Work Therapy

Implementation and Outcomes of the Individual Placement and Support Model of Employment Services for Los Angeles CalWORKs Mental Health Participants:
Summary of Phase I Results

Presented to the Los Angeles County Department of Mental Health and Los Angeles County Department of Public Social Services

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NOTE: This is a summary of a longer technical report submitted to the Los Angeles County Department of Mental Health. The technical report includes much more information regarding the results as well as information on methodological issues and how they qualify study conclusions. The technical report may be obtained in PDF format from:

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Implementation and Outcomes of the Individual Placement and Support Model of Services for Los Angeles CalWORKs Mental Health Participants: Summary of Phase I Results

Overview. The Individual Placement and Support (IPS) model of supported employment is a nationally and internationally recognized evidence-based practice for persons with psychiatric disabilities. The Los Angeles County Department of Mental Health (DMH) contracts with the Los Angeles County Department of Public Social Services (DPSS) to provide services to CalWORKs participants who have mental health barriers that impede their ability to achieve economic independence. DMH offers these services through a system of 54 contracted and directly operated programs. As of July 1, 2012, Department of Mental Health contracts to provide CalWORKs mental health services include the requirement that programs offer IPS supported employment. In an effort to learn more about the implementation of the model and to test its effects in the Los Angeles CalWORKs mental health system, the Los Angeles County Department of Mental Health, in conjunction with the Los Angeles County Department of Public Social Services, asked nine programs to volunteer to create IPS programs in advance of the general implementation date. The California Institute for Mental Health has evaluated these nine programs, and results are presented in this report. This is Phase I of a study of CalWORKs Mental Health outcomes using the IPS model. A second phase of the study—conducted not during implementation but after the IPS program has been implemented system-wide and programs have attained high fidelity to the original model—began in January 2014.

Background. Implementation of the Individual Placement and Support (IPS) study began in January 2012. Eligible participants are CalWORKs Welfare-to-Work participants who have been clinically assessed to have a DSM IV TR diagnosis that create mental health barriers to employment. In this study the largest diagnostic percentage was attributable to depressive disorders (53%), followed by adjustment disorders (13%), anxiety disorders (9%), PTSD (8%), and a variety of other disorders (8%). Another eight percent of study participants have a serious mental disorder (such as bipolar disorder). The Appendix points out a number of differences between CalWORKs mental health participants and traditional IPS participants, most of whom have a serious mental illness.

A total of 259 client volunteers in ten programs were initially recruited and signed consents for the study. However, one program (and its participants) had to be dropped for failing to implement either study procedures or IPS, leaving the nine programs reported on here. In addition, some participants dropped out very early—before a month had passed and often before being seen by clinicians or the supported employment specialist. In consequence, this report encompasses 201 participants who were in a program at least 30 days.

Sources of information for the study are:

a) Staff surveys about participants completed at baseline and after one year—or discharge if it came earlier. Baseline and follow-up data are available for 193 of the 201 participants.

b) Phone interviews with participants. Baseline interviews were conducted with 141 of the 201 persons and follow-up interviews with 121.

c) Diagnosis and costs came from Department of Mental Health information system data.

d) Employment data came from the Department of Public Social Services and covered a 6-month baseline period and a 14-month follow-up period.
Participants signed informed consents and information releases, and the study is approved by two human subjects protection committees.\(^5\)

Six programs implemented an evaluation design that included random assignment between a control group and the IPS study group. Three other programs were not organized in such a way as to permit randomization, so they serve IPS-only participants. Thus there are three study groups: IPS in experimental sites, the control group in experimental sites, and the IPS-only study group in three sites (with no control group).\(^5\) Of the 201 participants, 59 were in the experimental IPS group and 61 in the randomly assigned control group that received usual services. The IPS-only group (no controls) comprised 81 persons.

Supported employment specialists at each study site and their supervisors received extensive training in the IPS model during the first 6 months.

