

The Power of Public Information Sharing Tools: A Case Study of Contra Costa County Employment & Human Services Department

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EXECUTIVE SUMMARY

Marin County Health and Human Services Department (HHS) has stated a commitment to activities that improve the quality of and data sharing around its programs and to include the needs of clients and community in these processes. One example of activities to accomplish these goals includes the development of public-facing data dashboards. Contra Costa County Employment & Human Services Department (EHSD) has emphasized a commitment to publicly sharing benefits program data in a robust and secure way with the development of data dashboards. Marin County HHS’ current dashboard efforts, commitment to quality improvement and performance management initiatives, and racial equity goals could be enhanced with the implementation of a data committee, the development of more HHS divisional data dashboards, and increased data sharing across HHS divisions.

Introduction

As public servants, it is important to be thoughtful as to how government agencies report data and provide context on public programs to the community. There is also a notion that government agencies may not necessarily be the owners of data collected during the delivery of services to community members, but rather the stewards of these data (Williams, 2024). As such, agencies have responsibilities to perform accordingly, such as providing transparency into data and program outcomes. One method of providing transparency around delivered services is through the development of public-facing interactive dashboards, like those that Contra Costa County Employment & Human Services Department (EHSD) has developed over the past few years with the assistance of the County Department of Information and Technology (DoIT).

This case study is particularly relevant for Marin County Health and Human Services (HHS) to learn from as it strives to expand the current range of public-facing interactive dashboards, particularly within its Social Services division. While some divisions within Marin HHS have public-facing dashboards regarding service delivery and pressing community issues (e.g., COVID-19 and flu surveillance, overdose events, homelessness and housing supports) the Social Services division has not yet developed any due to resource constraints.

Background

Marin HHS is an integrated agency that encompasses multiple service divisions such as Planning and Administration, Behavioral Health and Recovery Services, Public

Health, Social Services, and Homelessness and Coordinated Care. The Social Services division at HHS includes many services that are housed within the EHSD in Contra Costa County. These include Public Assistance, Children and Family Services, Employment and Training, Adult and Aging Services, Public Guardian, and Veterans Services. Additionally, within EHSD, the Information and Systems bureau houses a multi-faceted Policy and Planning Division which is comprised of seven FTE employees whose responsibilities include research and evaluation, legislative and policy tasks, and assistance with inter-departmental work such as the implementation of California Advancing and Innovating Medi-Cal (Cal-AIM) initiatives.

When comparing Marin and Contra Costa County population and economic metrics, the two counties are relatively similar in terms of economic metrics of median income, poverty rate, and unemployment rate, but the population of Contra Costa is 4.5 times that of Marin. In 2023, EHSD served an average of 322,355 individuals on Medi-Cal, and Marin HHS served an average of 52,790 individuals [data includes only non-dual enrolled Medi-Cal clients] (Contra Costa County Employment and Human Services Department, 2024 and CalHHS, n.d). As expected, the EHSD is much larger than the Marin HHS Social Services Division and has 1937.5 FTE positions while the Marin division employs 391 FTE positions.

Table 1: Contra Costa and Marin County Comparison

| | Contra Costa | Marin |
|-------------------|--------------|---------|
| Population | 1,156,966 | 256,018 |

| | Contra Costa | Marin |
|--------------------------|---------------------|--------------|
| Median Income | \$120,061 | \$136,214 |
| % Below Poverty | 8.7% | 7.7% |
| Unemployment Rate | 3.3% | 4.2% |

Data Source: American Community Survey: 2022 ACS 1-year estimates data profile: (U.S. Census Bureau, 2022)

EHSD Public Information Sharing Tools

The EHSD Policy and Planning Division and DoIT team maintain public-facing data products on their Public Information Sharing Tools landing page. These include the EHSD Geographic Information System (GIS) Benefits Program Maps, the Interactive EHSD Program Dashboards, and legacy program data dashboards with data from 2016 to 2023. These products complement each other and relay the volume of benefit services that EHSD provides. The Interactive EHSD Program Dashboard visualizes monthly enrollment in EHSD benefit programs and offers context for each program. The EHSD GIS Benefits Program Map provides viewers with insights into service delivery at the individual and household level and by location, provides a program glossary to provide context on all programs displayed, and is updated quarterly. The data can be viewed at the county level, by board of supervisor district, or by zooming in on a specific region of the county, with program data changing dynamically by the selected view and program layer. A screenshot of the GIS Benefits Program map can be viewed in Figure 1 (see Appendix).

The history of these products dates back to 2018 when EHSD established a Data Council and began developing the concepts for dashboards, recognizing that their department was data-rich but lacked avenues of public communication for these data. The Data Council was initially comprised of leadership staff from EHSD Bureaus including Information and Systems, Community Services, Children & Family Services, Workforce Services, Workforce Development Board, and Aging and Adult. These individuals developed project concepts, helped validate data, provided program context, and approved draft products. A brief overview of the project timeline and milestones can be viewed in Figure 2 (see Appendix).

