>
<td>Prenatal care</td>
<td>Maternal depression</td>
<td>Developmental delay</td>
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<td>Parent education</td>
<td>Substance use</td>
<td>Abuse and neglect</td>
<td>Child care</td>
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<td>Parental employment</td>
<td>Domestic abuse</td>
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<td>Head Start</td>
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<td>Teenage motherhood</td>
<td>Preterm births</td>
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<td>Pre-kindergarten</td>
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<td>Low birth weight</td>
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<td>Obesity and Activity</td>
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There is no one comprehensive indicator of child well-being. Rather, well-being spans physical, social-emotional, and cognitive health and development. Since children do not grow up in a vacuum from their parents or communities, there are a variety of factors that influence overall well-being and long-term flourishing.

This brief focuses *only* on findings and conclusions related to Cognitive Development. Given the inter-related conditions across domains which can impact child well-being, we recommend reading the full report for a full discussion of all domains of child well-being, as well as the methodology for collecting these data. The Data Table comparing these data in an easy to read format is available online.¹

¹ The full data report contains analysis of all indicators as well as a full data table of indicators and is available online at: 
RESULTS AND STATE COMPARISONS

Developmental Delays

In 2017, 12.6 percent of South Carolina children under the age of five had been diagnosed with at least one functional difficulty, compared to 9.2 percent of Georgia’s, 16.1 percent of North Carolina’s and 11.8 percent of the United States’ children [4]. Functional difficulties were defined in the data source (The Child & Adolescent Health Measurement Child and Adolescent Health Measurement Initiative [4]) to include difficulty with one or more of the following areas: breathing or other respiratory problems; eating or swallowing; digesting food; repeated or chronic physical pain, including headaches; using hands, age 0-5 years; coordinating or moving around, age 0-5 years; concentrating, remembering, or making decisions, age 6-17 years; walking or climbing stairs, age 6-17 years; hearing problems; or vision problems.

Children who receive Medicaid benefits are eligible for developmental screenings through the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program. In 2017, of the total number of children aged between 0-9 years who were eligible for EPSDT (414,444), 9.3 percent of those children were less than one year of age, 21.1 percent were between the ages of 1-2 years, 30.1 percent were between 3-5 years, and 39.5 percent were between 6-9 years of age [5]. In 2017, 92 percent under one year of age, 73 percent aged 1-2 years, 54 percent aged 3-5 years, and 68 percent of South Carolina’s eligible children received at least one EPSDT screening.

Child Care

The most up-to-date data from 2018 reveals that there were 335,723 working mothers in South Carolina, and of that number, 120,033 were single [6]. Of those numbers, 85,810 were working mothers with children under the age of 6, which contrasts with the number of reported children under the age of 6 who potentially need care, 226,195 [6].

North Carolina and Georgia, both larger states than South Carolina (in both population and area), are more similar to each other in numbers on these indicators. Data from 2018 reveals that there were 767,112 Georgia and 774,100 North Carolina working mothers. Of those numbers, 256,161 Georgia and 235,918 North Carolina were single [6]. 181,673 Georgia and 182,424 North Carolina were working mothers with children under the age of 6, which
contrasts with the numbers of reported children under the age of 6 who potentially need care, 501,117 Georgians and 461,457 North Carolinians [6].

As of January 2019, there were 2,491 child care facilities that were licensed or registered in South Carolina [7]. This facility count included religiously-affiliated, private, public, and home-based centers. The average annual cost for center-based care for infants was $6,840, which is estimated to be 32 percent of the median family income for a single parent who is required to cover full-time care for an infant in a child care center, and 22 percent for home-based care [8].

The 6,860 reported child care workers in centers in South Carolina are paid an average annual income of $20,370 [6]. Childcare workers were paid slightly higher in Georgia and North Carolina at $22,380 and $22,080, respectively [9, 10]. Compared to the average United States child care worker, who makes $22,290, Georgia is actually about $100 above the national average [6, 9, 10].

The number of institutions providing courses for early childhood credentialing varies widely by state: South Carolina 16, Georgia 56, and North Carolina 112 [11-13].

Head Start and Early Head Start
Eligibility for federally-funded Head Start (HS) program is largely based on income, with families at or below 100 percent of the federal poverty level (FPL) qualifying. Children under age 3 and expecting members may be eligible for Early Head Start (EHS), a program which provides center-based programs for low-income families tailored to the needs of infants and toddlers [14].

