EARLY LEARNING POLICY BRIEF

Promoting early learning and development Birth to 8

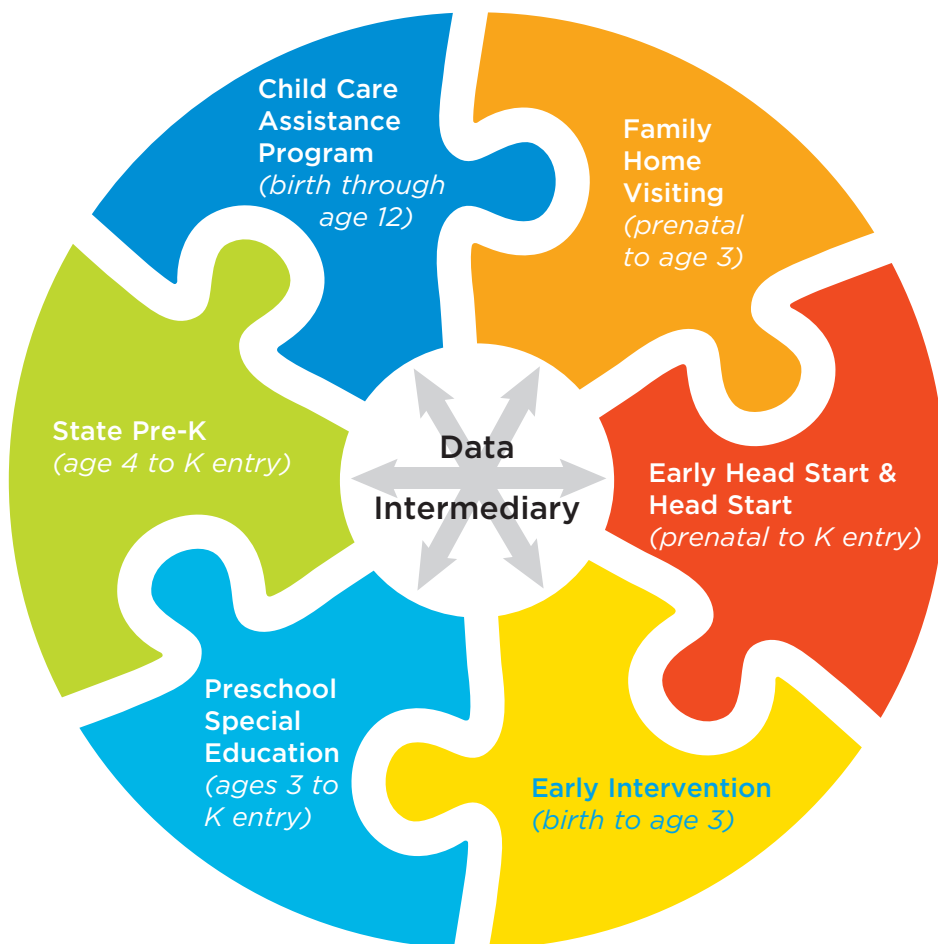## Focus on Integrated Early Care and Education Data

Decades of research show that when children participate in high-quality programs designed to improve early learning and development, they do better in school and in life. In every state there is a diverse array of programs designed to support the healthy development of young children. These include family home visiting, child care, Early Head Start/Head Start, State Pre-K, Early Intervention, and preschool special education. Programs vary in quality and intensity of services, training and qualifications of staff, and focus of services to improve individual child outcomes (e.g. early language and literacy, social emotional skills, etc.) and/or family outcomes (e.g. economic security, parenting skills, etc.).[1]

Because early care and education programs are funded and managed separately and are sometimes layered on top of each other to meet the needs of children and families (e.g. a child may be participating in Head Start, child care, and preschool special education at the same time), states are developing systems to integrate information across programs. When program data is shared and integrated, program administrators and policymakers can learn which children are getting the services they need at the right time, without gaps, and with the right dosage and duration to be ready for school — and which children are falling through the cracks.[2]

Development and use of integrated state early care and education data, helps state policymakers:

- improve the quality of programs;

- improve the qualifications and effectiveness of the educators who work in the programs;

- increase participation in high-quality programs; and

- improve child outcomes.

