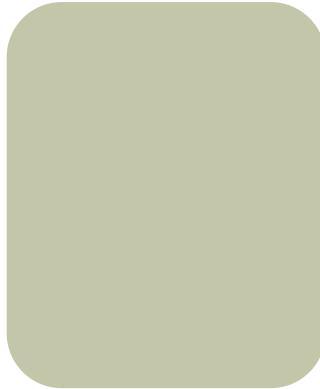


# The San Diego County Bridge to Employment in the Healthcare Industry Program: Implementation and Early Impact Report

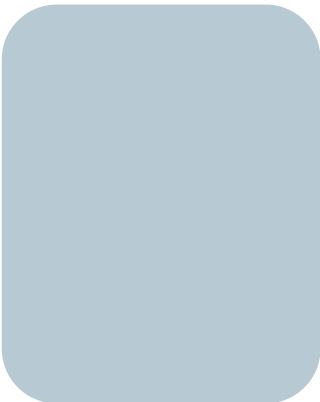


## Pathways for Advancing Careers and Education



OPRE Report No. 2017-41

June 2017



**PACE**  
Pathways for Advancing  
Careers and Education

# The San Diego County Bridge to Employment in the Healthcare Industry Program: Implementation and Early Impact Report

## Pathways for Advancing Careers and Education (PACE)

OPRE Report No. 2017-41

June 2017

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## Contents

<b>Overview</b> .....	<b>v</b>
<b>Executive Summary</b> .....	<b>i</b>
<b>1. Introduction</b> .....	<b>1</b>
1.1. Pathways for Advancing Careers and Education (PACE) Evaluation .....	3
1.2. Research on Key Components of the Bridge to Employment Program .....	5
1.3. Structure of this Report .....	6
<b>2. PACE Evaluation Design and Data Sources</b> .....	<b>7</b>
2.1. Career Pathways Theory of Change.....	7
2.2. Research Questions for the Evaluation of Bridge to Employment .....	10
2.3. PACE Evaluation Design and Analysis .....	11
2.3.1. Intake and Random Assignment Procedures.....	12
2.3.2. Characteristics of the Study Sample .....	14
2.3.3. Analysis Plan for the Impact Study .....	16
2.3.4. Analysis Plan for the Implementation Study .....	18
2.4. Data Sources .....	18
<b>3. About Bridge to Employment: Context and Administration</b> .....	<b>20</b>
3.1. Local Context.....	20
3.1.1. Population .....	20
3.1.2. Local Labor Market .....	21
3.1.3. Comparable Services.....	22
3.2. Program Administration .....	24
3.2.1. Recruitment and Referral .....	26
3.2.2. Orientation, Assessment, and Intake.....	27
3.2.3. Training Program Research.....	28
3.2.4. Supportive Services.....	29
3.2.5. Employment Services.....	30
3.2.6. Occupational Training.....	30
<b>4. Implementation Study Findings</b> .....	<b>32</b>
4.1. Implementation of Navigation Services.....	32
4.2. Implementation of Training Services.....	36
4.3. Implementation of Employment Supports .....	39
4.4. Education and Training Participation Patterns .....	42
4.5. Impact on Receipt of Education/Training and Services.....	48
<b>5. Early Impacts of the Bridge to Employment Program</b> .....	<b>54</b>
5.1. Key Hypotheses and Outcomes .....	54
5.2. Impacts on Educational Attainment .....	56
5.3. Impacts on Early Career Progress (Secondary Hypotheses).....	58
5.4. Impacts on Psycho-Social Skills and Life Stressors (Exploratory Hypotheses) .....	61

<b>6. Conclusions .....</b>	<b>63</b>
6.1. Summary of Key Early Impact Findings.....	63
6.2. Implication for Longer-Term Findings.....	65
<b>References .....</b>	<b>66</b>

## List of Exhibits

Exhibit ES-1. Participation in and Completion of Education and Training among Treatment Group Members within an 18-Month Follow-Up Period .....	vi
Exhibit ES-2. Receipt of Education or Training after Random Assignment, by Source.....	vii
Exhibit ES-3. Receipt of Credential, by Source.....	viii
Programs in PACE.....	3
Exhibit 2-1. Career Pathways Theory of Change for Bridge to Employment.....	8
Exhibit 2-2. PACE Enrollment for Bridge to Employment, by Navigator Organization.....	13
Exhibit 2-3. Selected Characteristics of the Bridge to Employment Study Sample .....	15
Exhibit 3-1. Comparison of Career Pathways Components Available to Treatment and Control Group Members.....	22
Exhibit 3-2. Three Navigator Organizations Providing Program Services to Bridge to Employment.....	25
Exhibit 3-3. Bridge to Employment Benefits/Services Provision .....	26
Exhibit 4-1. Three Training Providers that Enrolled Bridge to Employment Participants .....	38
Exhibit 4-2. Participation in and Completion of Training among Treatment Group Members within an 18-Month Follow-Up Period .....	43
Exhibit 4-3. Type of Program Attended, Completion Rates, and Average Length of Stay among Treatment Group Members Who Participated in At Least One Education/Training Program in 18-Month Follow-Up Period .....	44
Exhibit 4-4. Length of Stay among Treatment Group Members Participating in Training within an 18-Month Follow-Up Period .....	46
Exhibit 4-5. Programs Attended, Average Length of Stay, and Type of Institution among Treatment Group Members in Bridge to Employment Education/Training over 18-Month Follow-Up Period, by Navigator .....	47
Exhibit 4-6. Average ITA Spending per Treatment Group Member, by Navigator.....	48
Exhibit 4-7. How to Read Impact Tables.....	48
Exhibit 4-8. Education and Training Receipt after Random Assignment.....	49
Exhibit 4-9. Receipt of Various Supports since Random Assignment.....	53
Exhibit 5-1. Outcomes in the Early Impact Analysis .....	55
Exhibit 5-2. Early Impacts on Education/Training Outcomes (Confirmatory and Secondary Hypotheses).....	57

Exhibit 5-3. Early Impacts on Education/Training Outcomes, by Navigator Organization  
(Exploratory Hypotheses) ..... 58

Exhibit 5-4. Early Impacts on Selected Career Outcomes (Secondary Hypotheses) ..... 59

Exhibit 5-5. Early Impacts on Career Outcomes by Navigator Organization (Exploratory  
Hypotheses) ..... 60

Exhibit 5-6. Median Hourly Wages in San Diego and Imperial Counties ..... 61

Exhibit 5-7. Early Impacts on Other Outcomes (Exploratory Hypotheses) ..... 62

## Overview

This report documents the implementation and early impacts of the Bridge to Employment in the Healthcare Industry program, designed by the San Diego Workforce Partnership and operated by three community-based organizations in San Diego County, California. Bridge to Employment is one promising effort to help low-income, low-skilled adults access and complete occupational training that can lead to increased employment and higher earnings. It is one of nine career pathways programs being evaluated under the Pathways for Advancing Careers and Education (PACE) study sponsored by the Administration for Children and Families.

The Bridge to Employment program consisted of five components:

- (1) Assessments to determine eligibility for training programs;
- (2) Navigation and case management services to help students choose their training and address barriers to participation;
- (3) Individual training account (ITA) vouchers to cover the cost of training;
- (4) Supportive services for transportation, child care, and other services; and
- (5) Employment services to help participants find employment after training.

Using a rigorous research design, the study found that Bridge to Employment increased the credentials its participants received and increased employment in a healthcare occupation within the 18-month follow-up period. Future reports will examine whether these effects translate into economic gains in the workplace in the longer term.

## Primary Research Questions

- Was the intervention actually implemented as designed?
- How did services received differ between study participants who could access the Bridge to Employment program versus those who could not?
- What were the effects of the program on credentials received?

## Purpose

The federal government projects that over the next 10 years, the fastest-growing occupations are in healthcare. Almost all jobs in healthcare require some level of postsecondary education or training. But many low-income, low-skilled adults face barriers to completing even short-term training for entry-level jobs.

Career pathways programs are designed to address barriers by providing well-defined training steps targeted to locally in-demand jobs, combined with a range of financial, academic,



employment, and personal supports and services. The Bridge to Employment program gave students ITA vouchers they could use at any accredited training provider in San Diego, along with case management, supportive services, and employment services. To assess the effectiveness of this program, the PACE evaluation used an experimental design in which program applicants were assigned at random to a “treatment” group who could access the program or a “control” group who could not, and then compared their outcomes.

## Key Findings & Highlights

- **More than 80 percent of treatment group members enrolled in a healthcare training program using an ITA from the Bridge to Employment program.** The most popular programs included training to become certified nursing assistants, phlebotomists, medical assistants, and medical records and health information technicians.
- **Most treatment group members who attended training (more than 75 percent) chose to enroll in training offered by for-profit private schools.** Bridge to Employment participants could use their ITAs at any accredited training provider. More participants chose private for-profit schools instead of community colleges because they could generally enroll in the training more quickly and complete the training programs in less time. Additionally, community colleges did not accept ITAs, thus participants would need to pay upfront and get reimbursed.
- **Bridge to Employment increased the percentage of its participants who received a credential.** After 18 months, 64 percent of treatment group members received a credential compared with 34 percent of control group members, a 29-percentage point impact.
- **Bridge to Employment produced positive impacts on employment.** The program increased the proportion of study participants working in a job requiring at least mid-level skills. Also, more treatment group members than control group members were working in a healthcare occupation. The program did not increase the percentage of treatment group members who were working in a job paying at least \$12 per hour.

## Methods

The Bridge to Employment evaluation’s implementation study examined the design and operation of the program and the treatment group’s participation patterns, and its impact study measured differences in education and training and employment outcomes.

From July 2012 to October 2013, more than 1,000 program applicants were randomly assigned to either the treatment or the control group. The impact study used data from a follow-up survey at 18 months after random assignment.

Prior to estimating program impacts, the research team published an analysis plan that organized and disciplined the number of statistical tests conducted so as to avoid the problem

of “multiple comparisons” in which a potentially large number of the tests could reach conventional levels of statistical significance by chance. To address this issue, the team established three categories of hypotheses (confirmatory, secondary, and exploratory) and publicly registered confirmatory and secondary outcomes prior to starting analyses.

## Executive Summary

Over the next ten years, the demand for workers in healthcare jobs is expected to grow quickly as the population grows and ages.<sup>1</sup> Successfully meeting the need for more healthcare workers is important to both the national economy and providing quality healthcare to people. This also creates opportunities for low-income adults to find entry-level employment and advance to higher-skilled jobs. Almost all jobs in healthcare require some training after high school. Policymakers, workforce development organizations, educators, and other key stakeholders are very interested in how to enable the match between the nation's need for a skilled workforce and low-income adults' need for employment.

### Bridge to Employment Program

This report offers early evidence of the implementation and impacts of one promising effort to meet the dual policy goals of increasing the supply of healthcare workers while creating opportunities for low-income adults. The **Bridge to Employment in the Healthcare Industry** program, developed by the **San Diego Workforce Partnership** (SDWP), used an Individual Training Account (ITA) model to help adults with low incomes, including Temporary Assistance for Needy Families (TANF) recipients, pay for healthcare training in San Diego County, California. Community-based partners also provided case management, supportive services, and employment services.

In 2010, the Department of Health and Human Services Administration for Children and Families (ACF) awarded SDWP a grant from the **Health Profession Opportunity Grants (HPOG)** program to design and operate Bridge to Employment. SDWP contracted with three "navigator" organizations to operate the program throughout San Diego County: Comprehensive Training Services (CTS), Metropolitan Area Advisory Committee (MAAC), and North County Lifeline (Lifeline). Each organization served a different area of San Diego County.

Bridge to Employment combined several key components.

- **Formal and informal assessments** helped navigator staff determine whether applicants were eligible for the training program they wanted to enroll in, as well as helped staff give advice to students after they enrolled.
- **Navigation and case management services** helped students choose healthcare training programs within three occupational groups and address their barriers to participation.

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<sup>1</sup> <http://www.bls.gov/news.release/ecopro.nr0.htm>.

- **Individual Training Accounts (ITAs)** covered up to \$7,000 (\$10,000 for some occupations) of the cost of training.<sup>2</sup>
- **Supportive services** covered up to \$1,000 in expenses for transportation, child care, temporary housing, and other services that facilitated participants' enrollment in the program.
- **Employment services** helped participants find employment after training. Services included work readiness training, resume development, and help preparing for interviews. In addition, the program was expected to help participants get work experience while in training.

This report summarizes the findings of the first rigorous study to compare a group with access to an ITA combined with assistance and support services (treatment group) to a group without the benefit and services (control group).

In their first 18 months after enrollment in the study, treatment group members were significantly more likely than control group members to:

- participate in healthcare training;
- receive a credential; and
- work in a healthcare job.

## Pathways for Advancing Careers and Education (PACE) Evaluation

Abt Associates and its partners are evaluating Bridge to Employment as part of the **Pathways for Advancing Careers and Education (PACE)** evaluation. Funded by ACF, PACE is an evaluation of nine programs that include key features of a “career pathways framework.”

The **career pathways framework** guides the development and operation of programs aiming to improve the occupational skills of low-income adults, primarily older nontraditional students, by increasing their entry into, persistence in, and completion of postsecondary training. Central to accomplishing these outcomes, the framework describes strategies for overcoming barriers to education and training that these students can face. Key features of programs within this framework include having a series of well-defined training steps, promising instructional approaches targeted to adult learners, services to address academic and non-academic barriers to program enrollment and completion, and connections to employment.

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<sup>2</sup> Individual Training Account vouchers were used to reimburse training providers that accepted them. The community college system did not accept the vouchers. Instead, participants who were approved to attend a community college program paid for the training themselves and were reimbursed for its costs by the Bridge to Employment program.

The Bridge to Employment evaluation has two parts: An **implementation study** examines the design and operation of the program as well as participation patterns of students enrolled. An **impact study** uses a random assignment research design to determine the effects on education/training, employment, and other outcomes for study participants with access to the Bridge to Employment program (treatment group) compared with study participants without access (control group). Using data from baseline surveys, a follow-up survey, program records, and site visits, this report provides the results from the implementation study and it describes the early impacts of the program (18 months after random assignment) on training and employment.<sup>3</sup>

## Key Findings

This summary documents findings from the implementation study as well as short-term findings (18 months after randomization) from the impact study.

### Implementation Study

- *Participants in Bridge to Employment met with navigators soon after enrolling in the program to outline their goals and begin researching training providers.*

During the first meeting with the study's treatment group members, navigators reviewed the program requirements and worked with the enrollees to develop an Individual Education Plan (IEP) that described their employment and educational goals, as well as skills and barriers that could enable and prevent them from reaching their goals. Navigators discussed the next step, which was for enrollees to investigate at least two training providers and then synthesize the information in a "research packet," which outlined the training costs, the eligibility requirements, the hours of training, and the certificate that would be obtained at completion. Some enrollees were fairly certain what occupation they wanted to pursue and completed the task quickly; for others, it took several meetings.

- *Navigators provided program participants limited guidance on which training providers they should research and select.*

Once treatment group members outlined their educational and employment goals in the IEP, they had to complete the research packet. Though the program asked navigators to "guide" the participants, giving them with information about programs available at healthcare training providers in the community, they were not to "steer" participants to particular ones. Navigators

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<sup>3</sup> See the PACE analysis plan. Abt Associates, Inc. (2014). The Bridge to Employment analysis plan was also posted to the What Works Clearinghouse (WWC) online registry of randomized control trials (RCT) on May 20, 2016, as well as the Open Science Framework site. In September 2016, under the terms of a grant from the Institute of Educational Sciences, the RCT registry information was removed from the WWC website and transferred to the Society for Research on Educational Effectiveness (SREE). SREE plans to re-launch the registry in late 2017, at which time the analysis plan will be available in a searchable online database.

shared pamphlets and websites where participants could research programs on their own. None of the navigator organizations provided staff with formal training on guiding participants on career pathways, and most learned what they knew on the job. Additionally, many participants had been referred to the program from particular private for-profit training institutions for financial assistance and already had decided they were interested in particular training programs at those institutions. One navigator organization estimated that 40 to 50 percent of the participants it worked with had been referred by a training provider.

- ***After Bridge to Employment participants enrolled in training, the navigators checked in with them at least monthly to get updates on their progress and offer support services.***

The navigators were required to check in with treatment group members monthly by phone or email. Participants who needed monthly bus passes or other supportive services had to meet with navigators in person. During the check-ins, staff got updates on the students' progress in training and identified supports needed to lessen barriers to academic success. Two of the three navigator organizations experienced significant staff turnover during the study period, which may have impeded their ability to closely monitor and keep in contact with participants monthly during periods when they were not fully staffed.

- ***Most Bridge to Employment participants chose to enroll in training offered by private for-profit schools.***

Navigator staff provided several explanations for the popularity of private for-profit schools among the treatment group members with whom they worked. First, students could generally find a program at a private school that they could enroll in soon after enrolling in the program, rather than waiting for the next semester to start at a community college or a slot to open up if the college program had a waiting list. Second, students could generally complete the training programs at the private institutions in less time, which was appealing to those who could not stay out of the workforce for long. Third, these schools were good at marketing and were often able to attract applicants whom they then referred to Bridge to Employment for financial assistance. Community college programs did not make referrals to the program. Finally, private schools accepted ITA vouchers but community colleges did not; participants interested in attending a community college paid for their training out-of-pocket and then requested reimbursement from the program.

- ***Midway through the PACE study, the Bridge to Employment program encouraged its participants to pursue concurrently a second (“bundled”) training or subsequent training that would allow them to earn multiple certifications and help them find employment.***

Most treatment group members enrolled in entry-level healthcare programs for occupations such as certified nursing assistant (CNA), phlebotomist, and medical assistant. After the first two years, SDWP and Bridge to Employment management found the labor market for these lower-level healthcare jobs to be saturated and program completers faced challenges finding

good-paying jobs in their field of study. In 2013, the program staff began encouraging students to use the ITA funding to pursue a second (“bundled”) training program at the same time or pursue additional training after completing one program if doing so would make them more marketable. Common training bundles included medical assistant/phlebotomy or CNA/home health aide or CNA/home health aide/electrocardiogram technician. Navigators could approve funding that exceeded the ITA cap of \$7,000 for a second training.

- ***SDWP required that all navigators provide work readiness training to Bridge to Employment participants, though the organizations took different approaches to delivering the services.***

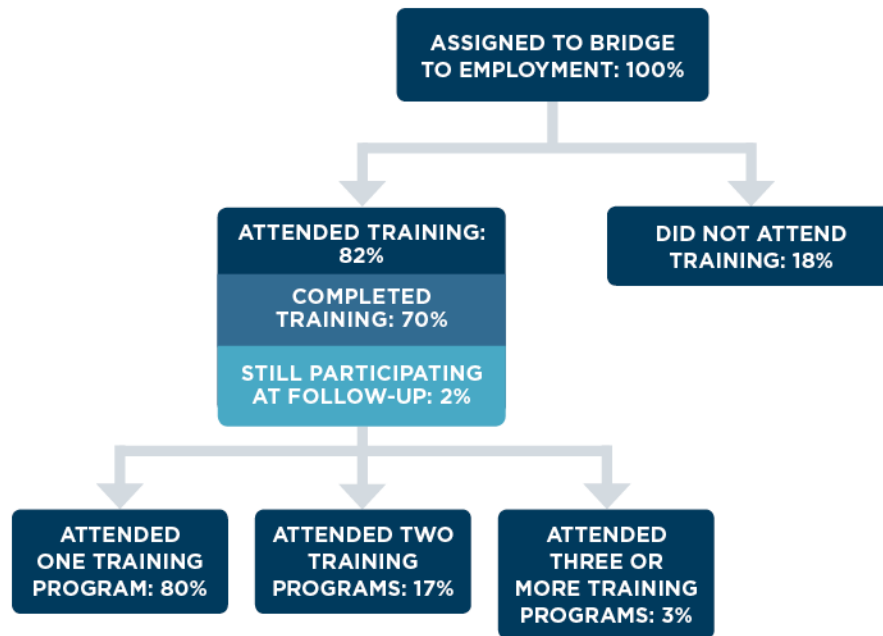
Work readiness training covered a combination of topics such as resume and cover letter writing, interview practice, job search skills, labor market research, soft skills, and job retention. How the navigator organizations delivered work readiness training varied substantially. MAAC required that treatment group members complete a three-week work readiness workshop before starting training, whereas CTS and Lifeline were more flexible in their workshop schedules. All three organizations also provided one-on-one job search assistance. In year four, each organization hired a job developer who helped generate job leads for participants and conducted at least one “employer social” each quarter, where employers were invited to discuss job openings and meet with training program completers.

- ***More than 80 percent of program participants enrolled in a healthcare training program; most participated in just one program.***

Exhibit ES-1 shows the proportion of all treatment group members who achieved key educational milestones in the program, based upon HPOG administrative records. On average, 82 percent of treatment group members participated in at least one healthcare training program. The remaining 18 percent did not participate in any HPOG-funded training after they were randomly assigned to the treatment group. (From other analysis not shown, most did attend at least one career counseling session, which might include the work readiness workshops or one-on-one job search assistance.) By the end of the 18-month follow-up period, 70 percent of treatment group members earned at least one credential and two percent were still in their first training. Among those who attended training, most (80 percent) attended one training, 17 percent attended two trainings, and three percent attended more than two trainings.

Training tended to be short term. Participants in the treatment group spent 4.9 months in training, on average, and few were still enrolled in HPOG-funded training at the end of the 18-month follow-up period.

