California's Community Mental Health Performance Outcome Report

Fiscal Year 2001 - 2002

A Report to the Legislature in Response to

AB 1288, Bronzan
Chapter 89, Statutes of 1991

(Welfare and Institutions Code Section 5613)

CALIFORNIA DEPARTMENT OF
Mental Health

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EXECUTIVE SUMMARY

This document provides data on county performance in response to AB 1288, Bronzan (Chapter 89, Statutes of 1991), Welfare and Institutions Code (WIC) 5613, and integrates performance measure results into DMH's quality improvement perspective.

A total of 595,405 consumers were served through California public sector mental health agencies during FY 2001-02. This number includes over 197,000 adults with serious mental illness and over 106,000 children with serious emotional disturbance.

The major findings are as follows:

1. Results of comparisons among consumer populations and the general California population reflect relative differences with regard to age group, gender, ethnicity, and severity of mental health problem. These differences are likely to be a function of service access and referral, mental illness prevalence, culture-specific issues, and individual consumer propensity toward service utilization.

2. Assessment results showed substantial consumer improvement.
    - Results obtained from clinician assessments, and caregiver and youth self-reports show that youth with severe impairment (measured during FY 2000-01) improved during FY 2001-02. Tables 1 & 2 show the percent improvement in youth functioning across a number of dimensions.

Table 1.

% of Severely Impaired Youth Who Improved in:								
	School	Home	Community	Behavior Toward Others	Moods & Emotions	Self-Harmful Behavior	Substance Use	Thought Problems
Clinician Report	**62.5%**	**64.9%**	**73.6%**	**80.0%**	**78.4%**	**86.1%**	**69.3%**	**79.5%**

Table 2.

% of Severely Impaired Youth Who Improved in:			
	Internalizing Problems (e.g., withdrawal, somatic complaints, anxiety/depression)	Externalizing Problems (e.g., delinquency, aggressive behavior)	Competency (e.g., sports, relationships, school functioning)
Caregiver Report	**72.9%**	**70.4%**	**64.6%**
Youth Report	**83.1%**	**76.5%**	**74.0%**

- Adult consumers with serious mental illness reported statistically significant improvement between fiscal years for the following quality of life indicators:
    - general life satisfaction
    - living situation
    - daily activities and functioning
    - family and social relationships
    - finances
    - work and school
    - legal and safety issues
    - health

3. Consumer satisfaction results indicate that:
    - A large majority of youth consumers' caregivers (86.6%) were satisfied with services overall.
    - A large majority of adult consumers were satisfied with access to services (87.1%), appropriateness of care (87.9%), outcomes of services (68.6%) and services generally (89.1%).

The service utilization information, as well as the clinician, consumer and caregiver outcome data presented in this report are used in the quality improvement process to identify types, duration, intensity and combination of services that effectively and efficiently impact mental illness. An enhanced evaluation approach that is itself part of the quality improvement process is being designed to include a combination of broad-based investigation, special studies, and inter-agency data sharing.

ISSUE STATEMENT

This document is a report to the Legislature as required by AB1288 (Bronzan, Chapter 89, Statutes of 1991), WIC Section 5613 which requires the following:

> *The Director of Mental Health shall annually make available to the Legislature data on county performance with regard to the performance measures established pursuant to WIC Section* 5612.

BACKGROUND

DMH oversees public sector mental health service delivery throughout the State of California. State, county and community-level mental health service delivery organizations are expected to demonstrate accountability for the receipt of mental health service dollars by providing appropriate, cost-effective, and efficient solutions for individuals with serious mental illness, and those at risk for serious emotional, and consequent functional impairment.

DMH views accountability as a critical component in achieving its mission. The Department is accountable to all stakeholders, including the California Legislature, consumers and their family members, taxpayers, communities, funding agencies, and service providers - and is dedicated to achieving a balance in addressing stakeholder priorities. Fiscal, administrative and service oversight is accomplished through the work of multiple entities within (and in affiliation with) DMH. DMH Performance Outcomes, Medi-Cal Oversight, and Technical Assistance and Training Units, Fiscal Auditors, State Quality Improvement Council, California Mental Health Planning Council, and local (county) mental health boards and commissions all have a role in the establishment of performance indicators and assurance of accountability.

These various entities report their respective findings and accomplishments as directed by legislative statutes and/or regulations. This annual report to the Legislature is in response to Chapter 89, Statutes of 1991, WIC 5613. However, it is the intent of DMH that its organization units and other participants in the performance outcome evaluation process work together to provide a comprehensive evaluation of the California mental health system. Therefore, this document integrates county performance outcome results into the larger, Departmental quality improvement effort regarding the evaluation of the service system and consumer outcomes.

DMH is encouraged by its most recent efforts and steps to ensure accountability for mental health funds. This report presents currently available performance results and highlights the Department's future directions that are the outgrowth of past experience. New methods emphasize a continuous quality improvement perspective, and enhancements in consumer outcome measurements that include special studies.

OBJECTIVE

The objective of this Annual Report is to provide the Legislature with detailed information regarding the results of performance outcome measurements in accordance with WIC Section 5613.

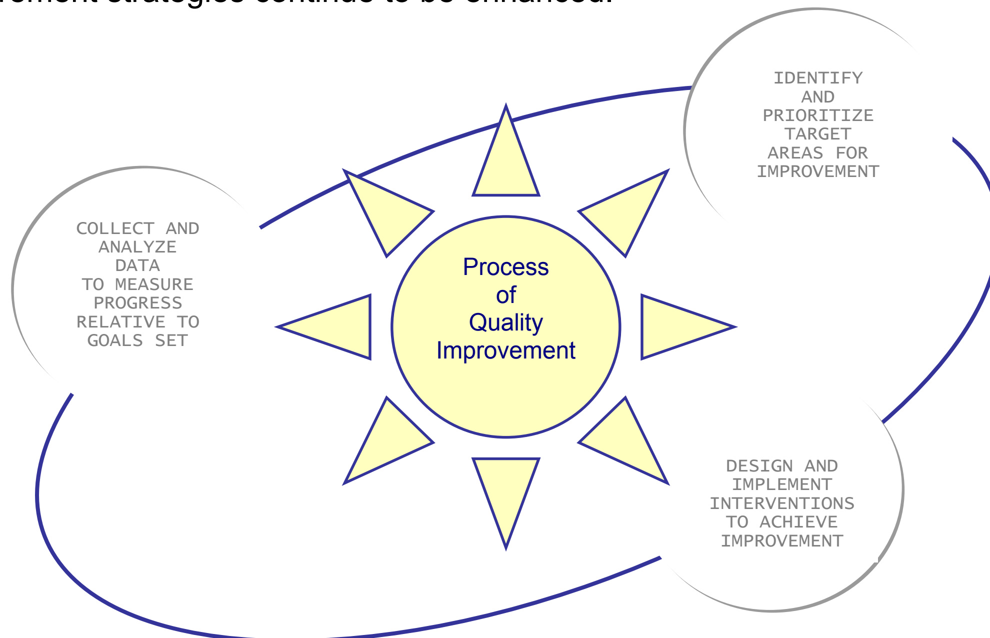
STUDY METHODOLOGY

Quality Improvement Process

The performance of multiple aspects of a mental health system must be evaluated within a quality improvement process. There are a number of mental health service performance indicators that have been traditionally classified into the following domains: (1) *Structure* (e.g., mental health system resources - service types and cost), (2) *Access* (e.g., mental health services utilization - penetration rates, service availability), (3) *Process* (e.g., appropriateness of mental health services for presenting condition, consumer satisfaction) and (4) *Outcomes* (e.g., results of treatment, improvement).

