## Implementation and Outcomes of the Individual Placement and Support (IPS) Model in CalWORKs Mental Health Programs in Los Angeles

Submitted to the Los Angeles County Department of Mental Health



Daniel Chandler, PhD
California Institute for
Behavioral Health Solutions
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#### Overview

CalWORKs is the California version of the TANF welfare reform legislation. Services to remove mental health barriers to employment for CalWORKs participants are provided by the Los Angeles County Department of Mental Health. Funds are disbursed by the county Department of Public Social Services using a specific allocation from the California Legislature. This report looks at supported employment, an unusual aspect of CalWORKs mental health services.

CalWORKs mental health participants face a variety of problems at admission. When they arrived 18% were homeless and another 8% had been homeless within six months. In the three months prior to admission 25% worked, 24% went to school, 21% volunteered, and 30% had a job interview—but 60% had worked only sporadically or never. Clinically 25% had a severe disorder and 44% a moderately severe disorder. Only 5% were diagnosed with bipolar disorder or schizophrenia, illnesses usually termed "severe mental illness." Fifteen percent had significant domestic abuse issues and 11% significant substance abuse issues. Parenting children under age 5 was the primary task of 48% of participants. Only 14% were age 25 or under; 13% were over 45.

#### **Executive Summary**

IPS stands for Individual Placement and Support. It is an employment program specifically designed for persons with mental health disabilities. Its distinguishing feature is that the employment program is co-located with clinical services, and employment staff and clinical staff plan jointly how to help each participant. The Los Angeles County Department of Mental Health (DMH) is the first governmental entity to extend the IPS model to all persons receiving CalWORKs (TANF) who also have mental health problems.

IPS was implemented in CalWORKs mental health programs in three waves during 2012 and 2013. It is a complex program. In the initial implementation in 2012 and 2013 all staff members were trained by the developers of IPS. A detailed "fidelity scale" establishes guidelines in 25 practice areas of the model. The fidelity scale was the basis for implementation for

the DMH administrative staff and the staff at each CalWORKs mental health site. As of December 2018, IPS programs exist in 45 of the 52 CalWORKs mental health sites, with the rest scheduled to be implemented when the next contract cycle begins. Independent fidelity reviews for providers are scheduled at yearly intervals <sup>1</sup>

#### **Summary of Part I: Outcomes**

Outcomes from ratings at admission and discharge. Despite nearly identical employment backgrounds, 57% of IPS participants worked prior to discharge in contrast to 35% for those not in IPS. The more weeks that participants spent in IPS, the higher the percentage who worked. This finding exceeds the goal set in 2013 by DMH that at least 50% of IPS participants work.

IPS participants overall had more employment-related activity happening: more jobs, more GED or training, and they were more likely to leave services due to a job or school—but they were not more likely to work full-time rather than part-time.

Employment is significantly higher for IPS participants, even when using regression models that control for both observed and unobserved bias.

Employment rates in monthly IPS data. DMH designed a system that captured monthly data from IPS programs between July 2017 and December 2018. Over the 18 months, the average monthly employment rate among IPS participants was 31% (median 33%). However, variability between providers was high, ranging from over 50% to less than 20%. The average monthly employment rate for CalWORKs mental health programs is in a range reported by other IPS programs.

Less positive findings. Monthly data also show 33% of IPS participants who work full-time. And while 23% of participants leave IPS services because of work or school, 40% leave due to lack of engagement.

During the first three years, fidelity reviews were primarily performed by outside experts with DMH staff working with them to learn the standards and practices. Use of outside experts was phased out in the following two years in favor of trained DMH staff.

## Summary of Part II: IPS fidelity reviews, fidelity scores and the usefulness of fidelity in predicting employment rates

The report identifies several trends regarding providers' achievement of fidelity in the aggregate and over time.

- Aggregate fidelity scores have increased substantially since the first round of reviews. (See Figure 1).
- b. From the first to the most recent review, 32 programs showed positive change, six no change, and five small negative change.
- c. CalWORKs mental health IPS programs receive a fidelity review about as often as IPS programs in other states, and the distribution of overall fidelity scores is similar.
- d. IPS fidelity scores at programs correlate 0.22 with the average monthly employment rate at the same programs over 18 months. Of the 25 items on the fidelity scale, only 14 correlate at least 0.15 and 10 correlate at 0.20 or above. These findings suggest the advisability of dropping items from the fidelity scale if they do not correlate with employment.

## Summary of Part III: IPS from the perspective of staff members

CalWORKs coordinators at 43 clinical sites responded to a survey that focused on the appropriateness of IPS for their programs, the acceptability of IPS to all stakeholders, and whether the IPS fidelity scale is relevant to the CalWORKs context. Interviews with supervisors and IPS employment specialists in eight programs supplemented the surveys, providing additional detail.

#### Training and fidelity:

DMH has adopted the practices of the developers of IPS in conceiving of training and fidelity reviews as the mainstays of program integrity.

Perceptions of the developer-provided training and DMH-sponsored job development training are generally positive. However, DMH is shifting direction in favor of transferring training responsibility to providers.

Although the CalWORKs population is very different from the one in the original IPS model, actions by the IPS staff to "adapt" the fidelity scale have been quite limited despite some suboptimal aspects of the fidelity scale.

- a. Although providers at most sites think their fidelity score generally reflects their ability to help clients with employment, a large majority believe that some requirements on the fidelity scale make attainment of high scores in those areas very difficult or impossible.
- While staff members view fidelity reviews as useful, most managers must balance achieving high scores with serving the needs of specific clients
- c. For different reasons, interactions of the IPS staff with the Greater Avenues for Independence (GAIN) staff and with the state Department of Rehabilitation workers is not optimal.

#### Acceptability of IPS:

In general, staff members in different programs report high acceptance of IPS with two exceptions. Clients are judged to be less positive than staff members about IPS, and almost a quarter of the sites report some issues with clinician over-protectiveness.

IPS programs all must face difficulties in participant motivation and finding incentives to encourage participants to want to improve their lives through employment. Some programs appear to have better success than others in these tasks, but it is unclear how much unhelpful participant attitudes about working vary by catchment area or in different programs.

Even after some CalWORKs participants have exceeded their time limit for receiving cash aid, DPSS sometimes has decided that they can continue to get cash aid if they continue mental health services. Doing so can create confusion for IPS staff members and for participants expected to be part of IPS.

Staff attitudes remain a barrier to easy access to IPS at some programs. Interviewees reported that close relationships between IPS staff members and clinicians as well as low levels of IPS job turnover are critical to IPS success. "Full" adoption of IPS was reported by two-thirds, with "high" adoption reported by the rest.

#### Appropriateness of IPS:

The majority opinion of staff survey respondents is that IPS benefits exceed costs and that resources for IPS would be increased if that decision were up to them. However, a significant minority felt resources were insufficient for doing a good job with both IPS and the clinical services at the site.

Practical difficulties are found in all IPS programs, but vary by region, population and significance. Countyoperated programs, as opposed to contract programs, have additional barriers.

Respondents reported high levels of support for IPS from top administrators and that most programs had a "champion" of IPS in the agency.

#### **Recommendations**

Training. For the most part IPS training arranged by DMH has been a strongpoint of the program. This has include the developers' online training, and funding of provider-specific technical assistance on job development. Additionally, two different attempts were made to introduce motivational interviewing techniques to IPS workers through training. At this point, however, no clear plan exists for repeating any of these trainings on an on-going basis. In fact, DMH has indicated that providers should conduct their own training. There are policy advantages to having providers establish their own training, or at least combine it with DMH-provided training. In either case, a clear plan is needed. We suggest that DMH should establish standards for IPS training. One guideline would set a standard if the clinic wanted to use the developers' training; a second guideline would set a standard for other types of training or hybrid efforts that also include IPS.

Referral information from DPSS. DMH should work with the program director of the GAIN Program Policy Section at the Department of Public Social Services in order to change the policy so that clients and clinics both know the anticipated date on which benefits will end and also know "extender" status without having to ask for it and wait 30 days to receive it.<sup>2</sup>

Regional meetings between DPSS staff and IPS staff. It is recommended that DMH and DPSS explore regional meetings for sharing information about the roles of each and problems each is encountering. This would help staff from both agencies view each other as partners.

*IPS caseload identification.* Currently there is no clear and system-wide standard for when a participant is part of IPS. This leads to inaccuracies in data (documented in this report) and hampers coordination with DPSS, around "time extenders," for example. We recommend developing a clear standard that includes referral and at least one face-to-face visit with IPS staff beyond orientation.

Participant incentives. DMH and DPSS should collaborate to create an attractive infographic that can be distributed to and used in all IPS programs, illustrating the advantages of working while receiving cash aid, both full-time and part-time and at different wage scales.<sup>3</sup>

Inappropriate references in the fidelity scale to the state Department of Rehabilitation. Unlike the severe mentally disabled population referenced by the IPS fidelity scale, the Department of Rehabilitation (DOR) has no official role with the CalWORKs population. While some CalWORKs participants qualify for DOR assistance, the fidelity scale focus on DOR (rather than DPSS) needs to be changed. We suggest DMH and DPSS collaborate to define more clearly the ways in which IPS and GAIN workers use each others as partners. If DOR is to remain in the fidelity scale, DMH administration should negotiate an MOU that covers all of the IPS programs.

Fidelity scale and new employment options. During the several years in which IPS implementation was under way across the system, DMH personnel and providers had general confidence that achieving high scores on the fidelity scale would result in good employment rates. The findings in the literature are that fidelity exerts only a "modest" effect on employment; in this study the effects of fidelity are even less consequential: knowing fidelity allows us to predict less than 5% of the variation in employment rates.

By regulation, DPSS must respond to participant requests to identify the number of months already used, the number of months for which an exemption was granted, and the number of months the participant is still eligible for aid.

<sup>3</sup> DPSS created an informational document about the impact of work and income that was widely distributed at one time. At least some of the program personnel interviewed did not know about that document.

A second finding in this study is that the CalWORKS IPS population differs in many concrete ways from the original severe mental disability population of the original IPS. These are described in Part III of the report, presenting the perspective of IPS experts and staff members. Many of these differences suggest the possibility of changes in the fidelity items that would increase their relevance for CalWORKs participants.

We suggest DMH and DPSS should consider three types of "reform" that we believe would lead to better employment results for CalWORKs mental health participants.

a. Revise the fidelity scale to better fit CalWORKs participant needs. First, the 25-item fidelity scale should be reviewed by a group of experienced CalWORKs IPS coordinators and employment specialists as well as DMH fidelity reviewers. Application of the original fidelity scale for six years has yielded a wealth of experience that can be drawn on in this effort. Fidelity items should be adapted to better fit the CalWORKs environment. Finally, after more than six years it is clear that IPS provides significant benefits to participants by helping them find and retain jobs. DPSS and DMH need to reconsider funding formulas for

- CalWORKs mental health programs so as to ensure that a higher proportion of participants with mental health problems receive IPS services.
- b. Experiment with a shorter fidelity scale. Items that don't correlate to employment might be dropped. This experiment is described in more detail in Appendix D on page 47. Essentially it requires using the 25-item fidelity scale as a control while introducing a 16-item scale with better correlation to employment.
- Expand the range of employment options. We found that fidelity is strongly linked to employment only in the lower range of acceptable fidelity scores. This means that once a minimum fidelity level is achieved, DMH administrators might begin to focus on trying other strategies for increasing employment. The key to the success of IPS appears to lie in the way employment staff members are integrated with the treatment program and staff. There is a lot of room to build on that strength while adopting other employment strategies well-suited to CalWORKs. We suggest working with DPSS in encouraging addition of some of the GAIN techniques to IPS teams. Strategies that are successful over time could be converted to new items to be added to a new CalWORKs IPS fidelity scale.

## Introduction: Supported employment in Los Angeles CalWORKs mental health programs

IPS stands for Individual Placement and Support. It is an employment program specifically designed for persons with mental health disabilities. Its distinguishing feature is that the employment program is co-located with clinical services, and the employment and clinical staffs plan jointly how to help each participant. Rapidly moving to a job search in competitive employment is a foundation of the program, as is building support around participant preferences. No one who wants to work is excluded. The principles and practices of successful IPS programs have been embedded in a "fidelity" scale that is used to rate IPS programs annually on how close they come to the program ideal.

IPS was developed 30 years ago to be used with persons whose mental health problems are severe. Typically they are persons with a diagnosis of bipolar disorder or schizophrenia. For that population, IPS has an extremely strong evidence base: 14 randomized control studies that had been published by 2008 showed that IPS outcomes were better than outcomes for other employment service models.<sup>4</sup> A recent study identified a total of 525 IPS programs in the United States. The Los Angeles CalWORKs mental health program has about 1/10th that number by itself.<sup>5</sup> IPS has spread around the world: programs have been established in Britain, the Netherlands, Australia, Canada, Japan, Italy, and elsewhere. In recent years IPS has been extended to other populations: persons experiencing a first psychotic break, persons with severe mental illness wanting to go to college, persons with severe mental illness and co-occurring substance

use disorder, and persons with severe mental illness who have criminal justice histories.<sup>6</sup>

The Los Angeles County Department of Mental Health is the first governmental entity to extend the opportunity to participate in the IPS model to all persons receiving TANF (CalWORKs in California) who also have mental health problems. Despite the large evidence base for IPS, the differences between severely mentally ill persons and CalWORKs participants raises the question of whether IPS is effective in this new population. Please see Appendix A for a discussion of how severely mentally ill and CalWORKs participants differ in ways that might affect the structure of IPS, the "IPS fidelity scale," or the outcomes of IPS services.

Evidence that only 26% of CalWORKs mental health participants worked at all in the six months after discharge from mental health services led DMH to investigate IPS. In the spring of 2012 an IPS pilot program in nine agencies was initiated and later evaluated. Although the design of the evaluation included a randomized control group, results were inconclusive in this Phase I of the study due to (a) bias despite the randomization such that control group participants had more prior work experience that IPS participants, and (b) very slow implementation of the IPS principles and practices, so that most of those in the experimental group did not experience the full IPS services.<sup>8</sup>

Despite this inconclusiveness DMH implemented IPS across all CalWORKs mental health programs, starting in 2013. Graphs of fidelity ratings from these early years and through 2018 are discussed starting on page 9. In 2015 a second study was conducted, again using nine programs. Fidelity scores of the programs were all

<sup>4</sup> Bond, G. R., Drake, R. E., & Becker, D. R. (2008). An update on randomized controlled trials of evidence-based supported employment. *Psychiatric Rehabilitation Journal*, 31(4), 280–90. doi:10.2975/31.4.2008.280.290

Johnson-Kwochka, A., Bond, G. R., Becker, D. R., Drake, R. E., & Greene, M. A. (2017, May). Prevalence and quality of Individual Placement and Support (IPS) supported employment in the United States. Administration and Policy in Mental Health 44(3), 311–319.

<sup>6</sup> Bond, G. R., Drake, R. E., & Pogue, J. A. (2019). Expanding Individual Placement and Support to populations with conditions and disorders other than serious mental illness. *Psychiatric Services* (Washington, D.C.), appips201800464. doi:10.1176/appi.ps.201800464

<sup>7</sup> Chandler, D. W. (2011). Work therapy: Welfare reform and mental health in California. Social Service Review, 85(1), 109–33.

<sup>8</sup> Chandler, D.W. (2013). 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. Sacramento: California Institute for Behavioral Health Solutions. Retrieved from https://www.cibhs.org/post/los-angeles-calworks-mental-health-services

"fair" or "good." DPSS data showed 47% of participants worked in the year following IPS enrollment, 50% worked within 14 months, and 53% worked within 16 months. These figures are supported by interviews with participants and by a system-wide outcome monitoring study that showed non-IPS participants did only half as well.<sup>9</sup>

While the second phase of the evaluation showed IPS to be successful, there was limited information about its success beyond the specific nine programs and 153 participants studied. The current evaluation, Phase III, examines both uniformity of implementation and of outcomes across all Los Angeles CalWORKs mental health IPS programs.

Phase III occurs in a labor market context last seen at the end of the 1990s. Since 2015, not only has unemployment been very low but also young single mothers have increased their share in the work force by 4 percentage points. This trend is strongest among those with less than a college degree. Given this larger trend we would expect somewhat higher employment rates for both IPS and non-IPS participants than found in Phase II.