**Implementation**

**Implementation of the IPS model took the better part of a year, but by that time 8 of 9 programs achieved acceptable fidelity.**

The major method of assessing whether the IPS model is being implemented correctly is the use of a “fidelity scale.” This scale has been developed over twenty years by the creators of the IPS model. There is a detailed protocol, and fidelity reviewers receive an intensive training. All of the experimental programs had outside independent fidelity reviewers as well as involvement of three DMH staff members who have received the fidelity reviewer training at Dartmouth. Baseline fidelity scores in programs roughly 6–8 months after program inception were disappointing, averaging 69 out of a possible 125. Only three of the nine programs scored high enough to even be called IPS programs according to the fidelity scale. Six months later all but one of the programs met the minimum required to be an IPS program, and three programs exceeded a score of 100 and thus achieved a “good” rating.\(^7\)

Table 1 shows results of the first and second reviews, with a score of 100 out of 125 being “good,” a score of 74–99 being “fair,” and anything less than that not meeting minimum standards to be an IPS program.

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**Engagement of clients in the program**

**Engaging participants was difficult. Half had left the program by 9 months. Half of those who withdrew before the study ended left for negative reasons, such as lack of compliance or no-shows. Interviewees who received IPS reported receiving more help with employment.**

**Duration of service.** Stays in the program of 30–90 days occurred for 13% of participants; 33% had left by six months, 51% had left by 9 months, and 72% had left by a year from enrollment in the study.

**Attendance of program activities.** Staff reported on the attendance of participants in the program. About half attended all or most of the scheduled services, while about 30% attended fewer than half. The differences among study groups on this measure do not approach statistical significance.

**Reasons for leaving the program.** Only 14.5% of participants left because they completed treatment—a figure that does not differ from findings in earlier CIMH studies.\(^8\) Excluding those still in treatment and those for whom the reason for leaving was not specified, 30% left for positive reasons, 20% for neutral reasons, and 50% for negative reasons (such as dropping out). The percentages in these categories were similar in the control group (50% negative reasons) and those randomized to IPS (53% negative reasons); IPS-only participants were less likely to leave for negative reasons (44%). We had expected that those leaving for negative reasons would leave the program much earlier, but the difference in length of stay between persons leaving for varying reasons was not statistically significant.
Program assistance. Participants were asked about who had provided them help regarding employment. IPS participants are twice as likely to be getting help from persons who specialize in employment—and three times as likely to be getting help from a psychiatrist—than are control group participants. It may be that the IPS approach, which integrates the employment specialist with the clinical team, has boosted the relationship to psychiatrists. Both of these differences are statistically significant.

Employment

Overall the percentage working in at least one month increased from 14% in the baseline to 39% in the follow-up period. Results on this and several other measures favor the IPS groups to a moderate degree, but on a number of other measures between-group differences were not statistically significant. Hours worked per week favor the control group, but may reflect baseline differences.

Working at least one month. Overall 14% of the study participants had earned income during the baseline 6 months, and 39% had income during the 14-month study period. In the control group those working increased from 16% in the baseline to 33% at follow-up; in the experimental IPS group the increase was from 12% to 36%; and in the IPS-only group the increase was from 16% to 47%. See Figure 1.

Additionally, the percentage of IPS-participants working at least one month differed between those being served in high- vs. fair-fidelity programs; in high-fidelity programs 47% of participants worked in at least one month compared to 39% in fair-fidelity programs (disregarding control group members for whom fidelity was irrelevant). In fact, IPS participants in higher fidelity programs worked more in almost every month. See Figure 2.

Number of months worked. If persons worked at all, the mean number of months during which income was earned (out of 14 in the follow-up period) was 8.1 for control group members, 7.9 for randomized IPS group members, and 6.2 for IPS-only members. These differences are not statistically significant for the 14-month study period, but if the baseline is included as a control then the IPS-only group is significantly lower than the overall mean. A shorter average time