This report provides an overview of a demonstration project conducted by Rhode Island KIDS COUNT that sought to use integrated data from early care and education programs to look at a population of children with high needs (young children who were maltreated in 2015) and their participation in high-quality early learning programs.

INTEGRATED EARLY CARE AND EDUCATION PROGRAM DATA CAN SUPPORT CHILDREN'S DEVELOPMENT & LEARNING

Child Care Assistance Program *(birth through age 12)*

Family Home Visiting *(prenatal to age 3)*

State Pre-K *(age 4 to K entry)*

Data Intermediary

Early Head Start & Head Start *(prenatal to K entry)*

Preschool Special Education *(ages 3 to K entry)*

Early Intervention *(birth to age 3)*

Key Questions Requiring Integrated Data from Early Care & Education Programs

1) **Which children are enrolled in early care and education programs? Which children are missing out?**
   by age, race, ethnicity, city/town, risk factors, type of program, quality of program

2) **What is the quality of our early care and education programs? What are the barriers for quality improvement?**
   by ages served, funding stream (Child Care Assistance Program (CCAP), Head Start, private pay, etc),
   city/town, hours of operation

3) **Are we attracting and retaining effective early educators/home visitors?**
   by program, funding stream, city/town, staff characteristics

4) **How many children need and receive more than one program at a time?**
   simultaneous participation by city/town, risk factor, quality of program

5) **What happens at key transition points?**
   succession of program participation (e.g. Early Intervention > Preschool Special Education) by city/town,
   risk factors, quality of program

6) **Are low-income and high-needs children getting the services and supports for which they are eligible and**
   entitled without any gaps and with the appropriate dosage and duration?
   by child risk factor (low-income, victim of child maltreatment, in foster care, in homeless family, with
   developmental delay or disability, with challenging behavior, substance affected at birth, etc.)

EARLY CARE & EDUCATION PROGRAM DATA IN RHODE ISLAND

EARLY CARE & EDUCATION PROGRAM	AGENCY AND DATA SYSTEM(S)
Family Home Visiting *(prenatal to age 3)* In-home coaching for parents to improve child health and school readiness and reduce parental stress.	**Department of Health** Efforts to Outcomes (ETO) and KIDSNET databases
Early Head Start & Head Start *(prenatal to K entry)* Early care and education, health, nutrition, and parenting supports for families living in poverty.	**7 Early Head Start & Head Start Agencies** Individual databases managed by each agency*
Child Care Assistance Program *(birth through age 12)* Subsidized child care, early learning, after school and summer programs for low-income working families	**Department of Human Services** RI Bridges database
Early Intervention *(birth to age 3)* Family-focused services for children experiencing or at-risk for developmental delays.	**Executive Office of Health & Human Services** Welligent database
Preschool Special Education *(age 3 to K entry)* Child-focused services for children with a developmental delay or disability.	**Department of Education** Special Education Census database
State Pre-K *(age 4 to K entry)* Early education for children age 4.	**Department of Education** Pre-K - Grade 12 Enrollment Census

* Head Start agencies are: CHILD, Inc., Children's Friend, Comprehensive Community Action Program, East Bay Community Action Program, Meeting Street, Tri-County Community Action, and Woonsocket Head Start Child Development Association. As of June 2018, several Early Head Start and Head Start agencies are working to share enrollment data with the Department of Health for inclusion in the KIDSNET data system.

Integrated Early Care & Education Program Data in Rhode Island

In 2016, Rhode Island KIDS COUNT set out to conduct a demonstration project that required the use of integrated early care and education data to answer a key policy question "How many young children involved with the child welfare system are participating (or have participated) in publicly-funded early care and education programs?"

Rhode Island KIDS COUNT partnered with DataSpark (an intermediary that integrates data and manages the State Longitudinal Data System for the RI Department of Education, the RI Office of Postsecondary Education, and the RI Department of Labor and Training), to request child-level data for children under age six who had been maltreated in 2015 from the Department of Children, Youth, and Families (DCYF), and children's enrollment data from June 30, 2009 – June 30, 2016 from the Department of Health's (DOH) Family Home Visiting programs, the Department of Education's (RIDE) State Pre-K and Preschool Special Education (PSpEd) programs, the Department of Human Service's (DHS) Child Care Assistance Program (CCAP), the Executive Office of Health and Human Services' (EOHHS) Early Intervention program, and seven separate community-based organizations that manage Early Head Start and Head Start programs. In addition, we requested information from the Rhode Island Department of Health's KIDSNET database about child and family characteristics and risk factors. The plan was for DataSpark, which had data sharing agreements in place with many of the state agencies, to match data at the child level and share de-identified, aggregate information with Rhode Island KIDS COUNT to produce a report with recommendations.

