PACIFIC MOUNTAIN WORKFORCE DEVELOPMENT COUNCIL

Opioid Disaster Recovery Grant program evaluation report

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Executive summary

Washington's opioid program helps people who are facing opioid-related job displacement to re-enter the workforce. It helps people regain stability through counseling, training, and job placement services. The federal Opioid Disaster Recovery Dislocated Worker Grant pays for the program.

Employment Security staff studied how the opioid program was carried out in the Pacific Mountain (PacMtn) Workforce Development Area (WDA) over two phases. Phase one spanned the third quarter of 2019 through the second quarter of 2021. Phase two was the third quarter of 2022 through the second quarter of 2023.

This report compares participants in phase one with participants in phase two. This analysis follows the 2021 report, which compared opioid program outcomes with outcomes from reemployment services provided to the general, non-opioid impacted, dislocated worker population. See https://media.esd.wa.gov/esdwa/Default/ESDWAGOV/newsroom/Legislative-resources/opioid-evaluation-report-12-17-2021.pdf.

Five takeaways from comparing phase one and two of the opioid program and general Dislocated Worker Grant (DWG) programs are:

1. In phase one, more people in the five-county PacMtn WDA received services funded by the general DWG program than services funded by the opioid program. Opioid grant funded services were more common in phase two.
2. Participants in both phases of the opioid program are similar with one key difference being that phase two participants are more likely to experience long-term unemployment before participating in the program.
3. Opioid program participants report their goal occupation. In phase one, the most common goal was to work in warehousing. This reflected the PacMtn Workforce Development Council's (WDC's) partnership with the Wrap-Around Instruction for Navigating Gateways (WING) program, which placed opioid program participants in warehousing jobs. In phase two, the most common goal occupation was peer navigator — an individual who helps coach people to overcome addiction and gain reemployment.
4. PacMtn WDC invested similar amounts of funding into the opioid program in phases one and two. The way funding was spent changed slightly from phase one to phase two. Spending on individualized training accounts (ITAs) decreased by 10% and

spending on support services (SS) increased by 16% in phase two compared to phase one.

5. The training completion rate increased by 9% and the work experience program completion rate increased by 13% in phase two compared to phase one. Differences can be explained by variations in goal occupations and funding.

Introduction

Background on the opioid epidemic

Epidemic effects on health outcomes

The opioid overdose epidemic is a national public health crisis fueled by opioid use disorders. According to the Centers for Disease Control and Prevention (CDC), the number of drug overdose deaths has quintupled from 1999 to 2020. Nearly 75% of drug overdose deaths in 2020 were related to opioid use.

From 1990-2020, there were three distinct waves of opioid overdose deaths. The first wave began in the 1990s with increased opioid prescriptions to patients suffering from chronic pain. The second wave began in 2010 and was characterized by rapid increases in overdose deaths involving heroin, an illegal, highly addictive opioid that can be cheaper and easier to obtain than prescription drugs. The third wave began in 2013 and had significant increases in overdose deaths involving synthetic opioids, particularly illicitly manufactured fentanyl.[1] The CDC estimates that more than 645,000 people died from opioid-related overdoses from 1999 to 2021.

These national trends also occurred locally. Washington state saw opioid-related deaths increase 71% between 2003 and 2020, with increases in most counties. After controlling for population growth, the annual growth rate of opioid deaths changed little from 2005 to 2018, though the share of deaths involving heroin increased. The three waves of opioid overdose deaths were also observed in Washington: prescription opioids peaked between 2008 and

[1] Centers for Disease Control and Prevention (CDC). Understanding the Opioid Overdose Epidemic. Published August 8, 2023. Accessed Oct. 6, 2023 from https://www.cdc.gov/opioids/basics/epidemic.html

2010, after which heroin use increased. More recently, the rise of synthetic opioids — mostly fentanyl — has contributed to increases in deaths involving non-heroin opioids.[2]

Opioid overdoses have led to increases in nonfatal hospitalizations and health care costs. The Agency for Healthcare Research and Quality (AHRQ) estimates that national opioid-related hospitalizations increased by 64% between 2005 and 2014.[3] Researchers in the U.S. Congress Joint Economic Committee (JEC) found that the opioid epidemic cost the United States a record nearly $1.5 trillion in 2020. The ongoing rise in fatal opioid overdoses suggests the total cost is likely to continue to increase.[4]

