

ECIDS - Project 10 – 2015 APR Write-Up (Submitted for Publication)

Although some work did continue during 2014, Project 10 lost a good deal of momentum primarily due to the large amount of staff turnover. In November of 2014, staff from the ELC State Support Team came to Wisconsin and brought the ECIDS team from all three agencies (DPI, DCF and DHS) back together again in a project reboot event. Building off of this event and the recommendations which followed, the ECIDS team “hit the ground running” in 2015.

On the heels of this event, three cross-agency work groups focusing on technical issues, research and analysis, and data governance were organized. These have become the main vehicles for accomplishing ECIDS work. Also, a cross-agency ECIDS Management Committee (EMC) was established to endorse project decisions and progress at key steps.

The ECIDS Management Committee (EMC) approved recommendations from project staff marking two key decision points:

- One recommendation dealt with a slate of three analytic questions, each requiring cross-agency data sharing, to guide the design of the ECIDS technical solution and demonstrate how the ECIDS could be used to address policy concerns.
- The second recommendation dealt with a strategy for building the ECIDS technical solution, meaning the hardware and software needed to compare records and identify unique individuals served by multiple agencies and to allow partner agencies to use this record matching system to fulfill individual data sharing requests.

In July 2015, the partner agencies hosted a day-long workshop on early childhood data privacy and confidentiality. At this workshop, leaders of the U. S. Department of Education’s Privacy Technical Assistance Center led agency technical, policy and legal staff and program managers and data stewards through examinations of legal constraints that apply to sharing early childhood data and methods for creating sound data use agreements.

To help inform the design of the cross-agency technical solution for ECIDS, staff from the partner agencies interviewed designers and developers of integrated data systems in Utah and North Carolina and reviewed a presentation by Virginia. To varying degrees, these three states are farther along than Wisconsin in creating integrated systems and have features in their systems of interest to us.

At the portfolio management level several efforts have taken off during 2015. A high level ECIDS Roadmap document has been created, with an emphasis on dependencies across work groups and across agencies. This will be used throughout the life of the grant to track progress and next steps. The Communication Plan for the current ECIDS project team has been completed. The ECIDS Stakeholder Engagement Plan is in the final draft stage within the work group focused on that effort and will soon be shared more broadly for comment. The ECIDS Sustainability Plan draft is in progress and will be finalized by second quarter of 2016. Application for a one-year no-cost extension to Project 10 is planned for 2016.

Specific project accomplishments are noted below.

ECIDS Staffing:

During 2014, key staffing vacancies hampered ECIDS progress. In 2015 the staffing picture has stabilized. To fill the portfolio management role, DPI assigned an existing staff to handle interagency coordination and hired a new ECIDS portfolio manager in August 2015. Both these individuals have deeper qualifications for the portfolio management role than the previous incumbents. The data governance work group lead has remained in place and has provided consistent leadership in this area. The technical solution work group leadership has been reorganized to take advantage of the guidance of technical leaders from all three partner agencies. The research workgroup lead position experienced turnover during 2015, but was filled quickly with an experienced interim leader. A new highly qualified research workgroup lead has joined the project in October of 2015 and will soon take full ownership of that work group.

ECIDS Technical Solution Work Group:

A specific approach for providing agency data for building the record matching program was decided upon. In addition, ECIDS project staff held discussions with the Department of Administration's Division of Enterprise Technology (DET) about housing the server for the ECIDS technical solution at DET. They also began planning the architecture of the technical solution. The technical environment is in the process of being set up at DET. The actual build of the technical solution will commence once the agencies have shared record matching data elements, pursuant to a data use agreement. The data use agreement is expected to be approved by all three agencies legal staff in the first quarter of 2016.

Also on the technical front, project staff decided on the data elements required from each agency to enable record-matching and agreed on CEDS (Common Educational Data Standard) as a common data standard. Staff also worked on mapping key process flows related to the technical solution, for example, how the technical solution data base would be initially populated and how it would be maintained, and how agencies would use the technical solution to obtain matched records for specific longitudinal data studies. Related to the key process flows, consideration will be given during 2016 to a possible user interface and tools to make sharing data between agencies faster, easier and more reliable.

ECIDS Data Governance Work Group:

Project staff focusing on data governance defined the types of data use agreements that would be needed to enable the technical solution to be built, maintain and use to fulfill specific data sharing requests. The data use agreement that would authorize the initial build of the technical solution has been drafted and should be approved during first quarter of 2016 by all three agencies legal staff. This group is also working on a comprehensive set of policies to ensure the security and quality of data accessed through the ECIDS and provide reliable means through

which the ECIDS partners can make joint decisions on managing their collective data assets, during and after the grant project. As part of this work, it created an Early Childhood Data Access Policy that sets clear guidelines for who may have access to these data. A Data Governance Charter was created and approved. A joint governing and decision making structure (as well as processes around that structure) was developed, is being executed and being improved upon with use. A Master Data Sharing Agreement is to be completed during 2016 to streamline interagency data exchanges.

ECIDS Research Work Group:

Key to this group's work during 2015 was the endorsement of the three analytic questions by the EMC. This has allowed the work group to move forward. DCF chose to take on Distinct Count as their "analytic question". Distinct Count has to do with arriving at non-overlapping counts of unique individuals being served by one or more early childhood programs. This is an important component of a good ECIDS and can only be performed successfully with an integrated data system. A paper was completed by the work group proposing their approach. The next step is to define specific requirements and to enlist the data governance work group to draft a data use agreement for all three agencies to share data for the Distinct Count effort.

Once the technical solution is in place in production, questions chosen by DPI and by DHS can be analyzed, as can the DCF Distinct Count question.

DCF L.I.F.T. Warehouse and DHS Customer Hub:

Both DCF and DHS have inter-agency data system projects and activities related to the ECIDS, described below.

