

Creating Counts of Children Served

Contents

- 1 Summary of Data Design and Processing3
 - 1.1 *Data Discovery*..... 3
 - 1.2 *Standard Data Request*..... 4
 - 1.3 *Data Processing* 5
 - 1.4 *Data Masking Protocol* 5
 - 1.4.1 Description of Code 6
 - 1.4.2 Interpretation Notes 6
 - 1.5 *Data Validation and Quality Checks* 7
- 2 Scope of Data and Limitations8
 - 2.1 *Child Care*..... 8
 - 2.1.1 Child Care Definition 8
 - 2.1.2 What is included?..... 8
 - 2.1.3 What is excluded?..... 11
 - 2.1.4 Interpretation Notes for this Data 11
 - 2.2 *Home Visiting*..... 13
 - 2.2.1 Home Visiting Definition 13
 - 2.2.2 What is included?..... 13
 - 2.2.3 What is excluded?..... 18
 - 2.2.4 Interpretation Notes for this Data 18

| | | |
|---------|---|----|
| 2.2.4.1 | Home Visiting Data..... | 18 |
| 2.2.4.2 | DAISEY Data – ECBG, MIECHV, MCH | 19 |
| 2.2.4.3 | KSDE - Parents as Teachers | 20 |
| 2.2.4.4 | Kansas Early Head Start..... | 20 |
| 2.2.4.5 | Family First Prevention Services Act | 20 |
| 2.3 | <i>Pre-K</i> | 21 |
| 2.3.1 | Pre-K Definition..... | 21 |
| 2.3.2 | What is included?..... | 21 |
| 2.3.3 | What is excluded?..... | 23 |
| 2.3.4 | Interpretation Notes for this Data | 23 |
| 2.4 | <i>Part C</i> | 24 |
| 2.4.1 | Part C Definition..... | 24 |
| 2.4.2 | What is included?..... | 24 |
| 2.4.3 | What is excluded?..... | 25 |
| 2.4.4 | Interpretation Notes for this Data | 25 |
| 3 | Appendices | 26 |
| 3.1 | <i>Appendix 1: Sample data request template</i> | 26 |
| 3.2 | <i>Appendix 2: DCF service area mapping</i> | 31 |

1 Summary of Data Design and Processing

The information presented on the Distinct Count Dashboard originates from a variety of data sources encompassing various programs, initiatives, and interventions. Owing to the distinct nature of these data sources and the differing methodologies employed by each program to tally children, a comprehensive effort was made to unify and standardize the data into a consistent format suitable for visualization purposes. This document delineates the principal procedures involved in processing and aligning the data throughout the project. Additionally, it delves into the distinctive characteristics of each data source, outlining their ramifications on data interpretation.

1.1 Data Discovery

The process of counting the number of children served in the Mixed Delivery System (MDS) was initiated through a series of systematic and recurring data exploration sessions. These sessions, facilitated by KU-CPPR, involved collaborative discussions with key program leaders from four State agencies including the Kansas Department of Health and Environment (KDHE), the Kansas Children's Cabinet and Trust Fund (KCCTF), the Kansas State Department of Education (KSDE), and the Department for Children and Families (DCF). The purpose of these discovery sessions was to delve into the subsequent areas:

1. **Defining the Use Case:** In this context, the team deliberated upon the optimal design of the dashboard to impart the highest degree of relevance and utility for the State agencies and their partner entities. This discourse played a pivotal role in shaping the dashboard to cater to the distinct needs and preferences of each state agency.
2. **System Architecture and Data Flows:** Through comprehensive dialogue and documentation, the team explored the diverse mechanisms through which children are entered into each data system, quantified, and deduplicated for reporting purposes. These discussions also identified prevalent data quality challenges within each data system. The insights garnered from these discussions laid the foundation for establishing a standard data request structure and methodological directives, designed to harmonize with the intricacies of each dataset and their associated data quality considerations.
3. **Existing Reporting Mechanism:** A portion of the conversation revolved around documenting the existing methodologies by which each state agency disseminates their data for federal, state, or public accountability reporting. This

dialogue was crucial in ensuring that the data sharing approach for this dashboard aligned with established reporting procedures, thus minimizing redundancy in data sharing efforts.

4. **Data Fields Desired for the Dashboard:** The team thoroughly examined and documented all potential data fields that could be visualized on the dashboard. This discussion delved into the intricacies of data collection methodologies for each data field within each MDS. These insights were crucial in building the standardized data request protocol for state agencies, which took into consideration the diverse data collection and child counting methodologies employed by each agency. In cases where processes diverged between agencies, concerted efforts were undertaken to harmonize the data, encompassing shared definitions, scopes, and standards.

1.2 Standard Data Request

The KU-CPPR team used the information gathered during the data discovery phase to build out a standardized data request template (See Appendix 1) for the data collected for the dashboard. The data request template has the following features:

1. A separate excel spreadsheet for each intervention type within each initiative for each data source (See Section 2 for definitions of intervention types and initiatives).
2. Within the excel spreadsheet there were separate sheets to collect information on:
 - a. County Level Counts
 - i. Total count of children served,
 - ii. Total count of children served broken down by Age,
 - iii. Total count of children served broken down by Race,
 - iv. Total count of children served broken down by Sex,
 - v. Total count of children served broken down by Ethnicity,
 - b. State Level Counts
 - i. Total count of children served,
 - ii. Total count of children served broken down by Age,
 - iii. Total count of children served broken down by Race,

- iv. Total count of children served broken down by Sex,
 - v. Total count of children served broken down by Ethnicity,
- c. Instructions on how each demographic characteristic is defined.

This standard data request was used as a guide by state agencies to provide their data for the dashboard. A standard data request template also allowed data teams at each state agency to build out standard data queries that can be used for the dashboard each year thereby decreasing the level of effort for future dashboard updates. This increases the sustainability of the data process and improves the quality of incoming data. Some agencies, however, had data systems or data processes that did not fit neatly within the data request template. For those cases, the KU-CPPR team worked to harmonize the data during the data processing stage.

1.3 Data Processing

The data processing stage involved building out replicable and reproducible code in R to transform the data received from agencies, to a flatfile (i.e., a two-dimensional database with each row representing one single record). The information for counts of children for each intervention, initiative, and data source, broken down by demographic characteristics, were stacked together as rows in this flatfile.

The data received from agencies was first imported as separate data frames for each excel sheet. Then, the data was transposed to stack the counts of children for each demographic characteristic and each geographical level (county and state) as rows. Per state agency agreement during the discovery phase, the DCF service area map (See Appendix 2) was used for mapping out the regions to the counties in the dataset. The final processing steps for this data are described in Section 1.4 where the KU-CPPR team applied a stringent masking procedure to mask counts of children that are 1 to 9.