Epidemic effects on labor market outcomes

The opioid crisis also influences the labor market, affecting both employed and unemployed people. Research has shown there is a negative relationship between opioid prescription rates and labor force participation,[5] and a positive relationship between substance misuse cases and unemployment rates.[6] The crisis also affects employers who may experience rising health care costs, increased absenteeism and reduced productivity.[7] Labor policies related to the opioid use are meant to address the underlying and complicating factors of this national crisis.

Background on the opioid program

Two-phase program focused on the crisis

The federal government has multiple ongoing efforts to address the opioid crisis. In October 2017, the Department of Health and Human Services (HHS) declared a public health

[2] Addictions, Drug & Alcohol Institute, University of Washington (ADAI UW). Opioid Trends across Washington State. Published August 29, 2022. Accessed January 5, 2023 from https://adai.washington.edu/wadata/opiate_home.htm

[3] Agency for Healthcare Research and Quality (AHRQ). Trends in the Rate of Opioid-Related Hospitalizations. Published May 2019. Accessed January 5, 2023 from https://www.ahrq.gov/opioids/map/index.html

[4] U.S. Congress Joint Economic Committee (JEC). Pandemic Disruptions Contributed to Increased Opioid Use, Highest-Ever Number of Opioid Fatalities. Published September 28, 2022. Accessed January 5, 2023 from https://beyer.house.gov/news/documentsingle.aspx?DocumentID=5684

[5] Bureau of Labor Statistics Monthly Labor Review (BLS MLR). Does Increased Opioid Use Lead to Declines in Labor Market Participation? Published March 2019. Accessed January 5, 2023 from https://www.bls.gov/opub/mlr/2019/beyond-bls/does-increased-opioid-use-lead-to-declines-in-labor-market-participation.htm

[6] Azagba, S., Shan, L., Qeadan, F. *et al.* Unemployment rate, opioids misuse and other substance abuse: quasi-experimental evidence from treatment admissions data. *BMC Psychiatry* **21**, 22 (2021). https://doi.org/10.1186/s12888-020-02981-7

[7] Vine, M., Staatz, C., Blyler, C. *et al.* The Role of the Workforce System in Addressing the Opioid Crisis: A Review of the Literature. *A report prepared for U.S. Department of Labor*, 2020. Accessed January 5, 2023 from https://www.dol.gov/sites/dolgov/files/OASP/evaluation/pdf/WorkforceOpioids_LitReview_508.pdf

emergency. Half a year later, the Employment and Training Administration (ETA) of the Department of Labor (DOL) started a grant program to help people affected by opioids to reenter the workforce.

Following the 2017 announcement, the ETA issued Training and Employment Guidance Letter (TEGL)[8] No. 12-17 to announce a crisis-focused demonstration program. DOL awarded more than $22 million to six states, including Washington, for demonstration projects starting July 24, 2018. These demonstrations helped ETA determine best practices for helping eligible participants effectively use program funds.

On Sept. 14, 2019, ETA issued TEGL No. 04-18 to help grant recipients address the opioid crisis in their communities and the opioid program phase one officially started. The best practices include unsubsidized employment, training activities, temporary employment opportunities and supportive services. All states, outlying areas, and tribal governments were eligible to apply for Disaster Recovery DWGs to put in place these best practices. Funding was distributed on a first-come, first-served basis.

The second phase of the opioid program, which is ongoing, lasts from 2022 to 2023. The performance period for Disaster Recovery DWGs is two years, but the ETA may make grant awards until the national health emergency expires. The ETA granted two years of performance extensions beyond 2021 to Washington's PacMtn Workforce Development so it could continue to address the opioid crisis.

Grant awards to Washington state

In the pilot program, Washington was granted about $4.9 million with that funding dispersed to the Snohomish and PacMtn WDAs. The program developed a strong community partnership helping people affected by the opioid crisis. Washington was in this pilot program from the third quarter of 2018 to the second quarter of 2020.