Currently, the Institute of Medicine (IOM) of the National Academy of Sciences is calling for the healthcare system to achieve six aims: care should be safe, effective, patient-centered, timely, efficient and effective.[1] Because these aims represent values that are generally viewed as critical for system success, DMH is investigating the feasibility of adopting the IOM aims to help guide its quality improvement and performance measurement activities.

The diagram below provides a framework within which interventions and progress with regard to the above performance indicators and aims may be tracked. Data with respect to performance are collected, and results are used to inform future quality improvement strategies. The effectiveness of those strategies is in turn evaluated, and the process continues. Assessment of the success of strategies and the implementation of new interventions is continuous, resulting in a quality improvement process that informs mental health service delivery and administration. The process of performance measurement is itself part of the process of quality improvement, as performance measurement strategies continue to be enhanced.



Specific methods for evaluation of progress with respect to performance indicators and aims currently include the exploration of consumer services utilization data captured through the statewide Client Services Information (CSI) system as well as consumer-based outcomes and satisfaction survey administration. The CSI system captures large-scale consumer demographic and service utilization data and is particularly important for the assessment of mental health system-wide indicators (e.g., capacity, access), while consumer and clinician survey data provide greater detail on service outcomes e.g., effectiveness and satisfaction. However, consumer-based data can to some extent be used to assess larger system indicators, and vice versa.

[1] *Crossing the Quality Chasm: A New Health System for the 21st Century*, Institute of Medicine, National Academy of Sciences, 2001.

Data capture methods reflect procedures stipulated in the performance outcome report for FY 2000-01 previously submitted to the Legislature. In order to provide a more focused presentation of results and future directions for the current report, specific data collection methods are presented in the Appendix. Methodological details may also be found in the performance outcome data system training manuals on line at http://www.dmh.ca.gov/rpod/PDF/Child-Training-Manual.pdf *and* http://www.dmh.ca.gov/rpod/PDF/Adult-Manual.pdf.
In the "Findings" section that follows, specific methods that inform results are noted.

FINDINGS

This section provides a description of the mental health services consumer population served in FY 2001-02 in the context of general population characteristics and the responsibilities of the public mental health services system. Performance outcome survey results on consumer improvement and satisfaction are also presented. Findings are interpreted within the quality improvement process and in light of existing knowledge with regard to service utilization and delivery.

Description of Consumers

California's public sector mental health system primarily targets individuals with serious mental illness and children at risk for serious mental illness. The number of seriously impaired consumers grows as population increases; the annual prevalence rates of serious disorders are approximately 5.4% for adults and 9-13% for children.[1] Over 197,000 adult consumers with severe mental illness (SMI) and over 106,000 children with serious emotional disturbance (SED) were served in the California public mental health system in FY 2001-02. These numbers indicate that over half of the total number of consumers (595,405) served through public sector mental health agencies in California is seriously impaired.

Public sector mental health outcomes assessments have typically been designed to target consumers who utilize numerous services for long periods of time, and are most costly to the service system. The public services system has a primary obligation to serve the ever-increasing number of consumers with the most severe conditions because other alternatives for these individuals may be scarce or non-existent.

The following tables show descriptive (age category, gender, ethnicity, and primary diagnosis) information for the (1) total adult consumer population and adults with SMI, and the (2) total children's services population and those with SED served through the public mental health system in FY 2001-02. The SMI and SED consumer information presented in the tables that follow reflects consumers who have been in services for at least 60 days and received at least four services within that time frame. The four

[1] Based on the rate of 5.4% published in Federal Register 64, No. 121 (June 24, 1999: 33895) and Friedman, R.M., Katz-Leavy, J.W., Manderscheid, R.W. & Sondheimer, D.L. (1998). Prevalence of serious emotional disturbance in children and adolescents. In Manderscheid, R.W. and Sonnenschein, M.A., (Eds.), *Mental Health, United States, 1998* (pp. 110-112). Washington, D.C.: U.S. Govt. Printing Office.

services include at least one service (e.g., therapy, case management, etc.) that is other than a medication visit.

The tables also present California demographic information[1] that is available for gender, ethnicity and age categories, and provides comparisons among the mental health services populations and the general population. Efforts are continually applied to increase service delivery relative to mental health services need in the population and consumer desire for services. Estimating consumer need and desire for services is a complex undertaking and involves the application of research findings on mental illness prevalence rates and consideration of other consumer-specific service utilization issues (some of which are addressed below). However, demographic information on the general population provides a basis for better understanding the service population with respect to the general population and provides a guide for mental health system strategic planning.

Age

Table 1.	Consumers Served in FY 2001-2002					
Age Category	**General Mental Health Services Consumer Population** (All consumers by age group)		**Severely impaired Consumer Population** (SMI and SED consumers by age group)		**California Population (Census 2000)**	
	Number	***Percent of total consumers served***	**Number**	***Percent of seriously impaired consumers served***	**Number**	***Percent of total population***
Youth (ages 0-17)	177,251	*29.8%*	106,243	*35.0%*	9,249,829	*27.3%*
Adults (ages 18-65)	398,841	*67.0%*	188,633	*62.2%*	21,026,161	*62.1%*
Older Adults (ages > 65)	19,313	*3.2%*	8,582	*2.8%*	3,595,658	*10.6%*
Total	595,405	*100%*	303,458	*100%*	33,871,648	*100%*

[1] Census 2000 information obtained from the California Department of Finance.

Age data (as shown in Table 1) suggests that children make up a greater percentage of the severely impaired consumer population than the general services population. As compared to the census 2000 state population, children are slightly over-represented, and older adults are slightly under-represented in the service populations. Adults are similarly represented in the SMI and state population, but comparatively over-represented in the general services population. These relative service utilization percentages are partially corroborated by mental disorder prevalence information. That is, a larger percentage of children in the general population are expected to have serious emotional disturbance (9-13%) as compared to the percentage of adults in the general population with serious mental illness (5.4%). Also, the prevalence rate of any mental illness in adults is slightly higher (23.0%) than the prevalence rate of any emotional disturbance in children (20.9%),[1] which may somewhat explain the comparatively larger percentage of adults in the general services population. Older adult percentage comparisons are less well informed by prevalence statistics. However, the lower percentage of older adults in the service populations as compared to the general population may be explained by the fact that many older adults with mental illness, due to physical and cognitive difficulties, are served through agencies other than mental health. Additionally, older adult dependency on Medicare has led to a reliance of this age group on primary healthcare to meet mental health needs, thus reducing the number of older adults in the public sector mental health system.

Gender

The percentages of males and females are currently similar in the general population, but differ considerably in the service populations. Table 2 shows that for children's services (both SED children and the general children's services population), the percentage of males exceeds the percentage of females by as much as 25.5%. For the adult services population (shown in Table 3), the reverse is true; that is, the percentage of females is greater than males (by as much as 11.3%). Gender differences in service utilization may be influenced by the fact that emotional disorders in children that are exhibited externally (e.g., aggressive acting out, delinquency) are, due to their disruptive nature, more likely to come to the attention of mental health professionals than those that are more internal (e.g., withdrawal, depression). Externalizing symptoms are more typically exhibited by boys and internalizing symptoms by girls (although all symptoms are exhibited to some extent in all youth). The opposite picture in adults may represent the fact that women are typically more likely to verbalize emotional distress and seek services than men.