**Exhibit ES-1. Participation in and Completion of Education and Training among Treatment Group Members within an 18-Month Follow-Up Period**



Source: Administrative Records from HPOG PRS

- *Bridge to Employment participants were significantly more likely than the control group to participate in training.*

As shown in Exhibit ES-2, based upon follow-up survey data, the program produced a 17 percentage point difference between the groups in the receipt of any occupational training: 75 percent for the treatment group versus 58 percent for the control group. (The difference was 25 percentage points in healthcare training; 70 percent versus 45 percent.)<sup>4,5</sup>

- *Bridge to Employment influenced the type of institution that its participants attended; more opted to attend private for-profit schools.*

Also shown in Exhibit ES-2, the program increased attendance among treatment group members at private for-profit non-degree granting schools by 23 percentage points (34 percent compared with 11 percent of control group members) and increased attendance at adult high

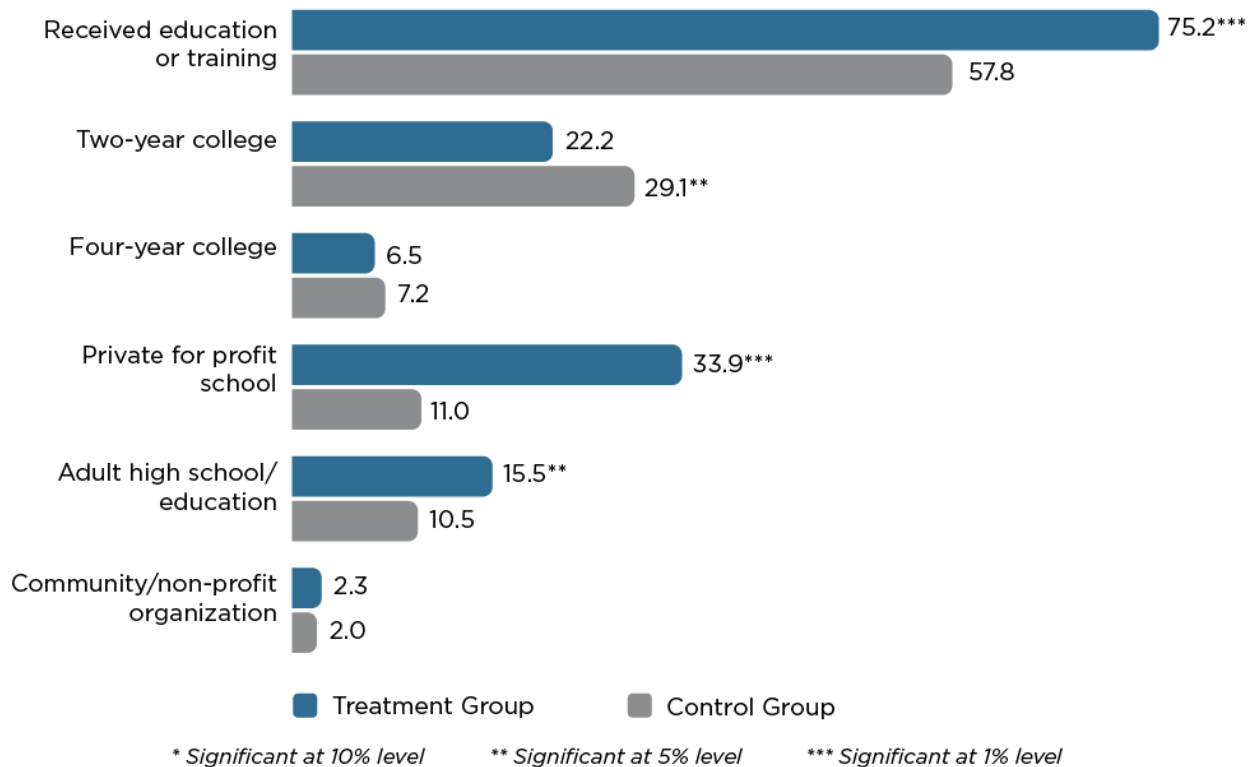
<sup>4</sup> These proportions represent the percentage of treatment and control group members who reported on the follow-up survey that they participated in an education/training program. For the treatment group, this self-reported value differs from Bridge to Employment program data, likely due to variation in the data source (e.g., self-reported measures are subject to recall error).

<sup>5</sup> Numbers may not sum to the total due to rounding.



schools by five percentage points (16 percent compared with 11 percent). This increase in training at such schools coincided with a decrease in training at two-year colleges (22 percent of treatment group members versus 29 percent of control group members). Because treatment group members received financial assistance from the program to attend the institution of their choice, control group members may have been more likely to attend the less expensive community college after learning they would not have access to financial assistance from the program. Thus, Bridge to Employment may have led some participants to substitute a private for-profit school education for a community college education.

**Exhibit ES-2. Receipt of Education or Training after Random Assignment, by Source**



Source: Abt Associates calculations based on PACE early follow-up survey.

- ***Bridge to Employment produced impacts on advising, employment services, and grant assistance.***

The program produced impacts of eight percentage points on receipt of career counseling (33 percent of treatment group members versus 24 percent of control group members), 14 percentage points on help arranging supports (25 percent versus 11 percent), and 17 percentage points on job search assistance receipt (36 percent versus 19 percent). Among those who received training, treatment group members were more likely to receive grant assistance than were control group members (62 percent versus 50 percent). Interestingly, control group members received loans at more than twice the rate of treatment group

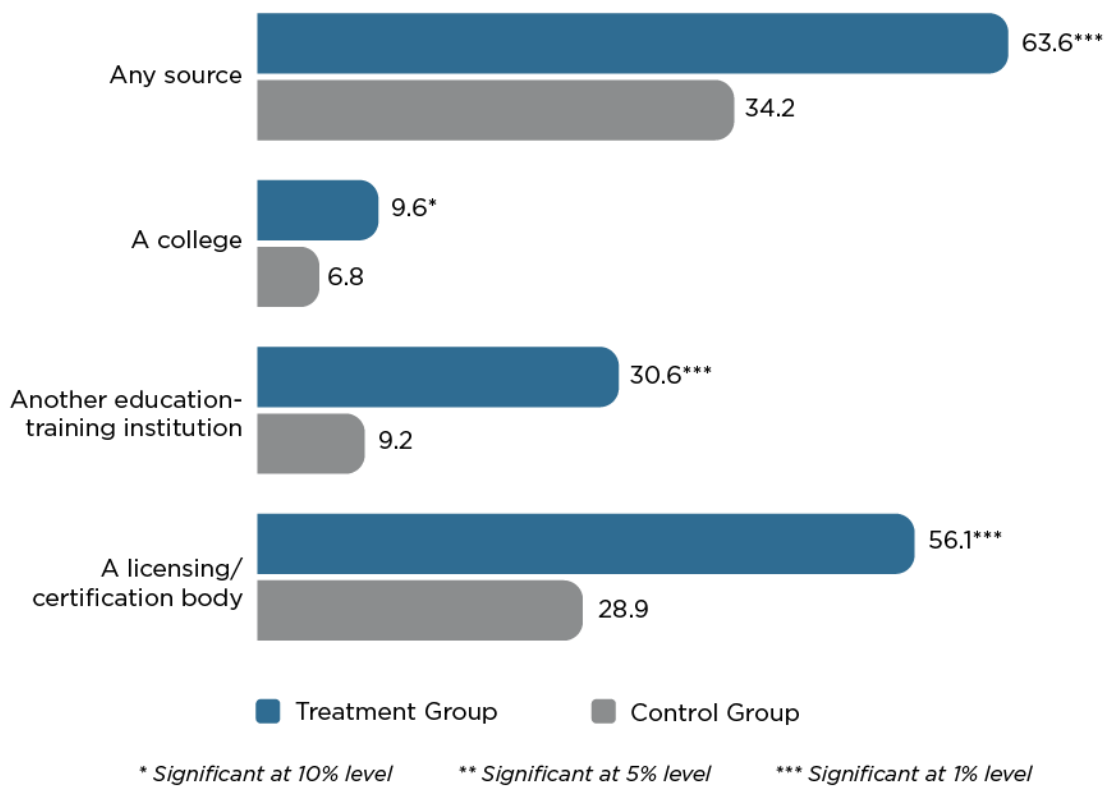
members (26 percent versus 12 percent). This suggests that one impact of the grant assistance provided by the Bridge to Employment program may have been reduced student loan debt.

**Impact Study**

- *Bridge to Employment increased the percentage of study participants who received a credential. The program also increased their hours of occupational training.*

As Exhibit ES-3 shows, based on the follow-up survey, the program had a 29-percentage point impact on receipt of any credential (64 percent of treatment group members versus 34 percent of control group members). Treatment group members were more likely than control group members to receive their credential from any type of institution (i.e., college, training institution, or a licensing/certification body).

**Exhibit ES-3. Receipt of Credential, by Source**



Source: Abt Associates calculations based on PACE early follow-up survey.

Over an 18-month period, treatment group members attended 380 hours of occupational training compared with 279 hours for the control group, a 36 percent increase. The increase in hours was driven primarily by the increase in the number of students in the treatment group who participated in training.

Interestingly, about one-quarter of both treatment and control group members were still in a training program at the time of the follow-up survey (23 percent of treatment group members

and 28 percent of control group members). Because program records showed that almost all treatment group members had exited the program, these students were likely pursuing training on their own, without the support of Bridge to Employment.

- ***Bridge to Employment produced positive impacts on employment.***

The program achieved impacts on two of the study's three employment outcomes. It increased the percentage of treatment group members who were working in a job requiring at least mid-level skills by 10 percentage points (25 percent of treatment group members compared with 15 percent of control group members).<sup>6</sup> It also increased the percentage of treatment group members who were working in a healthcare occupation by nine percentage points (26 percent of treatment group members compared with 16 percent of control group members). The program did not increase the percentage of treatment group members who were working in a job paying at least \$12 per hour. Impacts on employment and earnings will be the focus of the next report, as 18 months is not enough time to see the full impact on employment outcomes.

## Next Steps in the Bridge to Employment Evaluation

This report on Bridge to Employment focuses on the implementation of the program and its early effects on its enrollees' education/training.

**At 18 months after randomization.** At 18 months after study participants were randomly assigned into the program (treatment) or not (control), the key program goal examined was **increased receipt of credentials**, with limited analysis of employment and earnings. This relative focus on participation reflects expectations that many participants would still be enrolled in training at the end of 18 months. This proved to be the case, as the data show 23 percent of treatment group members and 28 percent of control group members were still in a training program at the time of the follow-up survey. However, treatment group members were more likely to have received a credential than control group members were within the first 18 months (64 percent versus 34 percent).

**At 36 months after randomization.** The next Bridge to Employment report will cover a 36-month follow-up period for the full research sample. It will take a more systematic look at impacts on employment for a period when such impacts can more likely be expected to emerge. The report will examine **employment outcomes**, such as average rate of employment and average earnings over successive follow-up quarters, and **job characteristics**, such as occupation, hourly wage, receipt of benefits, and career progress. Thus, it will begin to answer whether the occupational training gains that program participants achieved after 18 months will translate into economic gains in the workplace in the longer term.

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<sup>6</sup> Numbers may not sum to the total due to rounding.

**At 72 months after randomization.** Estimation of the long-term effects of PACE programs at approximately 72 months after random assignment will be the subject of the Career Pathways Long-term Outcomes Study.

## 1. Introduction

The federal government projects that over the next decade, the fastest-growing occupations are in healthcare (Bureau of Labor Statistics 2015). Successfully meeting the need for more healthcare workers is important both to the national economy and to the provision of quality healthcare to the population. This demand also creates opportunities for low-income adults to gain entry-level employment, as well as advancement to higher-skilled jobs. How to facilitate the match between the nation's need for a skilled workforce and low-income adults' need for employment is a topic of great interest to policymakers, workforce development organizations, educators, and other key stakeholders.

The **Bridge to Employment in the Healthcare Industry** program, developed by the **San Diego Workforce Partnership** (SDWP), used an Individual Training Account (ITA) model to help adults with low incomes, including Temporary Assistance for Needy Families (TANF) recipients, pay for healthcare training in San Diego County, California. The program combined this benefit with case management, supportive services, and employment services provided by community-based partners.

This report summarizes the findings of the first rigorous study to compare a group with access to an ITA combined with robust assistance and support services to a group without those benefits and services.

Almost all jobs in healthcare require some level of postsecondary education or training. This requirement can range from modest amounts of training (weeks) for entry-level jobs to substantial training (multi-year) for higher-skilled jobs. Research indicates many low-income, low-skilled adults face considerable barriers to completing even short-term training for entry-level jobs. Many are “nontraditional” students—that is, older, often parents, lacking adequate basic academic skills, and with few economic resources (NCES 2016). Often they enroll in college to obtain occupational certifications rather than academic degrees.

Research further shows that on average, nontraditional students fare poorly in postsecondary settings (Visher et al. 2008; Cooper 2010; Goldrick-Rab and Sorenson 2010). The Bridge to Employment program developers hypothesized that in addition to training, TANF recipients and other low-income adults need more guidance and wraparound services to successfully transition off public assistance benefits. One review of research concluded that most TANF recipients have at least one barrier to employment, and many have multiple barriers, including health issues and disability, substance abuse, criminal records, domestic violence, limited education, and caring for disabled children (Bloom et al. 2011). These barriers can also interfere with their participating in and completing training programs. Although research has documented these barriers to success, it provides less evidence about how to overcome them.

To increase knowledge about how to improve postsecondary outcomes for such a population, the **Health Profession Opportunity Grants (HPOG)** demonstration provided low-income individuals with opportunities for education, training, and career advancement in healthcare occupations to address workforce needs.<sup>7</sup> State, local, and tribal organizations such as community colleges and workforce agencies were eligible to receive these grants. Grantees could use funds to provide financial assistance, case management, and other supportive services to low-income adults to train them for healthcare jobs in demand in the local economy. The Administration for Children and Families (ACF) within the U.S. Department of Health and Human Services (HHS) administers the HPOG program.

In 2010, ACF awarded SDWP—the local Workforce Investment Board designated by the City and County of San Diego—a HPOG grant to design, launch, and operate Bridge to Employment in the Healthcare Industry. SDWP contracted with three community-based partners (“navigator” organizations) to operate the program throughout San Diego County: Comprehensive Training Services (CTS), Metropolitan Area Advisory Committee (MAAC), and North County Lifeline (Lifeline). Each organization was responsible for serving a different geographic area of San Diego County.

Bridge to Employment brought together several key components.

- **Formal and informal assessments** conducted during the study’s eligibility phase provided staff with information used to determine whether applicants were eligible for the program, as well as help staff provide guidance to those participants who enrolled in the program.
- **Navigation and case management services** helped enrolled participants select healthcare training programs within three healthcare-related occupational groups (patient care, technical, or administrative) and address their barriers to participation.
- **Individual Training Accounts (ITAs)** covered up to \$7,000 (\$10,000 for selected occupations) of the cost of training.<sup>8</sup>
- **Supportive services** covered up to \$1,000 for expenses for transportation, child care, temporary housing, and other services that facilitated participants’ enrollment in program activities.

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<sup>7</sup> HPOG was authorized by the Affordable Care Act.

<sup>8</sup> The program gave participants ITA vouchers of a set dollar value to cover tuition and other educational expenses at training providers that accepted the vouchers. The Bridge to Employment program reimbursed the provider for the value of the voucher. The community college system did not accept the vouchers. Instead, program participants who were approved to attend a community college paid for the training themselves, and Bridge to Employment reimbursed them later.

- **Employment services** helped program completers obtain post-training employment. Services included work readiness training, resume development, interview preparation assistance, and help finding jobs.

Abt Associates and its partners are evaluating Bridge to Employment as part of the **Pathways for Advancing Careers and Education (PACE) evaluation** of ACF-funded career pathways programs.<sup>9</sup> The evaluation of the program includes both an implementation study to examine its design and operation and an impact study that relies on a random assignment research design to estimate the impacts of access to Bridge to Employment on its students' education/training, employment, and other outcomes.

This report describes program implementation and early impact findings on participant outcomes within an approximately 18-month follow-up period.<sup>10</sup> This chapter describes the PACE evaluation, summarizes findings from the research literature regarding the program components that Bridge to Employment implemented, and provides a roadmap to the rest of the report.

## 1.1. Pathways for Advancing Careers and Education (PACE) Evaluation

Funded by ACF, the PACE evaluation is a 10-year study of nine programs that include key features of a “career pathways framework.” Initiated in 2007, PACE is the first large-scale, multi-site experimental evaluation of career pathways programs.

The career pathways framework guides the development and operation of programs that aim to improve the occupational skills of low-income adults, primarily older nontraditional students, by increasing their entry into, persistence in, and completion of postsecondary training. Central to accomplishing these improved outcomes, the framework articulates signature strategies for overcoming the barriers that nontraditional, occupational students often

### Programs in PACE

- Bridge to Employment in the Healthcare Industry, at San Diego Workforce Partnership, San Diego, CA
- Carreras en Salud, at Instituto del Progreso Latino, Chicago, IL
- Health Careers for All, at Workforce Development Council of Seattle-King County, Seattle, WA
- Pathways to Healthcare, at Pima Community College, Tucson, AZ
- Patient Care Pathways Program, at Madison College, Madison, WI
- Valley Initiative for Development and Advancement (VIDA), at Lower Rio Grande Valley, TX
- Washington Integrated Basic Education and Skills Training (I-BEST) program, at three colleges (Bellingham Technical College, Whatcom Community College, and Everett Community College) in Washington State
- Workforce Training Academy Connect, at Des Moines Area Community College, Des Moines, IA
- Year Up (in Atlanta, Bay Area, Boston, Chicago, National Capital Region, New York City, Providence, Seattle)

<sup>9</sup> PACE-related documents are available on ACF's Office of Planning, Research and Evaluation website (<http://www.acf.hhs.gov/opre/research/project/pathways-for-advancing-careers-and-education>). Documents are also available on [www.career-pathways.org](http://www.career-pathways.org).

<sup>10</sup> On average, participants completed the 15-month follow-up survey about 18-19 months after random assignment.

face. For example, key features of programs within this career pathways framework include having a series of well-defined training steps, promising instructional approaches, supportive services, and connections to employment (Fein 2012).

Programs consistent with the career pathways framework typically have multiple components, as illustrated by the Bridge to Employment program. The multi-component nature of such programs reflects the observation that nontraditional students face multiple barriers to success and that addressing only a single one is unlikely to substantially improve their educational or employment prospects. The career pathways framework is flexible, however, and not a specific program model. Thus, which components a local program adopts and how it implements them can vary greatly.

Reflecting this diversity, each of the nine programs in the PACE evaluation represents a different program model. All share some program components that are part of the career pathways framework, but each also has distinct and unique elements, reflecting the target populations, occupational training offered, and industries of focus. Because of this variation, PACE evaluates and reports findings for each evaluated program individually.

The central goal of the PACE evaluation is to determine the effectiveness of each of the nine programs using a common evaluation design and conceptual framework (**impact study**). The most critical element of the evaluation design is **random assignment** of eligible applicants either to a **treatment group** that can access the career pathways treatment or to a **control group** that cannot. Random assignment ensures that the study's treatment and control groups will be equivalent in their observed and unobserved characteristics, and that any systematic differences in their subsequent outcomes can be attributed to the treatment group having access to program services (these differences being the program's "impacts"). Systematic differences in outcomes due to the characteristics of individual members in each group can be ruled out.

Consistent with this career pathways framework and the career pathways theory of change (described in Chapter 2) guiding the PACE evaluation, the key outcomes for which the PACE study estimates effects are in the **educational and employment areas**, although the study also estimates effects in other areas such as family well-being.

The PACE implementation and early impact program reports analyze outcomes over approximately **18 months after random assignment**. The impact analyses rely primarily on surveys of treatment group and control group members. Future reports will analyze outcomes



three years and six years after random assignment.<sup>11</sup> These latter two sets of reports will also include benefit-cost studies for some of the nine PACE programs.

As a condition of receiving HPOG funds, ACF required that grantees participate in any ACF-sponsored evaluation if selected to do so. In addition, ACF added additional evaluation funding to PACE to include at least three HPOG grantee programs in the evaluation. ACF and the research team selected Bridge to Employment as one of these three because the program planned to use its HPOG grant to implement promising features of the career pathways framework, and it was of sufficient scale to generate a research sample large enough to support a standalone impact study.<sup>12</sup>

## 1.2. Research on Key Components of the Bridge to Employment Program

Bridge to Employment paid for program participants' training through ITAs and provided advising, counseling, and supportive services. It used a "consumer choice" model, in which participants could choose any accredited healthcare training program in San Diego County. Though participants were free to choose which program to enroll in, navigator staff were expected to help participants make an informed choice about which training courses would help them enter a new occupation and succeed.

ITAs are vouchers that can be used to pay for training at eligible training providers. This approach has become the standard way to fund training under the Workforce Innovation and Opportunity Act (WIOA). Under WIOA, the local workforce agency typically gives customers some choice about how they can use the voucher, though the agency limits the type of training that can be pursued, which training providers are eligible to receive the ITAs, and the dollar amount available for training.

**Financial Assistance.** As noted, to support its participants in training, the program provided financial support in the form of ITAs and support services to pay for transportation, work-related expenses, and education-related expenses. A large body of evidence indicates that insufficient resources are a barrier to entry and completion of education and training for low-income students and that financial assistance can increase postsecondary attendance and persistence (Deming and Dynarski 2010; Dynarski and Scott-Clayton 2013).

**Navigation Support.** Bridge to Employment provided navigation and case management support. Several rigorous studies have demonstrated that augmenting existing advising services

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<sup>11</sup> These reports will be part of the Career Pathways Intermediate Outcomes and the Career Pathways Long-Term Outcomes Studies, respectively and posted on the following websites:  
<https://www.acf.hhs.gov/opre/research/project/pathways-for-advancing-careers-and-education>  
<http://www.career-pathways.org/>

<sup>12</sup> The criterion for "promising" included positive empirical evidence of effectiveness for key components of the program or systematic, well-developed approaches to overcoming identified barriers to student success.

with more-intensive advising, sometimes combined with other services, can lead to greater persistence in education, although sometimes only for the short term (Bettinger and Baker 2011; Scrivener and Weiss 2009).

One evaluation funded by the U.S. Department of Labor (DOL) compared three approaches to providing ITAs that varied based on the level of customer choice and the ITA cap. Overall, the evaluation (Perez-Johnson et al. 2011) found that participants who received more-structured guidance and higher-valued ITAs were more likely to complete their training, to earn a credential in the field of their training, and to be employed in the occupation for which they trained compared with those who received less-structured guidance and less ITA funds. This suggests that more-structured navigation has positive effects over assistance that is less directive, though the higher ITA cap may have contributed to the better outcomes.

Unlike the DOL study described above, the evaluation of the Bridge to Employment program is able to assess the effectiveness of providing the full range of services and financial support—ITAs, navigation and case management support, and job search assistance—relative to a control group who did not have access to these services, though they could seek out other, sometimes similar services available in the community.