Several challenges were encountered in executing this project as designed, including the unexpected movement of DataSpark's home from the Providence Plan to the University of Rhode Island which required new data sharing agreements. The agencies that manage Head Start programs informed us that they were unable to share any retrospective data on child enrollment because policies in place required each family to be contacted every time any data was shared with an outside party. In addition, due to lack of clarity about whether DataSpark would be the permanent home for integrated data from early learning programs, long delays were encountered in getting data sharing agreements in place and receiving the actual data. By May 2018, DataSpark only had data sharing agreements in place with DCYF (the cohort population to be studied), RIDE (State Pre-K and Preschool Special Education data), and EOHHS (Early Intervention). Data sharing agreements between DCYF, EOHHS and DataSpark were specific to this project and did not ensure ongoing availability of the data. Data from CCAP, the Family Home Visiting Program, and Preschool Special Education were never received by DataSpark. The Rhode Island Department of Health requested the cohort data set be sent over directly from DCYF so they could conduct matches internally, rather than through DataSpark, and prepare aggregate data for Rhode Island KIDS COUNT.

DEMONSTRATION PROJECT DESIGN 2016: INTEGRATED EARLY CARE & EDUCATION PROGRAM DATA
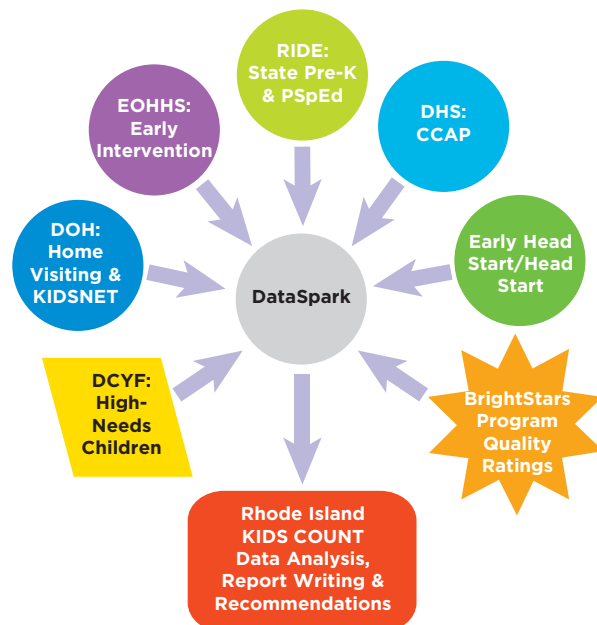
DEMONSTRATION PROJECT AS EXECUTED 2018: INTEGRATED EARLY CARE & EDUCATION PROGRAM DATA
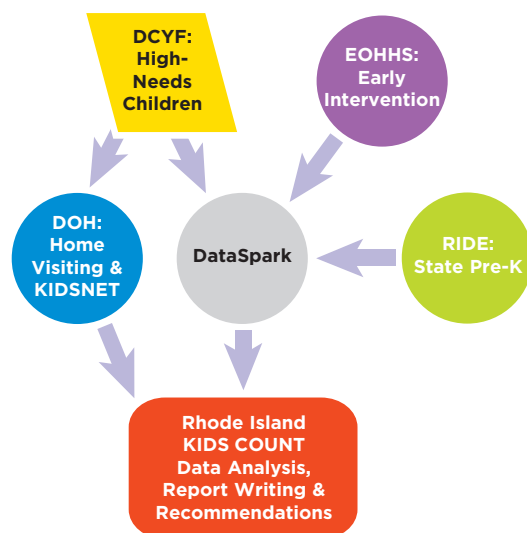
The Population of Young Children who were Maltreated

In Rhode Island in 2015, there were 1,421 children under age six with an indicated case of child maltreatment. This was the cohort that we studied. Twelve percent of these children (171) were repeat victims of maltreatment within the past 12 months. Of the total maltreated children, 33% had been removed from their home at least once (402 had one removal, 56 had two removals, 11 had three removals, 1 had four removals, and 1 had five removals).[3]