#### **Goal and methods of Phase III**

## The Phase III IPS study addresses three policy questions:

- 1. When measured across a whole system rather than for only 153 participants as in Phase II, do IPS participants still achieve the objective of at least 50% of participants working? Also to the extent we can determine it without a randomized study design, do IPS participants do better than those not participating in IPS?
- 2. What is the status of fidelity reviews in the system, and how important is fidelity to good employment outcomes?
- 9 Chandler, D.W. (2017, May). Evidence for using the Individual Placement and Support (IPS) model in CalWORKs mental health programs: Outcomes from the County of Los Angeles. Sacramento: California Institute for Behavioral Health Solutions. Retrieved from https://www.cibhs.org/ calworks on May 29, 2019.
- Miller, C. C., & Tedeschi, E. (2019, May 29). This article, by journalist Claire Cain Miller and economist Ernie Tedeschi, is based on Current Population Survey data. Retrieved from https://www.nytimes.com/2019/05/29/upshot/singlemothers-surge-employment.html

3. How successful is the IPS model from the standpoint of the staff and administrators who implement it?

#### **Sources of information**

Information about individual participants. To measure outcomes we integrate data from DMH and DPSS that tracks a cohort of 2,867 CalWORKs mental health participants entering services between October 1, 2016, and February 1, 2018. Three types of data are combined: Clinical data from outcome forms completed by staff at admission and discharge, service data from the DMH information system, and employment data from DPSS. Data from the three sources are merged using an arbitrary identifier. Please see Appendix B for more information on the individual participant data.

Administrative data. DMH keeps monthly IPS census and employment data for all providers. This information is provider-specific and covers all IPS participants but it does not allow tracking of results for individual participants. We also use the fidelity ratings determined by DMH (and in the past, independent IPS experts) for each program roughly once a year. In combination, these data let us explore policy question 3 above: how much do provider fidelity scores correlate with or allow us to predict average monthly employment rates? Please see Appendix C for more information.

Survey data. For this report we have collected two types of survey data from IPS program staff. At each site we asked CalWORKs coordinators (who also supervise IPS) to rate IPS on its acceptability to clients and staff, its embeddedness or institutionalization in program culture, its appropriateness for CalWORKs participant problems, its cost, and its sustainability. We also interviewed the IPS staff at eight agencies in which staff members were asked to describe the concrete issues they face in using IPS to help clients with their employment. These data enable us to respond to policy question 2.

<sup>11</sup> Since the evaluation does not constitute research, as defined by the DMH Human Subjects Committee, no IRB approval was required. No participants were selected specially for the study or had any benefit from or risk associated with the study because the client-specific data were all collected from existing data bases. The only risk would be disclosure of participant identity, but the use of the arbitrary identifier removed that risk.

#### PART I: EMPLOYMENT OUTCOMES

Employment outcome information was derived from three sources, all of which profile the entire set of 45 programs that have implemented IPS. First is the pre-post information from the Outcomes Monitoring System. Second is longitudinal (panel) data using DPSS employment data and DMH service data. And third is administrative data from monthly reports on employment variables from IPS staff in all programs.

## Employment outcomes based on staff baseline and discharge information

A cohort is a group of study participants who have traits in common. In this study the common trait among cohort participants is entry into CalWORKs mental health services between October 1, 2016, and February 1, 2018.

Despite nearly identical employment backgrounds, 57% of IPS participants worked between admission and discharge vs. 35% for those not in IPS. The more weeks they spent in IPS, the higher the percentage among them who worked.

Staff members at CalWORKs mental health sites completed a form for each participant at baseline, two weeks within admission, and another form at discharge. The staff members were asked at baseline to characterize the participants' work history. In the table below we show work history cross-tabulated by whether at discharge staff reported the participant had been part of IPS or had never received IPS services. The percentages are virtually identical: at baseline, past work experience—which is the best predictor of future work—did not favor either those who were to

get IPS or those who did not.

At admission 27% of those who would be served by IPS were working vs. 26% of those not served by IPS, so work history and work at admission do not distinguish the IPS and non-IPS groups of participants.

Staff members were also asked at discharge to indicate how many jobs the participant had held during the course of treatment. Of those participating in IPS, 57% had held at least one job, while of those not in IPS 35% had held at least one job. The 57% figure exceeds the initial goal for IPS set by DMH, and the difference between IPS and non-IPS was statistically significant.<sup>12</sup>

Figure 1 illustrates how the likelihood of participants having worked varied depending on how many weeks they participated in IPS.

IPS participants worked an average of 1.39 jobs, if they worked at all; those with no IPS worked an average of 1.26 jobs, if they worked at all, a statistically significant difference.

IPS participants overall exhibit more employment-related activity: more jobs, more GED or training, and they were more likely to leave services due to a job or school, but they were not more likely to work full-time rather than part-time.

Part-time/full-time status was determined only for a job that was held during the week before the participant's

Table 1: Comparison of work history for those who did and did not receive IPS

Work history	IPS N=558	No IPS N=1,453
Primarily stable full-time employment	23%	23%
Primarily part-time employment	17%	19%
Sporadic or occasional full-time or part-time	56%	53%
Client never worked	4%	5%

<sup>12</sup> In a logistic regression analysis of whether participants worked during treatment, and with work history and work at admission held constant, IPS participants worked 57% of the time and non-IPS worked 35% of the time (odds ratio .38 for non-IPS p=0.00.) These figures are essentially equal to the raw data because of the nearly identical baseline scores on work and work history among the two groups.

Figure 1: Predicted probability of working depending on number of weeks clinic staff report clients received IPS services N=1,839

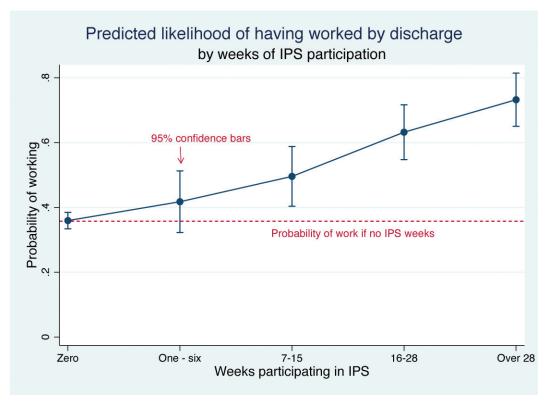


Table 2: Hours working at discharge, by IPS status

Work hours at discharge, if working	Participated in IPS N=262	No IPS N=480
40 hours or more	26.3%	20.0%
32–39 hours	20.6%	21.5%
20-32 hours	32.8%	35.4%
10-19 hours	12.6%	16.7%
9 hours or less	7.6%	6.5%
Total	100.0%	100.0%

Table 3: Time spent in treatment, by IPS participation

Days in treatment	IPS N=555	Not-IPS N=1,399
1–60 days	10%	30%
61–120 days	13%	20%
121–240 days	27%	26%
Over 6 months	50%	24%

last visit at the site. Differences between IPS and non-IPS were not statistically significant (omitting those not working at all).

We also asked what percentage of participants at discharge held the same job (if any) in which they had worked at admission. For IPS participants one third were still in the same job; for non-IPS two thirds were in the same job. This result may be confounded by differences in how long participants remained in treatment <sup>13</sup>

So far we have seen that IPS participants are much more likely to work than non-IPS participants, and that they are twice as likely to have a job that is different from the one they had at admission, if they had a job at discharge. IPS participants worked at more jobs (which also can be confounded by duration of treatment) but were no more likely to work full-time. The next measure is whether they were more likely to have their discharge reason categorized as due to working or going to school full-time, which left no time for continued clinic visits. For both groups the percent leaving for this reason is small: 9.3% for IPS and 6.7% for non-IPS.

Two other measures of work-life productivity were also small for both groups. At discharge, staff members were asked if participants were in GED or a training program that issues a certificate at the time of discharge or had completed such a program. For IPS participants the percentage was 13.1; for non-IPS it was 7.3. With regard to being enrolled in post-secondary school at discharge or having completed a post-secondary degree during the treatment period, the IPS and non-IPS groups were essentially equal: 13.0 vs. 13.2.

In sum, over and beyond being more likely to work, IPS participants overall had more employment-related activity happening: more jobs, more GED or training, and they were more likely to leave services due to a job or school.

## Employment is significantly higher for IPS participants even when using regression models that control for both observed and unobserved bias.

So far we have used raw numbers with the assumption that except for IPS status the groups are comparable. The main possible confounders<sup>14</sup>—work at admission or work history—did not indicate any differences between the IPS and non-IPS groups. However, there are other scenarios that would mean the groups are not really close to being the same. The most interesting possibility is that IPS participation is just a proxy for characteristics that end up keeping some participants in treatment longer than others, and it is the longer treatment that creates more employment. To test for this we compare the relationship of work and IPS for those who stayed in treatment less than the median number of days with the same relationship among

Table 4: Relationship of IPS to employment in short- and long-stay participants

Employed if	IPS	Non-IPS	Percent difference
Treatment duration less than median	41.4%	28.2%	13.2%
Treatment duration more than median	63.0%	43.8%	19.2%

<sup>13</sup> Data for duration of treatment are accurate to within only two weeks at either end. Admission forms are time-stamped but can be entered up to two weeks after admission.

Discharge forms are time stamped, and staff members are asked to indicate the time that discharge occurred before that date, in increments of two weeks. It turns out that non-IPS participants are served for substantially less time (see Table 3). Non-IPS participants may leave early while still working at their initial job; IPS participants have more time to try different jobs. Fifty percent of non-IPS participants leave the clinic in the first four months; only 23 percent of IPS participants do.

<sup>14</sup> A "confounder" is a variable that is related to one or both factors we want to understand. Having been employed and IPS status are the variables of interest. But other variables might be related to these variables in a way that creates the appearance of correlation when it does not really exist. In this case possibly a longer duration in treatment increases the probability that participants will be part of IPS *and* more likely they will gain employment.

those who stayed over the median number of days (147). If duration were the only variable, there should be no difference between IPS and non-IPS participants when under the median duration. Instead we see that short duration of treatment is associated with lower employment rates, but does not change the large advantage for IPS participants.<sup>15</sup>

The method to control for observed and unobserved bias is specialized "treatment effects" regression analysis for the relationship between work and IPS status, which includes in the model all variables that could potentially be confounding or obscuring this relationship by having an independent relationship with work. Such a model also controls for biased "selection" into the two groups. The control variables we use to construct the regression model are 15 descriptors of participants at baseline. 16 These descriptors of participants tell a story that possibly affects the conclusion that IPS results in large increases in employment. While clinics have moved to a procedure that introduces IPS workers to participants at admission, the fact is that many or most IPS referrals are made when the client expresses an interest in working or bettering their life. While there can be many variants or degrees of "wanting to work," our interviews surfaced the view that clinicians are more likely to "hang on" to participants who are very symptomatic. And in fact the statistically significant relationships between IPS status and covariates include three that in some way reflect clinical status. The first is the degree of clinical severity as judged at baseline: IPS participants tend to be lower in severity. A second is a scale rating occupational capacity: IPS participants are scored higher at the top end of the scale. A third is the co-occurrence of domestic violence: IPS participants are somewhat less likely to have suffered moderate to severe current or past domestic violence. So a possible

story we could tell is that participants who end up in IPS are psychiatrically more functional than non-IPS participants and thus more likely to choose IPS. Countering this story, however, are the facts that there are no significant differences based on diagnosis, on social relationships, or on substance abuse, all of which should tap the same vein of mental health capacity. And while we have no direct way to test for differences in motivation to work, as we saw earlier, work history and employment status at admission are nearly identical and thus do not suggest a different motivation to work—at least prior to treatment.

Here are the steps we took to implement the "treatment effects" regression model.

- a. The first model we used adjusts for the possibility of "selection" by assigning a weight to the covariates that is the inverse of their probability of being in the IPS group. When the effects of all 15 variables are taken into account this way, the model produces a predicted 51% probability of working for those in IPS vs. 37% for those not in IPS. Thus, the difference in percent working is 14.6% in the raw data and 14.5% in the data that control for baseline differences between those in IPS and those in non-IPS groups.
- b. Then we had to test three possible ways in which the model could be biased. First, we added a correction for the clustering that occurs because not all participants are independent due to being served by the same provider (with the same staff providing services, the same local employment rate, and other commonalities.). Second, we tested for the existence of endogeneity, stemming from dissimilarities in motivation to work or some other non-observable difference that affects the results. Third, we tested a hierarchical model that assigned variances either to the individuals or to the Service Planning Areas in which the sites were situated. A statistical test did not show dividing the variance that way added to the explanatory power of the individual-only regressions.
- c. We then applied a second type of model called propensity score matching. It uses a special statistical technique to find participants in the control group (that is, non-IPS participants) who are nearly exact matches to the experimental

<sup>15</sup> We also used a more formal test: Using the statistics program Stata's "treatment effects" routine a logistic regression model in which both IPS status and the duration of treatment were entered as predictors. IPS status was still statistically significant but the interaction of IPS and duration of treatment was not. Removing the effects of duration of treatment in this way, 53% of IPS participants worked vs. 37% of non-IPS.

<sup>16</sup> Duration of treatment, occupational GAF, social GAF, sex, race, age, symptom severity, level of care, substance abuse, domestic violence, diagnosis, work status at admit, work history. The SPA the program was in and the median income of persons in that SPA were also statistically significant covariates.

group (IPS) using the 15 baseline covariates. This approach resulted in a 23 percentage point difference between the two groups rather than 14.5%. 17

With observational data, it is not possible to be completely sure you have recreated the equivalent of random assignment. Even so, none of the various ways of modeling the effects of IPS participation showed a weaker effect of IPS on employment than using the raw data, and some showed it to be stronger. 18

#### Monthly data on employment and IPS

The average monthly employment rate among IPS participants is 31% (median 33%). However, variability between providers is high, ranging from over 50% to less than 20%.

Initially, it is important to note that six of the 52 providers do not have an IPS program, due to a quirk in their contract language. One other provider that encountered trouble starting its IPS program underwent its first fidelity review in February 2019. So in effect seven of the 52 providers show no IPS employment due to lack of an IPS program. Data from those programs is excluded from analysis.

Because the data available are not unduplicated, we can summarize it by using monthly averages. Overall, the mean of all providers-months showed 31% of IPS participants working; the median (50% below and 50% above) was 33%. Table 5 shows how the median provider-months were broadly distributed between zero and 52%. While only 14% of the provider-months were between zero and 13% working, 35% indicated that over 40% were working. Monthly employment rates in IPS programs are not widely published, but the CalWORKs IPS rates seem within the usual range for those programs in which they are published. For

Table 5: Proportion of IPS participants working in each of 18 months at 45 providers

Median proportion working in month	Months	Percent of all months
.0–.13	115	14%
.14–.26	190	23%
.27–.39	220	27%
.4052	285	35%
Total	810	100%

example, a 45-city study of 2,059 SSDI recipients who have severe mental illness showed that after program ramp-up, between 25% and 32% worked monthly.<sup>19</sup>

In another widely cited study that showed 80% of IPS participants working at least part of the time during the study period, monthly employment peaked at 40% and then drifted down to 30%.<sup>20</sup>

From the standpoint of DMH administrators, it matters a good deal how successful individual providers are. DMH administrators are trying to achieve the highest employment rates possible. To do so they employ a number of tools, including fidelity reviews, monthly data reports, and other site visits. For management purposes, they must distinguish problems specific to a provider (like high turnover among employment counselors or low percentage of participants in IPS) from problems that affect a whole Service Planning Area, like high unemployment rates. So in this section we attempt to use the monthly IPS employment data collected from 45 providers with an IPS program to profile the range of success among providers and highlight some possible causes.

In Table 6 we summarize the (average) number of participants over the 18 months.

<sup>17 23</sup> percent using nearest neighbor match and average treatment effect on the treated. If three IPS participants are removed because a caliper of 0.03 is used, the difference in employment between IPS and its "match" group becomes 26 percent.

<sup>18</sup> The 25-year body of literature on propensity score matching and other treatment effects modeling is extensive. We have tried to use conservative options and several models so as to avoid investigator bias. An example of the many options available is: Lunt, M. (2014). Selecting an appropriate caliper can be essential for achieving good balance with propensity score matching. *American Journal of Epidemiology*, 179(2), 226–35. doi:10.1093/aje/kwt212.

