

Analyzing the Impact of the Mental Health Services Act on Reducing Disparities in Access

Deliverable 1c

Data Sources, Limitations and Recommendations

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UC DAVIS
HEALTH SYSTEM

**CENTER FOR REDUCING
HEALTH DISPARITIES**

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Introduction

The purpose of this report is to aid the Mental Health Services Oversight and Accountability Commission (MHSOAC) in its ongoing efforts to ascertain the impact of the Mental Health Services Act (MHSA) through the use of available data resources. The MHSOAC selected the UC Davis Center for Reducing Health Disparities (CRHD) to conduct an evaluation of the MHSA in order to determine disparities in access by age, gender, race/ethnicity, and primary language at county, region and statewide levels. That evaluation was conducted through a series of qualitative and quantitative analyses.

This report provides an analysis of the data sources used in the quantitative components of the UC Davis evaluation. Each data source will be described and then reviewed for its promise (positive expectations) and limitations. These data sources include:

- Client and Service Information (CSI) data
- California Health Interview Survey (CHIS)
- County Cultural Competence Plans (CCP)
- Demographic Data

Following the review of the data sources, a series of recommendations will be made to assist MHSOAC and other interested stakeholders in creating and using data that are timely, complete, standardized and interoperable.

Client and Service Information (CSI) Data

The Client and Service Information (CSI) data has great potential as a data source for the analysis of disparities in mental health treatment and access. The system is maintained through the Department of Health Care Services (DHCS). It collects client-level service utilization data about California's county mental health programs. Data elements include information about patient demographics, reporting county, service information such as 24 hour services and outpatient services, provider, date of service, and other special topics like education, legal status and other physical factors influencing mental health. The system began on July 1, 1998 and continues to be used today to reflect both Medi-Cal and non-Medi-Cal clients and services provided in the County/City/Mental Health Plan program. Data for this system are collected by the counties, through their electronic systems (Electronic Health Records, billing system or electronic data warehouse), who create and send a CSI Submission file to DHCS on a monthly basis. Data are required to be submitted no later than 60 days after the end of the month in which services are provided. DHCS then provides a statewide summarization.

Promise:

The CSI database has many years of data, making it a rich resource for time trend analyses. It also has a data dictionary that describes the various (and numerous) fields of data being collected. This provides great opportunity for analyses focused on understanding patient access to care and the provision of care by the counties. In addition, the data dictionary provides a great start toward standardization if each county will adhere to data definitions. This will make data sharing, interoperability and summary analyses possible.

Limitations:

Obtaining the CSI data can be time consuming and difficult. These data are protected under the Health Insurance Portability and Accountability Act and as such require adherence to patient privacy standards and institutional review board permission to access. In other words, the data are not readily accessible. Despite many fields being available, we have found that many fields are left incomplete. In this analysis, missing data was particularly problematic for race and ethnic information. Another limitation is the timeliness of the data. As of December 2013, 43 of 59 county/reporting entities were in compliance with the regulatory 60-day CSI data reporting requirement. Five counties did not meet the 60-day reporting requirement by more than 4 months.

Recommendations:

We recommend the following actions be discussed, prioritized, and implemented by the following state agencies, including the Health and Human Services Agency, the California Department of Health Care Services (DHCS), the Department of Public Health (DPH) including the Office of Health Equity (OHE), the Office of Statewide Health Planning and Development (OSHPD), and the Mental Health Services Act Oversight and Accountability Commission (MHSOAC); and county departments of mental health to effectively reduce disparities in

unserved, underserved, and inappropriately served communities and improve mental health outcomes in MHSA-related and non-related programs.