### **1.3. Structure of this Report**

The organization of the remainder of this report is as follows:

- Chapter 2 presents the conceptual framework and research questions for the Bridge to Employment evaluation; details the evaluation design; describes the study sample; and summarizes the evaluation’s data sources.
- Chapter 3 describes the Bridge to Employment program’s context and administrative structure.
- Chapter 4 describes the implementation study findings, including training programs, participation in training and comparisons of participation in education/training across the treatment and control groups, academic and non-academic advising, employment supports, and financial assistance provided by the program.
- Chapter 5 presents the early impact study findings, focusing on educational attainment as reflected in two main impacts—credentials received over an 18-month follow-up period and hours of training. It also reports on a series of other career and life outcomes.
- Chapter 6 summarizes the key findings and discusses their implications for the longer-term studies.

The appendices (in a separate volume) provide additional details about baseline data (Appendix A); survey -based outcomes (Appendix B); and the approach to outliers (Appendix C).

## 2. PACE Evaluation Design and Data Sources

This chapter describes the larger PACE evaluation design and its application to Bridge to Employment. It begins with a discussion of the PACE career pathways theory of change and the research questions that the theory of change implies. It then briefly describes the evaluation design and analysis procedures for the impact study, including the random assignment process and the outcome of that process. A brief description of the implementation study analysis follows.<sup>13</sup> Finally, the chapter summarizes the main data sources for the implementation and impact studies.

### 2.1. Career Pathways Theory of Change

The career pathways theory of change guides both the implementation study (that is, it identifies which aspects of program services are expected to affect outcomes) and the impact study (that is, it identifies which outcomes the program is expected to affect). It also generates key hypotheses about the direction of expected effects that the impact evaluation will test for statistically significant change.<sup>14</sup> In addition, the theory of change implicitly assumes time horizons by which the program is expected to have effects, and thus the theory determines the key outcomes at any particular time of follow-up.

Exhibit 2-1 depicts the PACE career pathways theory of change, as applied to Bridge to Employment.<sup>15</sup> It shows how a program (inputs) is hypothesized to produce effects on intermediate outcomes, which in turn will lead to effects on main outcomes. Effects on intermediate outcomes are expected earlier than effects on main outcomes, but the exact timing depends on particular features of the program, such as the length of occupational training and what, if any, steps precede it. In addition, because effects on intermediate outcomes may persist over time, and because positive effects on main outcomes may amplify them, the study will also measure them at later points in time.

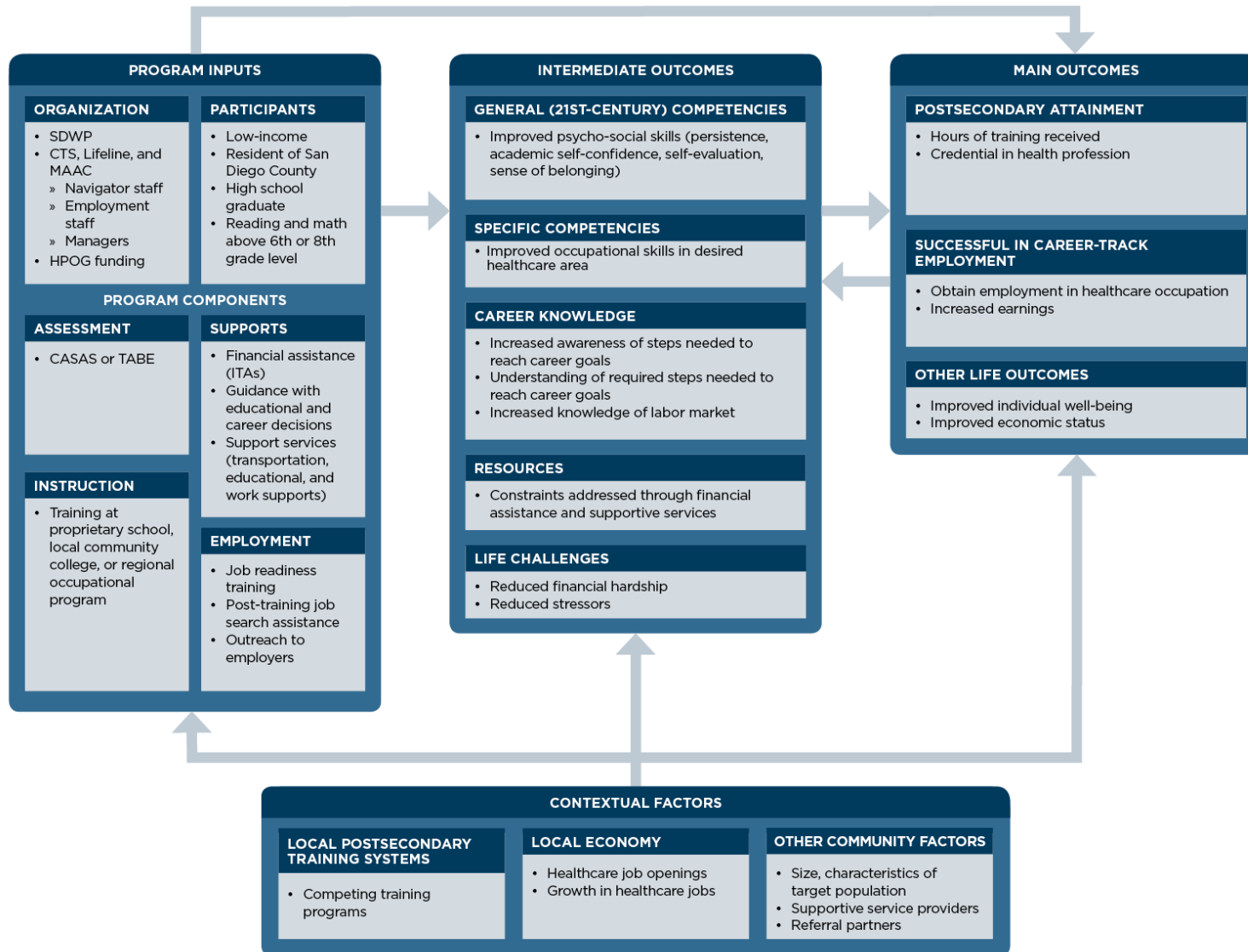
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<sup>13</sup> The research team developed a detailed evaluation design report for the PACE evaluation, including the evaluation of Bridge to Employment (Abt Associates, Inc. 2014).

<sup>14</sup> The implementation study describes the set of services that students in the treatment group experienced. In addition to descriptive statistics, it includes a small number of impact estimates that show the difference in services received between treatment and control group members.

<sup>15</sup> See Fein (2012) for an extended description of the framework.

Exhibit 2-1. Career Pathways Theory of Change for Bridge to Employment



As shown in Exhibit 2-1, starting in the box at the left, the career pathways theory of change begins with two types of **program inputs**:<sup>16</sup>

- **Organization.** Organizational inputs include the lead agencies (SDWP and the community-based navigator organizations that provide the services for Bridge to Employment), funding (HPOG), and staff (navigators, mentors, employment staff, and program leadership).
- **Participants.** This includes the characteristics of the target population. For Bridge to Employment, these are being a resident of San Diego County, having a household income below 200 percent of the Lower Living Standard Income Level, having an interest in a healthcare career, having a high school diploma or GED, and meeting minimum scores on assessments of reading and math proficiency.

This same box includes four kinds of **program components** that are expected to improve participant outcomes by overcoming specific barriers that are hypothesized to impede successful entry into and completion of occupational training:

- **Assessment.** For Bridge to Employment, the navigator organizations used either the Test of Adult Basic Education (TABE) or the Comprehensive Adult Student Assessment Systems (CASAS) to determine whether the participant was eligible for particular training programs.
- **Instruction.** Treatment and control group members could access the same training programs. The instruction varied based on the institution and healthcare area.
- **Supports.** For Bridge to Employment, these included financial assistance in the form of ITAs; transportation, child care, and work supports; and case management.
- **Employment.** For Bridge to Employment, these employment connections included workshops, one-on-one assistance with job search, and opportunities for program completers to meet with employers in the healthcare field.

The middle box shows the **intermediate outcomes**, where improvements are expected to lead to better main outcomes. These intermediate outcomes include:

- Improved psycho-social skills such as persistence and academic self-confidence.
- Attainment of occupation-specific skills; career knowledge.
- Reduced financial hardship.

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<sup>16</sup> Program inputs can include both components available only to treatment group members and components available to both treatment and control group members, because the interaction of the former with the latter can lead to impacts.

In the far right box, the **main outcomes** are the primary targets that career pathways programs seek to change:

- Increased postsecondary attainment, namely occupational training credentials.
- Successful employment, including obtaining employment in the healthcare industry, increasing earnings and job benefits, and career advancement.
- Improvements in other outcomes such as individual well-being.

Influencing expected effects are a number of **contextual factors**. These include:

- The types and number of postsecondary training systems in the local area.
- The local economy (in particular, healthcare jobs).
- Other community factors such as the size and characteristics of the target population and the number and nature of service providers.

## 2.2. Research Questions for the Evaluation of Bridge to Employment

The implementation study documents Bridge to Employment as implemented and captures participation patterns of treatment group members in training and other activities (see Chapter 4 for implementation findings). The impact study aims to measure the effectiveness of the program in improving students' intermediate and main outcomes (see Chapter 5 for findings).

### Implementation study research questions:

- What is the intended program model? What is its institutional and community context?
- What intervention was actually implemented? Did it deviate from plans or expectations?
- What were the treatment group's participation patterns and experiences with program services?
- What are the differences in services, including training, received by treatment and control group members?

### Impact evaluation research questions:

- What were the main effects of Bridge to Employment on:
  - Educational attainment, including credentials received?
  - Entry into career-track employment, higher-wage jobs, earnings, and perceptions of career progress?
  - Participant and family well-being, including income and material hardship?

- To what degree did the program affect intermediate outcomes in the theory of change, such as:
  - Confidence in career knowledge and access to career supports?
  - Psycho-social skills such as persistence, academic self-confidence, core self-evaluation, and social belonging at school?
  - Life stressors, such as financial hardship, life challenges, and perceived stress?

As mentioned, the program’s theory of change not only describes hypothesized causal connections, it also identifies time horizons over which they are expected to occur. The Bridge to Employment program emphasized short-term training, though encouraged participants to enroll in additional training if it would make them more marketable when they conducted their job search. For those who enrolled in one training program, most chose one that they could complete within 12 months. Thus, this early impact report focuses primarily on the first training that participants enrolled in and the credentials they earned as a result.

For this report, the primary data sources for addressing the research questions are a baseline survey, follow-up surveys of treatment and control group members initiated at approximately 15 months after random assignment, and the HPOG management information system. A more complete description of data sources is in the concluding section of this chapter.

Later PACE reports will focus more on employment outcomes and on other education/training outcomes resulting from activities that require a longer time to complete. In addition, continued measurement of such outcomes will be important, given that the career pathways framework implies that workers may alternate education/training and employment as they move along a pathway.

### 2.3. PACE Evaluation Design and Analysis

As mentioned in Chapter 1, the PACE evaluation uses a random assignment research design to estimate the impact of having access to the particular career pathways program on those students’ outcomes. The great benefit of such a design is that when properly implemented, it ensures that estimated effects reliably can be attributed to access to the program and not to unmeasured differences in characteristics or external circumstances between individual students *with* access (treatment group) and *without* access (control group) to the program.

However, maintaining the comparability of the treatment and control groups requires comparing *all* of those in the treatment group with *all* of those in the control group, regardless of whether group members actually enrolled in the program being evaluated (what researchers refer to as an “intent-to-treat” analysis). A critical implication of this is that the PACE evaluation estimates the impact of access to the *entire program* as opposed to the impact of access to the program’s specific *components*. The evaluation does so by comparing the entire control group

with the entire treatment group with access to the program, regardless of the treatment group's actual take-up of any particular program component or any component at all.

A second feature of the PACE impact study design is that both treatment and control group members can access education, training, and supportive services available in the community that are not exclusive to the program PACE is evaluating. The evaluation estimates its effect above and beyond what education, training and services were otherwise available elsewhere in the community during the study period, including those that the treatment group could access outside of the program being evaluated. For Bridge to Employment, both treatment and control group members could access the same occupational training programs offered in the San Diego County area. Thus, the control group's experiences represent what would have happened absent the program's key components—eligibility for ITAs, navigational assistance, and support services.

In summary, the PACE impact study assesses whether the existence of the multi-component career pathways program led to better outcomes for students who were offered the chance to participate in it, given what these students could have obtained *without* the program.<sup>17</sup>

### 2.3.1. Intake and Random Assignment Procedures

The research team worked closely with each program in the PACE evaluation to design and implement program intake and random assignment procedures. The steps in the procedures for Bridge to Employment specifically were as follows:

- **Recruitment.** Each navigator organization held regular, scheduled orientations to formally introduce the program to interested individuals. Each organization described program services, eligibility requirements, and how random assignment governed admission to the program. The navigators also conducted outreach and made presentations at local TANF offices, housing organizations, schools, and other agencies in the community that served low-income individuals.
- **Eligibility.** Prospective participants were required to meet the following conditions:
  - 18 years of age or older.
  - Receiving TANF assistance or having a low income (defined as having a household income below 200 percent of the Lower Living Standard Income Level, which for a household of three was \$35,428 in 2011).

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<sup>17</sup> Three technical appendices provide additional details about analysis methods. Appendix A describes data collected at baseline, gives further detail on baseline characteristics of treatment and control group members, and explains procedures for using these data to adjust for imbalances arising by chance during random assignment. Appendix B provides detail on survey-based outcome measures, adjustments for item non-response, and analyses of survey non-response. Finally, Appendix C documents the research team's approach to outliers.



- Able to provide proof of the right to work in the United States.
  - Possessing a GED or high school diploma.
  - Scored above a 6<sup>th</sup>- to 8<sup>th</sup>-grade level, depending on the organization, on either the TABE or the CASAS.<sup>18</sup>
- **Informed Consent.** At the intake appointment, after determining eligibility, program staff discussed the study, and administered the informed consent form. Prospective participants who refused to sign the informed consent form were not included in the study and were not eligible for Bridge to Employment.
  - **Baseline Data.** After signing the consent form, program participants completed the Basic Information Form (BIF) and the Self-Administered Questionnaire (SAQ). The BIF collected demographic and economic information. The SAQ measured a variety of attitudes, beliefs, and psycho-social dispositions, as well as more sensitive personal characteristics such as personal and family challenges.
  - **Random Assignment.** Following completion of the BIF and the SAQ, program staff used an online system to randomly assign the study participant to the treatment or control group. The random assignment ratio was 1:1, so that the treatment and control groups would each include approximately half of the research sample.
  - **Services According to Random Assignment Status.** Those assigned to the treatment group had access to Bridge to Employment benefits and services; those assigned to the control group could not access them but could access other similar services as available in the community.

Between July 2012 and October 2013, program staff randomly assigned 1,007 individuals; 507 to the treatment group and 500 to the control group. Exhibit 2-2 shows the members assigned to the control and treatment groups by navigator organization.

Bridge to Employment operated about two years before it entered the PACE study in July 2012 and continued enrolling participants into the PACE research sample through October 2013. The program ended in September 2015, when its HPOG grant ended.

**Exhibit 2-2. PACE Enrollment for Bridge to Employment, by Navigator Organization**

Navigator	Treatment Group Members	Control Group Members	Total
CTS	245	244	489
Lifeline	143	140	283
MAAC	119	116	235
<b>TOTAL</b>	<b>507</b>	<b>500</b>	<b>1,007</b>

<sup>18</sup> Navigator staff could make case-by-case exceptions if they judged that an individual with lower scores was likely to benefit from and succeed in the program.

### 2.3.2. Characteristics of the Study Sample

Exhibit 2-3 shows the percentage distributions of the treatment and control group members across a series of characteristics. The  $p$ -values in the last column test the hypotheses that there are no systematic differences between the groups for these characteristics.<sup>19</sup> As shown, random assignment produced treatment and control groups with no significant differences in observed baseline characteristics, with the exception of the percentage reporting financial hardship (treatment group members were less likely to report financial hardship compared with the control group). This difference is what would be expected to occur by chance and does not indicate systematic bias in treatment group assignment.

Exhibit 2-3 also shows the extent to which the composition of the study sample aligned with the eligibility criteria. Sample members had low incomes, with more than 80 percent having incomes less than \$30,000. Almost half of the sample members received benefits from the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) or from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and about half reported experiencing financial hardship in the past year.

Though the program gave priority to applicants receiving TANF assistance, Exhibit 2.3 shows that only about one-fifth of the sample was receiving public assistance or welfare benefits at program entry. During the first (planning) year of the PACE evaluation (before random assignment began), SDWP reported that about 50 percent of its participants were TANF recipients. Program staff attributed the reduction in referrals from TANF to changes in staffing at the TANF welfare-to-work contractor organizations, but they also speculated that the random assignment process reduced the interest of some TANF staff in the program, contributing to fewer referrals.

In addition to having low incomes, the study participants' other characteristics reflected the non-traditional student population that is typical of a program in the career pathways framework. Participants were older than traditional college students. About seven in 10 were age 25 or older, and more than one-third were age 35 or older. For a low-income population, a substantial proportion of participants were relatively well educated, with about 40 percent having one year or more of college. Most were non-White students; about half were Hispanic and about a fifth were Black, non-Hispanic. More than 80 percent were female reflecting the focus on healthcare occupations, which are predominantly female at the entry level.<sup>20</sup>

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<sup>19</sup> The  $p$ -value from chi-squared tests indicates the likelihood that the observed value or a larger value would occur if there was no difference between the two samples. For example, a  $p$ -value of .32 means that even if the characteristics of the members in the treatment and control groups were identical, the observed difference or a larger difference would occur 32 percent of the time.

<sup>20</sup> From the 2015 Current Population Survey, about 88 percent of healthcare support workers were female (<http://www.bls.gov/cps/cpsaat11.htm>).

**Exhibit 2-3. Selected Characteristics of the Bridge to Employment Study Sample**

Characteristic	All Study Participants	Treatment Group	Control Group	p-Value
Age				.252
20 or under	12.3%	10.5%	14.2%	
21 to 24	20.0%	19.3%	20.6%	
25 to 34	32.3%	33.5%	31.0%	
35 or older	35.5%	36.7%	34.2%	
Sex				.689
Female	83.7%	83.2%	84.2%	
Male	16.3%	16.8%	15.8%	
Race/Ethnicity				.757
Hispanic	46.5%	46.5%	46.5%	
Black Non-Hispanic	21.6%	22.1%	21.1%	
White Non-Hispanic	19.5%	18.1%	20.8%	
Other Non-Hispanic	15.0%	15.3%	14.7%	
Current Education				.208
Less Than a High School Degree	3.6%	4.8%	2.4%	
High School or Equivalent	36.7%	34.4%	39.1%	
Less Than 1 Year of College	19.4%	20.0%	18.7%	
1 or More Years of College	23.3%	24.2%	22.4%	
Associates Degree or Higher	17.0%	16.6%	17.3%	
Income				.433
Less than \$15,000	53.1%	51.0%	55.2%	
\$15,000-\$29,999	29.2%	30.1%	28.3%	
\$30,000 or More	17.7%	18.9%	16.5%	
Mean	\$17,319	\$17,510	\$17,124	.714
Public Assistance/Hardship in Past 12 Months				
Received WIC or SNAP	47.6%	46.1%	49.2%	.346
Received Public Assistance or Welfare	19.9%	21.1%	18.7%	.369
Reported Financial Hardship	53.8%	50.7%	57.1%	.056
Current Work Hours				.850
0	61.9%	63.3%	60.6%	
1 to 19	10.4%	9.8%	10.9%	
20 to 34	16.1%	15.3%	17.0%	
35 or more	11.6%	11.7%	11.5%	
Expected Work Hours in Next Few Months				.959
0	24.4%	23.6%	25.0%	
1 to 19	9.2%	9.5%	8.9%	
20 to 34	29.7%	29.7%	29.6%	
35 or more	36.7%	37.1%	36.5%	

SOURCE: PACE Basic Information Form.

SNAP is Supplemental Nutrition Assistance Program. WIC is Special Supplemental Nutrition Program for Women, Infants, and Children.

NOTE: There are no significant differences at the  $p=.10$  level. Appendix A provides a fuller set of baseline characteristics, also confirming that random assignment generated well-balanced treatment and control groups. Some percentages for characteristics do not add up to 100.0 percent due to rounding; the category Public Assistance/Hardship in Past 12 Months does not because the categories are not mutually exclusive nor exhaustive. Appendix B presents additional information on variable construction for baseline measures and the follow-up survey.

### 2.3.3. Analysis Plan for the Impact Study

Prior to estimating program impacts, the research team published an analysis plan specifying key hypotheses and outcome measures.<sup>21</sup> The team subsequently assessed data quality, refined the plan, and publicly registered it on the What Works Clearinghouse<sup>22</sup> and the Open Science Framework<sup>23</sup> websites. The purpose of the analysis plan and registration was to guide the work of the research team and publicly commit to particular hypotheses and an estimation approach that aligns with ACF’s commitment to promote rigor, relevance, transparency, independence, and ethics in the conduct of evaluations.<sup>24</sup>

#### Hypothesis Testing

An essential principle in the PACE analysis plan is to organize and discipline the number of statistical tests conducted. Like most social policy evaluations, the nine PACE studies target an array of different outcomes. If the evaluation did not adjust in some way for multiple hypothesis tests, a potentially large number of the tests would reach conventional levels of statistical significance by chance, even if there were no effect on any outcome. This is known as the problem of “multiple comparisons.” To address this issue, the study team established three categories of hypotheses: confirmatory, secondary, and exploratory:

- **Confirmatory tests** involve outcomes most critical to judging whether the program seems to be on track—that is, producing the results expected at a given follow-up duration. Given the relatively small sample sizes in the PACE studies, they generally limit such tests to one per program in the early impact report (at 18 months after randomization) and two tests in each subsequent report (at approximately three and six years after randomization). Confirmatory outcomes are selected under the “main” category in the program’s theory of change (see Exhibit 2-1).
- **Secondary hypotheses** involve a set of additional indicators consistent with expected effects within the period covered by the study report. Each confirmatory and secondary hypothesis has a hypothesized direction of change, an increase or decrease in the outcome. Therefore, the research team tests each confirmatory and secondary hypothesis for significance only in the specified direction, ignoring possible effects in the other, by applying one-tailed tests of statistical significance.

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<sup>21</sup> See Abt Associates (2015).