[1] Shaffer, D., et al., (1996a). The NIMH Diagnostic Interview Schedule for Children, Version 2.3 (DISC-2.3): Description, acceptability, prevalence rates, and performance in the MECA Study. Methods for the Epidemiology of Child and Adolescent Mental Disorders Study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 865-877 and Kessler, R.C., et al. The 12-month prevalence and correlates of serious mental illness, In Manderscheid, R.W., and Henderson, M.J. (1998). *Mental Health, United States*, 1996. Washington, D.C., Supt. of Documents, Government Printing Office.

Table 2.	**Youth Served in FY 2001-2002**				**California Population (Census 2000-Youth)**	
Gender	**All Youth Served**		**SED Youth Served**			
	Number	***Percent***	**Number**	***Percent***	**Number**	***Percent***
Female	67,558	*38.1%*	39,534	*37.2%*	4,505,291	*48.7%*
Male	109,566	*61.8%*	66,640	*62.7%*	4,744,538	*51.3%*
Other/Unknown	127	*0.1%*	69	*0.1%*	0	*0.0%*
Total	177,251	*100%*	106,243	*100%*	9,249,829	*100%*

Table 3.	**Adults Served in FY 2001-2002**				**California Population (Census 2000–Adults)**	
Gender	**All Adults Served**		**SMI Adults Served**			
	Number	***Percent***	**Number**	***Percent***	**Number**	***Percent***
Female	221,517	*53.0%*	109,709	*55.6%*	12,491,465	*50.7%*
Male	196,281	*46.9%*	87,363	*44.3%*	12,130,354	*49.3%*
Other/Unknown	356	*0.1%*	143	*0.1%*	0	*0.0%*
Total	418,154	*100%*	197,215	*100%*	24,621,819	*100%*

Race / Ethnicity

Tables 4 and 5, below, show differences in relative percentages of race/ethnicity groups in the mental health services populations versus the general state population. Most notable are the lower percentages of Hispanic and Asian/Pacific Islander consumers and higher percentages of African-American consumers (both children and adults) that are in the services populations relative to their percentages in the general population. These percentage differences are likely to be a function of a number of variables, including access to services and cultural competency of service providers, as well as culture-specific and individual consumer propensity toward service utilization.

Table 4.	**Youth Served in FY 2001-2002**				**California Population (Census 2000-Youth)**	
Race/Ethnicity	**All Youth**		**SED Youth**			
	Number	***Percent***	**Number**	***Percent***	**Number**	***Percent***
White	63,622	*35.9%*	39,489	*37.2%*	3,222,858	*34.8%*
Hispanic	55,870	*31.5%*	32,145	*30.3%*	4,050,825	*43.8%*
African-American	33,458	*18.9%*	21,439	*20.2%*	653,820	*7.1%*
Asian/PI	6,340	*3.6%*	3,918	*3.7%*	887,553	*9.6%*
Native American	2,053	*1.2%*	1,271	*1.2%*	49,112	*0.5%*
Other/Unknown	15,908	*9.0%*	7,981	*7.5%*	385,661	*4.2%*
Total	177,251	*100%*[1]	106,243	*100%*[1]	9,249,829	*100%*

[1] Total percentage may not equal precisely 100% due to rounding.

Table 5.	**Adults Served in FY 2001-2002**				**California Population (Census 2000–Adults)**	
Race/Ethnicity	**All Adults Served**		**SMI Adults Served**			
	Number	***Percent***	**Number**	***Percent***	**Number**	***Percent***
White	203,453	*48.7%*	96,741	*49.1%*	12,593,932	*51.2%*
Hispanic	79,033	*18.9%*	36,438	*18.5%*	6,915,731	*28.1%*
African-American	68,788	*16.5%*	31,115	*15.8%*	1,528,106	*6.2%*
Asian/PI	29,806	*7.1%*	16,393	*8.3%*	2,865,043	*11.6%*
Native American	3,895	*0.9%*	2,018	*1.0%*	129,872	*0.5%*
Other/Unknown	33,179	*7.9%*	14,510	*7.5%*	589,135	*2.4%*
Total	418,154	*100%*	197,215	*100%*[1]	24,621,819	*100%*

Mental Disorder Diagnosis

The diagnostic information presented in Tables 6 and 7, below, demonstrates differences in the children's versus adult services populations, and in the general services population versus those identified as more serious (i.e., SMI adult and SED children). The most prevalent diagnoses for the children's services population (both the general children's services population and SED children) are the major childhood disorders [e.g., attention deficit/hyperactivity disorder (ADHD) and conduct disorder], depressive disorders, and adjustment disorders. For the adult services population (both the general adult services and the SMI adult population) the most prevalent diagnoses are depressive, schizophrenia, and bipolar/mood disorders. These data provide evidence that emotional and psychiatric conditions are exhibited differently in children and adults. As a result, DMH uses different service performance and consumer outcome indicators for the different populations (see "improvement" sections below).

[1] Total percentage may not equal precisely 100% due to rounding.

Table 6.	Youth Served in FY 2001-2002			
Diagnosis	**All Youth**		**SED Youth**	
	Number	***Percent***	**Number**	***Percent***
ADHD / ADD	24,933	*14.1%*	17,443	*16.4%*
Conduct	28,024	*15.8%*	18,058	*17.0%*
Other Childhood Disorders	6,172	*3.5%*	3,561	*3.4%*
Depressive	32,183	*18.2%*	20,682	*19.5%*
Bipolar & Mood	5,181	*2.9%*	3,530	*3.3%*
Anxiety	7,052	*4.0%*	4,922	*4.6%*
Schizophrenia	721	*0.4%*	554	*0.5%*
Dissociative	8,651	*4.9%*	6,290	*5.9%*
Adjustment	27,967	*15.8%*	14,740	*13.9%*
Substance Abuse[1]	1,163	*0.7%*	450	*0.4%*
Other[2]	8,657	*4.9%*	5,084	*4.8%*
Uncategorized/ Deferred	26,547	*15.0%*	10,929	*10.3%*
Total	177,251	*100%*[3]	106,243	*100%*

[1] Although the percentage of consumers with a primary substance abuse diagnosis is low, many have co-occurring substance problems that are the focus of clinical attention, and are diagnosed separately as a secondary diagnosis.

[2] Other includes: Delirium, dementia, amnestic and other cognitive disorders, mental disorders due to a general medical condition, somatoform disorders, factitious disorders, sexual and gender identity disorders, eating and sleep disorders, impulse-control disorders not elsewhere classified, and personality disorders, as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington, DC, American Psychiatric Association, 2000.

[3] Total percentage may not equal precisely 100% due to rounding.

Table 7.	**Adults Served in FY 2001-2002**			
Diagnosis	**All Adults**		**SMI Adults**	
	Number	***Percent***	**Number**	***Percent***
ADHD / ADD	1,420	*0.3%*	668	*0.3%*
Conduct	1,424	*0.3%*	660	*0.3%*
Other Childhood Disorders	1,330	*0.3%*	529	*0.3%*
Depressive	119,726	*28.6%*	60,695	*30.8%*
Bipolar & Mood	51,541	*12.3%*	25,945	*13.2%*
Anxiety	17,298	*4.1%*	8,060	*4.1%*
Schizophrenia	66,916	*16.0%*	45,886	*23.3%*
Dissociative	10,135	*2.4%*	5,532	*2.8%*
Adjustment	25,313	*6.1%*	6,443	*3.3%*
Substance Abuse[1]	20,646	*4.9%*	4,349	*2.2%*
Other[2]	45,518	*10.9%*	18,448	*9.4%*
Uncategorized/ Deferred	56,887	*13.6%*	20,000	*10.1%*
Total	418,154	*100%*[3]	197,215	*100%*[3]

Although all diagnostic categories are represented to some extent in the general services population and the serious populations of child and adult consumers, the more

[1] Although the percentage of consumers with a primary substance abuse diagnosis is low, many have co-occurring substance problems that are the focus of clinical attention, and are diagnosed separately as a secondary diagnosis.