- Counties should provide training to county CSI staff on the use of their electronic systems to ensure more accurate data collected by the CSI system. This would emphasize CSI data codes overall and strong attention to the collection of race and sex data to improve both the completeness and accuracy of the data.
- The State (DHCS) may consider providing additional assistance to counties who are having difficulties with timely delivery of the CSI Submission file to the state. Such counties may need technical assistance or human resources to meet the 60-day regulatory requirement.
- The State (DHCS and DPH OHE) should clarify the meaning of sex versus gender in the CSI data dictionary.
- The State (DHCS and DPH OHE) should consider forming a work group to examine the potential for developing a category that clarifies coding that is currently relegated to the 'unknown' or 'other' sex headings. According to the CSI Data Dictionary, the 'other' category includes: "gender changes, undetermined gender and persons with congenital abnormalities which obscure gender identification." By further disaggregating the 'other' category, future disparities work related to sex and gender disparities could be accomplished. The unknown sex category should be reserved for missing data.
- Counties should improve the collection of race and ethnicity data with regard to standardization.
- The State (DHCS and DPH OHE) should clarify the use of Hispanic as a race or ethnicity. The commonly used standard for data on race and ethnicity comes from the Office of Management and Budget (OMB). In their 2003 revision to the federal standards related to classification of race and ethnicity data, they support five race categories (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White) and two ethnic categories (Hispanic or Latino and Not Hispanic or Latino). While counties may elect to include more racial and/or ethnic subgroups for their own analytic purposes, all subgroups should be mapped/cross-walked to the five race and two ethnic categories set forth by OMB.
- Counties should collect data on the client's residence (at least county of residence). This will likely require the State (DHCS and DPH OHE) to make an addition to the data dictionary and the counties to code the data accordingly.
- Counties should ensure that the collection of client language data is performed consistently to improve the completeness of that data field.

California Health Interview Survey (CHIS) Data

The California Health Interview Survey is the nation's largest state health survey and serves as an important source of data on Californian's as well as on the state's various racial and ethnic groups. CHIS is a random digit dial telephone survey (landline and cellular telephone numbers) that asks questions on a wide range of health topics, including health status, health conditions, health-related behaviors, health insurance coverage, access to health care services, mental health, and other health and health-related issues. The survey began in 2001 with reports generated every other year. Data were collected over a 9-month period within each 2-year cycle. Then, beginning with the 2011-2012 cycle, data collection became continuous – with the intention of providing estimates for the data each year. CHIS is a collaborative project of the University of California, Los Angeles Center for Health Policy Research, the California Department of Public Health, and the Department of Health Care Services among others. Westat, a large research and statistical survey organization, is responsible for data collection. The CHIS website provides detailed information on sampling, response rates, survey questions and more (<http://healthpolicy.ucla.edu/chis>).

Promise:

CHIS is the largest statewide survey in the United States and contains a large section on mental health. Thirty-two questions cover a range of topics, including: mental health assessment, disability due to a mental health problem, access to care and utilization of services in mental health, and stigma. While the full range of survey questions is available at the website noted above, the mental health assessment questions ask about feeling nervous, hopeless, restless, and/or depressed. They also ask about whether everything is an effort, if the respondent has feelings of worthlessness, and the questions address the frequency and duration of such feelings. Since each survey respondent is geocoded (their location is plotted with map coordinates), it becomes possible to perform analyses at local geographies (e.g. smaller than a county and perhaps more reflective of a neighborhood). The survey is also customizable. As the mental health care environment changes, new questions of interest may arise and could be incorporated into the CHIS for a fee. This allows stakeholders the opportunity to get the answers that are needed to further improve access to mental health services in California.

Limitations:

While customization is a significant benefit of CHIS, the addition of some questions (and changes in funding) may lead to other questions changing or being dropped from the survey. In the University of California Davis' Center for the Reduction of Health Disparities work evaluating the Mental Health Services Act (MHSA), this problem occurred. Because the California Health Interview Survey is constantly evolving and changing, our ability to measure mental health needs consistently over time, and across all counties, was impaired.

Another notable limitation with CHIS is the poor response rate to the survey (2005: 29.6%, 2007: 21.1%, 2009: 19.7%, 2011-2012: 17.0%). This challenge is further complicated by the fact that many people have eliminated their land lines and can therefore not participate in the

survey. The principal investigators of the California Health Interview Survey at the University of California Los Angeles have been working to update the survey methods to increase the survey's ability to contact cell phone users in California. However, this is a costly change and CHIS is currently underfunded¹. Finally, depending on the level of aggregation needed for CHIS data (i.e. whether public data use files or confidential files are needed for an analysis), it can be difficult to obtain. To use the CHIS confidential data files, one must obtain traditional IRB approval and then work with the UCLA Center for Health Policy Research Data Access Center (DAC) to obtain their permission to use the confidential CHIS data. Once approval has been granted, the researcher can:

- 1) Use the programming services of the Center's Statistical Support and Programming unit (at a cost).
- 2) Write their own programming code that can be e-mailed to the DAC programmers.

In either case, the researcher will generally receive data results, not the raw data. If the researcher wishes to conduct follow up analysis and explore results by testing other hypotheses in the data, he/she may encounter a time-consuming process in back and forth communication with the DAC.