<table>
<thead>
<tr>
<th>Provider</th>
<th>Initial Fidelity Review Score</th>
<th>Second Fidelity Review Score</th>
<th>Best Fidelity Rating</th>
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</thead>
<tbody>
<tr>
<td>Alma</td>
<td>75</td>
<td>79</td>
<td>Fair</td>
</tr>
<tr>
<td>Coastal Asian Pacific</td>
<td>60</td>
<td>80</td>
<td>Fair</td>
</tr>
<tr>
<td>Didi Hirsch</td>
<td>69</td>
<td>71</td>
<td>Not IPS</td>
</tr>
<tr>
<td>Enki</td>
<td>71</td>
<td>103</td>
<td>Good</td>
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<td>Penny Lane</td>
<td>80</td>
<td>111</td>
<td>Good</td>
</tr>
<tr>
<td>Prototypes</td>
<td>63</td>
<td>88</td>
<td>Fair</td>
</tr>
<tr>
<td>Shields</td>
<td>82</td>
<td>100</td>
<td>Good</td>
</tr>
<tr>
<td>The Guidance Center</td>
<td>48</td>
<td>77</td>
<td>Fair</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>68</strong></td>
<td><strong>89</strong></td>
<td><strong>Fair</strong></td>
</tr>
</tbody>
</table>
working is a predictable consequence of rapidly expanding the number of workers, at which the IPS-only programs excelled.

Staff-reported job status at follow-up. At discharge or end of study, the experimental IPS group was, to a statistically significant degree, more likely to be working than the experimental control group. But measures of job duration, hours, and wages did not differ between the three study groups.

Client interviewee-reported job status. By 4 to 6 weeks after enrollment, when interviews took place 11% of participants were working. At follow-up roughly a year later, 32% were working. If we look at change among the 101 present at both interviews, the percentage employed increased from 13% to 36%. The percentage working at follow-up favored IPS but was not statistically significant: controls 28%, randomized IPS 33%, IPS-only 34%.

For those working, average hours worked during a week at follow-up differed to a statistically significant degree: 11 control group members averaged 34 hours; 12 randomized to IPS participants averaged 22.5 hours; and 12 IPS-only participants averaged 31.75 hours per week.11

Hourly wages ranged from $8.00 to $14.00 for those currently employed. For the control group it averaged $9.30 vs. $10.86 for the randomized IPS group and $9.62 for the IPS-only group.12

Time until the first job is obtained. Figure 3 shows time from the date of enrollment until the first date of employment found in the DPSS data base for 91 participants who got a job.13 Participants from each group find employment equally quickly.
Factors that modify employment results

Reason for leaving the program affects employment but not in ways clearly associated with study group membership. Rates of employment varied significantly among providers, with higher fidelity programs more likely to have higher rates.

Reasons for leaving the program. Participants who leave for positive reasons (such as completing the program) do much better in terms of increasing their employment rate than those who leave for negative reasons. See Figure 4.

Among participants with a positive reason for leaving the program, control group members did better than IPS group members until near the end of the study period. However, these differences appear to reflect baseline patterns: despite randomization, the control group members who had a positive exit had a 20% rate of employment in baseline months compared to virtually none in the experimental IPS group. See Figure 5.

For participants with neutral exits there was no pattern. For those with negative exits the IPS experimental group did much better than the other groups through month 9—for reasons that are not clear.

Differences among providers. The average proportion of each provider’s participants employed during each study month ranged from a low of 12% to a high of 27%. The maximum proportion employed in any of the 14 study months ranged from 16% (lowest fidelity program) to 45% (highest fidelity program). Please see Table 2.

Education and training

Education was a part of the welfare-to-work activities of more than 20% of participants, with IPS interviewees involved in education to a somewhat higher degree than those in the control group.

Staff-reported educational attainment. Overall, 17 of 201 persons graduated from a program: 11 from a training program, 1 received a BA, and 5 received AA degrees. Other results included finishing a refresher course for IHSS care givers, a certificate for computer classes completed, a food handler certificate, a medical billing certificate, ESL certificate, and training in medical waste management.

The overall percentage enrolled in school declined from 21% at baseline to 12% at the end of the study or discharge, although this may have been an artifact of the study starting in January and ending in the summer vacation. There were no statistically significant differences in school enrollment by study group at either baseline or follow-up.
Client interviewee-reported educational and training status. Twenty-two percent of clients in the control group reported attending school during the study period as did 24% of randomized IPS clients and 32% of IPS-only clients.

Training and Self-Initiated Programs in education. DPSS data show that use of training and SIP participation and remedial education was fairly low, with job training affecting 10 to 15% of participants in each month and remedial education and SIP less than 10%. Figure 6 shows combined rates for earned income, job training, remedial education, and SIP education. Differences are not large but the trend favors the IPS groups.

