Two-Year Findings from the Evaluation of Breaking Barriers
An Individual Placement and Support (IPS) Program

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Two-Year Findings from the Evaluation of Breaking Barriers
An Individual Placement and Support (IPS) Program

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INTRODUCTION AND PURPOSE

Breaking Barriers was a San Diego-based program that provided employment services to individuals with low incomes and disabilities who were looking for work. The program used the Individual Placement and Support (IPS) model. There is extensive evidence of IPS’s success for people with serious mental illness, the group for which the intervention was originally designed. Breaking Barriers presented an opportunity to test the model with a different group: people with a range of disabilities and health conditions.

Breaking Barriers operated from January 2016 through mid-2018 in four San Diego locations. Some of the key features of the program included career counseling to establish clients’ goals and interests, job search assistance, systematic job development with local employers, personalized benefits counseling, referrals to supportive services, and follow-along support after job placement. A randomized controlled trial with over 1,000 participants was used to assess Breaking Barriers’ impact on outcomes such as employment, earnings, and health. Eligible individuals were assigned at random to a program group and offered Breaking Barriers services, or to a control group that did not receive those services and was referred to other publicly available supports. An evaluation of the program, conducted by MDRC in partnership with MEF Associates, included an implementation study, a cost analysis, and an impact analysis based on a 15-month follow-up survey. A 2019 report detailed findings from that evaluation.

This report summarizes findings from that earlier report and presents new impact findings based on administrative records from the National Directory of New Hires. These records include information on study participants’ quarterly employment and earnings over an extended, two-year follow-up period.

KEY FINDINGS AND HIGHLIGHTS

- Breaking Barriers increased earnings by almost $4,000 over the two-year follow-up period, based on the new analysis conducted for this report, using administrative records. This stands in contrast to the analysis from the 2019 report based on survey data, which did not find any impacts on employment or earnings outcomes.

- Breaking Barriers connected people in the program group to employment and increased earnings for this group earlier in the follow-up period compared with those in the control group, who did not have access to the program services.

- The Breaking Barriers evaluation shows the program is a promising way to connect job seekers to work and builds further evidence that IPS can be successful among those with a range of disabilities and health conditions.
GLOSSARY

**Individual Placement and Support (IPS):** a framework for delivering employment services, defined by eight principles. The approach helps people quickly start their search for jobs, helps programs develop connections with local employers to place clients, and promotes collaboration between employment service staff members and mental health providers.

**IPS fidelity scale:** a rubric for measuring the level to which a program implements IPS that considers the program’s services, characteristics, and alignment with the model’s core principles.

**Randomized controlled trial:** an experimental research design used to evaluate the effectiveness of an intervention or program by assigning individuals at random to a program group offered the intervention or a control group not offered it and then comparing the outcomes of the two groups.

**Serious mental illness:** having one or more diagnoses of mental disorders that significantly impair functioning. Such diagnoses could include schizophrenia spectrum disorder; severe, major depression; and severe bipolar disorder.
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Acknowledgments

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The Breaking Barriers program was operated by the San Diego Workforce Partnership, the Workforce Investment Board for San Diego County. We are grateful to the San Diego Workforce Partnership leadership and staff who participated in the evaluation and greatly appreciated their openness and dedication to the research process. They worked tirelessly to provide services to individuals in their communities, played a critical role in helping to recruit and enroll participants into the evaluation, made time in their busy schedules to participate in interviews, and provided the research team with essential data about study participants. In particular, we are grateful to Tanissha Harrell, Haley Stayton, Paul Dacanay, Lance Brandenberg, Vicki Brannock, and Nicole Murphy. We also thank the referral partners for their participation in interviews, including those from CalWORKs and the California Department of Rehabilitation.

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Finally, we are deeply appreciative of all the individuals who agreed to participate in the research. Without them, this report would not have been possible.
INTRODUCTION

Many Americans with disabilities struggle to find and maintain employment. The 2019 unemployment rate for people with disabilities was twice as high as the rate for those without them, a stark indication that this problem requires more attention. Limited access to jobs and systemic social inequities play a role in this disparity. Policymakers and practitioners continually search for effective ways to help the country’s 61 million adults with disabilities find steady employment. In recognition of the need for coordinated efforts in this realm, 11 federal agencies came together in 2018 to create the Multi-Agency Task Force on Increasing Employment Opportunities for Americans with Disabilities. The aim of this collaboration is to address the chronic unemployment rate of Americans with disabilities and to work toward the complete integration of this population into the workforce.