1.4 Data Masking Protocol

The KU-CPPR team meticulously applied a stringent masking procedure to safeguard against the disclosure of counts ranging from 1 to 9 within the dashboard. Furthermore, the team took measures to anonymize any aggregated totals computed using counts falling within the 1 to 9 range, by introducing random noise to these totals. This precaution was taken to protect child identification by preventing any arithmetic-based inference that could potentially unveil counts falling within the 1 to 9 range in the aggregated results.

1.4.1 Description of Code

The code built to implement this masking strategy used the following key steps:

1. **Creating Combinations for Levels of Observation:** The code produces permutations for all observation levels to be visualized in the dashboard. Initially, it identifies the filters and levels within the dashboard, including MDS, Geo-Unit, Data Source, Initiative, and Intervention Type. Then, the code constructs a data-frame with a comprehensive array of combinations from these levels.
2. **Creating Masking Flags and Aggregating Data:** The code uses the data-frame built in the previous step and the data received from the agencies (See Section 1.3), to create flags for every combination of the levels where a total would need to be anonymized through random noise to protect underlying counts that are between 1 to 9. The code also uses the combinations data-frame to build aggregations of the counts for each level of observation. Cases where a total was flagged are:
 - a. When the underlying group of counts for a total include only one count that is between 1 to 9
 - b. When the small counts (counts between 1 to 9) in the group underlying the total, sum to a number between 1 to 9.
3. **Applying Masking to Flagged Totals and Counts:** The code then uses the flags created in the previous step to:
 - a. Replace Counts that are 1 to 9 with a label stating, 'Data is suppressed for privacy,
 - b. Add a small random noise to the totals that may reveal underlying counts that are between 1 to 9 through arithmetic-based inference. The dashboard provides a label for all totals with noise added called, 'Random Noise Added to Total for Privacy.

1.4.2 Interpretation Notes

The data transformations and application of the masking protocol were adjusted to the specific data format of each data source. Section 2 will provide detailed notes on any specific transformations or interpretations related to each data source. The application of the masking protocol to all data received from agencies leads to a few interpretation notes such as:

1. Users of the dashboard do not have access to any counts that are between 1 to 9. They can however know whether a count is between 1 to 9 through the labels provided on the dashboard for those cases (i.e., 'Data is suppressed for privacy').
2. Dashboard users might encounter numbers on the dashboard accompanied by a minor degree of added noise, leading to reduced precision. Users can identify which numbers have noise added to them through the labels provided on the dashboard.
3. Since the dashboard uses aggregated data from some data sources, when users combine counties in the 'Detailed View' of the Dashboard, there may be duplicates introduced as children may move counties during the reporting period.

1.5 Data Validation and Quality Checks

The KU-CPPR team executed thorough data validation assessments and conducted meticulous code reviews at every stage of the data process.

1. **Data Validation of Data Received:** Upon receipt of data from state agencies, the team began an initial data validation phase to verify the conformity of the received data to anticipated formats. This encompassed identifying and addressing any instances of missing values. In cases where missing values arose, the team diligently documented and investigated the origins of these gaps, facilitating subsequent resolution during the data processing phase.
2. **Code Review:** A comprehensive code review was undertaken by a diverse group of CPPR team members. The central goal was to uphold code quality, detect possible bugs, enhance maintainability, and foster coherence across the project. Team members scrutinized the code to ensure compliance with coding standards, accuracy, efficiency, and overall design. This practice not only facilitated error detection but also created a platform for the exchange of knowledge and collaborative learning among team members.
3. **Data Validation of Data Processed:** After the data had undergone complete processing and transformation into the dashboard-compatible format, an additional round of data validation was executed by the team. This assessment aimed to confirm that the data transformations maintained count values consistent with the original figures, except for instances where counts were masked. The final processed data was cross-referenced with the agency-provided data to ensure continued alignment with the numbers from start to end.

4. **Data Audits with State Agencies:** After the data was processed and finalized, the KU-CPPR team organized individual data audits with each state agency where the complete data process, transformation and masking protocol was discussed in detail. The data audit also served as a platform for state agencies to see what the data looked like before it is uploaded to the dashboard. The data was uploaded to the dashboard only after state agencies signed off on the accuracy of the processing of their agency's data after the data audit.

2 Scope of Data and Limitations

2.1 Child Care

2.1.1 Child Care Definition

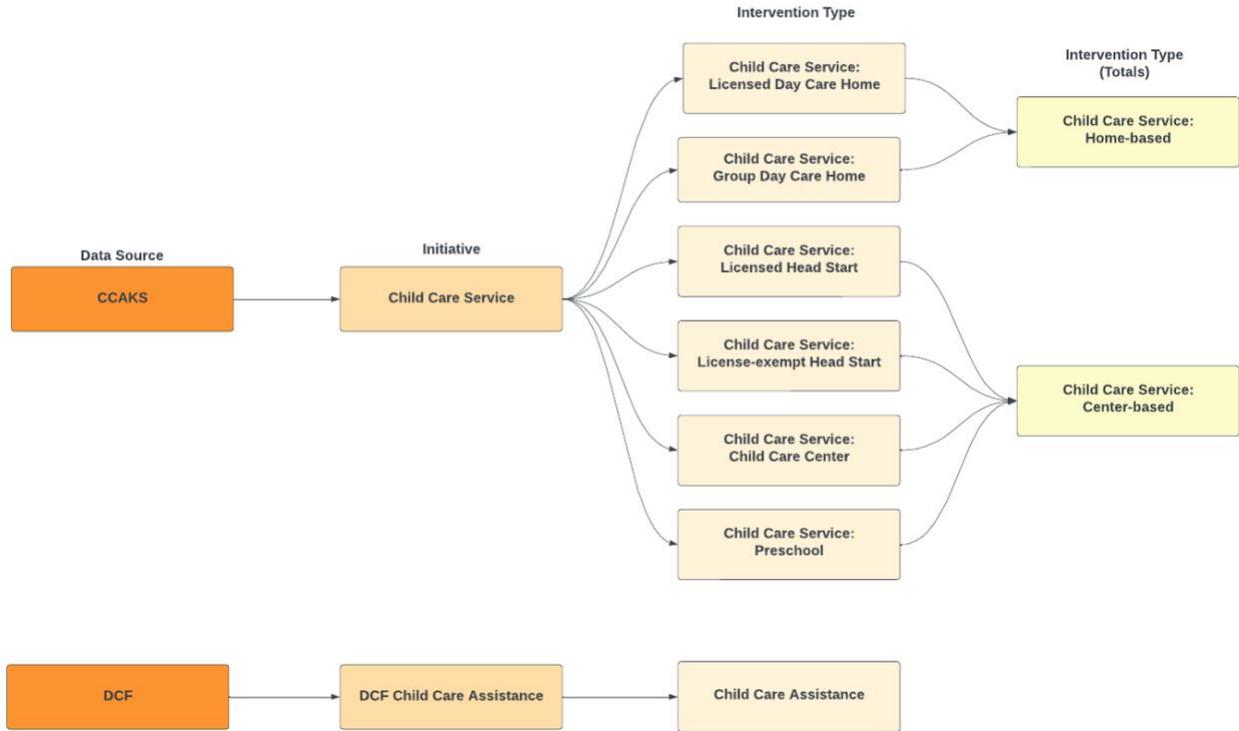
Non-parental or non-relative care provided in a licensed day care home, a group day care home, a child care center, or an independent preschool not affiliated with, or located at, a public school. Some families whose children receive Child Care Services are eligible for Child Care Assistance subsidies to help pay for the cost of these services.

