## Santa Cruz County's Comprehensive Knowledge Management: Agency-Wide Data-Driven Decision Support

#### **NICOLE HUFF**

## **EXECUTIVE SUMMARY**

#### **Background**

Knowledge Management and the use of data in decision making are emerging and growing areas of social services. Many human services agencies, including Santa Clara County Social Services Agency (SSA) and Santa Cruz County Human Services Department (HSD), have dedicated efforts toward the meaningful use and dissemination of information in order to move towards services delivered based on knowledge informed through data.

#### **Data Driven Decision Support**

Santa Cruz County HSD has recently launched a Data Driven Decision Support effort to create an agency-wide culture of informed decision making based on actual field data. This effort includes the following: an inventory of all current reports and data available; interviews with users to identify useful and necessary data in decision making; creation and piloting of dashboard containing the identified data; creating cross-agency data definitions and report templates and training, policies and procedures for the use of data.

#### **Recommendations for Santa Clara County**

The recommendations are as follows:

- Ensure executive level commitment and support to implementation of data and knowledge management efforts.
- Systematically take inventory of every report created for and within each of the departments.
- When the inventory is completed, each department should prioritize reports for frequency and necessity and create policies and procedures regarding who receives the reports and how they should be used.
- Once the data is streamlined and available to appropriate staff, managers, supervisors and line staff should receive training on the use of data.
- Create ongoing groups within the agency to discuss, analyze and further promote the intelligent gathering and use of data.
- Create a process to periodically review the report inventories to remove any redundancies or obsolete data.

Nicole Huff, Policy & Planning Manager, Development and Operational Planning, Santa Clara County Social Services Agency

# Santa Cruz County's Comprehensive Knowledge Management: Agency-Wide Data-Driven Decision Support

#### NICOLE HUFF

#### **Background**

Large government entities have long struggled with how to disseminate needed information to the right people in an understandable and relevant way. This challenge is being addressed by the field of Knowledge Management (KM) in human services. KM is gaining momentum as agencies and professionals recognize the need for capturing and disseminating information and knowledge in meaningful and appropriate ways, specifically with respect to process improvement. One specific area of KM in social services is the growing movement toward more evidence and data-informed practice.

While, historically, social services have shied away from the use of data, there is now growing recognition that human and social services can and should be informed through data and statistical analysis. Social service agencies are trying to find ways to respond to the need for data-informed decisions with timely, accurate and relevant information. It has become widely recognized that human services agencies need to be accurately monitoring their services and the outcomes for the individuals and families they serve. To that end, federal and state outcomes and accountability measures have been put in place for most social services. Often these agencies struggle with strategies to make their data available, useful and understandable to those who need it, as well as to know how to use the data strategically in planning and decision-making.

Santa Clara County Social Services Agency (SSA) has made a strong commitment to KM efforts and the use of data in meaningful and strategic ways. This includes the dedication of resources to the evaluation of outcomes, quality improvement efforts and internal and external communication. However, many challenges remain to the successful transfer of knowledge and information in such a large agency.

At Santa Cruz County Human Services Department (HSD), even within an atmosphere of dwindling resources, a commitment to KM has evolved in addition to a desire for an efficient and effective system that empowers at all levels. Santa Cruz County HSD has focused its efforts on a process that will identify and implement that which is working well and let go completely that which is not working. To that aim they have created a strategic plan for the entire department that will drive and focus their efforts.

Recently, HSD launched an agency-wide Data Driven Decision Support effort to address this need. The goals of this effort include:

- Identification of the data necessary to answer the most critical questions.
- Valid and timely data acquisition to provide those answers.
- Accessible and understandable presentation of vital information for line staff and managers.
- A method to engage all staff in responsibility for outcomes.<sup>1</sup>

HSD has structured its data focus to answer three main questions for each division or program: "How Much?," "How Well?", and "Is anyone better off?" It is hoped that by analyzing Santa Cruz's efforts in this area, Santa Clara County SSA can implement their own campaign to better manage data within the agency.

## **Data Driven Decision Support**

Santa Cruz County HSD, like many social services agencies, found that their organization received a large number of reports from a multitude of sources, but that they were not always using them in organized and meaningful ways. Also, the reports did not always contain the information needed for mean-

<sup>&</sup>lt;sup>1</sup>Power Point Presentation, *Data Driven Decision Support*, Madeline Noya, January 26, 2009.

ingful decision-making. Traditionally, the different divisions within HSD (Adult Services, Family and Children's Services, and Employment and Benefit Services) have reported yearly activities to the agency director through the use of "Budget Cheat Sheets." Often the information needed for these cheat sheets was not readily available to the divisions, and the same data reported from different sources did not always match. Also, the different divisions were not all using the same definitions or formats for their reporting. Another challenge was that each division's current use and availability of data was different. For example, Employment and Benefits Services needed preliminary assistance in developing management reports, but Family and Children's Services already had information readily available through the Safe Measures system.<sup>2</sup> Overall HSD found that while data was available, their information gathering efforts were not coordinated, their resources to obtain data were dwindling, and only some of the information needed for management of the programs was available.

In addition to the challenges posed by the data gathering itself, there were challenges posed by staff's use, misuse, or lack of use of the data. It is difficult to know whether staff reported using a certain data report because they found it helpful or because they felt they were supposed to report using it. Also getting direct services staff to prioritize an effort involving the use of data proved to be a challenge. Lastly, social services personnel often are not comfortable with the use of data, or the reports they are given in ways that are difficult to read and understand.

