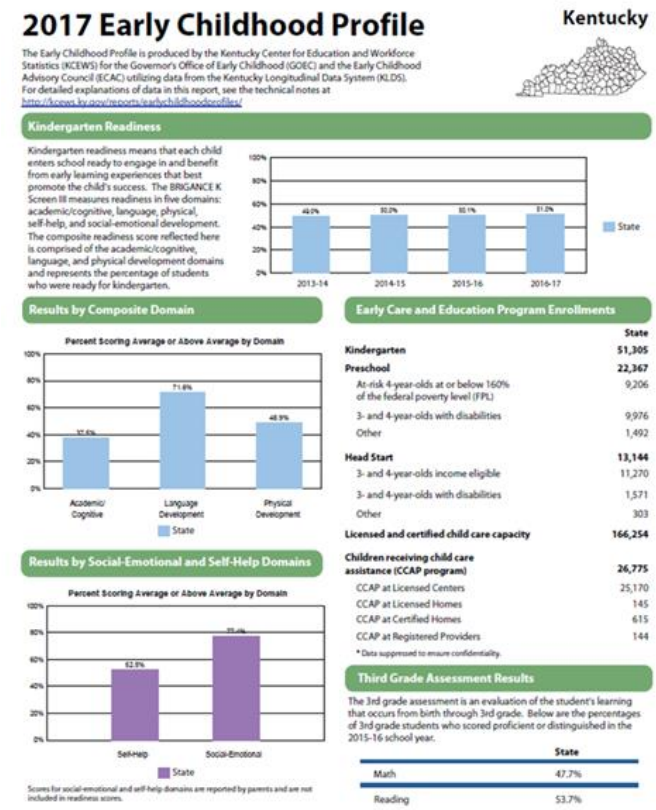
Title V Data Integration State Example: Kentucky

Background: State System

The Governor's Office of Early Childhood (GOEC) in Kentucky received funding through the Race to the Top – Early Learning Challenge in 2013. One of the objectives of the grant was to integrate data into Kentucky's Longitudinal Data System (KLDS). This system is maintained by the Kentucky Center for Education and Workforce Statistics (KCEWS). This system initially only included data on higher education, K-12, and teacher licensure. Data on workforce and non-education services were later added.

Integration & Use of Public Health Data



2017 Early Childhood Profile

Kentucky

The Early Childhood Profile is produced by the Kentucky Center for Education and Workforce Statistics (KCEWS) for the Governor's Office of Early Childhood (GOEC) and the Early Childhood Advisory Council (ECAC) utilizing data from the Kentucky Longitudinal Data System (KLDS). For detailed explanations of data in this report, see the technical notes at http://kcews.ky.gov/reports/earlychildhoodprofiles/

Kindergarten Readiness

Kindergarten readiness means that each child enters school ready to engage in and benefit from early learning experiences that best promote the child's success. The BRIGANCE K Screen III measures readiness in five domains: academic/cognitive, language, physical, self-help, and social-emotional development. The composite readiness score reflected here is comprised of the academic/cognitive, language, and physical development domains and represents the percentage of students who were ready for kindergarten.

Results by Composite Domain

Percent Scoring Average or Above Average by Domain

Results by Social-Emotional and Self-Help Domains

Percent Scoring Average or Above Average by Domain

Scores for social-emotional and self-help domains are reported by parents and are not included in readiness scores.

Early Care and Education Program Enrollments

	State
Kindergarten	**51,305**
Preschool	**22,367**
At-risk 4-year-olds at or below 160% of the federal poverty level (FPL)	9,206
3- and 4-year-olds with disabilities	9,976
Other	1,492
Head Start	**13,144**
3- and 4-year-olds income eligible	11,270
3- and 4-year-olds with disabilities	1,571
Other	303
Licensed and certified child care capacity	**166,254**
Children receiving child care assistance (CCAP program)	**26,775**
CCAP at Licensed Centers	25,170
CCAP at Licensed Homes	145
CCAP at Certified Homes	615
CCAP at Registered Providers	144

* Data suppressed to ensure confidentiality.

Third Grade Assessment Results

The 3rd grade assessment is an evaluation of the student's learning that occurs from birth through 3rd grade. Below are the percentages of 3rd grade students who scored proficient or distinguished in the 2015-16 school year.