In phase one of the opioid program, from 2019 to 2021, Washington was granted about $0.9 million for the PacMtn WDA. Eligible participants received disaster-relief employment as well as career, training, and support services. PacMtn Workforce Development initiatives were conducted primarily by community-based organizations, in collaboration with community agencies that serve high-risk opioid affected populations.

For the current phase of the program, Washington was granted about $1.8 million.

[8] TEGL (Training and Employment Guidance Letter) is a document of grant application requirements. It interprets the statutory and regulatory requirements of the DOL grants. It is not a law or policy, but lays out the requirements, procedures, and deliverables for a grant application.

Employment, training and support services

The opioid program gives people affected by the opioid crisis an opportunity to gain valuable work experiences. One way PacMtn Workforce Development helps people is by providing subsidized temporary employment. These opportunities last up to 12 months (or 2,040 hours), with a possible 12-month extension. The work experiences help people build or rebuild their resumes, gain new skills, and improve their chances of securing stable employment in the future. These temporary work positions may be part-time or full-time, depending on the program's design and the individual's circumstances.

PacMtn Workforce Development partners with organizations to provide training activities. These training services include cohort training like in-class instruction and individualized training like on-the-job training and mentoring. The training services help participants develop and enhance their job-related skills.

Another part of the program is employment and employer engagement, which involves collaboration with local businesses and organizations to create work opportunities. Employers may receive subsidies to encourage their participation in providing meaningful work experiences and on-the-job training. The opioid funds can reimburse up to 75% of employers' wage payments. The wages and onboard training costs do not come out of employers' pockets. After the subsidized temporary employment ends, the hope is that program participants will obtain unsubsidized, permanent employment because of the grant-supported activities.

PacMtn Workforce Development also provides support services to reintegrate eligible participants back into the labor force. Participants receive support services such as counseling, which includes mental health and addiction treatment, assistance funds for transportation, housing, certification/testing fees, and other needs. They may also receive funds to help address any barriers they may face in seeking and maintaining their employment.

Eligible participants

PacMtn Workforce Development is responsible for finding and enrolling eligible participants. To be eligible, a person must be a dislocated worker, temporarily or permanently laid off due to the opioid crisis, long-term unemployed, or self-employed who is unemployed or significantly underemployed because of the opioid crisis.

PacMtn Workforce Development cannot base the enrollment of participants on their addiction status. Eligible participants are not required to have a history of opioid misuse or otherwise be personally affected by the opioid crisis to participate in grant-funded initiatives. Grantees may ask participants one question about the crisis: "Do you, a friend, or any member of your family have a history of opioid use?" The responses are voluntary, and they can only be used to

decide a participant's needs. Responses are not required to be disclosed as a condition of participation in grant-funded activities.

To recruit and enroll participants, PacMtn Workforce Development relies on referrals from partners. PacMtn Workforce Development cooperates with local partners such as, community health providers or health-related organizations, employers or industry organizations, justice or law enforcement organizations, faith- and community-based organizations, and educational institutions. Through these community partners, the WDC can identify people who may be eligible to participate in the opioid program.

Two different epidemic-related eligibility criteria can qualify a dislocated worker for the opioid program.

1. Workers who are directly or indirectly affected by the opioid crisis. This requires the workers to have one of the following characteristics:
    a. The individual, a friend, or a family member with a history of opioid use,
    b. The individual works or resides in a community affected by the opioid crisis,[9] or
    c. The individual can demonstrate job loss as a result of the opioid crisis.
2. Workers who seek to enter professions that could help address the opioid crisis and its causes. Workers who need new or upgraded skills to serve people struggling with opioid misuse are eligible for reskilling or upskilling training activities in the following professional areas:
    a. Addiction and substance abuse treatment and related services,
    b. Pain therapy and pain management services that could reduce or prevent dependence on prescription painkillers, and
    c. Mental health care treatment services for disorders and issues that could lead to, or worsen, opioid abuse and addiction.

