



SUMMARY REPORT
from
**Virginia Early Childhood Data Integration:
*Moving Forward***
Hosted by the Virginia Early Childhood Foundation
on November 29, 2017

Overview

On November 29, 2017, the Virginia Early Childhood Foundation (VECF) brought together approximately 50 key stakeholders to explore opportunities to generate actionable information for a more effective early childhood system and better inform Virginia's birth-to-workforce research enterprise, through the creation of an early childhood integrated data system (ECIDS). Participation at the event reflected the diversity of Virginia's early childhood landscape and the rich knowledge assets at Virginia's disposal, including:

- Leading national experts on early childhood data integration, advocacy, and policy
- Representatives from Virginia Governor McAuliffe's administration
- Virginia's Longitudinal Data System (VLDS) leadership and participating agencies
- Researchers from state government and higher education
- State and local data stewards, scientists, analysts, users, and subject matter experts
- Program administrators
- School divisions
- Healthcare
- Philanthropy
- Local and regional conveners of early childhood systems
- Community-based early childhood service providers.

The morning focused on creating a shared context of understanding around:

- What VLDS is, is *not*, and future directions
- What an ECIDS is generally and potential pathways and resources to realize the value-add of developing an ECIDS in Virginia
- Virginia's early childhood data landscape.

The afternoon shifted to moving forward with Virginia's early childhood data integration agenda, including the selection of two use cases to implement as a proof of concept for an ECIDS:

1. A distinct count of all children birth to five served by one or more early childhood programs, as a foundational metric for a range of future early childhood policy and programmatic analyses and uses
2. The creation of a data sharing loop between private pre-k programs, VECF/Smart Beginnings, UVa PALS Office, and VLDS to strengthen Smart Beginnings' school readiness systems-building role within their footprint.

The day represented both the culmination of past efforts and the starting point for a new phase of action, with many promising ideas generated for building Virginia's capacity to generate actionable information for improved early childhood outcomes and more meaningful answers to pressing birth-to-workforce questions.

Virginia Longitudinal Data System

- ❖ **What VLDS is** – an equal partnership of 10 (and growing) agencies sharing de-identified student-/citizen-level administrative data, expertise, and a common purpose to improve citizen lives through enhanced policy recommendations, with system administration based at the State Council of Higher Education for Virginia (SCHEV).
- ❖ **What VLDS is *not*** – a separate database (or data warehouse) in which data from multiple sources actually reside, nor is it a case management system or business enterprise system.
- ❖ **Future of VLDS –**
 - Focus on expanding data sharing partners and inventory to address tough policy questions – Virginia's lack of longitudinal birth to four data linkages to PreK to workforce (PreK-20W) data excludes a key piece of the outcomes puzzle
 - Efforts to improve the quality of matched VLDS data, including changes to hosting, managing, and cleaning VLDS data
 - Support for the creation of institutionally-based policy labs for focused, ongoing research
 - In addition to already including SNAP, TANF, VIEW, and cross-cutting Customer by Year data from the Virginia Department of Social Services in VLDS, early childhood data are queued up to be added to VLDS soon, including foster care data, Medicaid participation data, and child care assistance (subsidy) data.
 - Data contributed by the Virginia Department of Education (VDOE) to VLDS go back to the 2006 cohort, which means Virginia is close to having a complete K-12 dataset, with a complete PreK-12 dataset coming on its heels.
 - Spurred by federal Preschool Development Grant (PDG) funds to expand VPI (known as the VPI+ program), VDOE revisions to pre-k data reporting requirements, which will be universal as of Fall 2018, will enable the generation of a distinct count for participation in each of Virginia's public pre-k programs.
 - VDOE announced it had applied for – and, after the November 2017 meeting, *received* – supplemental federal PDG funds, a portion of which will be used to build out a relational database within VLDS. Without a relational database, VLDS currently can only match data for a single unit of measurement (i.e., VLDS can link data across agencies on an individual child, but it currently cannot link data on an individual child with data on an individual parent, teacher, classroom, or program).

