**Background and Objectives**

- Data systems provide an important platform for data use for program improvement.
- Lack of linkages between the data systems of the multiple programs that serve young children and families is a barrier to using data for program improvement.
- Stakeholders—practitioners, administrators, policy makers, families, and others invested in early childhood—are needed to provide advocacy and support in the creation, maintenance, and use of high quality Early Childhood Integrated Data Systems (ECIDS) that have these linkages.

**Methods**

- Data linkage refers to joining or connecting records about an entity (e.g., child, professional, program) in one data system or dataset to the same entity in another data system or dataset; records could reside in the same data system, or in separate data systems that have been linked at least once, (i.e., linkage can range from a one-time event for a specific set of data to ongoing/real-time linkage).
- Review of 2013 survey responses by Early Childhood Intervention (EI) and Early Childhood Preschool Education (ECSE) staff reporting on data linkages to the Individuals with Disabilities Education Act (IDEA) Center for Early Childhood Data Systems (DaSy Center) (N=52, including states, the District of Columbia, and Puerto Rico; EI response rate = 94%, ECSE response rate = 96%) (see handout references for more details).
- Review of the Early Childhood Data Collaborative (ECDC) surveys in 2010 and 2013 with the 50 states and the District of Columbia (N = 51, response rate = 100%) (see handout references for more details).
- Review of DaSy and Statewide Longitudinal Data Systems Grant Program Technical Assistance Program (EDTAP) technical assistance center materials.

**Results**

Most state programs collect data on the children (and families served) and workforce, but there is a lack of program level data. Not many states can link child data to workforce or program data.

ECDC (2013)
- Data collected on children and the ECE workforce and programs were uncoordinated, being housed in multiple data systems and agencies.

DaSy (2013)
- Most states have workforce data systems containing information on IDEA EI and ECSE providers/teachers (65% and 83% of states, respectively).
- 29% of EI and 40% of ECSE state programs had data systems for programs/schools/classrooms.
- 40% of EI and 31% of ECSE state programs had linkages between child and workforce data.
- 19% of EI and 31% of ECSE state programs had linkages between child and program/school data. Fewer than 1 in 5 states linked EI or ECSE workforce data to program/school data.

More states need to be able to link data within and across programs to inform critical policy and program decisions.

ECDC (2013)
- Pennsylvania is the only state able to link child level data across all ECE programs.
- Child-level data are linked across two or more ECE programs in 25 states, and 17 states are planning linkages in the future.

DaSy (2013)
- The graphic below displays considerable variation in linkages of EI and ECSE to other ECE, health, and social programs within each state (ranging from 2% to 87% across states).

**Addressing critical policy and program improvement questions requires states be able to link child, provider, and program data, and link EI and ECSE data with other ECE, K-12 education, health, and social programs.**

<table>
<thead>
<tr>
<th>If a state had these linkages...</th>
<th>Policymakers and administrators could answer these questions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child-level to provider-level data linkages within an ECE program</td>
<td>• How does academic preparation and/or experience relate to child (and family) outcomes?</td>
</tr>
<tr>
<td>Child-level to program-level data linkages within an ECE program</td>
<td>• What program characteristics are associated with positive outcomes for children?</td>
</tr>
<tr>
<td>Provider-level to program-level data linkages within an ECE program</td>
<td>• Which programs have the lowest staff turnover?</td>
</tr>
<tr>
<td>Child-level data linkages across ECE, K-12 education, health, and social service programs</td>
<td>• How many children are served in various early childhood programs?</td>
</tr>
<tr>
<td>Child-level data linkages across ECE programs</td>
<td>• What percentage of children with IFSP/IEPs are receiving IDEA services in inclusive settings (e.g., Early Head Start, state-operated prekindergarten)?</td>
</tr>
<tr>
<td>Child-level data linkages across ECE programs</td>
<td>• What is the relationship between child outcomes and characteristics of the general early care and education program children attend?</td>
</tr>
</tbody>
</table>

**Conclusion: Implications for NTI Attendees**

1. Review the ECDC and DaSy findings to learn about the data systems in your states for children, workforce, and programs across ECE, education, health, and social services programs.
2. Conduct detailed linkage studies like the DaSy survey to learn about connections across non-IDEA programs—more data on data are needed!
3. Become a stakeholder and/or support stakeholder engagement in ECIDS in your state.

**Discussion Questions**

1. What questions do you have about children’s services, outcomes, and public investment in early childhood health/behavioral health, development, and education that could be answered by ECIDS?
2. What roles could you play as a stakeholder in the development of ECIDS?

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References