[2] Other includes: Delirium, dementia, amnestic and other cognitive disorders, mental disorders due to a general medical condition, somatoform disorders, factitious disorders, sexual and gender identity disorders, eating and sleep disorders, impulse-control disorders not elsewhere classified, and personality disorders, as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision. Washington, DC, American Psychiatric Association, 2000).

[3] Total percentage may not equal precisely 100% due to rounding.

serious consumers (*as defined by the services criteria outlined above: four services within 60 days)* show more serious disturbance as assessed by diagnosis. For example, a lesser percentage of children in the SED population compared to the general child service population have adjustment disorders (which are considered less severe) and a greater percentage have major attention deficit/hyperactivity and depressive disorders. Similarly, for adults, the more severe conditions have greater representation in the SMI group; that is, the percentage of schizophrenic diagnoses is 7.3% higher for SMI adults than for the general adult service population, and the percentage of depressive and bipolar/mood disorders (also more serious conditions) are also slightly higher.

This information regarding differences between age groups and severity of disorders is particularly informative for program and service development. Diagnostic information alone does not itself completely dictate best-practice service delivery. Alternatively, consumer service utilization information in combination with diagnostic information may better predict what types/duration/milieu of services will best benefit particular consumers. Future approaches to performance outcome assessments that integrate multiple factors (such as diagnostic and service utilization information) are discussed further in the "Implementation/Conclusion" section of this report.

Consumer Improvement

Outcome results from a sample of child consumers with SED and adult consumers with SMI are presented below. Information was collected from treatment providers and consumers (and their caregivers, if consumers were less than 18 years of age) during FY 2000-01 and again in FY 2001-02 to assess improvement.

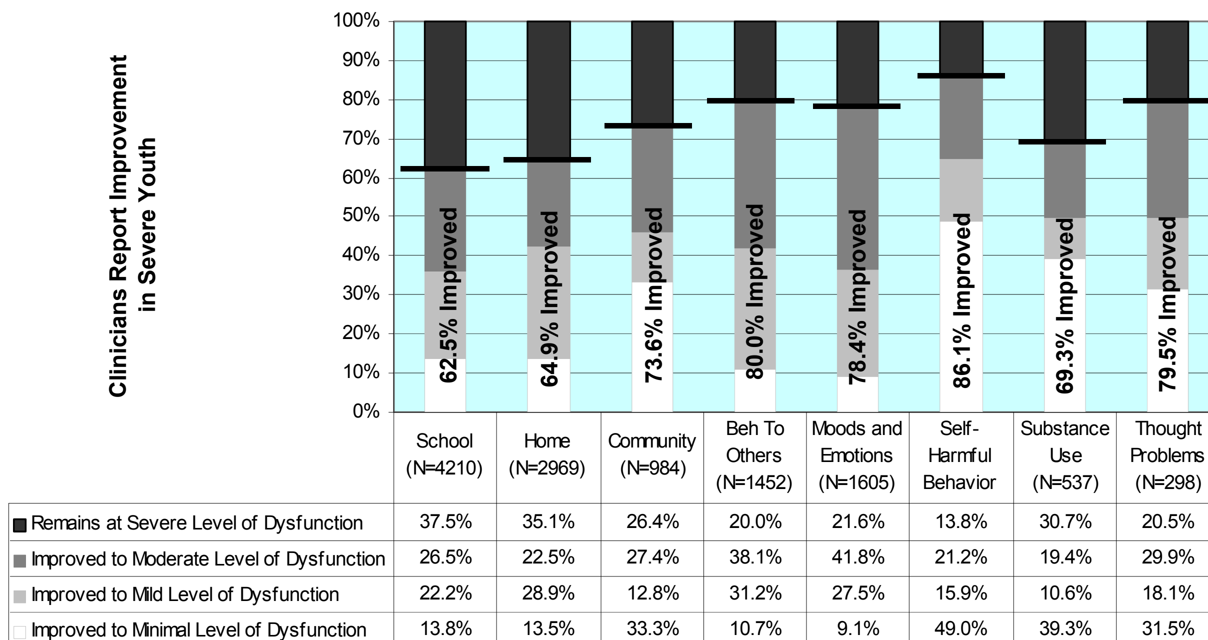
Youth Improvement:

The graph below (Figure 1) shows substantial improvement in functioning of severely impaired youth, across multiple areas of functioning (i.e., school, home, community, behavior toward others, moods and emotions, self-harmful behavior, substance use and thought problems.)[1] The data presented for each area of functioning represent youth who showed severe impairment in that specific area at assessment in FY 2000-01 (however, youth may have exhibited extreme impairment in multiple areas of functioning). The graph shows the percentage of youth that improved to moderate, mild, and minimal levels of dysfunction, as compared to those who remained at the severe level.[2] Depending on the area of impairment, 62.5% to 86.1% of youth showed improvement to a higher level of functioning. Services showed the greatest positive impact on self-harmful behaviors, behavior toward others, thought problems, and mood and emotions.

[1] Multiple areas of functioning were assessed using the Child and Adolescent Functional Assessment Scale (CAFAS). The CAFAS is a rating scale used by clinicians to indicate a consumer's general level of functioning. CAFAS scores can range from 0 (minimal impairment) to 30 (severe impairment) and are categorized into levels of dysfunction that demonstrate meaningful differences in functioning.

[2] The sum of the percentages may not equal precisely 100% due to rounding.

Figure 1.

