



Agency Priority Goal Action Plan

Combined Data Analyses

Goal Leader: Mona Siddiqui, Office of the Chief Technology Officer (CTO)

Overview

Goal Statement

- Increase combined analysis of disparate datasets in order to achieve better insights. By September 30, 2019 HHS will develop and implement an enterprise wide data governance model. This will enable more efficient and effective processes for sharing inter-agency data beyond a dataset's primary purpose. Three use cases of inter-agency data sharing through this process will be tested.

Challenges

- Siloes - HHS has rich data assets that are collected and maintained by separate agencies within the Department. In many instances, Operating Divisions may have specific authorities or mandates to collect data, which makes joint collection or integration of data collection activities difficult.
- Statistical agencies and units must adhere to legal provisions (e.g., Confidential Information Protection and Statistical Efficiency Act) that can inhibit data sharing. HHS programs and services can also be restricted from sharing data by legal provisions. For example, the National Directory of New Hires is a valuable data asset, but it contains the highest degrees of protection.
- CMS, IHS and other Health Insurance Portability and Accountability Act covered entities must adhere to HIPAA regulations for the disclosure and use of covered health information
- Agencies within HHS each serve specific missions and developed systems over time to address their unique needs. However, reexamining the underlying infrastructure can help identify gaps, areas for improvement, and efficiencies. Specifically, HHS needs to develop and implement an enterprise wide data governance strategy.

Overview

Opportunity

- Multi-sector issues—when an issue touches more than one agency or crosses into multi-disciplines then joint research and analyses occur and benefit everyone involved.
- Technology—advances in computing and IT infrastructure allow for secure sharing of information and enable collaborative work.
- Methodology—advances in statistics, machine learning, data mining, and geographic analysis enable disparate datasets to be combined to reveal new insights and find patterns.

Leadership

Core Team

- APG Goal Leader: Mona Siddiqui, Data Initiative Lead, Office of the CTO, IOS
- Reimagine HHS: Leveraging the Power of HHS Data Core Team

Goal Structure & Strategies

- HHS agencies have experience conducting combined analyses and linking datasets together (both internal and external). However, these are often treated as “one-offs”, experimental, or exploratory rather than a tool to support the overall mission. Encouraging agency collaboration to conduct this work will require providing tools, devoting staff time, and establishing a framework that benefits all involved.
- An HHS-wide data governance plan will establish ownership and rules for data assets and improve data quality and uniformity.
- A streamlined data use agreement infrastructure will enable more seamless interagency data sharing.
- Developing an infrastructure that allows for secure and simple sharing of data assets will enable agencies and staff to collaborate on issues that affect multiple agencies such as the opioid epidemic.
- Comparing commonly used data architectures and data management tools to open source software and file formats could reveal more efficient ways to analyze and manipulate data assets. Adopting and using flexible open source solutions would also increase the Department’s ability to partner with the private sector.

Summary of Progress – FY 2019 Q4

- The Goal Team revised the Future State report based on Departmental feedback and has completed the Department clearance process with concurrence from all agencies. The report is expected to be publicly released in December 2019.
 - This report outlines both a potential data governance framework for the Department and identifies important elements that should be included in developing any technical solution to data sharing.
 - The report is based on both the feedback gathered in Phase II of this work in conversations with staff across multiple HHS agencies and in a survey of practices both in the public and private sectors.
- The Goal Team completed an initial market analysis and awarded a contract for deployment and testing.
 - The Goal Team anticipates launching the prototype platform to enable data sharing and work flow facilitation in Q1 FY 2020.
- APG Close-Out Statement: Although HHS has not fully implemented this APG, HHS will continue to make progress on this project until it has achieved all of the original goal's objectives. HHS plans to monitor its progress internally and to achieve this APG in FY 2020.

APG Cycle Close-out Report

- During the FYs 18-19 APG reporting cycle, the Combined Data Analyses APG made substantial progress toward its performance objectives, despite encountering some delays. Activities in support of key milestones are in-progress and ongoing.
- Recent milestones include:
 - First meeting of the Data Insights Initiative Oversight Group scheduled for December 2019
 - A minimum viable product data-sharing platform presented to several teams across HHS
- Three primary use cases have been identified to refine and further develop the data governance model. Initial planning for these use cases is currently underway.
- Additional use cases are being identified from across the department and will be implemented throughout FY2020.

Key Milestones

Milestone Summary			
Key Milestone	Milestone Due Date*	Milestone Status	Comments
Develop framework for Department-wide Data Governance Plan	Q4, FY 2018	Complete	The framework for the Department-wide Data Governance Plan was completed by the end of October.
Deploy three pilots to test the process and infrastructure	Q1, FY 2019	Ongoing	Contract for deployment and testing awarded in September 2019. Deployment to begin Q1 FY2020.
Implement Enterprise wide data governance model	Q1, FY 2019	Ongoing	New data governance work groups will be formed in Q1 FY 2020.
Development of Department-wide Data Use Agreements (DUAs)	Q4, FY 2019	Ongoing	The Goal Team is working with partners across HHS, including the HHS Data Council, to identify elements to include in DUAs.

*Previous Action Plan documentation described expected APG milestone progress to be completed during quarters of the Calendar Year, rather than the Fiscal Year. For the Q4 update, the Key Milestones Table has been converted to reflect APG progress during quarters of the Fiscal Year.