The Individual Placement and Support (IPS) model, a promising approach to improving employment outcomes, has drawn great interest from federal and local policymakers. The model was developed for people with serious mental illness and has largely been studied with this group in community mental health centers. In that context, there is extensive evidence of IPS’s success in helping people find jobs. Given the model’s effectiveness with its original target population, there is a broad desire to understand whether the IPS approach can achieve similar successes with individuals who have disabilities or health conditions other than serious mental illness.

The San Diego–based Breaking Barriers program adapted the IPS model to provide employment services to people with a range of disabilities and connect them to jobs. This report, part of an MDRC evaluation of Breaking Barriers, summarizes 15-month evaluation findings that were published in a 2019 report and presents new, two-year impact findings on employment outcomes. Two federal agencies funded the evaluation—the U.S. Department of Labor (DOL) and the U.S. Department of Health and Human Services, both members of the Multi-Agency

2. U.S. Bureau of Labor Statistics (2020); unemployment rate calculated among those unemployed but available to work and looking.
3. Administration for Community Living (2020).
4. In the research team’s conversations with agencies during the initial project phase, nearly every agency indicated an interest in the IPS model.
5. See Elkin and Freedman (2020) for an overview of this evidence. In the context of community mental health centers and people with serious mental illness, there is no evidence to date that IPS can also have a positive impact on nonvocational outcomes, such as improved quality of life; however, research shows that sustained employment can lead to improved self-esteem and symptom control (Bond, 2004).
6. There are other Breaking Barriers programs, including one in Los Angeles County, but in this report the term refers to the San Diego program.
The evaluation found that the Breaking Barriers program, which ran from 2016 through mid-2018, implemented IPS employment services with fidelity to the IPS model. The two-year impact analysis presented in this report, which was based on a randomized controlled trial (RCT) design, shows that Breaking Barriers improved earnings and employment outcomes, mainly during the first follow-up year. Over the two-year follow-up period, individuals in the program group who were offered Breaking Barriers services earned, on average, almost $4,000 more than control group members who did not receive the services, a 26 percent increase. Breaking Barriers helped the program group find work more quickly compared with the control group, though the control group eventually found employment and reached about the same earnings level as the program group by the end of the two-year follow-up period.

The remainder of this report presents these findings in more detail. First, it reviews the IPS model. Next, it presents background on the Breaking Barriers program and the evaluation of the program, including characteristics of the study sample and a summary of the implementation research. This is followed by an analysis of the impacts on employment and earnings outcomes as well as a summary of the cost findings.

THE INDIVIDUAL PLACEMENT AND SUPPORT PROGRAM MODEL

The goal of IPS is competitive employment—that is, placement in jobs that pay at least the minimum wage and are available to anyone in the workforce. As described in Table 1, the model uses a framework defined by eight principles, including helping individuals quickly start their job searches, developing connections between programs and local employers, and promoting collaboration between employment service staff members and mental health care providers. A fidelity scale is used to measure whether a program’s services and characteristics conform with best practices in meeting those principles, and both the principles and the fidelity scale allow for flexibility in how the model is implemented. This framework supports variations in implementation across IPS programs as well as the ability to adapt IPS to individual settings, as was the case with Breaking Barriers.

Researchers have studied the effectiveness of IPS services for people with serious mental illness using randomized controlled trials. Most of these studies found that people who were offered IPS services were more likely to find jobs than similar people who were not offered IPS. Since it was developed in the 1990s, the IPS model has been applied more broadly to include individuals who have conditions and disorders other than serious mental illness, in settings other than community mental health centers, and with certain adaptations to or enhancements of the model. As mentioned above, a growing number of studies, including the study of Breaking Barriers, are exploring the effectiveness of these extensions of the model.