<sup>22</sup> The analysis plan was posted to the What Works Clearinghouse (WWC) online registry of randomized control trials (RCT) on May 20, 2016. In September of 2016, under the terms of a grant from the Institute of Educational Sciences, the RCT registry information was removed from the WWC website and transferred to the Society for Research on Educational Effectiveness (SREE). SREE plans to re-launch the registry in late 2017, at which time the analysis plan will be available in a searchable online database.

<sup>23</sup> <https://osf.io/cfuyj/>

<sup>24</sup> See <https://www.acf.hhs.gov/opre/resource/acf-evaluation-policy>.

- **Exploratory hypotheses** cover an additional set of possible effects whose direction and timing are less certain. Accordingly, the team is applying two-tailed tests to these hypotheses.

Chapter 5 identifies the specific hypotheses in each category tested for Bridge to Employment.

### Impact Estimation

Random assignment ensures that on average, samples of treatment and control group members will have similar characteristics at the outset and that measured differences in subsequent outcomes provide unbiased estimates of program impacts. To address any effects on point estimates of chance differences arising from random assignment, analysts typically estimate impacts using a procedure that compensates for chance differences in measured baseline characteristics. Such procedures also help to increase the precision of estimates.

The approach applied in PACE involves, first, estimating a statistical model relating each outcome to baseline variables for the control group sample. Next, the procedure applies this model to calculate predicted values for each treatment and control group member. In the last step, the approach calculates average differences between actual and predicted values in both groups and differences the two averages to provide the impact estimate. Appendix B provides a detailed description of this method.<sup>25</sup>

The team estimated this approach both for continuous outcomes (e.g., total credits earned) and for binary outcomes (e.g., yes/no questions). For survey-reported outcomes, weights were used to average outcomes. Additional details can be found in the technical appendices.

Formally, estimation uses the following equation:

$$\hat{\delta} = \frac{1}{n_T} \sum_i T_i (Y_i - \hat{Y}_i) - \frac{1}{n_C} \sum_i (1 - T_i) (Y_i - \hat{Y}_i),$$

where  $\hat{\delta}$  is the estimated impact of being in the treatment group (whether or not the person attended the program or used any of the offered services);  $Y$  is the observed outcome of interest (e.g., credits);  $\hat{Y}$  is a prediction of  $Y$  based on baseline variables measured at random assignment;  $T$  is an indicator of treatment status (which is set equal to 1 if the individual is assigned to the treatment group and 0 if the individual is assigned to the control group);  $n_T$  and  $n_C$  are the respective sample sizes in the treatment and control groups; and the subscript  $i$  indexes individuals.

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<sup>25</sup> As explained in the appendix, the approach is a variant on the traditional approach to regression-adjustment methods used in impact analyses. The latter typically involves linear regression of each outcome on an indicator of treatment status and a series of baseline variables. In the traditional approach, the coefficient on the treatment indicator provides the regression-adjusted impact estimate.

#### 2.3.4. Analysis Plan for the Implementation Study

The PACE evaluation's implementation study relies on both qualitative and quantitative analyses, as well as a broad variety of data sources. Key analyses include the following:

- **Descriptive.** Describing each program's design and context and developing its theory of change relied primarily on review of program materials (e.g., its application to ACF for HPOG funding, in the case of Bridge to Employment); in-person discussions with program staff and leadership during two rounds of site visits; and biweekly or monthly calls between study and program leadership during the study period when random assignment was ongoing.
- **Quantitative.** A quantitative analysis of the proportion of program participants who reached major program milestones served to systematically document their experience in the program. This relied on follow-up surveys of treatment and control group members, and in the case of Bridge to Employment, the HPOG management information system.
- **Fidelity.** The quantitative analysis of how and the extent to which participants moved through the program also enabled the comparison of the actual delivery of the program versus its design. For Bridge to Employment, this involved examining the proportion that receive program component services and completed or failed to complete a training program. To address the question of how program delivery changed over time, direct discussions with program staff revealed where internal or external obstacles arose and how staff altered the program in an attempt to overcome them.
- **Service Differences.** Because the random assignment design of the impact study implicitly ensures that any effects of the program result from the different experiences of treatment and control group members, a key task of the implementation study is to describe the difference in services the two groups received. This is particularly important for the PACE evaluation, as the control group is not barred from receiving other services available in the community comparable to those received by the treatment group. In the case of Bridge to Employment, the control group was able to access other training programs and services but would have to make other financial arrangements to pay for the training and arrange for the types of services provided by the navigator.

## 2.4. Data Sources

The PACE evaluation's implementation and impact studies use a variety of data sources.

- **Baseline Surveys.** Prior to random assignment into the evaluation, program participants completed two baseline surveys: The Basic Information Form (BIF) collected demographic and economic information. The Self-Administered Questionnaire (SAQ) measured a variety of attitudes, beliefs, and psycho-social dispositions, as well as more-

sensitive personal characteristics. For the Bridge to Employment study, individuals who consented to participate completed the BIF and SAQ.

- **Follow-Up Survey.** The research team sought to survey all PACE study sample members starting 15 months after random assignment. On average, the survey occurred about 18-19 months after random assignment. The survey asked questions on participants' training and service receipt, postsecondary educational attainment, employment, income, debt, and participation in income support programs. It used a mixed-mode approach, conducted initially by telephone and then in person for those participants not reached by telephone. For the Bridge to Employment study, Abt's survey unit, Abt SRBI, completed surveys with 388 treatment and 342 control group members, yielding response rates of 76 percent and 68 percent, respectively.<sup>26</sup>
- **HPOG Performance Reporting System (PRS).** ACF required that all HPOG grantee programs use the PRS to record the activities and outcomes of program participants. For this report, the team accessed the PRS to identify participant activity and service data on treatment group members in Bridge to Employment.
- **Site Visits and Monitoring Calls.** For the implementation study, the evaluation team conducted two rounds of site visits to each PACE program. For Bridge to Employment, the first visit occurred in November 2012 after random assignment began. The goal of this visit was to document the program's theory of change and key components (e.g., the counseling provided by navigators) and to assess implementation of evaluation procedures. The second visit was in February 2014, after random assignment concluded. The focus of this visit was documenting any modifications to operations or the provision of services, as well as implementation challenges and plans for sustaining the program beyond the study period. During both visits, the research team interviewed program managers; staff involved in evaluation activities (e.g., recruitment, intake, random assignment); navigators and management; and partner staff. In addition to these visits, the evaluation team had regular conference calls with program staff during the random assignment period to discuss program updates, recruitment activities, intake and random assignment processes and any challenges, engagement in the program by treatment group members, and staffing changes.
- **Program Documents.** The research team obtained and reviewed program documents, including the funding application, program materials, annual reports, and reports to funders.

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<sup>26</sup> See Appendix B for nonresponse bias analyses.

## 3. About Bridge to Employment: Context and Administration

Understanding the context in which a career pathways program such as Bridge to Employment operates generally, and its local context specifically, provides useful background on the forces shaping program design and implementation. This chapter begins with a description of that local context during the time the program operated (2010 to 2015). Additional details about its program administration follow, including the division of responsibility for service provision and implementation of new program components.<sup>27</sup>

### 3.1. Local Context

Three aspects of the local environment are important to evaluating Bridge to Employment’s design, implementation, and impacts: target population demand for the program, the local labor market, and the presence of comparable services in the community.

#### 3.1.1. Population

The first aspect is the nature of the population, specifically whether there is a sizable target group who might benefit from the program. To be eligible for the program, applicants had to reside in San Diego County and have income at or below 200 percent of the Lower Living Standard Income Level, be eligible to work, have a GED or high school diploma, and score above the 6<sup>th</sup> - to 8<sup>th</sup>-grade levels on basic skills assessments, depending on the navigator organization.

In 2015, approximately 3.2 million people lived in San Diego County, making it the second most populous county in California and the fifth most populous county in the United States. It is a geographically large county (about 4,300 square miles),<sup>28</sup> adjacent to the border with Mexico, and ethnically diverse, with about one-third of the population Hispanic or Latino, 12 percent Asian, and six percent African American.<sup>29</sup> About 15 percent of the population had income below the poverty level in 2014, which mirrors the national average (14.7 percent).<sup>30</sup>

The three community-based organizations that operated Bridge to Employment and were in the PACE study—CTS, MAAC, and Lifeline—are located in different regions of the county.<sup>31</sup> Individuals interested in the program could apply at any of the navigator organization sites, though given the county’s large geographical area, most likely applied at the site closest to

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<sup>27</sup> For additional information about the planned study design, see Elkin, Farrell, and Willie (2013).

<sup>28</sup> <http://www.sandiegocounty.gov/economicroundtable/docs/ertfact2014.pdf>.

<sup>29</sup> <http://www.census.gov/quickfacts/table/AGE275210/06073>.

<sup>30</sup> <https://www.census.gov/content/dam/Census/library/publications/2016/demo/acsbr15-01.pdf>.

<sup>31</sup> In addition, MAAC had subcontracted with International Rescue Committee (IRC) to operate a relatively small Bridge to Employment program in San Diego that served a population, about half of whom were refugees, who were more skilled and educated than the population served by the other navigators. Because of the unique population served, this site was excluded from the PACE evaluation.



where they lived. Populations in the three regions differ somewhat in economic and demographic characteristics:

- **Lifeline's** Bridge to Employment program operated in North County, which is the region north of the city of San Diego and includes coastal and inland communities. North County has some of the most affluent communities in the county, though there are pockets of poverty in Escondido, Oceanside, and Vista. In particular, in Vista, where Lifeline's main office is located, the poverty rate was 19 percent in 2014.<sup>32</sup>
- **MAAC's** Bridge to Employment program operated in Chula Vista, which is located to the south of the city of San Diego. From the 2010 Census, more than half of the population in Chula Vista (58 percent) identified as being Hispanic or Latino.<sup>33</sup> In 2014, about 13 percent of residents were living below the poverty threshold.
- **CTS** is located in the city of San Diego, specifically in the City Heights area, which has a large immigrant and refugee community of African, South Asian, and Southeast Asian descent. Some 16 percent of residents of the city of San Diego were living below the poverty threshold in 2014, though this percentage is likely higher in the City Heights area (one statistic estimated it at close to 30 percent).<sup>34</sup>

### 3.1.2. Local Labor Market

A second important contextual factor is whether the local labor market will offer sufficient jobs in the occupations for which program participants trained. If jobs are not available, employment goals cannot be met.

Overall, the local economy improved during the years the Bridge to Employment program operated. In March 2013, the unemployment rate in San Diego County was 8.0 percent; by March 2015, it improved to 5.4 percent.<sup>35</sup>

The healthcare sector was projected to grow in San Diego County. From a 2014 sector-specific labor market analysis, SDWP estimated that local healthcare employers provided jobs to more than 100,000 workers and they anticipated adding 13 percent more jobs over the next five years.<sup>36</sup> The analysis projected some occupations such as home health aide and certified nursing assistant to be in undersupply.

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<sup>32</sup> <http://www.cpisandiego.org/poverty2014>

<sup>33</sup> <http://www.census.gov/quickfacts/table/PST045215/0613392>.

<sup>34</sup> <http://www.city-data.com/neighborhood/City-Heights-San-Diego-CA.html>.

<sup>35</sup> <http://www.labormarketinfo.edd.ca.gov/cgi/dataanalysis/labForceReport.asp?menuchoice=LABFORCE>

<sup>36</sup> [http://workforce.org/sites/default/files/industry\\_reports/health\\_care\\_2014.pdf](http://workforce.org/sites/default/files/industry_reports/health_care_2014.pdf). From BLS Occupational Employment Statistics, there were 67,530 jobs in healthcare practitioner and technical occupations and 32,260 jobs in healthcare support occupations in the San Diego-Carlsbad Metropolitan Statistical Area in May 2015 ([http://www.bls.gov/oes/2015/may/oes\\_41740.htm](http://www.bls.gov/oes/2015/may/oes_41740.htm)).

### 3.1.3. Comparable Services

The third contextual factor is the degree to which comparable educational opportunities and supports were available to the control group. Programs have the greatest potential to produce impacts when they offer services distinguishable from those already available in the community. The nature of other educational opportunities and supports in the community also has some bearing on the ability of treatment group members to build on initial training successes after leaving the program.

The program offered a maximum of \$7,000 in financial assistance for training (\$10,000 for selected occupations), combined with case management, supportive services (up to \$1,000 per participant), and employment assistance. Control group members might have been able to piece together a similar level of services, though it would have required some effort and been subject to the availability of funds and services. Exhibit 3.1 summarizes the difference in services available to treatment group members versus control group members.

**Exhibit 3-1. Comparison of Career Pathways Components Available to Treatment and Control Group Members**

Component	Benefits/Services Available through Other Programs (TANF, WIA) to Treatment and Control Group Members	Benefits/Services Provided by Bridge to Employment to Treatment Group Members Only
<b>Assessment</b>	<ul style="list-style-type: none"> <li>• Assessments differ by program.                             <ul style="list-style-type: none"> <li>– SDWP WIA basic career services included an initial assessment of literacy, numeracy, and English language proficiency. Customers receiving Individualized Career Services received a comprehensive and specialized assessment, which could include diagnostic testing.</li> <li>– In 2014, the CalWORKs program began using the statewide Online CalWORKs Appraisal Tool (OCAT) to evaluate clients' employment and education history, and identify barriers to self-sufficiency.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• CASAS or TABE assessment of reading and math skills</li> <li>• Formal and informal assessment of skills, barriers, and needs</li> </ul>
<b>Financial Assistance for Training</b>	<ul style="list-style-type: none"> <li>• ITAs from WIA, but availability was limited (\$5,000 cap)</li> <li>• Waived fees at community colleges for TANF participants and other low-income individuals</li> </ul>	<ul style="list-style-type: none"> <li>• ITAs (\$7,000 or \$10,000 cap)</li> <li>• Waived fees at community colleges for TANF participants and other low-income individuals</li> </ul>
<b>Supports</b>	<ul style="list-style-type: none"> <li>• Case management from TANF</li> <li>• Career guidance and advising from WIA</li> <li>• Supportive services from WIA (\$500 cap) and TANF</li> </ul>	<ul style="list-style-type: none"> <li>• Guidance on available financial resources</li> <li>• Career guidance and advising provided by navigators</li> <li>• Supportive services (\$1,000 cap)</li> </ul>
<b>Employment Services</b>	<ul style="list-style-type: none"> <li>• Externships from training programs</li> <li>• One-Stop Career Center resource room–related services</li> <li>• TANF job club</li> <li>• Job search assistance from training programs</li> </ul>	<ul style="list-style-type: none"> <li>• Work experience</li> <li>• Work readiness training conducted by navigator organizations</li> <li>• Job development</li> <li>• Availability of navigators post-employment</li> </ul>

SOURCES: Program documents and site visits.

**Financial Assistance.** Some financial assistance for training was available from the Workforce Investment Act (WIA) program, which operated out of SDWP One-Stop Career Centers.<sup>37</sup> The availability of funding for ITAs fluctuated from year to year, however. Even when funding was available, there was no guarantee that control group members would be selected by the WIA program. For applicants who were selected and enrolled in WIA, the cap on ITAs was \$5,000, lower than the Bridge to Employment cap.

Control group members might have been able to get financial assistance such as Pell Grants or student loans, though some of the private schools offering training in San Diego were not eligible to participate in Federal Student Aid programs because they did not offer the required number of hours of instruction.<sup>38</sup> Control group members could access Federal Student Aid programs to attend community colleges, however. Additionally, the state of California will waive community college enrollment fees for California residents who are receiving TANF, Supplemental Security Income, or General Assistance or who are not receiving these benefits but have a low family income.<sup>39</sup> However, community colleges in San Diego could not accommodate the growing demand for healthcare training, and had waiting lists for some training.

**Supportive Services.** Control group members who were TANF recipients were required to meet with a TANF case manager monthly and had access to supportive services such as child care and transportation assistance. As shown in Exhibit 2-3, however, only 19 percent of the control group was receiving public assistance (including TANF) at program entry. Control group members who were enrolled in WIA could also receive career guidance and advising along with supportive services. The Bridge to Employment project director noted that based on her experience with it and WIA, the case management provided by their program was more intensive than that provided by WIA. The program's cap of \$1,000 on supportive services exceeded the WIA cap of \$500 per enrollee.

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<sup>37</sup> WIA operated for most of the time the Bridge to Employment program operated. WIA was replaced on July 1, 2015, by the Workforce Innovation and Opportunity Act (WIOA).

<sup>38</sup> According to the U.S. Department of Education, to be eligible for the Federal Student Aid programs, an institution must meet at least one of the following criteria: (1) Provides at least a 15-week (instructional time) undergraduate program of 600 clock hours, 16 semester or trimester hours, or 24 quarter hours. May admit students without an associate's degree or equivalent. (2) Provides at least a 10-week (instructional time) program of 300 clock hours, eight semester or trimester hours, or 12 quarter hours. Must be a graduate/professional program, or must admit only students with an associate degree or equivalent. (3) Provides at least a 10-week (instructional time) undergraduate program of 300–599 clock hours. Must admit at least some students who do not have an associate's degree or equivalent, and must meet specific qualitative standards. Note that institutions meeting only category 3 are eligible only for Direct Loan participation. <https://ifap.ed.gov/sfahandbooks/attachments/0405Vol2Ch4ProgramEligibility.pdf>.

<sup>39</sup> In this case, low income is defined as having a family income that is less than or equal to 150 percent of the HHS Poverty Guidelines based on family size.

**Employment Services.** Control group members who were TANF recipients had access to job search assistance from the TANF program, known as CalWORKs in California. Those who were not receiving TANF could access some assistance from staff at the One-Stop Career Centers. Additionally, training programs often required externships and provided work experience opportunities to their students in addition to helping them with their job search after they completed their program.

### **3.2. Program Administration**

SDWP was the recipient of the HPOG grant for the Bridge to Employment program, and was responsible for selecting the navigator organizations to provide program services through a competitive procurement process.<sup>40</sup> SDWP requested separate bids for each of the four regions of San Diego County (North, East, Metro, and South), and organizations could bid on any or all of the regions. Lifeline won the North region contract, CTS won the Metro region contract, and MAAC won the East and South region contracts.<sup>41</sup>

After selecting and contracting with the organizations, SDWP developed the Bridge to Employment policies, oversaw and monitored the contractors' performance, reimbursed training providers for the ITAs issued, and reported on program progress to HHS. Two staff at SDWP provided oversight to the navigator organizations and were expected to visit the sites regularly and monitor program operations.

Exhibit 3-2 provides background information on the three organizations. SDWP required that the three organizations provide the core service components of Bridge to Employment, though allowed them some autonomy with how they structured and staffed their programs. The organizations issued the ITA vouchers, provided participants with navigation support and employment services, and administered payments for supportive services.

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<sup>40</sup> Each HPOG grant required coordination and collaboration with a specified set of partners and encouraged grantees to partner with others, not only to provide healthcare training but also to leverage community resources essential for providing participants with multiple supports. The HPOG Funding Opportunity Announcement specified that successful grant applicants were required to partner with state and local Workforce Investment Boards, TANF agencies, and state apprenticeship agencies. Additionally, it strongly encouraged engagement of employers and business organizations that could provide training and employment opportunities, as well as guidance to ensure that training met local labor market demand. Other suggested partners included members of the education and training community, non-profit organizations, labor organizations, organizations implementing the American Recovery and Reinvestment Act of 2009, foundations, and social service agencies.

<sup>41</sup> MAAC subcontracted with IRC to operate a relatively small Bridge to Employment program excluded from the PACE evaluation.

### Exhibit 3-2. Three Navigator Organizations Providing Program Services to Bridge to Employment

**North County Lifeline** is a community-based organization, founded in 1969, that has offices in Vista and Oceanside, about 40 miles north of downtown San Diego. It provides a broad range of programs for adults, youth, and families to help them access community-based services, build skills, and build self-reliance. During the time it served the Bridge to Employment program, Lifeline also ran a Financial Opportunity Center, which helped clients access public benefits for which they qualified and provided them with financial coaching and employment services. It also operated a number of other programs focused on youth development, behavioral health, child abuse, domestic violence, and housing. Bridge to Employment was the only program at Lifeline that focused on occupational training.

**Metropolitan Area Advisory Committee (MAAC)** is a community-based organization founded in 1965 to address hunger and poverty in the community. Its main office in Chula Vista is about 15 miles south of downtown San Diego. In addition to the Bridge to Employment program, MAAC operated Head Start programs, a charter high school, and programs providing assistance on housing, immigration support, weatherization, energy, and alcohol and narcotics addiction. It operated a YouthBuild program that was designed to help youth aged 16 to 24 earn their high school diploma or GED while earning industry-recognized certifications in multimedia and construction. It also operated a counseling program for residents in affordable housing sites managed by MAAC.

**Comprehensive Training Systems (CTS)** is a community-based organization founded in 1985. Its main office is in City Heights, less than 10 miles from downtown San Diego. Unlike the other two navigator organizations, CTS is a training institution that offers training onsite at its City Heights location, as well as another site located in Imperial Beach, south of San Diego. It offers short-term training in a wide range of areas, including medical careers (medical receptionist and medical assistant), administrative assistance, computer repair technology, networking, website design, building maintenance, green technology, and construction. Students cannot receive Pell Grants to access training at CTS, though they could have used ITAs from the WIA program or the Bridge to Employment program. The program staff could not steer Bridge to Employment participants to CTS's own programs, though some participants chose to use their ITAs there. In addition to the training, CTS provides employment assistance to its participants.

