One Step at a Time: The Benefits of an Incremental Approach to the Integration of Home Visiting and Other Early Childhood Data

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Introduction

Home visiting is an important component of the early childhood (EC) landscape. However, states often fail to prioritize home visiting data when developing their early childhood integrated data systems (ECIDS). Home visiting represents a range of services, models, and programs, each with different data requirements, so integrating the data can be challenging. Often, home visiting data is disconnected across different models, as well as from other EC data. To address this challenge to data integration, states can take an incremental approach, integrating one aspect of home visiting data at a time, rather than tackling it all at once. The advantages to taking an incremental approach when integrating home visiting data with other EC data include the following:

- The process of integrating home visiting data into an ECIDS can be managed more easily when it focuses on one piece at a time, such as a specific model or geographic area.
- States can treat the incremental integration as a pilot phase, learn from any challenges or policy barriers that arise, and apply that knowledge when scaling up to integrate other home visiting data.
- Incremental integration allows states to achieve small wins and demonstrate success on data integration. By showing why integrating home visiting data with other EC data is important and worth the investment of time and resources, states can build buy-in from stakeholders.

The purpose of this resource is to provide states with examples of various ways to integrate their home visiting data into their ECIDS over time. This resource will highlight five examples of how states can approach this incremental integration of home visiting data.

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1 Early childhood is the time of child development from prenatal through age 8, with most programs targeting children from birth to age 5. The early childhood system is a set of policies, approaches, and services that are delivered through existing systems, such as education (e.g., pre-K), health care (e.g., immunization), or social services (e.g., subsidies to offset the cost of child care).

2 Epstein, D & King, C. (2018, December 5). Lessons from the early care and education field for home visiting data integration [Blog post]. Retrieved from https://www.childtrends.org/shining-a-light-lessons-from-the-early-care-and-education-field-for-home-visiting-data-integration. An ECIDS is a data system that combines, secures, and reports information from a variety of early learning services and programs, including data related to children and families served by the program, members of the workforce, and the characteristics of the program or services. For more information on ECIDS, please go to the Early Childhood Data Collaborative website: https://www.ecedata.org/.
Option 1. Integrate data from one geographic location.

States with an existing ECIDS can start by integrating home visiting data from a specific geographic location, such as a city or county. Starting with one geographic location can be especially helpful if the state administers many of its home visiting programs at the local level. By focusing on a specific geographic area, a state can pilot an approach to data integration within that region, and then apply any lessons learned to scale up data integration statewide. States should weigh several considerations when selecting a geographic region:

- If possible, select a city, county, or region that oversees several home visiting programs. This would allow the state the opportunity to pilot data integration processes with different models and vendors to better understand the most effective approach to integrating statewide.

- Assess which localities may be interested and eager to integrate home visiting data with their other EC data. It is beneficial to start with those that already have a vested interest in data integration for their own purposes.

- Consider whether there are areas of the state that have already started to integrate local data. Selecting such a location can give a state a great opportunity to build on an existing process and infrastructure.

State spotlight: Minnesota

In Minnesota, home visiting services are delivered by local organizations, including county public health agencies, with funding and support from the Minnesota Department of Health (MDH). To pilot the integration of home visiting data into their statewide Early Childhood Longitudinal Data System (ECLDS), Minnesota partnered with Saint Paul-Ramsey County Public Health department, which oversees four different home visiting programs, including some of the largest programs in the state. During the SHINE project, MDH and Saint Paul-Ramsey County Public Health department have collaborated with Minnesota’s ECLDS to develop a plan to integrate the county’s home visiting data into the statewide ECLDS, gathering lessons learned along the way that can be applied to the integration of other counties’ home visiting data. Minnesota will use a portion of its state longitudinal data system (SLDS) grant to integrate the county’s data in 2019.

Option 2. Integrate data from one funding source.

States can also start the process of integrating home visiting data into their ECIDS with data from home visiting programs that share a funding source. For example, a state might choose to integrate data from all state-funded home visiting programs, or all home visiting programs eligible for Medicaid reimbursement. Since funding sources often set their own program requirements for data storage and reporting, this approach allows a state to work through those requirements systematically for all programs funded by a particular source. States should take several factors into account when deciding which funded programs’ data they will integrate:

- Consider which data are most accessible and feasible to integrate. For example, states may have better access to or more oversight of data from state-funded home visiting programs. States might also consider first integrating data from home visiting programs funded through the Maternal, Infant, and Early Childhood Home Visiting (MIECHV)3 program, since MIECHV requires

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3 For more information on MIECHV: https://mchb.hrsa.gov/maternal-child-health-initiatives/home-visiting-overview
standardized data across all home visiting models it funds, which facilitates efforts to integrate these data.

- Consider starting with the largest funding source for home visiting programs. In many states, MIECHV is the largest funder of home visiting programs, so integrating MIECHV-funded programs may be a logical starting point.

**State spotlight: North Carolina**

North Carolina decided to focus first on integrating home visiting programs funded through MIECHV, including Healthy Families America and Nurse-Family Partnership, into the state’s ECIDS. North Carolina does not have a centralized system that houses all MIECHV data, so this process involves integrating data from two separate data vendors and systems. After integrating data from these two models into the statewide ECIDS, North Carolina plans to focus on integrating data from other evidence-based models, such as Parents as Teachers and Early Head Start.