Summary statistics

This section provides descriptive statistics for participants in phase one and two of the opioid

[9] A community affected by the opioid crisis is at the minimum an area that shows an increase equal to or greater than the national increase in such problems between 1999 and the latest year for which data are available. Possible sources may include (among others): a. the incidence or prevalence of opioid misuse and other substance use disorders; b. the age-adjusted rate of drug overdose deaths, as determined by the Director of the Centers for Disease Control and Prevention; c. the rate of non-fatal hospitalizations related to opioid misuse or other substance use disorders; or d. the number of arrests or convictions, or a relevant law enforcement statistic that reasonably shows an increase in opioid misuse or another substance use disorder. (Support to Communities: Fostering Opioid Recovery Through Workforce Development, USDOL ETA 2020, https://apply07.grants.gov/apply/opportunities/instructions/PKG00256286-instructions.pdf#page=27)

program. Phase one participants were enrolled between July 1, 2019, and Sept. 30, 2021. Phase two participants were enrolled between July 1, 2022, and June 30, 2023. Phase one participants were included if they had completed the program, but phase two participants were studied even if they had yet to complete the program.

Opioid program surpasses DWG program

During phase one, PacMtn Workforce Development enrolled more participants in the DWG program than in the opioid program. A total of 488 people participated in just the DWG program. A total of 66 people participated in just the opioid program. Seventy-two people received assistance from both programs.

In phase two, 82 people participated in the opioid program; five people participated in the DWG program; and 46 people received assistance from both programs.

Employment Security staff studied 266 opioid program participants in both phases. Staff chose to analyze and compare opioid program participants between the two phases because:

- Employment security staff compared opioid program and DWG program participants in the 2021 report;
- In phase two there are only five people enrolled in the DWG program only.

Phase two participants are more diverse

Figure 1 shows participant demographic characteristics. The first column lists the characteristic. The second and third columns list the phase group. The fourth column is a t-statistic. This statistic, when larger than 1.96, indicates that the two groups are statistically different from each other at the 95% confidence level.

The PacMtn WDC is the regional workforce development committee for five counties: Thurston, Mason, Lewis, Grays Harbor, and Pacific counties. Thurston County is the regional population and economic center of the area, the state capital, and the headquarter of all state governmental agencies.

The phase two group increased enrollment in the Grays Harbor and Thurston offices, but decreased enrollment in the Mason office.

The reason for increased enrollment in Thurston and Grays Harbor counties may be because they have more facilities to support peer navigation, which is the top goal occupation in phase

two of the opioid program. Thurston County is home to large program partners like Sidewalk, an organization assisting people experiencing homelessness with rapid rehousing services. Grays Harbor County has Grays Harbor College, which provides training for peer navigators. Thurston County Commissioners, Thurston County Public Health and Social Services, and the city of Olympia are also related to peer consultation and support to participants.

Figure 1. Demographic characteristics of opioid program participants in two phases

Washington state, 2019 through 2023. Source: Employment Security Department/DATA

Participant characteristics	Phase one	Phase two	Phase two vs phase one
Office location			
Grays Harbor	Suppressed	22.66%	4.00***
Lewis	10.14%	8.59%	-0.43
Mason	10.87%	Suppressed	-1.90†
Pacific	Suppressed	Suppressed	Suppressed
Thurston	32.61%	61.72%	4.95***
Demographics			
Age (years)	42.91	42.41	-0.33
Female	31.16%	41.41%	1.74†
White	63.04%	65.63%	0.44
Black	7.25%	Suppressed	-0.59
Asian	Suppressed	Suppressed	Suppressed
Hispanic	9.42%	Suppressed	-0.71
Disabled	13.04%	21.09%	1.74†
Veteran	7.25%	11.72%	1.24
Education			
No formal education	Suppressed	Suppressed	Suppressed
High school dropout	9.42%	7.81%	-0.47
High school graduate	50.00%	40.63%	-1.54
Some college	18.12%	29.69%	2.22*
Associate	10.14%	Suppressed	-1.16
Bachelor	9.42%	10.94%	0.41
Graduate school	Suppressed	Suppressed	Suppressed
Socioeconomic status			
Current employed	10.87%	Suppressed	-1.62
Long unemployment	29.71%	50.78%	3.57***
Low income	50.72%	59.38%	1.42
TANF	Suppressed	8.59%	1.13
Assistance	38.41%	45.31%	1.14
Homeless	11.59%	9.38%	-0.59
Offender	26.81%	27.34%	0.10
Sample size (N)	138	128	

Notes: † indicates $p \leq 0.10$, * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

Comparing the demographics of participants in phase two with phase one, phase two has more female participants. There is a 10-percentage-point increase in participants who identify as female in phase two. Disabled workers increased by 8 percentage points. There is a 10-percentage-point decrease in high school graduates, although not statistically significant, and a more than 10-percentage-point increase in workers with some college education.