<sup>19</sup> Drake, R. E., Frey, W., Bond, G. R., Goldman, H., et al. (2013). Assisting social security disability insurance beneficiaries with schizophrenia. *The American Journal of Psychiatry* (Vol. 170, pp. 1433–41). doi:10.1176/appi. ajp.2013.13020214

<sup>20</sup> Bond, G. R., Salyers, M. P., Dincin, J., Drake, R., Becker, D. R., Fraser, V. V., & Haines, M. (2007). A randomized controlled trial comparing two vocational models for persons with severe mental illness. *Journal of Consulting and Clinical Psychology*, 75(6), 968–82.

We can summarize the distribution of the proportion working per month averaged *over 18 months* for each provider. Figure 2 shows for each provider the average (mean) of all 18 monthly averages (means). That is, it is an average of monthly averages. In this graph and in the rest of the report we show only data for providers that have an IPS program. Ten providers averaged over 40% of participants working each month; fifteen averaged 30% to 39% working each month; fourteen averaged 20% to 29% working each month; and six providers averaged less than 20% working each month.

Although we know there is substantial variability between providers, we don't know yet whether that variability hides *trends* over time across providers. Figure 3 shows the median employment rate for all providers for each of the 18 months from July 2017 through January 2019. Over that duration, a clear pattern related to time emerged, but it is not linear. The cause of this pattern is undetermined.

Monthly data also demonstrates that 33% of IPSemployed participants work full-time. Job starts vary greatly by month. And while 23% of participants leave because of work or school, 40% leave due to lack of engagement. During this time period of July 2017 through December 2018, DMH collected information on three other aspects of IPS service: whether work is full- or part-time, job starts, and reasons why clients have disengaged from IPS, if they have.

*Full-time work*. Initially, part-time work enhances employability and, when combined with the cash aid still available to those working, significantly increases participant income.<sup>21</sup> However, CalWORKs participants ordinarily need to work full-time in order to transition off welfare. Figure 4 shows the median percentage of persons working full-time during each of the 18 months.<sup>22</sup>

While overall 33% of employed participants work full-time, it is also reasonable to calculate the percentage of *all* IPS participants (not just those employed) who are working full-time: 11% of IPS participants are working full-time on average each month. Because earnings from working part-time while receiving

Table 6: Monthly averages of CalWORKs mental health and IPS data: July 2017-Dec. 2018

Provider	SPA	CalWORKs	IPS	IPS%	IPS worked	IPS% worked
Antelope Valley MHS	1	50	14	28%	6	47%
Penny Lane Centers	1	113	30	25%	7	21%
Child & Family Guidance Center	2	39	16	44%	6	35%
El Centro de Amistad-Canoga Park	2	30	10	32%	2	23%
El Centro de Amistad-San Fernando	2	11	5	46%	3	46%
Hillview Mental Health Center, Inc.	2	66	26	40%	8	32%
San Fernando MHS	2	85	25	29%	4	19%
Santa Clarita Valley MHC	2	25	5	21%	2	48%
The Help Group/Child & Family Center Van Nuys	2	34	17	50%	6	39%
ALMA Family Services El Monte	3	62	18	29%	5	26%
East San Gabriel Valley MHC	3	28	7	25%	2	30%
Enki La Puente Valley MHC	3	28	7	26%	2	35%
Hillsides Irwindale	3	45	8	19%	2	23%
Hillsides Pomona	3	28	5	18%	2	30%
Prototypes OBHS Pasadena	3	21	3	14%	1	17%

<sup>21</sup> California has one of the more generous income disregard policies, so while grants are reduced by earnings the combined amount of grant and earnings still is much more than the grant alone.

<sup>22</sup> That is, we divide the number working full-time in each month across all providers by the number of persons working at all. This gives us the proportion working full-time. We use the median (50% higher and 50% lower) as our measure across the 45 providers who had IPS programs.

Table 6 continued...

Provider	SPA	CalWORKs	IPS	IPS%	IPS worked	IPS% worked
Prototypes Pomona	3	24	6	27%	2	14%
APCTC Metro Center	4	39	11	28%	4	42%
Children's Institute Inc. – Temple St.	4	33	12	37%	3	29%
Downtown MHC-CalWORKs	4	78	18	22%	6	28%
Hillsides Los Angeles	4	28	9	33%	3	27%
Hollywood MHC	4	31	10	31%	4	45%
Didi Hirsch CMHC Mar Vista	5	32	5	16%	1	25%
Pacific Asian Counseling Services Los Angeles	5	26	10	40%	6	56%
1736 Family Crisis Center Los Angeles	6	50	3	6%	1	21%
Augustus F. Hawkins MHC	6	58	14	21%	3	14%
Children's Institute Inc.	6	37	14	39%	3	22%
Didi Hirsch Taper Center	6	49	13	28%	4	32%
SHIELDS for Families-CalWORKs	6	31	12	39%	4	30%
SCHARP	6	63	17	27%	6	36%
The Guidance Center Compton	6	37	4	11%	1	26%
West Central Family MHS	6	84	9	13%	4	38%
ALMA Family Services Pico Rivera	7	57	7	14%	2	20%
Enki – East LA MHS Bell Gardens	7	31	7	22%	3	51%
Pathways Community Services	7	50	19	40%	9	48%
Rio Hondo Community MHC	7	83	19	23%	6	30%
Roybal Family MHS	7	66	24	38%	10	39%
San Antonio Family Center	7	87	20	24%	6	27%
Children's Institute Inc. Long Beach	8	26	12	45%	5	44%
Coastal Asian Pacific Islander Family MHC	8	88	31	35%	7	23%
DMH at Harbor–UCLA Medical Center	8	56	13	23%	2	18%
Didi Hirsch Inglewood	8	60	17	29%	6	32%
Long Beach Asian Pacific Islander Family MHC	8	60	23	39%	11	45%
Long Beach Child & Adolescent Program	8	71	22	29%	7	32%
Pacific Asian Counseling Services Long Beach	8	25	13	54%	4	37%
The Guidance Center Long Beach	8	37	7	19%	2	33%

Table 7: Summary of provider central tendency and variability in the period July 2017–December 2018 for 45 IPS providers

Statistics	CalWORKs clients	IPS participants	Percent in IPS	IPS clients working	Percent working
Mean	48.0	13.2	29%	4.3	32%
Median	42	12	28%	4	33%
Min	3	0	0%	0	0%
Max	139	47	100%	17	100%

Figure 2: Employment rate variability across providers

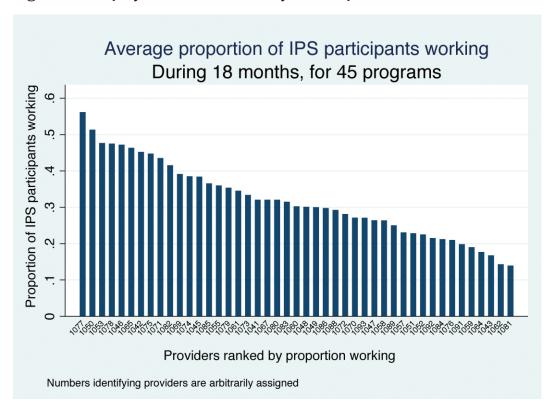


Figure 3: Trends over time in proportion of IPS participants having a job in a particular month

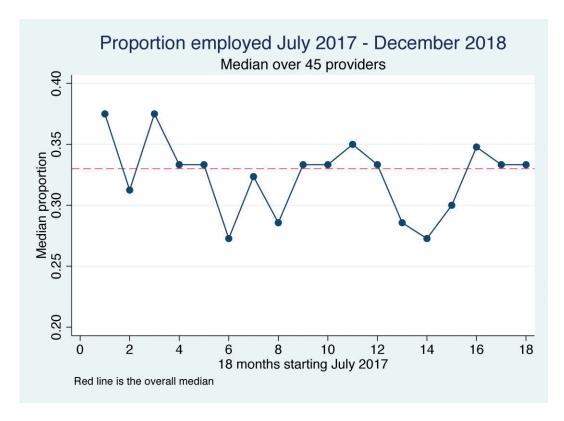


Figure 4: If employed, median proportion employed full-time

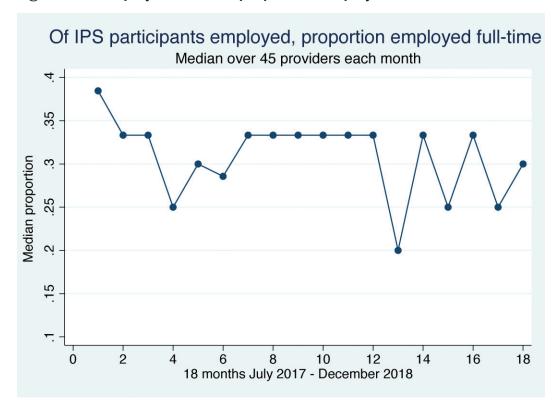
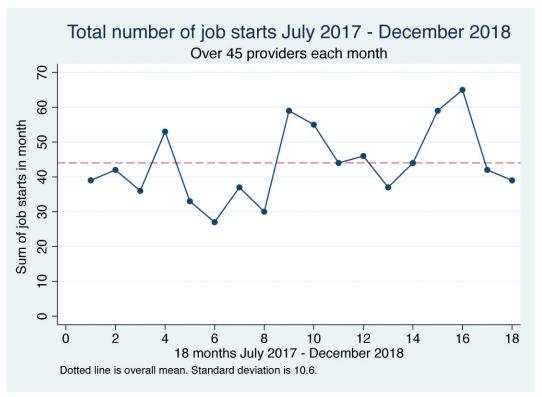


Figure 5: Total job starts per month



CalWORKs funding can rival the income from fulltime low-wage jobs, not too much should be inferred from this low number. However, most participants would need to procure full-time work for them to consider relinquishing cash aid.

Job starts. We can imagine two extremes that could produce a particular employment rate. In one extreme, the participants working might be employed at the same job month after month; in the other, all jobs last only a month or less, so the employment rate reflects job starts entirely. In reality there is a mixture of these patterns, but looking at job starts gives some idea of where the balance lies. We can calculate a rate of job starts per month per IPS participant. The median number of job starts per participant per month is 0.17 with a mean of 0.23 (and standard deviation of 0.26). Figure 5 shows the pattern in job starts over the 18 months for which we have data.

Reason for leaving IPS. DMH also tracks some of the reasons a participant might leave the IPS program (shown in Table 8). Looking at the relative frequency of these reasons provides some sense of the success of the program. Leaving for work or for further education indicate success. Ordinarily, a participant's decision to disengage from IPS probably would be made for a negative reason. Having the case closed due to the participant reaching their CalWORKs lifetime time limit of four years is clearly a negative outcome for the participant but may not have been anything the IPS program could have avoided in the time during which

Table 8: Number closed by IPS in all providers with an IPS program over 18 months

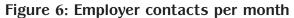
Reason for closure	Total number closed	Percent of all closures
Work	237	18%
Education	61	5%
Client disengaged	536	40%
DPSS closed due to time limits	132	10%
Other reasons	357	27%
Total case closures	1,342	100%

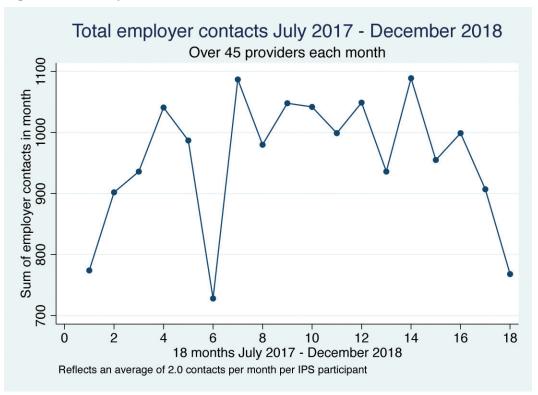
the agency was working with the participant. Because the number of cases with each reason are recorded for each month (and don't duplicate in other months), we can simply total the number of reasons of the 18 months.

The category "other reasons" can include many possibilities—from DPSS actions, such as sanctions, to agency actions for non-compliance, to client actions—including moving. The largest category in the table is client disengagement, which in a broad sense can be taken as indicating the IPS program did not meet the needs of those participants.

Number of contacts per month with a "hiring manager." A total of 17,227 meetings with managers having authority to hire were logged by the 45 providers over 18 months. Initial visits accounted for 10,298 visits and follow-ups for 6,929. Because some programs had many more IPS participants (and more employment specialists), this number has been converted into a rate: the number of hiring employer contacts per IPS participant per month.23 For example, in July 2017 one program had a total of 17 IPS participants and made 39 employer contacts; the rate of contacts per IPS participant was 2.3. Figure 6 shows how the total contacts per IPS participant changed for the 45 providers over the 18 months from July 2017 through December 2018. The precipitous declines in months 6 and 18 appear to be due to December holidays when hiring managers are very busy and hard to reach.

<sup>23</sup> The fidelity scale specifies contacts with employers who can hire. Interviews with employment specialists indicated that contacts with other employees can be equally or more helpful, but these are not counted.





## PART II: FIDELITY REVIEWS, SCORES AND CORRELATION WITH EMPLOYMENT

The Los Angeles County Department of Mental Health keeps a record of fidelity site visits made to providers. The results of site visits are summarized in fidelity scores, which are shared with providers and form the basis of correction plans. The fidelity ratings provide assurance that the services clients are receiving do constitute IPS, not a weak or bowdlerized version. Because studies have shown that fidelity scores correlate to some extent with employment outcomes, they are also a partial measure of the degree to which CalWORKs mental health programs are fulfilling their mission of removing barriers to employment.

#### Fidelity Ratings 2012 through 2018

IPS programs exist in 45 of the 52 CalWORKs mental health sites, with the rest scheduled to implement in the upcoming contract cycle. Fidelity ratings have gone up considerably over time in the aggregate and for almost all programs.

As highly successful psychosocial interventions for persons with serious mental disabilities were developed in the 1990s, interest grew in being able to export these models to other agencies or even states. Doing so required the ability to determine which key elements of the model were associated with good outcomes. Fidelity scales for evidence-based programs grew out of this need. In the early 2000s the National Evidence-Based Practices Project tested fidelity scales for five model services, including IPS. Further testing resulted in more refinements and an expansion from 15 to 25 items, so that now the 25-item fidelity scale is used in hundreds of IPS programs around the world<sup>24</sup>. Concurrent and predictive validity for a 15-item IPS fidelity scale were first established in 2005.<sup>25</sup>

A replication published in 2015 using the revised and expanded fidelity scale demonstrated a statistically significant correlation of .34 between the "total" score and competitive employment. Eight of the 25 items were also correlated with employment.<sup>26</sup>

In Los Angeles, the intent from the beginning was for the entire system of 52 CalWORKs mental health providers to offer IPS and be assessed with the fidelity scale. However, as a result of a few exceptions, fidelity reviews were not being performed on nine providers. Six of these used a different supported employment model from IPS initially; in the new contract starting in 2019 they will be required to use IPS. Two other contractors did not have contracts renewed so they are not included in the analysis, and one recently added contractor has not been providing services long enough for a fidelity review to be meaningful. So the data we use cover 155 reviews for 43 providers.

The range of scores over the categories of acceptable IPS performance is shown in Table 9 for all 155 reviews. If a score is below 74, the program cannot

Table 9: Overall categories of IPS fidelity, all reviews completed

	Number of	
Degree of fidelity	reviews	Percent
Not IPS	17	11%
Fair fidelity	78	50%
Good fidelity	53	34%
Exemplary fidelity	7	4%
Total	155	100%

qualify as IPS. Scores of 74–99 are considered "fair"; 100–114 "good"; and 115–125 "exemplary."

By comparison, Oregon has increased the minimum

<sup>24</sup> https://ipsworks.org/index.php/documents/ips-fidelity-scale/

<sup>25</sup> McGrew, J. H., & Griss, M. E. (2005). Concurrent and Predictive Validity of Two Scales to Assess the Fidelity of Implementation of Supported Employment. *Psychiatric Rehabilitation Journal*, 29(1), 41-47. Retrieved from http://dx.doi.org/10.2975/29.2005.41.47

<sup>26</sup> Bond G. R., Peterson A. E., Becker D. R., & Drake, R. E. (2012, August). Validation of the revised Individual Placement and Support Fidelity Scale (IPS-25). *Psychiatric Services* 63(8):758–63. doi: 10.1176/appi.ps.201100476.

threshold from a score of 74 to a score of 100. Below 100 an intense remediation period is triggered, and if the next fidelity review does not reach 100 funding is cut.

