Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County

California Institute for Mental Health
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This report, previous reports, and technical assistance materials are available at the California Institute for Mental Health Web site, www.cimh.org/calworks.
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It can also be downloaded from the CiMH Web site at: www.cimh.org/calworks

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EXECUTIVE SUMMARY

Part I. The Challenge: Limited Positive Outcomes of CalWORKs Mental Health Services Indicate a Need to Try New Approaches

Legislatively mandated CalWORKs mental health services were designed to remove mental health barriers to employment, resulting in positive welfare outcomes.

Research in California counties has shown a high prevalence of mental health (MH) issues in the CalWORKs population, and those with such problems are less successful in obtaining and retaining employment. The California Legislature designated CalWORKs funds to be used for the provision of MH services for CalWORKs participants, and such funds have been used in Los Angeles County for mental health services since 1998. The Los Angeles County Department of Mental Health currently provides specialized mental health services in 24 county-operated and 35 contracted sites.

The provision of mental health services to CalWORKs recipients in Los Angeles County has been based on a “barrier removal” model.

The basic assumption underlying the design of CalWORKs mental health services in Los Angeles County is that mental health problems constitute a remediable “barrier” to achieving CalWORKs goals of finding employment and ultimately leaving welfare and leading a fuller life. Treatment was considered a “pull-out” service in which the focus was initially on addressing the mental health problems; during this treatment phase, clients could engage in some work-related activities as appropriate.

The key assumptions of this model of services were (1) that the mental health problems that were barriers to employment would be resolved, and that (2) after these barriers were removed, people would be able to find employment using the usual GAIN resources. This model has received some support from participants who “complete” their mental health treatment are more likely to subsequently be employed. But more fundamentally, there is limited support for these assumptions. Rates of treatment completion are low, and even with treatment completion, rates of employment are low.

CalWORKs mental health services have been successful in some important ways.

- Identification of mental health problems has been quite successful. The number of clients served in CalWORKs mental health programs has continued to grow, despite overall declining CalWORKs enrollment. And the process has successfully identified clients who had not otherwise been exposed to mental health services: for more than 60% of clients receiving CalWORKs mental health services, this was their first encounter with the mental health system. This was especially true of persons whose primary language is not English.

- Several different measures of satisfaction show that clients think providers are doing a good job. In 2006, for example, 98% of participants said they would recommend the service they received to a friend.

- Efforts to engage participants in work-related activity during treatment have been largely successful. In 2007, a total of 76% of clients were participating in some work-related activities, such as preparing a resume or looking for work, in addition to treatment.

- On four annual CiMH surveys, mental health clinicians rated participants as showing a positive change in mental health status. They reported that more than 60% of clients made some improvements in their mental health status. This was the case to some extent even when the mental health treatment was not completed.

On the two basic measures of success—successful completion of the welfare-to-work mental health component and subsequent employment—results have been quite limited.

Mental health services are a “component” of the client’s welfare-to-work plan, often along with other welfare-to-work activities. Mental health agency clinicians notify DPSS staff regarding the nature of the termination of mental health services. A “component end code” in the DPSS database is the source for this basic outcome of services.

A person receiving services comments:

“I am happy that I am involved in the mental health services because I needed it a long time ago and I never got it. CalWORKs made it possible. I believe in CalWORKs and I also know that a lot of mothers like myself needed it. It will help a lot of women to get back to work.”
Out of roughly 2,400 cases in which mental health services were provided in 2004-2005, DPSS staff judged only 17% of clients as successfully completing the MH supportive service component. In the month in which mental health services ended, 84% of participants had no earnings; this changed little in the six months following termination. The monthly earnings of most working participants would not be sufficient to support a family.

The goal of this report is to explore hypotheses that may explain the modest successes to date, and to use that information to build a case for an experimental trial of service modifications, which may produce consistently better outcomes.

- The first section highlights the changing landscape for CalWORKs mental health services resulting from regulatory changes and service pattern changes.
- The second section considers hypotheses for explaining the limited outcomes. Explanatory factors are divided into those that can be changed (such as meeting child care and transportation needs or improving the performance of less successful providers), and those that are outside the capacity of the mental health system to ameliorate (such as being foreign born or not having English as a primary language). Fortunately, the factors in the latter category explain very little of the variation in outcomes, suggesting that opportunity exists to make a difference in outcomes through alterations in the mental health service system.
- The third section, reviews findings that suggest trying specific new approaches to mental health services.
- The report includes a set of recommendations for a new service design, which we recommend be tested in a number of different sites in different regions of Los Angeles County.

Part II. The New Context of CalWORKs Mental Health Services Makes Achieving Good Outcomes Even More Important

The current CalWORKs mental health service system design in Los Angeles County was largely created in 1998-99, and has persisted through major changes in the welfare regulatory structure and CalWORKs service patterns. Changes in the past five years and those being considered now make it even more critical now than in the past that mental health services help clients achieve financial independence.

A. Conclusions from 10 years of welfare reform studies

Welfare reform has been far more successful in meeting some goals than others. Welfare reform has helped replace income from welfare with earned income for many single mothers; and this may have contributed to the modestly increased income reported by welfare leavers. However, welfare reform has shown limited capacity to help poor families rise from poverty. Many studies have shown 50 to 75% of welfare leavers remain poor in the years after leaving welfare.

Participants with mental health problems fare significantly worse than the general welfare population. Given the limited and mixed outcomes of welfare reform in general and the significantly poorer outcomes of those with mental health problems, mental health services need to have powerful offsetting effects in order to help participants achieve the goals of welfare reform.

Many studies have now confirmed that a flexible approach to services is more effective than a strict “work first” approach.

Reviewing the results of 20 experimental programs, Manpower Demonstration Research Corporation (MDRC) concluded that flexible programs that included training, education, and holding out for good jobs did far better than either strict work-first or education-first programs. These findings have general applicability, but should specifically be applied to CalWORKs mental health clients.

B. The changing regulatory context for CalWORKs mental health services

The federal reauthorization of welfare reform added rigid new requirements, most particularly reducing the credit for caseload reduction that California has used to offset the work participation rate. However, CalWORKs mental health services will not count as work participation except during six weeks each year of job search and job readiness and as part of “other” work activities. The latter requirement provides an incentive to combine mental health and work experience in one program, as we suggest later.

C. Patterns of welfare service utilization have changed dramatically, casting mental health services in a new role

- CalWORKs caseload reductions since 2001 are much lower than commonly thought in California, but are substantial (25%) in Los Angeles County. However, the number of Los Angeles residents receiving Medi-Cal only (not Medi-Cal and cash aid) increased to 832,500 (153%).
Despite caseload decreases, the number of Los Angeles applications for CalWORKs cash aid have been fairly stable for five years. And the number of Los Angeles County residents enrolled in welfare-to-work has decreased faster than the number of cash aid cases, in large part due to the increase in “child only” cases.

The rate of sanctioned participants has increased substantially, particularly the rate of those sanctioned multiple times.

The employment rate and earnings are lower for mental health clients who have ended their mental health services than for CalWORKs welfare-to-work participants in general.

In combination, these findings add up to an increasing number of persons needing and using the assistance of cash or medical insurance but who are outside the reach of actual services. CalWORKs mental health services can work counter to this trend, but only if they are effective.

**Part III. Hypotheses Regarding the Limited Success of CalWORKs Mental Health Services**

A critical question is what explains why some clients are successful and others are not. This section explores a series of factors to determine which ones predict (explain) success. Some possible predictors of success are factors that can be changed in the short term (such as meeting transportation needs); some are factors that can be changed in the long term (not speaking English well or not having a high school equivalent education); and other possible predictors cannot be changed (such as race/ethnicity or number of children in the family).

Beyond identifying predictors of success, we want to know what the total impact of these factors is—how much of the difference between successful and unsuccessful participants can be explained by all these factors, and how much is the result of factors we don’t know about, can’t measure, or just a function of chance occurrences.

**A. How much do client characteristics predict outcomes of MH services?**

Individual characteristics of the 1,938 persons discharged from CalWORKs mental health services in 2004-05 show a population with multiple potential barriers to employment. Statistically significant predictors of successfully completing mental health services and of finding employment in seven follow-up months include:

- Persons who are foreign born or have a primary language other than English are more likely to complete mental health service; and those who are foreign-born are more likely to be employed.
- Females are more likely than males to have some earnings.
- Older participants are more likely to complete mental health services successfully.
- Those with education beyond high school are more likely to be employed.
- Those with little or no work history (47% in our 2006 survey) were less likely to complete mental health services and less likely to work.
- More severe types of mental disorder (and low functional level at admission) are associated with lower mental health treatment completion rates and lower employment rates.

**B. How do practical barriers affect mental health outcomes?**

In several surveys of both staff and clients, problems with child care and transportation negatively affected participation in treatment and increased drop-out rates.

Many clients experienced multiple life challenges during treatment. These included death of a relative, behavioral problems with their children, being homeless, legal difficulties, and being a victim of a crime. The presence of these challenges appears to affect the amount of positive clinical change observed, but was not reflected in mental health treatment completion rates or follow-up employment.

**C. Are mental health outcomes associated with neighborhood characteristics?**

- CalWORKs mental health clients are disproportionately concentrated in some neighborhoods.
- The odds of completing services were much lower for clients discharged to Zip code areas in which there was a relatively high proportion of African-Americans, a relatively high poverty population, or a relatively high percentage of welfare recipients. Neighborhood effects were not statistically significant for employment after discharge.

**D. Do outcomes vary by provider?**

- Among 43 mental health providers having at least 20 discharged CalWORKs mental health clients, the range of successful mental health treatment “completions” ranged from 5% to 33% with a median of 14%.
- Employment rates (for the clients served by these 43 providers) in the seven months following
discharge also varied greatly from a low of 12% to a high of 42%. The one-quarter of providers with the lowest employment rates had an average employment rate of 17% while the quarter with the highest rates averaged 30%.

- Very little correlation existed between the providers with high rates of successful service completion and the providers with high rates of employment by persons discharged.
- Further, the overall level of successful completion and follow-up employment are so low that if all providers replicated the success of the leaders, results would still be unsatisfactory for more than half the participants. These findings suggest we must go beyond the existing service model in order to achieve major improvements.

E. Does the pattern of services received by clients help explain outcomes?

- Most clients received case management and individual treatment but virtually none received vocational services from mental health providers. While 28% of the clients received more than 20 hours of services between Jan 2003 and Feb 2005, 25% received 5 hours or less.
- Total service hours, hours of group services, and hours of medication services were associated with successful completion of the mental health component.

F. Individual, geographic, and service variables have a limited effect on outcomes

- Individual, provider, and geographic characteristics are predictive of completing mental health services and of working. However, in combination they explain only about 5% of the differences in outcomes among participants.

PART IV. Deficiencies in the Model of Service: Poor Matches Between Client Needs and the Services Offered

A critical review of various sources of information allows for hypotheses about ways in which the current mental health service model does not address the needs of its CalWORKs clients. These sources of information include the following: analysis of client and staff surveys conducted over a five-year period, management information system data, information from other welfare reform studies, and CiMH site visits to five providers.

- While appropriate for many clients, the medical model outpatient clinic that is the norm for CalWORKs mental health services does not help those who need outreach. Barriers to accessing these services (e.g., lack of child care and transportation) and the multiplicity of other issues, which for many of these clients have higher salience, makes attendance at clinic outpatient visits difficult to sustain.
- Substance abuse and domestic violence issues are very common in the CalWORKs mental health population, but mental health programs often do not deal with them adequately.
- Although the issue of children and parenting is a focus in some treatment episodes, the current treatment model does not routinely assess for critical problems with children and does not easily accommodate the provision of needed services to such children when identified as having significant behavioral or emotional problems.
- Site visits to programs have revealed that many clinicians serving CalWORKs clients are interns or still working to attain their supervised hours for licensure. The difficulty of engaging and treating these clients requires the most (not the least) experienced clinicians.
- The reliance on regular GAIN vocational services does not allow for specialized attention to the effect of mental health issues on the capacity to obtain and retain employment. It has perhaps been overly optimistic to believe that a single course of mental health treatment will resolve all of the issues that can limit a participant’s ability to become employed. Specialized vocational services have traditionally been a part of substance abuse programs and programs for the seriously mentally ill. Such an approach may be needed for more of the CalWORKs clients.

A staff member reports:

“One of client’s major problems, which was also partially responsible for her depression, was her relationship with her husband who was very controlling. Client felt she was stuck in the relationship and had ‘no way out.’ Client also felt that her husband was fostering her dependence and didn’t want her to gain independence by going to school or working.”
RECOMMENDATIONS

The evidence suggests that the current service model is helpful for many CalWORKs participants, but this model has not provided a majority of clients with the information, skills, and supports they need to find and retain employment. In addition, the new strict regulatory climate and change in the composition of CalWORKs recipients puts a premium on effective mental health services. Given these facts, we propose a new comprehensive and flexible individualized service design.

In these recommendations, we lay out first the elements of the service design to be tested. Then we present in broad outline of the proposed scope, administration, and evaluation of the project. The new service design should stand, or fall, based on the outcomes it produces.

Recommendations: Service components

We present here a set of service components that we think are critical to improving outcomes. However, they are not all relevant to all clients or equally adaptable in all regions or by all providers. The components are intended to be a diverse set of tools to be applied in different sites and for different clients in a flexible way.

Services would have the following structure and functions:

- Multi-disciplinary team. A single co-located multi-disciplinary team would address all the mental health (MH), substance abuse (SA), and domestic violence (DV) needs of a particular client. Ideally, at least some staff would have not only special expertise in DV and SA but also experience working with clients with co-occurring disorders. Rationale: Epidemiological studies in Bakersfield and Stanislaus County indicated that a large number of participants had either two or all three issues, i.e., mental health problems (especially depression), domestic violence, and substance abuse. Yet, our surveys of Los Angeles staff indicate they devote “significant time” to SA issues in only 31% of cases in which there is co-occurring SA, and 33% for co-occurring DV. This finding is not surprising, given the lack of training that mental health clinicians receive in serving persons with SA or DV. Although 20% to 30% of clients in some clinics are referred for substance abuse services, substantial evidence indicates that an integrated approach to co-occurring disorders is more effective. Stanislaus is one county that has organized its CalWORKs specialized services in this manner, and this was identified as a promising practice in the earlier six-county study of MH/SA/DV services under CalWORKs.

- Outreach. Outreach case management can serve at least two useful functions; it can provide a more assertive approach to keeping clients engaged in treatment services by following-up on missed appointments, and it can assist clients in addressing some of their daily life issues. Again, while not all clients need this kind of additional help beyond regular treatment, a significant proportion of clients do.

Three clients comment on child care and transportation:

- “Great mental health services—need to improve CalWORKs child care system.”
- “How can I get help with child care while I am in session?”
- “I would like to have child care provided here in the facility opposed to taking them somewhere else.”