8. Specifying competitive employment as the goal stands in contrast with other work settings or situations—such as sheltered workshops or subsidized jobs—that are designed specifically for individuals with disabilities.
Table 1. Principles of Individual Placement and Support

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero Exclusion</td>
<td>There is a zero-exclusion policy: Every person who wants to participate is eligible.</td>
</tr>
<tr>
<td>Integrated Services</td>
<td>Employment services are integrated with mental health treatment.</td>
</tr>
<tr>
<td>Competitive Employment</td>
<td>Competitive employment is the main goal.</td>
</tr>
<tr>
<td>Benefits Planning</td>
<td>Participants receive comprehensive benefits counseling on how work and earnings interact with public benefits.</td>
</tr>
<tr>
<td>Rapid Job Search</td>
<td>The job search starts as soon as a person expresses interest in work. Any “pre-vocational” training is limited.</td>
</tr>
<tr>
<td>Systematic Job Development</td>
<td>Employment specialists systematically develop relationships with employers and actively engage in job development.</td>
</tr>
<tr>
<td>Time-Unlimited Support</td>
<td>Job support is available as needed and is not time-limited.</td>
</tr>
<tr>
<td>Worker Preferences</td>
<td>Client preferences regarding employment are important.</td>
</tr>
</tbody>
</table>


The key expected outcomes of Breaking Barriers through the use of IPS were higher rates of employment and increased earnings, as shown in Figure 1. Engagement in employment activities was also intended to improve participants’ health and decrease the use of public benefits.

BREAKING BARRIERS PROGRAM AND EVALUATION

MDRC, in partnership with MEF Associates, conducted the evaluation of the Breaking Barriers program. Specifically, the evaluation examined Breaking Barriers’ provision of IPS services in workforce centers to a broader population of people with low incomes and a wide range of self-identified disabilities.

The San Diego Workforce Partnership implemented the Breaking Barriers program from 2016 through mid-2018 using the IPS model. The program operated at four America’s Job Centers of California locations across San Diego County, and was funded by DOL’s Workforce Innovation Fund. The industries that employed the most people during the program implementation

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9. America’s Job Centers of California is a public-private collaboration that provides employment and training services. San Diego County is the fifth-most-populous county in the United States. The county also boasts great diversity, with a higher-than-average Hispanic population (34 percent, compared with 18 percent nationwide) and Asian population (13 percent, compared with 6 percent nationwide), as well as a higher-than-average foreign-born population (24 percent, compared with 13 percent nationwide). Percentages taken from U.S. Census Bureau (n.d.) in 2018.
Figure 1. Breaking Barriers Logic Model

**BREAKING BARRIERS ACTIVITIES**

- Career counseling
- Connecting with employers
- Referrals to other services

**INTENDED OUTCOMES**

- Higher rates of employment
- Increased earnings
- Decreased use of public benefits
- Improved health

**INTENTIONAL SERVICES**

- Job search assistance
- Personalized benefits counseling
- Continued services and support after placement
period were the government, professional and business services, education and health services, leisure and hospitality, and retail trade.\textsuperscript{10}

Program staff used the following eligibility criteria to determine who could participate in Breaking Barriers:

- be at least 18 years old
- live in San Diego county
- have a self-identified disability
- have a low income\textsuperscript{11}
- not be working\textsuperscript{12}
- be a client of a qualified referral partner: CalWORKs, the California Department of Rehabilitation, or the San Diego County Behavioral Health Services\textsuperscript{13}

The Breaking Barriers evaluation consisted of three main components: an implementation study, a cost study, and an impact study. The implementation study described the intervention as it operated on the ground and provided context for interpreting the results of the impact study. The cost study focused on the costs to the program provider of operating Breaking Barriers and how these costs compared with those of other services available in the community. The impact study, which used an RCT design, included two separate analyses—one covering a 15-month follow-up period, and another covering a two-year follow-up period. The latter analysis is part of the Building Evidence on Employment Strategies (BEES) project, described in Box 1.

In the RCT, individuals interested in and eligible for Breaking Barriers services were assigned at random to one of two groups: a program group that was offered IPS services through Breaking Barriers, or a control group that was not offered Breaking Barriers services but had access to publicly available services.\textsuperscript{14} A total of 1,061 individuals were enrolled in the study and randomly assigned (528 to the program group, 533 to the control group) between January 2016 and early


\textsuperscript{11} Originally, this requirement applied to household income and program staff were expected to set an income limit equivalent to 70 percent of the DOL’s Lower Living Standard Income Level. In practice, this threshold was not used consistently, and some program staff used a higher threshold at times. Freedman, Elkin, and Millenky (2019).

\textsuperscript{12} Nearly all study sample members were not employed at the time of study enrollment; however, a small number were “underemployed” and interested in employment services to improve their employment situations.