2.1.2 What is included?

The dashboard's Child Care numbers are derived from data provided by the Department of Children and Families from the Kansas Eligibility Enforcement System, and data provided by Child Care Aware of Kansas that they regularly gather and process as a part of their annual supply and demand report. Counts of children served by Child Care can be broken down into program subcategories of data source, initiative, and intervention type. For Child Care, intervention type labels reflect types of provider licenses and settings for providing services.

Program subcategories are mapped in the diagram below, and definitions for the labels used are provided following the diagram.

Child Care



Data source(s):

- **Department for Children and Families:** State agency responsible for the delivery of social services – including child care and child support, employment education and training, food and cash assistance, and support for youth who have experienced foster care – to those in need of them.
- **Child Care Aware of Kansas:** Data partner that connects parents, child care providers, businesses, local and state leaders, and community members to the information and ideas they need to take action to create an affordable and comprehensive early care and education system that provides enriching experiences for children, affordable and high quality care for families, opportunities for diverse individuals to pursue a sustainable career path, and healthy communities that retain residents and welcome new families.

Initiative(s):

- **Child Care Service:** Non-parental or non-relative care provided in a licensed day care home, a group day care home, a child care center, or an independent preschool not affiliated with, or located at, a public school.

- **DCF Child Care Assistance:** Helps families who receive Temporary Assistance for Needy Families, low-income working families, some families in education or training activities, and teens completing high school or a GED to pay for child care costs.

Child Care Service Intervention type(s):

- **Center based:** Non-parental or non-relative care provided in a child care center, or an independent preschool not affiliated with, or located at, a public school.
- **Home based:** Non-parental or non-relative care provided in a licensed day care home or group day care home.
- **Licensed Day Care Home:** Child care facility in which care is provided for a maximum of ten children under 16 years of age and includes children under 11 years of age related to the provider. The total number of children in care at any time is based on ages of the children in care.
- **Group Day Care Home:** Child care facility in which care is provided for a maximum of 12 children under 16 years of age and includes children under 11 years of age related to the provider. This could require 2 providers depending on the total number and ages of children in care.
- **Licensed Head Start:** Child care facility licensed by KDHE that is part of a Head Start program. Head Start and Early Head Start programs are free, federally funded programs designed to promote school readiness for infants, toddlers, and preschoolers from families that meet income eligibility requirements.
- **License-exempt Head Start:** Child care facility exempt from KDHE licensing requirements that is part of a Head Start program. Head Start and Early Head Start programs are free, federally funded programs designed to promote school readiness for infants, toddlers, and preschoolers from families that meet income eligibility requirements.
- **Child Care Center:** Child care facility in which care and educational activities are provided for 13 or more children two weeks to 16 years of age for more than three hours and less than 24 hours per day including day time, evening, and night-time care, or which provides before and after school care for school-age children.
- **Preschool:** Child care facility in which learning experiences are provided for children who have not attained the age of eligibility to enter kindergarten, and who are 30 months of age or older; which conducts sessions not exceeding three hours

per session; which does not enroll any child more than one session per day; and which does not serve a meal.

- **Child Care Assistance:** helps families who receive Temporary Assistance for Needy Families, low-income working families, some families in education or training activities, and teens completing high school or a GED to pay for child care costs in a licensed child care center or an independent preschool not affiliated with, or located at, a public school.

2.1.3 What is excluded?

Children are likely to be excluded from our counts in the following scenarios:

1. Children receiving services from providers who are not required to be licensed by KDHE, for programs under the mandate of another agency. This would include children served by programs including:
 - a. Programs operated within military installations (Federal property)
 - b. Tribal programs (tribal or Federal property)
2. Children receiving home-based services from providers who are legally operating without being licensed by KDHE (for which some eligible families would receive subsidies through the Child Care Assistance initiative). Children may legally receive services from such providers in the following circumstances:
 - a. care is provided for children in their own home,
 - b. care is provided for children who are all related to the child care provider,
 - c. care is arranged between friends or neighbors on an irregular basis (inconsequential),
 - d. care is provided for not more than two children unrelated to the child care provider for not more than 20 hours a week combined.

Data related to license-exempt Head Start programs do not include all programs or services.

2.1.4 Interpretation Notes for this Data

Notes that correspond to variations in the user interface indicated with asterisks (*)

2.1.4.1 Child Care Data

1. **Potential Duplicates:** The data source used to fulfill data requests does not include individual-level child data. Thus, the KU-CPPR team was not able to remove any duplicates, if any, from the data source.

2.1.4.2 Child Care Service Data

1. **Self-Reported Numbers:** Numbers are derived from data provided by Child Care Aware of Kansas, which has been collected through self-reporting by local providers on enrolled children.
2. ***Variation in Age Breakdowns:** Child age is the only demographic breakdown available. The age categories were provided in a different format than for other data sources. The age categories provided by Child Care Aware of Kansas were:
 - a. Infant (0-17 months) for Family Homes
 - b. Infant (0-12 months) for Child Care Centers
 - c. Infant (13 - 17 months) for Child Care Centers
 - d. Toddler (18-35 months) for Family Homes
 - e. Toddler (18-23 months) for Child Care Centers
 - f. Toddler (2 years) for Child Care Centers, Head Start, Preschools
 - g. Preschool (3 years)
 - h. Preschool (4 years)
 - i. Kindergarten (5 years)

The KU-CPPR team harmonized and relabeled these age categories to ensure they can fit into the dashboard format. To that end, the counts under 'Infant (13 - 17 months) for Child Care Centers' and 'Toddler (18-23 months) for Child Care Centers' were combined to create a category of counts called, '1 to 2 Years'. In the dashboard, the counts under '0-17 months' and '18-35 months' only show numbers for Child Care data. For all other programs, these categories produce blank numbers.

3. **County level counts:** The location of children being served is defined by provider address. Thus, county level counts of children served include children who may be living outside the county of the provider but receiving services from that provider in the reporting year.

4. ***Missing Data for Race, Ethnicity and Sex:** The Child Care data collected by Child Care Aware of Kansas does not include any demographic characteristics like Race, Ethnicity and Sex. Child age is the only demographic included.

