

This presentation proposal was prepared for the 2020 National Research Conference in Early Childhood. The conference was held entirely online due to COVID-19 pandemic.

Title: Systems Integration for Systems Improvement: Iowa's Integrated Data Approach to Support Early Childhood Program and Policy Research

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Abstract:

This presentation will discuss a State-University partnership approach to collecting and using administrative data from public health, education, human services, and workforce development to understand strengths and gaps in early childhood systems and inform collaboration to improve wellbeing outcomes for young children and their families. Iowa's IDS includes legal authorizations, technology platforms and data integration protocols that attend to equity, and demonstrated use cases showing the value of an IDS approach to inform strategic planning.

Narrative

Iowa's Early Childhood integrated data system (IDS) is a state-university partnership that acknowledges the need for agencies to retain control of their data while enabling it to be integrated across systems for social policy research to inform program coordination and improvement statewide. Developed within a legislatively governed alliance that brings together public systems toward the common goal of improving comprehensive, collaborative approaches to support young children, this partnership includes the state's land-grant University and each of the departments with programs serving children, including Health, Education, Human Services, and Workforce Development. Data in the system currently include vital records, home visiting, Child Care Assistance, state-funded and private preschool enrollment, Head Start/Early Head Start, and K-3 education records.

Our comprehensive development process connected experts from the Actionable Intelligence for Social Policy national network with invested stakeholders from our early childhood system to produce mission and vision statements; a governance model and operational procedures; data integration protocols that address equity; legal agreements including an enterprise MOU, data sharing agreements, and data use licenses; and priority research foci to understand connects and disconnects among our early childhood systems. The IDS was recently tested through a comprehensive needs assessment and strategic planning process using Iowa's Preschool Development Grant B-5 planning grant funds. This work included an IDS cohort study to identify unduplicated counts of children across disparate early childhood programs, gaps and needs in service use with particular attention to high-quality preschool and the needs of vulnerable families (including low-income, minority, rural, and children with disabilities), and early risk factors that are detectable at birth and relate to school readiness outcomes.

Iowa's IDS governance approach has three standing committees that oversee, approve, and implement the work with a series of ad-hoc advisory groups comprised of data, research, and community program experts to support approved projects and ensure data are "used" to inform program and policy improvements (see Figure 1). The Governing Board and Data Stewardship Committee are comprised of state leaders with authority to set priorities and review/approve projects to use the IDS in service of these priorities. The IDS Resource Center is housed at the University and charged with implementing the system, including maintaining legal agreements, secure data transmission and storage, scientific data integration, and monitoring users to ensure privacy and security standards.

Three demonstration projects were completed this year including (1) comprehensive statewide needs assessment focusing on unduplicated counts of children across multiple programs the year before kindergarten entry; (2) exploration of home visiting service use and outcome patterns; and (3) needs and service patterns for families with young children with histories of substance use problems. Sample findings from the comprehensive needs assessment are presented in Table 1.

This presentation will include a discussion of Iowa's IDS governance approach and our experience using the IDS through these demonstration projects and for a statewide strategic

planning process that is now shaping policy and programming to improve coordination across our B-5 systems.