Over the 2014-2015 enrollment year, 13,390 South Carolina children under age 4 were included in Head Start or Early Head Start. This number does not include pregnant women, who can receive services including home visiting, during their prenatal period. In Georgia, almost 25,000 children were served in this age range, and nearly 22,000 were served in North Carolina. Nationally, enrollment in these programs reached 916,612 children under age 4 [15].
Head Start has a focus on serving children from low-income families or with other qualifying risk factors. In South Carolina, 82 percent of children enrolled in HS/EHS come from a single parent family; this is higher than the rates in Georgia (76 percent), North Carolina (63 percent), and the national average (58 percent) [15]. Sixty-one percent of children served in South Carolina have at least one parent who is employed, similar to the rates in Georgia and North Carolina though below the national average (65 percent) [15]. Head Start also tracks the number of children enrolled in the program who have been diagnosed with a disability, specifically those who have an Individualized Education Program or Individualized Family Service Plan – two specific documents that are developed for children receiving special education or early intervention services under the federal Individuals with Disabilities Education Act [16]. In South Carolina, just 8 percent of enrollees already have an IEP/IFSP, compared to 9 percent in Georgia, 11 percent in North Carolina, and 12 percent nationally [15]. Head Start also aims to focus on the needs of families and children outside of the classroom – 67 percent of enrolled families in South Carolina and in Georgia access at least one family service through the program, compared to 70 percent in North Carolina and 72 percent nationally. These services can include parent education, housing and income assistance, and connections to physical and mental health care.
More than three-quarters of participants in South Carolina – 78 percent – identify as black/African American, compared to 68 percent in Georgia and 46 percent in North Carolina. Nationally, this figure is just 29 percent. On the other hand, the rate of Hispanic student enrollment is lower in the region than the national average – just 10 percent of South Carolina’s participating children identify as Hispanic, compared to 17 percent in Georgia, 29 percent in North Carolina, and 38 percent nationwide [15]. See Figure 1 for a graphic of South Carolina versus the United States Head Start demographics.

Figure 1: Selected characteristics of families enrolled in Head Start in South Carolina, 2014-2015
**Enrollment in Pre-Kindergarten/4K Programs**

When asked if their 3- and 4-year-old children were enrolled in school (as the parent defines it), 53 percent of South Carolina families reported their preschooler was not enrolled [17]. In Georgia, 51 percent of parents reported their preschool was not enrolled, similar to the 52 percent of parents reporting this nationally [17]. North Carolina had higher rates of non-enrollment at 57 percent [17].

The rates of 3- and 4-year-olds not being enrolled in school also differed based on racial and ethnic background of the family (see Figure 2)[18]. In South Carolina, 62 percent of Hispanic families reported their preschooler was not enrolled in school, compared to 53 percent of children in non-Hispanic white families and 51 percent in Black/African-American families [18].

![Figure 2. Percent of 3 to 4 year olds not enrolled in school (2012-2016 average)](image)

In the 2016-2017 school year, 24,079 South Carolina children were enrolled in publicly funded 4K [19]. The National Institute for Early Education Research estimated that 41 percent of all South Carolina 4-year-olds were enrolled in publicly-funded 4K in the 2016-2017 school year [19]. Sixty percent of Georgia’s, 22 percent of North Carolina’s, and 33 of the nation’s 4-year-olds were enrolled in publicly-funded 4K in the same school year [19].

As of 2017, the South Carolina spends $2,970 per child enrolled in 4K [19]. By comparison per child spending is $4,315 in Georgia, $5,308 in North Carolina, and the United States on average spends $5,008 per child enrolled in publicly-funded Pre-K [19]. One hundred percent of all districts for South Carolina, Georgia, and North Carolina reported offering state-funded 4K [19]. South Carolina spends less than Georgia ($348,959,814) and North Carolina ($143,419,198), in total on state Pre-K (4K): $71,513,051 [19].
DISCUSSION AND POLICY IMPLICATIONS

Developmental Delays

Developmental delay is defined broadly by the federal IDEA Part C program as a delay in one or more of the following five areas of early childhood growth and development relative to age-expected milestones: physical development including vision and hearing, cognitive development, communication, social or emotional development, and adaptive development. Because each developmental stage builds on prior development, it is critical that delays and difficulties are identified early, and proper interventions started.

Early identification of children with disabilities and delays who are eligible to receive special education services can reduce the intensity of duration of individual special education services [20-22]; this early identification is increased by the greater availability of quality early childhood education programs and is thus beneficial for student, family, and taxpayers.

