What do states need to know in order to implement legal solutions for sharing data across numerous early childhood programs? How can states implement a coordinated data system when commonality has not yet been sufficiently addressed? This webinar’s discussion centered around these two key questions facing education agencies. Albert Wat of the Early Childhood Data Collaborative (ECDC) addressed “The State of States’ Early Childhood Education (ECE) Data Systems Efforts,” and Todd Klunk and Phil Sirinides from Pennsylvania’s Office of Child Development and Early Learning (OCDEL) shared their state’s data sharing efforts through Pennsylvania’s Enterprise to Link Information for Children Across Networks (PELICAN).

Early Childhood Data: Challenges and Opportunities

The webinar began by addressing the question, “What are ‘Early Childhood’ data?” While the ECDC recognizes that multiple domains are important to early childhood, they do specify what they consider the “early care and education domain”:

- Childcare (subsidy and licensing)
- Head Start/Early Head Start
- State Pre-K
- Early Intervention (IDEA, Part C)
- Preschool Special Education (IDEA, Part B, Section 619)

In its Inaugural State ECE Analysis, the ECDC identified several key issues regarding data commonality and linkage:

- Every state collects ECE data on individual children, program sites and/or members of the ECE workforce.
- Data are uncoordinated as almost every state cannot link data across the ECE programs at the child-, program site-, and ECE workforce-levels.
- Data gaps remain for ECE workforce-level data and child-level development data.
- Governance matters and is needed to establish better coordination across agencies in support of data use. Currently, data linkages are most likely to occur between data systems located within the same state agency (data silos), and because federal reporting requirements drive many agencies’ data collection efforts—circumstances that, ideally, data linkages should transcend.

Because of these issues, it is difficult for states to answer questions about access, quality improvements, or program performance. State investment in data systems could be much more strategic and impactful if states would begin data system design by working with stakeholders to determine what policy questions they would like the system to address, what data they would need to collect to answer the questions, and therefore, what linkages would be necessary to collect those data. The ECDC has compiled six key policy questions to guide states’ efforts in this vein:

- Are children, birth to age five, on track to succeed at school entry and beyond?
- Which children have access to high quality early care and education programs?
• Is the quality of programs improving over time?
• What are the characteristics of effective programs?
• How prepared is the workforce to provide effective education and care for all children?
• What policies and investments lead to a skilled and stable early childhood workforce?

For more information on the State ECE Analysis, including the ECDC’s 10 Fundamentals of Coordinated State ECE Data Systems and recommendations to states, visit http://www.ceedata.org/state-ece-analysis.

Pennsylvania’s Enterprise to Link Information for Children Across Networks

The webinar moved on to a state-specific example of EC data sharing: Pennsylvania’s PELICAN. PELICAN is the Department of Public Welfare’s (DPW) initiative to design and develop a single information management system that integrates data from all of the Department’s childcare programs, and makes information accessible to key stakeholders. The state used a 12-step process to implement PELICAN’s information management system:

1. Provider Management: Established a centralized repository for all childcare providers in Pennsylvania, including automated provider management and resource and referral management
2. Enrollment and Financial Management: Centralized funds and waitlist management for OCDEL, and automated enrollments, payments, funds management, and reporting
3. Case Management and Eligibility Determination: Automated eligibility determination for low-income and former Temporary Assistance for Needy Families (TANF) families
4. Integrated TANF, Food Stamps, and Child Care: Integrated data on TANF, food stamps, and general assistance childcare into the system
5. Pennsylvania Pre-K Counts: Established a centralized repository for all 3-4 year olds participating in Pre-K program
6. Business Intelligence and Reporting: Allowed for data warehouse to provide fiscal, performance, and statistical reports; and executive dashboard aggregated information at the state and county levels
7. Client Self-Service: Enabled citizens to perform screening of childcare providers, apply for benefits, and perform redetermination of eligibility for benefits; and parents can directly access information on providers offering childcare services in their communities
8. Provider Self-Service: Allowed providers to update their own information at their convenience, and prospective providers to apply for certificate of compliance
9. Provider Certification: Automated provider certification, which included tracking inspections and complaints, as well as issuing certificates
10. Keys to Quality Program: Added provider and grants management for Keys to Quality program (PA’s quality improvement program, in which all early learning programs and practitioners are encouraged and supported to improve child outcomes)
11. Early Learning Network: Pulled together information across all ECE programs in coordination with child outcome assessments, integrated with independent assessment tool, and linked to SLDS
12. Early Intervention: Automated the assessment, service plan, and financial management for Infant, Toddler, and Preschool program

The Early Learning Network (ELN), step 11 in the implementation strategy, bridged existing systems and allowed for easy addition of new programs to PELICAN. Figure 1 (on the next page) depicts the ELN from the input of various data, including unique IDs, their flow into the network, consolidation in the data warehouse, and delivery via reports for providers.

Because the ELN assigned both a distinct Pennsylvania Department of Education (PDE) identifier and a distinct Department of Public Welfare identifier to all students, as well as an education workforce identifier to all staff, this forced consistency in data capturing.
Through a core set of values and goals, the ELN provides a common lens to view a picture of children receiving services:

**Early Learning Network Values**
- A comprehensive data system designed to integrate financial, program, teacher, family, and child information
- A standard system to be used by and coordinated among all OCDEL programs
- One reporting system reflecting results of authentic assessment used across programs, aligning with Pennsylvania’s early learning standards

**Early Learning Network Goals**
- Measure child and program performance
- Increase retention of quality staff
- Compare program findings to child assessment outcomes
- Manage service waitlists
- Increase knowledge of children’s health
- Track children’s service/program attendance
- Strengthen families
- Incent service providers to deliver quality services
- Strengthen child service/program transitions
- Measure statewide standard and assessment usage consistency

Of course, when implementing a broad data collection network, the confidentiality and security of the data must be heavily guarded. The approach to data security for PELICAN is as follows:

- Legal reviews (under both the Department of Education and the Department of Public Welfare) are performed on documentation of system design, as well as training materials and all communications to the field.
- Consultants have reviewed compliance of state systems with federal law. As a result, Pennsylvania has updated its written policies regarding data access and use.
PELICAN employs user security so access is limited only to data that are appropriate for a person (user provisioning). State employees are restricted from having access to personally identifiable information and third-party contractors manage back-end services.

Signed user request forms and signed management directives are on file for all people who have access to the system. These forms/directives specify the user’s terms of data access and management.

The data warehouse is also reviewed for security; access to identities of ELN children visible in the warehouse is restricted.

The discussion wrapped up with issues of data sharing. In Pennsylvania, parents/guardians are informed of data sharing activities through a set of materials the state created and provides on its website (find an example at http://206.82.23.133/files/ELN/ELN-Parent-Flyer.pdf). The materials include information about PELICAN, what information is collected, and also what data are and are not required.

Pennsylvania also recommended including both legal and technical experts in the data sharing agreement process with other agencies. Legal reviews are handled by legal counsel from the Departments of Education and Public Welfare. The state is also working to engage the Pennsylvania State House and Senate Education Committees in legislating data collection and management—providing a mandate for data collection should strengthen the systems overall.

Resources

- Early Childhood Data Collaborative: http://www.ecedata.org/
- ECDC’s Inaugural State ECE Analysis: http://www.ecedata.org/state-ece-analysis
- Pennsylvania Early Learning Keys to Quality: http://www.pakeys.org