Of considerable interest is whether programs improved their fidelity scores over time. Table 10 shows the scores for each program at the earliest or first fidelity review and at the most recent review. At their first fidelity review, 11 programs did not qualify as IPS because their score was below 74; only five programs

were rated "good" and one rated "exemplary." By the most recent rating (in most cases five years later), only two programs were not IPS; 22 were "good" and three were "exemplary."

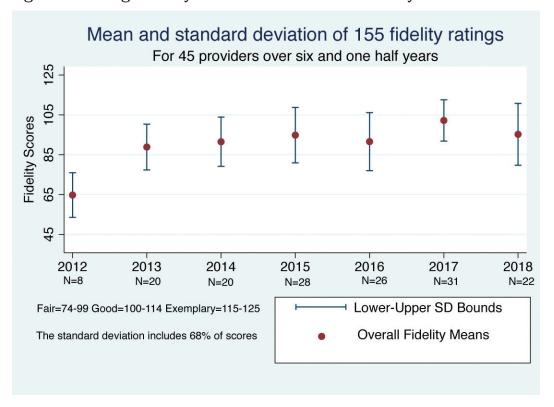
Figure 7 shows the average scores by year from inception in 2012 through 2018.

Table 11 and Figure 8 show that the set of 43 IPS programs has generally improved its fidelity ratings

Table 10: Comparison of IPS fidelity scores at the first and the most recent review

	Score at earliest rating		Score at most recent rating	
Rating	Number of IPS programs	Percentage	Number of IPS programs	Percentage
Not IPS	11	26%	2	5%
Fair	26	60%	16	37%
Good	5	12%	22	51%
Exemplary	1	2%	3	7%
Total	43	100%	43	100%

Figure 7: Average fidelity scores over six and one half years



over time. They do not show the improvement (or lack of) for individual programs. Figure 8 adds that information. Thirty-two programs had a wide range of improvement between earliest and most recent review, ranging from increases of under 10 to over 50. One program had increased its score by 62 points! Five programs had a lower score on the most recent review (though not by much), and six programs had not changed between earliest and most recent reviews. Three of the 11 not showing improvement were "not IPS" at both ratings, and therefore indicate a failure of implementation.

CalWORKs mental health IPS programs receive a fidelity review at about the same frequency as IPS programs in other states, and the distribution of scores is similar.

We asked Gary Bond, one of the developers of the current IPS fidelity scale, about the empirical frequency of fidelity reviews. His response:

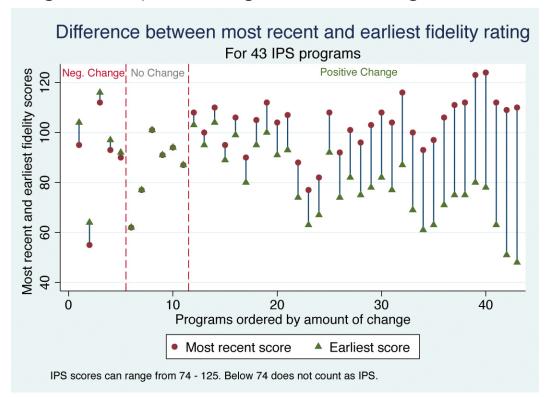
"The guidelines are every six months until you attain good fidelity and then annually. Some states have elaborate algorithms for longer periods of accreditation so you can skip fidelity reviews if you

have very good fidelity and also good outcomes. In 2014, 75% of sites in the learning community in our study had a fidelity review in the last year.<sup>27</sup>"

However, two years earlier the figure was 65%, so in personal correspondence Bond suggested combining them for a 70% rate of fidelity reviews done within a year.

In the Los Angeles CalWORKs mental health system in 2017 there were 32 reviews done, or 72% of IPS programs. But in 2018 the number of reviews declined to 22, or only 51%. We have been unable to locate a larger database showing the frequency of reviews in practice and whether a frequency of greater than one year has consequences on future fidelity or on outcomes.<sup>28</sup>

Figure 8: Graph showing scores of earliest and most recent IPS fidelity ratings for all 43 providers along with amount of change



<sup>27</sup> Personal communication April 22, 2019. The 75% figure is in: Bond, G. R., Drake, R. E., Becker, D. R., & Noel, V. A. (2016). The IPS learning community: A longitudinal study of sustainment, quality, and outcome. *Psychiatric Services* (*Washington*, *D.C.*), 67(8), 864–9. doi:10.1176/appi. ps.201500301.

<sup>28</sup> Oregon sets a fidelity score of 100 as the minimum. If the minimum is met, ratings are conducted every year. If not met, the program has a year to achieve 100. During this year ratings are done every three months.

Does something about the use of the fidelity scale with the CalWORKs population, rather than severely mentally ill persons, make attaining very high scores difficult? This question is raised because some CalWORKs IPS team leaders in Los Angeles have suggested that they encounter difficulty in trying to achieve high scores. For example, the fidelity scale gives top points for covering a high proportion of clients. In the DMH system, the level of DPSS funding basically establishes what the penetration rate can be and it is relatively low (around 20% rather than 80%).<sup>29</sup> Practically, for almost all programs this means one employment specialist per site.

In addressing the question of how having a CalWORKs population makes a difference, the first issue is whether the Los Angeles County IPS programs do in fact have lower fidelity scores than other IPS programs. Data are available from a 2012 study of 79 programs in eight states.<sup>30</sup> Most of the programs had been providing IPS services for at least a year, but 17 of the 79 had reported outcomes for less than nine months. In that sample the mean for the IPS total score was 101 with a standard deviation of 13 and a range of 56 to 123. Overall, 52 sites in the sample (66%) achieved a fidelity score of 100 or more, the cutoff for good fidelity.

By comparison in Los Angeles CalWORKs mental health programs, scores were either about the same or a little lower, depending on the sample. Using all 155 CalWORKs fidelity reviews, the mean score was 93 plus or minus 15, and 39% achieved the 100 cutoff. Using the most recent reviews of 43 programs, the mean score was 99 with a standard deviation of 14, and 58% achieved 100 or above. Note that the 155 scores from Los Angeles include quite a number of very low fidelity scores from the first six- or ninemonth implementation period. (See figure 7 showing average scores in the start-up year of 2012 vs. other years).

Column A of Table 11 shows the distribution of scores for the eight-state sample and the two Los Angeles samples broken into the four categories assigned by the fidelity scale.

Table 11: Distribution of IPS fidelity ratings over 79 programs in eight states \* compared to Los Angeles data (from prior tables)

Rating	A: 79 programs in eight States	B: All 155 reviews of LA CalWORKs IPS	C: Most recent review for 43 LA IPS programs
Not IPS	5%	11%	5%
Fair	29%	50%	37%
Good	57%	34%	51%
Exemplary	9%	4%	7%
Total	100%	100%	100%

<sup>\*</sup> Ibid (footnote 30). Oregon also keeps public fidelity score data for its 34 IPS programs. It is truncated at the bottom because programs with a fidelity score of less than 100 are not funded. But "exemplary" programs make up 6% in 2018 compared to the most recent LA scores having 7% rated "exemplary."

Compared to the overall Los Angeles scores of all 155 reviews (see Table 11, columns A and B), the eight-state sample scores are somewhat lower but roughly comparable: 4% "exemplary" in LA rather than 9% in the multi-state sample; 34% "good" in LA compared to 39% in the eight states; 50% "fair" compared to 32% in the eight states; and 11% "not IPS" in LA compared to 5% in the eight states.

The most recent fidelity scores in LA for all 43 programs show 7% "exemplary" (vs. 9% in the eight states), 51% "good" (vs. 57% in eight states); 37% "fair" (vs. 32% in eight states); and 5% "not IPS" (vs. 5% in eight states). So, in fact, it seems the LA program distribution of fidelity scores is generally comparable to other IPS programs in eight states. In short, there is nothing to explain: the distribution of fidelity scores for the Los Angeles CalWORKs IPS programs is not lower than found in other IPS programs around the country.

## The relationship of IPS fidelity to employment rates

IPS fidelity scores at programs correlate 0.22 with the average monthly employment rate over 18 months. Of the 25 items, 14 correlate at least 0.15, and 10 correlated at 0.20.

As discussed above, the IPS fidelity scale has been tested for psychometric properties and for its ability to predict employment rates for severely mentally ill

<sup>29</sup> Although a few programs have hired two or three rather than the usual one IPS employment specialist.

<sup>30</sup> Bond, G. R., Peterson, A. E., Becker, D. R., & Drake, R. E. (2012, August). Validation of the revised Individual Placement and Support Fidelity Scale (IPS-25). *Psychiatric Services* 63(8), 758–63. doi:10.1176/appi.ps.201100476.

*persons*.<sup>31</sup> In a parallel way, we are interested in the psychometric properties of the IPS-25 fidelity scale and its prediction of employment—but with regard to the *CalWORKs mental health population*.

*Internal consistency reliability.* Bond et al. report internal consistency reliability of .88 for the 25-item fidelity scale (Cronbach's alpha). In Los Angeles, using the CalWORKs mental health fidelity scores, we found the same reliability of .88—both overall using 155 reviews and with only the most recent 43.<sup>32</sup>

Correlation of fidelity items and total score to monthly employment rates. For the 43 programs having a recent fidelity score, we correlated that score with the average monthly employment rate for each provider. The average monthly employment rate was found by first calculating for each month between July 2017 and December 2018 the average percentage of IPS participants who worked competitively in the month. Then the average of the rates throughout all 18 months was calculated. In Table 12 we take a broad-brush

Table 12: Mean employment rate for 43 IPS programs in Los Angeles over 18 months, by IPS fidelity categories (using most recent fidelity review)

Category	Mean employment rate IPS programs	Standard deviation	Frequency
Not IPS	0.18	0.05	2
Fair fidelity	0.32	0.10	15
Good fidelity	0.34	0.10	22
Exemplary fidelity	0.27	0.10	3
Total	0.32	0.10	42

look at the relationship between the four categories of IPS fidelity and the employment rate per month per provider. The time frame for these two variables is similar but not an exact match. The employment data cover July 2017 through December 2018. The

fidelity ratings occurred in 2018 for 19 programs, in 2017 for 17, in 2016 for three, and 2015 for four. Because of this inexact fit in time frames, imprecision in the matching of the two is likely. For example, the employment rate for the programs reviewed most recently back in 2015–16 may be different from the rates found during our actual 18-month sample period. Table 12 illuminates a small tendency toward better fidelity being linked with more employment. Unfortunately the number of programs in the "not IPS" and the "exemplary" categories are too small to be reliable.

Correlation of fidelity scale items with employment rate. Table 12 shows the correlation between (a) scores on all 25 fidelity items, and (b) the average employment rate per month per provider over 18 months. For fidelity, the most recent score is used for each provider. Items are presented in rank order, with those with higher correlations appearing at the bottom of the table.<sup>33</sup>

Only three of the Los Angeles subscales correlated at a statistically significant level with employment rate. They are "collaboration with vocational rehabilitation," "individualized follow-along supports," and "there is assertive engagement and outreach by clinical team." The overall correlation was .22, which is not statistically significant.<sup>34</sup> For two subscales no variation in the fidelity scores occurred, so no correlation was computed. Six of the subscales actually had a negative correlation with working, but the correlation was very small.

<sup>31</sup> Op cit. Bond, G. R., Peterson, A. E., Becker, D. R., Drake, R. E. (2012, August). Validation of the revised Individual Placement and Support Fidelity Scale (IPS-25). *Psychiatric Services* 63(8), 758–63. doi:10.1176/appi.ps.201100476

<sup>32</sup> For the most recent 43 reviews, though, caseload drops out as all programs received a 5—that is, there is no variability.

<sup>33</sup> We also ran the correlations using the 39 sites that received fidelity reviews in 2018 or 2017 so that the fidelity and employment data were somewhat more closely matched. In general, the correlations using the 2017-2018 data were slightly lower than when we used the most recent fidelity scores from all 43 programs.

<sup>34</sup> Statistical significance is a slippery concept, in part because it is dependent on sample size. Bond and colleagues had 79 sites in one study and 129 sites in a second study. In Los Angeles we had 43 sites. However, 10 of the 25 total items correlated at least .20 with employment in Los Angeles; in the larger Bond study only five correlated at .20 or above. In general, the design of the studies is different enough, including number of sites, that not too much should be made of differences in findings—although in Appendix D we explicitly compare the CalWORKs data with Bond's two studies.

Table 13: Correlation of each IPS fidelity item with mean monthly employment July 2017-December 2018, over 43 IPS sites

IPS fidelity scale item	Correlation
Staff: caseload size	No variation
Diversity of employers	-0.13
Competitive jobs	No variation
Individualized job search	-0.01
Executive team support for SE	-0.02
Disclosure	-0.03
Integration of rehabilitation with mental health through team assignment	-0.06
Diversity of job types	-0.11
Time-unlimited follow-along supports	0.00
Vocational unit	0.01
Role of employment supervisor	0.06
Zero exclusion criteria	0.15
Ongoing, work-based vocational assessment	0.16
Work incentives planning	0.18
Staff: Employment services staff	0.19
Agency focus on competitive employment	0.20
Rapid search for competitive job	0.23
Staff vocational generalists	0.24
Job development—frequent employer contact	0.26
Community-based services	0.26
Integration of rehabilitation with mental health through frequent team member contact	0.27
Job development—quality of employer contact	0.28
Collaboration between employment specialists and DOR counselors	0.32*
Individualized follow-along supports	0.36*
Assertive engagement and outreach by integrated treatment team	0.38*
Total IPS fidelity score (sum of the individual item scores)	0.22

Note: an asterisk indicates the correlation is statistically significant at the .05 level.

It is helpful to compare these results to those found by Bond and colleagues in two studies validating the IPS 25 item fidelity scale.35 In a first study, eight of the item scores were statistically significantly related to the employment rate, as was the overall correlation of .34. However, a second validation study by Bond et al. found (a) internal consistency reliability of .77 instead of .88, and (b) the set of items that were significantly correlated with employment differed completely from those in the first validation study, and (c) the correlation of the overall scale score with employment was .29 rather than .34. From these distinctions we can draw two general conclusions: First, correlation between fidelity ratings and work are inconsistent for the items, which is somewhat disconcerting. Second, in both Bond studies the relationship between fidelity and employment is not strong. As Bond says, "... [T]he correlation between fidelity and outcome was modest, accounting for less than 10% of variance in employment outcome, suggesting that many other factors influence outcome."36

The developers of the IPS fidelity scale are interested in employment rates but also include items that don't correlate with employment because they represent employment services "best practices" with the severely mentally disabled population for whom IPS was originally designed. With severely mentally disabled participants, the primary goal is to encourage a meaningful life for persons who are likely to be disabled for many years. For CalWORKs, it is to help parents find and then keep employment that will permit economic self-sufficiency quickly, because of the life-time limit of four years for CalWORKs cash aid. That is, for CalWORKs mental health programs the items that do not correlate with employment seem less justifiable. Given the CalWORKs population and

context, it seems worth seeing if the fidelity scale could be reduced to those items that directly correlate to employment rates—dropping those items with low, minimal, or negative correlations.

In the CalWORKs data, 14 of the 25 IPS fidelity scale items have at least a .15 correlation with the monthly employment rate, and 10 of the items have a .20 correlation or more. Using them we can create two reduced-item scales: one with 14 items, the other with 10. The internal consistency reliability of the 14-item scale is the same as that of the 25-item scale: 0.88. For the 10-item scale it is slightly lower: 0.84. The overall scale score generated from 14 items correlates 0.33 with the employment rate and is statistically significant (and the same three items that were statistically significant in the 25-item context are still statistically significant). The overall scale score generated from 10 items correlates 0.38 with employment, and is also statistically significant.<sup>37</sup> So, as one would expect, reducing the items, to either 14 or 10, increases the correlation of the adapted CalWORKs scales with employment rates.