2.1.4.3 Child Care Assistance Data

1. **Monthly Point in Time Capture:** Counts within the Child Care Assistance Initiative are derived from the Department for Children and Families Caseload Detail Report. The Caseload Detail Report provides data that is a monthly point in time capture of the information contained in the Kansas Eligibility Enforcement System (KEES).
2. ***Missing Data for Race, Ethnicity and Sex:** The Child Care data collected by Child Care Aware of Kansas does not include any demographic characteristics like Race, Ethnicity and Sex. Child age is the only demographic characteristic included.

2.2 Home Visiting

2.2.1 Home Visiting Definition

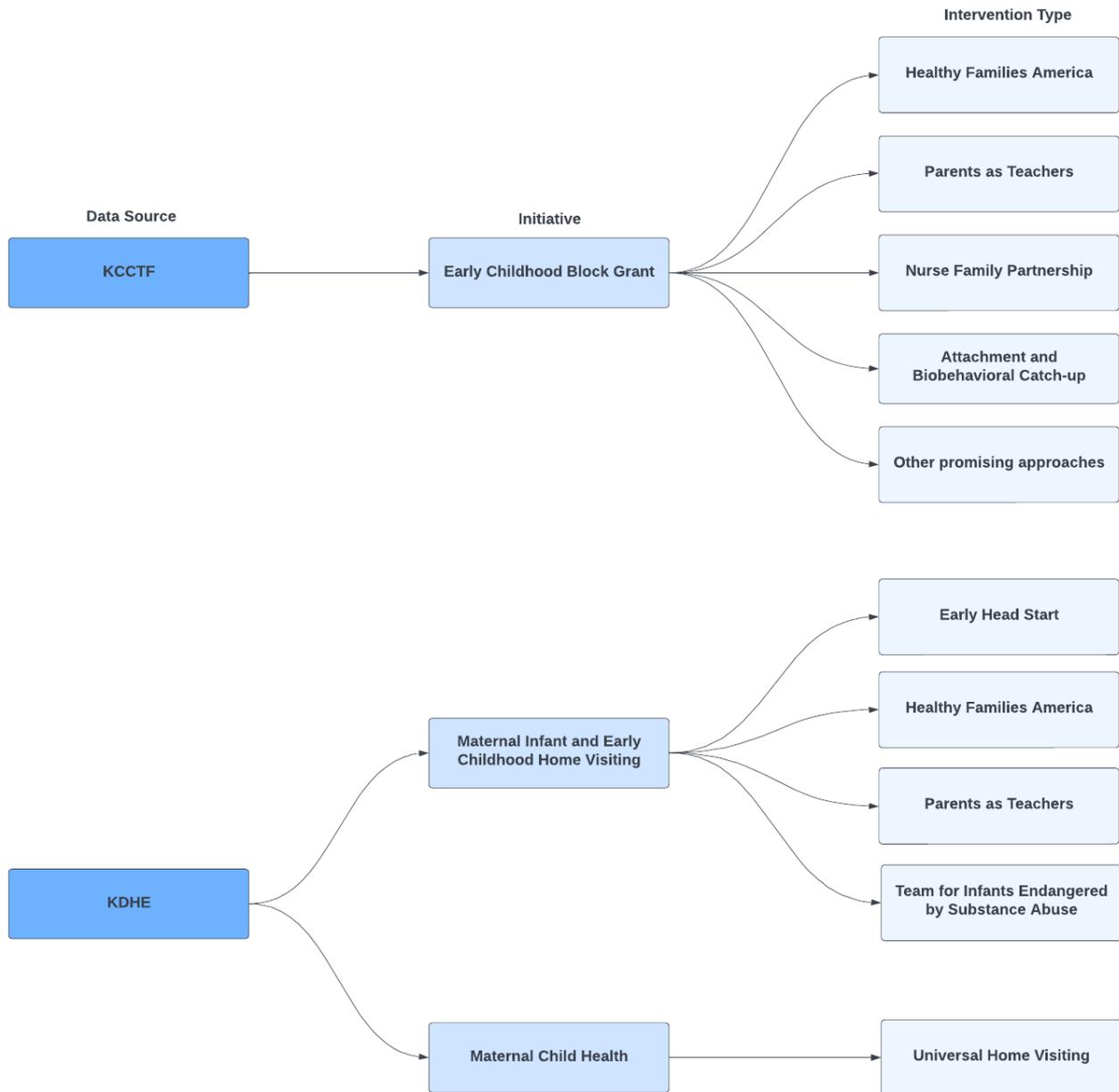
Education and support offered to families and their young children by a trained family-support professional in the family's home.

2.2.2 What is included?

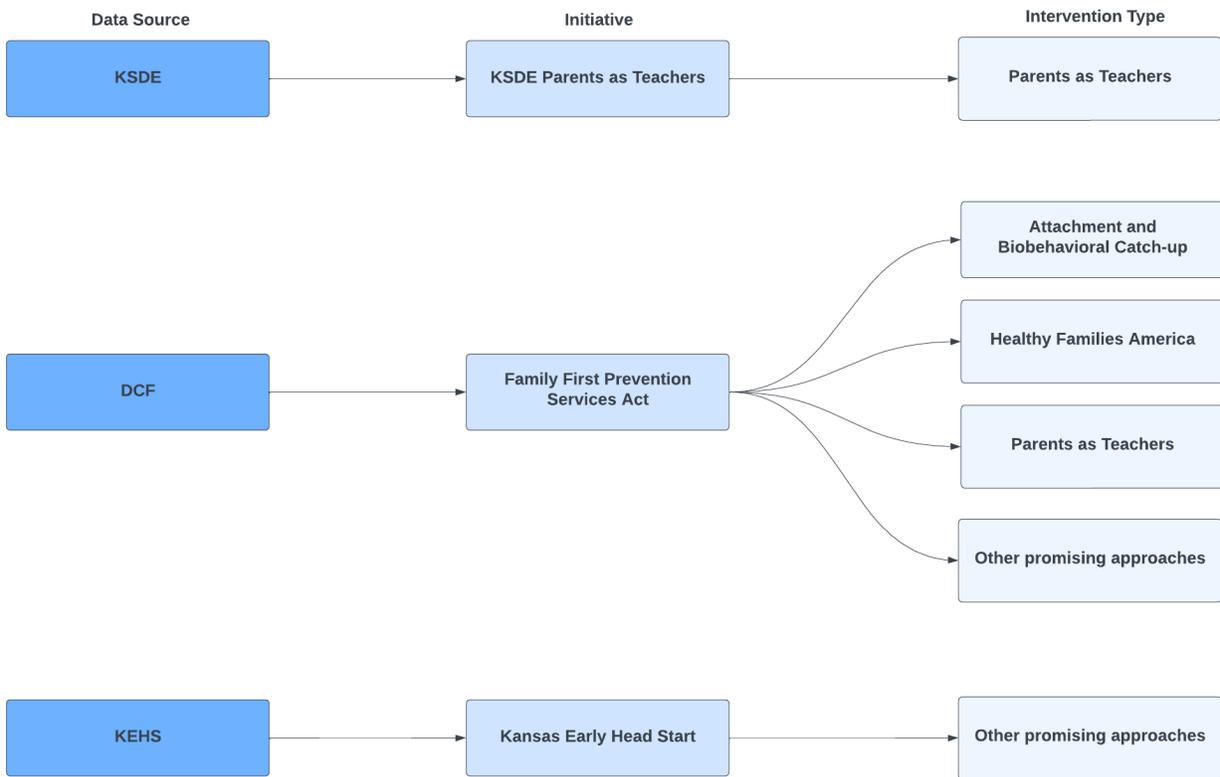
The dashboard's Home Visiting numbers are derived from data provided by KCCTF, KDHE, KSDE, Kansas Early Head Start, and DCF. Counts of children served by Home Visiting can be broken down into program subcategories of data source, initiative, and intervention type.