Six out of seven socioeconomic variables are statistically similar. In phase two, about 5% of participants are seeking jobs while employed, 59% have a low income, 9% receive TANF, 45% receive some other kind of social assistance, 9% are homeless, and 27% have past convictions that may impact a referral to an employer. The only statistically significant socioeconomic difference between the phase one and phase two participants is that there was a 21-percentage-point increase in the likelihood that the participants had been unemployed for four months or longer when enrolling in the opioid program. This increase may be owing to the COVID-19 pandemic and recession.

Participants earn comparable pre-program wages

Figure 2 shows participant hourly wages in the eight quarters before they entered the program. Column four is the t-test statistic showing when phase one and phase two groups are statistically different. Columns five and six show the sample size for the two phases, respectively. Hourly wages are winsorized at $100 per hour. Hourly wages are adjusted for inflation using the Consumer Price Index for All Urban Consumers and measured in 2019 dollar values.

Figure 2. Hourly wage history of opioid program participants in two phases before the start of the program

Washington state, 2019 through 2023. Source: Employment Security Department/DATA

Quarter before program enrollment	Phase one hourly wage	Phase two hourly wage	Phase two vs phase one	Phase one sample size (n1)	Phase two sample size (n2)
Eighth Quarter	$18.79	$24.42	2.86**	72	51
Seventh Quarter	$19.29	$24.73	2.51*	81	46
Sixth Quarter	$19.48	$23.86	2.27*	86	50
Fifth Quarter	$19.82	$23.37	1.92†	86	54
Fourth Quarter	$19.75	$21.56	1.06	88	59
Third Quarter	$20.45	$21.55	0.55	77	51
Second Quarter	$20.36	$21.41	0.51	74	45

First Quarter	$19.96	$21.82	0.83	72	39

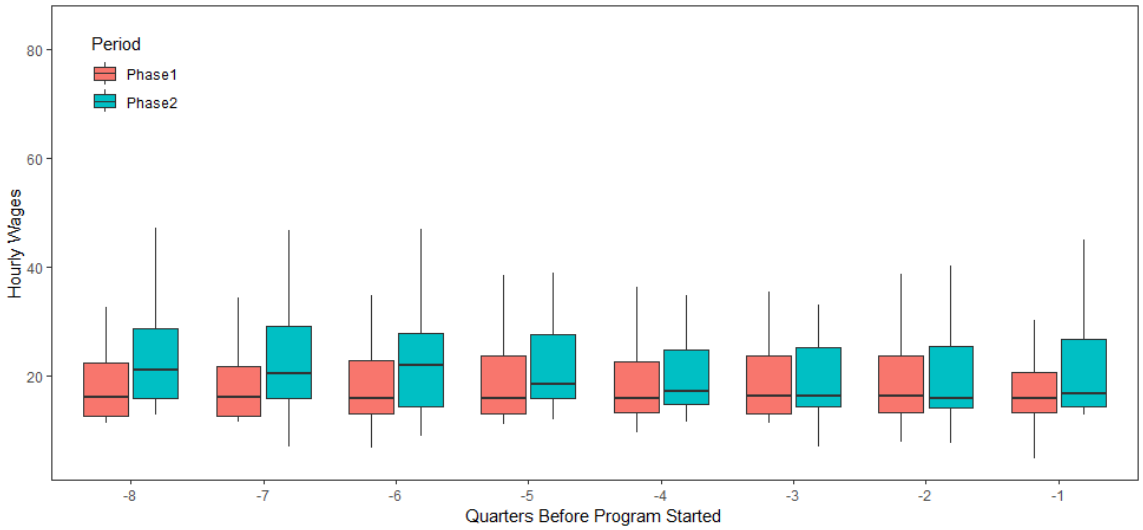
Notes: † indicates p ≤ 0.10, * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001.