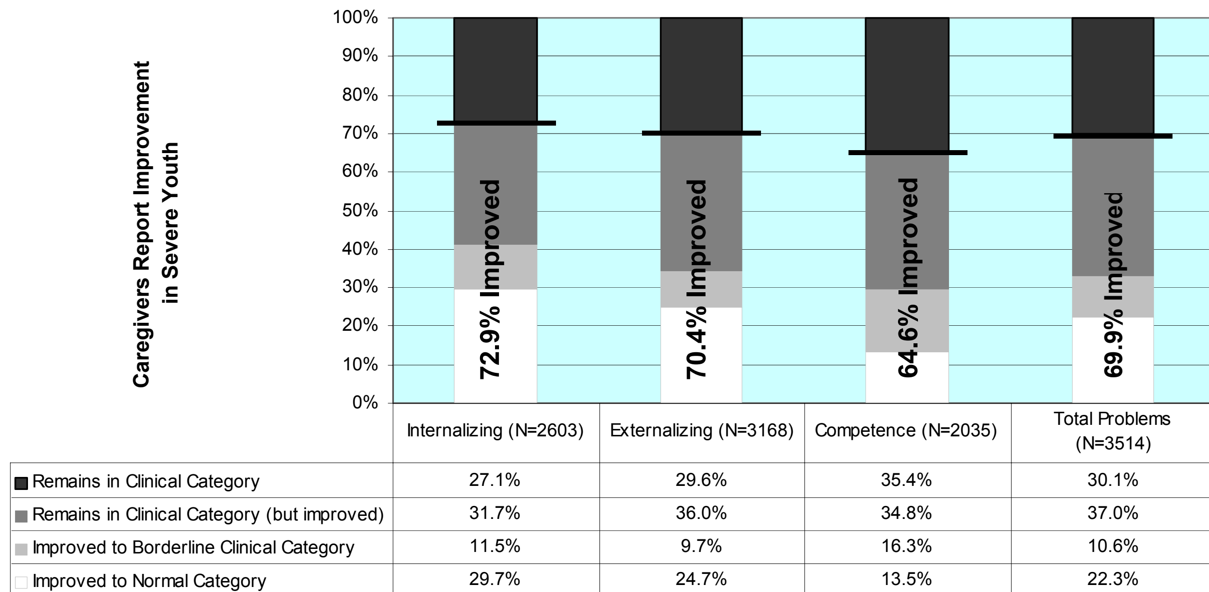


	School (N=4210)	Home (N=2969)	Community (N=984)	Beh To Others (N=1452)	Moods and Emotions (N=1605)	Self-Harmful Behavior	Substance Use (N=537)	Thought Problems (N=298)
Remains at Severe Level of Dysfunction	37.5%	35.1%	26.4%	20.0%	21.6%	13.8%	30.7%	20.5%
Improved to Moderate Level of Dysfunction	26.5%	22.5%	27.4%	38.1%	41.8%	21.2%	19.4%	29.9%
Improved to Mild Level of Dysfunction	22.2%	28.9%	12.8%	31.2%	27.5%	15.9%	10.6%	18.1%
Improved to Minimal Level of Dysfunction	13.8%	13.5%	33.3%	10.7%	9.1%	49.0%	39.3%	31.5%

Caregivers of youth, and youth themselves also reported substantial improvement in severe internalizing, externalizing and competence problems.[1] Consistent with the clinician-reported data in Figure 1, the caregiver and youth-reported results (presented below in Figures 2 and 3) for each problem area are for youth who showed severe, clinical-level problems in that specific area during the previous year's assessment. (Also, youth may have exhibited severe problems in multiple areas.) Figures 2 and 3 show the percentage of youth that improved within the clinical level, improved to a "borderline" clinical level, and improved to a normal level of problems, as compared with those who remained at their initial, severe level. 64.6% to 72.9% of caregivers across categories reported improvement; while even greater percentages of youth sampled reported improvement (74.0% to 83.1%). Both youth and caregivers reported the greatest improvement in internalizing problems.

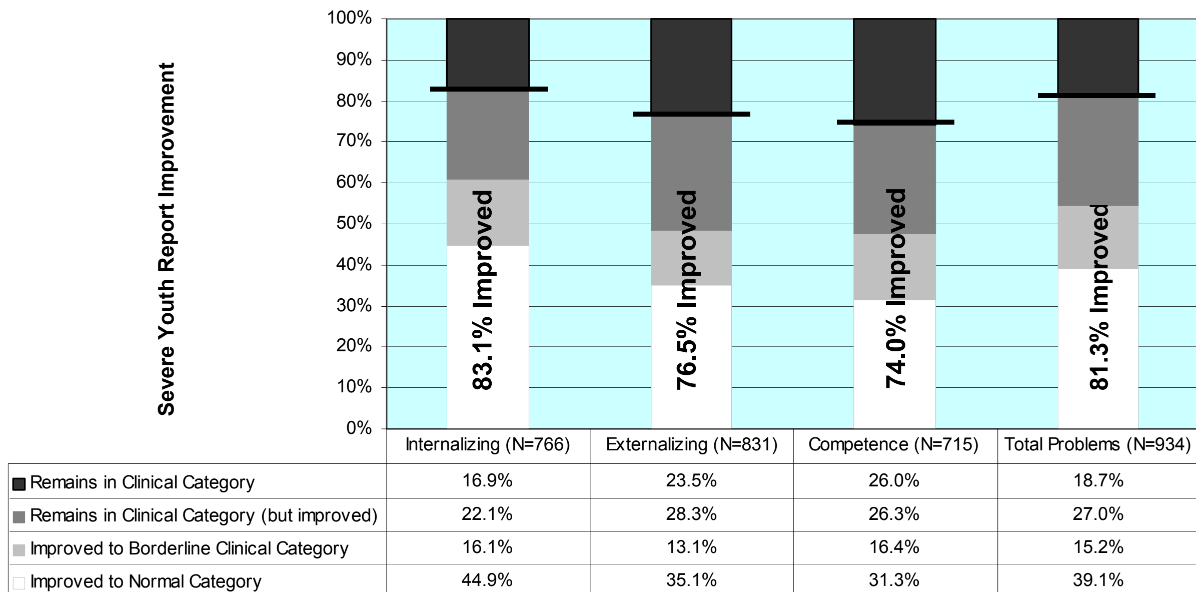
[1] The Child Behavior Checklist (CBCL) and the Youth Self-Report (YSR) assess youth in the areas of competence, and internalizing, externalizing and total problems. The Competence Scale assesses youth competencies in areas such as sports, relationships and school functioning. The Internalizing Scale measures withdrawal, somatic complaints and anxiousness/depression. The Externalizing Scale measures delinquency and aggressive behavior. Finally, the Total Problems scale is the sum of the scores for all of the scales.

Figure 2.



	Internalizing (N=2603)	Externalizing (N=3168)	Competence (N=2035)	Total Problems (N=3514)
Remains in Clinical Category	27.1%	29.6%	35.4%	30.1%
Remains in Clinical Category (but improved)	31.7%	36.0%	34.8%	37.0%
Improved to Borderline Clinical Category	11.5%	9.7%	16.3%	10.6%
Improved to Normal Category	29.7%	24.7%	13.5%	22.3%

Figure 3.

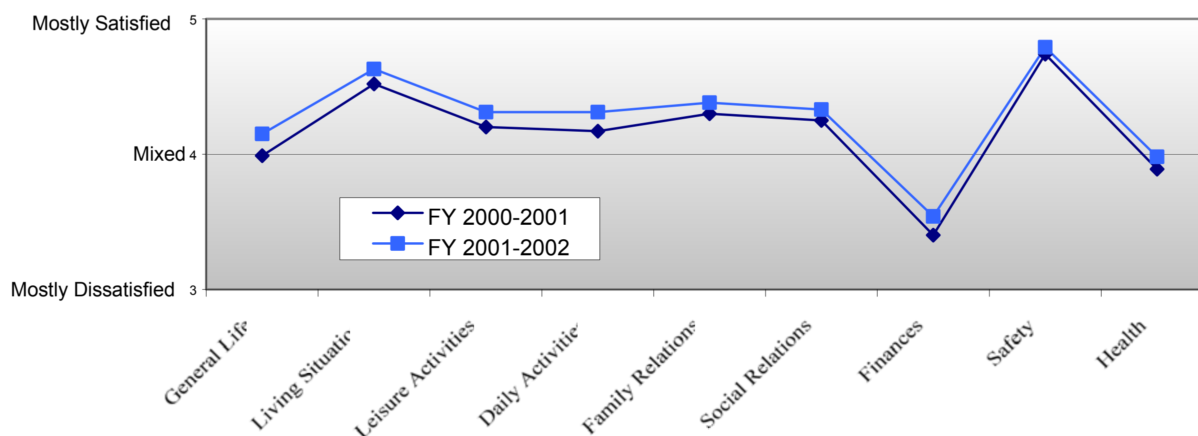


	Internalizing (N=766)	Externalizing (N=831)	Competence (N=715)	Total Problems (N=934)
Remains in Clinical Category	16.9%	23.5%	26.0%	18.7%
Remains in Clinical Category (but improved)	22.1%	28.3%	26.3%	27.0%
Improved to Borderline Clinical Category	16.1%	13.1%	16.4%	15.2%
Improved to Normal Category	44.9%	35.1%	31.3%	39.1%

Adult Improvement:

As shown in Figure 4, below, adult consumers reported improvement across quality of life domains (i.e., general life satisfaction, living situation, leisure activities, daily activities and functioning, family and social relationships, finances, safety issues and health).[1]

Figure 4.



