Utilizing Data to Inform Decision-Making

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EXECUTIVE SUMMARY

The San Francisco Human Services Agency (SFHSA) uses multiple sources and systems to collect, process, store, report, and analyze data. There are also multiple "reporting teams" scattered across the agency that may be working on the same data sets and generating reports to address similar needs. Although there is an abundance of available data, the fragmented network of reporting teams makes it nearly impossible to get an accurate global view of what is truly happening in the agency. This does not facilitate data-informed decision-making beyond the confines of where these various reporting teams operate.

Santa Clara County had a similar dilemma and recognized the need to address it. This project aims to leverage the initiatives and best practices that Santa Clara County adopted to resolve this issue. By drawing lessons fromSanta Clara County, San Francisco County can achieve the following:

- Promote a culture of data-informed decision-making at all levels and in all operational aspects of the agency.
- Create a forum where the fragmented reporting teams can collaborate to establish an organized, transparent, and logical use of data across the agency.

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Introduction

Data can be a powerful tool if validated and used appropriately. Metrics can be provided in various formats. Two of the most common forms are reports and dashboards. The two utilize the same data, but in a different manner. Commonly used formats for reports are tables and charts. Reports are often used for daily operational needs. Dashboards, on the other hand, provide a visual of the most important information in a consolidated format which could span various months. Dashboards allow an individual to view high-level data at a glance. The dashboards should contain helpful information that may require additional attention if goals are not met.

San Francisco Human Services Agency (SFHSA) is currently working on building its own internal Data Warehouse to leverage Business Intelligence (BI) using various data sources: CalWIN (CIS), Task Management Tool (iTasks), Lobby Management and Appointment Scheduling System (Q-Flow), and Workforce Management (Monet). Observing and taking away best practices learned from Santa Clara County would help fully utilize the Data Warehouse once it has been completed.

Background

After the implementation of the new welfare data system in 2005, California Work Opportunity and Responsibility to Kids Information Network (CalWIN), Santa Clara County Department of Employment and Benefit Services (DEBS) found the management reports from CalWIN did not provide an overall view of the actual service delivery to customers or accurately reflect work performed by staff.

A new CalWIN division was created which consisted of program staff, Decision Support and Research (DSR), and CalWIN Application Triage Support (CATS). Program staff was pulled from DEBS due to a "reclassification" of program staff from Program Coordinators to Application and Decision Support Specialist, similar to the groups that are in CATS. CATS was a result of the transition from WCDS system to CalWIN. By creating this CalWIN division, different groups were no longer working independently; instead, they started working collaboratively. This group began looking into local, state and federal performance mandates to ensure they were being met. A few measures that they began to track were how many applications remained pending for 30 days (CalFresh) and 45 days (Medi-Cal), timely processing of Expedited CalFresh, and overdue Redetermination / Recertification / Renewal (RRR). Depending on the measure, 3-6 months of data for the prior months were included to conclude if the measures were improving.

The accuracy of these reports allowed DEBS to stay compliant with various mandates. In addition, this gave confidence for additional reports to be developed. DEBS began looking into not only knowing that mandates were being met, but also ensuring that appropriate action was taken by line staff. For example, Immediate Need should be processed within 24 hours. If action has not been taken for Immediate Need, it could potentially appear on a report 3 times in a day to ensure disposition is performed.

After being able to compile data for various mandates, the next focus was to look at staff performance. Additional data sources were included to obtain these metrics. DEBS began looking into data from their phone system and task management tool to obtain a holistic view of the work performed

by line staff. This provided a tool for supervisors to explore the productivity and performance of each staff member.

The Data Dashboards and Reports and Their Uses

There has been an evolution of the Data Dashboards over the years. The Data Dashboards connect many data points behind the scenes to allow for a centralized location to analyze and display key performance indicators, in order to monitor how certain measures are performing. Presently, they are tailored for the consumption of the Director, Assistant Director, Managers, Supervisors, Intake and Continuing Cases staff, and district office staff. The Data Dashboards for the Director, Assistant Director, and Managers focus on meeting mandates from the various levels of government. They display the previous five months of data and baseline on some metrics to ensure mandates are met. One of the Data Dashboards contain measures on pending applications, how many of the pending applications are out of compliance with mandates, pending applications by district offices, timely approvals for CalFresh Expedited Services (ES) by office, timely disposition of Immediate Need by district office, total number of applications assigned and dispositioned, average number of applications assigned and dispositioned per Eligibility Worker (EW), and percentage of applications processed timely.

In addition to the Data Dashboards, Manager and Supervisors receive reports on individual performance by line staff. Data elements in these reports roll up into the Data Dashboards. These reports provide a conversation piece for discussions between the different levels of management. This can provide valuable feedback to line staff as to how they are performing. For example, a report could detail how an individual performed in a Service Center environment by looking at the average handle time, which takes into account the talk time with a customer and the wrap time needed to complete additional work on a customer case. If an employee handle time is

higher than their peers, a supervisor would look into the cause and discuss it with the employee.

The data points on the Data Dashboard collected for the various district offices allow the comparison of outcome metrics highlighting differences among the district offices. The various district offices can then compare if the business process varies from office to office. Best practices can be obtained to help improve performance in the various offices or to find out what barriers may be triggering the differences in outcomes.

Various reports help determine the need for additional staffing. When requesting additional staffing, it is important to have data that can support and justify this demand. The use of a report to provide current and future workload to meet and maintain mandates and to continue to provide the same level of customer service can assist with the justification.

Any additions to the Data Dashboards or reports require approval from the Assistant DEBS Director. This allows for prioritization of the data to be included and for appropriate resources to focus on analyzing and determining how much effort and time will be needed to complete the request.