Figure 1. Iowa IDS Governance Structure

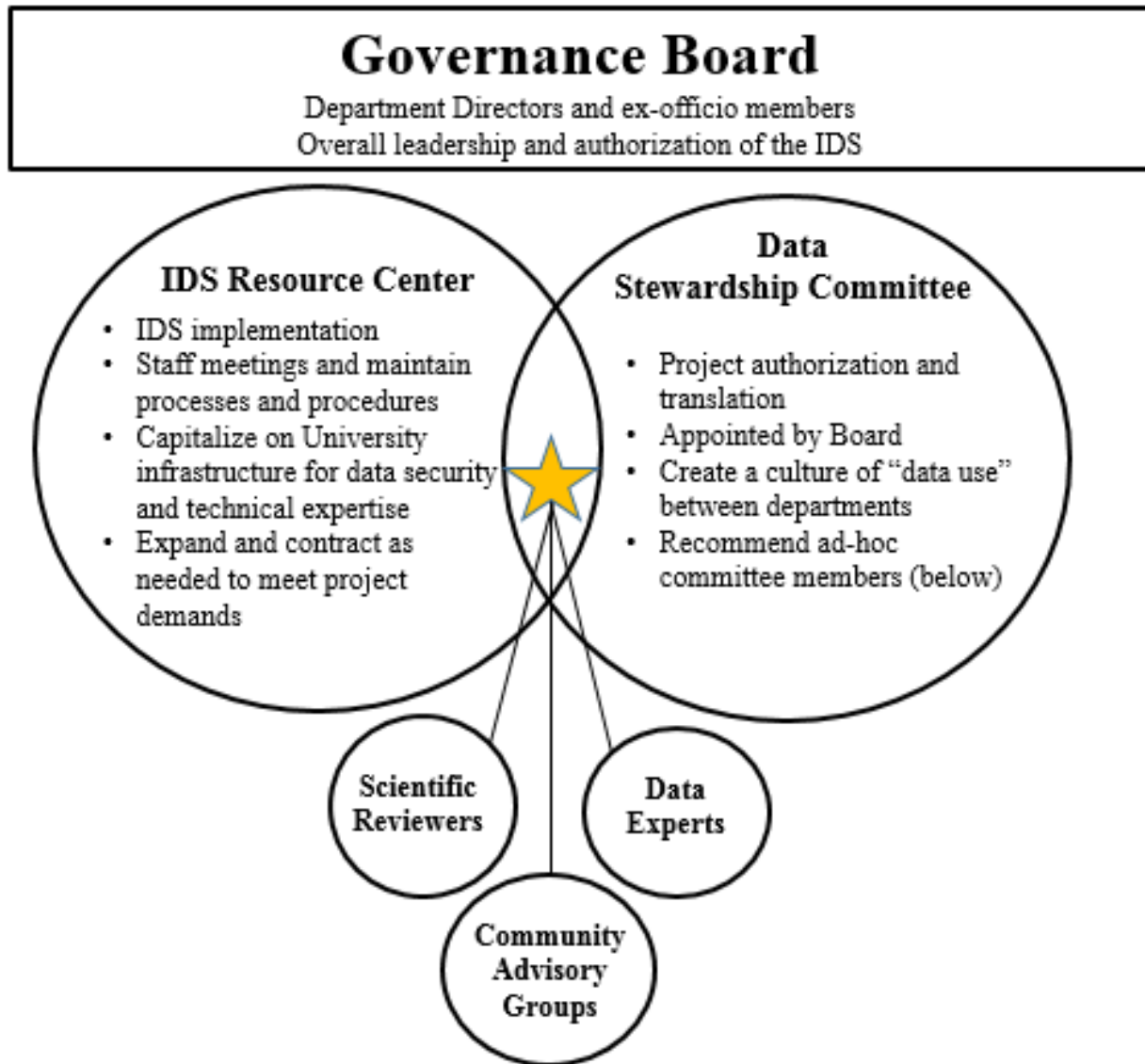


Table 1. Multiple logistic regression results (odds ratios) of child characteristics and risks related to preschool enrollment and kindergarten outcomes.

	Any preschool (n=19,944)	Free or reduced lunch status (n=10,655)	English Language Learner (n=1,912)	IEP (n=1,913)	Poor (<90%) attendant (n=1,914)	Any suspension (n=273)
Characteristics ^a						
Male				2.39		7.51
Hispanic	0.86	1.8	9.81	0.75	1.74	
Black	0.70	2.8	1.63	2.18	3.76	
Asian		1.39	4.98	2.04		
Multiple races	0.71	1.4	0.44	1.43	2.32	
Risks at birth ^b						
Poverty (Medicaid/WIC)	1.58	10.18	2.89	2.22	2.85	2.72
Unmarried mom		1.84	1.3	1.36		
Low maternal education	0.78	2.17	4.15	1.51		
Teen mom		1.76	3.68	1.92		
Preterm or Low birth weight		1.59				
Inadequate prenatal care		3.57				
Prenatal smoking	0.74	1.77	0.33	1.53	1.57	

Notes: N=27,219; Logistic regression models assessed: ^a Reference category is white, female. ^b Reference category is a child with zero of the listed risks. Only significant findings are presented (though all models included the full set of independent variables).