

Iowa's Early Childhood Integrated Data System

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Brief Report for the National Academy of Sciences Committee on National Statistics. May 10TH, 2019.

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 administrative data collected by programs that serve families and create legally and ethically sustainable ways to link data within and across systems in support of policy analysis and program improvement. IDS approaches are particularly useful for guiding early childhood social policy, where services and reporting are fragmented by disparate funding streams, federal and state requirements, and myriad options for program implementation and monitoring.

Recognizing the need for coordinated, comprehensive early childhood services within this mixed delivery system context, Iowa created a legislatively governed alliance in 2010 that also serves as the Head Start State Advisory Council: *Early Childhood Iowa* (ECI; Iowa Code Chapter 256i). Emphasizing public-private partnerships and statewide approaches, ECI is charged as the only systemic voice to promote comprehensive child wellbeing across the Departments of Education, Public Health, Human Services, Human Rights, Workforce Development, Economic Development, and Management. Embedded in ECI's legislative authority and the Head Start Reauthorization Act (H.R. 1429-642b) was a call to "advance the development of an integrated data system", which led to the creation of an IDS Taskforce in 2017 that was charged with the creation and implementation of an IDS. Comprised of Director-appointed representatives from each State Department and faculty from Iowa's land-grant University who have prior experience building and using IDS in other states and municipalities, the IDS Taskforce articulated the following mission statements to direct the Early Childhood Iowa IDS:

- **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

Over the last 2 years, the IDS Taskforce has partnered with national experts through the Actionable Intelligence for Social Policy Network (www.aisp.upenn.edu); incorporated best practices into planned governance structures, technology approaches, and state-of-the-art privacy and security protocols; and tested strategic operational processes designed to ensure the system serves the legislative vision of ECI and meets needs of state departments and program service providers. While still in the early stages of development, the IDS's utility is being recognized across agencies as an effective way to support federal and state priorities for programming, including efforts to inform the federal Maternal, Infant, and Early Childhood Home Visiting program needs assessment, a CDC-funded project to identify family patterns of substance abuse, and a partnership between the university and the Department of Education to understand how state investments in early childhood education programs relate to kindergarten readiness.

Iowa IDS Governance Approach. Iowa's IDS is a State-University partnership model of governance that allows the state and representative departments to retain control of data use and direction for the IDS while capitalizing on the expertise and capacity of Iowa's land-grant University to administer the system. This model has the ability to expand and contract to meet changing demands for evaluation and analytics, and greater political and economic sustainability potential because of its partnership approach.

The following standing groups (Governance Board, Data Stewardship, and Core Team) and ad-hoc stakeholder groups (Data Team, Scientific Reviewers, and Project Advisory Teams) facilitate the IDS operations and help maintain core values while actualizing the IDS principles through collaborative processes (see Figure 1).

- **Governance Board** – State Department Directors, University leaders, and ECI Board Chair who guide IDS priorities and approve legal agreements.
- **Data Stewardship Committee (DSC)** – Director appointees who meet regularly to drive the work of the IDS, consider new project proposals, discuss findings from ongoing and completed projects, and make recommendations to the Board for priorities and procedures.
- **IDS Core Team** – University partners and staff hired to implement the IDS including maintenance of legal agreements, technology, and data management, integration, and de-identification for approved projects.
- **Data Team** – Data system experts from state departments who share knowledge, create datasets to be included in the IDS, and provide recommendations on projects relative to data system capacities.
- **Scientific Reviewers** – members of the academic community who share feedback and recommendations on proposed projects related to scientific validity and rigor.
- **Project Advisory Team** – DSC-appointed community and program leaders who work with projects across their lifecycle, providing input and helping analytic teams consider program and policy implications.

All projects that use Iowa’s IDS must be reviewed by state agency leadership and follow an engagement protocol that is built to ensure the data are used ethically and in service of the public good (see Figure 2, adapted from Fantuzzo & Culhane, 2016). A key role is the leadership-appointed Project Advisory Team that follows a project and provides feedback routinely throughout. This is reflected in the dark “wraparound” circle that runs parallel with the data integration, analysis, and interpretation work.

IDS Use in Early Childhood. One of the first “tests” of Iowa’s IDS involves a statewide needs assessment for the 2019 US Department of Health and Human Services and Department of Education Preschool Development Grant (B-5). Key priorities include addressing the national challenge of measuring unduplicated counts of children across early childhood program silos, and understanding gaps in program participation for vulnerable and underserved children. Iowa will be paying particular attention to the needs of rural children as part of this approach. Because of the population-based capacity of an IDS that includes entire cohorts of children born in the state and entering public school kindergarten, the team will be able to describe characteristics and needs of children and families who are in the state but *not* participating in preschool programming. The longitudinal nature of the IDS will also allow for a more refined understanding of the predictors, patterns, and outcomes related to service utilization and gaps to inform our upcoming 5-year strategic plan for ECI.

Figure 1. IDS Governance Approach

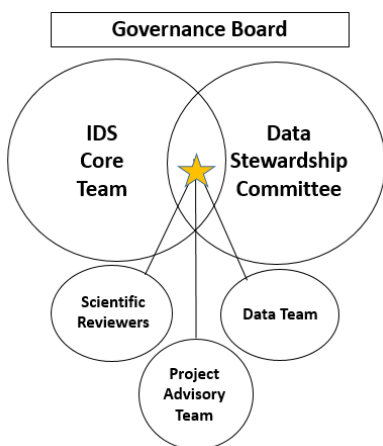


Figure 2. IDS Project Approach