The cohort population was 46% female and 54% male; 66% White, 13% Black, 13% Multi-Racial, 1% Asian, and 7% unknown/other race; and 25% Hispanic, 65% Non-Hispanic, and 10% unknown ethnicity. Almost half (48%) of the children lived in one of the four core cities. DCYF records indicate that 16% of the families were referred to the Family Care Community Partnership either by the DCYF investigator or through a self-referral.[4]
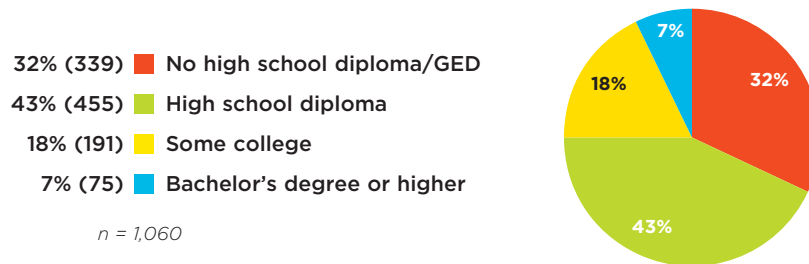
The Rhode Island Department of Health was able to match 1,390 (98%) children from the DCYF cohort with a record in KIDSNET. Among children with information in KIDSNET about maternal education levels, 32% of the maltreated children had a mother without a high school diploma when they were born, 43% had a mother with only a high school diploma, 18% had completed at least some college coursework and 7% had a bachelor's degree or higher at birth. In comparison, of all babies born to Rhode Island residents in 2017, 11% were born to a mother without a high school diploma.[5,6]

MALTREATED CHILDREN BY AGE AS OF DECEMBER 2015, RHODE ISLAND
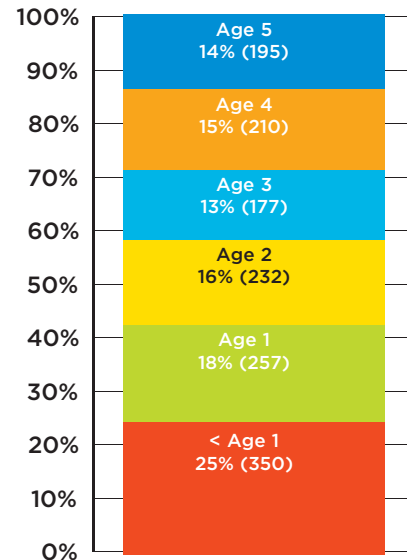
Source: Rhode Island Department of Children, Youth and Families, RICHIST, 2015.

MALTREATED CHILDREN UNDER AGE 6 BY MATERNAL EDUCATION AT BIRTH, RHODE ISLAND, 2015

- 32% (339) ■ No high school diploma/GED
- 43% (455) ■ High school diploma
- 18% (191) ■ Some college
- 7% (75) ■ Bachelor's degree or higher

n = 1,060

Source: Rhode Island Department of Health, KIDSNET Database matched with DCYF cohort of children with indicated child abuse and neglect. Maternal education level was not availble for 330 children in the cohort.

The majority of the children in the cohort were born into a low-income family (86% had Medicaid insurance or no insurance at the time of the birth, compared to 50% of all births in 2017) and 54% were born to a mother with a documented history of treatment for mental health conditions (compared to 31% of all children born in 2017). In addition, 24% of the maltreated children were born to a mother with a documented history of substance abuse (compared to 6% of all children born in 2017) and 17% were born to a mother with documented involvement in the child welfare system either as a mother or as a child (compared to 2% of all children born in 2017).[7,8]

This population was more likely to have been born pre-term (10.4% vs. 9.0%) and at low birth weight (11.5% vs. 7.5%) than the general population. They were more likely to have received a lead screening (86% vs. 76%) and more likely to have an elevated blood lead level (12% vs. 4%). The majority of the children (88%) had participated in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC).[9,10,11]

Participation in Rhode Island Early Care & Education Programs

Family Home Visiting

Data matched by the Department of Health showed that the maltreated children in the cohort were more likely than the general population to have been referred for a First Connections home visit (76% vs. 63%), a short-term program designed to help families get connected to needed resources soon after the birth of a child. They were also more likely to have received at least one First Connections visit (53% vs. 29%).[12,13]