Rationale: The more-or-less “medical model” outpatient services offered by most MH providers would work well for middle class clients; it is a mismatch for many or most CalWORKs clients. A clear indication of mismatch between need and service model is the fact that less than half of participants attend therapy sessions regularly. In Kern County, outreach case management has been a successful strategy for helping clients who have difficulty with handling daily life tasks and

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getting to appointments. A San Francisco study of poor depressed women found adding case management to cognitive behavioral therapy increased retention in treatment and, for Spanish speakers, increased symptom reduction.41

- Addressing practical barriers. In addition, other practical resources may be necessary. For example, CalWORKs MH programs in other counties have in some cases provided on-site child care or child watch or even transportation by van. The service design we propose will have the flexibility to respond to particular client needs that staff or clients perceive to be barriers to engagement or success.

Rationale: In our surveys of current clients, up to 24% (depending on the year surveyed) report that time or place of treatment services are not convenient. Since answering the survey requires presence at the clinic, this is already a biased sample. A survey of clients who had been discharged found higher rates of practical difficulties (27%) and provider-caused inconveniences (21% including transfer of therapists). Practical problems were associated with lower client satisfaction with services.

- Specialized and integrated vocational services. In most cases, a vocational specialist would be added to the treatment team. However, other models could be tried (possibly contracting with established private welfare-to-work organizations or community colleges). Whether a member of the team or not, vocational specialists for the program must have a background in vocational rehabilitation for persons with mental health disabilities. The flexible vocational/educational approach documented as most effective in experimental welfare reform studies should be the overarching model rather than “work first.”

Rationale: It is clear from the low success rate at finding employment that many mental health clients need a different approach than that offered by regular GAIN services. It is striking that in only 17% of the closed cases surveyed in 2006, clinicians rated capacity to work as “good.” Only 5% of the clients had a history of full-time employment. Including vocational services as part of the MH treatment package has been demonstrated to work in several Los Angeles programs (Prototypes, Shields for Families, SFVMHC, Inc.) and in CalWORKs programs in San Mateo and El Dorado counties. Hours spent in such service also count toward the new federal work participation rate. Some participants may need supported employment or supported education services.

- Family/child therapy. Mental health staff in the demonstration sites need to have experience in assessing and treating children and providing family therapy (as well as in helping with parenting skills). Services that include children need to be a part of the services design, since such a high percentage of parents are having difficulty dealing with their children or their children actually have significant emotional problems themselves.

Rationale: Staff report that the most common client stress—faced by more than 40% of MH clients—is “serious problems with at least one child.” CiMH epidemiological studies in Stanislaus County and Bakersfield show that direct negative effects on children’s well-being (such as behavioral problems in school) and indirect effects (such as food insecurity) were both substantially more likely among study participants who had mental health problems than those who did not. Mental health services need to be able to assess and treat any problem in the family that threatens the ultimate economic independence of the family unit.

A clinic supervisor states:

“The local job market plays a large role in the employment rates of clients—as does the level of education and language proficiency of our clients. Due to low levels of education, ESL proficiency, and family dynamics, many of our clients simply cannot compete.”

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**Recommendations: Organization of the demonstration project**

- **Scope.** Several demonstration sites should be available to reflect different client, provider, and geographic characteristics. This is particularly important given the diverse ethnic/cultural composition of Los Angeles and its CalWORKs participants.

Rationale: The project should be large enough to convince policy-makers that, if successful, it will be broadly applicable and affect outcomes system-wide.

- **Staff and client incentives that allow for flexibility.** Incentives need to be established for administrators and staff so that they place a premium on engaging
clients and following through with them until success is achieved—using any method necessary. These incentives would be linked to a) maintaining engagement, b) increasing motivation and participation, and c) achieving employment and/or education goals. These programs should not be based on a “cookie cutter” approach. They should consist of staff, working together with clients, with considerable autonomy to do what they feel is necessary to achieve the outcomes set out. DMH administrators might also experiment with providing direct incentives to clients who complete treatment.

Rationale: Currently there are disincentives to spending time and effort to engage clients. “Productivity,” in a narrow sense, is increased by discharging clients who are not willing or able to attend sessions regularly, and programs have often given incentives for this kind of productivity. Instead, incentives need to support intensive efforts at engagement and completion of services. Structuring such an incentive system may involve the waiving of usual productivity standards and/or including non-billable activities in the productivity equation.

Incentives for clients to reduce substance abuse have been the subject of successful experimentation in substance abuse programs and programs for persons with both mental health and substance abuse problems. Less is known about their usefulness in mental health treatment, but welfare reform experiments have shown that monetary incentives (wage supplements) increase work participation in general and are particularly effective for some persons with mental health problems.

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Rationale: Site visits to programs have revealed that many clinicians serving CalWORKs clients are interns or still working to attain their supervised hours for licensure. The difficulty of engaging and treating these clients requires the most (not the least) experienced clinicians. Decades of research have found that clinical experience and skills are a major determinant of therapy outcomes.

- **DPSS and Department of Health Services substance abuse program co-operation.** Although not critical for the mental health service design, it would be useful if DPSS agreed to have (to the extent possible) a single GAIN worker assigned to each demonstration site.

While some clients with substance abuse problems will be able to be served by the increased capacities of staff, others will need to attend treatment at a substance abuse program. It will be helpful if representatives of county-funded substance abuse programs are directly linked to each demonstration site.

Rationale: Co-location of DPSS staff at least part time has been shown by the Homeless CalWORKs Families Project to be feasible and effective. DPSS has in the past offered part-time co-location to residential treatment programs (e.g., Prototypes).

- **Evaluation.** Measuring outcomes at the demonstration sites would fall within the scope of the existing CiMH outcomes monitoring contract. The evaluation would be exploratory in nature, aimed at finding out which components appear to have the most effect at which sites. It could also focus on certain high-risk groups, such as those who have already been sanctioned once and are at risk for additional sanctions. The evaluation would also, of course, document the overall level of outcomes achieved.

- **Oversight and client participation in planning.** Because of the inherently inter-agency nature of CalWORKs mental health services, it will be important to have an inter-agency advisory body comprised of a variety of stakeholders, including clients and/or past clients with diverse linguistic, nationality, and ethnic backgrounds.

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Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County 9
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County
PART I: THE CHALLENGE

THE LIMITED POSITIVE OUTCOMES OF CALWORKS MENTAL HEALTH SERVICES INDICATE A NEED TO TRY NEW APPROACHES

Legislatively-mandated CalWORKs mental health services were designed to remove mental health barriers to employment, resulting in positive welfare outcomes.

Research in California counties has shown high prevalence of mental health issues in the CalWORKs population and that those with such problems are less successful in obtaining and retaining employment. The California Legislature designated CalWORKs funds to be used for the provision of MH services for CalWORKs participants, and such funds have been used in Los Angeles County for mental health services since 1998. The Los Angeles County Department of Mental Health currently provides specialized mental health services in 59 county-operated and contracted sites.

The provision of mental health services to CalWORKs recipients in Los Angeles County has been based on a “barrier removal” model.

The basic assumption underlying the design of CalWORKs mental health services in Los Angeles County is that mental health problems constitute a remediable “barrier” to achieving CalWORKs goals of finding employment and ultimately leaving welfare. Treatment was considered a “pull-out” service in which the focus was initially on addressing the mental health problems; during this treatment phase, clients could engage in some welfare-to-work activities as appropriate.

The key assumptions of this model of services were (1) that the mental health problems that were barriers to employment would be resolved, and (2) after these barriers were removed they would be able to find employment using the usual GAIN resources. This model has received some support in that participants who successfully complete their mental health treatment are more likely to subsequently be employed. But more fundamentally, the experience has shown that there is limited support for these assumptions. Rates of treatment completion are low; and even with treatment completion, rates of employment are low.

CalWORKs mental health services have been successful in some important ways.

Below we present findings from four years of client and staff surveys that provide evidence that in many ways the mental health services have been successful.

- Despite decreasing enrollees in CalWORKs, the number of clients served in mental health programs has continued to grow. In January 2002, 2,594 persons received mental health supportive services as part of a welfare-to-work plan; in December 2006, this number was 2,784. As a percentage of welfare-to-work enrollees, the number increased from 2.4% to 6.4% in this time period.

- As shown in table 1, several different measures of satisfaction show that clients think providers are doing a good job.

<table>
<thead>
<tr>
<th>Table 1: Measures of Client Satisfaction, by Study Year</th>
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<tr>
<td></td>
</tr>
<tr>
<td>N=394*</td>
</tr>
<tr>
<td>Reported being “Very Satisfied”</td>
</tr>
<tr>
<td>Treated with Respect+</td>
</tr>
<tr>
<td>Would recommend to a friend (Percent “yes”)</td>
</tr>
<tr>
<td>Trust clinician work with most++</td>
</tr>
</tbody>
</table>

*Number varies slightly by question.
+Year three and year four have the options “by all” “by some” and “by none”. We have combined “all” and “some.” In year four, 4% said “only by some people” and 1% said “by none”.
++Year three and year four had a “somewhat” category that was missing in the first two years. The 98.9% is the total of “Yes” and “Somewhat.” In year four, 7.6% said “some”; less than 1% said “not at all.”
The average duration of treatment indicates a substantial effort on the part of both client and provider. In year four, 63% attended treatment for longer than six months; only 19% attended three months or less.

Staff report significant improvement on mental health status, even for clients who do not successfully complete their mental health component.

Over four years in which we asked this question, staff reported between 60% and 73% of discharged clients achieved “strong positive” or “some positive” change in mental health status. “Strong positive change,” however, was limited to about 20% each year and was much more likely to be reported for those who completed services. For example, in year three, 34% of those who completed their mental health welfare-to-work component made “strong positive” change, vs. 11% of those who did not.

The program has been successful in increasing access to services. Many individuals receiving CalWORKs MH services have not had prior treatment, indicating appropriate access to those who need services to meet CalWORKs goals (see table 2). These rates are particularly high among non-English speaking participants.

### Table 2: First Time Receiving Treatment, by Study Year

<table>
<thead>
<tr>
<th>First time in treatment</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>First year (N=394)</td>
<td>57%</td>
</tr>
<tr>
<td>Second year (N=310)</td>
<td>59%</td>
</tr>
<tr>
<td>Third year (N=320)</td>
<td>71%</td>
</tr>
<tr>
<td>Fourth year (N=408)</td>
<td>64%</td>
</tr>
<tr>
<td>Fifth year (N=505)</td>
<td>42%</td>
</tr>
</tbody>
</table>

Substantial numbers of clients participate in work activities beyond their mental health service. The data here are from the four CiMH client surveys. Note that these are not necessarily activities included in the formal welfare-to-work plan (see table 3 on next page).

On the two basic measures of success—successful completion of the welfare-to-work mental health component and subsequent employment—results have been quite limited.

Mental health services are a “component” of the client’s welfare-to-work plan, often along with other welfare-to-work activities. Mental health agency clinicians notify DPSS staff regarding the nature of the termination of mental health services. A “component end code” in the DPSS database is the source for this basic outcome of services.

- Only 45% of discharged clients attended “most” or “virtually all” of their scheduled service visits
- Prescribed medications is a treatment mode for half of the clients, but in 2006 fewer than half of the clients were believed by staff to have taken the prescribed medication regularly.
- In more than 2,400 cases terminated in 2004-2005, DPSS staff judged only 17% of clients completed the MH supportive service component.
- In the month in which mental health services were terminated, 84% of participants had no earnings; this changed little in the six months following termination. The monthly earnings of most working participants would not be sufficient to support a family. In the month in which services terminated, only 16% of those working earned $1,340 or more (poverty-level income for a family of three). Persons completing services as planned had higher earned income than those dropping out, but differences were not substantial. When participants had completed their mental health services, 18% had some earned income in the month of termination, vs. 14% if participants had dropped out. For those who did have income, it averaged $815 in the month of termination for those who completed vs. $788 for those who dropped out, not a statistically significant difference.
- Data presented later in this report show that many clients get additional mental health services before or after a CalWORKs-funded mental health component—and that some participate in more than one mental health component. This means some ambiguity exists in the results presented above, but not enough to change any of the main points in the report.

The goal of this report is to explore hypotheses that may explain the modest successes to date...
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County

and to use that information to build a case for an experimental trial of service modifications which may produce consistently better outcomes.

- The first section highlights the changing landscape for CalWORKs mental health services resulting from regulatory changes and service pattern changes.

- The second section considers hypotheses for explaining the only marginally successful outcomes. Explanatory factors are divided into those that the mental health service system can change (such as meeting child care and transportation needs or improving the performance of less successful providers), and those that are outside the capacity of the mental health system to ameliorate (such as being foreign born or not having English as a primary language. Fortunately, the factors in the latter category explain very little of the variation in outcomes, suggesting that alterations in the mental health service system would make a big difference in outcomes.

- The third section reviews findings that suggest trying specific new approaches to mental health services.

- This report includes a set of recommendations for a new service design that we recommend should be tested in a number of different sites in different regions of Los Angeles County.

### Table 3: Current Clients’ Work-Related Activities in 90 Days Before Survey, by Year*

<table>
<thead>
<tr>
<th>Work activities reported</th>
<th>Year 1 N=379</th>
<th>Year 2 N=293</th>
<th>Year 3 N=312</th>
<th>Year 4 N=401</th>
<th>Year 5 N=488</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did a GAIN vocational assessment</td>
<td>31%</td>
<td>32%</td>
<td>42%</td>
<td>49%</td>
<td>48%</td>
</tr>
<tr>
<td>Composed a resume</td>
<td>24%</td>
<td>16%</td>
<td>22%</td>
<td>28%</td>
<td>25%</td>
</tr>
<tr>
<td>Had a job interview</td>
<td>25%</td>
<td>21%</td>
<td>22%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>Trained in a work skill (like computer)</td>
<td>15%</td>
<td>13%</td>
<td>16%</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>Worked as a volunteer</td>
<td>21%</td>
<td>20%</td>
<td>22%</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>Attended educational classes or got GED</td>
<td>35%</td>
<td>27%</td>
<td>29%</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>Got vocational training</td>
<td>19%</td>
<td>10%</td>
<td>13%</td>
<td>20%</td>
<td>16%</td>
</tr>
<tr>
<td>ANY OF ABOVE</td>
<td>65%</td>
<td>58%</td>
<td>68%</td>
<td>75%</td>
<td>76%</td>
</tr>
</tbody>
</table>

* The N for the different measures varies slightly within each year.
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County
PART II: CHANGES

THE NEW CONTEXT OF CALWORKS MENTAL HEALTH SERVICES MAKES ACHIEVING GOOD OUTCOMES EVEN MORE IMPORTANT

The current CalWORKs mental health service system design in Los Angeles County was largely created in 1998-99 and has persisted through major changes in the welfare regulatory structure and CalWORKs service patterns. Changes in the past five years and those being considered now make it even more critical now than in the past that mental health services help clients achieve financial independence.

A. Conclusions from 10 years of welfare reform studies

It is now more than 10 years since federal welfare reform was enacted in 1996, and more than seven years since the California version called CalWORKs was implemented. The provision of mental health services to CalWORKs participants for whom mental health problems constitute a barrier is occurring in a rapidly changing environment—changes in knowledge, the regulatory environment, and caseload characteristics. Some recent changes directly affect the Los Angeles supportive services mental health program, others suggest ways of increasing the relevance of, or improving, mental health services.

Welfare reform has been far more successful in meeting some goals than in meeting others.

