



Early Childhood Iowa Integrated Data System (IDS): ANALYTIC PROJECT SUMMARIES

January 2020. IDS is authorized by the ECI State Board and Department Directors, and advised by the IDS Taskforce, a subcommittee of ECI Results Accountability Workgroup: Heather Rouse & Cassandra Dorius (Iowa State University); Shanell Wagler & Amanda Winslow (Department of Management); Kelly Davydov (Department of Human Rights); Betsy Richey (Department of Public Health); Jay Pennington & Tom Rendon (Department of Education); Ryan Page & Tammi Christ (Department of Human Services); Marion Kresse (BooST Together for Children).

Background: In response to demands on public service systems to *do more, do better, and cost less*, there is increased attention to the value of integrated data systems (IDS) to inform executive decision-making. IDS capitalize on data already collected by programs that serve families, and use these data for policy evaluation and population-based analyses to better understand how families are faring across public service systems and over time. After three years of development, collaboration, and national training and technical assistance, Iowa Departments of Management, Public Health, Education, Human Services, Human Rights, Workforce Development, and Economic Development signed a Memorandum of Agreement in partnership with Iowa State University in June of 2018 authorizing the implementation of Iowa's Early Childhood IDS. In 2019 this IDS was used to complete three initial demonstration projects that sought to inform high-priority early childhood issues facing state departments, program partners, and Iowa families. The following brief highlights Early Childhood Iowa's Vision, Mission, and Principles for ethical use of Iowa's IDS and provides a summary of findings and implications from these three demonstration projects.

Early Childhood Iowa VISION for Iowa's Integrated Data System (IDS):

Iowa's early childhood system will be effectively and efficiently coordinated among health, social service, and education agencies to support healthy and successful families. This work will be informed by actionable intelligence derived from a statewide integrated data system that comprehensively identifies and addresses the needs of Iowa's young children and their families.

Mission: Ensure ethical integration and analysis of relevant, cross-system data to:

- Identify priority areas for policy and program change to support young children and their families.
- Advance a culture where applied and academic knowledge are effectively brought together to transform theory into practice.
- Strengthen broad outcome assessment and improvement.
- Promote a "data literate" community of researchers, practitioners, and policy makers.
- Encourage the use of analytic findings in practice and policy decision-making.
- Foster an iterative inquiry process that builds, expands, and adapts to knowledge gained.

Principles:

- Act first and foremost in the service of improved public good and services.
- Maintain high standards for data security that protect privacy and confidentiality.
- Build mechanisms to ensure that all data meet standards for timeliness, accuracy, validity, and professional collection methods.
- Minimize the costs associated with the actionable intelligence inquiry process, while maximizing the benefits to be derived from the data.
- Engage the community of practitioners, policy makers, and researchers in the production and sharing of information generated from the inquiry process.

IDS Analytic Project Summaries - Results from 2019 Demonstration Projects:

Three projects were prioritized in 2019 by Iowa Department Directors and ECI stakeholders because they could capitalize on funding opportunities, meet needs of departments and stakeholders, and had available data to address the target questions. They also reflected opportunities to test IDS processes, including (a) documenting strengths and challenges with existing administrative data systems and the variables contained within, (b) testing and refining data integration protocols to ensure security, scientific integrity and equity, and (c) communicating findings from IDS analytics with varied audiences to inform evidence-based decision making. The following summaries provide an overview of each project including the main findings and lead project directors from each state department and ISU.

Project. ECI Statewide Needs Assessment, Administration for Children and Families Preschool Development Grant B-5

Lead Department. Iowa Department of Management

Data Included. Vital Statistics birth records (IDPH); Kindergarten and preschool enrollment (IDOE); Child care subsidy receipt (IDHS); Head Start enrollment (Head Start grantees)

Main Findings and Implications. The IDS was used to conduct a birth-to-five cohort study that identified disproportionate risks experienced by many children that can be identified at birth and relate to poor outcomes in kindergarten. It also highlighted groups of children and families that were less likely to participate in formal preschool— a known supportive factor that could facilitate more vulnerable children being ready for successful school outcomes. The comprehensive needs assessment (<https://earlychildhood.iowa.gov/document/2019-statewide-needs-assessment>) informed the *ECI Strategic Plan: We Are ECI*, that is now guiding statewide efforts.

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Project. Multiple Risks and Family Home Visiting Experiences, Health Resources and Services Administration

Lead Department. Iowa Department of Public Health

Data Included. Vital Statistics birth records (IDPH); home visiting records (IDPH)

Main Findings and Implications. IDS analyses to date have examined child and family characteristics related to timing and duration of enrollment in home visiting and program outcomes. Findings highlight the value of prenatal enrollment for families experiencing multiple risks, particularly for families that receive the most comprehensive services. IDS data are also being used in the MIECHV statewide risks assessment to identify priority areas for funding and program improvement, with particular attention to expanding access for Iowa's most vulnerable and disconnected families.

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Project. Substance Use among Iowa Families, Centers for Disease Control

Lead Department. Iowa Department of Public Health

Data Included. Vital Statistics birth records (IDPH); home visiting records (IDPH); qualitative interviews

Main Findings and Implications. Families with substance use histories were found to disproportionately experience additional risk factors, many of which were evident at the time of a child's birth and could provide opportunity for intervention. These families were also less likely to complete home visiting programs, and more likely to have children removed from their custody than families without substance use histories. Opportunities for expanded interventions for children identified as experiencing early risk are being explored as a result of this work, as well as a pilot project to support home visiting interventions immediately following parent's release from substance use treatment centers. The ongoing use of an IDS for monitoring of substance use is under consideration at IDPH.

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