VLDS is as much a lifestyle as it is a technological platform and data sharing, in that the emphasis must be on the common purpose around which VLDS revolves – to do what it takes, even in the face of fears and the strong force of inertia, to improve the lives of Virginia's citizens of all ages.

Tod Massa, Director of Policy Analytics and VLDS at SCHEV

There needs to be a culture change in Virginia around sharing data from one in which the focus is on barriers to sharing data to a culture where the focus is on solutions to sharing data – a shift in attitude about sharing data from “no, unless” to “yes, so long as.”

Bill Hazel, Virginia Secretary of Health and Human Resources under Governor McAuliffe

Early Childhood Integrated Data Systems

An ECIDS typically includes data from a range of programs and services for young children ranging from birth to eight years old (e.g., health, home visiting, subsidized child care, state-funded pre-k, Head Start, IDEA Part C and Part B, 619) and on multiple levels (e.g., child, family, program, and workforce level data). The purpose of an ECIDS is to answer critical questions that cannot be answered by any one program or data system alone, such as:

- How many and which children are being served? (distinct counts)
- How can we make our services/programs more effective?
- Are young children on track to succeed when they enter school?
- What are the credentials of our workforce and do they meet the needs of our children?

An ECIDS integrates data from early childhood programs across multiple agencies within a state, to answer critical questions that cannot be answered by any one program or data system alone.

*Dale Epstein, Senior Project Director
of the North Carolina Early
Childhood Integrated Data System
and Research Scientist
with Child Trends*

The development of ECIDS is a fairly recent phenomenon (with the term “ECIDS” coming about circa 2011), and looks different from state to state, with some systems nested within or built parallel to a State Longitudinal Data System (e.g., VLDS), while others may use a separate data warehouse or federated system. Typically, an ECIDS is *not* a case management system, with Pennsylvania being an exception to that national trend. Also, an ECIDS does *not* typically contain financial data to assess per child costs of programs or services, although an ECIDS can help pull distinct count data on service receipt which can be paired with financial data. Also, some ECIDS provide only aggregate, population-based information, although the data are linked at the individual level and there are ways to provide those data for specific data requests.

While many ECIDS are still in their nascence, an example of how a built-out ECIDS can generate actionable information is Minnesota, which used their ECIDS to generate actionable information around early childhood program participation data for lower income children, children of color, and American Indian children. Also, the NC ECIDS has a public-facing system with aggregate data that can be accessed for guiding action and a private interfacing system with case level data that authorized users, such as researchers, can access.

Helpful assistance can come from learning from other individual states about what they have been able to accomplish and how they have been able to overcome challenges.

*Missy Coffey, Director of ECIDS TA for the
Statewide Longitudinal Data Systems
(SLDS) Program, ECDataWorks, Common
Education Data Standards (CEDs), DaSy
(The Center for IDEA Early Childhood Data
Systems) based at AEM*

There are many sources of technical assistance available related to ECIDS generally and to specific ECIDS development areas, such as privacy concerns. Just a few of the national resources available include: [USDOE Privacy Technical Assistance Center](#); [SLDS State Support Team Resources](#); [Child Trends](#); [IDEA Center for Early Childhood Data Systems \(DaSy\)](#); [ECDataWorks](#); [Common Education Data Standards](#); and [Preschool Development Grant](#). TA from national sources can be provided via a variety of avenues, such as on-site visits,

virtual groups, best practice conferences, communities of practice, webinars, and listservs.

The great value that lies in an ECIDS is its ability to harness the types of information that are needed to make better decisions. For instance, having a distinct count of children participating in one or more early childhood programs is fundamental to rethinking how services are delivered, as well as provides critical insights on spending (i.e., requisite to answering which kids are getting which services and how those services are working).

In moving toward the development of an ECIDS, it is imperative to meet the myriad – and, sometimes, competing – needs of the wide array of stakeholders that need to be involved. The diversity of stakeholder needs and perspectives requires a high degree of empathy to

The best answer to whether your state needs an ECIDS, is “What decisions are you making without data that you should be making with it?”