Of the 1,390 children in the matched cohort, 136 (10%) participated in an evidence-based home visiting program before, during, or after the child maltreatment occurred. Of those enrolled, 65% (88) were enrolled in Healthy Families America, 22% (30) were enrolled in Parents as Teachers, and 13% (18) were enrolled in the Nurse-Family Partnership program. Note that the availability of evidence-based home visiting programs in Rhode Island grew substantially between 2010 and 2016, from 37 children enrolled in 2010 to 1,043 children enrolled in 2016.[14]

Early Intervention

Data matched through DataSpark found 549 (39%) children from the cohort had a referral record in the Early Intervention database and 320 (58%) children participated in Early Intervention (were found eligible) before, during, or after the child maltreatment occurred. The participation rate (23% of the cohort) is almost four times higher than the participation rate of the general population (6%). Of the 320 determined eligible, 262 (82%) had a significant developmental delay, 31 (10%) had a single established condition (such as Down Syndrome), 16 (5%) had multiple established conditions known to put a child at-risk for poor outcomes – an eligibility category eliminated by the state in 2013, and 11 (3%) were eligible through informed clinical opinion. Of the 549 children referred to Early Intervention, 109 (20%) were evaluated but determined not eligible for Early Intervention and 120 (22%) did not have eligibility determined.[15,16]
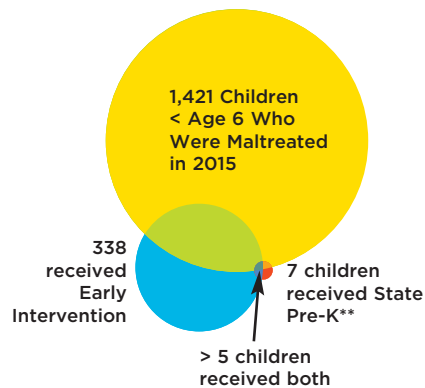
State Pre-K

Matched through DataSpark, of the 394 children from the cohort who were old enough to have participated in State Pre-K, 7 (2%) were enrolled before June 30, 2016. Like the evidence-based home visiting programs, State Pre-K experienced significant growth during this time period, expanding from 234 children enrolled in 2013-2014 to 594 children in 2015-2016 (the period when these children could have participated in State Pre-K) and continued to expand to 1,080 children in 2017. In fact, we found an additional 34 children from the cohort enrolled in State Pre-K in the 2016-2017 and 2017-2018 school years which were beyond the scope of the original project but reflect improved access to the program.[17,18]

Integrated Enrollment Data

Because data from both Early Intervention and State Pre-K were sent to DataSpark, we were able to determine the number of children in the cohort that had received both services between 2009 and 2016. Of the 1,421 children in the cohort, there were less than 5 children that had participated in both Early Intervention and State Pre-K by June 30, 2016. Including the additional children from the cohort that participated in State Pre-K in 2016-2017 or 2017-2018, there were 15 children who participated in both EI and State Pre-K.[19]

YOUNG MALTREATED CHILDREN IN COHORT THAT RECEIVED EITHER OR BOTH EARLY INTERVENTION AND STATE PRE-K, 2009-2016*

1,421 Children < Age 6 Who Were Maltreated in 2015

338 received Early Intervention

7 children received State Pre-K**

> 5 children received both

Source: DataSpark at the University of Rhode Island.

* This diagram does not include data from Family Home Visiting, CCAP, Head Start, or Preschool Special Education because data from these programs was not shared with DataSpark.

** An additional 34 children from the cohort were enrolled in State Pre-K since the 2015-2016 school year.

Integrated Early Care and Education Data Systems

Integrated early care and education data systems securely link child-level information across early learning programs to provide access to consistent child, program, and workforce information. These data systems are used to inform policymakers and provide actionable information to program administrators. States use integrated early care and education data to improve the quality of early learning programs, develop strategies to increase workforce qualifications and retention, and to increase children's access to high-quality programs.[20]

Integrated data can facilitate collaboration among different early care and education programs to improve services for children and can be linked to K-12, health, and human services data systems to answer a variety of policy questions.[21] For example, the preschool special education manager for a school district could learn how many young children with IEPs are enrolled in child care, Head Start, or State Pre-K.