\textsuperscript{13} CalWORKs is the state name for California’s Temporary Assistance for Needy Families (TANF) program.

\textsuperscript{14} Due to federal funding requirements, veterans could not be included in the study, so all eligible veterans received Breaking Barriers services. They were not included in this analysis.
November 2017. Random assignment is designed to create two groups with similar observed and unobserved characteristics at the time of study enrollment. Because of this procedure, systematic differences in outcomes between the two groups are likely to reflect the program’s effects.

**Study Sample**

The baseline characteristics of the study sample, presented in Figure 2, are based on information collected during brief interviews with study participants at the time of enrollment. Overall, the Breaking Barriers study sample was diverse in terms of age, gender, race and ethnicity, and other characteristics. Most sample members were between the ages of 24 and 59 at the time of study enrollment; the average age was 40. About one-third of the sample identified as Hispanic, another 40 percent identified as White/non-Hispanic, and 14 percent identified as Black/non-Hispanic. Over 7 percent of the sample reported that they were refugees, and approximately 6 percent reported not speaking English fluently. Forty-two percent reported employment in the year prior to study enrollment. The majority of the sample (82 percent) indicated that their overall health was excellent, very good, or good at the time of study enrollment.

Some characteristics of the Breaking Barriers sample differentiate the population from those in previous IPS studies. For example, approximately 22 percent of people in the Breaking Barriers sample reported receiving Supplemental Security Income (SSI), Social Security Disability

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15. People were categorized as not speaking English well if program staff reported that the sample member’s English proficiency was “not very fluent” or “not fluent at all.” The remaining categories were “fluent” and “somewhat fluent.”
Figure 2. Baseline Characteristics of the Breaking Barriers Study Sample

<table>
<thead>
<tr>
<th>Age (%)</th>
<th>Most common disabilities and conditions reported (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60+</td>
<td>Depression</td>
</tr>
<tr>
<td>45-59</td>
<td>Other psychological disorder</td>
</tr>
<tr>
<td>35-44</td>
<td>Substance use</td>
</tr>
<tr>
<td>25-34</td>
<td>Musculoskeletal injury</td>
</tr>
<tr>
<td>18-24</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race/Ethnicity (%)</th>
<th>Educational Attainment (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>Less than a HS diploma</td>
</tr>
<tr>
<td>White</td>
<td>HS diploma or GED</td>
</tr>
<tr>
<td>Black</td>
<td>Associate’s degree</td>
</tr>
<tr>
<td>Other</td>
<td>Bachelor’s degree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Female (%)</th>
<th>Ever employed (%)</th>
<th>Ever employed in the past year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>92</td>
<td>42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>English Proficient (%)</th>
<th>Receiving SSI and/or SSDI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>22</td>
</tr>
</tbody>
</table>

SOURCE: MDRC calculations based on data from the Breaking Barriers management information system.

Insurance (SSDI), or both. By comparison, study samples in other IPS studies often had much higher baseline rates of receiving SSI, SSDI, or both (ranging from 61 percent to 95 percent).\(^\text{16}\)

In most IPS studies, individuals in the study sample all had a diagnosis of a serious mental illness. However, the Breaking Barriers study sample reflected a wide range of disabilities and health conditions. Figure 2 presents the self-identified disabilities or behavioral health conditions (or both) that Breaking Barriers sample members reported at the time of study enrollment.\(^\text{17}\) The research team collected limited information about sample members’ disabilities and/or behavioral health conditions; the team did not have access to information about the severity of the mental health issues reported by study sample members. For example, 48 percent of the Breaking Barriers study sample reported depression as at least one of their disabilities. However, it is unknown whether the reported depression met the clinical definition of “severe major depression,” which would be categorized as a serious mental health illness.\(^\text{18}\) Similarly, 38 percent of the sample indicated they had “another psychological disorder” they considered a disability, but no specifics about these disabilities are known.

See Appendix Tables A.1 and A.2 in the separate technical appendix for more detailed information on baseline characteristics and a breakdown by research group.

**FINDINGS ON PROGRAM IMPLEMENTATION**

Implementation data sources in the 2019 report included two rounds of in-person site visits during program implementation, four rounds of fidelity assessments, and program participation data from Breaking Barriers’ management information system.\(^\text{19}\)

The study found that the Breaking Barriers program largely implemented services as intended and with fidelity to the IPS model. However, the program did not coordinate with mental health services, one of the eight IPS principles.