Lessons Learned from Santa Clara County

Data Should be Validated by a Small Group Consisting of the Appropriate Staff: Santa Clara County initially started with a large group of individuals looking into validating data. While a large group of collective minds sounded great initially, it ended up causing delays due to the group's inability to come to a consensus. There should always be Subject Matter Experts (SMEs) with knowledge of business processes. Many of the metrics are driven by business processes. Without an SME providing background information, the data can provide inaccurate information or be interpreted incorrectly.

An example of this in SFHSA is the report on clerical workload. Metrics should not only be gauged by the number and type of applications processed but also take into account the unprocessed

ones since time and effort is also spent researching these. Looking at unprocessed applications provides a truer measure of the clerical workload. It also provides additional insight as to the various reasons why applications are not processed (for example, the customer is already approved for benefits, the customer active in another county, etc.).

Consolidation of Reporting Groups: Santa Clara County has combined all of their reporting staff (Senior Management Analyst and Management Analyst) within DEBS under one management. This has provided efficiency, more resources, and consistency with the creation and maintenance of the Data Dashboards and reports. All report requests are vetted to ensure there is no duplication of an existing report. While the goal of each dashboard is different, the uniform layout for all the dashboards makes it easy for anyone to follow. The various dashboards in Santa Clara County are broken down into Intake and Continuing work. Similarly, the reporting team is also divided to primarily support either the Intake or Continuing caseloads. However, any Senior Management Analyst and Management Analyst can create or update both the Intake and Continuing dashboards.

SFHSA has done this in a smaller scale by combining the reporting functions for the CalFresh and Medi-Cal programs into one team. This was necessitated by the fact that the traditionally separate CalFresh and Medi-Cal programs merged into one. This combined reporting team now collects, generates, analyzes, and publishes reports and dashboards pertinent to these two programs. This resulted in more efficient utilization of resources, reduction in duplicate reports, and consistency in use and interpretation of data.

Providing Metrics Before and After: One of the key takeaways from the Data Dashboards is the ability to examine data at a glance. Having the ability to compare prior data gives a user perspective as to how a metric is performing. When there is a change in business process, a dashboard can readily tell you if it is impacting mandates or service delivery to customers. An example of this can be seen in the Lobby Navigation and Reception Operation at two of SFHSA's largest public-facing sites. One of the problems they faced was the high number of clients choosing the incorrect service at the kiosk. This resulted not only in wasted time for the client; it also created unnecessary work for program staff. To remedy this, staff implemented a change in business process where the client is required to interface with Lobby Navigation staff to issue a ticket for the lobby management system. Since staff are able to triage the client needs, the client is routed to the correct service. By comparing data before and post implementation, the team was able to validate the success of the change in business process.

Forecasting for the Future: The Data Dashboards provide useful information regarding upcoming workload. Some look at data over a period of time, therefore, allowing trend analysis to be performed. On one of the Santa Clara County's dashboards, instead of looking at prior months, it projects the upcoming six months of expected RRR for Medi-Cal. This allows for proper staffing for the upcoming workload. Like any other social service entity, SFHSA was greatly impacted by the implementation of the Affordable Care Act. Knowing that there would be a significant increase in the Medi-Cal caseload, SFHSA tried its best to project the number of newly-qualified San Franciscans with the Medicaid expansion. The agency looked at those who were enrolled in Healthy San Francisco, those who were receiving Low Income Health Program benefits, single adults in the County Adult Assistance Programs, and other data points that would help in projecting the additional caseload. Armed with the best available data, the agency managed to justify the hiring of additional Eligibility Workers. The data collected at the first open enrollment was also used to project staffing needs during the subsequent open enrollment years.

Providing Useful, Meaningful, and Actionable Information: Dashboards and reports must be directed toward the target audience that will be reviewing the data contained in them. If the information is not focused, the recipient of the information can become uninterested and end up not reviewing the information in the future. If there are items that are actionable, this engagement keeps the audience wanting to review the data to see how the actionable items change.

The Quality Assurance (QA) team supporting the CalFresh and Medi-Cal programs in SFHSA has been working with program staff to revamp the existing QA reports. The main purpose is to ensure that the needs of the consumers of the data provided are met and that the reports are presented in a way that is useful, meaningful, and actionable. This collaboration resulted in the QA team providing program staff with trends analysis on the top QA errors, the root causes for such errors, and recommendations to resolve and, more importantly, to prevent the same errors from recurring.

San Francisco Data Initiatives

In addition to implementing the lessons learned from Santa Clara County, it is also highly recommended that SFHSA continues these various initiatives to promote data-informed decision-making and to foster collaboration among reporting teams.

Data Analytics Council: On September 2017, SFHSA formally launched its Data Council. The council has four main goals: (1) Provide a forum for identifying and prioritizing data analytics projects; (2) Develop guidelines for the utilization of data sources and

data analytics or Business Intelligence (BI) tools; (3) Recommend and oversee efforts to improve data usability across the agency, and (4) Promote close alignment of IT BI team and programs.

Creation of the Business Intelligence/Data Warehousing Team: SFHSA created a team dedicated to developing Business Intelligence and establishing a Data Warehouse. This team aims to consolidate data silos, apply data quality, empower end-users to easily create reports, allow end-users to analyze data by employing various visualization techniques. This team wants to assist the agency to take a data-driven approach when making decisions.

Continue to Leverage Reports to Promote Operational Efficiencies: SFHSA has harnessed external data that is received in CalWIN through various sources such as: CalHEERS, My Benefits CalWIN, and electronic inter-county transfers (eICTs). When data is received through these channels, they are automatically queried through the CalWIN database to sort the requests into different buckets for review by various staff. This has expedited the review time of each request.

Acknowledgments