How mental health services should be provided and the outcomes it is reasonable to expect, must be seen in the context of what has been learned during 10 years of welfare reform. The major findings stem both from comparisons of those who remain on welfare with those who leave (“leavers”) and from a number of randomized controlled experiments testing the effects of different elements of reform.²

- Welfare reform in the U.S. has helped replace income from welfare with earned income for many single mothers; and this may have resulted³ in the modestly increased income reported by welfare leavers. For example, the RAND survey of current and past welfare recipients in five California counties (including Los Angeles) found in 2002 that the household income of those receiving cash aid averaged $1,559 per month, while for leavers it averaged $2,010.⁴

- However, welfare reform has shown limited capacity to help poor families get out of poverty—many studies have shown 50 to 75% of welfare leavers to be poor in the years after leaving.⁵ In Los Angeles, for example, 54% of persons in a MDRC study of persons who had left welfare in 1998 still had incomes below the poverty level in 2001.⁶ The 2002 RAND five-county survey found 41% of those who had left welfare still had household incomes below the poverty level.⁷

- While more leavers than aided parents work and household income is higher, medical care is less available and housing less stable for leavers. For example, the RAND study found more California leavers live in a family where at least one adult or child is uninsured (50% leavers vs. 43% aided), and leavers reported more moves to less expensive places, more moving in with relatives, and more homelessness (3.0% vs. 0.3%). (Both these rates are far lower than in CI MH surveys of CalWORKs mental health clients in Los Angeles County. Depending on the year surveyed, between 11% and 13% had been homeless on the street or in a shelter in the prior year.)

A RAND synthesis of welfare reform experiments found:

“There is evidence that financial work incentives, especially those that are more generous and increase family income, have mostly favorable, but modest, impacts on other measures of well-being. Programs with mandatory work-related activities tend to have smaller and often unfavorable impacts. Often, these programs lead to lower welfare use and little change or even a decline in family income. Health insurance coverage typically declines because the loss of Medicaid coverage received by welfare participants is not fully replaced in the transition from welfare-to-work by transitional Medicaid, poverty-related Medicaid coverage, or employer-based coverage.”

Participants with mental health problems fair significantly worse than the general welfare population.
The GAO has found that welfare recipients across the U.S. are more likely to have physical or mental impairments than those not receiving welfare. Recipients with impairments are much less likely to leave welfare and, if they do leave, less likely to work than those without impairments.\(^8\)

Leavers studies, including those in California, have found higher percentages of persons with mental health problems among those who left welfare through sanction or drop-out.\(^9\) A recent Los Angeles study shows mental health need to be higher among “chronically” sanctioned persons than those with no sanction or only one sanction.\(^10\)

Other leavers studies in several states point to an association between failure of past recipients to find stable employment and mental health problems, especially symptoms of depression.\(^11\)

A three-year longitudinal California study conducted by CiMH in Bakersfield and Stanislaus County found that a wide range of outcomes was more negative for clients with mental health problems than for those without such problems.\(^12\)

- **Direct effects on children’s well-being** (such as behavioral problems in school) and **indirect effects** (such as food insecurity) were both substantially more likely among study participants who had mental health problems than those who did not.

- **Study participants with mental health problems** who left CalWORKs were more likely than those without problems to have left due to having been sanctioned for failure to comply with welfare rules, due to having lost custody of children, or due to being incarcerated.

- **Study participants with mental health problems** were less than half as likely to work and, if they did work, they were more likely to lose a job or be fired; those with mental health problems who worked also had shorter job tenure.

- **Earnings for those with mental health problems** were substantially less than those without such problems.

Given the limited and mixed outcomes of welfare reform in general and the significantly poorer outcomes of those with mental health problems, mental health services need to have powerful off-setting effects in order to help participants achieve the goals of welfare reform.

Many studies have now confirmed that a flexible approach to services is more effective than a strict “work first” approach.

The strict “work-first” model is less effective than an approach that combines more flexibility to include education and training. Reviewing the results of 20 experimental programs around the United States, MDRC concluded that flexible programs that included training education and holding out for good jobs did far better than either strict work-first or education-first programs. Portland’s program, with this design, far outperformed any other site including Riverside.\(^13\) These findings have general applicability, and should specifically be applied to CalWORKs mental health clients.

### B. The changing regulatory context for CalWORKs mental health services

**The federal reauthorization of welfare reform added rigid new requirements.**

The federal Deficit Reduction Act of 2005, which re-authorized welfare reform, also requires attaining a federal work participation rate (WPR) of 50% while eliminating most of the caseload reduction credits the state has previously relied on to meet WPR requirements. Under the rigid new definitions of the WPR, California’s current work participation rate would be 23% (it reached its highest level of over 40% in 1999). Part of the difference may be met by exceeding the “maintenance of effort” requirements, but an “actual” increase of about 13% will be needed too, by 2008.\(^14\)

The new law, and regulations adopted in June of 2006, ignore the needs of disabled TANF participants. According to the Center on Policy and Budget Priorities, “[T]he DRA ‘raises the bar’ on states—requiring them to engage more recipients in welfare-to-work activities — but does not provide them with the flexibility they need to tailor those activities to the circumstances of some TANF recipients with disabilities.”\(^15\) Although the regulations implementing the DRA are already in effect, comments are still being received on them. Many states, including California, have expressed concern that the rules conflict with the ADA and in other ways are too rigid to allow them to meet the needs of disabled TANF participants.\(^16\)

**The new work participation regulations affect persons receiving MH/SA/DV services in three specific ways.**

- Previously state-funded programs were not included in calculations of the work participation rate because they were state-funded programs. Now, however, all such programs count (including child-only sanctioned cases and child-only cases that exceeded the five-year time limit).
However, participation in domestic abuse services and substance abuse, mental health, and rehabilitative treatment can now be counted as job search and job readiness assistance, which was not possible in the past. Such participation is for only six weeks a year, however (four weeks at a time). Extended periods of treatment will not earn work participation credits.

Work-related activities that are part of treatment (such as vocational training at MH or SA programs) can now be counted. This provision makes integration of employment services with treatment even more attractive than, as we will see later, it already is programatically.

While limited positive aspects exist in the new requirements, for mental health services to be effective many clients will need intensive and prolonged services prior to being able to meet the work participation requirements of 32 hours a week of work-related activity (35 for two-parent families). Unfortunately, obtaining the flexibility to count these services toward the work participation rate will probably require congressional action. In the meantime, the March 2007 “County Letter” to DPSS and other welfare departments from the California Department of Social Services clarified the current situation with regard to mental health by saying:

“...the four- to six-week time period can be extended, on a case-by-case basis, as a disability accommodation. Additionally, counties must continue to provide participants with needed behavioral health services based on individual assessments according to CalWORKs regulations, regardless of the federal rules for counting these activities toward the WPR.”

C. Patterns of welfare service utilization have changed dramatically casting mental health services in a new role

California CalWORKs caseload reductions in the past five years are much lower than commonly thought; reductions in Los Angeles total 25%, but Medi-Cal has increased 153%.

The California AFDC caseload (children and parents) in 1985 was 552,000; it climbed to more than 900,000 in 1995, and then dropped rapidly until again passing the 550,000 mark in 2001. Much of the reduction is attributed by economists to the economic boom of the 1990s and occurred in California prior to the implementation of welfare reform. California’s caseload declined 36% between January 1, 1998, when California’s CalWORKs program began, and 2006. However, in the past five years, 2001-2006, the overall caseload declined only 7%. In Los Angeles, the decline in the past five years is considerably larger—from 200,552 cases receiving cash aid in January 2001 to 150,426 in October of 2006, a decrease of 25%. However, this decline occurs in the context of an overall increase in persons aided. Between January 1, 1998 and January 2006:

- The number of persons receiving cash aid through CalWORKs has declined by 352,000 (48% compared to 36% statewide), the number receiving General Relief has dropped by 16,600 (21%), and the number receiving food stamps has dropped by 120,000 (15%). However, the number of persons receiving Medi-Cal only (not Medi-Cal and cash aid) increased 832,500 (153%). In January 2006, slightly more than 2 million persons were receiving one of these forms of aid from a population of 10 million, an increase since January 1998 of 536,000 persons or 36%.

- The Medi-Cal and food stamp cases are not unrelated to the CalWORKs cases: Although LA-specific data are not available, the RAND survey of a sample of persons who had left welfare in five counties (including Los Angeles) found that 76% live in households that receive some kind of...
support. The US GAO study of welfare recipients with impairments found that those leaving welfare were more likely than those without impairments to use Medicaid and food stamps.\textsuperscript{23}

Los Angeles applications for CalWORKs cash aid have been fairly stable for five years.

As shown in figure 1, over the past five years the number of Los Angeles CalWORKs applications and number of approved applications fluctuate but shows no overall downward trend.

Like most states, the percentage of welfare funds spent on cash aid in California has gone down and the percentage spent on child care and employment services has gone up.

The California Budget Project estimated in 2006 that the percentage of the welfare budget spent on cash aid had declined since 1996-97 from 84\% to 54\%. Concurrently, the expenditures on child care and employment went from 7\% to 40\%.\textsuperscript{24}

The number of persons enrolled in Los Angeles welfare-to-work has decreased faster than the number of cash aid cases, in large part due to the increase in “child only” cases.

The biggest change in the Los Angeles County CalWORKs caseload is in the percentage of “child-only” cases. These are cases in which the grant includes aid for the children in the family but not for an adult. If the parent is undocumented, a person with a history of a drug felony, sanctioned, or timed-off of welfare after five years, the case is child-only. Overall, Los Angeles child-only cases in September 2006 comprised 62\% of all CalWORKs cases.\textsuperscript{25}

In September 2006, a total of 151,004 Los Angeles cases received cash aid; 64,969 were cash-aided adults; 42,170 were registered in welfare-to-work; 57,063 were child-only cases.\textsuperscript{26} Figure 2 shows the trend over the past five years for cash cases overall, welfare-to-work cases, and child-only case. The number of welfare-to-work cases goes down faster than the overall number of cases, while the child-only cases do not decrease (and increase as a percentage of all cases).

The sanction rate has increased substantially, particularly among those sanctioned multiple times.

The sanction rate increased from 17\% in 2002 to 30\% in late 2005, with the increase due to persons sanctioned multiple times (the percentage of first-time sanctions has gone down).\textsuperscript{27}

A specific link to MH supportive services is drawn by the October 2006 CAO’s report on repeat and chronically sanctioned CalWORKs parents. The study found that the chronically sanctioned indicated a greater need for MH services than those sanctioned only once or not at all, yet they...
received MH supportive services at a lower rate than the other groups. Since Gov. Schwarzenegger intends to meet the new WPR requirements in part by requiring time-limited, child-only case parents to meet the work requirements, the unmet need for mental health services may threaten the plan and will, at a minimum, require increasing the capacity or the effectiveness of mental health services—or both.

When CalWORKs mental health services began, the population was falling rapidly, the work participation rate was far higher than it is currently, no-one had yet “timed off” welfare, and the chronically sanctioned population was small. Mental health services now occur in a much smaller pool of clients, with many of those most needing help being ineligible or having left welfare altogether. The high rate of unmet mental health need among the chronically sanctioned indicates a failure of identification and engagement. Yet funding for mental health services is maxed out.

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Work activities can be of many sorts, and only some of them involve working for wages (and some wage-earners may still not meet the work participation standard.) The top row of Table 4 shows the percentage of CalWORKs adult cash-aided participants in Los Angeles County who had some earnings in the period July–September 2006. (Only those present in all three months were included in the table.) Approximately one-third had some earnings in the three-month period. The mean three-month earnings, among those with any, was $2,532—or approximately $844 a month.

It is not possible to exactly replicate these figures for the sample of 2,400 CalWORKs mental health participants who terminated services in 2004-2005. However, we can look at figures for the three-month period that began with the month of termination. Of the 2,404 persons whose mental health services ended during the year, 2,109 were present in the database in the month of termination and two consecutive months.

Table 4 shows the figures generally comparable to those for all adult recipients of cash aid. The percentage working is less (19% vs. 33%), and for those with earnings, mean and median income are lower among mental health clients. The 17% of participants who completed their mental health services did somewhat better—23.9% worked, compared to 19.1% for those who did not complete. Note, though, that many confounding factors may have affected income; for example, clients with mental health problems might be less likely to have a high school degree, less likely to have worked recently, or more likely to have a long history on welfare—all of which have been shown to reduce earnings in experimental welfare reform studies. The new welfare reform environment puts a premium on effective mental health services.

The assumptions that have guided CalWORKs supportive services over the past eight years have
changed dramatically. On one hand, the regulatory environment that favored putting substantial funds into barrier removal has been replaced with one rejecting barrier removal and instead demanding very high levels of work activities for the increasingly small number of persons who are willing to participate in welfare-to-work activities. Maintaining barrier removal services may become a 100% state expense in the future. At the same time, barrier removal has become more difficult, and adults in almost two-thirds of the Los Angeles CalWORKs cases are ineligible for or have opted not to participate in welfare-to-work (child-only cases). Along with the increases in child-only cases, the number of persons with Medi-Cal only aid is skyrocketing.

Persons participating in CalWORKs mental health services are showing an admirable determination to use the welfare-to-work provisions of CalWORKs to move toward economic independence. However, in some sense mental health services are failing clients, since less than 20% successfully complete services and only 20% are working six months after the termination of mental health services. For CalWORKs mental health services to be relevant and justifiable in the regulatory environment that California faces, Los Angeles County will have to develop even more effective approaches to service.
PART III: HYPOTHESES REGARDING THE LIMITED SUCCESS OF CALWORKS MENTAL HEALTH SERVICES

At issue is whether the factors affecting CalWORKs outcomes can be modified by improving the mental health service design.

A critical question is what explains why some clients are successful and others not. This section explores a series of factors to determine which ones predict (explain) success. Some possible predictors of success are factors that can be changed in the short term (such as meeting transportation needs); some are factors that can be changed in the long term (not speaking English well or not having a high school equivalent education); and other possible predictors cannot be changed (such as race/ethnicity or number of children in the family).

Beyond identifying predictors of success, we want to know what the total impact of these factors is, that is how much of the difference between successful and unsuccessful participants can be explained by all these factors, and how much is the result of factors we either don’t know about or can’t measure or are a function of chance occurrences. If unchangeable factors, for example, explain most of why clients are or not successful, there would be little room for improving outcomes based on a different service design. On the other hand, if (as turns out to be true) all of the known and testable predictors combined do not explain success or failure to a large extent, a substantial opportunity exists to attempt to influence outcomes through service design changes.

A large number of factors are available to test as predictors of outcomes.

From our past outcomes reports, our work on the six-county study, welfare reform literature, and from new analyses of survey and DPSS and DMH management information system data, we review evidence related to the following questions:

- How much do individual characteristics of clients, including symptoms, predict completing mental health services and follow-up employment?
- How do practical barriers affect outcomes?
- Are characteristics of neighborhoods associated with outcomes?
- To what extent do overall success rates reflect varying success by different providers?
- Are particular types or amounts of mental health services associated with outcomes?

A. How much do client characteristics predict outcomes of MH services?

Individual characteristics of the 1,938 persons discharged from CalWORKs mental health services in 2004-05 show a population with what may be considered multiple potential barriers to employment. Non-English speaking clients, non-White clients, and foreign-born clients have relatively good outcomes.