DCF L.I.F.T. Warehouse:

DCF's Longitudinal Information on Family Touchpoints (LIFT) data warehouse is planned for production during first quarter of 2016. The first release of the warehouse will contain child-centric data on programs and services provided from Child Welfare, Child Care, and the W-2 Work Program. Children across these programs will be matched and brought together into one warehouse. The data will be viewed using an interactive dashboard that shows the number of distinct children being served by one or more of these programs in any month from 2005 forward. Several standard reports are also included in the first release.

Future plans for LIFT include the integration of "fuzzy" matching, annual snapshots, and the eventual integration of Child Support data, when it becomes available.

Department of Health Services and RTTT: Integrated Data System Build, Data Governance, Analytic Agenda:

During 2015 Department of Health Services (DHS) made dramatic progress towards fulfilling our RTTT ECIDS goals and objectives. DHS staff with technical, data governance, and research subject matter expertise worked closely with DPI and DCF team members in the ECIDS workgroups to meet numerous cross-agency milestones. DHS internal teams achieved even greater success on our agency-specific milestones. DHS staff developed:

- Customer Hub integrated data system (in non-Production environments)
- Customized linking algorithm
- Interface application for users to access the Customer Hub
- Data Governance Board that meets monthly
- Internal data governance processes
- Internal Analytic Agenda

DHS is developing new analytic agenda practices that integrate the new Data Governance Board and processes as well as maximizes the benefits of the Customer Hub functionality. We will endeavor to align DHS internal processes with cross-agency ECIDS processes in order to streamline data requests for inter-agency analytic agenda questions and hopefully achieve efficiencies.

Since the end of 2015 the DHS Customer Hub is receiving regular (daily & weekly) feeds of demographic data from five of the six programs that DHS proposed for Project 10. And the sixth program began feeding data into the Customer Hub in mid-January 2016. The linking algorithm DHS developed successfully matches the records of any client who exists in more than one of these 6 participating programs. The Customer Hub is also generating a 'Golden Record' made up of the 'best' (most accurate/most recent) data from multiple programs. This record will be shared with the ECIDS 'Knowledge Base' integrated data system that DPI is developing. Throughout the spring of 2016 DHS is planning extensive user testing to verify:

- The Customer Hub system feeds (timing, completeness, accuracy)
- The accuracy of the linking algorithm using the source system data existing within the Customer Hub
- The validity of Golden Records compared to the original data within a program's source system.

User Guides are being developed along with an issue reporting system. Documentation of successful and unsuccessful test results will include screen shot documentation and retention as well as a progress and result tracking log. The test plan will include test scripts for users with different access roles and step-by-step instructions including screen shots. DHS anticipates that testing and any resulting fixes or enhancements will be completed in May 2016. During the summer of 2016 DHS plans to copy the Test environment into a Production environment and 'Go Live'.

Data Governance and Analytic Agenda

DHS sponsored one of the three questions in the approved ECIDS Cross-Departmental Analytic Plan. During 2015 DHS and DPI worked collaboratively to develop a question focusing on attendance/suspension rates for children having identified hearing loss. DHS identified the applicable cohorts and data fields/data elements within our two program source systems so after the planned Customer Hub 'Go Live' in summer 2016, records can be linked across both DHS programs. After the ECIDS data system and processes are finalized, DHS will request data from DPI. Then DHS analysts will complete their assessment, and will follow future ECIDS processes to disseminate the

results to appropriate stakeholders within DHS and DPI. During 2016, while the ECIDS data system and processes are being developed, DHS will turn our focus to the internal analytic agenda approved by the Data Governance Board in 2015.

Our internal analytic agenda is comprised of eight questions on immunization and lead poisoning prevention and remediation. In addition to gathering and analyzing the data to address the questions, we will also pursue the design and development our internal ECIDS processes for the collection, compilation and dissemination of analysis results.

In order to perform a quality control test of the Customer Hub, we are taking one of our eight analytic agenda questions and completing it two times – once manually using existing processes, and then again using our Customer Hub and new internal ECIDS processes. The results from the manual process will help us validate that the Customer Hub data system is accurately and completely linking the records of the clients within the cohort. This strategy will also highlight ways we can improve our internal processes. After this test, DHS research analysts will leverage the Customer Hub to address the remaining seven questions. We anticipate that the functionality of the Customer Hub will greatly assist the epidemiologists and their programs.

Benefits of the new ECIDS processes and data systems will further validate the inherent sustainability of ECIDS. And initial successes will promote expansion of our analytic agenda in the near future, maximizing our use of the ECIDS processes and Customer Hub tool within our agency.

Stakeholder Engagement & Sustainability

Throughout Project 10 the DHS project and team members have kept agency executive leadership regularly informed of our progress and achievements, and. In addition to numerous ‘hands-on’ opportunities for program staff, DHS holds multiple meetings every month with program leadership representing more than just the six participating programs. Our goal is to:

- Keep programs involved in design and development
- Share Project 10 updates
- Gather program feedback on new processes
- Gather feedback on existing usability and future business requirements for the Customer Hub.

These opportunities to engage stakeholders keep Project 10 in the forefront. Meetings, demonstrations of the Customer Hub, and reviews of processes and documents have resulted in the programs identifying new ways the Customer Hub can help them meet their own goals – particularly for case management, quality control, surveillance and performance assessment. We are also attempting to foster an increasing sense of ownership by the users by implementing the functionality and design enhancements that they suggest. These interactions with users build a strong foundation for the Customer Hub sustainability plan. Our future sustainability planning for the Customer Hub will include the added value to programs of these benefits. Measured increases in quality and efficiency will encourage additional programs to join the Customer Hub, which will further increase its overall value to DHS and ECIDS.