Elliot Regenstein, Senior Vice President for Advocacy and Policy at the Ounce of Prevention Fund and Co-chair of the Research and Evaluation Subcommittee of the Illinois Early Learning Council

be built into the ECIDS development process. ECIDS are typically built in phases, with quick wins to show others, which prompts them to want to join. The more focus there is on common outcomes reported in the same way, the more buy-in there will be around a common purpose. In short, an ECIDS requires great data *and* great humanity. A sense of urgency should be the impetus for building data integration and use capacity, not for attacking organizations for not having that

capacity. There must be a balance between a sense of urgency and very real capacity limitations, especially for state program administrators, agency lawyers, and data analysts.

Attention must be devoted to developing a business model for an ECIDS up front. ECIDS price tags vary widely. NC ECIDS was allocated approximately \$5-6 million of the state’s Early Learning Challenge Grant funding, along with \$700,000 per year of state appropriations to run the system (e.g., server costs, IT support, system staffing, etc.). However, some states spend more in the range of \$1-1.5 million on an ECIDS if they are in a position to leverage a fully built-out SLDS and, sometimes, partners pay a percentage of the on-going maintenance of the ECIDS.

An ECIDS requires great data and great humanity.
Elliot Regenstein

Visualizing the Future – Virginia ECIDS

Virginia is still crystalizing its vision for an ECIDS, but it was suggested that a place to start was to envision a fully populated ECIDS that generates actionable information that is available to authorized users (e.g., researchers, state agencies, regional partners) on a de-identified case level and available to the public on a de-identified aggregate level (e.g., charts, graphs, reports on full cohorts of children).

A list of use cases on high priority areas for a range of early childhood stakeholders was compiled over the past year or so, with the goal of identifying a use case or two that could be implemented as a proof of concept for an ECIDS. Preliminary vetting was conducted with data stewards, analysts, users, and subject matter experts to pare down the list,

resulting in eight compelling use cases of high value to Virginia's early childhood system and birth-to-workforce research agenda. The following four use cases, although high-priority issues in Virginia, cannot be implemented within Virginia's current data integration landscape:

- X Efficacy of early Intervention – Part C services
- X Efficacy of home visiting services
- X Impact of opioid addiction crisis on young children
- X Better information for and coordination of Plans of Safe Care for Substance Exposed Infants.

The following four use cases were determined to be feasible currently or in 2018, based on the current/imminent VLDS data inventory and current system architecture, include:

- ✓ Distinct Count
- ✓ Foster Care-Children's Services Act impact
- ✓ VECF community partner supplementation of state program PALS-PreK data with private program PALS-PreK data in VLDS
- ✓ VECF community partners accessing data from VLDS to support school readiness.

While there was discussion about the possibility of building out an ECIDS within VLDS, other options were raised, as well, such as building out an ECIDS parallel to VLDS using the same architecture as VLDS (to keep the door open for future opportunities to connect to VLDS) or building a stand-alone ECIDS. If built within or parallel to and aligned with VLDS, the value-add of an ECIDS might include:

- Bringing in additional VLDS participating agencies, thereby expanding the VLDS data inventory, which would unlock the birth to five "black box" when it comes to answering tough birth-to-workforce research, policy, and practice questions;
- Given that the quest for an ECIDS in Virginia is primarily driven by the need for actionable information, this effort could further expand the VLDS portfolio of data products and increase the overall utility of VLDS.

Whatever system design Virginia pursues (whether within or outside of VLDS), the stakeholder group conveyed their priorities for an ECIDS:

1. Capturing interactions at the adult/child level
2. Reducing data collection burdens
3. Improving case management
4. Addressing benefits cliffs
5. Data-driven planning of services (feedback loops)
6. Revolving around data *use*
7. Making consent to share data easier/more consistent
8. Opportunities to expand inventory of data assets
9. User driven.