Information collected from interviews conducted during site visits indicated that Breaking Barriers delivered a set of services that covered most key components of the IPS model. Staff maintained small caseloads, which enabled them to provide clients with individualized support. Data collected from the Breaking Barriers management information system confirmed that clients were engaged in the program: As shown in Figure 3, nearly all program group members received at least initial employment services (such as creating a career profile) from Breaking Barriers. On average, program group members participated in Breaking Barriers services for 9 to 10 months.

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\(^\text{16}\) Bond et al. (2007); Bond et al. (2015); Gold et al. (2006); Lehman et al. (2002). The measure considered from Gold (2006) reflects the percentage of participants with SSI or SSDI. The paper did not provide the number of those receiving both types of benefits.

\(^\text{17}\) Sample members could report more than one type of condition and not all of those reported are recognized as disabilities by the Social Security Administration.

\(^\text{18}\) Mental Illness Policy Org. (n.d.).

\(^\text{19}\) See Freedman, Elkin, and Millenky (2019) for more information on these data sources.
An IPS consultant conducted fidelity reviews four times during the study period at each participating Breaking Barriers location. While fidelity scores varied, each location received scores that fell within ranges defined as “fair fidelity” or “good fidelity” on the fidelity scale.

While coordination with mental health care providers is a key component of IPS as it is traditionally implemented, this element was not planned for or implemented by Breaking Barriers. The program operated in workforce centers and there were no mental health services available on-site. Additionally, the level of mental health services that participants required, if any, is unclear. The Breaking Barriers implementation of IPS could never achieve a perfect fidelity score due to this planned modification.

**SERVICE CONTRAST IN THE BREAKING BARRIERS STUDY**

The service contrast—the differences in types and dosage of services that the study’s program and control groups received—provided context for the initial impact analysis. As presented in the earlier report, the study team fielded a follow-up survey approximately 15 months after study enrollment to collect information on service receipt.
As context, all study sample members had to already be connected to some services to be eligible for the Breaking Barriers program. Specifically, they needed to be a client of CalWORKs, the California Department of Rehabilitation, or the San Diego County Behavioral Health Services. In addition, as noted above, Breaking Barriers services were provided at workforce centers called America’s Job Centers of California; the list of alternative employment services offered to the control group could include other non-Breaking Barriers services offered at these centers.

The study found that while the vast majority of both groups received some type of employment services during the follow-up period, the program group was more likely to have received these services compared with the control group.

As shown in Table 2, the program group was statistically significantly more likely than the control group to have received any help finding or keeping a job overall (92 percent compared with 78 percent, respectively) during the first 15 months following study enrollment. The service contrast was larger (differences ranged from 22 to 29 percentage points) for receipt of specific employment services such as help preparing a résumé and filling out job applications, preparing for job interviews, looking for jobs, and getting referrals to jobs—all key services offered through IPS.

In the absence of access to the Breaking Barriers services, many control group members drew on their existing connections for employment services. Among control group members who received help finding or keeping a job, the most commonly reported sources of help (not shown) included the Department of Rehabilitation (31 percent); Family Resource Centers, CalWORKs or welfare-to-work programs (17 percent); or another career center program or workforce office (14 percent).

EFFECTS ON EMPLOYMENT AND EARNINGS

The Breaking Barriers impact study draws on a random assignment design. Specifically, it compares average outcomes for the program and control groups; any systematic differences measured can likely be attributed to the Breaking Barriers program. Employment and earnings were the key outcomes of interest for the study. The impact study drew on two data sources, discussed below.

A follow-up survey fielded about 15 months after study enrollment collected self-reported information on employment and earnings (among other outcomes) during that 15-month period. The impact analysis based on survey data and published in the 2019 report did not find any effects on employment or earnings outcomes (or others, such as those related to health and household). As noted in that report, survey responses were collected for a subset (62 percent) of the full study sample. Findings from this analysis were not generalizable to the full study sample (discussed in more detail in the separate Technical Appendix), and study sample members who responded to the survey differed from the remainder of the study sample across several baseline characteristics.

In 2020, the research team received administrative records from the National Directory of New Hires (NDNH), which included information on employment and earnings for the entire study sample over a two-year follow-up period. The database provides information about whether individuals were employed in a given quarter and their earnings in that quarter. Findings from the NDNH analysis, discussed in the confirmatory and exploratory analyses sections below, are promising and are a departure from the findings based on survey data. The Technical Appendix...