Child Care

The availability, access to, and high cost of quality child care is an issue that affects American families of all socioeconomic groups; however, minority groups and families from lower socioeconomic groups are disproportionally affected. As the results indicate above, the cost of child care is a large portion of any family’s income, but particularly the single, working parent who needs full-time care. The median income of approximately $23,000 for African American and Hispanic mothers severely limits choices for work and child care on the basis of cost alone [8]. Improving access to quality child care is a complex question demanding national attention as well as solutions here in South Carolina. Provided here is an outline of how quality is currently measured in South Carolina, as well as information on several programs in South Carolina which seek to ameliorate the child care access issue at the time of the writing of this report.

Quality. High quality child care is associated with improved school performance, academic attainment, higher cognitive test scores, fewer behavioral problems, and long-term well-being [23-26]. It is difficult to quantify “quality” in early care and education settings and, to some degree, may be subject to the perceptions of administrators, teachers, and parents. Little universal data exists concerning the quality of care received in South Carolina child care centers. Since the research is clear that the benefits of early child care accrue only in high-quality settings, it is essential for South Carolina decision makers to have information about
the quality of child care providers, instead of simply knowing the number of children who received out of home care.

The National Association for the Education of Young Children (NAEYC) and the National Institute for Early Education Research (NIEER) each provide their own set of research-backed indicators of quality in child care and preschool settings.\(^2\) Though these criteria different in their exact definitions, there is a focus on well-qualified staff; curriculum and alignment to early learning standards; family engagement and support services; appropriate use of continuous quality improvement strategies; and support for teachers, including appropriate class sizes and professional development [27, 28].

The ABC Child Care Program, administered by the Department of Social Services, provides the only statewide measure of quality child care. However, this program is an optional, voluntary quality improvement system for child care providers [29]. The ABC system also includes a Child Care Program that ranks the quality of facilities and has a quality improvement component. Programs are rated on an A-B-C ranking based on evaluation and assessment criteria, and receive regular on-site reviews to measure performance on the program standards at that level [30]. Programs that receive a B or higher rating are recognized as a quality program. As of February 2019, the SC Profile for Early Childhood [31] reports that of the 1,071 center-based and 1,173 home-based participating centers in South Carolina, 49.78 percent have received a “C” status, 45.37 percent a B+ or B, and only 4.85 percent an A+ or A.

*Resources to improve access.* South Carolina Child Care Resource and Referral (CCR&R), now administered by the Department of Social Services and the University of South Carolina, increases access to quality child care for families, improves knowledge of early childhood professionals, and facilitates community collaboration in support of children and families [32]. Through this referral network, CCR&R is available to connect families searching for child care with facilities providing quality care.

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\(^2\) Although there are now many organizations that offer quality standards and credentials for child care centers, we will mention only two of the most well-known and longest-serving programs here. It is difficult, and beyond the scope of the present project, to exhaustively examine and review each credentialing organization
The South Carolina Department of Social Services (SCDSS) administers the child care subsidy program, known as the SC Voucher Program. This program provides funding for child care for low-income families, and has paid for 20,008 children in licensed/approved centers, 73 in licensed/registered homes, and 795 in legally exempt programs, as of February 4, 2019 [33]. In order to be eligible for SC Vouchers, the first requirement is that parent income must be below 150 percent of the federal poverty level, based on family size; on the SC Voucher website, this annual income is indicated to be $37,050 annually [34]. Priority for child care services are given to parents participating in the TANF program, transitioning off of TANF, and families at risk of becoming dependent on TANF. Other priority populations include children who are in foster care, Child Protective Services, criminal domestic violence, families experiencing homelessness, wrap-around child care for Head Start recipients and families of children with special needs [35].

Another organization in South Carolina that currently helps families who need pecuniary assistance for child care is South Carolina First Steps to School Readiness (First Steps). Each county is responsible for executing the mission of First Steps; programs and implementation vary by county [36]. However, one of the missions of First Steps is to “help parents access quality child care for their young children” [36]. Some First Steps county partnerships choose to provide scholarships that support teen parents who are currently enrolled in school, participants in the Nurse Family Partnership program, and parents enrolled in approved workforce programs [37]. The number of children currently being served by the South Carolina First Steps Partnership is 30,026 [38].