- Birth country and primary language. At least 14 languages other than English are primary among the discharged mental health clients. The non-English language primary to most participants is Spanish (21%), followed by Cambodian (3%).

There is a statistically significant association between primary language and outcomes. English-speakers are least likely to complete (13%), Spanish speakers are next (25%); and other languages (primarily SE Asian) are most likely to complete (29%). However, the relationship to whether clients worked in the month of termination or any of the six following months is very different. A high of 29% (Spanish-speakers) worked; the low was 9% (other languages, primarily SE Asian). English speakers were intermediate (21% worked).

Highlighting the diversity of Los Angeles, participants were born in 32 countries other than the United States. The largest percentage (56%) is those born in Mexico, followed by Guatemala (16%), El Salvador (10%), Cambodia (7%), Vietnam (6%), and Nicaragua (3%). In all, foreign-born clients made up 18% of the persons discharged in the 12 months ending February 28, 2005.

- A statistically significant relationship exists between being foreign born and some specific outcomes. Those who are foreign born are much more likely to successfully complete their component than those born in the United States: 26% vs. 13%. (Those whose country of origin is unknown are intermediate.) Those who are foreign born are also more likely to have had earnings in the six months following discharge: 32% vs. 19% for those born in the United States.

Race and ethnicity. Despite their artificiality, the constructs of race and ethnicity continue to limit and shape economic opportunity. Among the 1,938 persons in the matched 2004-05 database served in
the component period, the largest percentage is Latino (43%), followed by African-American (26%), Caucasian (11%), and Asian and Asian Pacific Islander (5%).

- Certain outcomes are associated with race/ethnicity to a statistically significant degree. Completion of the mental health component occurred for 13% of Caucasians, 15% of African-Americans, 18% of Latinos, and 32% of Asian and Asian Pacific Islanders. Working in the six months following discharge is recorded in DPSS data for 16% of African-Americans, 18% of Asian and Asian Pacific Islanders, 26% of Latinos, and 27% of Caucasians.

- Age, sex and dependents. The mean age of the 1,938 mental health clients was 36 years old, with 26% being under age 30, 38% between the ages of 30 and 39, 29% between 40 and 49, and 8% over 50 years old. Participants in CalWORKs mental health programs were overwhelmingly female: 92%. The number of dependents (which is not necessarily calculated the same way DPSS calculates it) was zero for 14% of the study group, one or two for 44%, and three or more for 48% (10% of the study group had five or more dependents).

- Males and females were equally likely to complete the mental health component. But females were significantly more likely than males to have worked for wages in the seven months: 24% vs. 17%.

- The older the clients were, the more likely they were to complete services. Only 13% of those age 18 to 29 completed successfully, compared to 14% for those age 30 to 39, 20% for those age 40 to 49, and 32% for those 50 and over. Age was not a significant factor for having worked in the seven months.

- No association existed between the number of dependents, completing services successfully, or having worked in the six months following termination of services.

- Education. Among the 1,637 persons reporting their educational achievement, 32% had graduated from high school, 16% had some further education, 16% had completed the 11th grade, and 36% completed only the 10th grade or lower.

- Highest grade level attained did not affect completion of services to a statistically significant degree. There appears to be a significant effect of education on having worked, but it is not entirely linear. Among those who completed 11th grade but did not get a degree, 19% worked; among those who completed 12th grade, 23% worked; 29% of persons with at least some college credits worked. Paradoxically, 25% of the one-third of the clients who had completed only 10th grade or lower worked—a higher rate than among high school graduates.

- Time on welfare. DPSS management data contain the date of first eligibility for CalWORKs. The time from first eligibility until the start of the mental health component was up to 14 months for 35%, 13 to 36 months for 30%, four to ten years for 22%, and over ten years for 14%.

- No association existed between total time receiving welfare and completion of mental health services successfully. A marginally significant relationship (p≤0.07) existed between time on welfare and having worked. Those who had been receiving CalWORKs for a year or less worked at a rate of 26% (during the termination month and the six months following). A total of 21% of clients who had received welfare for two to three years worked; 22% of those receiving welfare for four to ten years worked; and 20% of those receiving welfare for more than 10 years worked.

- Work history. Work history was a question on the 2005 staff survey (N=462), which is matched to DPSS and DMH management data. Only 8% of mental health clients had a history of full-time work; another 12% had a history of part-time work. Sporadic or occasional work characterized 27%, and little or no employment was reported by 47%. (Staff members were unsure of work history in 10% of the cases.)

- The relationship of work history to the two outcomes is statistically significant. Fifty percent of those with a full-time work history completed treatment, compared to 15% of those with little or no history of work. Likewise, 57% of those with a history of full-time employment worked during the treatment termination month of the following six months. Only 14% of those with little or no work history completed services.

- Overview. Work history, time on welfare, educational attainment, age, sex, race/ethnicity, primary language and being foreign born all affect at least one of the primary outcomes of completion of services and finding employment to some degree. These factors differ regarding how much they appear to affect outcomes. Some results are paradoxical: persons with less than 10th-grade education as well as those who are foreign born work more than some with more education and those born in the United States.

b. Clinical factors

- Mental health diagnosis. Major depressive disorder was assigned to 53% of clients. Dysthymic disorder

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was assigned to 8%; adjustment disorder was assigned to 9%; and anxiety disorders, including post-traumatic distress disorder, comprised 17% of the diagnoses. Serious and persistent diagnoses (bipolar disorder, schizophrenia, and other psychotic disorders) comprised 8% of the diagnoses.

Persons having a serious and persistent mental illness were significantly less likely to complete a mental health component successfully (7%) than were those with major depression (16%), or other diagnoses (18%). Likewise, they were significantly less likely to work than the other groups, 16%, vs. 24%, vs. 25% respectively. Although we present broad groupings here, we did not see evidence in the more detailed diagnostic data indicating that any other diagnoses were particularly likely to affect outcomes.

Table 5: Staff Judgments of the Effects of Symptoms on Employment Among Those With Low Capacity to Work (does not sum to 100% because multiple responses possible)

<table>
<thead>
<tr>
<th>Effects of symptoms on employment</th>
<th>Percentage of 191 cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client would have trouble getting along with a boss or co-workers</td>
<td>39%</td>
</tr>
<tr>
<td>Client would have difficulty with getting to work or getting to work on time</td>
<td>50%</td>
</tr>
<tr>
<td>Symptoms would interfere with ability to concentrate or complete tasks</td>
<td>93%</td>
</tr>
</tbody>
</table>

Level of functioning at admission. The Global Assessment of Functioning (GAF) scale is used by clinicians to rate clients from 0 to 100 on several dimensions of functioning—from symptoms to relationships to employment. Persons under a rating of 40 have impairments in multiple functional areas, psychotic symptoms, or presence of danger to self or others. Ratings of 41 to 50 indicate serious symptoms or impairment, and those with ratings of 51 to 60 have moderate symptoms or impairment. Ratings over 60 indicate mild symptoms and some impairment in daily activities.

Among 370 persons who were discharged from CalWORKs mental health services in the spring of 2006, 11% had admission GAF scores of under 40; 30% had scores of 40 to 49; 42% had scores of 50 to 59; and 17% had scores of 60 or over. We would expect to see persons with very low functioning (the 41% of clients with scores under 50) to do less well on outcomes.

The 11% with GAF scores below 40 completed treatment only 8% of the time; the percentage increased in each category to reach 27% in those with scores over 60. We do not have a good measure of employment for this sample.

Symptoms. We structured the staff survey in 2006 so that we could obtain information about the effects of symptoms on work. Staff members were asked to rate the capacity to work at admission. Capacity to work was rated as good or very good for 18%; capacity was rated as OK for 29%; capacity was rated as poor for 33%; and for 19%, capacity was rated as very poor. For the 52% rated as poor or very poor, we asked staff to judge how work would be affected by mental health symptoms. Five percent reported that the work capacity issues were unrelated to mental health symptoms. Omitting these, the responses are shown in table 5. Multiple responses were possible. For 191 persons rated, staff members made 348 ratings. Staff members judged 39% of persons would have relationship problems if they worked; 50% would have attendance problems if they worked; and 93% would have concentration problems if they worked.

In table 6, staff members relate the job problems they believe would limit capacity to work to the type of symptoms clients manifested. Depressive symptoms were listed for 86% of the 181 cases—by far the most common category. But substantial numbers of clients were affected by symptoms of anxiety (28%), personality disorder (18%), and substance abuse (10%). “Other symptoms” included agoraphobia, problems with anger management, excessive crying, emotional manifestations of divorce, low self esteem,

A therapist comments on symptoms and work:
“Client had made significant progress in treatment, in reducing external tremors (caused by anxiety) however she was still unable to work due to depressive symptoms, and social anxiety.”
Table 6: Staff Judgments of the Type of Symptoms That Limit Employment Among Those With Low Capacity to Work (does not sum to 100% because multiple responses are possible)

<table>
<thead>
<tr>
<th>Type of symptom affecting employment</th>
<th>Percentage of 181 cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive (e.g., lack of energy, poor concentration)</td>
<td>86%</td>
</tr>
<tr>
<td>Anxiety including Post-Traumatic Stress Disorder</td>
<td>28%</td>
</tr>
<tr>
<td>Characterological traits (e.g., antisocial personality disorder)</td>
<td>18%</td>
</tr>
<tr>
<td>Other symptoms</td>
<td>17%</td>
</tr>
<tr>
<td>Active or negative symptoms of psychosis</td>
<td>12%</td>
</tr>
<tr>
<td>Consequences of substance abuse</td>
<td>9%</td>
</tr>
</tbody>
</table>

fear of failure, obsessive-compulsive disorder, severe codependency, and violent behaviors.

Overview. Staff members perceive symptoms to negatively affect the likelihood of employment. We found, in support of this view, that low admission Global Assessment of Functioning scores or having serious and persistent mental illness diagnosis do affect outcomes negatively.

B. How do practical barriers affect mental health outcomes?

Access to services: Practical barriers to services are of particular interest because CalWORKs is intended to address these by providing transportation help and child care or other specialized services. In other words, within the structure of CalWORKs it should be possible to address practical barriers. Yet, in a site visit interview, a CalWORKs mental health team manager estimated 60% to 70% of their clients still have child care and/or transportation as a barrier to working.

Barriers reported by clients in two recent surveys are below.

Approximately 40% of current clients report at least one practical barrier to attending treatment services (see table 7). This is a high rate, considering that a built-in bias occurs in these questions—those for whom accessing services was difficult are more likely to have dropped out and thus did not answer this survey. To correct for this bias, in our 2006 outcomes report we presented results from a survey conducted at GAIN offices after clients had terminated an MH/SA/DV supportive service. In the GAIN office study, the two most common reasons participants cited for not completing services were:

- Problems with participant scheduling, time, child care, transportation, including job scheduling (27% of those responding).
- Provider scheduling, provider moving, transferring therapist, delayed GAIN notifications (21% of those responding).

Statistical analysis that compared child care and transportation problems for those completing and not completing services in the GAIN office study showed that:

- Participants who said they had child care problems were only half as likely to have completed services as those who did not cite child care problems. Note that one-third of participants have three or more children.

Two clients comment on child care and transportation:

“Well I just want to mention since December 2005 until this date I haven’t received any help for transportation at all.”

“I have not been offered gas money for transportation here from either agency. And the gas prices are terrible.”

“CalWORKs should provide transportation for the children if they are receiving mental health services or if they are attending with the parent who is attending.”
Two therapists describe practical difficulties:

"Client faces significant challenges in her daily life as a single parent of five. She experiences periodic elevated stress as a result."

"Client’s homelessness and lack of transportation made it difficult to obtain consistent treatment and child care."

---

### Table 7: Measures of Service Accessibility by Study Year

<table>
<thead>
<tr>
<th>PRACTICAL BARRIERS</th>
<th>2005 Survey</th>
<th>2006 Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Times not convenient</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Place not convenient (have transportation problems)</td>
<td>16%</td>
<td>11%</td>
</tr>
<tr>
<td>Time OR place not convenient</td>
<td>20%</td>
<td>14%</td>
</tr>
<tr>
<td>Had to wait too long to be admitted to the program</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>People client knows pressured client to stop treatment</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Services not available in client’s primary language</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Work schedule makes it difficult to attend</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Currently have problems with child care while at treatment</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>ANY of seven practical barriers</td>
<td>39%</td>
<td>40%</td>
</tr>
</tbody>
</table>

*Number varies slightly by question.

Persons who said that the times at which services were offered were inconvenient were only 40% as likely to have completed services as those not citing this problem.

If we recall that these are parents who have seriously incapacitating symptoms of depression or anxiety, it should not be surprising that finding child care and traveling to appointments on public transportation constitute significant barriers.  

**Stressful life circumstances.** In our questionnaires in 2005 and 2006, we asked staff about specific challenges participants might face. The most common difficulty in both years was problems dealing with children (40% in 2005, 35% in 2006). However, legal difficulties, losing a job, being victim of a crime, being seriously injured or ill, having a relative or close friend die or have a serious illness, and the end of a significant relationship all were reported for more than 10% of the sample of participants whose cases had been closed. Being homeless during the treatment episode was reported for 6% and 7% in the two years, and having had a child removed by DCFS was reported by 3% and 4%. About a third of the clients did not have any of these challenges (so far as staff knew), but at least 25% had three or more challenges (see the tables 8 and 9).

**The impact of multiple difficulties during treatment.** Staff surveys of discharged clients in 2005 and 2006 also asked how much positive change clients made in “managing daily problems.” The amount of positive change (or negative change) was associated with the number of challenges in both years. For example, in 2006 “strong positive change” was reported for 18% of those with two or fewer challenges, vs. 9% for those with three or more challenges. Negative change occurred in 3% of those with less than three challenges, and 13% in those with three or more challenges. However, the number of challenges was not associated with whether or not clients achieved therapeutic goals in either study year. Nor, in 2005 when we have linked data, was it related to having worked in the termination month or in the six months following.

**Overview.** In summary, it appears that child care and transportation difficulties affect completion of treatment, but other personal challenges can be dealt with in the context of on-going treatment.

**C. Are mental health outcomes associated with neighborhood characteristics?**

While it makes intuitive sense that the neighborhood CalWORKs participants live in would affect success in meeting CalWORKs goals, an MDRC study in Los Angeles found on the contrary that “[w]elfare
recipients living in neighborhoods with high rates of poverty and welfare receipt were just as likely to go to work as welfare recipients who lived in other neighborhoods. In this section, we look at whether this general finding is also reflected among the 1,948 persons who terminated a CalWORKs mental health service in 2004-05.

Figure 3 shows, by Zip code, the density of clients in Los Angeles County Zip codes for the 1,911 persons for whom we have this information. The number of discharged clients is standardized to a rate per 10,000 inhabitants in a Zip code area.

To be clear, in this analysis we are not looking at the characteristics of the clients themselves, but the characteristics of the neighborhoods in which they live. We developed statistical models to tell us whether successful completion of mental health services and whether working after services ended were related to the client’s 2000 census tract characteristics. Using census data linked to client data by Zip code, we tested a number of census tract characteristics (particularly those that have been associated with economic disadvantage) to see if they were associated with either completing services or working among CalWORKs mental health clients.