21. This database contains quarterly wage data reported to the Unemployment Insurance system. Records in this database do not capture employment that is exempt from reporting to the system (such as self-employment or domestic work), or employment that goes unreported.
explores reasons for differences in the two sets of results and presents findings from a survey response bias analysis.22

Using the NDNH data, the research team conducted both confirmatory and exploratory analyses focused on the two-year period following study enrollment. (See Box 2 for an explanation of the approach to confirmatory and exploratory analyses.) This period includes the time when many program group members were participating in Breaking Barriers services (for an average of 9 to 10 months). Members of both the program and control groups could have accessed other employment services during this time.

The confirmatory outcomes identified in advance of this analysis are number of quarters employed over the two-year follow-up period and total earnings over the two-year follow-up period. Exploratory outcomes include total earnings and employment rates in each of the two follow-up years, and quarterly earnings and quarterly employment rates over the two-year period. In the discussion that follows, all differences between the program and control group are statistically significant at the 5 percent level, unless otherwise noted.

Box 2. Confirmatory and Exploratory Analyses

A confirmatory analysis centers on key outcomes—selected by researchers prior to analyzing any data—that are used to assess a program’s effectiveness. This approach avoids the statistical problem induced by measuring multiple outcomes, often referred to as the “multiple comparisons problem”: In brief, when many statistical tests are performed simultaneously, the overall probability of a spurious finding (that is, one due to chance rather than a true program effect) increases.

In contrast, an exploratory analysis looks for suggestive evidence of the program’s impacts. Findings from exploratory analyses can help inform policy and the confirmatory analyses but should not be taken as definitive. In the exploratory analysis, formal adjustments for multiple comparisons are not made when reporting on statistical significance. Nonetheless, the research team took steps to limit the number of outcomes measured as part of the exploratory analysis.

22. Reasons include different characteristics seen in the sample for the survey-based analysis compared with the larger study sample, differences in the types of employment captured by each data source, and differences in how the data were collected.
Confirmatory Analyses

Earnings data offer an understanding of the extent and quality of the employment that sample members experienced, while information on quarterly employment status provides a high-level look at engagement in paid work.

Breaking Barriers increased earnings by almost $4,000 over the two-year follow-up period.

As shown in Table 3, the confirmatory outcomes analysis found that program group members earned on average just over $19,000 ($3,965 more than control group members) over the two-year period following random assignment. On average, those in the program group worked in more quarters over the follow-up period compared with those in the control group, though this difference is not statistically significant (3.9 quarters compared with 3.7 quarters, respectively). Earnings for both groups were low considering the California state minimum wage from 2016 through 2019, the calendar years included in the study’s follow-up period. As context, a California employee working one full-time job at the minimum wage in 2017 would earn almost $22,000 that year. While not a direct comparison, program group members who were employed in the first follow-up year earned just over $13,000, and control group members who were employed in the first follow-up year earned about $10,300 (not shown in table).

### Table 3. Impacts on Employment and Earnings Over the Two-Year Follow-Up Period

<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>PROGRAM GROUP</th>
<th>CONTROL GROUP</th>
<th>DIFFERENCE (IMPACT)</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of quarters employed</td>
<td>3.9</td>
<td>3.7</td>
<td>0.3</td>
<td>0.127</td>
</tr>
<tr>
<td>Total earnings ($)</td>
<td>19,084</td>
<td>15,119</td>
<td>3,965**</td>
<td>0.020</td>
</tr>
<tr>
<td>Sample size (Total = 1,061)</td>
<td>528</td>
<td>533</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


NOTE: Statistical significance levels are indicated as: *** = 1 percent, ** = 5 percent, * = 10 percent.

Exploratory Analyses

The exploratory analyses offer additional detail on employment and earnings outcomes from quarter to quarter over the two-year follow-up period.

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23. In calculating average earnings, a zero was included for someone who had no earnings over the period. In this case, approximately 26 percent of the program group and 30 percent of the control group had no earnings over the two-year follow-up period.

24. Calculation based on a minimum wage of $10.50, the minimum wage for employers with 26 employees or more (California Department of Industrial Relations, 2020).

25. NDNH data did not offer information on study participants’ employment type (part time, full time, temporary, etc.) over the follow-up period.
Breaking Barriers connected people to employment and increased earnings earlier in the follow-up period compared with those who did not have access to the program.

