

# STRATEGY | INNOVATION | RESULTS



## Early Childhood Integrated Data System (ECIDS)

With fragmented, siloed data from government agencies and providers of early childhood care and education, many states are seeking professional help with integrating their data to better understand families, programs and services. Eagle Technologies is a leader in providing cloud-based data aggregation and analytics solutions. We help our federal and state clients modernize their data systems and improve program effectiveness through:

- Advanced methods for privacy-protected record linkage
- Industry-leading predictive analytics
- Sophisticated applied research into child programs and services, child development, and the early care and education workforce

### SECURITY AND PRIVACY

ECIDS integrates multiple state agency systems and other public and private systems. Accordingly, ECIDS must address the PII and child privacy aspect as a fundamental requirement. Eagle is well versed with federal, state, and local regulations and standards for compliance, such as FERPA, the Head Start Act, and HIPAA.

Our team is experienced implementing cybersecurity solutions on-premises and in the cloud and have handled PII in multiple federal projects.

#### THE EAGLE ADVANTAGE

We understand the challenges implementing an ECIDS solution in terms of the operating environment, questions, and issues facing Early Childhood programs across the nation. Eagle possesses the expertise and domain experience needed to help Department of Education decision makers in each state reach their childhood data system development goals.

#### UNMATCHED EXPERIENCE

Our award-winning experience with the federal Administration for Children and Families, our acumen with Health IT, and our subject matter expertise in early childhood research make us particularly qualified to deliver a robust, state-wide data integration solution.

#### SOLUTIONS THAT WORK

Let our team design and implement an ECIDS solution that is right for you. With our wealth of experience, we will help your early childhood team implement an ECIDS solution characterized by industry-leading practices in data management and integration, application development, data security and Personal Identifiable Information (PII) handling, data analysis, predictive analytics, business intelligence, dashboards, and the cloud.

## ARCHITECTURE

The purpose of ECIDS is to integrate data from multiple systems, each with its own way of maintaining PII and identifying participation of Child Care Development Fund beneficiaries—children from birth through age 5—in your state.

Eagle can design your ECIDS solution with the fundamental goal of establishing a state-wide, single-source-of-truth for each child.

Depending on the state's specific needs and data ecosystem, there are three different solutions for a state-wide ECIDS:

- 1. Centralized
- 2. Federated
- 3. Hybrid

The three solutions differ in terms of how strongly or loosely the participating systems are integrated, and in how the PII maintained by individual systems is handled by ECIDS.

Eagle can assess your state's integration, analytics, and reporting requirements to architect an ECIDS solution that meets your state's specific needs.



## INTEGRATION, ANALYTICS, DASHBOARDING, AND REPORTING

Eagle can integrate data from various state agency and other participating systems, develop and maintain aggregate data and longitudinal child records, perform a wide range of data analytics, and generate reports and dashboards to empower the ECIDS stakeholders of your state with insight into your early childhood care and education programs. One of our team's many data science capabilities is Precision Analytics (see right)-using machine learning to determine the program features that are effective for each subset of children.

#### PRECISION ANALYTICS

- Offers a tested, proven way of determining the program features that work.
- Grounded in a convergence of social, evaluation, and data sciences.
- Leverages the flexibility and power of machine learning to develop predictive, prescriptive, and evaluative models that provide insights to support decision-making by policymakers and other stakeholders.

Like precision medicine, the goal of Precision Analytics approach is to determine more precisely what will work for unique subgroups of a population. Precision models can be used to produce results that support real-world, hereand-now decision-making.

To facilitate stakeholders' understanding of the insights derived with these methods, we package the knowledge into easily digestible dashboards and reports.

## RESEARCH

Eagle can implement ECIDS use cases of major importance to policymakers in your state, such as:

- How many unique children are receiving early childhood care and education services each year?
- Who are the beneficiaries of each service type?

We build the data infrastructure for ECIDS use cases with the flexibility to support future research needs with minimal incremental costs.

Additionally, our team has extensive experience evaluating early childhood policies and programs to provide the evidence supporting the provision of highquality services for young children. Our research team has a distinguished history of partnering with local, state, and federal decision makers to help shape the key questions and extract actionable evidence to help early childhood leaders make progress.

Examples of the evaluation questions we can answer include:

- Are state services succeeding at enabling the most vulnerable children to excel in school over time?
- To what extent do rural families have access to high-quality early care and education?
- Is the current workforce adequate to meet standards for early care and education?

## ABOUT US

Eagle Technologies, Inc., founded in 2004, is a small business based in Arlington, VA. Eagle is an established concept to-completion company that specializes in developing innovative and effective enterprise solutions to complex project requirements for federal, state, local and commercial entities nationwide. We offer intelligent design, effective development, and responsible management of forward-leaning solutions to help our customers meet their unique mission-critical needs. The end-to-end solutions we provide our customers include:

- IT modernization
- Cloud and Infrastructure
- Enterprise Architecture
- Data Analytics
- Analytic and Reporting Solutions

- Research
- Public Health and Health IT
- Information Dissemination
- Business Intelligence Services

Eagle is strategically elevated through collaborations with contractors (as sub or prime), creating teams of highly experienced professionals delivering Program Management and Information Technology to service various federal clients. Our teams have proven their trailblazing capabilities as subject matter experts on contracts that require out-of-the-box support to satisfy unique customer requirements.



#### POINTS OF CONTACT

**Paul Garcia** serves as Director of Business Development at Eagle Technologies. He is a former Government Contracting Officer with more than 30 years of experience supporting Government and Commercial sectors. Mr. Garcia leverages decades of management expertise to drive business development resulting in corporate growth.



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