Quality-of-life outcomes

Staff-rated and interviewee quality of life and functioning measures did not consistently favor any study group. We initially hypothesized that if one study group achieved significantly more employment than another, it could be reflected in a variety of quality-of-life measures from psychological functioning to housing stability.

Staff reports. Both IPS groups showed more improvement than the control group in obtaining independent living situations, and the experimental IPS group had a statistically significant GAF score increase. But on four measures of staff-rated

<table>
<thead>
<tr>
<th>Provider</th>
<th>Average proportion employed in a month over the study period</th>
<th>Max proportion employed in any one month</th>
<th>2nd Fidelity score</th>
</tr>
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<tbody>
<tr>
<td>Alma</td>
<td>0.15</td>
<td>.25</td>
<td>79 Fair</td>
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<td>Coastal Asian</td>
<td>0.12</td>
<td>.29</td>
<td>80 Fair</td>
</tr>
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<td>Didi Hirsch</td>
<td>0.12</td>
<td>.16</td>
<td>71 Not IPS</td>
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<tr>
<td>Enki</td>
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<td>Penny Lane</td>
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<td>.36</td>
<td>111 Good</td>
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<tr>
<td>Prototypes</td>
<td>0.26</td>
<td>.35</td>
<td>88 Fair</td>
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<tr>
<td>The Guidance Center</td>
<td>0.19</td>
<td>.40</td>
<td>77 Fair</td>
</tr>
<tr>
<td>Total/Average</td>
<td>0.19</td>
<td>.33</td>
<td>89 Fair</td>
</tr>
</tbody>
</table>
participant strengths—self esteem, hope for the future, social support, and coping—the experimental IPS group had one neutral and two negative changes while the other two groups showed consistent improvement on these measures. Thus results are inconsistent.

Client interview reports. There were no statistically significant differences between the study groups regarding quality of life, including in two standardized tests of mental health functioning, that might be related to the IPS intervention.

Cost

Though qualifications apply, mental health service costs were higher for each IPS group than for the control group.

IPS adds another staffing component to CalWORKs mental health services. Participants have not only a psychiatrist, therapist, and case manager but also an employment specialist. Consequently the lowest per-person average mental health service cost during the study period belongs to the experimental control group ($5,612) which did not have this extra staffing. The IPS-only average cost of $10,769 is the highest, followed by $8,698 for the experimental IPS group. These cost differences started in the enrollment month and were consistent across each month for a year.

If considered in terms of “return on investment,” the control group cost less per participant month employed. These results regarding cost need three qualifications, however.

- IPS service costs are a substitute for some GAIN costs, a trade-off that does not show up here.
- Control group members spent less time on average.
receiving services from the mental health agency than did IPS participants. The IPS-only group averaged 272 days in IPS, the experimental IPS group 294, and the experimental control group 256 days; these figures correspond roughly to the difference in costs during the study period. It is unclear if higher IPS costs due to longer stays reflect IPS itself or other group differences.

Despite randomization, the control group was more likely to work in the baseline, so the study period differences in months worked per service dollar may in large part reflect pre-existing differences between groups.

Conclusions

1. The Individual Placement and Support model appears to be appropriate for the CalWORKs population of persons with psychiatric disabilities. Fidelity ratings were applied by experienced independent raters without significant modification. Achieving fidelity is difficult and takes the better part of a year but can be attained by almost all programs.

2. All three study groups improved their rate of employment very considerably during the study period, indicating substantial success in fulfilling the CalWORKs Mental Health mission of removing mental health barriers to employment.

3. Employment rates are higher if participants leave their programs for positive reasons. But lack of engagement—negative reasons for leaving, short stays, and poor attendance—constitutes a significant threat to achieving further success for IPS participants and those receiving usual services.

4. Because of employment-rated baseline differences between the study groups, comparisons are methodologically difficult. Overall, however, the results for both types of IPS participants appear promising compared to results for control participants.

5. On a number of measures participants in programs that eventually achieved high IPS fidelity did better than those that achieved fair fidelity.

Phase I results reflect a system in transition to IPS model fidelity. Phase II will test outcomes in programs that already have achieved high fidelity when participants enter.
Appendix: How CalWORKks mental health participants differ from the seriously mentally ill with respect to IPS supported employment, by Luana Turner, Psy.D., and Shirley Glynn, Ph.D.