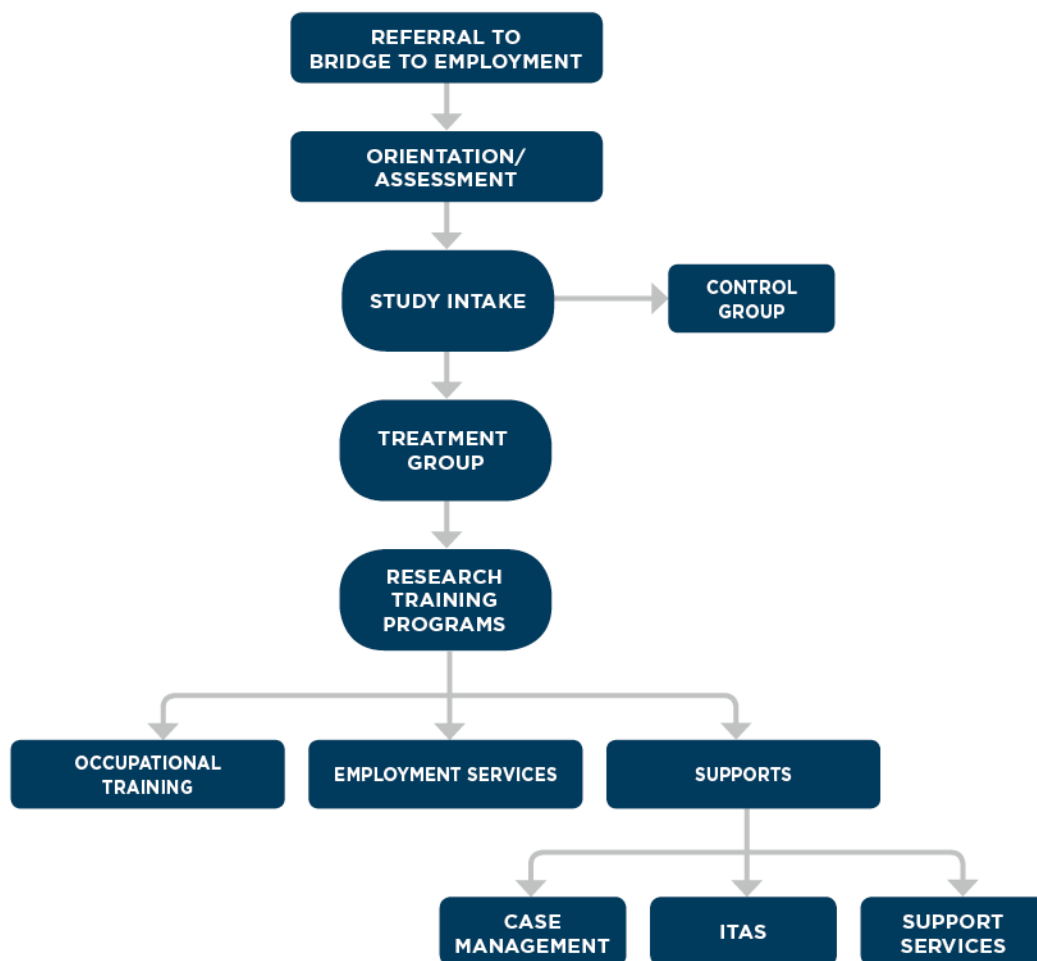
Each of the three navigator organizations had a program manager, an intake staff person who helped with outreach and enrollment, and two to five navigator staff. The navigator staff provided participants with case management, advice, and counseling, as well as issued the ITAs and administered the supportive services. The organizations also had employment staff who conducted work readiness workshops and helped participants with their job search. CTS employed two mentors, and MAAC had an AmeriCorps intern who provided additional support. Lifeline had an employment services staff person who worked across all Lifeline programs, and provided additional support to the Bridge to Employment program. At the start of its fourth year of operations, SDWP gave each organization additional funding to hire a job developer who met with employers and developed job leads, as well as helped program participants with their job searches.

For the first three years of the HPOG grant, SDWP also had a contract with the University of California at San Diego's (UCSD) Student-Run Free Clinic Project, which operated four medical clinics around San Diego County. As part of the contract, UCSD offered volunteer positions at the clinic to Bridge to Employment program completers, where they gained work experience under hands-on supervision. In addition, UCSD staff conducted work readiness refresher workshops on behalf of each of the navigator organizations, where they met with program participants, reviewed their clinic skills, reviewed their resumes, and conducted mock interviews. As discussed further in Chapter 4, the contract with UCSD was cancelled after three years because the program did not get enough volunteers.

Bridge to Employment also had several unfunded partners. These included the County of San Diego, which oversees the local TANF program; organizations contracted by the County to run the TANF welfare-to-work program; the California Department of Rehabilitation; and local housing authorities. Once a month, SDWP held meetings with its partners and the navigator site managers to update them on the Bridge to Employment program, encourage referrals to the program, and help streamline supportive services for its participants.

The rest of this section describes the study and the program components outlined in Exhibit 3-3. Chapter 4 provides details about the program as implemented.

**Exhibit 3-3. Bridge to Employment Benefits/Services Provision**



### 3.2.1. Recruitment and Referral

Each navigator organization was responsible for recruiting participants for the program. TANF recipients were a priority group for recruitment for the national HPOG Program, and the navigator organizations met with local TANF staff to discuss Bridge to Employment and how it could benefit their clients. The organizations also conducted outreach in the community,

making presentations to staff at career centers, subsidized housing organizations, schools, and other agencies in the community that served low-income individuals. Staff also met with administrators of schools that provided healthcare training, since these schools could identify interested individuals who needed financial assistance for their training. Additionally, the program created brochures and flyers to distribute to potential community partners and made some public service announcements for radio and television. They also staffed booths at various community events such as health fairs and job fairs.

The Bridge to Employment program had operated almost two years before SDWP began randomly assigning individuals to the PACE study in July 2012. Prior to entering the study, the navigator organizations experienced few problems meeting the program enrollment targets established by SDWP. Both potential students who had yet to apply and current students already engaged in healthcare training were eligible to enroll in the program, and training institutions referred their students to the program.

SDWP changed its eligibility criteria when the study began and stopped allowing students already in training programs to enroll in Bridge to Employment. The schools still could, and did, refer potential applicants who visited the schools to the program, where they would have a chance to access funding—just not their current students. This change in the referral pipeline meant that the navigator organizations had to recruit twice as many potential enrollees (because only half would be randomly assigned to the treatment group and able to access training), and that staff had to devote more time to recruiting. Though they reported these challenges, SDWP met its enrollment goals for the study.

### **3.2.2. Orientation, Assessment, and Intake**

A potential student's first step to enrolling in the program was to attend an orientation where program staff provided an overview of its benefits/services, reviewed its eligibility requirements, and informed them of the PACE study, particularly how random assignment governed admission to the program. As part of determining the eligibility of those attendees still interested, the staff conducted formal assessments of their reading and math proficiency, using either the TABE or the CASAS, depending on the navigator. CTS administered the TABE and required scores at the 6<sup>th</sup>-grade level. Lifeline administered the CASAS and required scores at the 8<sup>th</sup>-grade level. MAAC administered the CASAS and required scores at the 7<sup>th</sup>-grade level. MAAC also conducted a 12-point assessment to capture the attendee's work history, motivation, basic skills (including English proficiency and computer literacy), and supports needed.

The staff also conducted one-on-one interviews with potential applicants. The interviews were intended to gauge suitability for the program, such as level of motivation, likelihood of following through with the program's activities, and interest in the healthcare field. Staff also

discussed the individual's barriers to employment and what supportive services they might need.

Based on the information collected from these activities, program staff determined who to enroll in the study and invited selected individuals to complete the intake process, which involved signing the consent form and completing the BIF and the SAQ.

Finally, the program staff conducted random assignment and enrolled those applicants assigned to the treatment group into the program. Individuals assigned to the control group received information about other services available in the community.

### **3.2.3. Training Program Research**

SDWP selected the consumer choice model (i.e., participants could choose any accredited healthcare training program in San Diego County) to enable Bridge to Employment program participants to receive services in the communities where they lived and where they were comfortable. SDWP wanted to ensure that training was available in each region of the county, thus eliminating barriers to participation such as transportation. However, the model did require that participants understand something about the training program options available before they made their choice. To address this, each program participant was required to research at least two schools and visit at least one of the schools. These steps aimed to help participants make well-informed decisions about which healthcare training program to select, given their own career goals and circumstances.

For the two schools selected, participants had to complete a research form, supplying the date they contacted each school, its total cost of training, total hours of training, class schedule, and what degree or certificate they would complete. They also had to list the prerequisites, entrance test requirements, and any required skills. One section of the form was used to note their observations: whether the school was clean and well maintained and whether it had sufficient equipment on the premises, like computers. They were asked to note the number of miles required to commute to the school and estimate how long it would take to get there. Finally, participants summarized the results of their research; that is, whether they chose that training, and the reasons for their decision.

Along with the research form, they also completed a budgeting worksheet, listing their monthly expenses and current income. They also had to provide confirmation that they had submitted a Free Application for Federal Student Aid (FAFSA). The program took financial aid awards such as Pell Grants, state grants, and other grant funding into consideration before issuing participants an ITA voucher.

The program expected participants to complete their research packets, which consisted of the completed research form, budget worksheet, and FAFSA confirmation, soon after they enrolled,



though there was no deadline. However, navigators would not issue an ITA voucher until this packet was submitted and approved.

#### 3.2.4. Supportive Services

SDWP directed the navigator organizations to assist participants in navigating every step of their educational experience, from beginning their chosen training program through completing it successfully. Navigators were expected to provide wraparound services to participants throughout to ensure they received needed supportive services and mentoring. Though the navigator organizations did not provide academic counseling or tutoring, they were expected to help participants access this from the training provider if academic issues arose.

During their first meeting, which generally took place within two weeks of program enrollment, treatment group members and the navigators together developed an Individual Education Plan (IEP) that described the participant's employment and education goals and the skills and barriers that might enable or prevent that participant from reaching the goals. The IEP was typically completed prior to when the program participant completed the research packet. It was considered to be a living document that they updated when the participant's goals changed or when additional barriers were identified. Navigators reviewed participants' progress toward their goals monthly. The navigators also tracked participants' academic progress by getting attendance information and grades from the training institutions.

Navigators could provide up to \$1,000 per participant in supportive services to cover training-related needs such as uniforms, certification fees, textbooks, transportation, or child care. Supportive services had to address a barrier specified in the participant's IEP. If a participant was a TANF recipient, the navigator communicated directly with the TANF case managers to arrange supportive services so there was no duplication of support. The navigators had flexibility to distribute supportive services payments on a case-by-case basis.

The navigators also issued the ITA vouchers. The ITA cap was \$7,000 per participant, though it could be increased to \$10,000 for occupations identified as higher in demand (e.g., registered nurses, licensed vocational nurses, licensed practical nurses, pharmacists, pharmacy technicians, dental assistants, and dental hygienists). In order to receive the higher amount, the participants had to prove that the training program would lead to a mid to upper-level degree or certification. In addition, the SDWP program manager could approve ITAs exceeding \$7,000 for participants to attend a second training or on a case-by-case basis.

At private training institutions, program participants enrolled in training and provided the ITA voucher in lieu of paying the tuition directly. The community college system did not accept the vouchers at enrollment. Instead, participants approved by the program to attend a community college paid out of pocket for the training, and the tuition was reimbursed by the program. These reimbursements—referred to as Bridge to Employment Training Accounts—had the same cap as ITAs.

Finally, the navigator organizations provided follow-up services to ensure that program completers who found jobs kept them. SDWP required the organizations to conduct five follow-up contacts in the first six months after the hire: one contact in the first week following placement, at least two contacts in the next three months, and at least two contacts in the final three months.

### 3.2.5. Employment Services

SDWP required each navigator to provide program participants work readiness training, usually in workshops and one-on-one job search assistance. SDWP established that the work readiness training provide instruction in the areas of pre-employment, employability, work maturity, basic skills, and occupational technical skills. It let each navigator organization decide on the length and timing of the work readiness training, as well as when the organization expected each participant to complete the requirement. Navigator organizations offered job search assistance to all participants enrolled in the program regardless of whether they successfully completed an occupational training program. SDWP expected the organizations to provide participants with assistance on resumes and cover letters, interviewing skills, and job referrals.

As part of its contract with navigator organizations, SDWP spelled out the expectation that the organizations provide opportunities for participants to gain real work experience. To help them meet this expectation, for the first three years of the HPOG grant, SDWP contracted with UCSD to provide unpaid internships to participants who were interested in gaining work experience. Alternatively, the navigators could coordinate with the training institutions to ensure students were getting work experience opportunities through the training program.

Federal law did not allow HPOG funds to pay wages in the form of internships or subsidized employment. However, in 2013, California funded the Expanded Subsidized Employment (ESE) program to serve its TANF recipients. SDWP operated ESE in San Diego and in 2015 (the last year of the PACE evaluation) gave priority to Bridge to Employment participants. Because the ESE program subsidized the initial wages paid to TANF recipients, it could generate interest from employers to hire them.

### 3.2.6. Occupational Training

Bridge to Employment funding supported training courses at any accredited training provider in one of three occupational groups:

- **Patient care**—Workers have direct patient contact, such as nurses;
- **Technical**—Workers run tests or dispense medications, such as pharmacy technicians; and
- **Administrative**—Workers process paperwork or handle billing, dictation, and scheduling, such as unit assistants.

SDWP wanted to ensure maximum flexibility, and so prescribed few training program requirements, though it did expect the training to result in a certificate, degree, or license. Training could take place at community colleges, adult education providers, public universities, and private schools.

## 4. Implementation Study Findings

Prior chapters described the signature components of the Bridge to Employment program, as well as the contextual factors that could facilitate or impede program implementation and affect outcomes for participants. This chapter reports on the benefit/services actually implemented. It then describes patterns of participant experiences in the program, including enrollment in occupational training and receipt of program services. It concludes by comparing education/training receipt and service receipt for the treatment group versus the control group.

### 4.1. Implementation of Navigation Services

The SDWP program director considered the navigation services to be the key component of Bridge to Employment that distinguished it from other programs the workforce agency had operated in the past. For example, the services funded by WIA had ITAs for training and provided case management services to enrollees. Bridge to Employment, however, worked with a population that, the program director believed, needed more services than the typical WIA enrollee. Program participants, especially TANF recipients, had very limited work histories and needed more help navigating the training enrollment process and staying in school, given obstacles they faced (e.g., caring for their children). She believed the case management provided by the program could make the difference in getting its students to select the right training, complete the program, find a job, and retain employment.

Through interviews with program staff during two rounds of site visits and monthly calls, the research team assessed the degree to which navigation services were implemented as planned. Key findings are detailed below. In summary, though the program was designed to provide navigation support to participants, several factors reduced the support that was provided.

- *The Bridge to Employment program screened out few applicants during the intake process.*

As noted in Chapter 3, the model called for the navigator organizations conducting comprehensive assessments to determine each applicant's fit. They did this by administering the TABE or CASAS, as well as interviewing applicants, before enrolling them into the program.

Prior to joining the PACE study, the Bridge to Employment program also had assessed applicants' seriousness and commitment to the program by requiring them to complete the research packet before allowing them to enroll. Once the program joined the PACE study, SDWP decided to enroll applicants *before* they completed the research packet. This was, in part, because it would be difficult to deny services to applicants who had made the effort to conduct the research and submit the packet but then were assigned to the control group. Additionally, the completion of the research packet was an important component of the program, and thus should be reserved for treatment group members.

At the same time, the program did not allow participants already in training to enroll. This policy change added to pressure on navigators to meet SDWP's program enrollment targets, which had become more difficult under the PACE study since they had to recruit twice as many applicants given that half would be assigned to the control group. As a result, navigators did not screen out many applicants based on test scores or interviews.

Though the navigators reported that they did not screen out many applicants as a result of assessment results, they noted that the information they obtained from the assessments helped them work with program participants to develop their IEPs once enrolled.

- ***Participants in Bridge to Employment met with navigators soon after enrolling in the program.***

During the first meeting with participants, which generally took place within two weeks of enrolling in the program, navigators reviewed the program requirements and worked with the enrollees to develop an IEP that described their employment and educational goals, as well as skills and barriers that could enable or prevent them from reaching their goals.

Navigators noted that sometimes participants knew exactly what occupation they wanted training in and were able to complete the IEP in one meeting. For participants who were unsure, navigators assigned them homework to do research on the healthcare industry and its occupations. For example, Lifeline staff mentioned that they had participants conduct an online career assessment to help them determine suitable occupations given their skills and the kind of job they might like. CTS directed participants to online tools that provided labor market information on health occupations. MAAC had an upfront work readiness workshop that devoted some sessions to researching employers. This led some MAAC participants to update their IEP after participating in the workshop.

- ***Navigators provided Bridge to Employment participants with limited guidance on which training providers they should research and select.***

Once participants outlined their educational and employment goals in the IEP, they had to complete the *research packet*. In contracts with navigator organizations, SDWP spelled out that during this process, navigators were expected to “guide” participants to the training provider(s) offering training in the healthcare occupations they selected. However, from interviews with program staff, most participants had already identified a training provider when they enrolled. Some were referred to the program from the training provider. One navigator estimated that about 40 to 50 percent of the participants at his organization had been referred by a training provider. Another navigator estimated that about 75 percent of participants came in knowing which training program they might enroll in.

Navigators generally believed that the consumer choice model limited their ability to provide direct guidance to participants about which training providers they should select or even which

type of training program might be a good fit for them. Though SDWP told them to “guide” participants, they were also told not to “steer” participants to particular schools. A navigator could provide participants with pamphlets and websites where they could go and research the programs on their own. One SDWP staff member explained how navigators should guide program participants:

*What the navigators need to understand as part of the job is to use the information that is available to guide participants to make an informed choice. Navigators should not say “You can’t go to XYZ school, I don’t like XYZ school, it’s not a good school.” This is true for selecting the occupation that they train in. ... With medical assistant, we have data that show that some of our participants are having a hard time getting a job because the market is saturated. If you are just going to [train to become a] medical assistant [MA] or certified nursing assistant [CNA], then you are going to have a difficult time. But what employers like is if you do CNA with, let’s say, healthcare interpretation, or MA with phlebotomy, or CNA and home health aide [HHA]. Or specialize and get a Geriatric Care Certification. Those kind of things make them more marketable, and the data can prove that. So when the navigators are working with the clients, they are supposed to be informing them about this. But then let the client still make the decision that the client wants to make, but make sure it is an informed decision.*

An earlier national implementation study to test a more structured form of directing participants to training in WIA found that counselors did not feel comfortable steering customers to particular training and rarely denied customers their choices (McConnell et al., 2006).

Similar to that earlier study, some navigators felt ill equipped to provide participants with candid guidance. None of the organizations provided staff with formal training on helping guide participants on career pathways, and most learned what they knew on the job. One staff member noted that it was better to be hands-off because the participants had to “own their decisions.” However, he noted that he might let one know about another participant’s experience with a particular program, especially if completers of a particular training program were having a difficult time getting jobs.

Navigator staff at all three organizations estimated that it might take two or three meetings for participants to complete their research packet. At CTS and Lifeline, the participants began working on their packet soon after enrolling in the program. At MAAC, especially in the first year of PACE when participants were required to attend a three-week work readiness workshop before starting the training, participants may have taken more time to complete the packet, though the goal was for them to have completed it by the end of the workshop.

- *After program participants enrolled in training, the navigators checked in with them at least monthly to get updates on their progress and provide support services.*

The navigators were expected to check in with participants monthly, though this could be done by phone or email. Participants who needed monthly bus passes or other supportive services had to meet with navigators in person. During the check-ins, staff got updates on the students' progress in training and identified supports needed to alleviate barriers to academic success.

The navigators approved supportive services for participants that helped them meet their employment or educational goals and that they could not get from other organizations. For example, participants enrolled in TANF and other low-income parents could generally obtain child care assistance from the county. If, for some reason, the county did not approve their child care assistance, the program could approve the assistance, though one staff noted that child care costs could easily exceed the \$1,000 cap over time. It was rare for someone to request child care assistance from the program. Education providers often included textbooks and other material costs as part of the tuition, so the ITA covered these expenses. Many participants received transportation assistance from the program.

The program staff discussed helping participants with other supports that the program could not provide. For example, navigators referred those who needed child care assistance to community agencies that could help them apply for subsidized child care. Lifeline navigators operated a separate benefits access program and screened all program participants for other benefits outside of HPOG services that they could access. Some participants received funding for emergency housing assistance or car repairs through this program. MAAC gave participants information on other services available in the community, including a program where they could get discounted cell phone service.

During the check-ins, navigators inquired about enrollees' academic progress. The training programs were supposed to send in students' attendance records and grades, though staff reported schools were inconsistent in providing these. When navigators learned of an academic problem, they communicated directly with the schools to determine options available to help the participant succeed. For example, they might refer participants who were struggling in school to tutoring services or to other community organizations that provided academic tutoring.

When participants stopped checking in with the navigator staff, the navigator organizations had different approaches to reaching them. CTS created a position for "mentors," who did not have the same responsibilities as the navigators in administering ITAs and supportive services, and therefore had more flexibility in their schedules to work with particular participants if specific needs arose. They reached out to participants who became disengaged with the program and offered assistance with specific needs (ranging from providing emotional support to helping a participant access a food bank). Sometimes this mentoring involved conducting home visits.

MAAC had an AmeriCorps intern who reached out to disengaged participants. Lifeline navigator staff reached out to the disengaged participants themselves.

- *The navigator organizations struggled with high turnover among navigator staff, which may have led to their providing an inadequate level of services during periods when they had fewer staff.*

The navigator organizations experienced substantial staff turnover among their navigator staff. By the end of the fourth year of the five-year HPOG grant, it became a larger issue, which program managers attributed in part to the organizations being unable to guarantee staff would have jobs after funding ended. Lifeline and MAAC only had two or three navigator staff and when one left, the others had to take on that caseload until a replacement was found. CTS, which served more participants, had five navigators and experienced fewer issues with turnover. Staff turnover affected service delivery because the new staff were less experienced, less familiar with the model and the service providers, and unable to provide guidance based on prior participants' experiences. There was some anecdotal evidence, from discussions with participants, that they had a difficult time meeting with navigators and receiving services during periods when the organizations were short-staffed. Additionally, SDWP staff noted that the new navigator staff made mistakes in processing the paperwork and ITAs, which could have affected when a participant was able to begin training.

## 4.2. Implementation of Training Services

The Bridge to Employment consumer choice model meant participants could enroll in any healthcare training program of their choice as long as it fit within one of the three occupational groups (patient care, technical, or administrative) and was at an accredited school, which included private schools, community colleges, and adult high schools in San Diego County. This section describes the choices participants made.

- *Most Bridge to Employment participants chose to enroll in training offered by private for-profit schools.*

As discussed below, most participants enrolled in private for-profit schools; an extremely small number of participants enrolled in community college programs. Navigator staff provided several explanations for the popularity of private schools among participants they worked with. First, students could generally find a program at a private school that they could enroll in soon after enrolling in Bridge to Employment, rather than waiting for the next semester to start at a community college or a slot to open up if the community college program had a waiting list. Staff noted that community college programs had long waiting lists, and it generally took months and even semesters to get into some classes.

