

Building Successful Data Linking Teams for Child Welfare and Medicaid Agencies

Lessons Learned from the Child Welfare and Health Infrastructure for Linking and Data Analysis of Resources, Effectiveness, and Needs (CHILDREN) Initiative

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KEY POINTS

- Data linking across child welfare and Medicaid systems has substantial benefits including improving program integrity, identifying unmet needs of children and families, and supporting research and evaluation.
- Data linking efforts require cross agency collaborations, firm understandings of legal authority to link data, and dedicated resources to build data infrastructures.
- Meeting jurisdictions “where they are” by collaborating with jurisdictions’ child welfare and Medicaid agencies to identify analytic use cases that meet their collective needs helps ensure a high level of buy-in for developing a linked data infrastructure.

INTRODUCTION

Linking data across public systems is beneficial for a multitude of reasons including care coordination, improving research on populations engaged with multiple public services, and improving program integrity. The Child Welfare Health Infrastructure for Linking and Data Analysis of Resources, Effectiveness, and Needs (CHILDREN) Initiative is a five-year project funded by the Health Care Fraud and Abuse Program, run by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) and implemented by Mathematica. The CHILDREN Initiative assists jurisdictions with linking child welfare and Medicaid data to improve their data infrastructure and service systems. This multi-phase project (shown in Figure 1) has to-date recruited site partners in the District of Columbia, Iowa, Oregon, and Wyoming. After having assessed initial capacity for data linking, at the time of publication we are currently determining the feasibility of each site’s ability to link child welfare and Medicaid data and implement analytic use cases to improve service delivery, program integrity, and evaluation efforts.

Figure 1. Current progress of CHILDREN Initiative Phases



One of the key features of building successful data linking efforts is identifying and bringing together the right collaborators across programs. Using the four jurisdictions engaged in the CHILDREN initiative as case studies, this brief presents what we have learned thus far regarding the range of collaborators involved in developing a strategy for building data infrastructures and sustainably linking data across programs. We also discuss approaches that help increase engagement by participating agency staff. These interim lessons can assist other entities hoping to embark on their own data linking efforts between child welfare and Medicaid systems, and likely for other efforts to link other human services and health data. We expect these lessons to be useful to identify and engage a range of collaborators and strategize how to best conceptualize the scope and uses of linked data.

DATA LINKING EFFORTS BENEFIT FROM HAVING TEAMS REPRESENTING A MULTITUDE OF DEPARTMENTS AND ROLES

Assembling the initial site teams for developing data linking strategies was an iterative process that required closely working with the sites to identify collaborators who could bring the knowledge and leadership needed concerning data processes and program management. Every jurisdiction has different organizational structures, statutory authorities, and personnel responsible for data management across agencies. For example, some jurisdictions have centralized data and information technology (IT) departments that assist agencies and programs across government, while others have data and IT staff embedded within individual agencies or programs (e.g., child welfare and Medicaid).

The early phases of the CHILDREN Initiative included recruitment, capacity assessments, and the beginning of the feasibility assessments. Throughout these phases, each site collaborated with the federal project team to identify and engage individuals across child welfare, Medicaid, and other relevant government agencies. Each site team is developing a strategy to create sustainable linked data infrastructure and use these data to address analytic and information needs across these agencies. As the project continues, each site will remain open to including additional collaborators to accomplish project goals.

To guide other jurisdictions in considering who may need to be engaged in developing a data linking strategy, Figure 2 shows the range of agencies or departments participating in the site teams, along with examples of individual roles within these agencies. While these examples do not represent everyone who may be involved in each site, they demonstrate the range of key participants across different offices within child welfare and Medicaid agencies, as well as data and IT departments who are involved in cross-program data linking. The range of roles reflects the complexity of sustainable data linking efforts, and the extent of expertise required to be successful in these initiatives.

The breadth of personnel required to develop sustainable data linking efforts differs from those required to link data systems for one-time data linking projects. For sustainable data linking to be successful, it is critical to have staff with knowledge about a range of information including: technical requirements, legal authorities, privacy protections, projected costs, program infrastructures, data management, and interagency coordination.

Figure 2. Examples of Partners Involved in CHILDREN Initiative Sites

Agency/Department	Staff Role
Child Welfare	Director
	Deputy Chief of Strategy and Innovation
	Chief of Operations
	Bureau Chief for Policy
	Bureau Chief for Support & Training
	Senior Administrator for Social Services
	Administrator for Health Services

	Director of Early Intervention and Support Assistant General Counsel Health Insurance Portability and Accountability Act (HIPAA) Officer Business Services Administrator Federal Revenue Program Manager Eligibility Claiming Specialist Data & IT Systems Manager Data Analyst Operations and Policy Analyst Family First & Integration Policy Manager Policy Analyst Case Management Program Manager
Medicaid/Health	Deputy Medicaid Division Administrator Bureau Chief for Medicaid Policy Division of Children's Health Services Associate Director Associate Director for Service Delivery Fee for Service Director Data and Analytics Research Administration Director Data Warehouse & Special Projects Manager Operations Manager Claims Supervisor Business & Information Systems Analyst Data Analyst Program Analyst Behavioral Health Analyst Children's Policy Analyst
Data & IT	Data Strategy and Operations Director Bureau Chief for Data Enterprise & Business Intelligence Senior Policy Advisor Continuous Quality Improvement Program Manager Data Warehouse Manager Data Policy Analyst Data Analyst Comprehensive Child Welfare Information System (CCWIS) Contractor

The roles outlined in Figure 2 are reflective of the specific jurisdictions participating in CHILDREN. In other jurisdictions, different parties may need to be involved, and may sit in different offices or agencies.