"Predictive power" is also increased by using each of the reduced-item fidelity scales. A correlation coefficient shows an association between two variables, in this case the average fidelity rating and the average employment rate over 43 programs. It is not causal. A regression analysis does not prove causality but it answers a highly relevant question: if we know fidelity scores, how much does that help us predict employment rates?<sup>38</sup> In Bond's two studies, knowing the fidelity score allowed prediction of 7.3% and 11.6% of the variability in employment rates.<sup>39</sup> Using the CalWORKs mental health data, in regression analysis the full 25-item fidelity scale predicts only 4.8% of variability, while the 10-item version predicts 10.7%, and the 14-item scale predicts 14.7% of employment variability. These findings raise the possibility that for CalWORKs agencies the fidelity

<sup>35</sup> Bond, G. R., Peterson, A. E., Becker, D. R., & Drake, R. E. (2012, August). Validation of the revised Individual Placement and Support Fidelity Scale (IPS-25). *Psychiatric Services* 63(8), 758–63. doi:10.1176/appi.ps.201100476) and Kim, S. J., Bond, G. R., Becker, D. R., Swanson, S. J., & Langfitt-Reese, S. (2015). Predictive validity of the Individual Placement and Support fidelity scale (IPS-25): A replication study. *Journal of Vocational Rehabilitation* 43(3), 209–216. doi:10.3233/JVR-150770

<sup>36</sup> Kim, S. J., Bond, G. R., Becker, D. R., Swanson, S. J., & Langfitt-Reese, S. (2015). Predictive validity of the Individual Placement and Support fidelity scale (IPS-25): A replication study. *Journal of Vocational Rehabilitation* 43(3), 209–216. doi:10.3233/JVR-150770

<sup>37</sup> Statistical significance of the overall scale score of 14 items is p=0.03; for the 10-item scale it is p=0.01.

We usually talk about how much of the variance in employment rate is "accounted for" or "explained" or "predicted" by knowing the fidelity score.

<sup>39</sup> Correlation coefficients are squared to arrive at these rates.

scale might be modified to include only the 10 or 14 items that correlate best with employment.

DMH administrators might apply any of several ways to adjust the emphasis they put on fidelity vs. employment rates. But all of them should take into account the facts that (a) many fidelity *items* do not predict employment in the CalWORKs population, and (b) the predictive power of the fidelity scale—whether of the 25-item, the 14-item, or the 10-item scale—is "modest."

In Appendix D we present in one table item-level correlations with employment from this Phase III study, correlations from Phase II, and information from Bond's two validation studies. Based on this information, we recommend an 18-month experiment:

- a. Half of the IPS programs would continue to use the 25-item IPS scale. This would provide continuity in rating over the transition year-and-a-half, and would offer additional data to validate the conclusions from this study regarding item correlations with employment.
- b. The other half of the programs would use the 16-item scale recommended in Appendix D. If it continued to have a significantly higher correlation with employment than the full 25-item scale, the switch could be made permanent.

## The implications of this analysis of the relationship of fidelity to employment success could be major.

Bond and other IPS developers have also used a very large dataset of individuals receiving IPS in order to determine what factors other than IPS can predict employment. The conclusions are not encouraging.

Unsurprisingly, they found that work history, greater cognitive capacity, and the local unemployment rate were associated with employment. Fidelity did not quite make their threshold of statistical significance. Here is a somewhat shortened statement of their conclusions:

[O]ur ability to predict employment outcomes among people with serious mental illness receiving high-quality vocational services is limited because commonly measured client and environmental characteristics provide an incomplete description of the complexity of the employment process.... [T]he variance in IPS employment outcomes will remain largely unexplained until we assess a wider range of predictors. A more comprehensive list might include: local economic conditions, such as the needs of local employers; social and cultural influences, such as ethno-racial factors and stigma; IPS service intensity and the competence of individual IPS employment specialists; and unmeasured client characteristics, such as motivation, perseverance, and social skills.

Because of our ignorance about employment success in the context of IPS, it seems appropriate for DMH and DPSS to begin to look beyond IPS fidelity. The basic model of co-located employment services that is at the heart of IPS clearly works. Which other factors contribute to high employment rates and might be replicated? Some programs have relatively low fidelity ratings but very high employment rates. Do they contain part of the answer? Or, what about the programs that have very high fidelity but only fair employment rates? What do they feel they are missing that could make a difference?

#### PART III: IPS THROUGH THE EYES OF STAFF

#### Introduction

We used a survey form to collect the views of CalWORKs coordinators, who are also generally the supervisor for IPS. Then we followed up with indepth interviews with IPS staff members from eight providers; these included employment specialists as well as supervisors. (Additionally, the views of two specific staff members are included in Appendix A.) Below we describe the methodology for each way of soliciting staff perspectives and then present the results for the survey along with relevant observations from the interviews.

#### A. Methods

Staff survey: While there are 45 sites with IPS programs, in many cases one agency operates two to four sites. Thus, 33 agencies maintain IPS programs. In some cases the IPS staff serves two or more sites. CalWORKs coordinators at the 45 sites were requested to answer a survey. However, if they served in multiple sites they had the choice of answering for all sites (if they were similar) or answering separately. Three of the agencies with multiple sites were represented by one survey respondent (and response) while four with multiple sites responded multiple times. Of the 45 IPS sites, 43 are represented in one of these ways.

In the past 20 years it has been discovered that a variety of factors beyond those captured in fidelity scales affect the success and sustainability of evidence-based programs. Enola Proctor, a respected author of implementation studies, has divided the factors that lead to sustained implementation among eight components<sup>40</sup>: acceptability, adoption, appropriateness, costs, feasibility, fidelity, penetration, and sustainability. We adapted a number of these categories for use in our survey of IPS supervisors.

Staff interviews: As noted above, in a number of

40 Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., Griffey, R., & Hensley. M. (2011, March). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Adm Policy Ment Health* 38(2), 65–76. doi:10.1007/s10488-010-0319-7. A chart in the paper fills out the concepts. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3068522/table/Tab1/?report=objectonly

cases one agency operates two to four sites. For indepth interviews we sampled eight, or 24% of the 33 agencies—one site per agency. They were selected using the most recent fidelity score and the 18-month average monthly employment rate for IPS participants in these categories. <sup>41</sup> The number of sites interviewed in each category is in brackets.

- 1. "Low" fidelity score (under 90) and "low" employment rate (under 20% working). [2]
- 2. "Fair" fidelity score (90–99) and "fair" employment (20% to 30% working). [2]
- 3. "Good" fidelity (100 or over) and "good" employment (over 30%) [1]
- 4. "Exemplary" fidelity (115 and over) but only "fair" employment. [2]
- 5. "Low" fidelity (under 90) but "exemplary" employment (over 40%). [1]

Of most theoretical interest are the last two "anomalous" categories in which fidelity and employment are not associated strongly.

The interview questions were adapted from the IPS National Learning Collaborative Sustainability Study.<sup>42</sup> Because of the small sample, the interview protocol was used as a guide to exploration rather than a structured interview. IPS staff members were also encouraged to describe issues that concerned them.

#### **B.** Findings

## Survey: Acceptability of IPS among stakeholders

In general, staff report high acceptability for IPS with two exceptions. Clients are judged considerably less positive than staff about IPS, and almost a quarter of the sites report some issues with clinician overprotectiveness even though 85% say IPS is offered to all CalWORKs mental health clients.

<sup>41</sup> Within these categories, administrators Carrie Esparza and Ed Armstrong suggested specific sites.

<sup>42</sup> Bond, G. R., Drake, R. E., Becker, D. R., & Noel, V. A. (2016). The IPS learning community: A longitudinal study of sustainment, quality, and outcome. *Psychiatric Services* (*Washington, D.C.*), 67(8), 864–9. doi:10.1176/appi. ps.201500301

Respondents were asked how well IPS fits into the mission of their program; 85% replied "completely" or "quite a lot"; 15% said "moderately," while none said "somewhat" or "not at all." Among survey participants, 95% said IPS staff members and clinicians collaborate well in developing treatment plans, while 97% said clinicians are open to referring clients to IPS. Staff perceptions of how much clients like IPS present a contrast: Only one person (3%) of 40 said clients "completely" like IPS; 52% said they like it "quite a lot"; 33% said clients like it "moderately"; and 13% said they like it "somewhat." Interestingly, this is one of the few questions for which responses correlated to a statically significant degree with the site fidelity scores. Fidelity scores average 98 at IPS programs whose respondents said that clients like it "somewhat," 100 for those saying "moderately," and 102 for those saying "quite a lot." The one program saying clients like IPS "completely" had a fidelity rating of 62 and a low 18-month average employment rate, so that rating is a puzzle unless the response was ironic.

Staff have gotten the message that IPS is for all CalWORKs participants (zero exclusion). When asked to whom clinicians consistently offer IPS, 85% (33) said "every CalWORKs client." Finally, staff were asked if clinician "over-protectiveness" reduces client access to IPS. "Not at all" was the choice of 77%, but 13% (five sites) said "somewhat," 5% (two sites) said "moderately," and another 5% (two sites) said "completely." So clinician overprotectiveness is an issue in nine sites. It primarily takes the form of refraining from referring clients based on a perception that more psychiatric interventions are needed first. <sup>43</sup>

#### Interview detail: client feelings about IPS

IPS programs all must face issues of participant motivation and finding incentives to encourage participants to want to improve their lives and to do so through employment. Some programs appear to have better success than others in these tasks, but it is unclear how much unhelpful participant attitudes about working vary by catchment area of different programs.

While all the IPS staff members with whom we spoke indicated that some participants would be happy staying home taking care of their kids, in two of the eight programs "clients don't want to work" was a particularly strong theme. In one program, a significant number of clients who are referred to IPS by clinicians subsequently do not respond to IPS phone calls, letters, or even drop-in home visits. Another program is much stricter: staff members assign homework, telling participants who don't want to work they should not waste their own time and the IPS worker's time, and sometimes dismissing clients who are no-shows repeatedly and have not responded to a letter. The employment specialist at this site said, "I have a conversation with clients about their participation. As a result, they may have a lightbulb moment, but if they don't then I will tell them 'this may not be the right program for you. You can talk to your GAIN worker about other [options]." Another IPS staff member complained about the issue of "extenders" (see below), who may have significant mental health problems but also try to game the system. They know IPS cannot discharge them if they say they want to work, even if they make no effort to cooperate with the IPS staff.

A somewhat similar problem that has existed for many years is that once clients get a job they often cut off ties with both clinicians and the IPS staff. In fact, some IPS staff members report they may not know if a client gets a job. IPS in particular is designed around providing ongoing support while the client works. But for many clients this is neither needed nor desired.<sup>44</sup> One supervisor pointed out that each month a client is open in a program counts against their lifetime cash aid limit. She feels it is in the client's interest to initiate the procedure to dismiss them if they have been referred to IPS but are not actively seeing both IPS and a clinician at least once a month.

<sup>43</sup> Note that IPS developed and has proven successful with a population of the severely mentally ill whose symptoms and disabilities are ordinarily far more significant than among CalWORKs participants.

<sup>44</sup> This act of cutting off communication also means that statistics for the IPS "caseload" can be heavily skewed due to having only new or unemployed clients on the caseload—the "percentage working" they report does not include those who were helped to get a job but then cut off contact. Likewise, when clients are referred to IPS but don't actually follow through with contact, the caseload count becomes virtually useless.

DMH has sponsored motivational interviewing training during two of the past five years. Some of the interviewed IPS staff members had taken it. However, to be successful the motivational interviewing training needs to be intensive with weeks-or months-long follow up. 45 This is hard for DMH to organize on a broad scale and would be very expensive for individual programs. In some programs where staff perceive that "clients don't want to work," staff members commented that the assumption in the training is that clients *do* want to work, which is not realistic for CalWORKs participants.

Another program has found a useful incentive: laying out very clearly for clients how much more money they would have if they worked, even part-time. (DPSS has an information sheet that was distributed to mental health clinics making this point.) One supervisor listed some of the ways clients are motivated to be more proactive in IPS—for example, by offering to meet in a public place, such as in a library, coffee shop, or park, and reminding clients that they are being assisted with job preparation but not expected to work right away.

When CalWORKs participants exceed their time limit for receiving cash aid but then DPSS decides they can continue cash aid if they continue mental health services, confusion can be the result for IPS.

CalWORKs mental health participants in one group are on "time extenders." This means they have already timed out (received cash aid for as long as legally possible, two or four years depending on circumstances) but for reasons related to their mental health they are allowed to continue receiving cash aid as long as they continue to go to a CalWORKs mental health clinic. DPSS requires participants make at least one visit per month at the clinic. Participants in this category will lose their cash aid (but not that of the children on the grant) if discontinued by the mental health program (ordinarily that is not the case). Thus, retention in the mental health program is crucial for them.

This is a complex issue. There are many possible reasons time might be extended, and need for clinical services is only one of them (though it is the one IPS staff are concerned about). Calculating time remaining is complicated and needs to be redone over time.

There is much confusion about this group among IPS staff. Providers do not ordinarily know if a participant is on a "time extender." Participants may not know themselves even though by regulation a notice must be mailed to them. Conflicting interpretations appear to exist about IPS participation for those on "time extenders." Different providers stated that (a) the client must be in IPS as well as receiving clinical therapy, and (b) only contact with a clinician is necessary—not IPS. One supervisor and employment specialist said those on "extenders" must participate in both, and if closed by either IPS or clinicians they will lose their cash aid. One provider said that even if they close an "extender" client's case due to noncompliance, the GAIN worker will send them back to the clinic again. (Presumably because the GAIN worker feels the participant's mental health problems preclude just ending cash aid.)

When participants on "time extenders" game the system by saying they want to work and have their once-monthly required visit with a therapist but not IPS, then the IPS program has people on the "caseload" who are actually completely inactive. Some providers interpret the guideline of "zero exclusion" as meaning these people *cannot* be removed from the caseload—a prime example of how a policy designed for severely mentally ill participants runs afoul of the different motives and incentives in CalWORKs. 46

How much of the confusion about "time extenders" is due to unclear policies, and how much is due to DPSS being a huge system with some degree of variability in how different GAIN workers and regions interpret the policies, is unclear. (A specialized unit in each region deals with

<sup>45</sup> This follow-up was provided for a small number of motivational interviewing participants in 2015 and 2016.

<sup>46</sup> In the context of the severely mentally ill, "zero exclusion" means no one who wants to work can be denied access to IPS. Here people who don't want to work are using it to keep IPS staff at bay.

"extenders.") A requirement that GAIN workers communicate information about "time extenders" to the mental health program upon referral would help with the major problems.

#### Interview detail: staff overprotectiveness

### Staff attitudes remain a barrier to easy access to IPS at some programs.

Research has found that when evidence-based programs are introduced, some staff members are resistant to the new ways. Many times the program can't really get off the ground until those staff members leave. (One of the programs we interviewed had experienced that situation.) With IPS the problem is primarily over-protection on the part of clinical staff, who may feel clients are not ready to try to work even if the clients indicate they are.47 Most of the IPS program staff said there is very good cooperation between IPS and clinicians at this point, and survey results confirm this overall. Staff in two of the eight programs suggested that clinicians hang on to some participants who are ready to try employment because the clinicians feel the clients are still too symptomatic.

At least two programs have IPS staff do an intake with clients before clinicians do their intake. They believe this works very well. In general, IPS is now involved early in the admission process. For example, at admission and every three months, clinicians must complete an IPS Enrollment Worksheet. But programs vary widely in how successfully this results in actual involvement of clients with IPS.

### Interview detail: What staff think makes IPS acceptable

Interviewees report that close relationships between IPS staff and clinicians as well as low levels of IPS job turnover are critical to success.

The fidelity scale provides many specific standards that IPS developers have largely demonstrated to be

important to IPS success. 48 In these interviews, we tried to find factors that either help or inhibit IPS success even though they may not be included in the fidelity scale. Personnel with several programs identified a close relationship between IPS and clinical staff as key to success. One five-year employment specialist said, "Clinicians fully trust me. So they push their clients to get involved in IPS or even just to meet me." In another program, the CalWORKs coordinator emphasized that employment specialists can meet with clinicians about a participant at any time—they do not need to wait for team meetings.