Second, students could generally complete the training programs at the private institutions in less time, which was appealing to those who could not stay out of the workforce for long. Third,



these schools were good at marketing and were often able to attract applicants whom they then referred to Bridge to Employment for financial assistance. Community college programs did not make referrals to the program. Fourth, the private schools accepted ITA vouchers, but community colleges did not. Participants interested in attending a community college funded their training out of pocket and then requested reimbursement from the program.

Navigator staff did not discourage participants from attending the private schools, though they were more expensive, and (according to one job developer) employers may not have viewed them as favorably as community college programs.

The local school district in North County, which operated a regional occupational program that provided healthcare training, served a sizable portion of Lifeline participants. The staff at the district mentioned that they made referrals to Lifeline. Additionally, Lifeline staff were aware of this program and mentioned it to participants. This program accepted the ITA vouchers.

Exhibit 4-1 provides a description of three training institutions popular among program participants.

- ***Midway through the PACE study, the program began encouraging participants to pursue a second training or “bundled training,” that would allow them to obtain multiple certifications and help them find employment.***

Most participants enrolled in entry-level healthcare programs for occupations such as certified nursing assistant (CNA), phlebotomist, and medical assistant. Some program completers, however, found it difficult to find employment in a healthcare setting, a key performance metric established by ACF. Additionally, in interviews, navigator staff noted that it was not unusual for completers to take other jobs because they paid higher wages.

To overcome this problem, in 2013, the navigators began encouraging program participants to use the ITA funding to pursue a second or two trainings concurrently if doing so would make them more marketable (that is, preferred by employers over other job candidates). Instead of medical assistant training alone, navigators might encourage participants to pursue medical assistant *and* phlebotomy training. Another popular bundled training was CNA, home health aide, and electrocardiogram technician. Navigators could approve training that exceeded the \$7,000 ITA cap for a second training.

#### Exhibit 4-1. Three Training Providers that Enrolled Bridge to Employment Participants

##### International Health Group (IHG)

IHG is a private for-profit school that has two locations in San Diego County, in the city of San Diego and in San Marcos, located in the north region. It offered several programs that were on an accelerated timeline. The certified nursing assistant (CNA) training took just four and a half weeks to complete (five days a week, for 22 days), which was substantially shorter than the eight- to 16-week CNA training offered by the community colleges and adult high schools. IHG offered a 16-day certified home health aide (CHHA) program; CNAs could take a shorter five-day course to become certified as a CHHA. A two-day restorative nursing program was offered for CNAs interested in developing their career in restorative care. IHG also offered training programs to become clinical medical assistants and administrative medical assistants.

The research team met with the instructor of the CNA training program and observed one of the classes. The program appealed to students who wanted to complete the training quickly and could spend eight hours a day in school, Monday through Friday, plus time required in the evenings to read the chapters and complete the homework assignments. The class observed that day covered five chapters in the textbook. The instructor noted that it was challenging to cover the material in such a short timeframe but was able to do this by assigning students the homework. Immediately following the end of the training, the program provided a day to review the material for the state exam, administering the state exam onsite the week after classes ended. At the time of the site visit, the cost of the CNA training was \$2,150.

##### U.S. Colleges

U.S. Colleges is a private for-profit school with locations in four California counties (Riverside, San Bernardino, Orange, and San Diego). It offered a number of healthcare courses, including phlebotomy, medical administrative secretary, medical billing, clinical medical assistant, medical office administrator, front and back office medical assistant, and advanced medical coder. The programs ranged in price from \$2,595 for a six-week phlebotomy technician program to \$7,694 for a 24-week front and back office medical assistant program that provided the skills and knowledge necessary to work in a physician's office. Training for medical assistant–administrative was \$6,995.

The school encouraged students to bundle two training programs to increase their employability. A common bundle was phlebotomy/clinical medical assistant. It recommended that students first complete the phlebotomy training so they could find work and earn some money (e.g., taking blood in a clinic) while completing the second training, which took more time to complete.

##### Regional Occupational Program (Escondido Union High School District)

Many participants served by Lifeline received training from the regional occupational program (ROP) in Escondido, which was operated by the Escondido Union High School District. The ROP offered a number of healthcare training programs, including for CHHAs, CNAs, administrative medical assistants, clinical medical assistants, and medical billers and coders.

The cost of training provided by the ROP was less than that at private schools. For example, its CNA training cost \$1,100 (compared with \$2,150 at IHG) and the medical assistant–administrative training was \$975 (compared with \$6,995 at U.S. Colleges). The ROP programs generally took longer to complete. Managers noted that programs exceeded the state's guidelines on the number of classroom and clinical hours required to be certified. For example, CNA certification mandates a minimum of 160 hours of training time; the ROP provided about 350 hours.

- ***In the third year of the HPOG grant, SDWP attempted to directly fund training courses limited to Bridge to Employment participants, but encountered challenges.***

In the third year of the five-year HPOG grant, SDWP found itself with extra funding that could be used for training. The project director saw benefits in offering training in occupations that were limited to Bridge to Employment participants, who would enter the program together in a cohort in order to promote peer-to-peer learning experiences.

In late 2012, SDWP requested that each navigator organization submit a proposal to offer subcontracted, cohort-based training focused on specific in-demand occupations that SDWP identified in advance. CTS was the only organization to pursue this; Lifeline and MAAC were not able to meet the timeframe established by SDWP, which required that all training be completed by September 2013, the end of the funding year. In January 2013, CTS subcontracted with one private provider to provide trainings in physical therapy aide and phlebotomy, in a cohort

setting. Overall, participants' response to the phlebotomy training was good, filling two classes of 20 students each. Just one small class of about 10 physical therapy students completed training.

Because of the problems encountered in asking navigators to subcontract for the cohort-based training, SDWP decided to contract directly with an institution(s) to offer this training grant wide. In June 2013, it issued a request for proposals from training institutions to develop training for specific occupations (physical therapist assistants, registered dental assistants, healthcare interpreters, licensed vocational nurse to registered nurse, surgical technician, radiological technician, and medical lab technician) or bundled training. SDWP received no bids.

SDWP had hoped that community colleges would submit bids, increasing Bridge to Employment program participants' access to the community college system, which typically had long waiting lists for healthcare training. The project director attributed the lack of bids to the contract structure, which could not guarantee funding because it was contingent on participants selecting the training.

### 4.3. Implementation of Employment Supports

SDWP is the designated local Workforce Investment Board for the City and County of San Diego, and thus focuses on helping individuals connect with employment. Employment was one of the primary metrics it used to judge navigator organization performance. In its HPOG application, SDWP identified several performance outcomes that it hoped to achieve through Bridge to Employment: (1) 70 percent of participants who completed training would enter employment; (2) those who entered employment would earn average wage of at least \$15 an hour; (3) 85 percent of those who entered employment would remain employed for at least three months; and (4) 85 percent of those who completed training and entered employment would find employment in the field in which they trained.

Key components of Bridge to Employment that addressed these employment-related outcomes directly included work readiness workshops, one-on-one job search assistance, work experience opportunities, and job development. Key findings are detailed below.

- *SDWP required that all navigators provide work readiness training to Bridge to Employment participants, though the organizations took different approaches to delivering the services.*

The work readiness training covered a combination of topics such as resume and cover letter writing, interview practice, job search skills, labor market research, soft skills, and job retention. MAAC differed from the other two organizations by requiring most program participants to complete the workshop before they started training, believing it would give them a "leg up" once they started the training. MAAC offered workshops on the weekend for enrollees who were working during the week. The work readiness training began as a three-week workshop

and helped participants learn about the healthcare employment field, reviewed healthcare terminology they would hear in training and on the job, and helped participants develop their resumes. Participants spent one afternoon touring a local hospital where they could meet with staff and ask questions and sign up to volunteer if interested. After participants completed their training, they could attend a one-day refresher class to update their resumes and practice interviewing. In 2013, MAAC noticed that some participants were losing interest in training and exiting the program for employment, so it reduced the workshop to one week.

CTS offered both work readiness workshops and job clubs. The navigators hosted the work readiness workshops for program participants on their own caseload once a month, for half a day. The CTS mentors were in charge of the job club, which participants could start as soon as they had completed their training. The job club, which was offered four mornings a week, from 9:00 to 10:00 A.M., covered general topics such as resume writing and interviewing, as well as specific topics like how attendees could get hired full-time at their employer of choice. Though the information provided in the two venues overlapped, it provided participants with different opportunities to attend, based on their schedules.

Lifeline offered program participants a week-long employment workshop covering verbal and nonverbal communication skills, elevator pitches, networking, resumes, and what to include in an application. Though attending the workshop was a requirement, Lifeline let participants determine whether to complete it before or during training. It also invited participants to register for other services and workshops with the One-Stop Career Center, which was located next door. Attendees could use the computers and access job search listings. In addition, during the period of the study, Lifeline was operating a Financial Opportunity Center that provided financial coaching to help low-income clients with budgeting their expenses, establishing credit, and accessing public benefits for which they qualified.

In the grant's third year, staff at the University of California at San Diego's Student-Run Free Clinic Project offered workshops at the navigator organization sites for program participants who had completed training. In the workshop, clinic staff met with participants, reviewed their clinical skills, talked about workplace scenarios, and conducted mock interviews and resume reviews. They did this in part because the project was not getting the volunteers from the training programs it expected at its healthcare clinics (discussed below), but wanted to assess workshop attendees' skills and provide employment advice.

In addition to formal workshops, the program provided one-on-one job search assistance. The navigator staff were involved, but they also relied on employment services staff at Lifeline and MAAC and the mentors at CTS. Generally, this assistance was provided after participants had completed their training.

- *The original design of Bridge to Employment emphasized employer involvement and more work experience opportunities, but the program encountered challenges in creating those experience opportunities for participants.*

As proposed, the Bridge to Employment program would develop work experience opportunities with healthcare employers for its participants who completed their training. Employers who provided workplace experiences would receive funding to help offset the additional costs of supervising them. However, federal legal restrictions on HPOG did not allow SDWP to use grant funds for that purpose. As a result, the project director looked for other ways to provide work experience opportunities.

**UCSD Free Clinics.** As described in Chapter 3, SDWP contracted with the UCSD Student-Run Free Clinic Project to offer volunteer positions at the clinic to participants who completed a training program, where they could gain experience applying their skills hands-on in a worksite under supervision. SDWP had hoped that more Bridge to Employment participants would volunteer at the project's four clinics, but the locations were inconvenient for many of the program's participants. For example, Lifeline participants who lived in the North County area were far from any of the clinic sites. Instead, Lifeline partnered with Palomar Health, which operates three hospitals and several healthcare facilities in North County, to provide some volunteer opportunities.

Given participants' lack of interest, SDWP cancelled its contract with UCSD in the grant's fourth year and used the funding for job development (discussed below).

**ESE Program.** SDWP oversaw the Expanded Subsidized Employment program, also discussed in Chapter 3. This program subsidized the wages of program participants who also were TANF recipients: 100 percent in their first two months on the job, 50 percent in the third and fourth months, and 25 percent in the fifth and sixth. SDWP gave Bridge to Employment participants who were receiving TANF benefits priority for the ESE program, thinking it would attract employers and provide good opportunities for participants to gain paid work experience. Additionally, it would help those program completers find better jobs than they might get on their own because ESE paid a portion of their initial wages, offsetting the upfront costs of hiring new staff.

This approach was promising, but by the time ESE was implemented in San Diego County, few Bridge to Employment participants were enrolled in TANF. Navigators noted that participants that had been receiving TANF at program entry had either exited TANF or had already obtained employment. In the end, only a few had their employment subsidized through ESE.

- *In the fourth year of the HPOG grant (beginning October 2013), as SDWP focused on helping participants who completed training find employment, it provided funding for job development.*

In the grant's fourth year, SDWP hired a full-time business service representative to coordinate job development efforts across the navigator organizations, gather labor market information from employers, and otherwise support employer engagement with the Bridge to Employment program. SDWP also funded one job developer for each navigator organization. The role of the job developers was to interact with employers, establish relationships with them, and generate job leads. They were also asked to hold at least one "employer social" each quarter for program participants, where employers would participate in a panel to discuss the employment opportunities at their organizations, describe attributes they looked for in prospective employees, and answer audience questions.

The job developers met monthly to discuss participants they were helping and their needs, as well as plans for outreach to employers for the upcoming month. The navigator sites were able to use this time to share ideas and discuss their efforts and the outcomes from these efforts. The business service representative was also in the field, making employer connections on behalf of the program and then connecting the sites to those employers.

Job developers noted that in marketing the program to employers, they emphasized a few key benefits. First, the job developers could screen job candidates for them and not charge a fee as staffing agencies did. Second, the job developers worked with participants to help them understand the job, so job candidates were prepared for the interview and the position. Finally, the job developers could make the interview process easy for employers, by lining up the interview candidates for them to interview, and using the Bridge to Employment offices. They also highlighted that in the quarterly socials, employers got the opportunity to educate and interact with potential job seekers.

#### **4.4. Education and Training Participation Patterns**

This section analyzes rates and durations of participation in healthcare training for those assigned to the study's treatment group. The analysis, based on HPOG PRS data, reports the overall level of participation, completion rates, and the duration of participation over the 18-month follow-up period.

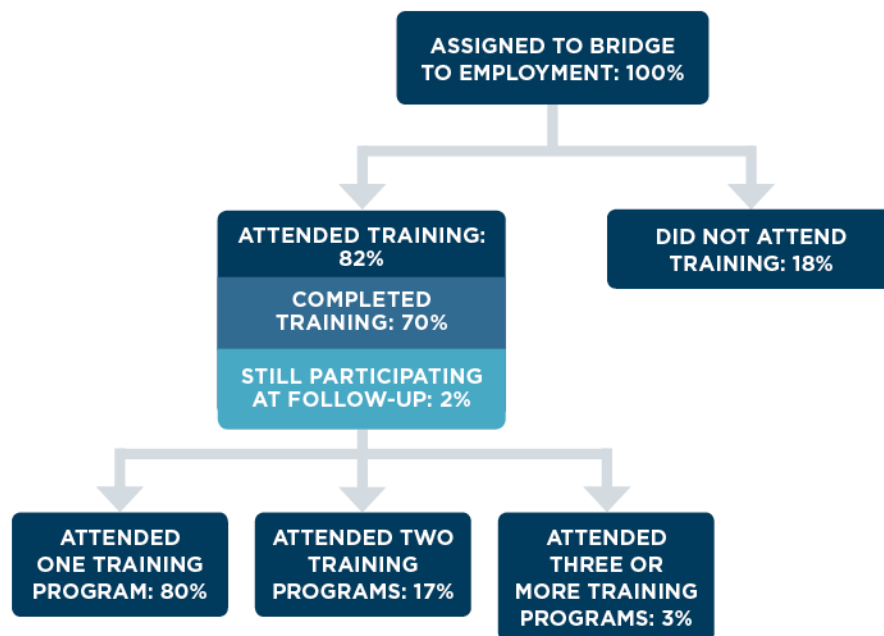
In summary, a high proportion of treatment group members (82 percent) participated in healthcare training and 70 percent received at least one credential. Of those who participated in a healthcare training program, the largest share enrolled in the nursing assistant program (21 percent). Participants spent about 2.5 months after random assignment completing some of the upfront activities before attending training; the length of stay in training averaged 4.9 months. Few participants were attending Bridge to Employment-funded training at the end of

the 18-month follow-up period. More than 75 percent of participants attended training at for-profit private schools. Key findings are detailed below.

- **More than 80 percent of Bridge to Employment enrollees participated in a healthcare training program.**

Exhibit 4-2 shows the proportion of all treatment group members who achieved key educational and training milestones in the Bridge to Employment program. On average, 82 percent of treatment group members participated in at least one healthcare training program. The remaining 18 percent did not participate in any training after they were randomly assigned, although from other analyses (not shown), most of them did attend at least one career counseling session, which might include the work readiness workshops or one-on-one job search assistance.

**Exhibit 4-2. Participation in and Completion of Training among Treatment Group Members within an 18-Month Follow-Up Period**



Source: Administrative Records from HPOG PRS

By the end of the 18-month follow-up period, about 70 percent had completed at least one training and two percent were still participating in their first training. Among those who attended training, most (80 percent) attended one training, 17 percent attended two trainings, and three percent attended more than two trainings.

- *Participants attended a range of healthcare training programs, but nursing assistant was the most commonly attended program. Completion rates were high for many of the programs attended.*

Exhibit 4-3 depicts attendance and completion rates and average length of time in a training program for the subset of treatment group members who *attended* training—that is, the 82 percent from Exhibit 4-2. Note that for purposes of this analysis, “completion” refers to obtaining a credential.

**Exhibit 4-3. Type of Program Attended, Completion Rates, and Average Length of Stay among Treatment Group Members Who Participated in At Least One Education/Training Program in 18-Month Follow-Up Period**

Education/Training Program	Total (%)	Of Participants in Specified Program		
		Completion Rate (%)	Average Length of Stay (mos.)	Still Participating at End of Follow-Up (%)
Attended One Healthcare Training Program	80.4	84	4.7	3.6
Training Program (for those who attended one program)				
Nursing Assistant	21.3	97	2.4	
Phlebotomist	15.5	88	3.3	
Medical Assistant	11.6	77	6.4	
Medical Records and Health Information Technician	9.2	76	5.6	
Nursing Psychiatric and Home Health Aide	7.3	97	2.7	
Dental Assistant	4.6	79	9.4	
Licensed and Vocational Nurse (LVN)	4.1	59	12.6	
Other	6.8	64	5.5	
Attended Two Healthcare Training Programs	16.5	71	5.5	10.3
Training Programs (for those who attended two programs)				
Medical Assistant, Phlebotomist	2.7	100	1.7	
Nursing Assistant, Nursing Psychiatric and Home Health Aide	2.4	57	6.9	
Nursing Assistant, Phlebotomist	1.7	100	7.0	
Other	9.7	61	5.9	
Attended Three or More Healthcare Training Programs	3.1	77	8.6	15.4
Most Common Training Programs (for those who attended three or more programs)				
Medical Assistant, Phlebotomist, Nursing Assistant	0.7	100	11.3	
Nursing Assistant, Phlebotomist, Nursing Psychiatric and Home Health Aide	0.5	100	10.5	
Nursing Assistant, Licensed and Vocational Nurse, Phlebotomist	0.2	67	10.7	
Other	1.7	63	6.7	
Attended Any Number of Healthcare Training Programs	100.0	81	4.9	5.1

SOURCE: HPOG Performance Reporting System.

NOTE: Sample size is 413 and includes all participants who attended at least one program.



Among treatment group members who attended training, about one-fifth attended a nursing assistant program (and not a second training program), and 97 percent of those completed it. Other common training programs were phlebotomist (16 percent of training participants), medical assistant (12 percent), and medical records and health information technician (nine percent). Completion rates were relatively high for most of the programs, averaging 84 percent for those who attended one healthcare training program. Only 17 percent of participants attended two healthcare programs, and 71 percent of those completed the two programs. The combination of programs for those who attended two varied, although medical assistant/phlebotomist and nursing assistant/home health aide were most common. Very few participants attended three training programs.

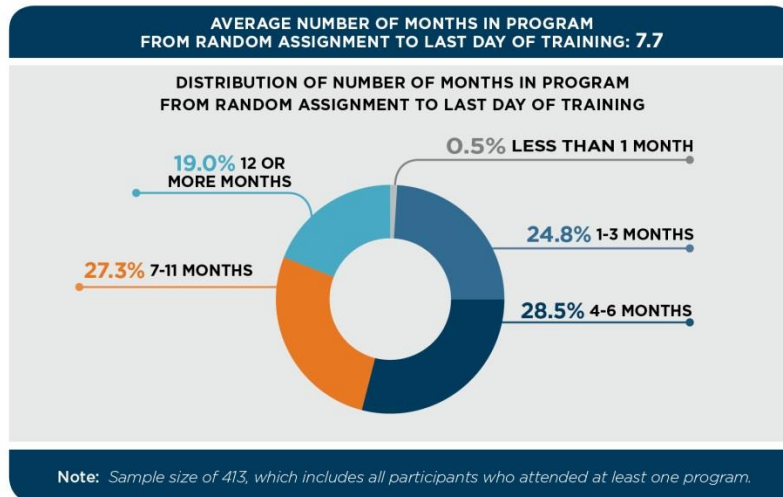
- *The average length of stay in a healthcare training program was 4.9 months, and few participants were still enrolled at the end of the 18-month follow-up period.*

As seen in Exhibit 4-3, across all those who attended a training program, treatment group members attended the training program for an average of 4.9 months, with 81 percent completing the programs they were enrolled in and about five percent still enrolled at the end of the follow-up period. Reflecting different time commitments to complete the program requirements, there was considerable variation across the programs in the length of time students spent in healthcare training. The average length of stay for nursing assistant training was 2.4 months, but it was 6.4 months for medical assistants and 12.6 months for licensed and vocational nurses. Overall, participants who attended one program attended for 4.7 months, but as expected, the length of participation was longer for those attending two or three programs (5.5 and 8.6 months, respectively). Regardless of the number of programs attended, few participants (five percent) who started training were still attending their training programs at the end of the follow-up period.

The training began roughly 2.5 months after random assignment, indicating some time spent completing upfront activities and waiting for training to start. As noted above, during the first month of enrollment, participants were required to conduct research on training providers and submit their research packet to the navigators. MAAC required that participants attend a three-week work readiness workshop (later shortened to one week) prior to enrolling in a training program. Finally, depending on when participants entered the program, they might have to wait for a program to start.

Exhibit 4-4 shows the average length of time in a program from random assignment to the last date of training. The average length of stay including the upfront waiting period was 7.7 months. Most (81 percent) had completed their training less than 12 months after random assignment; 19 percent attended 12 or more months from their random assignment to their last date of training.

**Exhibit 4-4. Length of Stay among Treatment Group Members Participating in Training within an 18-Month Follow-Up Period**



SOURCE: HPOG Performance Reporting System

- *There were not major differences in the participation patterns across the three navigators.*

Exhibit 4-5 shows a summary of participation patterns for Bridge to Employment program participants served by each of the three navigator organizations. In general, the participation patterns discussed above are similar across all the navigators, although there are some differences. All had relatively high rates of enrollment in and completion of healthcare training programs (86 percent completed at least one program), although Lifeline had somewhat lower enrollment rates than MAAC and CTS (73 percent compared with 85 percent). Participation in the training for nursing assistants was common among all the navigators, although MAAC had a larger share in home health aide and licensed and vocational nurse (LVN) training than the other two.