INTERLOCKING COMPONENTS OF AN INTEGRATED EARLY CARE AND EDUCATION DATA SYSTEM

Data Intermediaries In Rhode Island

There are several organizations in Rhode Island that are working to integrate data sets across state agencies in order to inform policy and practice. As of June 2018, it is not clear which entity is responsible for integrating data across all early care and education programs, including children's enrollment data, program data, and early care and education workforce data.

DataSpark and RI Data HUB University of RI	DataSpark manages the Rhode Island DataHUB as the Rhode Island Statewide Longitudinal Data System (SLDS), connecting K-12 data to post-secondary and workforce data.
Rhode Island Innovative Policy Lab (RIIPL) and RI 360 Brown University	RIIPL builds and navigates complex databases to design and test policy innovations to improve equity and opportunity. RI 360 matches data from a variety of sources to give a comprehensive view of social indicators in Rhode Island.
KIDSNET RI Department of Health	Established in 1998, KIDSNET aggregates data about children's health and development to improve coordination of care and access to services. Key data in KIDSNET include: newborn screening, vital records, immunizations, developmental screening, WIC, lead poisoning, Early Intervention, and Family Home Visiting.
Early Care and Education Data System (ECEDS) RI Department of Education	The Rhode Island Early Care and Education Data System is designed to centralize data about the early care and education system in Rhode Island and houses data (including BrightStars quality ratings) about licensed centers, licensed family child care homes, public schools that operate preschool classrooms, and information about the early care and education workforce.
The Data Ecosystem RI Executive Office of Health and Human Services	The Data Ecosystem shares data across state health and human service agencies to make decisions, manage performance, and make continuous quality improvements.

Improving Access to Services for Children with High Needs

The Rhode Island Early Learning Council, an advisory committee to the Rhode Island Children's Cabinet and the Governor, makes recommendations to improve outcomes for children from birth through Grade 3. The Council is focused on improving access to high-quality early learning programs, particularly for children with high needs. The Council's 2016-2020 advisory plan identifies the following groups as children with high needs: low-income children (< 200% of the federal poverty level), infants and toddlers, children with developmental delays or disabilities, children with behavioral or mental health challenges, children experiencing homelessness, children who have been victims of child abuse or neglect, children in non-English speaking families, and children in refugee families.[22]

POPULATION WITH HIGH NEEDS	DATABASE(S)
Children in Low-Income Families	DOH: Children with Public or No Health Insurance DOH: Children receiving WIC DHS: Children receiving TANF/RI Works
Infants and Toddlers	DOH: Children < age 3 in KIDSNET
Children with Developmental Delays or Disabilities	EOHHS: Children with an IFSP RIDE: Children with an IEP
Children with Behavioral or Mental Health Challenges	HealthFacts RI: All-Payer Claims Database* RIDE: Children with an IEP for social-emotional issues
Children Experiencing Homelessness	RIDE: McKinney-Vento data RI Emergency Shelter Information Project*
Children Involved in Child Welfare System	DCYF: Indicated cases of child abuse and neglect DCYF: Children in foster care DCYF: Children receiving services from the Family Care Community Partnerships
Children in Non-English Speaking Families	DOH: Children born to a mother who does not speak English
Children in Refugee Families	Dorcas International Institute & the Diocese of Providence*
Other	DOH: Children born to parents with low education levels DOH: Children born to parents under age 20 DOH: Children by race and ethnicity

These databases may or may not contain child-level information on this population that could be integrated with ECE program enrollment data.

Getting to Kindergarten Initiative

With support from the W. K. Kellogg Foundation, the Rhode Island Department of Children, Youth, and Families (DCYF) is working to improve outcomes for young children in the child welfare system with a focus on young children under age six who are in foster care. DCYF staff are working to ensure all young children in foster care have access to high-quality programs that promote learning and development, including Family Home Visiting, Early Intervention, high-quality child care, Early Head Start, Head Start, Preschool Special Education, and State Pre-K.[23] Integrated data from early care and education programs would help DCYF make progress toward their goals.