**Treatment duration limitations**

Rules of CalWORKks mean clients are often discharged from mental health services or CalWORKks services in a relatively brief period (due to loss of eligibility, say). This is counter to the IPS principle that support is time unlimited.

**Treatment engagement**

Traditional IPS participants have received mental health services for years and are thus more connected to the mental health facility where they receive treatment.

**Need for a salary to support economic self-sufficiency**

Many traditional IPS participants see their IPS work income as supplementing their SSI disability payments, and they are often open to accepting entry-level jobs that pay minimum wage. CalWORKks clients typically have a goal of economic self-sufficiency and often have better work histories, so they are less likely to willingly accept entry-level jobs.

**Motivation to work**

The primary entry criterion for traditional IPS is the client desire to work (at least part time). CalWORKks Mental Health participants may be much less motivated or ambivalent.

**Need to care for others**

CalWORKks mental health participants are much more likely to be caretakers of children living with them compared to traditional IPS participants, and thus work issues are complicated by the need to find child care. Additionally, the GAIN worker rather than an IPS specialist is responsible for coordinating child care.

**Lack of family or loved ones’ involvement**

Traditional IPS clients and treatment teams often rely on support from clients’ loved ones during the engagement period and during periods of high stress. In general, CalWORKS participants appear to lack this type of support system.

**Participant preference for behind-the-scenes work**

IPS workers are encouraged to spend time in the community, and this often involves disclosing information about potential employees when meeting with potential employers. Traditional IPS participants often are willing to allow this level of “front-line” work because they see its advantages and may have limited experience obtaining jobs. However, many CalWORKks participants preferred to have IPS personnel work “behind-the-scenes.” When IPS staff members work in the background there is more onus on the participants to be active in the job search. Many CalWORKks participants seem to have difficulty “taking the lead” on their job-seeking efforts.

**Endnotes**

1. This is a summary of a longer technical report submitted to the Los Angeles County Department of Mental Health. The technical report includes much more information regarding the results as well as information on methodological issues and how they qualify study conclusions.

2. Individual Placement and Support supported employment is perhaps the most widely studied of evidence-based practices for persons with psychiatric disabilities, and has now spread to many countries. The following recent references document important aspects of the model and can serve as a guide to further exploration. McHugo, G. J., Drake, R. E., Xie, H., & Bond, G. R. (2012). A 10-year study of steady employment and non-vocational outcomes among people with serious mental illness and co-occurring substance use disorders. *Schizophrenia*

3 CalWORKs is California's name for the Temporary Assistance for Needy Families (TANF) program.

4 Attrition appears to be random regarding most variables, but participants with both baseline and follow-up interviews stayed in the program significantly longer than those not interviewed both times, which may indicate that the interviewed group could have more positive outcomes than those not interviewed.

5 The IRB at California State University, Fullerton, approved both designs. The Los Angeles County Department of Mental Health required only the research design with randomized controls to be approved.

6 A few IPS-only participants were also served at sites that did randomization.

7 We use “good” for the range 100 to 115; over 115 is “exemplary” or “high.”


9 Data gathering from staff and participants ended at 12 months, but we obtained two extra months of employment data from DPSS.

10 In these comparisons we do not have a 14-month baseline. If we did the increases might seem less significant.

11 The control and randomized IPS group difference was significant at p<0.02; differences between all three groups were significant at p<0.03.

12 The difference between the two randomized groups favors the IPS group to a statistically significant degree. The difference across all three study groups is not statistically significant.

13 The DPSS data contained a “job start date” variable that was used for the 57 persons who had it. The job start date for the remaining 34 persons was the first day of the first month in which earned income was shown during the study period.

14 Control group members who worked during the 6-month baseline period earned on average about a third more than the IPS members. And the control group members earned in the aggregate twice as much in the baseline period as the IPS experimental group did. These baseline differences make it clear that despite randomizing the experimental IPS and control groups, they ended up being very different with regard to employment and earnings in the baseline.

15 This appendix condenses a longer document by Drs. Glynn and Turner, who were trainers for the project. Dr. Turner also conducted several of the fidelity reviews.
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.

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