MAAC and Lifeline participants were more likely to attend two training programs than CTS's. Navigators at MAAC reported that two training providers offered a program that bundled nursing assistant and home health aide that was popular, and sometimes they suggested this to participants who were interested in either one.

**Exhibit 4-5. Programs Attended, Average Length of Stay, and Type of Institution among Treatment Group Members in Bridge to Employment Education/Training over 18-Month Follow-Up Period, by Navigator**

Measure	Total (%)	MAAC (%)	CTS (%)	Lifeline (%)
Attended at Least One Healthcare Program	81.6	84.7	84.9	73.4
Type of Program Attended (first program)				
Nursing Assistant	25.9	16.0	31.3	24.8
Phlebotomist	18.9	19.0	20.2	16.2
Medical Assistant	16.2	7.0	16.3	24.8
Medical Records and Health Information Technician	10.7	13.0	13.0	3.8
Nursing Psychiatric and Home Health Aide	9.4	24.0	5.8	2.9
Dental Assistant	4.8	2.0	5.8	5.7
Licensed and Vocational Nurse (LVN)	4.6	11.0	2.4	2.9
Completed at Least One Program	86.0	88.0	85.1	85.7
Attended Two Healthcare Training Programs	13.4	17.8	8.6	18.2
Completed Two Training Programs (of those who attended two)	70.6	85.7	61.9	65.4
Average Length of Stay (all programs)	4.9 mos.	5.4 mos.	4.3 mos.	5.6 mos.
Still Enrolled at End of Follow-Up Period (all programs)	5.1	9.0	1.9	7.6
Type of Institution Attended (first program)				
Private For-Profit School	75.5	93.0	78.4	53.3
Non-Profit Organization	18.2	0.0	14.4	42.9
Four-Year College	6.1	7.0	7.2	2.9
Community/Technical College	0.2	0.0	0.0	1.0

SOURCE: HPOG Performance Reporting System.

- **Participants most commonly attended healthcare training at private schools, followed by non-profit organizations.**

Exhibit 4-5 also shows the type of institution where participants received their healthcare training. Notably, more than 75 percent of participants received training from private schools. Much smaller proportions received training at a non-profit organization (18 percent) or four-year college (6 percent). Less than one percent received training from a community college. MAAC enrolled the highest proportion (93 percent) of participants in training at private schools, whereas Lifeline enrolled them in more equal proportions at private schools and non-profit organizations.

- **Participants who were issued an ITA voucher received about \$4,000 on average, though the cap was \$7,000.**

On average, participants received an ITA voucher that was about \$3,000 less than the cap (Exhibit 4-6). This likely reflects the short-term nature of the training. MAAC participants received the highest average amount. Lifeline participants received the lowest, which may be because more of its participants received their training at the lower-cost regional occupational program operated by the local school district.

**Exhibit 4-6. Average ITA Spending per Treatment Group Member, by Navigator**

Navigator	Average ITA Spending per Participant
CTS	\$4,168
Lifeline	\$3,563
MAAC	\$4,466
<b>All</b>	<b>\$4,078</b>

**4.5. Impact on Receipt of Education/Training and Services**

This section focuses on the degree to which Bridge to Employment increased receipt of education/training, supportive services, and employment services among the treatment group members. An implication of the career pathways framework is that any improvements in the main outcomes (discussed in Chapter 5) will result primarily from impacts on the treatment group’s experiences and services tied to education and training.

These analyses expand the previous analysis in Section 4.4 that described treatment group experiences based on PRS records.<sup>42</sup> The analyses in this section use data from the follow-up survey to compare the programmatic experiences of treatment and control group members in order to gain insight into how any differences in those experiences might lead to impacts on more distant outcomes. (Exhibit 4-7 below briefly explains how to read impact tables.) Chapter 5 presents the main findings on impacts on amounts of education and training received.

**Exhibit 4-7. How to Read Impact Tables**

Exhibit 4-8 and Exhibit 4-9 in this chapter, as well as exhibits in Chapter 5, list the outcome measure in the analysis in the left-most column (**Outcome**), with the unit of that outcome in parentheses (e.g., “(%)”).

The **Treatment Group** column presents the treatment group’s regression-adjusted mean outcome, followed in the next column by the control group’s regression-adjusted mean outcome (**Control Group**). The regression adjustments correct for random variation in baseline covariates between the two groups (and thus differ slightly from the raw means). The **Difference** column lists the impact—that is, the difference between the treatment and control group means.

There are several common standards for judging statistical significance. In this report, tests are considered statistically significant and highlighted in tables if the *p*-value is less than or equal to .10. Tests with smaller *p*-values are separately flagged:

- \* for 0.10
- \*\* for 0.05
- \*\*\* for 0.01

The penultimate column is **Standard Error**, a measure of uncertainty in the estimated impact that reflects both chance variation due to randomization and any measurement error. The final column, ***p*-Value**, is the probability that the observed difference between the treatment and control group values is due to chance.

Outcomes in *italics* apply to a subset of survey respondents (e.g., those who attended education/training). These estimates are not impacts, but unadjusted, non-experimental comparisons.

<sup>42</sup> For the treatment group, the self-reported information in the survey differs from Bridge to Employment program data. The survey data captures information on services that the treatment group sought on their own outside of the program. However, the survey data are [subject to recall error](#).

<sup>42</sup> Numbers may not sum to the total due to rounding.

**Exhibit 4-8. Education and Training Receipt after Random Assignment**

Outcome	Treatment Group	Control Group	Difference	Standard Error	p-Value
<b>General Aspects of Education/Training Receipt</b>					
Received Education/Training Since Random Assignment (%)					
In Any Subject/Field	75.2	57.8	+17.4	***	3.5 <.001
In a Healthcare Occupation	70.0	45.2	+24.9	***	3.7 <.001
<i>Type of Healthcare Occupation for Which Received Training (respondents can select more than one option) (%)</i>					
<i>Administrative</i>	28.2	25.4	+2.8		4.7 .541
<i>Technical</i>	32.2	23.9	+8.3	*	4.7 .076
<i>Direct Personal Care</i>	53.7	62.5	-7.8		5.2 .133
<i>Other</i>	7.5	6.5	+1.0		2.7 .724
Since Random Assignment, Ever Attended (%)					
Two-Year College	22.2	29.1	-6.9	**	3.2 .033
Four-Year College	6.5	7.2	-0.6		1.8 .724
Private (non-degree granting) School	33.9	11.0	+22.9	***	3.0 <.001
Adult High School/Education	15.5	10.5	+5.1	**	2.4 .038
Community/Non-Profit Organization	2.3	2.0	+0.3		1.1 .802
Other	3.8	5.4	-1.6		1.6 .340
<i>Time Spent at School and Work at First Place Attended (%)</i>					
<i>Full-Time School and Full-Time Work</i>	7.4	9.0	-1.6		2.6 .531
<i>Full-Time School with No or Part-Time Work</i>	52.8	38.7	+14.2	***	4.6 .002
<i>Part-Time School and Full-Time Work</i>	11.4	14.6	-3.2		3.2 .309
<i>Part-Time School with No or Part-Time Work</i>	28.4	37.7	-9.3	**	4.4 .037
<i>Views of classes at first place attended (%)</i>					
<i>Strongly agrees relevant to life/career</i>	65.8	70.3	-4.5		4.4 .302
<i>Used active learning methods most/all of the time</i>	33.6	30.3	+3.3		4.3 .447
<i>Perceived strong emphasis on community at first place of instruction (%)</i>	25.0	27.7	-3.7		4.2 .380
Total	100.0	100.0			
<b>Basic Skills Instruction and Tests</b>					
Received Basic Skills Instruction Since Random Assignment (%)					
Academic Skills	12.8	11.5	+1.3		2.4 .583
English as a Second Language	3.6	3.1	+0.4		1.3 .739
Took College Placement Exam (%)					
English	15.4	19.3	-3.9		2.8 .155
Math	16.3	16.9	-0.6		2.7 .830
Passed College Placement Exam (%)					
English	11.5	15.4	-3.9		2.5 .118
Math	11.5	12.6	-1.1		2.4 .646
<b>Life Skills Instruction <sup>c</sup></b>					
Received Life Skills Instruction Since Random Assignment (%)					
Hours Among Those Receiving (average)	217.5	365.9	-148.4	***	2.9 117.6 .209
Hours for Entire Sample (average)	42.9	53.4	-10.5		19.8 .597
Sample Size (full survey sample)	388	342			

SOURCE: Abt Associates calculations based on data from the PACE short-term follow-up survey.

NOTES: Where not italicized, outcomes apply to the full survey sample, and impact estimates are fully experimental and regression-adjusted. Outcomes in *italics* apply to subset of survey respondents (e.g., those who attended education/training)—for these estimates, between-group differences are unadjusted, non-experimental comparisons. See Appendix Exhibit B-1 for outcome definitions.

Statistical significance levels, based on two-tailed *t*-tests tests of differences between research groups, are summarized as follows:

\*\*\* statistically significant at the 1-percent level; \*\* at the 5-percent level; \* at the 10-percent level.

The analyses in this section are based on experiences respondents reported in the follow-up survey. Specifically, the following section discusses impacts on education or training receipt after random assignment (Exhibit 4-8) and receipt of advising and employment services (Exhibit 4-9).

- ***Bridge to Employment had a statistically significant impact on its participants' receipt of education/training.***

Exhibit 4-8 (above) shows statistically significant impacts on receipt of education/training activities. The program produced an 17-percentage point difference in the proportion of treatment group members who received training in any subject compared with the control group (75 percent versus 58 percent) and a 25-point difference between the groups in receipt of healthcare-related training (70 percent versus 45 percent).<sup>43</sup>

It is notable that more than half of the control group members still pursued education/training on their own without the Bridge to Employment navigator services or financial assistance.

As shown in Exhibit 4-8, among treatment group members who reported receiving healthcare training, more than half received training for a direct personal care occupation, such as home health aide or certified nursing assistant (outcomes are in italics because they apply to a subset of survey respondents). About one-third received training for a technical occupation such as medical and clinical laboratory technician, and a little more than one-quarter received training for an administrative occupation such as medical records and health information technicians. Survey respondents could select more than one occupation. Treatment group members were more likely to report training for a technical occupation than control group members were.

- ***Bridge to Employment influenced the type of institution that its participants attended; more treatment group members opted to attend private schools.***

The program increased attendance among treatment group members at a private for-profit, non-degree-granting school by 23 percentage points (34 percent compared with 11 percent) and increased their attendance at an adult high school by five percentage points (16 percent compared with 11 percent). As noted in Section 4.4, participants were more likely to use their ITA vouchers to attend private schools or adult high schools, such as a regional occupational program, rather than community colleges.

Training programs at private schools were shorter in length than at community colleges. In addition, it was easier for participants to find a program that they could start soon after

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<sup>43</sup> These proportions represent the percentage of treatment and control group members who reported on the follow-up survey that they participated in an education/training program. For the treatment group, this self-reported value differs from Bridge to Employment program data, likely due to variation in the data source (e.g., self-reported measures are subject to recall error).

enrolling in the Bridge to Employment program; at community colleges, they might have to wait until the next semester. Also, some programs at community colleges had waiting lists. Some of the private schools offered training on weekends and evenings, which could accommodate students who worked during the day. Finally, some participants were referred to the program by private schools and had already chosen their school prior to enrolling in the program.

As Exhibit 4-8 shows, this increase in training from private schools and adult high schools coincided with a decrease in training from two-year (public, private non-profit, and private for-profit) colleges, resulting in a seven-percentage point reduction (22 percent of treatment group members attended a two-year college compared with 29 percent of control group members). Treatment group members received financial assistance from the program to attend the institution of their choice, but they may have been less likely to attend a less-expensive community college after learning they could not use their ITA voucher and would have to pay out of pocket and be reimbursed. Thus, Bridge to Employment may have led some treatment group members to substitute a private school education for a community college one.

Reflecting the fact that the program did not focus on increasing basic skills, there was not a statistically significant difference in receipt of basic skills instruction between the treatment and control groups. Treatment group members were less likely to take and pass an English college placement exam, which reflects the fact that fewer treatment group members attended a two-year college where such an exam would be necessary than did control group members.

Finally, treatment group members were more likely to report having received life skills instruction (22 percent compared with 15 percent). Though the program did not have a specific component focused on life skills instruction, the work readiness workshops covered topics such as workplace etiquette, communication skills, and time management.

Exhibit 4-8 also shows non-experimental comparisons for the subset of treatment and control group survey respondents who reported attending any training (see *italicized* rows). As shown, treatment group members who received any training were more likely to report that they attended full-time school, with no or part-time work (53 percent versus 39 percent). Control group members were more likely to report that they attended part-time school with no or part-time work. The financial assistance provided to the treatment group presumably allowed them to attend school full-time without having to work full-time.

- ***Bridge to Employment produced impacts on receipt of supportive and employment services.***

Exhibit 4-9 (below) shows impacts on receipt of supportive services and employment services for treatment and control group members, regardless of whether they received services or not (that is, for the total sample).

Bridge to Employment had an eight-percentage point impact on receipt of career counseling (32 percent of treatment group members versus 24 percent of control group members), a 14-percentage point impact on help arranging supports (25 percent versus 11 percent), and a 17-percentage point impact on job search assistance receipt (36 percent versus 19 percent). As discussed above, SDWP strongly emphasized participants entering employment after training, and required the three navigator organizations to provide work readiness training and individual job search assistance to participants. The training institutions also reportedly provided job search assistance.

The program did not reduce the percentage of treatment group members who reported financial support as a challenge to enrollment or persistence in training.

- *There were differences between the supportive services that treatment group and control group members received from the training institutions, reflecting the different types of institutions selected by each group.*

For those who received training, the survey asked about the types of supports received *at the first place of instruction*. Because program participants attended a wide range of training institutions and were more likely to attend private and adult high schools and less likely to attend community colleges than control group members, any differences between the groups likely reflected the services offered at these institutions. Treatment group members were less likely to get academic advising. They were more likely to get help arranging supports for school or work, and they were more likely to get help with their job search—services provided by Bridge to Employment but may also have been provided by the training institutions. Only about one-quarter of both groups reported receiving career counseling from their training institution.

- *Treatment group members received more financial assistance from Bridge to Employment, which reduced the percentage who received loan funding.*

Among those who received training, treatment group members were more likely to receive grant assistance than were control group members, resulting in a 12-percentage point difference (62 percent versus 50 percent). Interestingly, there was a 13-percentage point difference between the percentages of control group members who received loans (26 percent) and treatment group members (12 percent). This suggests that the grant assistance provided by the program may have reduced the indebtedness of treatment group members.

Treatment group members who received training were more likely to report being offered a clinical internship or apprenticeship and were more likely to visit local employers as part of their training.



**Exhibit 4-9. Receipt of Various Supports since Random Assignment**

Outcome	Treatment Group	Control Group	Difference	Standard Error	p-Value
<b>Received Assistance from Any Organization Since Random Assignment (%)</b>					
Career Counseling	32.5	24.4	+8.0 **	3.4	.017
Help Arranging Supports for School/Work/Family	25.0	11.3	+13.6 ***	2.7	<.001
Job Search or Placement	35.8	18.9	+17.0 ***	3.2	<.001
<b>Received Supports at First Place of Instruction Attended (%)</b>					
<i>Career Counseling</i>					
Ever	25.3	27.3	-2.0	4.2	.634
Three or More Times	13.6	13.2	+0.4	3.3	.895
<i>Academic Advising</i>					
Ever	25.4	36.7	-11.2 **	4.4	.011
Three or More Times	11.9	20.5	-8.6 **	3.5	.016
<i>Financial Aid Advising</i>					
Ever	21.6	26.6	-5.0	4.1	.224
Three or More Times	6.9	9.2	-2.4	2.6	.366
<i>Tutoring</i>					
Ever	20.6	23.4	-2.8	4.0	.484
Three or More Times	14.6	18.2	-3.6	3.6	.314
<i>Help Arranging Supports for School/Work</i>					
Ever	15.7	9.6	+6.2 **	3.1	.045
Three or More Times	11.1	5.8	+5.3 **	2.5	.037
<i>Job Search/Placement Assistance</i>					
Ever	30.1	17.7	+12.4 ***	4.0	.002
Three or More Times	16.1	10.9	+5.2	3.2	.106
<b>Received Financial Assistance at First Place of Instruction (%)</b>					
Grant/Scholarship	62.2	49.8	+12.4 ***	4.7	.008
Loan	12.3	25.7	-13.5 ***	3.7	<.001
Cited Financial Support as Challenge in Enrollment or Persistence (%) <sup>b</sup>	66.4	66.6	-0.2	3.5	.948
<b>Offered Opportunities for Related Work Experience as Part of Training at First Place of Instruction (%)</b>					
Clinical Internship	60.2	42.3	+17.8 ***	4.6	<.001
Visits to Local Employer	26.6	18.2	+8.4 **	3.9	.030
Work-Study Job	23.7	22.4	+1.3	4.0	.738
Apprenticeship	16.5	7.6	+9.0 ***	3.0	.003
Any Related Work Experience (including other)	72.2	56.1	+16.1 ***	4.5	<.001
Sample Size (Full Survey Sample)	388	342			

SOURCE: Abt Associates calculations based on data from the PACE short-term follow-up survey.

NOTES: Where not italicized, outcomes apply to the full survey sample, and impact estimates are fully experimental and regression-adjusted. Outcomes in *italics* apply to subset of survey respondents (e.g., those who attended education or training)—for these estimates, between-group differences are unadjusted, non-experimental comparisons. See Appendix Exhibit B-1 for outcome definitions.

Statistical significance levels, based on two-tailed *t*-tests tests of differences between research groups, are summarized as follows: \*\*\* statistically significant at the 1-percent level; \*\* at the 5-percent level; \* at the 10-percent level.

## 5. Early Impacts of the Bridge to Employment Program

This chapter reports estimates of Bridge to Employment’s early impacts on educational attainment, career progress, and a set of non-economic outcomes. These main estimates cover impacts over an 18-month period after random assignment for the sample of study participants who responded to the follow-up survey (388 treatment group members and 342 control group members).<sup>44</sup> Analyses are based on experiences reported by study participants in the survey.

The chapter begins by describing hypothesized impacts and outcomes analyzed. Subsequent sections present findings on education, early career progress, and non-economic outcomes, respectively. In each, subsections distinguish among confirmatory, secondary, and exploratory analyses.

### 5.1. Key Hypotheses and Outcomes

The program’s designers sought to promote completion of training in growing healthcare fields through financial assistance and enhanced guidance and navigation. In the theory of change (see Exhibit 2-1), these program components should have positive effects on intermediate outcomes—such as career knowledge, work-related skills, self-esteem and other psycho-social factors, and resources for coping with life challenges that can interfere with school and work. The ultimate aim (main outcomes) was to increase educational attainment, as well as increased employment and earnings in middle-skill jobs in the healthcare sector.

The research team classified outcomes as confirmatory, secondary, or exploratory, according to whether they addressed confirmatory, secondary, or exploratory hypotheses about Bridge to Employment impacts (see Chapter 2). Exhibit 5-1 lists and describes each outcome.

The confirmatory outcome in the Bridge to Employment early analyses is **receipt of a credential**. The receipt of a credential was considered to be a key necessary step before finding employment in the healthcare field (confirmatory hypothesis). Given the program emphasized short-term training, the receipt of a credential was possible to attain within the 18-month follow-up period.

Secondary analyses included tests of hypotheses for additional education outcomes, as well as a number of indicators of early career progress. These hypotheses capture additional early effects suggested by the program’s logic model and, as with the confirmatory hypothesis, have a hypothesized direction of change, an increase or decrease in the outcome.

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<sup>44</sup> The survey response rate was 72 percent overall: 77 percent for the treatment group and 68 percent for the control group. See Appendix B for statistical adjustments to address non-response bias.

Finally, exploratory outcomes provide additional evidence on program impacts, generally for outcomes of interest with some, though less certain, expectation for effects. The research team expected the occupational training, the navigation, employment supports, and material supports to have positive effects on measures of a variety of psycho-social skills and life stressors.

**Exhibit 5-1. Outcomes in the Early Impact Analysis**

Outcome	Description	Data Source	Sample Size	
			Treatment	Control
<b>Confirmatory (Confirmatory Hypothesis)</b>				
Received Credential	Percentage receiving any occupational credential from any source	PACE short-term follow-up survey	388	342
<b>Secondary (Secondary Hypotheses)</b>				
Education		PACE short-term follow-up survey		
Hours of College			381	332
Occupational Training				
Credential Receipt by Location	Credential by the type of granting authority		388	342
Career Progress		PACE short-term follow-up survey		
Employment at or above a Specified Wage	Earning \$12 or more per hour		384	339
Employment in Job Requiring Mid-Level Skills	Whether employed in a job requiring calibrated set of skills based on federal standards <sup>b</sup>		384	337
Working in a Healthcare Occupation	Whether employed in one of several healthcare occupational categories		384	337
Perceived Career Progress	Three-item scale of self-assessed career progress; response categories range from 1=strongly disagree to 4=strongly agree		387	340
Confidence in Career Knowledge	Seven-item scale of self-assessed career knowledge; response categories range from 1=strongly disagree to 4=strongly agree		387	341
Access to Career Supports	Six-item scale counting number of types of career-supportive relationships in workforce and education settings; response categories range from 1=no to 2=yes.		388	340
<b>Exploratory (Exploratory Hypotheses)</b>				
Psycho-Social Skills		PACE short-term follow-up survey		
Grit	Eight-item scale capturing persistence and determination; response categories range from 1=strongly disagree to 4=strongly agree		388	342
Academic Self-Confidence	Twelve-item scale; response categories range from 1=strongly disagree to 6=strongly agree		388	342
Core Self-Evaluation	Twelve-item scale; response categories range from 1=strongly disagree to 4=strongly agree		387	342
Social Belonging in School	Five-item scale capturing sense of belonging; response categories range from 1=strongly disagree to 4=strongly agree		388	341

Outcome	Description	Data Source	Sample Size	
			Treatment	Control
Life Stressors		PACE short-term follow-up survey		
Financial Hardship	Two-item scale capturing financial hardship, reported as either an inability to pay rent/mortgage or not enough money to make ends meet; response categories are either 0=no or 1=yes		381	335
Life Challenges	Seven-item scale capturing life challenges that interfere with school, work, or family responsibilities; response categories range from 1=never to 5=very often		387	342
Perceived Stress	Four-item scale capturing perceived stress; response categories range from 1=never to 4=very often		387	342

NOTE: Sample sizes vary slightly across survey-defined outcomes because of item nonresponse. Responses of “don’t know” or refused were generally not imputed.