Program subcategories are mapped in the diagram below, and definitions for the labels used are provided following the diagram.

Home Visiting 1/2



Home Visiting 2/2



Note: The Family First Prevention Services Act administration no longer contracts for Attachment and Biobehavioral Catch-up as of 6/30/23.

Data source(s):

- **Kansas Children’s Cabinet and Trust Fund:** State agency directed by statute to undertake four overarching responsibilities: (1) advise the Governor and the legislature regarding the use of money credited to the Children’s Initiative Fund; (2) evaluate programs that utilize Children’s Initiatives Fund money; (3) assist the Governor in developing and implementing a coordinated, comprehensive delivery system to serve children and families in Kansas; and, (4) support the prevention of child abuse and neglect through the Children’s Trust Fund.
- **Kansas Department of Health and Environment:** State agency that works to protect and improve the health and environment of all Kansans through initiatives related to public health (e.g., licensing hospitals and child care facilities),

environment (e.g., monitoring air quality and regulating landfills), and health care finance (e.g., operating the state's Medicaid program).

- **Kansas State Department of Education**: State agency that provides leadership, resources, support and accountability to the state's K-12 education system with a goal to provide all Kansas children with equal access to a quality, high-level education that promotes student achievement and prepares all students for global success.
- **Department for Children and Families**: State agency responsible for the delivery of social services – including child care and child support, employment education and training, food and cash assistance, and support for youth who have experienced foster care – to those in need of them.
- **Kansas Early Head Start (KEHS)**: Social service and child development program primarily for pregnant women and families with infants and toddlers who meet the Federal poverty guidelines. KEHS is modeled after the federal Early Head Start program that was created by the U.S. Congress. Ten percent of total enrollment slots must be made available for children with disabilities. Comprehensive services delivered through weekly home visits and/or child care.

Initiative(s):

- **Early Childhood Block Grant (ECBG)**: funds distributed to sites that provide preschool and research-based child development services to promote school readiness. ECBG targets three areas: Healthy Development; Safe, Stable, and Nurturing Relationships in Families; and Early Learning and focuses on at-risk children and families.
- **Maternal, Infant, and Early Childhood Home Visiting (MIECHV)**: gives pregnant women and families, particularly those considered at-risk, necessary resources and skills to raise children who are physically, socially, and emotionally healthy and ready to learn. The Kansas MIECHV program targets two high-need communities: urban Wyandotte County and rural Southeast Kansas, including Cherokee, Labette, Montgomery, Neosho, and Wilson counties.
- **Maternal Child Health (MCH)**: Improve the health and well-being of Kansas mothers, infants, children, and youth, including children and youth with special health care needs, and their families with a focus on 7 priorities identified through a needs assessment.
- **Parents as Teachers (PAT)**: Evidence-based affiliate model provides parents with the skills and knowledge they need to help make informed decisions regarding their

child's education. The program includes personal visits, group connections, health, vision, hearing, and developmental screenings, and supports family connections with other community services.

- **Family First Prevention Services Act (FFPSA)**: prevents children from entering foster care by serving families with quality, evidence-based programs in the areas of parent skill-building, mental health, substance use disorders, and kinship navigation.
- **Kansas Early Head Start (KEHS)**: social service and child development program primarily for pregnant women and families with infants and toddlers who meet the Federal poverty guidelines. KEHS is modeled after the federal Early Head Start program that was created by the U.S. Congress. Ten percent of total enrollment slots must be made available for children with disabilities. Comprehensive services delivered through weekly home visits and/or child care.

Intervention type(s):

- **Healthy Families America (HFA)**: free evidence-based home visiting program that empowers parents to help children develop the social, emotional, and cognitive skills they need to succeed in life. HFA promotes child well-being and prevents the abuse and neglect of children in communities around the world through family-focused and empathic support provided in the home.
- **Parents as Teachers (PAT)**: evidence-based affiliate model provides parents with the skills and knowledge they need to help make informed decisions regarding their child's education. The program includes personal visits, group connections, health, vision, hearing and developmental screenings, and supports family connections with other community services.
- **Nurse Family Partnership (NFP)**: evidence-based community health program that empowers first-time moms to transform their lives and create better futures for themselves and their babies. Specially educated nurses regularly visit young, first-time moms-to-be, starting early in the pregnancy and continuing through the child's second birthday.
- **Attachment and Biobehavioral Catch-up (ABC)**: evidence-based home-visiting parenting program designed to help parents nurture and respond sensitively to their infants and toddlers to foster their development and form strong and healthy relationships.
- **Early Head Start (EHS)**: program that serves infants and toddlers under the age of 3, and pregnant women. Provides intensive comprehensive child development and

family support services to low-income infants and toddlers and their families, and to pregnant women and their families. Designed to nurture healthy attachments between parent and child (and child and caregiver).

- **Team for Infants Endangered by Substance abuse (TIES)**: intensive home-based partnership with pregnant and postpartum women and their families affected by prenatal alcohol and other drug abuse. Social workers and parent educators work with families to create a jointly designed plan that builds on family strengths to promote overall physical, social, and emotional health.
- **Universal Home Visiting (MCH)**: Improve the health and well-being of Kansas mothers, infants, children, and youth, including children and youth with special health care needs, and their families with a focus on seven priorities identified through a needs assessment.
- **Other Promising Approaches**: education and support offered to families and their young children by a trained family-support professional in the family's home which are distinct from the other categories or evidence-based modalities of home visiting services tracked in the dashboard.

