## **NASCIO Award Category**

State CIO Office Special Recognition

# State of Illinois: Innovation Incubators (i2)

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#### **Executive Summary**

In the past two years, Illinois established **Innovation Incubators** ("i2") through the State CIO's office, in collaboration with the Governor's strategic priorities. Beginning with healthcare and human services, and progressing to public safety and business and workforce agencies, the "i2s" help identify and prioritize business needs for data interoperability. Concurrent with the statewide consolidation of IT resources into the new Illinois Department of Innovation and Technology (DoIT), the development of enterprise-level data sharing agreements (eMOUs), and the launch of a state data practice, these i2s are helping agencies build an ecosystem to identify, rapidly prototype, and analyze data across multiple systems to support their operational needs and address strategic issues.

#### Concept

#### HHSi2 and Person 360

The Illinois Health and Human Services Incubator (HHSi2) is a data sharing and interoperability initiative led by the State CIO and the Illinois Department of Innovation and Technology (DoIT) in support of the Governor's strategic priorities. HHSi2 is an important component of the State's enterprise transformation of government healthcare (Medicaid) and human services, and it also serves as a pilot of an approach to data interoperability that will be extended to public safety, economic and workforce development, and education.

HHSi2 establishes a data platform to support the four pillars of Illinois healthcare and human services (HHS) transformation:

- Education and self-sufficiency
- Moving from institutional care to community care
- Prevention and population health
- Paying for value, quality and outcomes

### **Illinois HHS Transformation Vision/Aspirations**

Pain Points; Business Needs; Problems to be solved

Prevention & Population Health Institutional Care to Community Care

Paying for Value: Quality & Outcomes

Education & Self-Sufficiency

Efficient, Effective, Person Centric Delivery of Services

Questions/Analytics/360 Views (Person-Family-Provider)

### **Enterprise Data**

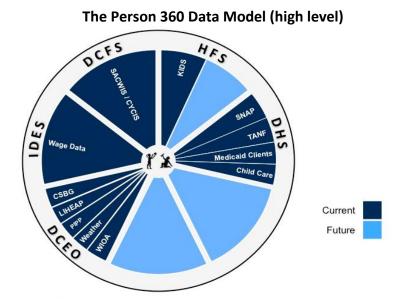
The project emerged from a previous administration's project, the Illinois Framework, which emphasized systems interoperability and focused on enterprise architecture and governance. Advances in data science and master data management (MDM) and a need for more data-driven government led the State CIO under Governor Rauner to shift the project's focus to data interoperability and quicker wins, through identifying HHS agency pain points, business needs, and problems that could be rapidly solved using data across existing systems. The underlying business and technical approach changed from business process analysis and application interoperability to developing a data platform to support the comprehensive analysis of populations, programs and providers of healthcare and human services in Illinois.

The restructuring and rebranding of this effort as HHSi2 emerged from the "grand challenge" unifying all of Illinois' transformation efforts: **How do we enable the redesign and restructuring of government operations using data and evidence to drive more efficient, effective and customer-focused service delivery?** 

DoIT led a team representing five major state agencies that support healthcare and human services, shown in the graphic below: Healthcare and Family Services (HFS), Department of Human Services (DHS), Department of Children and Family Services (DCFS), Illinois Department of Employment Security (IDES), and Department of Commerce and Economic Opportunity (DCEO). For future phases, other major agencies with programs that serve similar populations include the Department of Corrections, Department of Juvenile Justice, and Department on Aging.

HHSi2 is ultimately planned to include data and systems interoperability across more than 60 programs and over a dozen agencies, and a 360-degree view of a person, program or other entity based on data from all data sources available to state government ("Person 360").

The Illinois **Person 360** data model is designed to provide state staff, policy makers and providers with a visual representation of an individual, the individual's family members and every service/benefit provided to each individual in real time. This approach provides the ability to go beyond HHS interactions to public safety, education, and employment data. The capability to integrate data on an individual from prenatal to death will provide the comprehensive visibility to support Medicaid modernization, population health management, HHS services integration, fraud, waste, and abuse prevention and other important projects.