<sup>a</sup> Threshold selected because it was close to the 60th percentile of hourly wages among employed control group members.

<sup>b</sup> Skill levels based on the federal O\*NET system with thresholds targeted to PACE program target occupations. Occupational categories were coded for PACE by Census Bureau staff from standard open-ended survey items.

## 5.2. Impacts on Educational Attainment

This section presents impact estimates for key measures of educational progress for the full Bridge to Employment sample (treatment and control groups). To highlight the confirmatory test’s special role as an indicator of whether early impacts are on track, this section first assesses findings on the confirmatory outcome and then examines findings for secondary and exploratory outcomes.

- ***Bridge to Employment increased the percentage of participants who received a credential (confirmatory hypothesis).***

As Exhibit 5-2 shows, the program had a 29-percentage point impact on receipt of a credential— 64 percent of treatment group members received a credential compared with 34 percent of control group members. Additional analysis of the survey (not shown) found that about 89 percent of the treatment group members who received a credential earned short-term certificates (certificates that required fewer than 30 credits or equivalent of training time), nine percent earned certificates that required 30 or more credits, and two percent earned an associate’s degree (none had earned a bachelor’s degree).

The secondary outcome reported in the exhibit’s next panel shows where the survey respondents received their credential. Treatment group members were more likely than control group members to receive their credential from all types of institutions, though the exhibit shows very strong evidence that Bridge to Employment had a positive impact on receipt of a credential from a training institution other than a college or a licensing/certification body.

**Exhibit 5-2. Early Impacts on Education/Training Outcomes (Confirmatory and Secondary Hypotheses)**

Outcome	Treatment Group	Control Group	Difference	Standard Error	p-Value
<b>Confirmatory Outcome</b>					
Received a Credential (%)	63.6	34.2	+29.4 ***	3.6	<.001
<b>Secondary Outcomes</b>					
Total Hours of Occupational Training at (average)					
A College	144.1	173.6	-29.5	30.6	.832
Another Place	232.6	101.8	+130.8 ***	29.5	<.001
Any Place	380.2	279.1	+101.1 ***	39.7	.006
Received a Credential from (%)					
A College	9.6	6.8	+2.7 *	2.0	.090
Another Education/Training Institution	30.6	9.2	+21.4 ***	2.8	<.001
A Licensing/Certification Body	56.1	28.9	+27.1 ***	3.6	<.001
Sample Size <sup>a</sup>	388	342			

SOURCE: Abt Associates calculations based on PACE early follow-up survey.

NOTES: Statistical significance levels, based on one-tailed t-tests tests of differences between research groups, are summarized as follows:  
\*\*\* statistically significant at the 1-percent level; \*\* at the 5-percent level; \* at the 10-percent level.

<sup>a</sup> Sample sizes in this row are based on the subsample who responded to the PACE follow-up survey.

- ***The program also increased the hours of occupational training (secondary hypotheses).***

Exhibit 5-2 shows very strong evidence that Bridge to Employment had a positive impact on total hours of occupational training: about 101 hours. Over an 18-month period, treatment group members attended 380 hours of occupational training compared with 279 hours for the control group. A closer look reveals that treatment/control group difference in total hours was driven primarily by treatment group members' increased enrollment relative to the control group and not due to increased hours of participation among those enrolled. Among those who attended any training, the average hours per enrollee are similar for the treatment and control groups (483 and 506 hours, respectively).<sup>45</sup>

The program had a positive impact on total hours of occupational training at an institution other than a college: about 131 hours. It did not have an impact on hours at colleges. This reflects the finding that treatment group members were more likely to receive their training from a private school than a two-year college.

The survey also found that 23 percent of treatment group members were still enrolled in training at the end of the follow-up period (not shown). Since administrative records indicate few treatment group members were receiving HPOG-funded training at the end of the follow-up period, as shown in Chapter 4, some participants were pursuing training on their own, without the support of Bridge to Employment. A higher portion of control group members, 28 percent, were still in training.

<sup>45</sup> Calculated by dividing each group's average total hours by its fraction ever enrolling. For example, for the control group: 279.1 hours / 57.8 percent enrolled = 483 hours per control group participant.

- *All three navigator organizations produced impacts on credential receipt, though the size of the impacts varied across the organizations.*

Exhibit 5-3 shows that all three organizations increased credential receipt among treatment group members relative to control group members. Of all the organizations, MAAC achieved the largest impact, increasing the percentage of treatment group members who received a credential by 42 percentage points; CTS produced an impact of 27 percentage points and Lifeline produced an impact of 24 percentage points on receipt of credentials.

The implementation study found that MAAC differed from the other two organizations in two key ways. MAAC required that participants first attend a work readiness workshop where they learned more about the healthcare job market, which may have prepared them more for their training and led to higher credential receipt. As Chapter 4 shows, MAAC also provided higher levels of ITA support, on average, than the other organizations.

**Exhibit 5-3. Early Impacts on Education/Training Outcomes, by Navigator Organization (Exploratory Hypotheses)**

Outcome	Treatment Group	Control Group	Difference		Standard Error	p-Values (One-Sided)	p-Values for Interaction (Two-Sided)
Received a Credential (%)							.028
CTS	64.0	37.5	+26.5	***	5.3	<.001	
Lifeline	52.6	28.7	+23.8	***	7.0	<.001	
MAAC	75.2	33.7	+41.6	***	6.8	<.001	
<b>Pooled</b>	<b>63.6</b>	<b>34.2</b>	<b>+29.4</b>	<b>***</b>	<b>3.6</b>	<b>&lt;.001</b>	
Sample Size <sup>a</sup>	388	342					

SOURCE: Abt Associates calculations based on PACE early follow-up survey.

NOTE: Statistical significance levels, based on one-tailed *t*-tests tests of differences between research groups, are summarized as follows:

\*\*\* statistically significant at the 1-percent level; \*\* at the 5-percent level; \* at the 10-percent level.

<sup>a</sup> Sample sizes in this row are based on the subsample who responded to the PACE follow-up survey.

### 5.3. Impacts on Early Career Progress (Secondary Hypotheses)

This section presents impact estimates for six measures of career progress. Three indicators capture different aspects of self-assessed progress toward career goals: perceived career progress, confidence in career knowledge, and access to career supports. Three describe employment outcomes: working in a job that pays at least \$12 per hour, working in a job requiring at least mid-level skills, and working in a healthcare occupation.

The estimates in Exhibit 5-4 reveal positive impacts on all three indicators of self-assessed career progress, resulting in an increase of 0.08 points on a four-point scale (1 to 4) on the index of perceived career progress and confidence in career knowledge and 0.04 points on a two-point scale

(1=no and 2=yes) on the index of access to career supports.<sup>46</sup> These differences amount to effect size impacts of 0.10, 0.15, and 0.12, respectively. Although statistically significant, it is not clear that these effects are large enough to be policy relevant. Further analyses with longer-term follow-up may clarify this.

**Exhibit 5-4. Early Impacts on Selected Career Outcomes (Secondary Hypotheses)**

Outcome	Treatment Group	Control Group	Difference	Standard Error	Effect Size	p-Value
Indices of Self-Assessed Career Progress (average)						
Perceived Career Progress <sup>a</sup>	3.42	3.35	+0.08 *	0.05	+0.10	.076
Confidence in Career Knowledge <sup>b</sup>	3.46	3.37	+0.08 **	0.04	+0.15	.022
Access to Career Supports <sup>c</sup>	1.79	1.76	+0.04 *	0.02	+0.12	.052
Indicators of Career Pathways Employment (%)						
Working in a Job Paying \$12/Hour or More <sup>d</sup>	30.1	28.7	+1.3	3.3	+0.03	.340
Working in a Job Requiring at Least Mid-Level Skills	24.9	15.4	+9.5 ***	2.9	+0.24	<.001
Working in a Healthcare Occupation	25.7	16.4	+9.2 ***	3.0	+0.23	.001
Sample Size <sup>e</sup>	388	342				

SOURCE: Abt Associates calculations based on data from the PACE early follow-up survey.

NOTE: Statistical significance levels, based on one-tailed t-tests tests of differences between research groups, are summarized as follows: \*\*\* statistically significant at the 1-percent level; \*\* at the 5-percent level; \* at the 10-percent level.

<sup>a</sup> Three-item scale tapping self-assessed career progress; response categories range from 1=strongly disagree to 4=strongly agree.

<sup>b</sup> Seven-item scale tapping self-assessed career knowledge; response categories range from 1=strongly disagree to 4=strongly agree.

<sup>c</sup> Six-item scale tapping self-assessed access to career supports; response categories range from 1=no to 2=yes.

<sup>d</sup> Assessed wage distributions for employed control members to establish this cut-point at approximately the 60<sup>th</sup> percentile of wages.

<sup>e</sup> Sample sizes in this row are based on the subsample who responded to the PACE follow-up survey.

- **Bridge to Employment produced positive impacts on employment.**

The program achieved impacts on two of the three employment outcomes. It increased the percentage of treatment group members who were working in a job requiring at least mid-level skills by 10 percentage points (25 percent of treatment group members compared with 15 percent of control group members). According to the federal definition, jobs requiring at least mid-level skills typically require one or two years of training involving both on-the-job experience and informal training with experienced workers. Given that the healthcare training most participants received was short-term, it is surprising that there is an impact on this measure. However, some participants pursued longer-term training, such as training to become an LVN. Some may have come in with a certificate and used the HPOG grant to fund additional training.

Bridge to Employment also increased the percentage of treatment group members who were working in a healthcare occupation by nine percentage points (26 percent of treatment group members compared with 16 percent of control group members). This measure was derived by

<sup>46</sup> An effect size is a standardized measure of the size of an effect that is defined as the impact divided by the pooled standard deviation of the treatment and control groups. Its purpose in this report is to express in a standardized manner the size of impacts that have no natural unit of measurement and to allow for comparison of the sizes of effects across scales.

coding the participant’s current or last occupation based on Census Bureau codes as being a healthcare occupation.

Exhibit 5-5 shows the impact on working in a healthcare occupation by navigator organization. All three organizations produced an impact on this measure; the differences in impacts across the three organizations were not statistically significant.

**Exhibit 5-5. Early Impacts on Career Outcomes by Navigator Organization (Exploratory Hypotheses)**

Outcome	Treatment Group	Control Group	Difference	Standard Error	p-Value	p-Value for Differential Effects
Working in Healthcare Occupation, by Navigator Organization (%)						0.128
CTS	25.9	16.8	+9.1 **	4.3	.037	
Lifeline	22.1	14.6	+7.4	5.6	.188	
MAAC	29.2	17.5	+11.7 *	6.4	.069	
Sample size <sup>a</sup>	388	342				

SOURCE: Abt Associates calculations based on data from the PACE short-term follow-up survey.

NOTES: Statistical significance levels, based on two-tailed t-tests tests of differences between research groups, are summarized as follows:  
\*\*\* statistically significant at the 1-percent level; \*\* at the 5-percent level; \* at the 10-percent level.

<sup>a</sup> Sample sizes in this row are based on the subsample who responded to the PACE follow-up survey.

Overall, the positive effects on employment outcomes are not surprising given that the treatment group members were more likely to complete their training and achieve a credential during this follow-up period compared with control group members. However, as Exhibit 5-4 shows, the program did not increase the percentage of treatment group members who were working in a job paying at least \$12 per hour.

The lack of an impact on this measure may stem from the wages participants can expect to make initially in entry-level healthcare jobs. A 2014 report on the healthcare sector in San Diego County, produced by SDWP, estimated median wages across a number of healthcare occupations in San Diego (see Exhibit 5.6). Though the median wages of most of the healthcare occupations pay more than \$12 per hour, those on the lower end of the scale may not pay this wage at job entry. For example, one provider told researchers that CNA jobs generally start at \$10 to \$11 an hour but can increase to \$18 an hour with more experience.

The follow-up report at 36 months after random assignment will estimate whether there are positive effects on earnings.



**Exhibit 5-6. Median Hourly Wages in San Diego and Imperial Counties**



SOURCE: Health Care: Labor Market Analysis San Diego County, October 2014. EMSI. QCEW, non-QCEW, and self-employment data. May 2014.

**5.4. Impacts on Psycho-Social Skills and Life Stressors (Exploratory Hypotheses)**

Positive impacts on educational attainment and self-assessed career prospects create some possibility for positive effects on psycho-social skills associated with college success. Although the measures of psycho-social skills used in the follow-up survey are the result of fairly substantial testing, psychometricians have recently raised concerns about their use in program evaluations. Specifically, individuals in a program that emphasizes these skills may come to have higher expectations of their performance than do control group members, and thus the treatment group members rate the same level of performance more negatively than do the control group (Duckworth and Yeager 2015). This potential for measurement biases injected some uncertainty about the direction of expected effects, such that the study treats these analyses as exploratory (i.e., subject to two-sided tests).

Results show little evidence of impact for the indices of psycho-social skills tested (Exhibit 5-7, top panel). The findings provide suggestive evidence that the program increased treatment group members’ core self-evaluation, implying they thought more positively of themselves and were more confident in their abilities. The program’s enhanced case management and supports provided by the Bridge to Employment program favored positive psycho-social impacts, though the program did not explicitly emphasize improving psycho-social skills. The success achieved in earning training

certificates might improve self-assessments of personal qualities and capacities. Finally, there is the potential for measurement error, as described above.

**Exhibit 5-7. Early Impacts on Other Outcomes (Exploratory Hypotheses)**

Outcome	Treatment Group	Control Group	Difference	Standard Error	Effect Size	p-Value
Indices of Psycho-Social Skills (average)						
Grit <sup>a</sup>	3.25	3.22	+0.04	0.04	+0.07	.330
Academic Self-Confidence <sup>b</sup>	5.12	5.02	+0.09 *	0.05	+0.13	.070
Core Self-Evaluation <sup>c</sup>	3.44	3.36	+0.07 **	0.03	+0.16	.028
Social Belonging in School <sup>d</sup>	3.46	3.46	+0.01	0.04	+0.02	.820
Indices of Life Stressors (average)						
Financial Hardship <sup>e</sup>	0.57	0.60	-0.03	0.04	-0.05	.465
Life Challenges <sup>f</sup>	1.50	1.50	+0.00	0.03	-0.01	.940
Perceived Stress <sup>g</sup>	2.04	2.17	-0.13 **	0.06	-0.16	.029
Sample Size <sup>h</sup>	388	342				

SOURCE: Abt Associates calculations based on data from the PACE short-term follow-up survey.

NOTES: Statistical significance levels, based on two-tailed t-tests tests of differences between research groups, are summarized as follows: \*\* at the 5-percent level; \* at the 10-percent level.

<sup>a</sup> Eight-item scale capturing persistence and determination; response categories range from 1=strongly disagree to 4=strongly agree.

<sup>b</sup> Twelve-item scale capturing academic self-confidence; response categories range from 1=strongly disagree to 6=strongly agree.

<sup>c</sup> Twelve-item scale capturing core self-evaluation; response categories range from 1=strongly disagree to 4=strongly agree.

<sup>d</sup> Five-item scale capturing sense of belonging; response categories range from 1=strongly disagree to 4=strongly agree.

<sup>e</sup> One-item scale capturing financial hardship, reported as inability to pay rent/mortgage or not enough money to make ends meet; response categories range from 0=no to 1=yes.

<sup>f</sup> Seven-item scale capturing life challenges that interfere with school, work, or family responsibilities; response categories range from 1=never to 5=very often.

<sup>g</sup> Four-item scale capturing perceived stress; response categories range from 1=almost never to 4=very often.

<sup>h</sup> Sample sizes in this row apply to sample members responding to the PACE follow-up survey.

Bridge to Employment did not improve indices of financial hardship and life challenges, though it did reduce perceived stress. The program may have reduced some financial hardships given it reduced the percentage of treatment group members who took out loans. Additionally, the program provided supportive services, such as transportation assistance. Finally, the navigator organizations developed other components that might have reduced barriers. For example, CTS mentors worked with participants one-on-one to address barriers they were facing, Lifeline’s program offered financial counseling and screened participants for other benefits they might be eligible for, and MAAC’s AmeriCorps intern offered mentorship to participants. However, the other participants’ other living expenses and barriers they faced may have been greater than could be addressed by the support the program was able to provide.

## 6. Conclusions

With its Health Profession Opportunity Grants award, SDWP aimed to increase the number of low-income San Diego County residents enrolling in and completing healthcare occupational training. This chapter summarizes early findings at approximately 18 months after random assignment of the implementation and impact studies. It also describes implications for longer-term findings under the Career Pathways Intermediate Outcomes Study and Career Pathways Long-term Outcomes Study.

### 6.1. Summary of Key Early Impact Findings

The Bridge to Employment program in San Diego County used an Individual Training Account (ITA) model to help adults with low incomes pay for healthcare training, combined with case management, supportive services, and employment services provided by community-based partners.

- *The consumer choice model leaves it up to participants to select training programs in demand occupations; navigators provided little guidance on which programs employers valued.*

Participants could use the ITA vouchers in any accredited program in one of three occupational groups: direct patient care, technical, or administrative. SDWP wanted to ensure maximum flexibility. This is not unique to Bridge to Employment; most workforce agencies that provide ITA vouchers allow participants to choose their training from an eligible training provider list that includes accredited providers in the area. Another study that attempted to test a more structured model for providing guidance to participants found that staff were reluctant to steer them to one training over another (McConnell et al. 2006). Under the program, training could take place at community colleges, adult education providers, public universities, and private schools; SDWP did not prefer one type of institution over another.

Participants had to conduct their own provider research (“research packet”). The program considered it important that participants “owned their decision.” Though some participants knew where they wanted to attend when they entered the program, others came into the program with questions. Navigators could provide participants with information on which providers provided which training programs, but they did not steer participants to particular programs or provide detailed information on quality, such as statistics on outcomes achieved by program graduates. Navigators were frank in feeling ill equipped to provide concrete guidance, as they had no formal training in how to do so and felt constrained by the consumer choice model not to express their views.

- ***Most participants chose to enroll in training offered by private schools.***

Participants learned what they knew of a program from the institutions they visited. Most chose to attend private schools, whose training programs were shorter in length than those offered by community colleges and adult high schools, allowed them to start training soon after enrolling in Bridge to Employment, and were good at marketing their programs to program participants. The community college programs did not offer enough entry-level healthcare programs to meet the demand, resulting in waiting lists. Additionally, the community colleges required that participants pay the training costs up front and be reimbursed, rather than accept the ITA vouchers, which might have been a limiting factor for participants who could not pay out of pocket.

- ***The program, overseen by the local workforce agency in San Diego, focused on short-term training and moving participants into employment.***

Bridge to Employment did not focus on long-term career pathways. Some participants who enrolled in the program pursued registered and vocational nursing programs, but most focused on entry-level healthcare occupations such as medical assistant or certified nursing assistant. For those who pursued these entry-level occupations, their focus was on completing the programs quickly and finding employment.

SDWP ensured the Bridge to Employment program helped participants find jobs in the healthcare field, given this was one of the key performance metrics established by ACF. It required that the navigator organizations provide work readiness training that covered a combination of topics such as resume and cover letter writing, interview practice, job search skills, labor market research, soft skills, and job retention. The organizations were also expected to provide individual job search assistance. In the fourth year of the grant, they provided funding to each organization to hire a job developer. These developers were to generate leads for the participants and conduct “employer socials,” where employers were invited to discuss job openings and meet with participants who had completed their training.

- ***Bridge to Employment achieved impacts on the receipt of training and the receipt of a credential.***

The program increased participation in vocational training by 17 percentage points over the 18-month follow-up period. Though more than half of the control group were able to obtain training on their own without the financial assistance and navigation support provided by the program, 75 percent of treatment group members participated in training, compared with 58 percent of the control group.

Bridge to Employment achieved a 29-percentage point impact on the receipt of a credential (64 percent of treatment group members compared with 34 percent of control group members).

- *Bridge to Employment produced some positive impacts on employment.*

The program increased the percentage of treatment group members who were working in a job requiring at least mid-level skills by 10 percentage points (25 percent of treatment group members compared with 15 percent of control group members).<sup>47</sup> Jobs needing at least mid-level skills typically require one or two years of training involving both on-the-job experience and informal training with experienced workers. The program also increased the percentage of treatment group members who were working in a healthcare occupation by nine percentage points (26 percent of treatment group members compared with 16 percent of control group members).

Treatment group members were not more likely than control group members to be both employed and earning more than \$12 an hour.

## **6.2. Implication for Longer-Term Findings**

This initial report on Bridge to Employment focuses on the implementation of the program and its early effects on the education/training outcomes of treatment group members. Based on the career pathways framework and the Bridge to Employment logic model, the expectation was that if the program was to achieve its goals, by 18 months after random assignment there would be significant positive effects on occupational training received and credentials attained in the healthcare field (confirmatory hypothesis). The positive effects found on this measure suggest that the program was successful in achieving this initial goal.

This report has focused mainly on education/training impacts, with only limited analysis of employment and earnings. This reflects expectations that a substantial proportion of program participants could still be engaged in training at the end of 18 months. Almost one quarter of treatment and control group members were still receiving training at 18 months.

The next PACE report on Pathways to Healthcare will cover a 36-month follow-up period for the full research sample. In a later report, the study will also examine longer-term follow-up at 72 months. The 36-month report will examine impacts on education outcomes and provide a more systematic look at impacts on employment for a period when any such impacts can be expected to emerge. It will examine a broad variety of employment outcomes, including average employment and earnings over successive follow-up quarters, job characteristics (e.g., occupation, hourly wage rate, receipt of fringe benefits, career progress).

Thus, the next report will begin to answer whether the occupational training gains that Bridge to Employment achieved after 18 months will translate into economic gains in the workplace in the longer term.

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<sup>47</sup> Numbers may not sum to the total due to rounding.

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