2.2.3 What is excluded?

1. Kansas Early Head Start counts do not include children served by all Kansas Early Head Start programs, only those that are grantees of DCF.
2. The Home Visiting counts do not include data from federally funded Early Head Start and local Early Head Start programs. This is because the data for those programs is collected and managed by individual Head Start programs and required more time to collect and process for the version 1.0 dashboard than the team had available. The team is making concerted efforts to work with these programs to add their data in subsequent iterations of the dashboard.
3. The Home Visiting counts also do not include the counts of children receiving services through privately funded home visiting services.

2.2.4 Interpretation Notes for this Data

Notes that correspond to variations in the user interface indicated with asterisks (*)

2.2.4.1 Home Visiting Data

1. **Duplicates Introduced through Aggregation**: While the data sources under Home Visiting had some deduplicated data at the data source level, there was no

deduplication process performed at other levels of observation such as, at the intervention type level or the mixed delivery system level. This is because KU-CPPR did not have access to individual level data for any data sources other than DAISEY. When counts were aggregated together, some duplicates may have been introduced as a result.

2.2.4.2 DAISEY Data – ECBG, MIECHV, MCH

1. **Deduplicated Data:** The KU-CPPR team had access to individual-level data (via DAISEY) for counts under the Early Childhood Block Grant (ECBG), providers utilizing DAISEY for Maternal, Infant and Early Childhood Home Visiting (MIECHV), and providers using DAISEY for Maternal and Child Health (MCH). The team undertook a deduplication process for each observation level within the DAISEY data. This process entailed utilizing First and Last Names, along with the child's Date of Birth and Sex, to identify and eliminate duplicate records within and across DAISEY programs. To address potential data entry errors in these variables, the team employed a fuzzy matching technique known as 'Jaro-Winkler similarity' that scores the similarity between strings to establish matches among records. This technique was adopted due to the nature of DAISEY's record entry, often performed manually by home visitors and case managers based on participant-provided names.
2. **Identifying Home-Visiting Programs in ECBG:** The DAISEY-recorded ECBG data lacked specific labels indicating the type of service provided by each provider to the child, such as, Parent Education, Pre-K, and Home Visiting. To address this, the KU-CPPR team collaborated closely with program coordinators and home-visiting program experts to identify the programs that provided home-visiting services. This determination used the Grantee Name, Program Name, and Organization Name present within the DAISEY dataset. Instances where the Program Name was absent posed challenges in categorizing programs as Home Visiting or other interventions. Consequently, there may be a slight underreporting of home-visiting services within the ECBG due to this.
3. **Age Calculation:** The age calculation for ECBG, MCH, and MIECHV data was done using a cutoff of Aug 31, 2023. Ages were then rounded up. This was done to avoid negative years for children born during the reporting year.
4. **Imputing County using Zip Codes:** The data for ECBG had a few missing values for the county. In those cases, the KU-CPPR team used the zip codes provided for those rows to impute the county for that case.

2.2.4.3 KSDE - Parents as Teachers

1. **Potential Duplicates:** The data source used to fulfill data requests does not include individual-level child data. Thus, the KU-CPPR team was not able to remove any duplicates, if any, from the data source.
2. ***Missing Data for Sex:** Data on the sex of the child is not available.
3. **Age Calculation:** Child age is calculated by the date of June 30 (instead of August 31).
4. **County level counts:** The location of children being served is defined by provider address. Thus, county level counts of children served include children who may be living outside the county of the provider but receiving services from that provider in the reporting year.

2.2.4.4 Kansas Early Head Start

1. **Potential Duplicates:** The data source used to fulfill data requests does not include individual-level child data. Thus, the KU-CPPR team was not able to remove any duplicates, if any, from the data source.
2. ***Missing Data for Sex, Race, Ethnicity, and Age:** Data on the sex of the child, race, ethnicity, or age is not available.
3. ***Counts by County Replaced by Service Area Indication:** Data on child location is not available. Where service providers operate in more than one county, counts by county are replaced with an indication of whether these locations are within provider service areas and a count of children served by the provider.

2.2.4.5 Family First Prevention Services Act

1. **Deduplicated Data:** The data team for the DCF Prevention and Protection Services (PPS) data ensured that all counts provided to the KU-CPPR team were already deduplicated at the data source level.
2. **Race and Ethnicity:** The KU-CPPR team received counts for both race and ethnicity from DCF PPS. However, the category for Hispanic was also added to the Race breakdowns since DCF reported their numbers accordingly. To be able to harmonize the data with the data structure of other data sources, the KU-CPPR team reported the numbers for Hispanic and Race separately for the DCF PPS data.

2.3 Pre-K

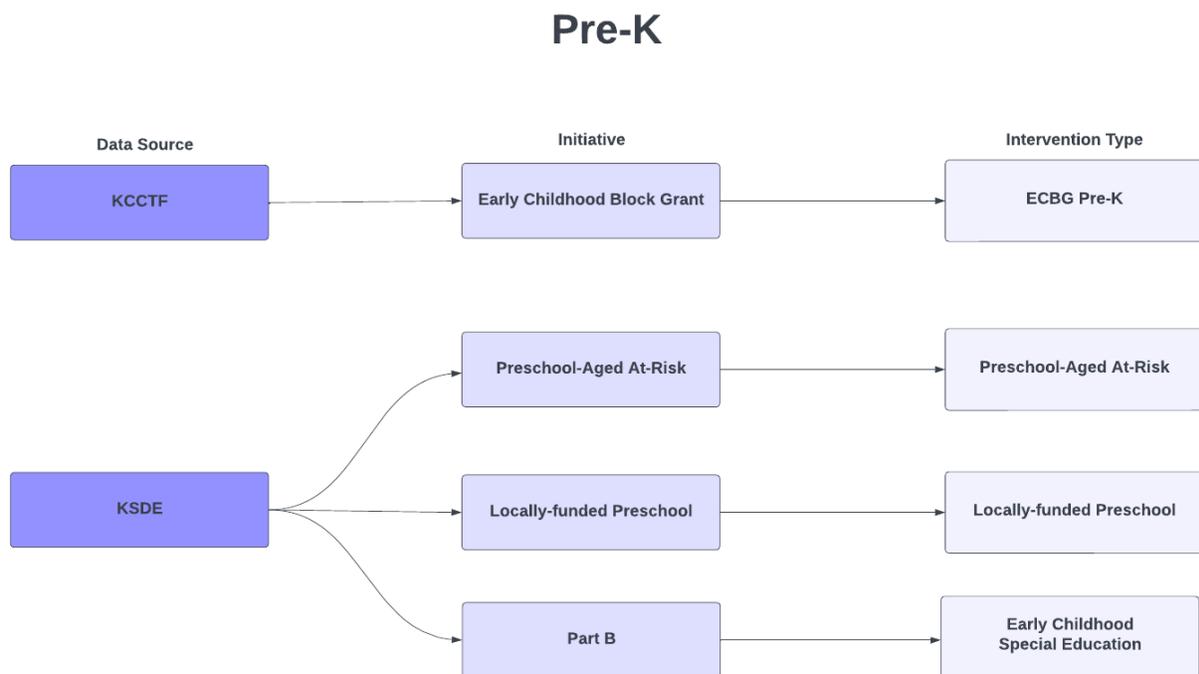
2.3.1 Pre-K Definition

Preschool services offered by local providers for all children birth through 5.