Opioid program phase two participants had higher average hourly wages than phase one participants in every quarter two years prior to program enrollment. The hourly wages in quarters one year prior to program enrollment are not statistically different between the two phases. In phase one, the average pre-enrollment hourly wage was about $7.50 more than Washington's minimum wage and phase two hourly wage was about $8.40 above minimum wage.

Figure 3 shows a boxplot of hourly wage distribution of eight quarters before enrollment in the opioid program phase one and phase two. The figure shows that the average hourly wage differences are greater two years before enrollment and the differences become insignificant one year before enrollment. Participants in phase two had better economic preconditions than phase one participants.

Figure 3. Boxplot of hourly wage history of opioid program participants in two phases before the start of the program

Washington state, 2019 through 2023. Source: Employment Security Department/DATA



Goal occupations

Figure 4 shows participant goal occupations. Column one gives the goal occupations. Columns two and three provide the probability of participants setting goals in different occupations. Column four shows the t-statistic for the hypothesis test that there is no difference between

phase one and phase two in the likelihood that a participant listed this occupation as their goal.

Opioid program participants sometimes provided more than one goal occupation. A total of 189 participants provided 242 goal occupations, 159 of which were goals set in phase one and 83 were goals set in phase two.

The largest proportion of opioid program phase one participants set hand-mover laborer in the warehouse setting as their career goal, accounting for 43% of the total. About 40% of phase two participants chose legal, community service, and healthcare occupations as their goal occupation. This includes 16% as community health workers, 16% other counselors, and 8% other legal, community and health care occupations.

The second largest career goal group for both phases was in the transportation category. Heavy truck drivers in both phases accounted for about 17% of participants' goal occupations. The next most chosen transportation occupation for phase two participants was driver/sales worker at about 13%. Besides the above occupations, sales/office occupations dropped significantly from 14 people in phase one to fewer than 10 people in phase two.

Figure 4. Goal occupations for opioid program participants in two phases

Washington state, 2019 through 2023. Source: Employment Security Department/DATA

Goal occupation	Phase one	Phase two	Phase two vs phase one
Legal, community service, and health care practitioners	6.92%	39.76%	5.69***
Community health workers	0.00%	15.66%	3.90***
Counselors, all other	0.00%	15.66%	3.90***
Community service, other	6.92%	Suppressed	-0.22
Natural resources, construction, and maintenance	7.55%	Suppressed	0.24
Sales and office occupations	8.81%	Suppressed	-1.70†
Service: health care, protective, food preparation, building and maintenance	6.29%	Suppressed	-0.48
Transportation: driver/sales workers	0.00%	13.25%	3.54***
Transportation: heavy and tractor-trailer truck drivers	16.98%	16.87%	-0.02
Material moving: laborers and freight, stock, and material movers, hand	43.40%	0.00%	-11.01***
Sample size (N)	159	83	

Notes: † indicates $p \leq 0.10$, * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

Of the top selected career goals, all but heavy truck driver (which was equally chosen in both phases) experienced large changes. Some changed from positive to zero percentage or from zero to positive percentage. This is because during phase one, PacMtn WDC cooperated with the warehouse and trucking industry and sent participants into those fields. In phase two PacMtn Workforce Development recruited participants into community health worker and counselor roles, working as peer navigators helping peer workers affected by opioids.

Phase two participants receive more work experience services

The opioid program connects participants with Workforce Innovation and Opportunity Act (WIOA) services, including basic services and individualized, training and support (ITS) services. Participants are also co-enrolled in other programs that leverage different funding sources. *Figure 5* shows WIOA services and co-enrolled programs. Columns two and three show the average number of services and program enrollments per person. Column four is the t-statistic and its significance.