Child Care Providers. As this report’s data indicates child care teachers make an annual salary that is less than what is a median income to be able to afford full-time child care. Their income level is also less than 150 percent of the federal poverty level (as detailed above). The systems that surround child care are complex, which is often the reason cited for low pay for child care workers; however, the pay and lack of benefits provided for many child care workers in South Carolina, as well as nationally, is appalling. Child care workers provide an integral service for our nation and state’s children and families.
Head Start and Early Head Start

Head Start continues the work it has done over the last five decades: providing comprehensive health and education services to some of the neediest families in America. Recently, Head Start has experienced a renewed focus on ensuring quality through “recompetition” and ongoing quality monitoring [39]. The revised Head Start Performance Standards, released in 2016, provide an opportunity for all those who work for families and children to recommit themselves to the needs of those served [40]. Included in these Standards is an increased focus on full-day, full-week operating schedules, influenced heavily by parents’ work schedules and the likelihood of greater academic gains [41, 42]. The South provides a model in this area, as the rate of children enrolled in this schedule is significantly higher than the national figure [43]. However, no Southern states currently enroll 100 percent of children on this schedule; moving programs consistently towards this goal while seeking to maintain the number of children served will require innovative thinking.

Enrollment in Pre-Kindergarten

High-quality 4K programs positively impact the academic achievement and social-emotional development of their participating students. While all children certainly benefit from these types of programs, the effects are greatest for children who are considered at-risk for school failure due to factors like low family income, low parental education level, living in a home where English is not the primary language, and special needs considerations [44-47].

Children are served in a range of early childhood care and education settings, including private child care centers, Head Start/Early Head Start programs, and public preschool/4K. Participation rates in early childhood vary based on a number of factors including cost, available slots, perception of quality, and location [48].
School Readiness
Children who begin school academically behind their peers are more likely to struggle academically in later grades as well. In fact, half of the educational achievement gap between poor children and their non-poor peers exists at kindergarten entry. Instead of these children catching up once they are in school, the gap continues to grow larger, meaning that academic struggles in early grades are associated with higher grade retention and high school dropout rates in later schooling [49]. Conversely, children who start ahead typically stay ahead in school and experience more positive school and life outcomes. Many early childhood services exist in South Carolina to ensure children are ready to learn when they begin school, including CDEPP, Head Start/Early Head Start, child care centers, and other community- and home-based interventions.

South Carolina recently began measuring Kindergarten Readiness using a tool called the Kindergarten Readiness Assessment (KRA). The tool was first developed between 2012 and 2015 through a partnership between the states of Ohio and Maryland, supported by a federal Race to the Top grant. The SC Department of Education adopted this tool in 2017, and it has now been deployed twice - in the falls of 2017 and 2018 - and results are now published from the 2017 school year.

The state first began measuring kindergarten readiness in a systemic fashion in the fall of 2015, in response to legislation requiring the schools to do so. The state then chose different assessment tools for each of 2015, 2016, and 2017, limiting the ability to observe trends in the data.

In August of 2018, South Carolina’s Education Oversight Committee (EOC) published the results from the first administration of the KRA from the fall of 2017 [50]. It states that the 36 percent of children demonstrate readiness. Regarding the subdomains of readiness, it states that 45 percent demonstrate readiness for “Social Foundations,” 34 percent for “Language and Literacy,” 31 percent for “Mathematics,” and 48 percent for “Physical Development and Well-Being.” Information on school readiness is not provided in Table 3 as each state approaches measurement of this concept differently; it would be difficult to draw meaningful conclusions.
from cross-state comparisons, particularly as South Carolina has only completed one year of the use of this instrument.

CONCLUSION
The indicators in this report make it clear that too many young children continue to struggle every day in South Carolina. By providing a snapshot of how young children are faring in the state, we strive to inform statewide efforts to intervene early and effectively in the lives of children. We recognize, however, that this report can only be as informative as the data available for us in the state. To be fully informed about the needs of young children and the outcomes of systemic reforms effecting changes in the lives of these children, we must ensure the availability of reliable, valid, and appropriate data statewide. To this end, the Institute for Child Success recommends continued efforts toward high-quality and timely data collection concerning early childhood well-being.
REFERENCES

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- Proposing smart public policies, grounded in research.
- Advising governments, nonprofits, foundations, and other stakeholders on strategies to improve outcomes.
- Sharing knowledge, convening stakeholders, embracing solutions, and accelerating impact.
- Modeling, encouraging and cultivating catalytic, innovative leadership in early childhood.