SIM PROJECT SUMMARY: Integrated Health and Human Services Data Ecosystem

Project Summary

Project Description

The state of Rhode Island, led by the Executive office of Health and Human Services (EOHHS), has developed an integrated data environment – the Data Ecosystem – that provides operational analytic solutions to state agencies and self-service analytics for staff across the state, We have integrated, at the person level, 10 data sources across EOHHS and a few other agencies, developed a robust person matching process, and delivered several major and dozens of smaller data-driven projects that have, in some cases, directly led to state policy changes.

Project Goals and Objectives

- Create a mechanism to access integrated data for each person, tied to operational purpose, in a user-friendly way that enables self-service analytics for operations and increases performance management.
- Develop programs that respond to lived experience, help Rhode Islanders fulfill their potential, and responsibly steward state resources using the integrated data made available to State agencies.
- Respond nimbly to changing policy and operational needs while controlling total costs through the State's ownership, operationalization and optimization of the data ecosystem.

Vendor Information:	State Contact:	Total Funds Leveraged:		Target Populations:
Kim Paull, EOHHS (Kimberly.Paull@ohhs.ri.gov) 401-462-6232	James Rajotte, SIM <u>James.Rajotte@health.ri.gov</u> 401-222-5142	SIM:	\$1,600,000	☐ State Government

Major Accomplishments

Impacts on Data Capability and Expertise:

- All EOHHS agencies executed an Executive Data-Sharing Agreement that specifies the overarching use cases for which data can be shared among EOHHS agencies.
- Established two functioning working groups to support data integration, sharing and product selection and development:
 - Executive Data Integration Board provides strategic oversight on new data integration and data product selection and ensures the work aligns with Medicaid priorities.
 - Data Stewards Group supports the functional implementation of new data sources and data product development and implementation.
- 10 data sources have been integrated linked at the person and family level -- including Medicaid claims, vital statistics, behavioral and mental health, early intervention, immunization, lead, DLT wage, and Supplemental Nutrition Assistance Program (SNAP) Temporary Assistance for Needy Families (TANF) and Childcare enrollment data.
- As a result, the ecosystem has developed and deployed many previously unavailable reporting dashboards to support key EOHHS business priorities.

Key Metrics and Evaluation Insights

Outcomes Achieved

- 3 major board-approved projects completed
- 12+ smaller projects completed
- Established and fully operationalized the Ecosystem Data Integration Board and conduct quarterly meetings
- Established and fully operationalized the Data Stewards Group and conduct monthly meetings
- Integrated 10 data sets at the person-level within the ecosystem environment
- Licensed, onboarded, and provide training to 100 PowerBI Users to increase data access and self-service

Lessons Learned and Evaluation Insights

Below are nine principles that have become the core tenants of the ecosystem's work:

- Curated: Environment is agile and includes only relevant data elements
- Secure: Adheres to best practices and industry standards through regular, independent security audits, regular testing and role-based permissions.
- Builds on existing environment
- High quality: Data is standardized, verified, and cleaned
- Drives agency performance: Provides specific, critical data to drive agency operations.
- Collaborative, data-driven culture: Cross-agency governance structures built with agency input, program-led product design.
- Interactive: Intuitive tools plus a simplified model encourages use by all authorized users
- Integrated: Data for each person is connected across state agencies

Impacts:

☐ Patients
☐ PCPs
☐ Payers

☐ Specialists

☐ Hospital & Long-Term Care Staff

☐ State Government

☐ Community Based Organizations

☐ Community Mental Health Center Staff

State owned and directed: Governed and operated by state employees rather than an outside company

Sustainability Efforts

As of July 1, 2019, the ecosystem received comprehensive funding from CMS through the state's MMIS Implementation Advanced Planning Document (IAPD) to support the ecosystem at mostly 90/10 match through FFY 2021 (two years, three months). This funding will support an expanded level of effort for the team. The state portion of the matched funding for the first year of work will come from the Rhode Island Information Technology Investment Fund (ITF).

Project Website and Informational Handouts

The ecosystem team remains a data system focused on internal end users and uses a secure Sharepoint site to disseminate information. Below is a link to an overview of our work, shared on Sharepoint:

Ecosystem 101

Communications Material and Media Highlights

While our analyses remain intended for internal users, below is a presentation given to the University of Pennsylvania's Actionable Intelligence for Social Policy (AISP) program network sites May 2019 summarizing an Opioid Use Disorder (OUD) Analysis and Child Maltreatment Prevention Project Findings:

OUD and Child Maltreatment Prevention Project Presentation for AISP

Toolkits and Online Training

Over the course of the last 18 months, the ecosystem team has developed content and implemented comprehensive PowerBI training to state staff and analytic "end users" of our data, ranging from support for beginner analysts learning to use data for the first time to advanced "superuser" analysts. These trainings have included monthly lunch-and-learns and demonstrations, 1on1 tutorials, bi-weekly small group trainings, and online materials posted to the state's secure Sharepoint site. Examples or online trainings are below:

- PowerBI Lesson # 1
- PowerBI Lesson # 2
- PowerBI Lesson # 3

Evaluation Reports and Presentations

As part of the Ecosystem, EOHHS was accepted into a Learning Cohort for integrated data systems as part of the University of Pennsylvania's Actionable Intelligence for Social Policy (AISP) program. This offered EOHHS the opportunity to regularly connect with and learn from other state's initiating similar data integrated projects and receive technical assistance from AISP staff and leading experts in the field. As part of this learning community, EOHHS gained invaluable insights around use case development and best practices for data governance, legal considerations, data standards, and technologies. EOHHS and AISP evaluators jointly assessed the progress of the Ecosystem over the course of the AISP 1-year program. The assessment identified a clear advancement against the Ecosystem's articulated goals as well as highlighted categories with room for improvement.

Disclaimer

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