Figure 5. WIOA services and co-enrolled programs of opioid program participants in two phases

Washington state, 2019 through 2023. Source: Employment Security Department/DATA

Services and programs	Average per person phase one	Average per person phase two	Phase two vs phase one
Basic services	16.75	10.98	-3.32**
Basic assessment	9.82	5.58	-5.22***
Career learning	0.45	2.06	2.75**
Networking	0.42	0.17	-1.43
Staff assistance	3.95	1.37	-4.59***
Self service	1.94	1.30	-0.87
Unemployment assistance	0.17	0.50	1.98*
ITS services	9.79	9.00	-0.78
Career counseling	2.62	3.21	2.25*
Support services: transportation	1.65	0.86	-2.01*
Support services: other	3.44	2.33	-2.22*
Training	1.66	1.38	-1.17
Work experience (WEX)	0.42	1.22	3.58***
Co-enrolled programs	2.46	1.73	-6.19***

WIOA DWG	0.52	0.36	-2.69**
WIOA Adult	0.75	0.72	-0.61
COVID DWG	0.18	0.03	-4.12***
Other programs	0.07	0.62	10.22***
Opioid Demonstration	0.12	0.00	-4.24***
Rapid Response Increased Employment Initiative program	0.82	0.00	-22.76***

Notes: † indicates $p \leq 0.10$, * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

Basic services

There are six groups of basic services: basic assessment, career learning, networking, staff assistance, self-service, and unemployment assistance.

- Basic assessment: accounts for the largest proportion of basic services, regular assessment of participants to assist them in deciding on appropriate next steps, including searching for employment, training, and services.
- Career learning: standardized information sharing, workshop, instruction, and skill modules, not based on knowledge of the individual participants, no staff assessment provided.
- Networking: activities that involve single or multiple customers, referrals, or job fairs to develop job opportunities.
- Staff assistance: a two-way communication/assistance between staff and participant, tailored to the participant's individual needs, including assistance in job search and application review.
- Self-service: job search type activity performed by a job seeker without staff assistance.
- Unemployment assistance: specific staff assistance provided to individuals regarding filing claims under the unemployment insurance program.

Participants in phase two of the opioid program received about six fewer basic services per person than opioid phase one participants. Staff intensive services like basic assessment and staff assistance saw the largest drop. Phase two participants received more career learning (which could be delivered in a cohort) and more unemployment assistance (which could be a result of more unemployment and higher reliance on unemployment insurance). The number of networking services and self-services stayed almost the same.

ITS services

There are five groups of ITS services: career counseling, support services transportation,

support services other, training, and work experience (WEX).

- Career counseling: counseling assistance through WorkSource or other partner services, comprehensive and specialized assessments of skill levels and service needs, joint development of employment plans.
- Support service transportation: money provided for transportation before job placement and until exiting the program.
- Support service other: money provided for assistance in procuring clothing, housing, car repairs, study supplies, utilities, and so on.
- Training: practice activities for hands-on learning, including occupational skills training, on-the-job training, training paid by others, and so on.
- WEX: subsidized, time-limited work experience with a public, private, or nonprofit employer to establish a work history that will lead to unsubsidized employment.

Opioid program phase two participants received almost the same number of ITS services as phase one participants, but the composition of the ITS services differs in an interesting way. The per-person number of support services provisions decreased while work experience services increased, and training stayed intact. Career counseling also increased significantly.

Co-enrolled programs

Opioid program phase two participants were co-enrolled in fewer other programs than phase one participants. People may want to enroll in more than one program at a time because the additional resources could provide more training and income support and lead to improved participant outcomes. There are six groups of other programs: Workforce Innovation and Opportunity Act Dislocated Worker Grants program (WIOA DWG), WIOA Adult program, COVID DWG, other Opioid, Rapid Response Increased Employment Initiative program (RRIE), and other programs.

- WIOA DWG program: provides job search assistance, job training and work-based learning opportunities for unemployed job seekers with barriers that inhibit their ability to obtain gainful employment. This is the closest substitute for the opioid program. WIOA adult program: provides individualized career services and training services, must give priority to recipients of public assistance, other low-income individuals, and individuals who are basic skills deficient.
- COVID DWG: provides immediate re-employment, training, support services, and virtual service-delivery strategies to dislocated workers in the pandemic, including Disaster Recovery DWGs and Economic Recovery DWGs.

- Opioid Demonstration DWG: the pilot national health emergency demonstration grant project announced in March 2018.
- RRIE: Rapid Response Increased Employment Initiative program, provides supplemental funding to dislocated workers in opioid program phase one.
- Other programs: including Rapid Response Additional Assistance program (RRAA), Economic Security for All program (EcSA), disabled veterans outreach program, WIOA out of school youth program and WorkFirst job search program.