In 2019, the first EHSD Program and Data Dashboards were released publicly monthly and consisted of PDF versions of program data based on State-mandated reporting, with data validation activities confirmed by the Data Council. These initial dashboards are now referred to as the legacy reports as EHSD enhanced their data visualization skills and products in 2021 to include interactive dashboards, which included the capacity to display trended program data over time. For example, a visitor can select to view monthly trends of individuals in the County who have been enrolled in Medi-Cal since 2017, a powerful mechanism to inform program decisions.

The next major milestone in this project came in 2022 when EHSD developed GIS program maps for program data at both the household and individual levels. These data products were developed with support from the DoIT team and multiple review discussions were held with internal county staff such as the Data Council and the

Health Services Department, the EHSD Diversity, Equity, and Inclusion Team, community stakeholders, and Board of Supervisors staff to address topics such as privacy, functionality, and utility. For example, decisions were made with these stakeholders to limit how far viewers could zoom in and see dynamic data counts of program participants on the map to no fewer than 20 to protect the privacy of program participants.

ESHSD Data Council

In 2023, the Data Council was restructured to no longer host mainly bureau leads and to include more analytical bureau staff who work with program data on a regular basis and can address challenges with data sets and analyses, provide insights on future products, and be data ambassadors. Data and products are still brought to bureau leads for data validation, additional context, and approval. The Data Council is supported by over two dozen staff from within EHSD and DoIT and work is outlined in a scope of work, annual work plan, and with well-outlined agendas for monthly meetings. Currently, the Data Council is exploring more projects such as an internal executive-level dashboard which would serve as a resource for leaders to find information, identify trends, and use data to inform decision-making for a range of programmatic and administrative topics. The Data Council is also working to communicate and engage internal staff with data dashboards to illustrate the volume of work that staff contributes to daily and brainstorm any programming enhancements that the products may inform, such as enhanced outreach in a particular geographic region.

Use of Dashboard Products

The power of these data products is the ability to have transparency into the volume and location of EHSD services provided in the county with multiple, dynamic views. EHSD leadership has indicated that the dashboards have been helpful to reference during meetings with staff, Board of Supervisors, and with community-based organizations (M. Stuart, personal communication, April 30, 2024). For example, community members and community-based organizations can reference and utilize data to inform programming, outreach, or funding applications. The dashboards have also been used internally to inform programming with additional viewing options of the GIS Program Dashboard to allow for more granular views of data points for program staff. Additionally, all data products include information on data sources and allow viewers to print and export the information such as through downloading data used to populate the dashboard products.

Resources and Considerations

The EHSD data products are comprehensive and informative and include a range of resources, challenges, and considerations to implement well. The resources to maintain the data products and ensure innovation of new products include the collaborative Data Council, approximately four FTE staff positions (including one DoIT staff/GIS analyst, two analysts for collecting, analyzing, and validating data, and a managerial lead), as well as software licenses for platforms which display data. A strong working partnership between EHSD and DoIT is also a contributor to the success of the data dashboard products. Additional

considerations include the importance of accurate data and that nuances are well understood and documented.

A consistent challenge is validation between administrative program data and State data, and ensuring that tolerance for differences between data sets is low and discrepancies are addressed with a systematic process. Additionally, data must be updated regularly, a process that entails analytical capacity for processing data as well as displaying data and ensuring these processes are completed within target timeframes, for example, quarterly or monthly. These tasks require consistent communication, collaboration, and teamwork within and across teams. The Data Council provides a reliable structure for many of these components, but well-resourced analytical staff and programs, support from information technology, and executive-level support are crucial to the sustainability, accuracy, and data security of similar projects.

Recommendations for Marin County

Marin HHS can benefit from implementing practices learned from EHSD such as the development of a Data Council or similar steering committee with HHS staff as well as potential partners such as IST to oversee the development, maintenance, and growth of both public and internal information sharing data projects. This group could develop a work plan around data dashboard projects and address related tasks, such as:

- Understand the data dashboard landscape within HHS, including staff capacity and software utilized
- Develop a process to track the development and publishing of new

dashboards so all HHS staff as well as community members are informed

- Engage with community members and organizations in dashboard development
- Assess training needs for HHS staff to ensure sustainability and innovation around data projects (e.g., data collection, data extraction, analysis, and visualization)
- Ensure alignment of data projects with HHS Strategic Plan goals, equity goals, and performance measurement initiatives
- Leverage existing data collection efforts for dashboard projects (e.g., compliance reporting, performance measures, etc.)
- Assist with the development of Social Service divisional dashboards
- Explore the development of an integrated HHS departmental dashboard