All scales showed a statistically significant increase in average score between fiscal years. For both fiscal years, consumers reported the greatest satisfaction with safety and living situation; they were least satisfied with their financial situation. The greatest improvement between years was observed for general life satisfaction, followed by daily activities and finance domains.

Adult consumers also showed improvement in the areas of social contact and number of arrests[2] (see Tables 8 and 9, below). Outcome results show that 61.4% of a sample of adult consumers with initially no social contact increased their social contact to daily/weekly or monthly contact (see Table 8). Difficulties in social adjustment and social interaction are features of many psychiatric conditions, and represent areas for which consumers indicate a need for assistance (see "adult satisfaction" section of report). Table 9 shows that the number of arrests for the survey sample of adult consumers with previous arrests decreased considerably between fiscal years. The large majority of the sample of adult consumers who reported arrest(s) in FY 2000-01 was arrest-free or reduced their number of arrests in FY 2001-02. This information is used by the State Quality Improvement Council and the California Mental Health

[1] The Quality of Life (QOL) instrument provides information about a consumer's satisfaction with several quality of life areas. Subjective scales use a seven-point scale: 1 = Terrible, 2 = Unhappy, 3 = Mostly Dissatisfied, 4 = Mixed, 5 = Mostly Satisfied, 6 = Pleased, and 7 = Delighted. The QOL outcomes are based on a longitudinal analysis between fiscal yeas 2000/2001 and 2001/2002). Analyses showed statistically significant differences in all areas between fiscal years (paired sample t-tests, $p < .01$).

[2] These "objective" quality of life issues were also assessed with the Quality of Life (QOL) instrument.

Planning Council to determine the types and combination of services that best increase socialization and reduce criminal justice system involvement. Based on these data, best practice solutions can then be designed and implemented for consumers whose presenting problems include socialization needs and illegal behaviors.

***Table 8.* Comparison of Social Contact**
Consumers with no social contact in FY 2000-01 (N=948) were followed in FY 2001-02. Social contact improvement was found in 61.4% of these cases (52.2% plus 9.2% where contact increased to daily, weekly or monthly).

Social Contact during FY 2001-02			
No Social Contact	***Monthly Contact***	***Weekly/Daily Contact***	***Total***
366 **38.6%**	495 **52.2%**	87 **9.2%**	948 100%

***Table 9.* Comparison of Number of Arrests**
Consumers with arrest history in FY 2000-01 (N=213 with 1 or 2 arrests; N=48 with more than 3 arrests) were followed in FY 2001-02. Improvement was found in 89.7% of those cases that previously had 1 or 2 arrests; Improvement was found in 81.3% of those cases that previously had 3 or more arrests (68.8% plus 12.5%).

	# of Arrests during FY 2001-02			
	No arrests	***1 or 2 arrests***	***3 or more arrests***	***Total***
Consumers with *1 or 2 arrests* in FY 2000-01	191 **89.7%**	19 **8.9%**	3 **1.4%**	213 100%
Consumers with *3 or more arrests* in FY 2000-01	33 **68.8%**	6 **12.5%**	9 **18.8%**	48 100%[1]

[1] Total percentage may not equal precisely 100% due to rounding.

Consumer Satisfaction

Satisfaction with Youth Services:

As reflected in Table 10, below, the large majority of parents/caregivers who evaluated services[1] during FYs 2000-01 and 2001-02 were satisfied with the services their children received. The table functions as a report card, indicating the frequency and percentages of caregivers who were "Very Satisfied", "Satisfied", "Indifferent / Mildly Dissatisfied", or "Dissatisfied".[2]

Caregiver satisfaction appears to have decreased slightly between fiscal years. The percentages of caregivers who were very satisfied and mostly satisfied each decreased by several percentage points, while those who were indifferent or mildly dissatisfied increased. This issue has become a target for quality improvement efforts.

Table 10. *Caregiver Evaluation of Mental Health Services for Youth*

Caregiver Satisfaction Report					
	FY 2000-2001		**FY 2001-2002**		
	Frequency	**Percentage**	**Frequency**	**Percentage**	
	6,377	46.0%	5,250	44.0%	Very Satisfied
	6,384	46.0%	5,078	42.6%	Mostly Satisfied
	972	7.0%	1,442	12.1%	Indifferent / Mildly Dissatisfied
	141	1.0%	150	1.3%	Quite Dissatisfied
Total	13,874	100%	11,920	100%	
	Average Score = 3.39[3] "Satisfied"		**Average Score = 3.32[1] "Satisfied"**		

[1] The Client Satisfaction Questionnaire (CSQ-8) is an 8-item instrument that asks the parent/caregiver questions related to satisfaction with the mental health services their child received, and is administered annually and/or at service discharge. The CSQ-8 item percentages are based on a four-point scale. The data from each fiscal year represent responses from groups of caregivers sampled in each year, and are not necessarily the same individuals assessed during both time periods.

[2] Response ranges were calculated as follows: 3.5001 - 4.0 = "Very Satisfied", 2.5001 - 3.5 = "Satisfied", 1.5001- 2.5 = "Indifferent / Mildly Dissatisfied", and 1.0 - 1.5 = "Dissatisfied".

The State Quality Improvement Council and the California Mental Health Planning Council are looking deeper into the issue of consumer/caregiver satisfaction. Table 11, below, shows results for the individual items that make up the satisfaction survey, thereby providing greater detail into specific areas of change in satisfaction ratings between fiscal year assessments. Survey item-analyses also demonstrate how item results compare to one another and to the survey results in aggregate (presented in Table 10). In FY 2001-02 as compared to FY 2000-01, caregiver general satisfaction and evaluation of type, quality, and effect on ability to deal with problems remained reasonably consistent. However, a slightly greater percentage of caregivers who responded in FY 2001-02 were dissatisfied with the amount of services, extent to which needs were met, and reported they would not come back nor recommend services to a friend. Further investigation in the form of special studies and focus groups will be conducted to determine the reasons for the above changes in satisfaction. However, the fact that satisfaction related to quality appeared to stay high while satisfaction related to amount of services declined, may be a function of budgetary concerns (e.g., reduction in work-force issues/reduced service capacity) and increasing population growth, which impact the number of deliverable services per consumer.