Recommendations

■ **Improve access to and use of integrated data to ensure that young children with high needs,** including children who have experienced abuse or neglect, have access to high-quality early learning programs. It is also important to understand which children are enrolled in programs and which are not, and whether children are enrolled consistently and receiving the right dosage and duration of services.

■ **Establish coordinated governance across state agencies** to promote use of integrated data from early care and education programs. Identify core goals and develop data sharing and coordination systems to produce regular reports to track progress over time.

■ **Clarify which data intermediary is responsible** for gathering and integrating early care and education data. Will it be managed and coordinated with the State Longitudinal Data System?

■ **Ensure there is a permanent home and staff capacity to manage the Early Care and Education Data System (ECEDS)** so it can continue to provide valuable information for families and state agencies about licensed child care and early learning programs and public schools that operate preschool classrooms.

■ **Improve systems to ensure data about early childhood educators and home visitors is regularly entered into ECEDS** and can be used by program administrators and policymakers to improve the development and retention of a qualified and effective workforce that reflects the diversity of the children in our state.

■ **Connect integrated data from early care and education programs to children's health data and K-12 education data** for comprehensive and longitudinal information on children's learning, health, and development.

■ **Consider establishing a state Office of Early Learning** to promote coordination, collaborative decision-making, and shared data and resources across the core early childhood programs. Improved state governance is needed to promote the use of integrated early care and education data. An Office of Early Learning could also promote collaborative governance for the Rhode Island Early Learning and Development Standards, the Early Care and Education Workforce Knowledge and Competencies, and BrightStars, the state's Quality Rating and Improvement System for early learning programs.

States like Connecticut, Georgia, Massachusetts, and Washington have established new consolidated state agencies to manage early learning programs. Pennsylvania created an Office of Early Childhood Development and Early Learning by moving early childhood program managers into shared office space with a director that reports to both the state education agency and the human service agency.[24]

References

[1] Center on the Developing Child at Harvard University. (2016). *From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families.* Cambridge, MA: Harvard University.

[2,20,21] *Using coordinated data systems to guide early childhood education policies: Today's investment, tomorrow's rewards.* (2016). Bethesda, MD: Early Childhood Data Collaborative, Child Trends.

[3,4] RI Department of Children, Youth, and Families RICHIST data shared with DataSpark at the University of Rhode Island, indicated child abuse and neglect victims under age 6 in 2015

[5,7,9,12] RI Department of Health, KIDSNET data matched with RICHIST data, indicated child abuse and neglect victims under age 6 in 2015.

[6,8,13] RI Department of Health, KIDSNET database, children born in Rhode Island to Rhode Island mothers 2017.

[10] RI Department of Health, Center for Health Data and Analysis, Maternal and Child Health Datbase, 2012-2016.

[11] RI Department of Health, KIDSNET database, three-year-old children who have received at least one blood lead test, 2017 and Healthy Homes and Childhood Lead Poisoning Prevention Program, children under age six, 2017

[14] RI Department of Health, ETO home visiting database matched with RICHIST data, indicated child abuse and neglect victims under age 6 in 2015.

[15,17,19] DataSpark at the University of Rhode Island, RI Executive Office of Health and Human Services Early Intervention data and RI Department of Education, State Pre-K data matched with RICHIST data, indicated child abuse and neglect victims under age 6 in 2015.

[16] RI Executive Office of Health and Human Services, Center for Child and Family Health, Early Intervention enrollment on June 30, 2017 and population of children under age 3 from U.S. Census 2010, Summary File 1.

[18] National Institute of Early Education Research, *The State of Preschool 2014, 2015* and RI Department of Education, State Pre-K programs 2015-2016 through 2017-2018.

[22] *Rhode Island Early Learning Council comprehensive advisory plan and recommendations 2016-2020.* Retrieved June 19, 2018, from www.earlylearningri.org

[23] *DCYF awarded grant to focus on needs of young children* [September 20, 2017 Press Release]. Retrieved June 19, 2018, from www.dcyr.ri.gov/news

[24] Regenstein, E. & Lipper, K. (2013). *A framework for choosing a state-level early childhood governance system.* Retrieved June 19, 2018 from www.buildinitiatve.org

Acknowledgements

Rhode Island KIDS COUNT
One Union Station
Providence, RI 02903

Phone: 401-351-9400
rikids@rikidscount.org
www.rikidscount.org