DEVELOPING PRACTICAL USE CASES FOR DATA LINKING FOSTERS ENGAGEMENT WITH PARTNERS

Developing clear, practical examples for how linked data can be used helps partners understand the value in linking data and buy-in to the project. After identifying the key participants in the teams for each site, the federal project team facilitated multiple virtual and in-person meetings with each site team. During these discussions, the site's team members generated and then discussed the strengths, weaknesses, opportunities and challenges of a variety of potential use cases for linked data. This has helped the staff from each agency represented on the site teams to determine the value the project could have for their own agency and office mission.

Through a collaborative process with the project team, these meetings have enabled each sites' agency staff to identify priority and secondary use cases for linked data. The meetings also helped to decide on the scope of linked data to include within their linked data infrastructure. For example, each site had to determine the types of data to include such as: years of data, types of child welfare and Medicaid services, as well as number and type of child and caregiver records. As part of these discussions, the project team also assisted the participating sites to consider the utility of sustainably linking data for ongoing and future uses, including the possibility of linking data from systems outside of child welfare and Medicaid to gain a more holistic understanding of how children and families' lives are impacted by government programs. In addition to the benefit provided to the site staff, this process enabled the federal project team to develop an understanding of each agency's level of interest and commitment in pursuing development of linked data infrastructure through participation in the CHILDREN Initiative. These use cases proved to be a critical support in generating buy-in from the site partners while also assessing the feasibility of the sites' ability to be successful in their data linking efforts.

Figure 3 shows an example use case from each of the four CHILDREN sites. These examples helped each site define the scope of data linking, and conceptualize ways to use the linked data.

Figure 3. Example Use Cases for Linked Child Welfare and Medicaid Data from CHILDREN Sites

Example Use Cases	
Implement efficient processes for sharing data to enable improved care coordination (Site 1)	
Proposed analyses: <ul style="list-style-type: none"> – Examine linked data of children and families with open child welfare cases to determine how child welfare and Medicaid agencies can improve early intervention health services and child welfare outcomes – Maintain program integrity for Title IV-E claiming, family preservation claiming on Evidence Based Practices, Qualified Residential Treatment Programs, and prevention services 	Linked data to be used: <ul style="list-style-type: none"> – Medicaid enrollment and claims – Child welfare services and placement records – Prevention services data from outside child welfare – Title IV-E claims
Additional expected uses of linked data include improving the ability to collect Medicaid managed care organizations' (MCOs) data submissions	
Understand child welfare services and Medicaid services used by children involved in child welfare systems and children living with their caregivers (Site 2)	
Proposed analyses: <ul style="list-style-type: none"> – Assess the utilization and effect of services for the in-home population to understand their impact during and after child welfare participation, improve care coordination and prevent foster-system involvement – Identify Medicaid-eligible children receiving in-home services who are enrolled in Medicaid MCOs to better understand their access to and engagement with MCO-based case management and other support services – Identify duplication of efforts—particularly for Title IV-E and Medicaid – Examine impacts of Medicaid services on length-of-time in care for foster and adoption cases 	Linked data to be used: <ul style="list-style-type: none"> – Medicaid enrollment and claims – Child welfare services and placement records – Prevention services data from outside child welfare – Home visiting data – Case and client-level engagement – Child welfare health data – Title IV-E claims
Additional expected uses of linked data include informing potential expansions of Family First Prevention Services Act (FFPSA) services, specifically expanding motivational interviewing to new candidates	

Plan for implementation of services designed to prevent foster care placement (Site 3)	
Proposed analyses: <ul style="list-style-type: none"> – Identify which services are visible across child welfare and Medicaid agencies to identify service needs and improve service sharing – Examine impacts of Medicaid services on child welfare outcomes – Assess duplications of payments for services, and ensure payments come from appropriate sources 	Linked data to be used: <ul style="list-style-type: none"> – Medicaid enrollment, claims and provider data – Child welfare services data (including out-of-state services) and placement records – Child maltreatment reports – Prevention services data from outside child welfare – Title IV-E claims
Additional expected uses of linked data include preventing duplication of payments to out-of-state providers	

Better understand psychotropic medication use among children in foster care (Site 4)	
Proposed analyses: <ul style="list-style-type: none"> – Determine the extent to which such medications are prescribed to children by age and other characteristics – Assess rates at which children in foster care are prescribed psychotropic medications – Identify any associations between prescribers and facilities, with analyses to identify potentially concerning outlier facilities 	Linked data to be used: <ul style="list-style-type: none"> – Medicaid enrollment and claims – Child welfare services and placement records – Child maltreatment reports – Prevention services data from outside child welfare – Home visiting – Early childhood indicators – Title IV-E claims
Additional expected uses of linked data include building infrastructure to monitor service receipt, review continuity of care, and better identify and support children and families eligible for services authorized by the Family First Prevention Services Act (FFPSA)	

CONCLUSIONS

States and local human services agencies increasingly recognize the importance of data linking for improving the delivery and oversight of services for children and families that involve clients and beneficiaries of both agencies’ programs, improving agencies’ ability to monitor program spending, and conducting cross-program research and evaluation of service outcomes. Building the infrastructure necessary to successfully and sustainably link data takes time, resources, and collaboration. Efforts such as the CHILDREN initiative are directly helping jurisdictions to develop a sustainable linked data infrastructure and use it to conduct analyses designed to improve service delivery, program integrity, research, evaluation, and other goals. Though CHILDREN focuses on a relatively small number of jurisdictions, the lessons learned from the project can be useful to other entities wishing to pursue data linking initiatives. As the CHILDREN initiative progresses, ASPE intends to share additional insights throughout the process.

For more information on the CHILDREN initiative please visit the [project site](#).

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