Table 8: Difficult Life Circumstances Faced by Mental Health Clients During Treatment, as Reported by Staff

<table>
<thead>
<tr>
<th>Difficulty Faced</th>
<th>2005 Survey Percent</th>
<th>2006 Survey Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child removed</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Homeless</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Moved to worse housing</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Legal trouble</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Lost job</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Victim of crime</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Serious illness or injury</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Death or serious illness of a relative/friend</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>End relationship</td>
<td>26%</td>
<td>20%</td>
</tr>
<tr>
<td>Child problem</td>
<td>41%</td>
<td>35%</td>
</tr>
</tbody>
</table>

N ranges from 360 to 401, since staff members were unable to answer the question for some participants.

Table 9: Occurrence of Multiple Challenges During Treatment

<table>
<thead>
<tr>
<th>Multiple challenges among clients who had at least one</th>
<th>2005 Survey (N=307) Percent</th>
<th>2006 Survey (N=266) Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>51%</td>
<td>42%</td>
</tr>
<tr>
<td>Two</td>
<td>24%</td>
<td>29%</td>
</tr>
<tr>
<td>Three</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Four to seven</td>
<td>10%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Completing services. The odds of completing services were much lower for clients discharged to areas in which there was a relatively high proportion of African-Americans, in which there was a relatively high poverty population, and in which there was a relatively high percentage of welfare recipients. The percentage of Latinos in the Zip code area was not related to completion of services.

Any work in month of case closure or succeeding six months. The only Zip code area characteristics we tested that were associated (p<0.10) with reduced employment was the percentage of African-Americans in the Zip code area in which the client lived.

Overview. Zip code characteristics that are associated with poverty and under-employment
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County

D. Do outcomes vary by provider?

In previous outcomes reports, we have presented findings for an entire sample, without regard for the possibility that clients served by some providers are more successful than clients served by others. Here we present information by provider regarding successful completion of services and having clients who work after services end. We also look at the extent to which those two outcomes are correlated—that is, if a provider has a high completion rate do clients also work at high rates? The data source for these analyses is the set of 2,400 clients terminating services in 2004-2005.

Completion rates. A total of 91 providers were represented among the 2,404 mental health supportive services participants who had been discharged during this time period. (Some providers of mental health services are not under contract to DMH.) In general, the rate of successful completion of the mental health supportive service (as reflected in the DPSS data) was quite low (an average of 17%), and the completion rate in different providers varied greatly. Of the 91 providers, the discharges for 23 providers included zero clients who were recorded as having “completed” their supportive service. Most of these providers had small numbers of clients (16 and under). However, one provider had 43 discharged cases and only 5% successfully completed the service; another had 88 discharged cases and only 7% successfully completed the service. At the high end, only providers with few discharges are represented: 11 providers had completion rates of 33% or more, but in only one of these cases were there as many as 20 discharges. However, some large providers had relatively high completion rates. One had a successful completion rate of 31% for 143 discharges, another had a completion rate of 29% for over 63 discharges. For all 91 providers, the median completion rate was 14%.

Because the rates for agencies with a small numbers of discharges can be excessively influenced by chance, the rest of the analyses in this section use data from the 43 providers with at least 20 discharges (the median number of discharges during this period in this group of agencies is 39). For this group, the range of successful completions goes from 5% to 33% with a median of 14%. The map was created by linking the completion rate for a provider with the Zip code for the provider. Providers are divided into three categories, based on these completion rates. Zip code areas in which none of the providers is located are blank. No clear geographic pattern exists, with high, low, and medium completion rate patterns being found in most areas of the county.

Employment rates. Employment results for the 2,404 are presented in the 2006 Outcomes Report, available at www.cimh.org/calworks. In the month of service termination, only 16% of clients worked. During the next six months, a total of 24% worked. In the present analysis we focus on the employment rate among the persons discharged from each provider. As with completion rates, agencies with less than 20 discharges are dropped because their rates are likely to be unstable due to chance. However, the employment rates for these smaller agencies are modestly higher than for the larger agencies. Among the 48 smaller
providers, the median employment rate was 31%, while it was 21% among the 43 larger providers—a marginally statistically significant difference (p≤0.06). The bottom quarter of the larger providers had employment rates that did not exceed 17%; the rate in the agencies in the top quarter all exceeded 30%. The lowest rate in the larger providers was 12%, the highest was 42%.

The relationship between provider, completion of services rates, and employment rates. In the 2006 report, we noted that employment rates overall were 30% for clients completing services and 23% for those who did not—so those completing services were somewhat more successful at working than those who did not. Here, though, we are looking at whether agencies with high client completion rates also have high client employment rates.

Many disparities exist in the rank order for these two measures. We illustrate the disparities by focusing on the top and bottom quarter of providers judged by completion rate (Figure 5). Four programs are in the lowest quartile based on service completion that are in the highest quartile for employment. On the other end, none of the agencies in the highest quartile for completion were in the highest quartile for employment. In fact, two programs in the highest quartile for completion were in the lowest quartile for employment. (The overall correlation between the two measures is only 2%.) Thus, it appears that the characteristics of providers that are associated with the completion rate are for the most part not the same as those that are associated with the employment rate.

Overview. Both completion of treatment rates and post-discharge employment rates vary dramatically by provider. However, a) the pattern of variation by provider is not the same for the two outcomes, and b) even the most successful providers fall considerably short of achieving these goals in a majority of cases.

Figure 4: Low, Medium, and High Completion Rates for the Largest 43 MH Providers
E. Does the type or pattern of mental health services received by clients help explain outcomes?

Surprisingly, a substantial proportion of all services delivered were outside the time frame of the CalWORKs mental health component; many services were paid for through other funding streams.

In comparing DMH service utilization data from January 2003 through June 2006 with the DPSS information on the mental health component that was closed between March 1, 2004, and February 28, 2005, we found that some participants had started services earlier than their DPSS mental health component began.\(^{47}\) DMH initial admits went back as far as 1991; 9.2\% had been admitted in 2001 or earlier. However, only 3\% of the component episodes started in 2001 or earlier. Likewise, services often continued past the end of the component. In fact, 342 persons (18\%) began another mental health service episode after the termination of the mental health supportive service component in 2004-2005.

Illuminating also is the percentage of services that were not billed to CalWORKs (49\%), and the percentage of services received at agencies that were not CalWORKs providers (9\%). Finally, an episode of mental health service is defined by an admission date and its related discharge date. During the period from January 2003 through June of 2006, 65\% of the clients had only one episode, 25\% had two episodes, and 10\% had between three and ten episodes.

A number of reasons explain why services do not coincide with the welfare-to-work mental health component. First, use of CalWORKs funds, and the establishment of a mental health service component in the welfare-to-work plan, depend on CalWORKs eligibility. Mental health clients might not have been eligible for welfare-to-work yet still were eligible for mental health services funded through other sources. For example, a woman who lost eligibility when her oldest child turned 18 might still have a mental health condition that qualified her for treatment using Short-Doyle funds. Of the 391 discharge ratings made in our 2006 survey, staff members noted that 90 clients

![Figure 5: Comparison of Quartiles of Percentage Having Worked At All in Six Months After Ending Mental Health Supportive Services (Mean for Each Agency) in Relationship to Quartiles for Completing Services (Mean for Each Facility).](image)
(23%) lost eligibility. Among all 2,404 clients in the DPSS data, fewer than 1,000 (40%) were still receiving CalWORKs six months after the last mental health component ended.

Second, a proportion of “back door” referrals have always occurred—that is, persons who enter mental health services on their own (rather than being referred by DPSS) but later decide to apply for CalWORKs.

Third, some participants are so incapacitated that they qualify for SSI disability payments and leave CalWORKs but remain in treatment. (In the data for these 1,949 persons, 7% of the services were delivered to persons whose source of income was SSI.) Data on source of income indicates, in fact, that in only 77% of the services CalWORKs was the source of the client’s income. Other categories include general relief (4%) and earnings (3%).

A final and important reason is that some CalWORKs participants have multiple mental health welfare-to-work components. For any of a number of reasons, participants may end one component and later start another. In the DPSS data for 2004-2005, 71% of terminations (which covers a period of 18 months) had one mental health component, 23% had two, and 5% had three or more.

In the table below, the number of clients receiving the major types of mental health service are shown along with the average number of hours of each service clients received. The table contrasts services received during the welfare-to-work mental health component period (plus or minus 90 days, as noted above) and services received during the entire period of January 1, 2003 to June 30, 2006. The number of clients and the number of average hours received are both greater for all types of services in the longer period. [Recall that all of these persons terminated their mental health component prior to February 28, 2005.] The most marked difference is for individual therapy; although only a few more clients received this service, an average of 11.9 hours were received in the longer period compared to 7 hours in the shorter period. Overall, participants received 17.5 service hours in the component period and 27.6 in the extended period, an increase of 55%.

### Table 10: Comparison of All Services in the Period January 2003 Through June 2006 With Those Services Delivered Within the Mental Health Welfare-to-Work Component Period (N=1,949)

<table>
<thead>
<tr>
<th>Type of service</th>
<th>Any time Jan 2003-Feb 2005</th>
<th>Only in the component period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of clients receiving</td>
<td>Mean hours of service</td>
</tr>
<tr>
<td>Case management</td>
<td>1859 (95%)</td>
<td>9.0</td>
</tr>
<tr>
<td>Collateral</td>
<td>568 (29%)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Vocational</td>
<td>8 (0.4%)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Individual</td>
<td>1936 (99%)</td>
<td>11.9</td>
</tr>
<tr>
<td>Group</td>
<td>805 (41%)</td>
<td>2.8</td>
</tr>
<tr>
<td>Medications</td>
<td>1301 (67%)</td>
<td>3.4</td>
</tr>
<tr>
<td>All services</td>
<td>1949 (100%)</td>
<td>27.6</td>
</tr>
</tbody>
</table>
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County

Information from client and staff surveys has shown that a particular CalWORKs-funded mental health treatment episode was the first time of receiving mental health services for 60% to 70% of clients. While earlier services may have occurred years before for some of these clients, it is clear from this data that “CalWORKs mental health clients” as a group also receive differently funded mental health services immediately before, after, or in alternation with CalWORKs services. And a quarter have multiple mental health welfare-to-work components.

Two important implications stem from this pattern. First, for a substantial minority of CalWORKs mental health clients, mental health problems are more serious and more prolonged than is reflected in the DPSS records of mental health service. Second, the “outcomes” we are analyzing (completion of the component and obtaining employment) are accurate for a “snapshot” in time (the end of the component), but for many clients are not the last word.

Most clients received case management and individual treatment but virtually none received vocational services. While 28% of the clients received more than 20 hours of services between Jan 2003-Feb 2005, 25% received 5 hours or less.

We examined the service data to determine which services clustered together (see table 10). Note that the services may not have occurred concurrently. Vocational services are virtually unused and about 20% receive collateral (family) visits. Other than these services, three main service patterns exist:

- 31% receive individual therapy and case management and psychiatric medications
- 26% receive those services plus group therapy
- 26% receive individual therapy and case management but not medications or group therapy

In all, 99% received individual therapy, and more than 90% received case management; about 60% received at least one medications visit; and one-third received group treatment.

Great variability exists in the number of hours of service received per person. Figure 6 shows the percentage receiving 0-10 hours of service, 11-20 hours of service, and so on, up to 120 hours of service (a handful of clients had more than 120 hours and are not shown on the graph). We looked at this distribution in more detail and found that 24% of the clients had five or fewer hours of service. Another 22% had between 5 and 10 hours of service. Another 25% had between 10 and 20 hours, and a final 28% had more than 20 hours of service. Thus 46% received less than 10 hours of services—a small amount to expect to effect significant life changes.

Looking more specifically at individual therapy, which for most clients is a key active ingredient of services, we find that 28% received two or fewer hours of individual therapy. Another 26% received two to five hours of individual therapy.

Outcomes. Total service hours are significantly related to completion of services. Of those who

Figure 6: Distribution of Service Hours For 1,938 Clients (January 2003-February 2005)
received less than five service hours in total, only 10% completed services. This increases steadily with increasing hours so that for those with more than 20 hours, 22% completed services. However, no relationship exists between total hours of service and whether clients worked in the service termination month and the six succeeding months.

We used a statistical model to determine whether the amount of specific services (individual, group, medications or case management) was related to successful completion of the mental health component. Holding the effects of other services constant, amounts of individual therapy greater than 20 hours were associated with higher completion rates. Amounts of group service greater than seven hours were associated with higher completion rates as were amounts of medication support greater than six hours. The association with hours of case management was not statistically significant.

Persons with only one episode were more likely to complete their mental health component than those with two or more episodes (18% vs. 13%). Conceivably, though, they could have completed the component on a second try, for which we do not have data. Those with only one episode worked in the six months follow-up at a rate of 26%, compared to 21% for those with two episodes, and 14% for those with three or more.

Overview. Seemingly high percentages of clients receive very low numbers of service hours during the CalWORKs mental health component period. However, many services are delivered to clients using other funding sources, before or after the CalWORKs services. Within the time period of the CalWORKs services, at least, persons receiving low amounts of service do not do as well as those receiving higher amounts of individual, group and medications services.

F. Individual, geographic, and service variables have a limited effect on outcomes

Using statistical models which allow us to see the effects of each predictor independent of the other predictors, four individual characteristics plus provider differences were important in predicting completion of mental health services. Having worked in the six follow-up months was predicted by nine individual characteristics and to a lesser extent by provider differences.

In exploring the hypotheses above regarding the inconsistency of outcomes for CalWORKs mental health services, we have used “bivariate” analyses—that is, we looked separately at each outcome in relation to each possible predictor variable. “Multivariate” analysis allows us to “hold constant” each of the other possible explanatory variables while focusing on one. It also gives us an estimate of the total explanatory power of all the different hypotheses together. This “multivariate” point of view is not necessarily more valid than looking at each predictor in isolation; it allows us to answer different questions.

By virtue of the nature of the data available to us, we have had to look at characteristics using three different data sets.

- We first use the 1,938 cases that combine data from DMH and DPSS. The services are those provided within the component start and end dates (plus or minus 90 days).
- The same database is used in looking at the effect of provider variations with other factors held constant; but we limited the analysis to providers having discharged at least 20 clients in the 12 months.
- For variables based on staff ratings after discharge, we were limited to a subsample of 433 cases of persons who had both staff ratings and the DMH and DPSS linked management data.