To assess the information currently available to HSD, the Planning and Evaluation (P&E) team completed a report inventory for each division. Each division report inventory included reports that analysts and Information Technology (IT) produced, manual reports staff completed, automated reports available through the various software systems and current management reports. One P&E staff member

was assigned the task of completing the report inventory for all three divisions. She conducted division staff interviews and research in order to identify all the data and reports being used in each division. The completed inventory included the following information about each report: description; frequency; audiences; intended uses; data sources; who uses it; and file type. While this was a time-consuming task, it was very helpful in identifying areas for the data effort to address, such as the following:

- Reports that were not used, repetitive, and/or non-critical
- Operational and performance goals that had no reports tracking them
- Manual data collection that could have used available technology
- A lack of standardization and expectations concerning who uses the data, how they use it, and when or how often they use it.

In January 2009, P&E was ready to take the next step in this effort and begin conducting user interviews to prioritize and streamline data sources. This next step involved structured interviews with each member of the executive management team at HSD. The P&E team designed these interviews around specific questions concerning what information is needed on a monthly (or more frequent) basis and what information would be required in an annual report. Particular focus was placed on the decisions that the data was intended to be driving rather than solely on gathering knowledge. A great deal of emphasis was placed on determining which decisions were best made by data gathering and to brainstorm as to what other data may prove valuable in making managerial and/or policy decisions. The member of P&E most familiar with the division brainstormed answers prior to the interview with the executive team member in order to create a starting point for the conversation. Every member of the P&E team attended these meetings so that they could all be familiar with the information.

After meeting with the entire executive team individually, the Data Driven Decision Support effort will move on to the next phase, which is for P&E to

<sup>&</sup>lt;sup>2</sup>Safe Measures is a web-based data system that monitors numerous child welfare case management requirements, such as timely social worker visits and timely case plans.

prioritize reports and create a "mock-up" dashboard which will contain relevant reports in an easy-to-read and understandable format. These dashboards will be created using standard templates and data definitions. The plan is to go through the same process with all levels of staff, i.e., managers, supervisors and line staff.

After creating the blueprints for the needed management reports, the Data Driven Decision Support effort will then test out these reports with the appropriate audiences. After that phase is complete, these new data reports will be fully implemented within HSD. To support implementation, ongoing staff development and training in the use of data in case management, program management and staff supervision will be provided. While Santa Cruz County Human Services Department is only in the beginning stages of this effort, they have made a strong commitment to a culture of data informed decision making.

#### **Implications for Santa Clara County**

Every county social services agency has its own distinct internal and external structures and influences, and no one initiative can be directly transposed from one county to another. Certainly between Santa Cruz and Santa Clara Counties there are some marked differences including: size of region; ethnic, culture and language diversity; population; and socioeconomics. However, Santa Clara County SSA shares the same service areas as Santa Cruz: Aging and Adults Services; Employment and Benefits Services and Family and Children's Services. More importantly with respect to this analysis, SSA shares many of the same challenges as Santa Cruz in accomplishing data informed decision making.

Very recently, SSA has started a project for a data warehouse. The main goals of this project are to streamline data within the departments and allow for cross-system data analysis. Along with the data warehouse, the concept of "Information Governance" has also been introduced at SSA. Information Governance is defined as, "a process focused on the managing of quality, consistency, usability, security

and availability of enterprise information." This concept has the goal of coordinating people, processes and technology to manage data within the agency. In many ways, this is a similar project to Santa Cruz County HSD's Data Driven Decision Support.

#### **Recommendations**

In implementing Santa Clara County's own datadriven decision efforts, there are some actions SSA should take to address the challenges of data management and make the implementation of the data warehouse smoother. The recommendations are as follows:

- Ensure executive level commitment and support for implementation of data and knowledge management efforts. This includes a specific strategic plan or charter developed for the use of data and information within SSA.
- Systematically take inventory of every report created for and within each of the departments, including reports generated through Information Services, manual reports and automatic reports from other sources. This inventory should contain information on uses, audiences and data sources and is best completed by someone familiar with the department. These inventories can then be analyzed for redundancy or irrelevancy in reporting. This is best completed by staff in Evaluation and Planning, Information Systems, and/or the Calwin Division.
- When the inventory is completed, each department should prioritize reports for frequency and necessity and create policies and procedures regarding who receives the reports and how they should be used. This can be accomplished through a series of interviews or workgroups coordinated by the staff completing the inventory.
- Once the data is streamlined and available, managers, supervisors and line staff should receive training on the use and interpretation of data, including the interpretation of the data available in the standard reports they will be expected to

<sup>&</sup>lt;sup>8</sup>Power Point Presentation, *Information Governance: "Information and Knowledge Management (IKM),"* April 7, 2009.

- use regularly. This will necessitate the inclusion of Staff Development in developing and providing training.
- Create ongoing groups within the agency to discuss, analyze and further promote the intelligent gathering and use of data. These groups should also consider implementation of best practices or new policies or protocols to improve outcomes, as well as the use of data trends to inform ongoing staff development and training. These groups should be both inter-departmental and crossagency, as appropriate.
- Create a process to periodically review the report inventories to remove any redundancies or obsolete data. The ongoing data groups can be utilized for this task as part of their work.

This effort will take considerable time and a commitment of staff and resources from the agency.

However, they will complement the data warehouse project and will save SSA time and resources in the future. They will also add great benefit to the individuals and families served by the county by providing for more efficient, effective and data informed services.

#### **Acknowledgements**

At Santa Cruz County Human Services Department, I would like to thank Madeline Noya for her time and wisdom. I would also like to thank Ellen Timberlake and Kathy Mello for their time.

In Santa Clara County, I would like to thank the following people for providing me information: Lori Medina, Jaime Lopez, Cathy Turner, Jan Picolorich, Dana McQuary, and James Ramoni. I would also like to thank Gina Sessions for her support throughout this project.