	State
Math	47.7%
Reading	53.7%

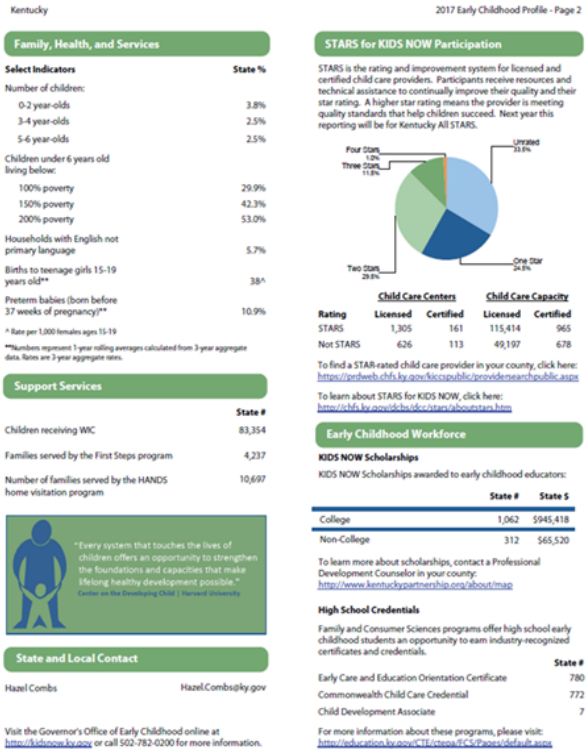
Figure 1: Kentucky Center for Education and Workforce Statistics Early Childhood Profile – Statewide, Page 1

Once the state had successfully established its system for integrated data, KCEWS developed several reports and white papers primarily focused on postsecondary and workforce data. In 2015, KCEWS, in collaboration with GOEC and the Early Childhood Advisory Council, used data from the KLDS to develop a county-level "Early Childhood Profile". This profile includes a combination of data from the KLDS and data that are to be added to the KLDS in the near future. The profile includes data on kindergarten readiness, 3rd grade measures, child care capacity and information on the quality rating improvement system, and early childhood indicators on family, health, and social services.

The community profile contains data specific to public health, such as data on the Health Access Nurturing Development Services (HANDS) home visitation program, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the First Steps early intervention program for children with developmental disabilities. Data from HANDS

are now in the KLDS, but the data shown in this report have not all been integrated. They do, however, demonstrate the utility of coupling public health data with other early childhood data to help communities better understand their needs. Community-level data from across programs allows service providers to better understand the landscape of services, identify barriers to access, and gaps in early childhood programs. Information on the "big picture" can improve service coordination, efficiency, and quality of services for children and families.

Due to policy and research interests, Kentucky is currently in the process of adding additional public health data from Medicaid, Supplemental Nutrition Assistance Program (SNAP), and Temporary Assistance for Needy Families (TANF) into the KLDS.



Kentucky

2017 Early Childhood Profile - Page 2

Family, Health, and Services

Select Indicators	State %
Number of children:	
0-2 year-olds	3.8%
3-4 year-olds	2.5%
5-6 year-olds	2.5%
Children under 6 years old living below:	
100% poverty	29.9%
150% poverty	42.3%
200% poverty	53.0%
Households with English not primary language	5.7%
Births to teenage girls 15-19 years old**	38^
Preterm babies (born before 37 weeks of pregnancy)**	10.9%

^ Rate per 1,000 females ages 15-19

**Numbers represent 1-year rolling averages calculated from 3-year aggregate data. Rates are 3-year aggregate rates.

Support Services

	State #
Children receiving WIC	83,354
Families served by the First Steps program	4,237
Number of families served by the HANDS home visitation program	10,697

"Every system that touches the lives of children offers an opportunity to strengthen the foundations and capacities that make lifelong healthy development possible."
Center on the Developing Child | Harvard University

State and Local Contact

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Visit the Governor's Office of Early Childhood online at http://kidsnow.ky.gov or call 502-782-0200 for more information.

STARS for KIDS NOW Participation

STARS is the rating and improvement system for licensed and certified child care providers. Participants receive resources and technical assistance to continually improve their quality and their star rating. A higher star rating means the provider is meeting quality standards that help children succeed. Next year this reporting will be for Kentucky All STARS.

	Child Care Centers		Child Care Capacity	
Rating	Licensed	Certified	Licensed	Certified
STARS	1,305	161	115,414	965
Not STARS	626	113	49,197	678

To find a STAR-rated child care provider in your county, click here: https://prdweb.chfs.ky.gov/kiccspublic/providersearchpublic.aspx

To learn about STARS for KIDS NOW, click here: http://chfs.ky.gov/dcbs/dcc/stars/aboutstars.htm

Early Childhood Workforce

KIDS NOW Scholarships

KIDS NOW Scholarships awarded to early childhood educators:

	State #	State $
College	1,062	$945,418
Non-College	312	$65,520

To learn more about scholarships, contact a Professional Development Counselor in your county: http://www.kentuckypartnership.org/about/map

High School Credentials

Family and Consumer Sciences programs offer high school early childhood students an opportunity to earn industry-recognized certificates and credentials.