The actual statistical models we arrived at are presented in Appendix 2.

a. DMH and DPSS linked data: individual characteristics

In table 11, the left hand column shows the statistically significant predictors derived from the multivariate model in Appendix 2. The second column shows the direction of the effect. The other two columns show the effect on the predicted probability of completing services for two illustrative cases. The first case is a person who received treatment less than three months, who was under age 30, who had a less serious diagnosis, and was born in the United States. The second illustrative case is for someone who received treatment over a year, is between 40 and 49 years old, had a serious mental illness, and was
Table 11: Significant Predictors and Two examples of the Way Demographic and Service Characteristics Affect the Likelihood of Completing The Mental Health Treatment Component Under Welfare-To-Work

<table>
<thead>
<tr>
<th>Statistically significant predictors</th>
<th>Direction of Effect</th>
<th>Case Example 1</th>
<th>Case Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long was mental health treatment as shown on component dates?</td>
<td>Longer duration +</td>
<td>3 months or less</td>
<td>Over a year</td>
</tr>
<tr>
<td>Age</td>
<td>Over 50 +</td>
<td>Under 30</td>
<td>Between 40-49</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Bipolar or psychotic –</td>
<td>Adjustment disorder or anxiety disorder</td>
<td>Bipolar/Schizophrenia/Other psychotic</td>
</tr>
<tr>
<td>Birth country</td>
<td>Foreign-born +</td>
<td>Born in US</td>
<td>Foreign-born</td>
</tr>
</tbody>
</table>

Probability of having worked in termination month and succeeding six months

<table>
<thead>
<tr>
<th>Case Example 1</th>
<th>Case Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5%</td>
<td>22.4%</td>
</tr>
</tbody>
</table>

Table 12: Significant Predictors and Two Examples of the Way Demographic and Service Characteristics Affect the Likelihood of Working at All in Six Months Following Termination of Treatment

<table>
<thead>
<tr>
<th>Statistically significant predictors</th>
<th>Direction of Effect</th>
<th>Case Example 1</th>
<th>Case Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Female +</td>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td>How many treatment episodes?</td>
<td>More episodes –</td>
<td>1 episode</td>
<td>3 or more episodes</td>
</tr>
<tr>
<td>How long was mental health treatment as shown on component dates?</td>
<td>Longer treatment +</td>
<td>MH component lasted 3-6 months</td>
<td>MH component lasted 12 months+</td>
</tr>
<tr>
<td>Age</td>
<td>Older –</td>
<td>Age under 30</td>
<td>Age 50 or over</td>
</tr>
<tr>
<td>Language</td>
<td>Non-English +</td>
<td>Spanish language</td>
<td>English language</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td>White +</td>
<td>Latino</td>
<td>African-American</td>
</tr>
<tr>
<td>Hours of group treatment</td>
<td>More group hours –</td>
<td>2-7 hours</td>
<td>8 or more hours</td>
</tr>
<tr>
<td>Last grade of school completed</td>
<td>Over HS +</td>
<td>10th grade or less</td>
<td>12th grade</td>
</tr>
<tr>
<td>Birth country</td>
<td>Foreign-born +</td>
<td>Foreign born</td>
<td>US born</td>
</tr>
</tbody>
</table>

Probability of having worked in termination month and succeeding six months

<table>
<thead>
<tr>
<th>Case Example 1</th>
<th>Case Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>0%</td>
</tr>
</tbody>
</table>
foreign born. For the first person, the probability (according to the statistical model) of completing services successfully was only 8.5%; the probability of the second person completing services was 22.4%.

In table 12, the same format is followed for having worked in six follow-up months for two illustrative cases. Note that nine predictors were statistically significant, versus the four for completion of services. The added variables are gender, race/ethnicity, episodes of treatment, hours of group treatment, education and not-speaking English as a primary language. Diagnosis was important for completion of services, but not for working. In the two illustrative cases, one is a foreign-born Spanish-speaking young woman with less than 11th grade education; the other is a U.S.-born, African-American with a 12th grade education. The former has a 30% chance of working, the latter a 0% chance of working.

B. DPSS and DMH linked data: The effect of provider variation

We reran the above statistical model predicting successful completion of services, limiting the analysis to 26 providers that had 20 or more cases in the database. The same variables remained statistically significant. We then added the individual providers to the model. Using as a comparison (omitted category) Long Beach Adult Mental Health Services, which had the highest completion rate (32%) among these providers, we tested whether each other provider was statistically different (at the 0.05 level) from this leader. Of the 26 providers, 17 had statistically significant lower completion rates than did the leader.

When we reran the model predicting any work in the six follow-up months but limiting the analysis to the 26 providers with 20 or more cases, age was no longer statistically significant. We added the individual providers to the model, using as the comparison category Verdugo Mental Health Center, which had the highest employment rate of 42%. When providers were added, race was also no longer statistically significant. Only five of the 26 providers were statistically different from the top provider in terms of follow-up employment. Thus—paralleling what we saw in the bivariate analysis above—the provider is less important in predicting follow-up employment than in predicting successful completion of treatment.

C. Staff ratings and linked DMH/DPSS data: work history and motivation to change

This analysis differs from that above in that instead of the whole population of 1,938 clients who were discharged in the year we focus on a sample 433 chosen randomly from the population. Staff completed survey forms for these clients, including rating their motivation to change and describing their work history.
Successful completion of services in the sample. We re-ran the statistical model predicting completion of services; however, this time we added motivation for treatment at admission and work history as potential predictors. Those with little or no work history were significantly less likely to complete services than were those with a history of full-time employment (having some but not full-time employment was not statistically significant). Not surprisingly, compared to those who were highly motivated to change, those who were moderately, inconsistently, or not motivated were less likely to complete services.

Any work in the follow-up six months in the sample. We also re-ran the statistical model predicting work during the follow-up six months among the 433 sample members, adding motivation for change at admission and work history to the model. Results for having little or no work history were statistically significant. Results for motivation for change were not associated with having work in the follow-up six months.

It is encouraging that for both completion of treatment and working, the only category of work history that showed significant effects on the outcome was “little or no” work history. Unfortunately, about half of the clients are in this category.

Overview: While individual, provider and geographic differences are predictive (in different ways) of completing mental health services and working, they explain a relatively small part of the variation we find. More importantly, the level of success for either outcome is so low it suggests we must go beyond the existing service model to achieve improvements.

The characteristics we have profiled are all statistically significant—there is less than a 1 in 20 chance that they occur due to chance factors. However, the factors in our models explain only about 5% of the variation we see in actual outcomes. That is, neither “fixed” nor “changeable” factors that have been measured to date explain the pattern of outcomes to any substantial degree.

More importantly, among even the very successful providers far more clients do not complete services and do not work during the follow-up six months than those who do complete services. Only a small proportion of those who do work earn at even the federal poverty level. It seems clear that if we want to substantially improve outcomes, we need to look beyond the factors that account for variation in the current clients as served by current providers.

We believe many of the mixed and limited outcomes we have observed to date are due to the lack of a highly effective treatment model. As we will see in the next section, many of the needs that we know clients to have are not addressed by the current service model. A service model that better fits client needs has a possibility of improving outcomes regardless of client or provider characteristics.

A therapist comments:

“Client was unable to work for most of her adulthood prior to entering treatment. She appeared eligible for SSI benefits but stopped coming to treatment before process was completed. At no time did she ever appear able to work, nor did her history of symptoms appear to allow her to work.”
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County
PART IV: DEFICIENCIES IN THE MODEL OF SERVICE

POOR MATCHES BETWEEN CLIENT NEEDS AND THE SERVICES OFFERED

While appropriate for many clients, the medical model outpatient clinic that is the norm for CalWORKs mental health services does not meet the needs of those requiring more comprehensive and flexible services.

The model of services in which clients identify a need for mental health treatment, arrange their schedules to come using their own form of transportation, and are comfortable with either pharmacological or “talking cure” modalities of treatment is distant from the realities of many CalWORKs participants.

First, many clients may not have chosen to come to treatment. Although treatment itself is not required, screening is, and for most of the time since 1999 a follow-up assessment was required. An assessment may be triggered by answering just one question positively on a screening test. So, while in some sense clients “self-identify” and agree to treatment, they do so in the context of work-activity requirements in which mental health services are suggested by welfare staff and in which the focus of treatment is dealing with barriers to employment. These factors all raise questions about the degree of real motivation for treatment. Staff reported in the 2005 and 2006 surveys that only about 20% to 25% of clients were highly motivated to change and poor motivation occurred in up to half. As noted above, low motivation to change is directly associated with failure to complete the mental health service component (see table 13).

Lack of motivation combines with the practical difficulties we presented above to result in a high rate of no-shows and poor participation in therapy. In 2005, participation was poor or minimal for 56%. Participation appears somewhat better in 2006 (probably because new DMH regulations required terminating clients after only 30 days of not attending services), but 46% of participants are still rated as poor or minimal (see table 14).

Members of our CiMH team visited five different providers (selected from those that had very high and very low completion rates). In general, even though “case management” is often provided, it is “brokerage” case management in which the case manager assists the client with referrals. Conversely, “hands on” case management occurs when concrete assistance is offered (ranging from transportation to accompanying a client to GAIN interview). Staff at

Table 13: Staff Ratings of Client Motivation to Change, at Admission

<table>
<thead>
<tr>
<th>Motivation</th>
<th>2005 Survey N=457</th>
<th>2006 Survey N=388</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly motivated</td>
<td>20%</td>
<td>26%</td>
</tr>
<tr>
<td>Moderately motivated</td>
<td>28%</td>
<td>33%</td>
</tr>
<tr>
<td>Slightly or inconsistently motivated</td>
<td>37%</td>
<td>33%</td>
</tr>
<tr>
<td>Not motivated</td>
<td>15%</td>
<td>8%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 14: Staff Rating of Participation in Therapy

<table>
<thead>
<tr>
<th>Participation</th>
<th>2005 Survey N=458</th>
<th>2006 Survey N=379</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>Good</td>
<td>29%</td>
<td>41%</td>
</tr>
<tr>
<td>Poor</td>
<td>34%</td>
<td>31%</td>
</tr>
<tr>
<td>Minimal</td>
<td>21%</td>
<td>15%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
several clinics told us that some GAIN staff think that keeping appointments and remaining in treatment is a “test” of clients’ abilities to be organized and ready for the challenges of employment. In reality, these clients’ mental health issues constitute a barrier and need to be addressed effectively, rather than setting up clients to fail. There is no DMH rule against providing services outside of the agency, but in most clinics it is rarely done. A “promising practice” we found at one clinic was that if clients did not keep their appointments for 30 days, a clinician and case manager would assess whether they thought the attendance problem was “symptom-related.” If it was, the two of them would make a home visit. This clinic also used case managers for purposes such as attending a job fair with a client.

At another clinic, which had a very low completion rate and was in a high poverty neighborhood, staff reported extremely high no-show rates, but they did minimal outreach. They stated, though, that many of their clients needed outreach:

- Staff estimated 40% of their clients lived with others and could be “put out” at any time. Having very tenuous and unstable living situations made keeping appointments problematic.
- Another factor cited as indicating a need for outreach on the first contact was lack of cultural support for therapy (including pharmacotherapy).
- Many clients have concurrent or related conditions that make clinic attendance problematic, including a history of suicide attempts, substance abuse, and domestic violence.

As one case manager put it, “These clients have survival skills but not life skills.” For many clients, attendance at a mental health clinic is not recognized as contributing either to survival or a better life. Nonetheless, their service needs are real and the consequences of not receiving services are significant. Given these barriers and the unsurprising high no-show rate, trial of a service model more in tune with client needs is justified.

Substance abuse and domestic violence issues are very common in the CalWORKs mental health population, but mental health programs often do not deal with them adequately.

Overlap of mental health, substance abuse, and domestic violence in CalWORKs participants. Epidemiological research carried out by CiMH in Kern and Stanislaus CalWORKs populations has shown a high rate of co-occurrence of mental health, substance abuse and domestic violence (MH/SA/DV) problems. Of those who met the criteria for mental health service need used in the study, 29% in Stanislaus and 31% in Kern also reported serious domestic violence. Similarly, of those with mental health service need, 20% in Stanislaus and 21% in Kern reported substance use disorders.

Prevalence of substance abuse among Los Angeles CalWORKs mental health clients. Both client and staff surveys in 2005 and 2006 give some evidence of the extent of substance abuse problems and how well these problems are addressed in the course of mental health treatment.

- Information from staff. Staff members were asked how much change the client experienced regarding substance abuse. If substance abuse was not an issue, staff members selected “not applicable.” Because this is an area of social stigma and clients may not be open about it, we also gave an option for “unable to judge.” In table 15, we have omitted the cases in which staff felt unable to judge (17% of cases). Staff members show about 20% having substance abuse problems. Over half of these had no change or negative change.
- Substance abuse treatment through referral. In 2006, we asked additional questions about the extent and success of referral for substance abuse. Of the 72 persons staff indicated had a substance abuse problem, 18 received treatment at a substance abuse provider; staff members were unsure about substance abuse for 13 clients. Staff also rated whether clients who had received a referral for substance abuse treatment had followed through with it: 12 did and 36 did not.

We also asked about this issue during our site visits to CalWORKs mental health programs. We were told that 20% to 30% of clients are referred for substance abuse treatment.

Taken altogether, this information indicates that a substantial percentage of clients acknowledge having problems with alcohol or drugs, and that half or more do not receive effective help either from the mental health agency or through referral.

A therapist explains why a client with a dual disorder dropped out:

“Client was very busy attending group meetings for substance abuse, worked 30 hours per week and had children to take care of, which made it difficult for client to commit to individual mental health services.”
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County

Two clients comment:

“I need to hurry up sign up for classes: parenting, anger, dual diagnoses, domestic violence.”

“I believe that couples counseling should be offered…”

Prevalence of domestic violence among Los Angeles CalWORKs mental health clients. Similarly, both client and staff surveys in 2005 and 2006 give some evidence of the extent of domestic violence and how well these problems are addressed in the course of mental health treatment.

As with substance abuse, staff asked how much change the client experienced regarding domestic violence. If domestic violence was not an issue, staff selected “not applicable.” We also gave an option for “unable to judge” but have omitted these cases (17%). Domestic violence was rated as not applicable for 70% and 72% of clients in 2005 and 2006. Of those rated regarding change in their domestic violence situation, half had no change or negative change (see table 16).

Although the issue of children and parenting is a focus in some treatment episodes, the current treatment model does not routinely assess for critical problems with children and does not easily accommodate the provision of needed services to such children when identified as having significant behavioral or emotional problems.

Epidemiological evidence of risk to children if CalWORKs parents have mental health problems. There is a great deal of evidence that the children of parents with mental health, alcohol or other drugs, or domestic violence (MH/AOD/DV) problems are at high risk for a wide range of behavioral and other problems; this seems particularly true for CalWORKs families. Figure 7, for example, contains two graphs from the CiMH epidemiological study of MH/AOD/DV among CalWORKs participants in Kern County, showing two of many risks children face in families where a parent has MH/AOD/DV. We have not limited the display to mental health because as shown above, the co-occurrence of substance abuse and domestic violence with mental health needs is very high.

The best predictor of poor developmental outcomes among young children is the total number of risk factors to which they are exposed. In the Kern/Stanslaus study, we measured 49 potential threats of different kinds to children. Within the study population, CalWORKs participants had a range from two threats to as many as 29—the mean was 9.8. Overall 15% of the study sample had a very high total number of

---

Table 15: Staff Rating of Need for Substance Abuse Treatment and Change During Treatment

<table>
<thead>
<tr>
<th>Change regarding alcohol or drugs</th>
<th>2005 Survey N=363 Percent</th>
<th>2006 Survey N=354 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong positive</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Some</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>No change</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Negative change</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>No problem</td>
<td>79%</td>
<td>80%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

---

Table 16: Staff Rating of Need for Domestic Violence Services and Change During Treatment

<table>
<thead>
<tr>
<th>Change regarding domestic violence</th>
<th>2005 Survey N=354 Percent</th>
<th>2006 Survey N=353 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong positive</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Some</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>No change</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>Negative change</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>No problem</td>
<td>70%</td>
<td>72%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County

A therapist describes a client:
“Inconsistent attendance after numerous attendance contracts. Client required more intensive in-home service with her children & was referred & granted ‘systems of care’ assistance. Client’s issues mostly focused on parenting.”