While a Data Council or similar committee can provide project management, guidance, and innovation to data dashboards and related projects, HHS analysts and program staff will need support to extract and analyze data from numerous sources. The workload and staffing structure for this type of coordinated effort should be explored further. Coordinating with the HHS Measurement, Learning, and Evaluation (MLE) team to develop staffing infrastructure is recommended due to the skill set of the team as well as being housed in the administrative division, which

supports all divisions within HHS and has a mission to cross the silos within the organization. Marin may benefit from a structure similar to EHSD where a centralized administrative unit (Policy and Planning unit) holds the majority of the responsibility for research and planning, including data dashboard development and maintenance. In Marin HHS, this type of structure may be beneficial as this type of centralized unit could assist multiple divisions with data projects by collaborating with program staff who may already develop data dashboards as well as advocate for cross-divisional partnership and data sharing. Potential fiscal implications include the costs of maintaining and possible expansion of relevant software platforms and related training, and costs related to any newly hired staff.

Timeline for Recommendations

The timeline of these recommendations could include forming a data council with existing HHS staff in the next year, and having interactive dashboards built and displayed in the next one to two years as HHS establishes the capacity to build and maintain these types of products. Expanding the data extraction, analysis, and dashboarding staffing infrastructure could occur in the next one to two years with the restructuring of how analysts support data projects within HHS and with the addition of new staff skilled in these areas. Important staffing considerations include the need to explore the types of skills needed for projects among existing and new staff, examining which job classifications are most appropriate, as well as where positions will be housed within HHS. Project staff should include those who

are skilled in relevant topic areas such as data science, programming languages, GIS, business systems analysis, as well as data analytics.

Conclusion

Marin County HHS has numerous examples of successfully building, maintaining, and communicating data through public-facing dashboards, though these products are not equally distributed among HHS Divisions, creating gaps in departmental and divisional transparency and responsiveness to data requests. There is currently an opportunity to enhance the capacity to collaborate across HHS to develop more programmatic dashboards for divisions such as Social Services to increase transparency of our services, and potentially how service delivery relates to initiatives including advancing racial equity, performance measures, and the larger strategic goals of the department.

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Appendix

Figure 1: EHSD GIS Benefits Program Map: Individual Data View

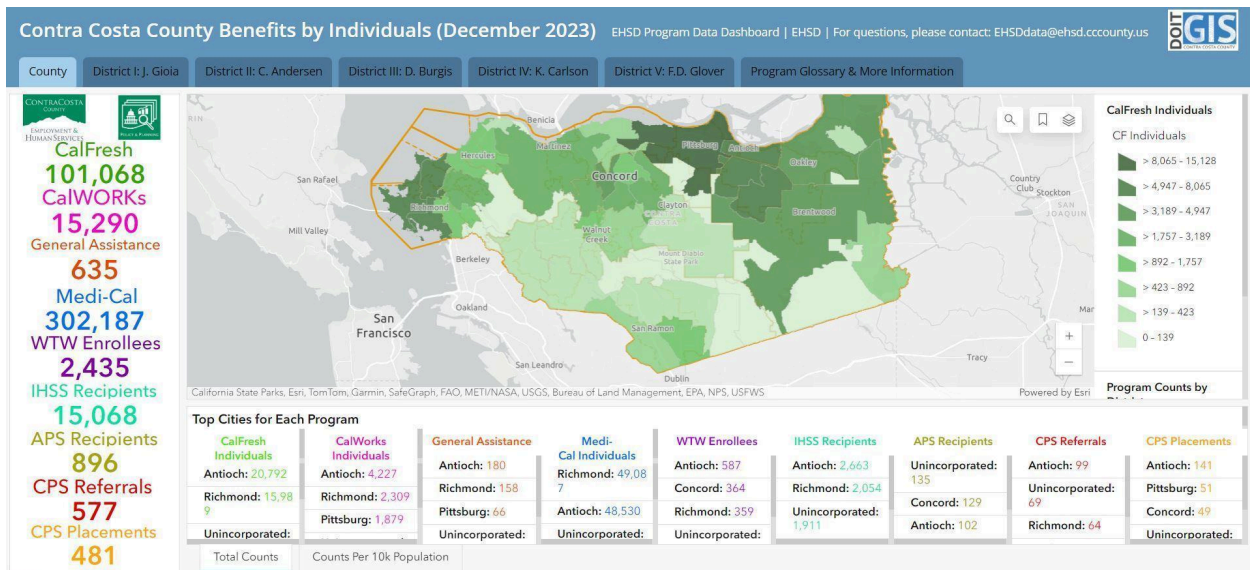


Figure 2: History of EHSD Public Information Sharing Tools Project