Table 11. ***Caregiver Satisfaction Survey - Item Results***

How satisfied are you with the amount of help you have received?	Very Satisfied	Mostly Satisfied	Indifferent / Mildly Dissatisfied	Quite Dissatisfied
FY 2000-2001	**48.4%**	**39.6%**	**6.1%**	**5.9%**
FY 2001-2002	**45.7%**	**35.2%**	**8.5%**	**10.6%**
To what extent has our program met your needs?	Almost all of my needs were met	Most of my needs were met	A few of my needs were met	None of my needs were met
FY 2000-2001	**37.7%**	**45.9%**	**13.5%**	**2.8%**
FY 2001-2002	**36.9%**	**42.5%**	**14.1%**	**6.5%**
Did you get the kind of services you wanted?	Yes, definitely	Yes, generally	No, not really	No, definitely not
FY 2000-2001	**46.9%**	**45.5%**	**5.9%**	**1.7%**
FY 2001-2002	**47.5%**	**44.1%**	**6.4%**	**2.0%**
How would you rate the quality of service you have received?	Excellent	Good	Fair	Poor
FY 2000-2001	**52.1%**	**37.3%**	**8.1%**	**2.5%**
FY 2001-2002	**52.7%**	**36.9%**	**7.5%**	**3.0%**
If you were to seek help again, would you come back to our program?	Yes, definitely	Yes, generally	No, not really	No, definitely not
FY 2000-2001	**60.5%**	**33.1%**	**4.1%**	**2.2%**
FY 2001-2002	**57.0%**	**30.0%**	**6.1%**	**6.9%**
Have the services you received helped you to deal more effectively with your problems?	Yes, they helped a great deal	Yes, they helped somewhat	No, they really didn't help	No, they seemed to make things worse
FY 2000-2001	**55.3%**	**36.8%**	**5.5%**	**2.5%**
FY 2001-2002	**56.6%**	**35.4%**	**5.2%**	**2.8%**
In an overall, general sense, how satisfied are you with the service you have received?	Very Satisfied	Mostly Satisfied	Indifferent / Mildly Dissatisfied	Quite Dissatisfied
FY 2000-2001	**51.2%**	**37.6%**	**6.8%**	**4.4%**
FY 2001-2002	**52.4%**	**36.3%**	**6.7%**	**4.6%**
If a friend were in need of similar help would you recommend the program?	Yes, definitely	Yes, generally	No, not really	No, definitely not
FY 2000-2001	**61.4%**	**33.0%**	**3.9%**	**1.8%**
FY 2001-2002	**58.0%**	**29.5%**	**5.8%**	**6.7%**

Satisfaction with Adult Services:

Tables 12-15, below, show adult consumer evaluation of mental health service delivery in report card format (as above) along four dimensions: access to services, appropriateness of care, treatment outcomes, and satisfaction with services. Results are based on longitudinal data (i.e., the same consumers were surveyed during FY 2000-01 and again in FY 2001-02). Average scores across the two years indicate that overall, consumers surveyed are satisfied with the mental health services as reflected in the four dimensions. Satisfaction with regard to treatment outcomes, however, was somewhat less positively evaluated than other dimensions assessed, and is a target area for further study within the quality improvement process.

Some slight changes in satisfaction between years are also notable. The percentage of "very satisfied" consumers decreased slightly and the percentage of "satisfied" consumers increased slightly across all domains. Also, the percentage of consumers who were "neutral" decreased, while the percentage of those who were dissatisfied stayed fairly consistent. Although these changes are minor, they indicate that consumer satisfaction is not stable over time and may benefit from further exploration.

Same consumer comparison between FY 2000-2001 and FY 2001-2002[1]

Table 12. **Access to Services**

	FY 2000-2001		FY 2001-2002		
	Frequency	**Percentage**	**Frequency**	**Percentage**	
	1,941	37.1%	1,826	34.9%	Very Satisfied
	2,597	49.7%	2,729	52.2%	Satisfied
	607	11.6%	578	11.1%	Neutral
	77	1.5%	80	1.5%	Somewhat Dissatisfied
	6	0.1%	12	0.2%	Dissatisfied
Total[2]	5,228	100%	5,225	100%	
	Average Score = 4.28[1] "Satisfied"		**Average Score = 4.27[1] "Satisfied"**		

[1] The Mental Health Statistics Improvement Program (MHSIP) Consumer Survey is a 26-item public domain instrument that asks questions relating to satisfaction with access to services, appropriateness of treatment, outcomes of care, and general satisfaction with services. The MHSIP items are rated on a five-point scale; "5" indicates the greatest satisfaction. Response ranges were calculated as follows: 1.0 - 1.5 = 'Dissatisfied', 1.5001 - 2.5 = Somewhat Dissatisfied', 2.5001 - 3.5 ='Neutral', 3.5001 - 4.5 = 'Satisfied', and 4.5001 – 5 = 'Very Satisfied'. As a general guideline, overall consumer satisfaction with mental health services is indicated by a scale score over 3.5.

[2] Total frequencies may be different across survey sub-categories if consumers did not complete all survey items that make up the sub-category. Also, total percentages may not equal precisely 100% due to rounding.

Same consumer comparison between FY 2000-2001 and FY 2001-2002 (Continued)[1]

Table 13. Appropriateness of Care					
	FY 2000-2001		**FY 2001-2002**		
	Frequency	**Percentage**	**Frequency**	**Percentage**	
	1,802	34.9%	1,771	34.3%	Very Satisfied
	2,736	52.9%	2,765	53.6%	Satisfied
	568	11.0%	560	10.9%	Neutral
	55	1.1%	53	1.0%	Somewhat Dissatisfied
	8	0.2%	12	0.2%	Dissatisfied
Total[2]	5,169	100%	5,161	100%	
	Average Score = 4.27[1] **"Satisfied"**		**Average Score = 4.28**[1] **"Satisfied"**		

Table 14. Perceived Outcomes					
	FY 2000-2001		**FY 2001-2002**		
	Frequency	**Percentage**	**Frequency**	**Percentage**	
	1,119	22.0%	1,067	20.9%	Very Satisfied
	2,303	45.3%	2,442	47.7%	Satisfied
	1,355	26.6%	1,295	25.3%	Neutral
	256	5.0%	267	5.2%	Somewhat Dissatisfied
	53	1.0%	45	0.9%	Dissatisfied
Total[2]	5,086	100%	5,116	100%	
	Average Score = 3.96[1] **"Satisfied"**		**Average Score = 3.95**[1] **"Satisfied"**		

[1] The Mental Health Statistics Improvement Program (MHSIP) Consumer Survey is a 26-item public domain instrument that asks questions relating to satisfaction with access to services, appropriateness of treatment, outcomes of care, and general satisfaction with services. The MHSIP items are rated on a five-point scale; "5" indicates the greatest satisfaction. Response ranges were calculated as follows: 1.0 - 1.5 = 'Dissatisfied', 1.5001 - 2.5 = Somewhat Dissatisfied', 2.5001 - 3.5 = 'Neutral', 3.5001 - 4.5 = 'Satisfied', and 4.5001 - 5 = 'Very Satisfied'. As a general guideline, overall consumer satisfaction with mental health services is indicated by a scale score over 3.5.

Table 15. Services Generally					
	FY 2000-2001		**FY 2001-2002**		
	Frequency	**Percentage**	**Frequency**	**Percentage**	
	2,286	43.5%	2,251	42.6%	Very Satisfied
	2,353	44.8%	2,461	46.5%	Satisfied
	501	9.5%	455	8.6%	Neutral
	77	1.5%	100	1.9%	Somewhat Dissatisfied
	36	0.7%	23	0.4%	Dissatisfied
Total[1]	5,253	100%	5,290	100%	
	Average Score = 4.32[1] "Satisfied"		**Average Score = 4.31[1] "Satisfied"**		

Further item-analysis (Table 16, below) reveals the specific issues that adult consumers rate less rather than more favorably, thereby allowing quality improvement strategies to be implemented. Although on average consumers indicated satisfaction on all items, those items where the average is less than 4.0[2] (shaded below) have been identified by the State Quality Improvement Council as areas for further investigation. DMH continues to develop special studies and is conducting focus groups to better understand consumer expectations and better meet consumer needs.

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[1] Total frequencies may be different across survey sub-categories if consumers did not complete all survey items that make up the sub-category. Also, total percentages may not equal precisely 100% due to rounding.
[2] As a general guideline, overall consumer satisfaction with mental health services is indicated by a scale score over 3.50. The MHSIP items are rated on a five-point scale; "5" indicates the greatest satisfaction. Response ranges were calculated as follows: 1.0 - 1.5 = 'Dissatisfied', 1.5001 - 2.5 = Somewhat Dissatisfied', 2.5001 - 3.5 = Neutral', 3.5001 - 4.5 = 'Satisfied', and 4.5001 - 5 = 'Very Satisfied'.