**Option 3. Integrate data from one home visiting model.**

States can choose to integrate home visiting data into their ECIDS beginning with a specific home visiting model. In many cases, each home visiting model (e.g., Parents as Teachers, Early Head Start, Healthy Families America) has its own requirements for how data are collected, stored, and reported—often involving a proprietary software or database. This means that each model collects data elements or indicators that may or may not align with those of other home visiting models. Furthermore, depending on the contractual language that the state, local agency, or tribal entity has with the proprietary software or database, there may be restrictions on the types of data integration the current contract allows.

Integrating data from a single home visiting model into an ECIDS can allow states to coordinate the process with just one data system and vendor, rather than having to simultaneously work with multiple data systems and vendors across multiple home visiting models. Since each model has its own consent language, this approach enables states to examine the language and related policies to see how they align with how the states intend to use the data. With this approach, states can document the process for working with a data vendor to integrate home visiting data into their ECIDS. States can also gather lessons learned and then apply those lessons to other data vendors when they are ready to integrate additional home visiting models.
State spotlight: Utah

The Utah Department of Health (UDOH) decided to integrate home visiting data into their ECIDS by starting with Parents as Teachers (PAT) data. PAT uses the Penelope data vendor. In collaboration with the contracted local implementation agencies, UDOH intends to create a data extract derived from the Penelope data system and then upload these data into Utah’s ECIDS. To develop this extract, UDOH is working with their internal contracts, privacy, security, and legal resources to clarify policies around data ownership, and to ensure all privacy and security requirements are accounted for and in place. After integrating PAT data, Utah plans to integrate data from various Early Head Start, Head Start, and Migrant Head Start grantees, using lessons learned from integrating PAT data.

Option 4. Integrate data with one early childhood program.

Some states, especially those that do not yet have an operational ECIDS, may choose to begin by integrating home visiting data with data from just one or two other EC programs. For example, states can start by integrating home visiting data with early intervention (IDEA Part C) data, or data on subsidized child care. When deciding which program(s) to link with home visiting data, states should consider where there is the greatest need for data to provide answers to critical research and policy questions of stakeholders and/or policymakers. If state leadership is hesitant to integrate home visiting data, initially integrating data from two programs can serve as a pilot that demonstrates the questions that can be answered when data from different programs are linked together. Alternatively, states could start by integrating a subset of data from each of two programs to generate initial pilot data.

State spotlight: Rhode Island

Rhode Island opted to start by integrating home visiting data with child welfare data. This approach aligned with the state’s need to answer specific questions requiring the integration of these two programs’ data. For example, the state was interested in understanding whether children enrolled in home visiting programs were less likely to be part of the child welfare system. Rhode Island will use this approach to pilot the data integration with home visiting and child welfare data to demonstrate the types of questions that could not otherwise be answered if the systems were not integrated.

Option 5. Identify data elements that answer a specific research or policy question.

While it is always important for states to identify their research or policy questions of interest before integrating any data, they can begin by integrating data needed to answer just one specific policy question. To accomplish this, states can select one research or policy question they want to answer and link only the data elements required to answer that question. When states narrow their focus to a particular question, they can begin the process of data integration by navigating the logistics of linking only a limited set of data. States can then apply what they learned through this process to larger scale linkages, adding more data elements that correspond to other research or policy questions.

As states undertake the process of integrating home visiting data into a statewide ECIDS, there may be points where they could benefit from engaging a consultant who can provide guidance on how to navigate the challenges that may arise.
State spotlight: Oklahoma

Oklahoma was able to test the feasibility of integrating home visiting data with other EC data by linking the data needed to answer a specific research question:

Of the children who were identified by a home visitation program as possibly being developmentally delayed, how many received an initial screening from Sooner Start within the 45-day window as per the grant requirements and state regulations?

Oklahoma identified the home visiting and early intervention data elements that were necessary to answer this question. Integrating the needed data also provided the opportunity to test the feasibility of the state’s unique identifier system (the Master Person Index). Since successfully integrating these specific data elements, Oklahoma has expanded to focus on additional questions they would like to answer by integrating other home visiting data into their ECIDS.

Conclusion

While the process of integrating home visiting data into an ECIDS can be challenging for states, the strategies and examples presented in this resource offer guidance for approaching data integration incrementally. Each example provided shows how one state integrated a subset of their home visiting data in a way that allowed them to navigate the data integration process and gather lessons learned on a small scale, before expanding to integrate additional home visiting data into their ECIDS.

In addition to reviewing this resource, states that are ready to start integrating home visiting data into a statewide ECIDS should consider reviewing additional resources included in the SHINE toolkit. For example, the resource Developing Policy Questions to Guide Integration of Home Visiting and Other Early Childhood Data will help states create research and policy questions to answer with integrated home visiting data. Additionally, the resource Identifying Home Visiting Data to Integrate with Other Early Childhood Data will help states identify and map out the various home visiting programs, models, funding sources, and data requirements statewide, which can guide them in determining the best approach to take to start integrating home visiting data.