	State #
Early Care and Education Orientation Certificate	780
Commonwealth Child Care Credential	772
Child Development Associate	7

For more information about these programs, please visit: http://education.ky.gov/CTE/ctepa/ECS/Pages/default.aspx

Figure 2: Kentucky Center for Education and Workforce Statistics Early Childhood Profile – Statewide, Page 2

Data Sharing

Kentucky is using the same process to integrate public health data into the KLDS that was used for integrating other types of data. Initially, conversations between KCEWS staff and potential data sources are held to demonstrate how data sharing could be mutually beneficial. The purpose of these conversations is to gain buy-in from program leadership to initiate the data sharing process. KCEWS policy allows each data source to use their own data sharing agreement template and then cross-references it with the KCEWS standard template. This decision has supported the buy-in of contributing data sources, as they can work through processes they are familiar with and use templates that have already been vetted by their agencies

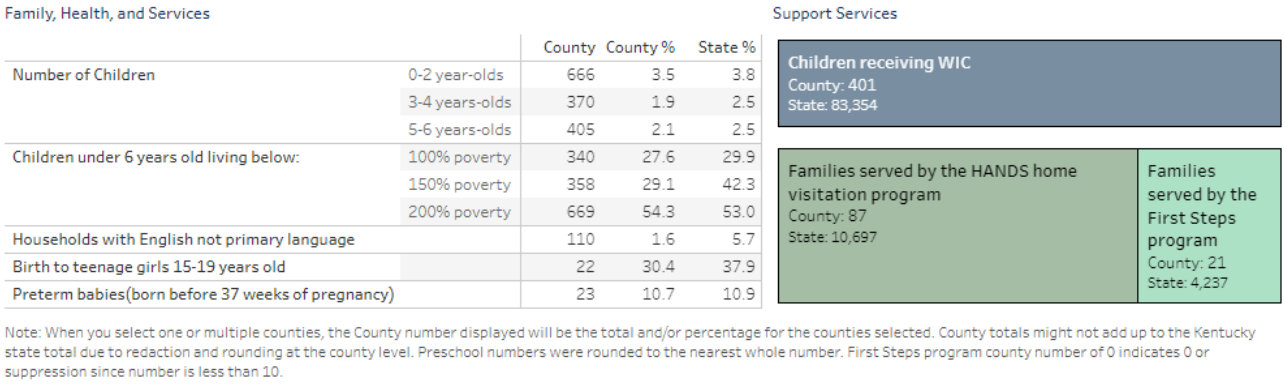
There have been some challenges to integrating public health data into the KLDS. For example, KCEWS could not integrate historical data from some early learning and home visiting programs. Historical data pose a challenge because parents may not have been required to give consent in past years when data were being used only for program evaluation purposes. Some programs are also required to delete data after a certain amount of time, meaning that historical data are simply unavailable. In terms of certain types of data, there are also challenges. For example, integrating prenatal data is challenging, as fetuses are not assigned social security numbers when their mothers receive prenatal care. Another challenge has been the matching process as some data sources "recycle" IDs.

A concern among data sources when sharing data is often how their data are going to be used. When individual-level data from the KLDS are requested, written Memoranda of Understanding (MOU) are signed by KCEWS, the individual requesting the data, and the contributing data source. When aggregate-level data are requested, a preview of the data is sent to the data

source for review. The data source is given 5-10 days to identify any potential privacy or confidentiality issues, such as a violation of HIPAA, FERPA, or state statute.

Reports & Dissemination

The Early Childhood Profile was originally developed for stakeholders (e.g. policymakers, state agency and program staff, general public) as a PDF and downloadable at the state and county level. Due to interest within Kentucky and across the nation, KCEWS has developed an interactive version of the Early Childhood Profile that is now available on their website. Figure 3 below is a visual from the interactive report highlighting public health data. The data shown are for a single county in Kentucky based on a drop-down menu allowing users to customize the report by selecting any county in the state. Data can also be automatically aggregated through the selection of multiple counties so users can create profiles for their own areas.



Family, Health, and Services

		County	County %	State %
Number of Children	0-2 year-olds	666	3.5	3.8
	3-4 years-olds	370	1.9	2.5
	5-6 years-olds	405	2.1	2.5
Children under 6 years old living below:	100% poverty	340	27.6	29.9
	150% poverty	358	29.1	42.3
	200% poverty	669	54.3	53.0
Households with English not primary language		110	1.6	5.7
Birth to teenage girls 15-19 years old		22	30.4	37.9
Preterm babies(born before 37 weeks of pregnancy)		23	10.7	10.9

Note: When you select one or multiple counties, the County number displayed will be the total and/or percentage for the counties selected. County totals might not add up to the Kentucky state total due to redaction and rounding at the county level. Preschool numbers were rounded to the nearest whole number. First Steps program county number of 0 indicates 0 or suppression since number is less than 10.

Figure 3: KCEWS 2017 Early Childhood Profile (Interactive Version) – Adair County

Value Added

Through the addition of new public health data sources into the KLDS, Kentucky will be able to answer questions that were previously unanswerable. For example, by integrating Medicaid, SNAP, and TANF data in the KLDS, the state can analyze socioeconomic disparities and how they impact school readiness and health outcomes at the state and community level. This data can then be leveraged to improve programs and services for Kentucky's most vulnerable population.

Key Takeaways

Based on their data integration experience, Kentucky has shared some key takeaways for other states working to integrate public health data. First, demonstrate the value of integrated data to stakeholders early to gain their buy-in. Second, elevate privacy and confidentiality to the forefront of discussions so data sources know how their data will be protected. Next, contributing data sources need to understand that their data are valued and how their data will be used. Finally, leverage the work of other states and entities who are using public health data to improve outcomes for children and families.

For more information on the KCEWS, click here.