Table 16. **Adult Satisfaction Item-Analysis**

Number of adult consumers surveyed = 5359

	Individual Items	FY 2000- 01	FY 2001- 02
		Average Score	
Access to Services	The location of services was convenient.	4.21	4.20
	Staff were willing to help as often as I felt it was necessary.	4.37	4.35
	Staff returned my calls within 24 hours.	4.30	4.27
	Services were available at times that were good for me.	4.33	4.31
	I was able to get all the services I thought I needed.	4.24	4.23
	I was given written information that I could understand.	4.26	4.28
Appropriateness of Care	Staff here believed that I could grow, change, and recover.	4.26	4.27
	I felt safe to raise question or complain.	4.23	4.24
	Staff told me what side effects to watch for.	4.15	4.16
	Staff respected my wishes about who is, and is not, to be given information about my treatment.	4.37	4.38
	Staff were sensitive to my cultural/ethnic background.	4.31	4.33
	Staff helped me so that I could manage my life and recover.	4.31	4.32
	I felt that I was treated with respect by the receptionist.	4.34	4.33
	I felt comfortable asking questions about my treatment and medication.	4.36	4.38
	Staff and I worked together to plan my treatment.	4.34	4.33
	I, not the staff, decided my treatment goals.	4.07	4.09
Outcomes	I deal more effectively with daily problems.	4.06	4.06
	I am better able to control my life.	4.01	4.02
	I am better able to deal with crisis.	3.94	3.95
	I am getting along better with my family.	3.99	3.99
	I do better in social situations.	3.84	3.85
	I do better in school and/or work.	4.14	4.08
	My symptoms are not bothering me as much.	3.83	3.81
Services Generally	I like the services that I received here.	4.36	4.35
	If I had others choices, I would still choose to get services from this agency.	4.27	4.25
	I would recommend this agency to a friend or family member.	4.33	4.33

IMPLEMENTATION / CONCLUSION

As discussed, consumer outcome data are used in the continuous quality improvement process. Data on consumer improvement are used to identify types, duration, intensity and combination of services that effectively and efficiently impact mental illness. DMH is utilizing its recent performance outcome results (as described) and its experience obtained in the process of data collection to streamline its outcomes evaluation approach. As the performance outcome approach is also part of the quality improvement process, the Department endeavors to continually improve its measurement methods in order to maximize the utility of resulting data. The goal is to provide less expensive, more efficient processes, while continuing to provide effective outcome compliance oversight. A new outcome evaluation approach is being designed to include (1) the integration of mental health system and consumer-level outcomes data obtained from the various performance evaluation entities within and affiliated with DMH, (2) the use of WEB-based computer technology for the continued collection of consumer survey data, (3) new methods and special studies for the assessment of service and program-specific indicators, and (4) shared databases between mental health and other partnering agencies.

Two aspects of the new approach are already underway and showing great promise to provide meaningful and useful outcome information. They are special studies and shared databases. Results from broad-based outcomes evaluation are being used as a point of departure for further special study and enhancement of specific services that will benefit mental health consumers. Special studies are often an appropriate method of evaluation because they can be tailored to closely examine system performance (e.g., capacity, access, cost-effectiveness) and consumer outcomes.[1] The Children's System of Care project is one such special study that has been able to target specific youth services performance indicators, e.g. out of home placement, school and legal problems - and measure them directly in relation to mental health and other agency service delivery.

At the same time, DMH has established a memorandum of understanding with the California Department of Social Services, and is working on agreements with other partnering agencies regarding data coordination. Data system links between agencies that serve the same populations will not only allow enhanced assessment of consumer outcomes, but will provide an avenue for the measurement of cost-effectiveness across public service organizations.

The combination of broad-based investigation, special studies, and inter-agency data sharing represents an approach that truly informs the quality improvement process. In the quality improvement process, data assists the development of cost-effective services that target particular consumer groups, including the identification of the most

[1] National, state and local mental health organizations have been struggling to implement a universally applicable set of measurement indicators and outcome assessment instruments / procedures for mental health performance evaluation. The struggle is due in part to the fact that a "universal" approach may be too broad to reflect the complexity of the mental health delivery system and how it is impacted by the concomitant effects of issues such as the availability and distribution of financial resources, population growth and increasing mental health services need, socio-economic conditions, array of available mental health services, and community/consumer perspectives and motivation.

appropriate spectrum of service (across treatment agencies) that can best meet consumer needs. As new interventions are developed and implemented, they are subjected to further evaluation to ensure continuous service innovation and accountability.

APPENDIX

METHODOLOGY FOR CHILD AND YOUTH PERFORMANCE OUTCOME SYSTEM

Implementation

The Children and Youth Performance Outcome System (CPOS) was implemented on April 1, 1998. Data from county mental health programs are submitted to DMH biannually.

Target Population

The target population for the CPOS is children and youth less than 18 years of age who have received (or are expected to receive) services for 60 days or longer, excluding children receiving medication only services and children receiving services through the county's individual provider network.

Instruments Administered

The instruments administered to children and youth from which data were captured for this report are:

- **Child & Adolescent Functional Assessment Scale for Ages 7-18 (*CAFAS*)**
  A clinician-rated scale which measures a consumer's functional level for the domains of role performance in the school, at home, and in the community; behavior toward others; moods and self-harmful behavior; substance use, and thinking.

- **Child Behavior Checklist for Ages 4-18 (*CBCL*)**
  A standardized assessment instrument which measures competencies and problems from the parent's perspective.

- **Youth Self Report for Ages 11-18 (*YSR*)**
  A standardized assessment instrument which measures competencies and problems from the youth's perspective.

- **Client Satisfaction Questionnaire (*CSQ-8*)**
  An 8-item survey measuring consumer satisfaction with services received from the parent's perspective.

Instrument Administration Schedule

The schedule for completing the child and youth instruments is as follows:

Assessment Instruments

- Within 60 days of the consumer's involvement with county mental health (sometimes referred to as "intake" for the target population)
- Annually (i.e., annual case review)
- Upon discharge

Satisfaction Instrument

- Annually
- Upon discharge

METHODOLOGY FOR THE ADULT PERFORMANCE OUTCOME SYSTEM

Implementation

The Adult Performance Outcome System (APOS) was implemented on July 1, 1999. Data from county mental health programs are submitted to DMH biannually.

Target Population

The target population for APOS is seriously mentally ill adults, ages 18 through 59, receiving (or expected to receive) services for 60 days or longer. Some data from consumers who were 60 years of age and over were also included in the analyses (approximately 5% of the data file). (Service performance evaluation methods specific to older adult will be implemented soon.)

Instruments Administered

The instruments administered to adults from which data were reported:

- Choice of one of the following quality of life instruments:
  (scale scores on the two quality of life instruments can be statistically equated)
  - **California Quality of Life (*CA-QOL*)**, or
  - **Lehman's Quality of Life Short Form (*QL-SF*)**

- **Mental Health Statistics Improvement Program (*MHSIP*) Consumer Survey**
  (a 26-item consumer survey that collects consumer perceptions of access to care, appropriateness of care, perceived outcomes of care, and satisfaction with services.)

Instrument Administration Schedule

The schedule for completing the adult instruments is:

Assessment Instruments

- Within 60 days of the consumer's involvement with county mental health (sometimes referred to as "intake" for the target population);
- Annually (i.e., annual case review), and
- Upon discharge.

Satisfaction Instrument

- Annually, and
- Upon discharge.