One longtime supervisor emphasized longevity of employment counselors—that is, high staff retention—for success. Developing the relationship of trust with clinicians described above takes time, so a lot is lost every time IPS staff turnover occurs. Being an employment specialist is highly complex, and there is no good way to learn some of the skills except by doing them. Retaining employees is difficult when their skills and attitudes don't actually match the employment specialist job requirements. Two employment specialists emphasized that their job is not for everyone. This may be more of a problem at county-operated programs because the county does not have an IPS employment specialist job class. Instead employees are hired as medical caseworkers.

Another factor that IPS staff members believe leads to acceptability is establishing trust with the participant. Concretely this seems to shade into "doing everything needed" to help a client get a job. In one site with a high employment rate, an

<sup>47</sup> Pogoda, T. K., Cramer, I. E., Rosenheck, R. A., & Resnick, S. G. (2011). Qualitative analysis of barriers to implementation of supported employment in the Department of Veterans Affairs. *Psychiatric Services (Washington, D.C.)* 62(11), 1289–95. doi:10.1176/ps.62.11.pss6211\_1289

<sup>48</sup> The IPS fidelity scale purports to be science-based, but the limited correlation with employment rates—even though employment rates are the primary desired outcome indicates that fidelity also reflects values. The process for coming up with fidelity items or revised items not only in IPS but in all evidence-based programs is far from transparent, as demonstrated by a few studies that published the results of asking different experts what the key elements are—with far from universal results. See: McGrew, J. H., & Bond, G. R. (1995). Critical ingredients of assertive community treatment: Judgments of the experts. Journal of Mental Health Administration, 22(2), 113–25 and Schaedle, R., McGrew, J. H., Bond, G. R., & Epstein, I. (2002). A comparison of experts' perspectives on assertive community treatment and intensive case management. Psychiatric Services, 53(2), 207-10.

employment specialist loaned a client the money to take a food handling test online, and clinic staff took care of the woman's baby while she was doing the test. After the test, which she passed, the employment specialist accompanied the client to the work site. The hiring manager then told the client that the dress code required her to have black socks starting the next day. The employment specialist took the black socks off her own feet and gave them to the client to wash and wear the next day as there would be not time for her to get to a store.

#### Survey: Appropriateness of IPS

Two aspects of appropriateness drew a wide spread of responses: the practicality of IPS and whether programs adapt the IPS model to fit site-specific needs.

IPS might be viewed as a good program model but still not be practical at particular sites. Among the 40 sites represented, 16 or 40% said it was completely practical, another 11 or 27% said "quite," another 10 or 25% said "moderately," while two sites said "somewhat" and one said "not at all." This latter site, which had a very good fidelity score and employment rate explained: "Coercing participation in IPS at intake and meeting employer contact deadlines within time frames are off-putting to clients and discourage involvement in overall mental health treatment."

IPS was not designed for the CalWORKs population, so it would make sense to adapt it to fit the specific

Table 14: To what extent is adaptation of IPS encouraged?

Adaptation encouraged	Frequency	Percent
Not at all	9	22.5
Somewhat	4	10.0
Moderately	12	30.0
Quite a lot	7	17.5
Completely	8	20.0
Total	40	100.0

needs of CalWORKs participants. (See Appendix A on differences between CalWORKs and severely mentally ill program participants.) However, as seen in Table 14 the question of how much sites are encouraged to adapt the IPS model to the specific needs of the site received responses all over the map. Since it is unlikely a particular stance from DMH staff would be interpreted so inconsistently, it seems probable the encouragement or lack of it is internal to the program sites.

#### Interview detail on appropriateness

Practical difficulties are found in all programs, but vary by region and population. County-operated programs, as opposed to contract programs, have additional barriers.

Practical difficulties surrounding childcare and transportation can cause difficulty for clients, and staff may have trouble assisting them. (In a baseline survey, 19% of our cohort of CalWORKs mental health participants said they had difficulty getting to services due to transportation inadequacies, and 17% said childcare problems interfered with services for them.) This varies by region, with many clients in a rural area of the county having transportation problems while another site reports most clients have their own vehicles. A third site said clients don't have their own cars, and male IPS workers cannot transport female participants.

Lack of participant access to computers is a barrier to success. The process for finding jobs has changed enormously in the last few years. Virtually all job applications are conducted online. Contract programs are able (and in our interview sample did) share computers with participants so that they can complete applications. The computers can also be used for training in typing and in the most effective ways to fill out forms. County-operated programs, however, do not have this possibility. They have laptop and desktop computers but clients are not allowed to operate them. County staff have figured out a few ways to help (e.g., assisting clients in completing forms on their phones and going to libraries, although libraries have a one-hour limit on computer use). But this is still a drawback that affects only clients of county-operated programs.<sup>49</sup>

Another difficulty faced by county-operated programs is inflexibility in employment schedules. Because many clients are working, arranging time for visits with them within the county work hours may be difficult. It is possible to use overtime to finesse this, but overtime is limited. This issue affects clinicians, too, who sometimes must try to see clients along with an IPS worker on the work site immediately after work or during a work break. A related issue is the lack of an "emergencies" fund in county-operated programs to buy items necessary for a client's employment, especially if waiting for DPSS would be too slow (or the client is caught in a Catch-22, as below).

Participants also have individual barriers that are particularly problematic, such as having a criminal record. This was mentioned especially in two programs, although both have helped clients go through "expungement" class, written letters of explanation to potential employers, and have found employers who do not discriminate against those with a criminal record. There are other such barriers. Representatives of one program mentioned that it is very difficult to help persons with serious physical disabilities as well as those that have never worked before. Finally, personnel from two programs stated that a proportion of participants are either homeless or do not have stable housing and do not want to look for employment until housing issues are resolved. This issue has become more prevalent in the past two years, and in our participant cohort 17% were homeless at admission.

## Although the CalWORKs population is very different from the one in the original IPS model, actions by IPS staff to "adapt" it have been quite limited.

The IPS fidelity scale is very prescriptive, but it leaves much room for adapting an IPS program to meet specific needs of clients, neighborhoods, and organizational environments. To a limited extent

these potential adaptations have been created. One program has a "welcoming" for client with IPS staff. One function of the "welcoming" is to explain the program and why the client has been referred to it. Several programs have arranged job fairs that take place at their site. It gives them a chance to develop relationships with local employers. Since attendees do not need to be mental health clients, typically more "outside" people attend than "inside." One program is planning a combined job fair with several mental health agencies in order to yield a higher turnout of both employers and clients. One program attempts to persuade clinicians to come to a job fair and even to go out on a job development interview, so that they can be more helpful to clients who are seeking employment. Some programs have a holiday party to celebrate the success of participants. Two programs have done group-based "workshops" on "job preparedness" and related topics.

### Interview detail: Appropriateness in staff training

Perceptions of the developer-provided training and DMH-sponsored job development training are positive. If training is to become a responsibility of providers, more planning is necessary.

DMH arranged for all staff to be trained when the IPS programs first were initiated in 2013. They again arranged for many of the supervisors and employment specialists to be trained during summer and fall of 2018, largely in response to a falloff in referrals to IPS and job placements. DMH also arranged for two different workshops on the practice of motivational interviewing. Supervisors and employment specialists who took the training provided by the developers (several weeks of online sessions with homework) offered generally favorable reviews in that it provides a solid basic training. However, repeating the training does not seem to be useful for experienced supervisors. Job development training has been provided over the past several years by Lisa Harris, who worked for Penny Lane as a job developer when IPS began.

organizational environments. To a limited extermed.

49 County-operated programs also seem to have the most redundant paperwork: the same information is filled in on multiple forms.

Almost all the staff interviewed had taken this training and felt it very worthwhile.<sup>50</sup>

At this point the administrator in charge of IPS at DMH states that the providers should arrange for training themselves out of their contract allocation. The advantages of this approach are that providers can arrange individually for training from the developers at the appropriate times, when new staff have been hired, for example; and they might decide to do less on IPS and get other kinds of relevant training, such as motivational interviewing, or specific non-retail types of job development training. For the decentralized approach to work, though, standards for employer-provided training must be enacted. If expectations are not clear, training will inevitably become a low priority and/ or of dubious relevance. Some interviewees were unaware that individual agencies can buy training from the developers on their own rather than being part of a large DMH-organized effort. One employment supervisor has been on the job only six months. She lost an employment specialist at the other site she managed and said she was uncertain how she would train the person who is about to be hired. The developers specifically advise each program to have two employment counselors so that new hires have someone to train them. However, for the most part, funding is insufficient for two employment counselors per site in CalWORKs programs. If DMH does not provide training, it needs to be sure training from providers is adequate and appropriate.

## Survey: Fidelity issues

Although personnel at most sites think their fidelity score reflects their ability to help clients with employment, a large majority feel that there are requirements on the fidelity scale that make it very difficult or impossible to get high scores in certain areas. Explanations by respondents focused most frequently on the difficulty of working with the Department of Rehabilitation, of getting benefits counseling through GAIN, and having a Steering Committee. Model rigidity is a concern.

We asked, "How well do you think the most recent IPS fidelity score for your program reflects your actual ability to help clients find and sustain employment?" While representatives at 60% of the sites say the fidelity score is valid, 40% are less sure; only two sites said the fidelity score reflected their capacities "not at all." (One of these sites had a high 18-month average employment rate and high fidelity score, so the rating is a puzzle. The other had "fair" fidelity and a low average employment rate; so again the reason for the response is unclear.)

We also asked if any elements of the IPS fidelity scale are impractical or impossible to meet in order to attain a high fidelity score. "Yes" was the response of 27 respondents or 67%; seven respondents, or 18% said "no," and six respondents were uncertain. Below we list a slightly edited set of comments that staff provided as an explanation of their response to this question:

- It is very difficult to coordinate the Steering Committee as required by the fidelity scale. Finding the right date and time also is very hard because everyone is busy with their job or duties.
- Not being able to have more than one employment specialist due to budget limitations.
- Department of Rehabilitation (DOR) not wanting to collaborate with MH agencies.
- GAIN workers not reviewing benefits with clients; and having to provide most services in the field.
- Benefit planning is beyond us; inability to have a team of employment specialists; DOR not wanting to work with MH providers.
- The low number of clients who are enrolled or employed. A lot of employer contacts but no clients to be referred or matched.
- Difficulties in fidelity scale: Number of employment specialists required. Time frame for follow-along support. Having a Steering Committee as required.
- Improving relationship and increasing contacts with DOR. Manager reaches out regularly, employment specialist attends DOR intakes and other appointments with clients, but the amount of contact that the fidelity scale requires for a high rating has been too difficult to achieve and maintain consistently.

<sup>50</sup> In one program the employment specialist felt the task of job development was made easier in the training by doing onsite job development at malls—where hiring managers tend to be more polite than at some other businesses.

- It's not feasible to have (fidelity requirement of) two full-time employment specialists at this agency.
- Contact three days after employment begins is not always possible. Having a Steering Committee is difficult because of time and participation.
- Coercing participation in IPS at intake and meeting employer contact deadlines within time frames are off-putting to clients and discourage involvement in overall mental health treatment.
- Having a Steering Committee or a Job Preparedness Group has been challenging due to our staffing pattern (one employment specialist per site).
- We don't meet criteria for a vocational unit due to staff pattern (one employment specialist per site).
- Requirement of 65% field-based contacts; clients are linked to DOR but communication with DOR when no clients are receiving DOR services is challenging.
- Establishment of a "Vocational Unit" [is difficult] because [my agency's] employment specialists are in different Service Planning Areas. Specific target for job development contacts as sometimes all clients are working (more flexibility would be helpful).
- Difficulties: Having only workers who do IPS fulltime; and DOR collaboration given contractual barriers.
- Steering Committee, Department of Rehabilitation.
- Model is too rigid.
- Due to our budget, we have one employment specialist for two sites. We have weekly individual supervision, but can meet as a group only once a month.
- Steering Committee meeting is very difficult to sustain due to multiple demands that program managers are faced with. Also I feel that this meeting should be something that the DMH CalWORKs coordinator should perform to help the clinics
- Due to funding and the number of clients referred to our programs, the ratio of clients to employment specialist is challenging to meet.

- Employment specialists spending 95% of their time doing IPS (as opposed to meetings or case management).
- Meeting in the community 65% of the time due to having to be in the office for engagement and case management issues. It's also difficult to have a relationship with DOR since they do not have a memorandum of understanding to work with us.
- The Steering Committee has been difficult for me to establish due to mental health stigma among employers. Follow Along Support Plans have also been difficult to get within the fidelity time frame due to clients having a hard time prioritizing their sessions when they start work.
- Difficulties: Getting meetings with hiring managers wanting to be solicited by employment specialists.
   Clients [who are] risk averse to losing benefits from employment along with steps to get client to have benefits counseling with GAIN worker. Lack of client-supportive services for clothes, planners, etc.
- As an agency, we have come across clients who are not fully aware of their benefits. We often discuss how employment can be beneficial, but clients seem hesitant because they feel they will be cut off from their benefits immediately. We usually refer clients to their GAIN worker but we have noticed that GAIN workers are unaware of the benefits planning process, per clients report. It would be great if this collaboration and practice of reviewing benefits is communicated with entire treatment team (agency and DPSS) in efforts to continue to support clients.

Also see comments of the supervisor and employment specialist in Appendix A.

Interview detail on fidelity: pros and cons of working for high scores

While staff members view fidelity reviews as useful, managers balance achieving high scores with serving their specific clients' needs.

Representatives of all programs said the fidelity reviews are useful, that something is always learned. They also cause a fair amount of staff anxiety. However, CalWORKs supervisors who have worked with IPS for several years consistently said that they have to balance trying to achieve a high fidelity score against demands for serving their specific clients. Generally the client needs win out, resulting in a willingness to accept somewhat lower fidelity scores. As one supervisor said, "I used to take it personally. Now I don't." Another commented, "We go with what is most effective. Sometimes we just decide not to meet a particular fidelity standard." One supervisor said they try to improve because the reviews occur less frequently once the threshold score of 75 is passed.

Personnel at three of the eight programs interviewed complained that the fidelity scoring can change between reviews. That is, they score well on certain items at a first review but at the next review, when nothing in their practices has changed, they are scored lower on the same practices. This may occur primarily in fidelity areas that have been announced as a focus for the year. A perception of fidelity scoring as unfair can causes resentment.

## Interview detail on fidelity: relationships with DPSS and DOR

For different reasons, interactions of IPS staff with GAIN staff and with DOR workers is far from optimal. Fidelity scale standards with respect to both should be considered for possible revision.

All CalWORKs mental health clients must maintain contact with their eligibility worker and their DPSS GAIN (employment) worker. This usually entails direct contact between GAIN and IPS, although sometimes only the clinician contacts GAIN. And as noted above, the fidelity scale rates programs on their relationship with the Department of Rehabilitation (DOR). While in some programs these relationships go smoothly, a number of problems were very common.

A major difficulty in the relationship with GAIN workers is the failure of the GAIN worker to send relevant information along with referrals. This includes at least two pieces of information that

are critical to motivating clients: (a) the expected date that their eligibility will end, and (b) whether the client is on a "time extender" (that is, being allowed to continue receiving cash aid despite having timed out on condition of continued mental health treatment).<sup>51</sup> At least two of the eight programs interviewed have asked DPSS for both types of information to accompany referrals, but without frequent success. Some clinic staff also say that GAIN workers do not explain the mental health program adequately for participants, especially IPS. And as noted above, IPS staff feel GAIN workers do not do an adequate job of benefits counseling.

DPSS has strict rules that sometimes create a Catch-22. For example, a client in one site needed CPR certification in order to apply for a job. But DPSS would not pay for the CPR course unless the participant already had a job offer. [In discussing this case with a DPSS Supportive Services supervisor it seems likely that going up the chain of command at DPSS would have been effective.] One employment specialist described collaboration with GAIN workers as "hit or miss" and said she usually has to go to visit the GAIN worker to facilitate a request (regarding child support, say). Another program, though, said relationships are very good and that GAIN workers act when the employment specialist calls—about getting child care, for example. In another program, all the contact with the GAIN worker is routed through clinicians.