Recommendations:

- For important questions concerning mental health needs and supports contained in the CHIS, MHSOAC and other mental health stakeholders should consider providing financial support to ensure that those questions do not change which would limit trending types of analysis. In particular, the use of the Kessler-6 and the Sheehan Disability Score to evaluate mental health needs in Californians may be of ongoing interest as they facilitate the calculation of an index of mental health need in California that can be disaggregated by age group, sex, racial and ethnic groups and geography.
- The California Department of Public Health has access to the California Health Interview Survey through a computer placed in the Center for Health Statistics and Informatics at 1501 Capitol Ave, Sacramento, CA 95814. This resource is rarely used for access to CHIS data, but has the potential to make data access much easier and faster for government entities that may have inter-agency agreements, memorandums of understanding or some other partnership agreement with UCLA allowing them access to the data. Not only could the fees associated with the DAC statistical support services be avoided, but the ability to explore study results and generate hypothesis could be facilitated by an 'in-person' option rather than the 'e-mail' communication strategy employed by UCLA's DAC listed above. We recommend that a collaborative including UCLA, CDPH and DHCS review of the feasibility of using that resource.

¹ For a review of CHIS funders, please go to: <http://healthpolicy.ucla.edu/chis/about/Pages/funds.aspx>

Cultural Competence Plans (CCPs)

The Department of Mental Health (DMH) issued the first ever statewide Cultural Competence Plan requirements on October of 1997, as an addendum to the implementation plans of *Phase II of the Medi-Cal Consolidation of Specialty Mental Health Services*. The CCP requirements were added to state statute under Title 9, Rehabilitative and Developmental Services, Division 1, DMH, Chapter 11, Medi-Cal Specialty Mental Health Services, Article 4, Section 1810.410, culture and linguistic requirements. It states “*County mental health shall develop and implement cultural competence plans and submit these plans to DMH for review and approval.*” This statute addressed the requirements in the federal waiver.

The overall goals of the CCP requirements were to:

- 1) Establish standards and requirements to create consistency in the reporting of data on cultural competency. This drive toward consistency was designed to facilitate the California DMH in its capacity to monitor improvements in the creation of more culturally and linguistically competent county mental health systems over time.
- 2) Improve access and the quality of care in mental health services for underserved racially and ethnically diverse Medi-Cal beneficiaries.

Promise:

Accompanying the CCPs, instructional documents were made available to counties in an effort to clarify and standardize the data compilation and reporting process. However, based on review of CCPs and related tables, it appears instructions were not presented in a way that assured consistent, reporting across all 58 counties. Further, the instructions did not always encourage use of identical data sources and consistent reporting categories across all 58 counties. Standardized data collection and analysis procedures would benefit all counties and the state by ensuring that information is shareable, the results are reproducible, and that findings can be compared across counties.

Limitations:

Inconsistent collection of demographic data (general, Medi-Cal, Community Services and Supports, and Department of Finance) is an important problem since it is the denominator on which all rates and subsequent decisions are made. The bulk of the report is overly narrative, making it difficult to draw usable data from the report. We found that the CCPs can be incomplete for many counties in a number of sections. It is unclear whether this is because resources are limited or instructions are difficult or vague. It is also unclear how one should make decisions based on the collected data (e.g., populations to target for disparity reduction).

Recommendations:

Again, we recommend the following actions be discussed, prioritized, and implemented by DHCS, DPH OHE, OSHPD and the MHSOAC; and county departments of mental health to

effectively reduce disparities in unserved, underserved, and inappropriately served communities and improve mental health outcomes in MHSA-related and non-related programs.

- The State (DHCS in collaboration with DPH OHE, and MHSOAC) should provide boilerplate/templates for county CCPs for the data entry component – especially related to demographic data. There is the potential to insert hyperlinks into the template to ensure standardized demographic data collection.
- The State (DHCS in collaboration with DPH OHE, and MHSOAC) should streamline the length and required tables for CCPs in order to have counties focus on provision of the most essential data, data tables, targets, and commentary.
- The State (DHCS DHCS in collaboration with DPH OHE) should also provide technical assistance to counties during data collection, targeting processes, report writing, and processes to effectively address local mental health service disparities. Technical assistance could include but would not be limited to: guidance on use of report templates, use of hyperlinks to data sources within report templates, streamlined and focused targeting techniques, data collection, data compilation, data management, and quality improvement in evaluation activities.