2.3.2 What is included?

The dashboard's Pre-K numbers are derived from data provided by the Kansas Children's Cabinet and Trust Fund and the Kansas State Department of Education, which has been collected through administrative oversight of programs and funds. The Kansas State Department of Education included Pre-K and Part B services together in their counts and those combined counts are reflected here. Counts of children served by Pre-K can be broken down into program subcategories of data source, initiative, and intervention type.

Program subcategories are mapped in the diagram below, and definitions for the labels used are provided following the diagram.



Data source(s):

- **Kansas Children's Cabinet and Trust Fund**: State agency directed by statute to undertake four overarching responsibilities: (1) advise the Governor and the legislature regarding the use of money credited to the Children's Initiative Fund; (2) evaluate programs that utilize Children's Initiatives Fund money; (3) assist the

Governor in developing and implementing a coordinated, comprehensive delivery system to serve children and families in Kansas; and, (4) support the prevention of child abuse and neglect through the Children's Trust Fund.

- **Kansas State Department of Education:** State agency that provides leadership, resources, support and accountability to the state's K-12 education system with a goal to provide all Kansas children with equal access to a quality, high-level education that promotes student achievement and prepares all students for global success.

Initiative(s):

- **Early Childhood Block Grant (ECBG):** funds distributed to sites that provide preschool and research-based child development services to promote school readiness. ECBG targets three areas: Healthy Development; Safe, Stable, and Nurturing Relationships in Families; and Early Learning and focuses on at-risk children and families.
- **Preschool-Aged At-Risk:** provides school districts with funding for preschool-aged students who meet at least one at-risk criteria to ensure high-quality early learning opportunities that prepare the students to enter kindergarten at age 5 socially, emotionally and academically prepared for success.
- **Locally-funded Preschool:** preschool slots funded by local school districts.
- **Part B:** Free Appropriate Public Education for all children ages 3 through 5 with disabilities in the state.

Intervention type(s):

- **ECBG Pre-K:** sites that provide preschool and research-based child development services to promote school readiness. ECBG targets three areas: Healthy Development; Safe, Stable, and Nurturing Relationships in Families; and Early Learning and focuses on at-risk children and families.
- **Preschool-Aged At-Risk:** provides school districts with funding for preschool-aged students who meet at least one at-risk criteria to ensure high-quality early learning opportunities that prepare the students to enter kindergarten at age 5 socially, emotionally and academically prepared for success.
- **Locally-funded Preschool:** preschool slots funded by local school districts.
- **Early Childhood Special Education:** supports educational services for young children with disabilities when they turn 3. It addresses individual needs within the

context of developmentally appropriate activities, including early learning experiences in language, communication, cognition, motor, and social emotional areas.

2.3.3 What is excluded?

1. KSDE provides oversight for the Kansas school finance formula and thus collects data on all children receiving Pre-K services funded by the school finance formula. KCCTF also collects data on services provided to children through the Early Childhood Block Grant. Counts of children receiving Pre-K services in this dashboard may not include all children receiving locally-funded Pre-K services, or children receiving Pre-K services in private school systems accredited by the Kansas State Board of Education and operating KDHE-licensed preschool facilities.

2.3.4 Interpretation Notes for this Data

Notes that correspond to variations in the user interface indicated with asterisks (*)

2.3.4.1 Pre-K Data:

1. **Potential Duplicates:** The data source used to fulfill data requests does not include individual-level child data. Thus, the KU-CPPR team was not able to remove any duplicates, if any, from the data source. There could be some programs that are reported in both KSDE and KCCTF data. While the team made a concerted effort to remove the programs where the duplicates were easy to identify, there may still be some duplicates across the two data sources.

2.3.4.2 ECBG Data

1. **Age Calculation:** Ages calculated for children served through ECBG PreK used an anchor date for 8/31/2023. Thus, the ages for children served under ECBG PreK are lagged by a year.

2.3.4.3 KSDE Data

1. ***Missing Data for Region-level counts:** The KU-CPPR team received pre-suppressed aggregated data from KSDE which had some county-level and demographic level breakdowns. Since the data was pre-suppressed, no further calculations could be made for any combination of rows that contained suppressed data. Region-level counts were provided only for all PreK data from KSDE.
2. ***Missing Data for Demographics:** Pre-K data received from KSDE included demographic breakdowns for only All Pre-K. No demographic breakdowns were

available for Locally funded Preschool, Early Childhood Special Education, and Preschool-Aged At-Risk.

3. **Suppression of data:** KSDE data was suppressed in two scenarios: One, when the count was greater than 0 but less than 10, and two, when a total could be used to unveil smaller counts. Thus, the counts suppressed in the KSDE data may include both small counts and larger counts that unveil smaller counts. This is different from the masking and suppression protocol applied for the rest of the data sources in the dashboard.

2.4 Part C

2.4.1 Part C Definition

Comprehensive statewide program of early intervention services for infants and toddlers ages birth through 2 with disabilities, and their families.

2.4.2 What is included?

The dashboard's Part C numbers are derived from data provided by the Kansas Department of Health and Environment, which has been collected through administrative oversight of programs and funds. Part C counts cannot be further broken down by program subcategories.

Program subcategory labels used are displayed in the diagram below. Definitions for the labels used are provided following the diagram.



Data source:

- **Kansas Department of Health and Environment:** State agency that works to protect and improve the health and environment of all Kansans through initiatives related to public health (e.g., licensing hospitals and child care facilities), environment (e.g., monitoring air quality and regulating landfills), and health care finance (e.g., operating the state's Medicaid program).

Initiative:

- **Kansas Early Childhood Developmental Services**: KDHE provides grants to tiny-k programs to assist in maintaining and implementing a statewide system of coordinated, comprehensive, multidisciplinary early intervention services for infants and toddlers with disabilities from birth to age three and their families.

Intervention type:

- **Early Intervention (coaching model)**: KDHE provides grants to tiny-k programs to assist in maintaining and implementing a statewide system of coordinated, comprehensive, multidisciplinary early intervention services for infants and toddlers with disabilities from birth to age three and their families.

2.4.3 What is excluded?

1. KDHE, the only data source for Part C data for this dashboard, provides oversight for all Part C programs in Kansas and thus collects data on all children receiving Part C services. Therefore, counts of children receiving Part C services in this dashboard are not expected to exclude any children.

2.4.4 Interpretation Notes for this Data

Notes that correspond to variations in the user interface indicated with asterisks (*)

1. **Potential Duplicates**: The data source used to fulfill data requests does not include individual-level child data. Thus, the KU-CPPR team was not able to remove any duplicates, if any, from the data source.
2. ***Missing Data for Age**: Complete county-level and state-level counts by age are not available.