Figure 4 presents the percentage of the sample employed in each quarter over the two-year follow-up period. The program group was employed at a higher rate than the control group in the first quarter of follow-up, a statistically significant difference at the 10 percent level. This trend continues, and the differences in the second and third quarters are statistically significant at the 5 percent level. The difference begins to narrow in the fourth quarter. In the second year of the follow-up period, the program and control groups were employed at similar rates. These findings could imply that Breaking Barriers services helped connect program group members to employment earlier than their counterparts in the control group.

Overall, throughout the first year after random assignment, program group members were more likely to be employed (68 percent) compared with the control group (61 percent). Both groups were employed at similar rates over the second year following random assignment.

Figure 5 presents the average amount earned among the study sample in each quarter over the follow-up period. The quarterly earnings averages follow a pattern similar to the one for the employment rates. In the second quarter after random assignment, program group members began earning more than control group members (a statistically significant difference at the 1 percent
level). This difference remained through the fourth quarter, and then began to shrink in the fifth quarter. Beyond that point, there were no statistically significant differences in earnings between the two groups during the follow-up period.

These patterns over the two-year period suggest that while Breaking Barriers helped the program group find work quickly, the control group eventually found employment. Over the entire first year, program group members earned, on average, about $8,800 (about $2,400 more than control group members). Over the second year, there were no statistically significant differences between program and control group earnings.

**Comparisons with Other IPS Study Findings**

Breaking Barriers study participants experienced better outcomes compared with individuals who participated in similar evaluations of the IPS model. The characteristics of Breaking Barriers participants, described earlier in this report, may have contributed to these differences.

For example, in a study of IPS services offered to Temporary Assistance for Needy Families (TANF) recipients in Ramsey County, Minnesota, program group members earned, on average, just under $3,000 over the first follow-up year—far less than the program group in Breaking Barriers.

**Figure 5. Quarterly Earnings Over the Two-Year Follow-Up Period**

![Figure 5](image-url)


NOTE: Statistical significance levels are indicated as: *** = 1 percent; ** = 5 percent; * = 10 percent.

Total Earnings ($) Year 1 *** | Total Earnings ($) Year 2
---|---
Program | Control | Impact | Program | Control | Impact
8,807 | 6,427 | 2,380 | 10,276 | 8,692 | 1,584

**Quarterly Earnings Over the Two-Year Follow-Up Period**

Quarter relative to random assignment

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Program</th>
<th>Control</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,380</td>
<td>2,297</td>
<td>2,380</td>
</tr>
<tr>
<td>2</td>
<td>3,017</td>
<td>3,017</td>
<td>3,017</td>
</tr>
<tr>
<td>3</td>
<td>3,500</td>
<td>3,500</td>
<td>3,500</td>
</tr>
<tr>
<td>4</td>
<td>3,970</td>
<td>3,970</td>
<td>3,970</td>
</tr>
<tr>
<td>5</td>
<td>4,390</td>
<td>4,390</td>
<td>4,390</td>
</tr>
<tr>
<td>6</td>
<td>4,790</td>
<td>4,790</td>
<td>4,790</td>
</tr>
<tr>
<td>7</td>
<td>5,170</td>
<td>5,170</td>
<td>5,170</td>
</tr>
<tr>
<td>8</td>
<td>5,530</td>
<td>5,530</td>
<td>5,530</td>
</tr>
</tbody>
</table>
Barriers, even considering labor market differences.\textsuperscript{26} One possible reason for these differences is that at the time of study enrollment, Breaking Barriers participants had some recent work experience (some were even employed at the time, though likely underemployed), among other factors discussed earlier, which may have helped them find better-paying jobs during the follow-up period.

Further, in randomized controlled trials of IPS programs that mostly focused on individuals with serious mental illness, the control group was employed at a much lower rate over the follow-up period (often below 30 percent) than the Breaking Barriers control group.\textsuperscript{27} The high control group employment rate in Breaking Barriers suggests that many in the study sample would have been able to find employment even if they did not have access to Breaking Barriers services.

**BREAKING BARRIERS PROGRAM COST ANALYSIS**

A previous report presented the estimated costs (personnel, other direct, indirect, and in-kind) to program providers of operating Breaking Barriers. This analysis drew on data provided by the San Diego Workforce Partnership (SDWP), including a financial summary of relevant management activities and invoices from the four locations offering Breaking Barriers services. The cost analysis also drew on data from the Breaking Barriers management information system regarding length of program participation.