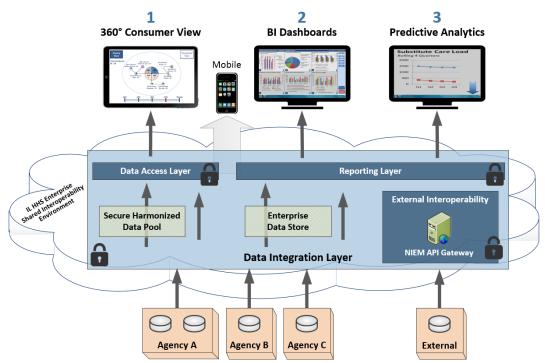
Significance and Impact

HHSi2 will help agency leadership achieve the Governor's vision of efficient program management, effective policymaking and customer-centric service delivery. It is also helping drive the establishment of a Predictive Analytics practice within DoIT, which will allow the State to leverage data from all State HHS agencies, other government entities and open data sources to address the issues that agency leaders would like to resolve to provide greater value to the public.

The project has been funded through federal Medicaid, with additional funding coming from participating agency budgets through an intergovernmental agreement. Medicaid's interest in the project is developing a national model for a cross-agency data platform to improve outcomes in health and human services delivery.

As Illinois embarks on the Person 360 journey, early adoption of new ideas is giving the project momentum in a new way. Breaking down the agency siloes to share data is the first critical success factor. The creation of an interagency data sharing agreement, the Enterprise Memorandum of Understanding or eMOU, is addressing this problem. The formal process has prompted discussion and elevated the importance of data management from an enterprise point of view.

Illinois has a vision of customer-centric government in which citizens are no longer shuttled from agency to agency. Numerous strategic initiatives are being launched under this approach, and the interoperability platform - Person 360 - is a critical enabler to all.



Illinois HHS Enterprise - Shared Environment for Data Availability

#### **HHSi2 Accomplishments**

- Proof of concept model built for the Person 360 data model using child welfare, child support, Medicaid Eligibility, Supplemental Nutrition Assistance Program (SNAP), and Temporary Assistance for Needy Families (TANF) program data, providing business value for HFS, DHS and DCFS casework; can be replicated for other HHS programs and populations
- Conducted gap analysis for case management functionality, comparing case management system needs within Illinois HHS programs to existing system capabilities
- For the first time in Illinois history, 13 state agencies signed onto an Enterprise
   Memorandum of Understanding (eMOU) that will greatly reduce the bureaucratic red tape
   previously associated with cross-agency data collection and analysis

- Piloted data sharing with external sources using National Information Exchange Model (NIEM) standards; anticipate using this widely-recognized model to facilitate greater data sharing among state agencies, counties, community organizations, and service providers
- Completed requirements analysis and systems selection for data sharing interoperability platform
- The Implementation Advanced Planning Document (IAPD) representing unified state vision of HHS data interoperability was submitted to federal CMS November 2016 to document work to date and proposed FY17 and FFY18 implementation activities, including detailed use cases

The project at this point has generated significant usable tools including the Person 360 proof of concept, the eMOU (which now makes all inter-agency data sharing much easier), the gap analysis for case management functionality, and the piloting of data sharing externally using NIEM standards. The i2 concept and approach to data interoperability has proven viable in the State of Illinois with the rollout of HHSi2 and Person 360 proof of concept. If HHSi2 can be thought of as "i2 v1.0" in Illinois, there are more versions and varieties of i2 to come. Over the next two years, Illinois' i2 concept and Person 360 model will not only benefit HHS agencies and constituents with the implementation of HHSi2, but will bring benefits across the entire state enterprise as the i2 approach is broadened, and access to more datasets is included in the MDM.