At different times, DPSS referrals can dry up or participants may not keep appointments, thereby

<sup>51</sup> The CalWORKs form for requesting extension of your 48-month time limit includes these two mental health-related provisions: "(a) Although you are not getting disability benefits, is a physical or mental problem keeping you from working or participating in welfare-to-work activities for 20 or more hours per week? (b) Are you able to work or take part in welfare-to-work activities for 20 or more hours per week even though you have a physical or mental problem, because you get help with the problem? For example, you receive counseling, treatment, or special tutoring to enable you to cope with the problem. Otherwise the problem would keep you from working or participating in welfare-to-work activities."

reducing admissions. Staffing decisions have to be made in advance, so agencies have little recourse if they get too few referrals. (One site had over 80 CalWORKs clients a year ago but only 48 at the time of the interview.) Scarcity of referrals incentivizes accepting everyone, even if their mental health problems are minimal (see the comments by LaToya Walker in Appendix A). It is not surprising that the 30% of participants who clinicians judge to be normal or minimally impaired profess that they do not understand why they are in the program.

The fidelity scale assigns an outsized importance to relationships with the state Department of Rehabilitation (DOR). Staff members are rated on the kind of relationships they establish with DOR, whose mission is to assist disabled persons to become economically self-sufficient. This makes sense for the severely mentally ill persons for whom IPS was designed because: (a) in many states the vocational rehabilitation agency is the primary funding agency for IPS, and (b) severely psychiatrically disabled people in general will need longer term and more intensive services than CalWORKs participants. However, this is not a generalization that applies across the board. Therefore the fact that staff in some agencies are able to coordinate with DOR for some of the more impaired clients while other staff find DOR to be largely unresponsive may reflect the lower disability level of CalWORKs referrals, but it may also reflect inconsistent standards across an agency with multiple local offices. At three of the eight programs, personnel who were interviewed have figured out ways of working with individual DOR staff around individual clients and use DOR frequently, though still in a minority of cases (e.g., 5 of 16, 4 of 16). According to one employment supervisor, a DOR local supervisor visited the program but ended up ruling that it is not appropriate for DOR to serve CalWORKs clients. Another program said they make referrals and nothing happens. "It is not a successful partnership" they concluded. Even a program that has successfully gotten DOR to accept a couple of clients says "Collaboration could be a lot better. It is very one-sided." For DMH the relevant question is: to what extent the relationship with DOR is appropriately rated on the fidelity scale since, in general, serving CalWORKs participants is not a priority of DOR. Regardless of whether the fidelity scale is revised, DMH should consider initiating an MOU with Los Angeles DOR offices that would cover all IPS programs.

## Interview detail fidelity: caseload standards Current caseload standards lack definition.

When DMH consulted with the developers of IPS in 2012, Deborah Becker thought 15 might be a sufficient caseload, given the other problems that confront CalWORKs participants. That was the standard during the initial pilot program. After that the caseload was not given a minimum number but the maximum was 20. Recently, DMH relaxed the standard and no longer imposes an upper limit. In general, at the programs we visited 16-18 was the caseload, and it was felt that was close to ideal. One employment specialist, who is experienced and efficient, had a caseload of 24 but says with that number it is not really possible to meet standards for frequency of meetings and spending 65% of time in the field—a fidelity requirement. Another had a caseload of 22 and 23 for a while and says it was difficult to manage.

Factors discussed above, such as the presence on some caseload of "extenders"—some of whom really have no contact with IPS staff—affect what is a workable caseload. Please also see footnote 45.

A significant number of contract programs split an employment specialist between two programs. This reduces the size of the caseload that can be served effectively.

## Survey: costs of IPS

The modal opinion of respondents is that IPS benefits exceed costs and that resources for IPS would be increased if it were up to them. A significant minority felt resources were insufficient for doing a good job with both IPS and the clinical services at the site.

Several questions ask about the resources used by and available to IPS. The first asked if the respondent had complete control of resources within their site, how much would they assign IPS. Just about half, 19 or 49%, said they would give more to IPS; six or 15% would give less to IPS; the rest would keep the current balance. A somewhat different question asks if the site has enough resources to do a good job with both IPS and the clinical program. Almost half, 18 or 46%, said there were sufficient resources for both; 17 or 31% thought resources were insufficient; the rest were unsure. A final question was whether the benefits for clients outweigh the costs of IPS. About 85%, 29 respondents, said benefits equal or exceed costs; 15%, five respondents, said costs are greater than benefits.

## Survey: the sustainability of IPS

Most respondents reported high levels of support for IPS from top administrators and that there was a "champion" of IPS in the program. Full adoption of IPS was reported by two-thirds with high adoption reported by the rest. In open-ended comments, multiple themes emerged.

CalWORKs coordinators were asked the extent to which the IPS model has been fully adopted in their sites. Two-thirds, 26 respondents, said "completely," another 26% said "quite a lot," and 8% (three persons) said "moderately." No one selected the two least positive choices. These responses correlated to a statistically significant degree with their most recent fidelity scores: Those responding completely had an average fidelity score of 102, "quite a lot" averaged 96, and "moderately" averaged 79.

Other implementation studies have often found that support from top administrators and having an internal "champion" are important for sustainability. Somewhat less than half said top administrators were "completely" supportive of IPS (18 or 46%); another 15 (or 38%) replied, "quite a lot"; five respondents (or 13%) said the support was "moderate"; and one person reported receiving only "some" support. Almost two thirds (25 respondents, 64%) said there was a person widely perceived as a champion in the organization; 10 (or 25%) said there was not; the rest were unsure. However, the answers to neither of these questions correlated with fidelity scores.

Finally, since California has been extremely slow in adopting IPS for persons with a severely mentally

ill diagnosis, we asked if having an IPS program for CalWORKs participants had made administrators think positively about adopting IPS for target population clients; 59% said yes.

Respondents were also invited to make comments on any aspect of IPS that is important to them. Below, again lightly edited, are these comments:

- The motives of CalWORKs participants vary when enrolling into mental health services. IPS enrollment is currently very low.
- I believe that without the IPS program we would not have as many consumers working or studying in a field that best suits their lifestyles and interests.
- Our programs serving PEI/TAY and PEI adult clients are very interested in making IPS available to those clients. Since those are not CalWORKs programs, various resources would need to be allocated under those contracts to enable staff training and ongoing supervision. Another comment on the costs and benefits of IPS is that the amount of paperwork and tracking feels staggering and repetitive at times. I understand the need to track various data points *and* that tracking requires a significant amount of time, which is hard to come by in community mental health. Still, we love IPS here and have found it to be highly successful in helping our clients meet their career goals.
- I would say the only hard thing about IPS and the CalWORKs population is when they receive "stop" notices and we are not able to fully support their employment goals or job maintenance.
- Clients feeling forced into IPS results in and fosters higher levels of non-participation in IPS and jobseeking behaviors [respondent had a very high fidelity score and an average of 40% employment per month].
- It would be a good idea to have more frequent initial and refresher trainings and workshops, and more cross-agency clients presenting their journey in IPS.
- Consider emphasis on cultural competency and cultural humility with the IPS program and staff.

- Face-to-face job development has shifted to online applications.
- The vision of IPS is good, however a majority of the clients have difficulty sustaining their motivation and lack follow-through. The fidelity rule that the employment specialist spend 65% in job development is high for the county, especially since the number of clients interested in IPS is very low. Thus, costs outweigh benefits. Staff are doing more work when there are very few clients (i.e., they have overstock of products in storage when there are very few buyers—not a good business, I must say).
- All the staff in the program are champions of IPS.
- IPS paperwork is cumbersome, especially when employment specialists spend two-thirds of their time in the field, and the remaining third meeting with clients and completing IPS paperwork, which is more cumbersome (feedback from current and past employment specialists) than agency paperwork—which is saying a lot. Lack of client "buy-in" or serious reluctance or resistance to IPS is attributable to fear of lost benefits. Until there is clarity on the benefits counseling piece, the client "I am getting bait and switched here" sentiment will continue. The inherent challenge to CalWORKs and the counter-productive potential factor is: How do you incentivize individuals to work when they are already being provided benefits by not working?

# APPENDIX A. HOW THE ORIGINAL IPS POPULATION DIFFERS FROM CALWORKS PARTICIPANTS — AND IMPLICATIONS FOR FIDELITY

IPS was developed for persons with severe and often lifelong psychiatric disabilities. Fewer than 10% of the Cal-WORKs mental health population fits this profile. Those who do fit the profile often apply for SSI and, if successful, move out of the CalWORKs system. Below are three descriptions of the differences between these populations and ways in which fidelity standards might be adapted to better fit the needs of CalWORKs participants.

The first piece has appeared in all three IPS evaluations because of its continued relevance. It is written by two UCLA psychologists, Shirley Glynn and Luana Turner, who have a great deal of experience providing IPS services to persons with severe mental illness. They were both trainers for the initial CalWORKs IPS pilot project.

The second piece is by E. Sofia Mendoza, a CalWORKs supervisor in charge of both clinical and IPS staff at a county-operated program. It is focused on problems the original IPS fidelity scale can create in a CalWORKs context and also on some concrete ways of changing the original standards so as to be more helpful to clients.

The third piece is by LaToya Walker, an employment specialist at the same program. She focuses on the part of the CalWORKs mental health population that has little functional impairment. At baseline ratings, clinicians determined that 30% of participants were either "normal," had a "possible psychiatric disorder," or were "mildly ill, [experiencing] minimal, if any, distress, or difficulty in social and occupational function." (On the other end of the spectrum, 54% of participants said that this was not their first episode of mental health treatment.)

## "Differences Between the CalWORKs and Seriously Mentally III Participants in Supported Employment," by Shirley Glynn, Ph.D., and Luana Turner, PsyD.<sup>52</sup>

### Treatment duration limitations

IPS is meant to be time unlimited. Regulations concerning CalWORKs funding or agency requirements

(CalWORKs/DMH contract ends/time runs out; no longer eligible) meant clients were often discharged from mental health services or CalWORKs services early, contrary to this IPS principle.

## Treatment engagement

Traditional IPS participants are usually receiving care at a community mental health program, and have often been doing so for years. Many have been hospitalized and receive Social Security Disability Insurance or Supplemental Security Income. Thus, they are often more socialized into mental health treatment and more connected to the mental health facility where they receive treatment. This ongoing relationship facilitates engagement into IPS, which is typically co-located at the mental health agency. CalWORKs participants seem to have a more tenuous commitment to treatment—leaving treatment (and thus IPS) prematurely. Two CalWORKs patterns are particularly pervasive: (1) initial failure to engage with the employment specialist (and often overall treatment); and (2) quitting supported employment (and mental health care) as soon as the participant starts a job.

## Need for a salary to support economic selfsufficiency

Again, because they are adjudicated to be disabled, many traditional IPS participants see their IPS work income as supplemental, and they are often open to accepting entry-level jobs that pay minimum wage. CalWORKs clients typically have higher expectations for initial wages (probably because they have a goal of economic self-sufficiency), and many do not want to accept entry-level jobs (probably because they have better work histories than traditional IPS participants).

#### Motivation to work

The primary entry criterion for traditional IPS is the client desire to work (at least part-time). There is no such requirement for mandated CalWORKs participation. IPS has limited strategies to promote motivation to work, and yet the motivation of many of the CalWORKs participants is unclear, which leaves the CalWORKs employment specialists struggling with relatively few tools to address motivation issues.

<sup>52</sup> Drs. Glynn and Turner were trainers for the project. Dr. Turner conducted several of the fidelity reviews.

#### Need to care for others

CalWORKs provides financial support for families. Thus, it is not surprising that CalWORKs participants appear to be more likely to be caretakers of children living with them, compared to traditional IPS participants. Work issues therefore are complicated by the need to find childcare—often at peak employment hours, such as evenings and weekends when childcare is more difficult to secure—and with little lead time when offered a job. This situation was further complicated because it was not the IPS worker, but the GAIN worker, who usually was coordinating the childcare, leaving opportunities for communication failures and role diffusion.

## Lack of family members' 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, which often can be helpful with participation and maintenance of the IPS model.

## Participant preference for behind-the-scenes work

IPS workers are encouraged to spend time in the community, which often involves disclosing information about potential employees on their caseloads 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 they have limited experience obtaining jobs. However, many CalWORKs participants prefer to have IPS personnel work "in the background." While IPS staff members can accommodate working in the foreground or background, when they take a background role there is more onus on the participants to be active in the job search. Many CalWORKs participants (who perhaps struggled with motivational and logistical obstacles to job seeking as described above) seemed to have difficulty "taking the lead" on their job-seeking efforts.

# "IPS Does Not Fit the Needs of Some Participants," by LaToya Walker, IPS Employment Specialist, Long Beach Child and Adolescent Program

IPS-supported employment is supposed to be individualized, but working with the CalWORKs population we have found that some of the IPS tools, forms, policies, and procedures do not work well for some participants. They assume that all clients need intensive assistance to find employment whereas, in fact, each client's needs are different, and some need much less or different assistance than IPS assumes.

## 1. Misfit to client needs at intake

- a. IPS and mental health services can be overwhelming for some CalWORKs clients. Some clients don't know what DMH, mental health services, or mental illness are. Some clients don't even know why they were referred for services in the first place.
- b. [Many clients do not have a "mental illness." They may be having relationship problems, which the *Diagnostic and Statistical Manual* classifies as "V codes."] The mental health section asks specifically "Has anyone ever told you that you have a mental illness?" Most CalWORKs clients say they have *not* been told they have one. The following question asks, "How does your mental illness affect you?" Clients who report they have not been told they have mental illness have difficulty answering this question. The remaining questions concern symptoms, medications, and other related concerns. The process assumes that a client has a mental illness, exhibits symptoms, and takes medication. The questionnaire doesn't ask "Do you take medication?" but rather it asks, "What medicines do you take, and when do you take them?"
- c. The substance use section questions also assume a client has substance abuse issues. For example, questions read, "How much alcohol do you drink?" not "Do you drink alcohol?"

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### 2. Misfit to client needs in job search

- a. According to IPS, the employment specialist must meet with client a week prior to job start. In the real world clients may start working the same day they submit their application, which makes it impossible for the employment specialist to meet with them one week prior to the job start. Meeting with clients three days after a job start, as required, can also be difficult. Sometimes clients becomes employed, and a week may pass before informing the employment specialist they have started working. Meeting with a client weekly for the first month during employment can also be overwhelming for the client. A client who obtains full-time employment has less time to meet with clinic staff, and may be terminated for lack of attendance. While it is true that some clients may need this additional support, some clients do not and become annoyed when an employment specialist is trying to make appointments to meet IPS requirements rather than the needs of the client.
- b. Employment specialists are expected to meet with the client during the first two sessions and complete the Vocational Profile, complete the disclosure worksheet, discuss benefits counseling, create a treatment plan objective, and identify the involvement of family and friends. A resume must also be created or updated before clients can begin their job search. Being mandated to complete this process prolongs the time before clients can even begin to look for work; and if positions are open, CalWORKs clients are not "prepared" to apply for them until this process has been completed. By the time the client is ready, the position may no longer be open. Since CalWORKs participants compete with *all* job seekers, these delays can put CalWORKs participants at a disadvantage.
- c. Job development outreach is expected to be done for each client. However, some clients are higher functioning and can obtain employment on their own or with little support. Some of them may not need someone to talk to a manager for them because they have no trouble communicating with people. If they just want job leads or help updating their resume, the employment specialist should not be forced to meet with employers on their behalf. Some clients are able to complete applications on their own, have no trouble interviewing, can update their own resume, and can search for job leads. These clients generally find their own employment outside of IPS and either are never enrolled after hearing about the services offered or enroll and attend only a few sessions before they feel that this program is not meeting their needs because the employment specialist is doing things for and with them that they can do on their own. This is the part of IPS that lacks individualization.

### 3. Misfit of IPS requirements to the needs of some participants after obtaining a job

- a. A follow-along support plan must be completed after a client obtains employment. Most clients do not ask for a copy, refuse a copy, or take a copy and never look at it again. While in some cases, it may be necessary to have it written, in others a discussion about possible issues could be enough.
- b. Follow-up employer contacts are not always necessary. If no clients are interested in that industry or employer, and an employment specialist has a full caseload of active job seekers, the focus for the ES should be on employers and industries that interest the current job seekers. Following up with contacts just to maintain relationships with employers that are not hiring job seekers or that do not interest current clients does not benefit anyone.