Breaking Barriers cost program providers, on average, $4,340 per participant over a 12-month period.

First, the analysis identified and summed the costs of delivering Breaking Barriers services to clients. These included personnel costs (both SDWP program staff and management), other direct costs (such as facilities, maintenance, consultants, and equipment), indirect costs (such as organizational administration and management), and in-kind costs (such as staff time and facilities costs funded through other means). Given the small caseloads and individualized services of the IPS model, personnel costs accounted for nearly half of the program costs, as shown in Figure 6. Then, the analysis calculated an average cost of participation per person. These estimated costs of Breaking Barriers are within the range of estimated costs to program providers of other IPS programs. In fact, they are somewhat lower than the average IPS operating cost, according to a more recent summary of the model's effectiveness, but within the range of variation that some older studies have found.\textsuperscript{28}

\textsuperscript{26} This study was a randomized controlled trial of Minnesota’s Families Achieving Success Today (FAST) program in Ramsey County, which offered IPS services to TANF recipients with physical disabilities, mental disabilities, or both (Farrell et al., 2013). State minimum wage in Minnesota was $6.16 at the time of the FAST study (U.S. Department of Labor, 2021b), while minimum wage in San Diego County at the time of the Breaking Barriers study was almost double that (U.S. Department of Labor, 2021a).

\textsuperscript{27} See Figure 4.1 in Freedman, Elkin, and Millenky (2019).

\textsuperscript{28} Bond, Peterson, Becker, and Drake (2012); Latimer et al. (2004).
CONCLUSION

Breaking Barriers achieved what it sought to do: The program helped people with low incomes and a range of disabilities find work quickly. This an important finding for the BEES project, the goal of which is to understand which programs can improve employment and earnings among Americans with low incomes. The two-year findings from the Breaking Barriers evaluation are also important for the field of IPS research, bolstering evidence of the model’s success outside of its traditional setting in community mental health centers.

Specifically, the evaluation found that Breaking Barriers implemented the IPS model to fidelity and improved earnings and employment outcomes, mainly during the first follow-up year. Over the two-year follow-up period, program group members earned, on average, almost $4,000 more than control group members, for a total of about $19,000. On average, the program and control groups were employed in the same number of quarters over the two-year follow-up period. However, in the first follow-up year alone, program group members were more likely to be employed and had higher earnings than the control group.

The quarterly earnings levels and employment rates for each research group suggest that Breaking Barriers helped program group members find jobs quickly as well as higher-paying jobs, compared with their control group counterparts. This is an important finding, as employment...
can allow for improved financial stability. After the first follow-up year, control group earnings levels and employment rates rose over time to meet those of the program group. In other words, the control group was able to eventually find employment, although they took a bit longer than the program group to do so. Given that these results are limited to a two-year period, the research team cannot conclude whether IPS leads to sustained, long-term impacts. This will be important to understand going forward, as the costs of an IPS program are significant. Additional quarters of follow-up data could offer more information on whether differences between the program and control groups would emerge again with time.

As discussed earlier, the evaluation adds to the growing body of literature on the IPS model. Notably, Breaking Barriers study participants experienced better employment-related outcomes compared with individuals who participated in previous evaluations of the IPS model. This could be due to the characteristics of Breaking Barriers study participants. At the time of study enrollment, 79 percent had been employed in the past five years. (By comparison, in other studies of IPS where this information was reported, the percentage of the study sample that had any employment in the past five years ranged from 49 to 73 percent.) This is further reinforced by the relatively high employment rates among the control group over the follow-up period when compared with previous studies of IPS.

The BEES project is currently pursuing studies of other IPS programs—specifically those that operate outside of community mental health centers or that serve new populations: individuals who receive mental and behavioral health services at Federally Qualified Health Centers (which often provide low-cost health services in low-income neighborhoods); individuals with low incomes who receive substance use disorder services; and individuals served in other human services contexts. Given the positive two-year findings from Breaking Barriers, these studies offer a promising opportunity to build further evidence on the IPS model and whether it can improve the economic security of a broader group of people with low incomes.

29. See Bejerholm et al. (2015); Bond et al. (2015); Lehman et al. (2002); and Lones et al. (2017).
References