Figure 7: Random Sample of Kern County CalWORKs Participants: Two Measures of How Children are at Risk if Their Parents Have Mental Health, Substance Abuse, or Domestic Violence Problems

<table>
<thead>
<tr>
<th>Homeless on street or in a shelter during the year, by AOD/MH/DV service need</th>
<th>Very high scores on child behavior difficulties, age 7-17, by AOD/MH/DV service needs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td><strong>Overall</strong></td>
</tr>
<tr>
<td>No AOD/MH/DV</td>
<td>No AOD/MH/DV</td>
</tr>
<tr>
<td>Need AOD Service</td>
<td>Need AOD Service</td>
</tr>
<tr>
<td>Need MH Service</td>
<td>Need MH Service</td>
</tr>
<tr>
<td>Need DV Service</td>
<td>Need DV Service</td>
</tr>
<tr>
<td>Percent Homeless on Street or Shelter</td>
<td>Percent With Very High Child Problematic Behaviors</td>
</tr>
</tbody>
</table>

- Threats to child well-being (greater than 14). Roughly twice as many families with SA, MH, or DV problems (28-30%) had more than 14 threats (for those with mental health needs it was 29%). These rates are five to six times higher than among the families with no SA, MH, or DV issues. Thus, it seems clear that children of parents with mental health problems should be a focus of assessment and, in many cases, services. Currently, however, children are not systematically assessed or offered services, although parents may be given referrals to child mental health services in other sites.

- In the CIMH 2006 survey of mental health staff, in which they were asked to provide information about discharged clients, we asked a number of questions about children. First we asked whether parents were having problems with their children.

  - In 2005, 41% of parents reported having a serious problem with at least one child; in 2006 the figure was 35%. At one site we visited, clinic staff referred about 15% of families to the children’s clinic in the same building.

  - Staff members work with the parents around child problems. In 2005 and 2006, we asked staff how much time they spent working on parenting or helping with problems children were having. The issue was a significant focus in about 30% of cases. If staff had reported that the client was having a serious problem with one or more children, the percentage devoting significant time to the issue was much higher—more than 50% (see tables 17 and 18).

- Staff were asked to rate improvement in parenting skills during the course of treatment. Note that only families for which parenting was judged relevant by staff were rated (but it was considered relevant for well over half in each year). Although some positive change was reported for more than half, no change or negative change was reported for 40% (see table 19).

- More detailed questions in 2006 resulted in staff classifying 40% of parents as having no out of the ordinary problems with a child; 38% were classified as having parenting concerns that required discussion in therapy; 16% were classified as having children with serious behavior or emotional problems at home or at school; 4% reported having children with medical problems; and 7% reported having other kinds of problems with a child (there is a small amount of overlap in these categories).
For 52 families out of the 63 having a child with serious emotional or behavioral problems, staff described treatment received: in 9 cases, or 17%, a child was being treated at the same clinic, in 23 cases (44%) a referral and been provided, and in 20 cases (38%) the child was not in treatment and had not been referred; the two most common reasons were that “this is an adult program” and that staff had not been successful in engaging the child in treatment.

We have presented two types of evidence: 1) epidemiological evidence that child problems are much more common if parents have mental health problems (or substance abuse or domestic violence), and 2) evidence from Los Angeles County surveys that children in many CalWORKs mental health families experience a wide range of emotional and behavioral problems. CalWORKs mental health services need to re-orient their assessment and treatment provisions to better meet the needs of all family members.

**Mental health providers may rely on relatively inexperienced therapists to serve very difficult clients.**

In three of our five program site visits, most of the therapists were relatively inexperienced, many not yet licensed and still getting their supervised training hours. Many are very young (in their early or mid 20s)—much younger than most clients. DMH staff members who conducted site visits with all CalWORKs mental health providers have confirmed that this lack of experience is common. (All sites we visited, though, have experienced supervisors.) Research on psychotherapy outcomes conducted over many years has shown that clinician experience, skill, and ability to establish a therapeutic alliance are important determinants of success. CalWORKs cases are difficult:

- CalWORKs mental health clients are dealing with a wide range of very difficult circumstances (see the section on multiple stressful life circumstances in the section above on practical barriers).
- For various reasons, including the “demand” characteristic of CalWORKs work activities, motivation for therapy is not high in most clients and attendance is often sporadic.

Given these circumstances, success will be more likely with therapists having substantial life experience (marriage, family, dealing with adversity and the job market) as well as experience and skills in psychotherapy.

**Table 17: Staff rating of Therapy Time Spent on Parenting or Children: All Cases**

<table>
<thead>
<tr>
<th>Time spent on these issues</th>
<th>2005 Survey N=456 Percent</th>
<th>2006 Survey N=388 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant time</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>Some time</td>
<td>43%</td>
<td>48%</td>
</tr>
<tr>
<td>Little time</td>
<td>27%</td>
<td>23%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Table 18: Staff Rating of Therapy Time Spent on Parenting or Children: Cases With Serious Problems**

<table>
<thead>
<tr>
<th>Time spent on these issues</th>
<th>2005 Survey N=161 Percent</th>
<th>2006 Survey N=126 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant time</td>
<td>59%</td>
<td>53%</td>
</tr>
<tr>
<td>Some time</td>
<td>30%</td>
<td>41%</td>
</tr>
<tr>
<td>Little time</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Some CalWORKs mental health clients find employment on their own or with the help of GAIN; but specialized vocational services may be needed for others.

CalWORKs mental health services use a “pull out” model of barrier removal. Like children pulled out for a remedial reading class in school, they are assigned to mental health treatment with the assumption that their problems will be “cured” and returned to the usual GAIN employment services. As we have seen, this model is producing limited outcomes:

- Only about 16% of clients successfully complete treatment. So “barrier removal” is incomplete.
- Our multivariate analyses showed that serious mental health problems reduce the likelihood of completing treatment or of getting follow-up employment.
- Many clients do not just have mental health issues to cope with; they also have very poor work histories and low capacity to work, both of which reduce the likelihood of finding employment. In fact, 38% of the our 2005 study sample a) did not complete their component, and b) did not work in the seven months, and c) had little or no work history.

We identified another important issue: persons with mental disabilities may need specialized vocational services. Not only may there be a need for job accommodation to meet Americans with Disabilities Act requirements, but specialized counseling and training may be required. This is not new territory. We know that by using a “supported employment” model, very high percentages of mental health clients can work—even those with the more serious impairments that characterize persons with schizophrenia and bipolar disorder. CiMH staff also have visited some CalWORKs programs that have successfully built a vocational component into the mental health treatment services. Other examples come from the vocational component of a number of residential substance abuse treatment programs that serve CalWORKs clients—including Prototypes and Shields for Families in Los Angeles. However, according to DMH data, virtually no CalWORKs mental health client among all those who were discharged in 2004-05 received vocational services as part of their treatment (four persons out of 1,938).

Not only are specialized vocational services known to help those with mental health problems, the new federal TANF work activity requirements will give credit for these activities.

The factors presented in this section suggest that CalWORKs mental health services could be more successful if the problems we have outline are addressed systematically but with flexibility.

In the Recommendations section, we have presented a proposal for a large-scale demonstration project that was derived from thinking about what service design would meet clients’ needs that are currently not fully addressed. Here is a brief recap of those recommendations:

A client comments:

“Believe CalWORKs should offer longer time period with more professional therapist, i.e., licensed doctorates etc.”

<table>
<thead>
<tr>
<th>Participation</th>
<th>2005 Survey N=317</th>
<th>2006 Survey N=314</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td>Strong positive</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>Some positive</td>
<td>52%</td>
<td>50%</td>
</tr>
<tr>
<td>No change</td>
<td>39%</td>
<td>38%</td>
</tr>
<tr>
<td>Negative change</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
A. Proposed service components

- Availability of outreach and “hands on” case management.
- An interdisciplinary team that includes specialists in substance abuse and domestic violence.
- A focus on children and the capacity to provide child or family therapy.
- Vocational rehabilitation staff and capacities on the treatment team.

B. Organization of the demonstration project

- Scope. Several demonstration sites should reflect different client, provider, and geographic characteristics.
- Incentives that allow for flexibility. Incentives need to be established for administrators and staff so that they place a premium on engaging clients and following through with them until success is achieved—using any method necessary.

  - Experienced and skilled staff. Staff members need to be recruited based on having several years of experience and on having specific skills (and in some cases having additional accreditation so that they can serve clients with co-occurring substance abuse or domestic violence).

A client comments:

“They never gave me on-the-job training in my field, even though I asked for it. The carers that hear me now need to enlarge themselves with understanding for my situation. It is different…. I need life skill classes.”
END NOTES

1 Data from the California Department of Social Services reports WTW25 and WTW25A. Available at: http://www.dss.ca.gov/research/default.htm


3 We say “may have resulted” because those who leave welfare are likely to be systematically different from those who remain aided. The many welfare experiments in which participants were randomized to different approaches to reform did not show that income was increased by reform measures, although a larger share of income came from employment. In addition, seriously disadvantaged populations (multiple barriers), including persons who are depressed, may be helped little by reform measures. “Moving People from Welfare to Work: Lessons from the National Evaluation of Welfare-to-Work Strategies,” http://aspe.hhs.gov/search/hsp/NEWWS/synthesis02/chapt4.htm#Subgroup


7 RAND, op cit. The U.N. recently reported a slightly lower poverty rate in Mexico as a whole: 40%. http://www.washingtonpost.com/wp-dyn/content/article/2007/03/11/AR2007031101387.html?referrer= Email For context, among developed countries a recent UNICEF report ranks Mexico last in child poverty (28%) and the U.S. just above Mexico (22%). UNICEF, ‘Child Poverty in Rich Countries, 2005’


13 “The [Portland] program was strongly employment-focused: staff communicated that the primary program goal was to help people move into jobs, and job search was the most common activity. However, in contrast to many employment-focused programs, participants were encouraged to look for and take “good” jobs — full-time, paying above the minimum wage, with benefits and potential for advancement. Also, Portland’s program utilized a more mixed services strategy than is typically implemented by strongly employment-focused programs. Staff assigned many people to short-term education, vocational training, work experience, and life skills training to improve their employability. “Moving People from Welfare to Work: Lessons from the National Evaluation of Welfare-to-Work Strategies.” http://aspe.hhs.gov/search/hsp/NEWWS/synthesis02/chapt4.htm#Effective

14 If the work participation requirements are not met, it could cost the state many millions of dollars—which could be passed on to counties. Provisions of the federal law and the Governor’s proposal for meeting the requirements are summarized succinctly in the Legislative Analyst’s 2007-2008 Budget Analysis, http://

The National Governors Association said, ”Governors continue to believe that states should have maximum flexibility in receiving credit for key rehabilitative and supportive services such as substance abuse, behavioral/mental health and domestic violence treatments in one or more work activity. These services are an imperative part of moving recipients, with barriers, to work and retaining employment. States need credit for these services in work activities that are fully countable for all hours of participation without time limit.” Ibid.

Oregon commented: “Limiting rehabilitation services to the time limits within job search...activity ignores the reality of these barriers and time needed to successfully address them...” Parrott, op cit.

But, since new rules in December in 2006, perhaps only if the work activity is paid, see http://www.clasp.org/publications/increasing_opportunities.pdf

See Blank, op cit for role of the economy vs. welfare reform. See detailed caseload figures at: http://www.sphereinstitute.org/publications/AspePACaseload.pdf

http://www.dss.cahwnet.gov/research/res/pdf/caltrends/CA237Caseloadsep06.pdf In September of 2001 the total number of aided cases was 497,818; in September of 2006 it was 463,165, a 7% decrease.


GAO. op cit.


See also: Moreno, M. H., Toros, H., Stevens, M., & Salem, N. (2005). The Changing CalWORKs Case-Type Composition in the County of Los Angeles, 2002 to 2005 Los Angeles: CAO Research and Evaluation Services. The statewide percentage was 49%.

Total cases come from CDSS report CA 237; WtW cases come from combining CA 25 and CA 25A data.


Ibid. Los Angeles County does conduct outreach and home call program to noncompliant participants and those who are already sanctioned to facilitate removal of the sanction and to identify needed services that will enable those participants achieve active engagement. Mental health services are included.

There was some improvement in the percentage working and earnings over a longer time-span. For persons present in the food stamp, Medi-Cal or CalWORKs databases, the percentage earning at all went from 13.9% in the first of the 18 months we have data on, to 23.2% in the last of the 18 months in which we have data; monthly mean income increased from $88 to $198 for all participants and from $636 to $854 among those who had some earnings.

Only 88 people completed services and had earnings in the quarter. Their earnings averaged $2,121, compared to the $1,989 of the 332 who did not complete services but had earnings. Data from 1998-2001, which used earnings data from the unemployment insurance system, showed a larger differential between those completing and not completing services; perhaps showing that those who complete are more likely to leave welfare for jobs. Note that we have used the DPSS definition of completing a mental health supportive service. This is intended to reflect clinical judgment, however, and when we compared 400 clinicians ratings of “achieving goals” with the DPSS “completion” we found very close concordance.

Data collection for a number of these individual characteristics is incomplete. When there is a fairly large category of “unknown” or unspecified “other” in the data described below, we have included this as a separate category rather than simply dropping the category or attempting to impute data from associated traits.

The Diagnostic and Statistical Manual of Mental Disorders defines dysthymic disorder as “a mood disorder characterized by depressed feeling (sad, blue, low), loss of interest or pleasure in one’s usual activities, and by at least some of the following: altered appetite, disturbed sleep patterns, lack of energy, low self esteem, poor concentration or decision-making skills, and feelings of hopelessness. Symptoms have persisted for more than two years but are not severe enough to meet the criteria for major depressive disorder.”

In one clinic we visited, staff said many participants must take three busses to get to the clinic; in other cases there are safety issues involved with waiting for public transportation; busses may be infrequent.

In reporting these findings we use “associated with” as a short hand term for “statistically significant.”


See the 2006 Outcomes report for a description of this sample. Chandler, D., Meisel, J., & Jordan, P. (2006). Outcomes of CalWORKS Supportive Services in Los Angeles County, Year Three: Mental Health. Sacramento: California Institute for Mental Health, 2125 19th Street, 2nd Floor, Sacramento, CA 95818. Available: www.cimh.org/calworks There are 1,949 for whom we have both DPSS and DMH data. Analyses using only completion rates and employment rates are based on the 2,400 cases. Analyses that use other client characteristics, including demographic information are based on the subset of participants present in both the DPSS and DMH databases. Matching was done by DMH staff using social security numbers (the matched data was then de-identified). The discrepancy in numbers appears to be largely due to the fact that DPSS-approved mental health services from a number of providers that are not funded through DMH.