Virginia's early childhood data landscape

Virginia data stewards, analysts, users, and subject matter experts provided brief overviews of their corner of the early childhood data landscape to help the full group develop more of a shared understanding of Virginia's assets for birth-to-workforce research and data use:

- **VECF/Community Partners data** – VECF recently became a VLDS participating agency; so, efforts are underway to identify opportunities for VECF Community Partners¹ to contribute data *to* VLDS and to access data *from* VLDS in support of their school readiness systems-building roles within their communities. A recent survey indicated that the greatest potential areas for VECF to contribute data to Virginia's early childhood data inventory² include:
 - Child Assessment data
 - Head Start data
 - Private pre-k data (e.g., PALS-PreK)
 - Public Pre-k capacity data (slots, seats).
- **Virginia Department of Health (VDH) data** – While participants seemed to share a sense of the urgency for pulling VDH data into VLDS and/or an ECIDS, a lack of resources was cited as the barrier and the suggestion was made to seek grant funding to help facilitate and support the sharing of VDH data.
- **Home Visiting data** – there is great data diversity among the state's seven models of home visiting, and the goal is to institute more uniform reporting across local, state, and federally funded HV programs. Some measures that cut across all programs include enrollment, dosage rate, developmental screenings, maternal and child health, and family functioning, and future data automation aspirations were discussed.
- **Early Childhood Mental Health data** – Statewide ECMH indicators have been developed, which pull from administrative data across a number of agencies and programs (most of which currently are not linked or accessible through VLDS).
- **Early Intervention-Part C data** – A new data system is currently under development for Part C data, which should be operational by July 2019 and would include electronic health record data, case management system functionality, timelines, Individualized Family Service Plans, and transition information. All Part C data are at the child level. The agency's current system can generate a distinct count (19,085 for FY16).
- **Office of Children's Services/Children's Services Act data** – OCS recently joined VLDS with the addition of FY16 data on 13,400 unique children, which were matched with other agency data in VLDS (94% match to records in at least one other agency). OCS data in VLDS include a limited number of mental health data elements, with additional data elements planned to be contributed to VLDS on service placements, expenditures, and child needs and strengths assessment (CANS data).

¹ VECF coordinates a network of Smart Beginnings regional sites that serve as public/private conveners around school readiness within their geographical footprint, as well as work with other community partners to support school readiness.

² These potential areas for VECF to contribute data to Virginia's early childhood data inventory are contingent on partners agreeing to share the data for integration purposes (i.e., SBs were not asked to first vet accessibility to the data with their partners prior to completing the survey).

The value-add of OCS participation in VLDS is that it will allow OCS to match their services and expenditure data at the child level with data from other agencies, which – in conjunctions with CANS data – will enable OCS to measure the impact of their services on children and families.

- **PALS data** – Recent developments position Smart Beginnings (SB) sites to be a vehicle for expanding Virginia's inventory of PALS-PreK data, in that all PALS PreK data from SB-connected child care and pre-k programs (including private programs for which school divisions are not the fiscal agent) will now automatically be passed to elementary schools through the UVa PALS K-3 website system (including children without a State Testing Identifier). This enables schools to know more about their incoming students.

Moving Forward with a Virginia ECIDS

The November 2017 ECIDS convening culminated in a full group discussion of the four use cases that are feasible in 2018, with stakeholders voting on the top two use cases for immediate implementation:

- **Distinct Count (#1 choice by stakeholders)**
- Foster Care-Children's Services Act impact
- VECF community partners supplementing state program PALS-PreK data with private program PALS-PreK data in VLDS
- **VECF community partners accessing data from VLDS to support school readiness (#2 choice by stakeholders).**

Stakeholders shared thoughts on moving forward, with agreement that Virginia needs to balance “quick wins” that have immediate relevance and practical utility for a broad base of stakeholders to keep momentum going with “big wins” that resonate with policy-makers who can get Virginia where it needs to go. The following next steps were identified for moving forward over the next several months with the development of an ECIDS in Virginia:

- **Broaden stakeholder engagement around the two selected use cases and the development of an ECIDS**
- **Launch the distinct count and VECF/Smart Beginnings VLDS data extract use cases**
- **Hold a follow-up stakeholder convening**
- **Assess and cost out ECIDS system design options**
- **Support data capacity among VECF community partners**
- **Develop a clearinghouse on Virginia's inventory of early childhood data assets**
- **Explore data use “pilots” or labs.**