Demographic Data – the U.S. Census

The U.S. Census Bureau's American Community Survey (ACS) began producing intercensal population estimates with the year 2005 to provide communities with more current data than the decennial census. The ACS is a continuous survey that relies on a smaller population sample than the 100% sample employed by the decennial census and thus provides estimates of population data. Estimates provided are considered stable for single years in communities with >65,000 population (adequate for most but not all California counties). Three years of data are combined to create estimates for areas with populations with 20,000 or more and five-year estimates are required to reduce the margin of error for populations with fewer than 20,000 individuals. Since this study was conducted at the county, region and state levels and included a study period beginning in 2005, one year estimates were used.

Promise:

The U.S. Census, including the decennial census as well as the American Community Survey is a trusted source for information and has been considered the 'gold standard' or highest level of truth for the decennial 100% population count. In addition, the U.S. Census has a relatively user friendly website for searching demographic data. The data from this site are free.

Limitations:

When using the ACS data access website for intercensal years, it became clear that several small and rural CA counties did not have data. In fact, eighteen counties in California had populations too small (fewer than 65,000 individuals) to be included in the ACS 1-year estimates for 2005-2012. The table below lists counties with no 1-year ACS data available.

County	County
Alpine	Modoc
Amador	Mono
Calaveras	Plumas
Colusa	San Benito
Del Norte	Sierra
Glenn	Siskiyou
Inyo	Tehama
Lassen	Tuolumne
Mariposa	Trinity

Even when data are reported by the U.S. Census, using the American Community Survey, users need to be aware of the 'MOE' or Margin of Error data that comes with the reported demographic data. If one does not review the MOE, it is possible that the population estimates they are using may have a low level of accuracy and should not be trusted. While the U.S. Census has improved timeliness in the preparation and delivery of their data for the country, there remains a 9-13+ month delay.

Demographic Data – the California Department of Finance (DOF)

The Demographic Research Unit of the California Department of Finance is designated as the single official source of demographic data for state planning and budgeting. The staff in this unit provide research and analysis and produce current population estimates as well as future projections for the California population. The State Data Center (SDC) in this unit is a central point for dissemination of census data in California and works to improve public and county access to census data products and services.

Promise:

The DOF, like the U.S. Census, is a trusted source of demographic information. In fact, for intercensal years and for small/rural counties, the DOF estimates may be more accurate, as they take into consideration county level data for births, deaths, and migration.

Limitations:

Much of the work of the DOF is dependent on U.S. Census data. So it is likely that the timeliness of the data may be compromised with the additional data preparation time. The searchability of the DOF data is also more cumbersome than the U.S. Census data. However, if one is able to work well with pivot tables in Microsoft Excel, it is possible to analyze DOF data quickly.

Recommendations for US Census Data and DOF Data:

- Counties and state entities should use the DOF data whenever possible, and especially if engaging in county or smaller geographies. These data are likely to be more available and reliable. In addition, the DOF offers more accessible personal services than the U.S. Census Bureau.
- The State (DHCS) should create decision rules/guidelines for alternate (non DOF) demographic data sources (based on timing of data needs and completeness of the data). In other words, for decennial census data, the best source of data may be the U.S. Census Bureau since it will probably be the first release, if timing is an issue. For intercensal 1-year estimates, DOF data is likely a better data choice.
- If using ACS data, the counties should review the margins of error to ensure that data are reasonably accurate. Processes can be learned via publications from the U.S. Census Bureau or free courses offered by the California DOF.

Conclusion

This report reviews five quantitative data sources used in the analysis of the MHSA's impact on reducing disparities in access to county provided mental health treatment in California. Each data source was introduced and then reviewed for its potential and its limitations. Finally, recommendations for each dataset were made. While multiple aspects of each dataset were considered, the overall review focused on issues of data quality which may be defined as those essential characteristics that determine the reliability of a dataset for making decisions. The following components of data quality were assessed:

- Completeness: all relevant data are there. There are few to no missing data fields.
- Accuracy: misspellings, typos and random abbreviations have been cleaned up.
- Availability: data are accessible on demand.
- Timeliness: up-to-date information is readily available to support decisions.

The table below summarizes how well (using a low, medium, and high level scale) each data source adheres to the above listed quality criteria based on this research team's review and experience.

Data Source	Complete	Accurate	Available	Timely	Overall Quality
Client Services Information (CSI)	Low	Med	Low	Med	Low-Med
CA Health Interview Survey (CHIS)	High	High	Low	Med	Med
Cultural Competence Plans (CCP)	Med	Med	High	Low	Med
U.S. Census	High	High	High	Med	High
Department of Finance (DOF)	High	High	Med	Med	Med-High