3 Appendices

3.1 Appendix 1: Sample data request template



Data Request for Authorized Project #2

<Intervention Name>

<Agency Name>

Introduction

Under an Authorized Project, the Early Childhood Data Trust is aggregating data from agencies to build an aggregate count of children in a set of programs under five Mixed Delivery early care and education systems: Child Care, Pre-K, Home Visiting, Part B, and Part C. This Excel workbook has been organized to collect data to determine that aggregate count for the intervention named above.

Instructions

The data fields (see Data Dictionary tab) require data at two levels: state and county. We are asking for basic demographic information: sex, age, race, and ethnicity.

We ask that agencies provide a quick overview of their approach to aggregating these counts on the separate Methodology Worksheet, then fill in data for each demographic on the tabs for state counts (yellow) and county counts (green). Please contact the team at KU CPPR with any questions through [Fiona Helsel](mailto:fhelsel@resultant.com) (fhelsel@resultant.com).

Scope of Data Requested

Aggregated Value Requested: Count of Children being Served

Timeframe: State Fiscal Year (July 1, 2022 to June 30, 2023)

Geographical Groupings of Data: State, County

Program/Intervention: <Intervention name>

Description of Indicator Breakdowns Requested

| Indicator | Indicator Breakdown | Indicator Description |
|-------------------|--|---|
| Sex/Gender | Male, Female | Standard breakdown of sex into binary category used by agencies in KS |
| Age | Age Birth to <1, Age 1, Age 2, Age 3, Age 4, Age 5 | Breakdown of children into cohorts by year, calculated by the age of the child on August 31, 2022 |
| Race | White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, Some Other Race, Multiracial | Standard US Census categories |
| Ethnicity | Hispanic Children, Non-Hispanic Children | Standard US Census breakdown by ethnicity |

Data Dictionary

| Indicator | Field Name | Definition |
|-----------------------|-----------------------|---|
| Total Children | total_mds_child_count | Total count of children in the intervention or program in the geographic unit |

Gender

| Indicator | Field Name | Definition |
|----------------------------|----------------------|---|
| Total Male Children | total_mds_male_count | Total count of male children in the intervention in the geographic unit |

| | | |
|------------------------------|------------------------|---|
| Total Female Children | total_mds_female_count | Total count of female children in the intervention in the geographic unit |
|------------------------------|------------------------|---|

Age

| Indicator | Field Name | Definition |
|---------------------------------|----------------------|--|
| Total Children Age <1 | total_mds_age0_count | Total count of children 0-11 months in age in the intervention in the geographic unit |
| Total Children Age 1 | total_mds_age1_count | Total count of children 12-23 months in age in the intervention in the geographic unit |
| Total Children Age 2 | total_mds_age2_count | Total count of children 24-35 months in age in the intervention in the geographic unit |
| Total Children Age 3 | total_mds_age3_count | Total count of children 36-47 months in age in the intervention in the geographic unit |
| Total Children Age 4 | total_mds_age4_count | Total count of children 48-59 months in age in the intervention in the geographic unit |
| Total Children Age 5 | total_mds_age5_count | Total count of children 60-71 months in age in the intervention in the geographic unit |

Race

| Indicator | Field Name | Definition |
|---|------------------------------|--|
| Total White Children | total_mds_race_white_count | Total count of children classified with race as White alone in the intervention in the geographic unit |
| Total Black/AA Children | total_mds_race_blackaa_count | Total count of children classified with race as Black/African American alone in the intervention in the geographic unit |
| Total American Indian/Alaska Native Children | total_mds_race_natam_count | Total count of children classified with race as American Indian/Alaska Native alone in the intervention in the geographic unit |
| Total Asian Children | total_mds_race_asian_count | Total count of children classified with race as Asian alone in the intervention in the geographic unit |
| Total Native Hawaiian or Other Pacific Islander Children | total_mds_race_nhpi_count | Total count of children classified with race as Native Hawaiian or Other Pacific Islander alone in the intervention in the geographic unit |
| Total Some Other Race Children | total_mds_race_other | Total count of children classified with race as Some Other Race in the intervention in the geographic unit |
| Total Multiracial Children | total_mds_race_multi | Total count of children classified with race as Multiracial in the intervention in the geographic unit |
| Indicator | Field Name | Definition |

| | | |
|------------------------------------|---------------------------------|--|
| Total Hispanic Children | total_mds_ethnicity_hispanic | Total count of children classified with ethnicity as Hispanic in the intervention in the geographic unit |
| Total Non-Hispanic Children | total_mds_ethnicity_nonhispanic | Total count of children classified with ethnicity as Non-Hispanic in the intervention in the geographic unit |

County Totals

For county total, agencies were given a list of the 105 counties in Kansas. Each agency was asked to report the total count of children in the counties they serve. For county age, each agency was asked to report the total count of children per age category. The age category includes children ages birth through five. For county race, each agency was asked to report the total count of children per race category. The race categories include White, Black or African American, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, Asian, Some Other Race, or Multiracial. For county ethnicity, each agency was asked to report the total count of children per ethnicity category. The ethnicity categories include Hispanic and Non-Hispanic. For county gender, each agency was asked to report the total count of children per gender category. The gender categories include Male and Female.

State Totals

For state total, each agency was asked to report the total count of children in the state of Kansas they serve. For state age, each agency was asked to report the total count of children in the state of Kansas per age category. The age category includes children ages birth through five. For state race, each agency was asked to report the total count of children in the state of Kansas per race category. The race categories include White, Black or African American, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, Asian, Some Other Race, or Multiracial. For state ethnicity, each agency was asked to report the total count of children in the State of Kansas per ethnicity category. The ethnicity categories include Hispanic and Non-Hispanic. For state gender, each agency was asked to report the total count of children in the state of Kansas per gender category. The gender categories include Male and Female.

The Southwest Region includes: Barton (*DCF Service Center*), Chase, Clark, Comanche, Edwards, Finney (*DCF Service Center*), Ford (*DCF Service Center*), Grant, Gray, Greeley, Hamilton, Harvey (*DCF Service Center*), Haskell, Hodgeman, Kearny, Kiowa, Lane, Lyon (*DCF Service Center*), Marion, McPherson (*DCF Service Center*), Meade, Morton, Ness, Pawnee, Reno (*DCF Service Center*), Rice, Rush, Scott, Seward (*DCF Service Center*), Stafford, Stanton, Stevens, and Wichita County.

The Wichita Region includes: Barber, Butler (*DCF Service Center*), Cowley (*DCF Service Center*), Elk, Greenwood, Harper, Kingman, Pratt (*DCF Service Center*), Sedgwick (*DCF Service Center*), and Sumner County.