



State Guide to Developing Successful Early Childhood Data Systems

Early education leaders—inside and outside of government—are looking for new ways to improve quality, accountability, and efficiency across many different programs serving young children and their families, and they see investment in data systems as a pivotal part of that effort. However, it can be challenging to develop and implement effective data systems that successfully build on existing platforms and serve multiple purposes.

If done well, a data system can provide critical information to support policy decisions, steer continuous quality improvement, create cost savings, and improve customer service. If done poorly, a data system can create new administrative burdens, incur unexpected costs, and tarnish an agency’s reputation. To help ensure your data project provides the greatest benefits to all involved, this guide provides key considerations across the “Assess, Plan, Do, Evaluate” cycle of data systems development.



Types of Early Childhood Data Tools and Systems

STATE EARLY CHILDHOOD DATA SYSTEM	PRIMARY INFORMATION ON...	PRIMARY PURPOSE IS TO IMPROVE...
Subsidy eligibility	Children and families	Management
Subsidy payment	Families and providers	Management
Fraud prevention and detection	Eligibility and payments	Management
Professional development	Workforce	Quality
Licensing	Providers	Management
QRIS	Providers	Quality
Longitudinal tracking	Children and families	Quality
Resource and referral	Providers	Public information
Analytical tools	Budget and policy	Decision making

Effective data system development requires careful consideration and planning as well as organizing and monitoring many activities. Using an “Assess, Plan, Do, Evaluate” model, the following checklist helps states move forward with data system development and implementation. Because data system building is complex and multi layered, this checklist is intended to highlight helpful tips and should be used in combination with other strategic planning methods.

ASSESS

- Examine current business processes and policies.
 - Map current processes in detail, and identify the key areas where data system improvements would do the most to help you achieve your goals.
 - Involve all levels of staff in the assessment process to identify “pain points” and areas for improvement.
 - Be open to changing processes, and helping resistant staff see the benefits of the change.
- Research current technology solutions.
 - Engage your state information technology (IT) agency early to determine what enterprise options may already be available.
 - “Off-the-shelf” solutions cannot be adapted to a state’s unique circumstances, but may be less expensive because they don’t require customization.
 - “Customized off-the-shelf solutions” (COTS) have some adaptability, and are more expensive because of the additional development and design costs.
 - Each solution carries its own pros and cons, and each will have varying levels of flexibility to integrate and share data with other systems.
- Examine the current landscape of data systems in the state that include young children.
 - What data elements are collected, and how are they defined?
 - How do your data and reporting needs overlap with other data systems?
 - Are there opportunities for sharing and/or integration?
- Engage a trusted advisor.
 - At each stage of the “Assess, Plan, Do, Evaluate” cycle, a “trusted advisor” can help identify best practices and lessons learned in other states and agencies, provide critical guidance in working with IT vendors, and ensure that the planning and implementation goes smoothly and on schedule.

PLAN

- Create an executive steering committee to guide the work from inception. Buy-in, stewardship, and ownership of the project from a broad array of stakeholders will make the planning process stronger and pave the way for smoother project implementation.
 - Establish governance and protocols for decision making, approvals, and multilevel communication throughout the process. Your “trusted advisor” can help you design a project charter to establish this critical foundation.
 - Establish subcommittees that will participate in development and implementation, and continue with ongoing system evaluation and improvement activities.
 - Include external stakeholders, other state agency staff, researchers, providers, and parents.
 - Include staff from each division of the implementing agency(ies)—IT, financial, audit, legal, fraud, policy, and so on.
- Define the scope of work (SOW) and specific business and functional requirements, based on your needs assessment.
 - System design starts with this step. Your SOW and requirements should not eliminate the flexibility to add new ideas later, but failing to be specific can compromise your success and the integrity of the system.
 - Your “trusted advisor” can assist you with developing a request for proposal (RFP) to procure an IT system development contract.
- Commit to a realistic timeline and budget.
 - Be upfront with executives and the legislative branch about the importance of a realistic timeline.
 - Give careful consideration to vendors who promise turnaround times that seem too good to be true.
 - If fiscal resources are constrained, start small and do it very well—it could help justify future investments.

DO

- Stick to the project charter established by the executive steering committee.
 - It may be tempting to avoid protocol to get a “quick fix,” but it may damage the end result.
 - Your “trusted advisor” can help monitor and report the progress of the work.
- Engage established work groups to do hands-on review at critical stages of development.
 - Ask your vendor to include users in a “test drive” at scheduled milestones during system development.
 - Keep your staff and other end users involved. Their attitude and support will ultimately determine the extent to which the new system is adopted and fully integrated into daily program operations.
- Roll out the new system in phases that make sense for your situation.
 - Weigh risks and benefits of staggered roll out versus one-time, full-blown roll out.
 - Small software pilots can help you test and revise.
 - Regardless of the roll out schedule, allow ample time for staff training on the new system.

EVALUATE

- Define success metrics at the outset.
 - Data system implementation success and ongoing program success metrics are two different things. Your “trusted advisor” can help you develop metrics that measure both.
- Have a plan for improving usability, getting and acting on feedback from both internal and external stakeholders.
 - Data systems are never done. Use your executive steering committee and/or subcommittees to share information about the system (good and bad) and to manage the continuous quality improvement process.

Development and implementation of data systems is a complex but essential part of early childhood system building and quality improvement. Working with an expert “trusted advisor” and using the “[Assess, Plan, Do, Evaluate](#)” model helps ensure success every step of the way—a smooth and insightful development process, thoughtful and inclusive implementation, and the best cost and management benefits.





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