Modeled with multiple logistic regression. See Appendix 2. Since these data are de-identified, we do not have addresses that could be used to link to census tract data. Since Zip areas were developed for mail delivery rather than social analysis, the internal homogeneity of the area is not assured as it is with census tracts. Thus, the measures we use, such as rate of persons with below-poverty income, may arise from averaging across disparate sub areas. If a Zip code contains, for example, both low-income and middle-income neighborhoods, it could be misleading. However, the primary effect would be to attenuate the relationships that we have documented.

As noted above, there are 1,949 for whom we have both DPSS and DMH data.

As noted elsewhere, there is a high concordance between the DPSS record of “completion” and DMH clinician ratings that “therapeutic goals were achieved.”

Data on employment were drawn from DPSS records of earnings. Only months in which a client was registered for CalWORKs, Medi-Cal or food stamps were used in the analysis as income needs to be reported in all three programs. Thus, if participants were working full time and received none of these types of aid, they would not be included. In each month analyzed, the number not receiving aid was small, so we do not believe that working ex-clients would change the picture presented here significantly. Employment was coded as present or not (based on whether there were earnings) in the month in which a client was discharged (termination of the mental health service, for whatever reason) and in the six succeeding months.

The DPSS data contains a start date and an end date for the mental health component. Because there was “slippage” in getting data entered, we defined the “component period” in the DMH data to comprise the DPSS component period plus 90 days on either side of that date. [Had we used the component dates alone, we would have erroneously dropped 115 cases.]
48 In calculating these percentages, we disregarded the 4% of cases in which source of income was not recorded.

49 In the three years in which we randomly sampled clients, 59%, 71%, and 64% reported it being the first time receiving mental health services.

50 The total hours of service for this group averaged 5.4, indicating participation in group or medications for many.

51 Logistic regression model. Completion of the mental health component successfully was the dependent variable. Case management was a continuous variable; group and medications were entered as categorical (because of large numbers of zeroes). Individual was coded as categorical because of the highly skewed distribution. The model was significant, fit well and predicted 83% of cases overall, but the pseudo-R2 was only 2%.

52 Unfortunately, some variables we used in bivariate analysis, particularly those based on clinical staff judgments, are not available for all 1,948. And in some cases, Global Assessment of Functioning scores, for example, the data is not available of any of the 1,948.

53 Not all of the characteristics that were statistically significant in bivariate analysis remained so in multivariate analysis. This reduction in the number of statistically significant associations is typical of multivariate analysis and comes about because in real life each individual has many traits. When we include an individual in several different separate analyses, the traits can be “confounded.” For example, what we reported as a paradoxical association of a higher rate of employment among persons with less than an 11th grade education is confounded by the fact that foreign-born persons have a high rate of employment (but low educational attainment). Since multivariate analysis reduces confounding, some traits no longer are predictive when all others are “held constant.”

54 We used the convention level of alpha=0.05. Other predictors, including never having been married and the percentage of African-Americans and percentage of Latinos in the person’s Zip code area were statistically significant at a level between 0.05 and 0.10.

55 The 95% confidence interval is 21% to 40% for case example 1, it is 0 and 0% for case example 2.

56 In this sample, age was not a significant bivariate predictor of completion of services, but foreign-born was (more completion for those foreign born). Yet in multivariate analysis neither was significant. In the multivariate model for work in the follow-up period, neither age nor race was statistically significant in this sample.

57 Staff rated 47% as having little or no work history but for another 9% they were unsure; some of those persons may have had little or no work history as well.


62 There are specific licensing categories for those getting supervised hours. For example, the Associate Clinical Social Worker (ACSW) must have a master’s degree in social work plus have completed several specific courses on substance abuse, human sexuality, and domestic violence. Some ACSWs have a great deal of experience, often as case managers; others are fresh from school.


APPENDIX 1: DATA SOURCES

Access to earlier reports. This is the fourth outcomes monitoring report CiMH has done under contract with the Los Angeles County Department of Mental Health. This report covers only mental health services; earlier reports also covered substance abuse and (for two years) domestic violence. All reports are available at: www.cimh.org/calworks

A note on confidentiality. CiMH is party to a data-sharing MOU that also includes the Department of Mental Health and the Department of Public Social Services. The latter agencies have a separate MOU permitting data sharing for clients served in common using CalWORKs funding. All data used in the CiMH monitoring study is either anonymous (client surveys) or de-identified. In the latter case, DMH staff match data between surveys, DMH management data, and DPSS management data using social security numbers. These are then removed, along with all information that could be used to identify any individual, and an arbitrary identifier is attached to link the data. CiMH staff members receive no information that could identify individuals.

A. Population of discharged clients. In the spring of 2005, DPSS generated a list of clients whose mental health supportive services had ended in the 12 months between March 1, 2004, and February 28, 2005. There were 2,404 persons in this group—which is better thought of as a population than a sample. However, not all of the participants received their mental health services from Department of Mental Health providers. There were 1,948 persons who matched (on social security number) DMH databases. In the Year Three Report, we used DPSS data on these participants to profile completion of services and earned income. In this report, we add to this data from the DMH management system such as diagnosis, demographics, and service utilization.

B. Samples of discharged clients. The data on samples of discharged clients is particularly valuable because it is based on staff ratings of what occurred during services. Thus, it can include statements of the kinds of problems clients faced, their motivation, their participation in treatment, and the changes they made. In each of four years, we selected a random sample of approximately 400 clients who had been discharged from mental health services. In the third year, these 400 cases were randomly drawn from the 1,949 that were identified by the DPSS and DMH management data systems as having a closed mental health component between March 1, 2004, and February 28, 2005.

In the second and third years, we were able to match survey data, DPSS data, and DMH management data. In the other two years, the survey data is matched to DMH management data but not to DPSS data.

The boxed comments by staff in the body of the report come from the open-ended comment section at the end of the spring 2006 survey.

C. Client surveys. In each of four years, we selected a random sample (during one three-week period of the year) of current clients. Clients were asked about satisfaction with services, success of services, barriers to employment, and work-activities. These surveys are anonymous and not matched to any other data. They also occur during treatment rather than after treatment. A small study in the third year obtained the same data from clients who had completed mental health, substance abuse or domestic violence services. That study had very similar results to the current-client surveys but indicated a greater impact of practical difficulties like transportation and child care. Results are described in the Year Three Outcomes Report. Boxed client comments come from the open-ended request for comments on the 2006 client survey.
Improving Mental Health Outcomes for CalWORKs participants in Los Angeles County

A number of the variables we deemed important possible predictors of outcomes had missing values. For the most part these were demographic variables like education, so we felt safe in assuming these were missing at random. We used multiple imputation to create a data set without missing values, a procedure which is highly recommended if it can be assumed data are missing at random.*

Table 20: Missing Values Replaced by Multiple Imputation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1</td>
</tr>
<tr>
<td>Education</td>
<td>310</td>
</tr>
<tr>
<td>Years receiving welfare</td>
<td>63</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>58</td>
</tr>
<tr>
<td>Zip population, total</td>
<td>51</td>
</tr>
<tr>
<td>Zip Latino population</td>
<td>51</td>
</tr>
<tr>
<td>Zip African-American population</td>
<td>51</td>
</tr>
<tr>
<td>Zip below-poverty level population</td>
<td>51</td>
</tr>
<tr>
<td>Never married</td>
<td>51</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td>289</td>
</tr>
<tr>
<td>Country of origin</td>
<td>655</td>
</tr>
</tbody>
</table>

Table 20 lists the variables included in the initial logistic regression models, along with the number of imputed values among the 1,938 cases. As a test of randomness, we first ran the regression with a code for missing. For primary language, the “unknown” category was statistically significant, so it was retained in the regression.

Akaike's information criterion (AIC) was used to assess whether variables should be retained in the models. A number of standard tests were conducted for collinearity, goodness of fit, and predictive accuracy. On the next page, the final model (the one with results presented in the body of the report) is presented. The McFadden adjusted R2 is quite low (under 0.06).

Table 21: SUCCESSFUL COMPLETION OF SERVICES: Logistic Regression Results

<table>
<thead>
<tr>
<th>Completion of component</th>
<th>Odds ratio</th>
<th>Std. Err.</th>
<th>t</th>
<th>P&gt;t</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omitted: Tx Months &lt;3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment Months 3-6</td>
<td>1.25127</td>
<td>.267009</td>
<td>1.05</td>
<td>0.294</td>
<td>0.823584</td>
</tr>
<tr>
<td>Treatment Months 6-12</td>
<td>2.12689</td>
<td>.42546</td>
<td>3.77</td>
<td>0.000</td>
<td>1.43704</td>
</tr>
<tr>
<td>Treatment Months 12-57</td>
<td>2.76057</td>
<td>.542153</td>
<td>5.17</td>
<td>0.000</td>
<td>1.87856</td>
</tr>
<tr>
<td>Omitted: Foreign-born</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Born in US</td>
<td>.500362</td>
<td>.069825</td>
<td>-4.96</td>
<td>0.000</td>
<td>0.375796</td>
</tr>
<tr>
<td>Omitted: Age 18-29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 30-39</td>
<td>.964956</td>
<td>.176926</td>
<td>-0.19</td>
<td>0.846</td>
<td>0.673629</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>1.21178</td>
<td>.228532</td>
<td>1.02</td>
<td>0.308</td>
<td>.83721</td>
</tr>
<tr>
<td>Age 50 plus</td>
<td>2.02659</td>
<td>.493571</td>
<td>2.90</td>
<td>0.004</td>
<td>1.25711</td>
</tr>
<tr>
<td>Omitted: Anxiety, adjustment disorders, and other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major depression</td>
<td>.802913</td>
<td>.108791</td>
<td>-1.62</td>
<td>0.105</td>
<td>.615621</td>
</tr>
<tr>
<td>Bipolar/psychotic</td>
<td>.44298</td>
<td>.146315</td>
<td>-2.47</td>
<td>0.014</td>
<td>.231854</td>
</tr>
<tr>
<td>Constant</td>
<td>.188274</td>
<td>.043714</td>
<td>-7.19</td>
<td>0.000</td>
<td>.119304</td>
</tr>
</tbody>
</table>

Table 22: ANY WORK IN SIX MONTH FOLLOW-UP PERIOD: Logistic Regression Results

<table>
<thead>
<tr>
<th>Any earnings</th>
<th>Odds ratio</th>
<th>Std. Err.</th>
<th>t</th>
<th>P&gt;t</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1.56863</td>
<td>.364853</td>
<td>1.94</td>
<td>0.053</td>
<td>.993964</td>
</tr>
<tr>
<td>Omitted: One episode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two Episodes</td>
<td>.787975</td>
<td>.112314</td>
<td>-1.67</td>
<td>0.095</td>
<td>.595855</td>
</tr>
<tr>
<td>Three or more episodes</td>
<td>.479815</td>
<td>.113783</td>
<td>-3.10</td>
<td>0.002</td>
<td>.301418</td>
</tr>
<tr>
<td>Omitted: Tx Months &lt;3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment Months 3-6</td>
<td>1.43797</td>
<td>.242487</td>
<td>2.15</td>
<td>0.031</td>
<td>1.03324</td>
</tr>
<tr>
<td>Treatment Months 6-12</td>
<td>1.50787</td>
<td>.263108</td>
<td>2.35</td>
<td>0.019</td>
<td>1.07111</td>
</tr>
<tr>
<td>Treatment Months 12-57</td>
<td>1.57081</td>
<td>.29279</td>
<td>2.42</td>
<td>0.015</td>
<td>1.09008</td>
</tr>
<tr>
<td>Omitted: White</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-Am</td>
<td>.485309</td>
<td>.094056</td>
<td>-3.73</td>
<td>0.000</td>
<td>.330618</td>
</tr>
<tr>
<td>Latino</td>
<td>.640232</td>
<td>.120613</td>
<td>-2.37</td>
<td>0.019</td>
<td>.441575</td>
</tr>
<tr>
<td>Asian &amp; other races</td>
<td>.508214</td>
<td>.196731</td>
<td>-1.75</td>
<td>0.103</td>
<td>.220739</td>
</tr>
<tr>
<td>Omitted: Foreign-born</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Born in US</td>
<td>.488115</td>
<td>.074127</td>
<td>-4.72</td>
<td>0.000</td>
<td>.358927</td>
</tr>
<tr>
<td>Omitted: Primary English</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>1.50673</td>
<td>.262197</td>
<td>2.36</td>
<td>0.019</td>
<td>1.06929</td>
</tr>
<tr>
<td>Other non-English</td>
<td>.726836</td>
<td>.307511</td>
<td>-0.75</td>
<td>0.457</td>
<td>.305737</td>
</tr>
<tr>
<td>Unknown</td>
<td>1.57625</td>
<td>.37862</td>
<td>1.89</td>
<td>0.058</td>
<td>.984351</td>
</tr>
<tr>
<td>Omitted: Age 18-29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 30-39</td>
<td>.992851</td>
<td>.151271</td>
<td>-0.05</td>
<td>0.962</td>
<td>.736491</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>.825779</td>
<td>.140458</td>
<td>-1.13</td>
<td>0.260</td>
<td>.591637</td>
</tr>
<tr>
<td>Age 50 plus</td>
<td>.547215</td>
<td>.149485</td>
<td>-2.21</td>
<td>0.027</td>
<td>.320316</td>
</tr>
<tr>
<td>Omitted: 10th grade or under</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th grade</td>
<td>.889491</td>
<td>.17327</td>
<td>-0.60</td>
<td>0.548</td>
<td>.606321</td>
</tr>
<tr>
<td>12th grade</td>
<td>1.05664</td>
<td>.159763</td>
<td>0.36</td>
<td>0.716</td>
<td>.785454</td>
</tr>
<tr>
<td>Some college</td>
<td>1.7189</td>
<td>.312411</td>
<td>2.98</td>
<td>0.003</td>
<td>1.20323</td>
</tr>
<tr>
<td>No group tx hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One group hour</td>
<td>.666974</td>
<td>.147205</td>
<td>-1.84</td>
<td>0.067</td>
<td>.43275</td>
</tr>
<tr>
<td>2-7 group hours</td>
<td>.892165</td>
<td>.155969</td>
<td>-0.65</td>
<td>0.514</td>
<td>.633337</td>
</tr>
<tr>
<td>8-97 group hours</td>
<td>.495953</td>
<td>.127309</td>
<td>-2.73</td>
<td>0.006</td>
<td>.299873</td>
</tr>
<tr>
<td>_cons</td>
<td>.433384</td>
<td>.153302</td>
<td>-2.36</td>
<td>0.019</td>
<td>.215896</td>
</tr>
</tbody>
</table>
The California Institute for Mental Health is a non-profit public interest corporation established for the purpose of promoting excellence in mental health. CiMH is dedicated to a vision of “a community and mental health service system which provides recovery and full social integration for persons with psychiatric disabilities; sustains and supports families and children; and promotes mental health wellness.”

Based in Sacramento, CiMH has launched numerous public policy projects to inform and provide policy research and options to both policy makers and providers. CiMH also provides technical assistance, training services, and the Cathie Wright Technical Assistance Center under contract to the California State Department of Mental Health.