# "Ways to Make the Fidelity Scale More Helpful for CalWORKs Participants," by E. Sofia Mendoza, LCSW, Mental Health Clinical Supervisor, Long Beach Child and Adolescent Program

Differences between the CalWORKs population and the severe and persistent mentally ill (SPMI) population that are not reflected in the fidelity scale	Proposed more relevant CalWORKs IPS fidelity scale criteria					
The IPS Fidelity Scale is interlaced with references to collaboration with the Department of Rehabilitation (DOR). The agency's name occurs 77 times in the IPS Fidelity Manual. However, compared to the SPMI population, the CalWORKs population has few participants who qualify for services with DOR. DOR has MOUs with agencies serving the SMI population but not with CalWORKs programs.	Replace DOR with DPSS contracted employment agencies that have a requirement to employ a particular percentage of service recipients and with job training agencies.					
"Steering Committees: Sometimes referred to as advisory committees or leadership teams. A group of stakeholders for IPS-supported employment that meets to discuss implementation efforts and develop goals for better implementation and program sustainability." IPS Fidelity Manual. Steering Committees are now required to be agency-specific, but the language above is much more general and would accommodate a more useful group	Replace the Steering Committee with SPA IPS meetings that include supervisors, ES staff and DPSS vocational services. This will allow us to provide each other with ideas and assist each other with sharing employer contacts and other information and resources; it would benefit clients greatly.					
CalWORKs clients typically do not meet criteria for SSI. Persons receiving SSI have a long-term income and need only a supplemental part-time job. The CalWORKs population needs full-time competitive employment with benefits for themselves and their children. Currently, there is a gap in the job training services available to CalWORKs participants through CalWORKs mental health.	In the fidelity scale, replace DOR with DPSS or a more relevant community agency that works with functioning clients seeking full-time jobs that pay living wages with benefits. Our clients would benefit if we had partnerships (with MOUs) with job/computer training programs with DPSS, LA County HR departments, and other community partners where CalWORKs clients would have priority or easy access.					
Since the CalWORKs population varies in the severity of their mental disabilities, some do not need as much hands-on assistance as others. This assessment is determined on a case-by-case basis. As a rule, the SPMI population will need more hands-on assistance with employment search and linkage to resources for removing barriers.	Change the requirement of spending 65% of time in the field to perhaps a certain number of employer contacts and activities. For our clinic, we've been doing hiring fairs where we invite employers to our clinic. This activity is not considered field work in the fidelity reviews, but we spend a lot of time recruiting and planning for it.					
The Vocational Profile is an IPS requirement. It was recently updated. However, some of the questions are leading and assume an "individual" is physically or mentally impaired, which is true for the original population but may not be for CalWORKs participants. This makes it difficult to get answers to these questions or the questions are left blank. A "cultural background" section asks questions to help ES understand a client's culture and background but does not give an employment specialist any insight into a culture or background.	Create a CalWORKs-specific Vocational Profile, and modify some of the questions to be more culturally competent and sensitive.					

## APPENDIX B: COHORT STUDY METHODOLOGY FOR INDIVIDUALS

## Data sources for analysis of individual participants

The parts of the study that focus on individual participant data use a combination of administrative data and clinical reports by providers generated for an outcomes monitoring system.

- 1. In October of 2016 DMH CalWORKs administrators established an outcomes monitoring system that collects facts about participant episodes (dates, level-of-care assigned, IPS status) as well as generating clinical ratings on a number of brief scales completed by therapists. This database became the source of the study sample.
  - a. The intention was for all new CalWORKs mental health participants to be entered in the outcomes monitoring database as of October 1, 2016. While the vast majority were entered, there were some exceptions. In a few cases, programs did not participate or participated in a curtailed fashion. For example, Arcadia Mental Health began entering clients, but then dropped its CalWORKs program; Downtown Mental Health Center underwent a fire that interrupted participation for over a year. Thus the outcomes monitoring data omits a small proportion of persons who received services during the study period.
  - b. The data are stored in a commercial database rather than being integrated into the DMH information system. In order to meet HIPAA standards, no personal or clinic identifiers can be attached to the data. Programs were required to keep a roster that includes actual identifiers matched to the arbitrary ones used for the database. However, when DMH attempted to generate a study participant roster by using provider lists of all participants served between October 1, 2016, and December 31, 2018, many anomalies materialized. Most of these were straightened out, either by providers or by DMH staff, but some 109 were not—so they were dropped.

- c. A total of 2,867 identifiable participants were submitted to the DMH information system in order to be matched with SSNs that would enable DPSS to track their employment history. It turned out that 20 of these persons had been readmitted and given a new arbitrary identifier. We analyzed both episodes for these participants, but the number of possible SSNs was reduced by 20. DMH information services also found some participants who either had no SSN or an erroneous SSN in the system. When readmissions and those lacking an SSN were dropped in order to provide the data to DPSS, the total was 2,761.
- d. The clinical reports completed at admit matched the 2,867, with the exception of one person. We could not find a reason for the mismatch.
- e. The clinical reports at discharge matched the data from DMH information services for 2,067 participants; 800 persons who had a baseline form did not have a discharge form. While it is possible that 28% of those admitted in the two years between October 1, 2016, and December 31, 2018, simply had not yet been discharged, this is unlikely. Unfortunately, we have no direct way of checking. Providers received an emailed reminder at one year (if a discharge form is not yet complete), but it is possible that up to several hundred discharge forms that should have been completed were not. We compared 10 baseline variables for the 800 with no discharge form to the 2,067 with both admit and discharge forms. Eight of the variables exhibited no statistically significant differences. Those without a discharge form are somewhat more likely to be men (12% vs. 9%) and somewhat more likely to have been enrolled in IPS immediately (8.5% vs. 5.6%). Fortunately, IPS participation is recorded in DMH service records, not just on the discharge form.

- 2. DMH service records of the 2,761 participants who have a unique identifier are used to see the type and amount of clinical services participants received as recorded in the DMH information system.
- 3. Chronological months were converted to study months. For example, someone starting in the month of October 2016 would be assigned month 1, and study months would follow consecutively. Someone starting a year later would also be assigned month 1. However, because we used the date on which the admit form was filled out rather than the date of actual admission, a number of participants actually entered in the month before month 1. All 2,761 should have a month 1. However, in the month *before* study month 1, there were 2,572 participants and only 2,290 in month 1. This is likely due to slow input of data forms after admission by providers. Manual inspection showed mismatches, e.g., the admit form was submitted in November 2016 but services weren't delivered until January 2017. These mismatches mean there are 295 cases short. For these cases, as an alternative we used the first month services were delivered after September 2016 as the month of admission.
- 4. Another anomaly concerns status as an IPS participant. Using the codes supplied by DMH as indicative of having received IPS services (H2025), 36% of those served in the first year appear to receive IPS services. If we look at all 2,867 participant records, 45% appear to have received IPS services. The difference is those who are recorded as getting IPS services in the first year vs. the number of participants shown when no time restriction is applied. In large part this discrepancy seems to be due to clients having undergone multiple treatment episodes, some of which occurred earlier than the study period. There were 698 person-months in the data supplied prior to the study period; in 45% of them an IPS service was delivered.

Finally, staff members identified 83 persons they said participated in IPS but who showed no service units that are associated with IPS. This, again, is theoretically possible because some clients are automatically assigned to IPS but may not have any actual service contacts. (See the section on defining caseloads on page X.) Practical consequences may not be large: Using the IPS status staff assigned at discharge, 28% were in IPS and 57% of the IPS participants worked vs. 35% of the non-IPS participants. Using the data from CIOB, 36% were in IPS, and the difference in employment was 53% to 37%.

## APPENDIX C: TYPES OF MONTHLY IPS DATA COLLECTED BY DMH

Providers were asked by the CalWORKs Division of the Department of Mental Health to keep monthly data. By July 2017 the data were standardized with a wide range of indicators of how well IPS was being implemented. Earlier formats included fewer tracked variables. The primary variables were:

- a. The number of CalWORKs participants served in a particular month. This measure included all persons receiving services in any part of the month—so new participants only served a partial month and exiting participants who were served a partial month were both counted. From month to month this figure contains a large amount of overlap because, for example, most of those present in July would also be present in August and September. So this information can be summarized by looking at monthly averages, but not monthly totals.
- b. The number of IPS participants served in a particular month. The same qualifications apply to this measure as to the number of CalWORKs clients. A measure of how much the agency and clients have engaged with IPS is the percentage of CalWORKs participants who are enrolled in IPS during a month. Ideally it would be close to 100%, but resources are insufficient for that amount. Practically, the percentage is regulated by whether an agency has one, two, or three IPS employment counselors.
- c. The number and percentage of IPS participants who worked during a given month. The same qualifications apply to this measure as to the number of CalWORKs and IPS participants in a month. That is, it includes those working partial

months due to entering or leaving the program that month. And month-to-month comparisons are possible but aggregating months is not—due to the duplication of participants over different months. It is also important to recognize that this is a very different measure than that IPS researchers often use to determine whether participants worked in a year or in the study period (if longer or shorter). These research rates are likely to be much higher than monthly rates. For example, Bond reported on a group of mental health clients (not TANF) of whom 82% worked over the two-year study period, but monthly rates of employment in the last 18 study months averaged 35 percent.<sup>53</sup> In another study, Drake found that 60% worked for pay over 19 months, but, after a seven-month start-up period, rates averaged 28% per month.54 Mean monthly employment in IPS programs in this study was 32%.

The other measures that DMH collected are designed to judge how well IPS is functioning in a given provider and given month. Included are: number of job starts in the month by IPS participants, number working part-time vs. full-time, and IPS cases closed in the month with reason for closure. Some of these measures can be aggregated—for example, number of job starts over the entire 18 months.

<sup>53</sup> Bond, G. R., Salyers, M. P., Dincin, J., Drake, R., Becker, D. R., Fraser, V. V., & Haines, M. (2007, December). A randomized controlled trial comparing two vocational models for persons with severe mental illness. *Journal of Consulting and Clinical Psychology* 75(6), 968–82.

<sup>54</sup> Drake, R. E, Frey, W., Bond, G. R., Goldman, H. H., Salkever, D., Miller, A., Moore, T. A., Riley, J., Karakus, M., & Milfort, R. (2013, December). Assisting Social Security disability insurance beneficiaries with schizophrenia, bipolar disorder, or major depression in returning to work. *American Journal of Psychiatry* 170(12), 1433–1441.

# APPENDIX D. COMBINING DATA CORRELATING FIDELITY SCALES AND EMPLOYMENT FROM SEVERAL STUDIES IN ORDER TO DEFINE AN OPTIMUM SCALE

We can correlate fidelity and employment rates at an earlier time. Twenty-three IPS programs had fidelity reviews in 2014–2015 that correlate with employment.<sup>55</sup> (Several of these programs had two reviews, in which case the one from 2015 was used.) These Phase II correlations are in Column 2 of Table D1 (shown on next page); the current Phase III correlations are in Column 3 and the table is sorted on Phase III correlations in Column 3.

A number of discrepancies between the two CalWORKs studies exist, but six items correlate over 0.15 in both studies (indicated in green). However, the Phase II measure of employment is much weaker than that in Phase III. Also, Phase III reflects mature program fidelity scores rather than those of still-changing program fidelity. Therefore the Phase III data is more likely to be reliable than the Phase II data if they are in conflict.

The 15-item IPS fidelity scale used around the country until 2008 had a somewhat higher correlation with employment (0.38) than the 25-item scale did in either of Bond and colleagues' validation studies. In Table D1, we have indicated the items that are in the 15-item scale by an asterisk. (Note: "follow-along supports" was on the original scale. It is broken into two items on the 25-item version. Both are asterisked.) Two of the original 15 items are not included or are totally rewritten in the 25-item scale. Eight of the original 15 items are part of the 14-item scale, while seven are part of the 10-item scale. The 14-item scale is arrived at by taking the 14 Phase III items with a correlation with working of 0.14; the 10-item scale is arrived at by taking the 10 items with a correlation of 0.20.

In Columns 4 and 5, I have put in the statistically significant item correlations from both of Bond's validation studies. None of the statistically significant items in one study line up with those in the other. However, seven of the significant items (from one or

the other study) overlap with the CalWORKs 14-item scale created by using the 14 items that correlate with employment rate at 0.15 or better.

Three steps might yield the most reliable reduced-item fidelity scale.

- 1. Keep the six items with correlations over 0.15 in *both* CalWORKs studies (green) regardless of Bond correlations
- 2. Keep another six items if they are over 0.15 in one but not both CalWORKs studies and if they are statistically significant in at least one Bond study. (These are shown in yellow font.) These include two items that were highly correlated with work in the Phase II IPS data but did not have a Phase III correlation of .15 or above: "Diversity of job types" and "Time unlimited follow-along."
- 3. Consider removing items that have a correlation of 0.15 or above in only one CalWORKs study if the item does not seem appropriate to CalWORKs.

We thus suggest using the 14-item scale with the addition of two items that have a high correlation with Phase II in a Bond study. Using the 16-item scale builds in some resilience to chance fluctuations because we include two items (near the top in yellow) that have high Phase II correlations as well as a statistically significant correlation from at least one of the Bond studies. The 16 items are shown by the X marks in Column 6.

An experimental approach to validating a reduceditem scale. At this point our recommendation is to convene a working group of experienced CalWORKs IPS coordinators to review the 16 items suggested above. Review would focus on modifying the items to better fit the CalWORKs environment, and perhaps dropping some if they cannot be made highly relevant to CalWORKs IPS.

A second step would be to use the new scale for a year or 18 months as needed to include a significant number of sites. At that point the correlation with employment could be calculated again and a final

<sup>55</sup> Data for the employment outcomes comes from a 2014 pilot test of the current outcome monitoring system rather than from the monthly IPS employment data used in Phase III.

Table D1: Comprehensive results of correlating IPS fidelity items and employment

Column 1 Fidelity Items (asterisk indicates items in the original 15-item IPS scale)	Column 2 CalWORKs correlation Phase II	Coumn 3 CalWORKs correlation Phase III	Column 4 Bond SMI Study I significant	Column 5 Bond SMI Study II significant	Column 6 Proposed 16-item scale
*Staff: Caseload size Competitive jobs	No variation 0.004	No variation No variation			
*Individualized job search	0.12	-0.01		0.30	
Executive team support for SE	-0.18	-0.02			
Disclosure	0.02	-0.03	0.38		
Integration of rehabilitation with mental health through team assignment	0.204	-0.06			
*Diversity of job types	0.37	-0.11	0.23		X
Diversity of employers	0.29	-0.13	0.24		
*Time-unlimited follow-along supports	0.47*	0.00	0.28		X
*Vocational unit	-0.14	0.01	0.27		
Role of employment supervisor	0.18	0.06			
*Zero exclusion criteria	0.27	0.15			X
*Ongoing, work-based vocational assessment	-0.23	0.16			X
Work incentives planning	0.09	0.18			X
*Staff: employment services staff	0.37	0.19			X
Agency focus on competitive employment	0.12	0.20		0.24	X
*Rapid search for competitive job	0.29	0.23		0.26	X
*Staff vocational generalists	0.01	0.24	0.39		X
*Community-based services	-0.12	0.26		.28	X
Job development—frequent	0.06	0.26			X
*Integration of rehabilitation with mental health through frequent team member contact	0.25	0.27			X
Job development—quality of employer contact	0.32	0.28		0.32	X
Collaboration between employment specialists and DOR	-0.118	0.32*			X
*Individualized follow-along supports	-0.059	0.36*	0.36		X
*Assertive engagement and outreach by integrated treatment team	0.24	.38*	0.23		X
Total IPS fidelity score	0.23	0.22	.34	.27	.28

Green indicates both Phase II and Phase III fidelity item had a correlation of over .15 with actual work.

Yellow indicates one of the Bond study item correlations is over .15 as is at least one of our Phase II or Phase III correlations.

decision made about which scale items to keep. As part of the experiment, half the providers could randomly be assigned to continue the 25-item scale and half to try the new 16-item scale. The experiment would allow us to check whether the item correlations are stable.

Finally, if fidelity is strongly linked to employment only in the lower range of acceptable fidelity scores, as suggested above, DMH administration might focus on trying strategies for increasing employment other than those in the fidelity scale—which, as we have seen, predict a relatively small amount of variation in provider employment rates. Strategies that are successful over time could be converted to items to be added to the CalWORKs fidelity scale.



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