Phase two participants receive more support service funding

Figure 6 shows the average funding received by each participant in the two phases. The funding information is extracted using text analytics techniques applied to case notes. The first column shows the funding type. ITA funding stands for individualized and training account[10] funding. SS funding stands for support service funding. The second and third columns show funding per person. The fourth column shows the t-statistic. The fifth and sixth columns display the sample size.

Figure 6. Program funding per person by usage for opioid program participants

Washington state, 2019 through 2023. Source: Employment Security Department/DATA

Program funding	Phase one	Phase two	Phase two vs phase one	Phase one sample size (n1)	Phase two sample size (n2)
ITA funding	$4,029.77	$3,545.48	-0.82	43	44
SS funding	$660.39	$1,107.75	3.21**	106	73
ITA/SS ratio	13.46	10.82	-0.35	35	27

Notes: † indicates p ≤ 0.10, * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001.

Phase two has less ITA funding per person, though the difference is not statistically significant. It also has more SS funding per person, and this difference is statistically significant. The sum of ITA and SS funding over the two phases are similar, around $4,700.

Combining *Figures 5* and *6* shows a different trend in ITA and SS funding per service from phase one to phase two. Participants in phase two may have received more work experience services per person but the ITA funding for each person did not increase, which means that

[10] Individualized training and support (ITS) services refer to a customized approach to help individuals affected by opioids. ITS tailors services to the unique needs of each person. Individual training accounts (ITAs) are the primary method for funding ITS for opioid program participants.

average funds for each training or work experience service decreased. On the contrary, the number of support services per person decreased in phase two, but the SS funding for each person increased, which means that average funds for each support service increased.

In phase two, the low-cost training services like short-term driver's license training may have increased in number. Likewise, high-cost support services like rental assistance may have increased in number as well.

Service completion rate increases in phase two

Figure 7 shows participant completion rates for the five categories of ITS services. Column one lists the five service categories, including career counseling, support service transportation, support service other than transportation, training and work experience. Columns two and three show the completion rate for each phase. Columns four and five present the sample size for each phase.

Figure 7. Service completion rate for Opioid program participants in two phases

Washington state, 2019 through 2023. Source: Employment Security Department/DATA

ITS service	Phase one completion rate	Phase two completion rate	Phase one sample size (n1)	Phase two sample size (n2)
Career counseling	Suppressed	100.00%	Suppressed	164
Support services transportation	Suppressed	100.00%	Suppressed	19
Support services other	Suppressed	100.00%	Suppressed	32
Training	86.32%	94.44%	117	72
Work experience (WEX)	74.29%	84.29%	35	70

Note: Suppressed if there are fewer than 10 participants in that cell.

The completion status is defined as any of the three outcomes:

1. Completion of service with certificate or credential earned.
2. Completion of service with certificate or credential pending.
3. Completion of service with no certificate or credential required.

Figure 7 shows a significant change in sample size from phase one to phase two for the first three service categories, probably because the requirement of these services changed between the two phases. For example, some career counseling services require a practice component in phase two.

Empirical results

What predicts successful completion?

Empirical analysis provides information that is difficult to obtain by descriptive analysis. This section addresses the research question:

> *What characteristics of a program participant predict success in completing training or work experience program engagements?*

A quick answer is that the different occupations and amount of funding are the major contributors to predict success in completing training or work experience services.

We evaluate this research question using logit regressions. In these logit models, the response is the logarithmic transformation of the odds of service completion. The odds of success are the ratio of the probability of completing services over the probability of not completing services. The logarithmic transformation is the natural log of the odds. For the odds of completion, the greater the odds, the greater the probability of completing the service, and the greater the logit regression response variable. The negative log-odds indicate higher chances of failure than success, while the positive log-odds indicate higher chances of success than failure.

We further calculate predicted probability for a representative participant with hypothetical characteristics at the sample mean. Predicted probability is calculated for two phases combined with two types of services.

Figure 7 shows that the completion rate of different services depends on the phase and the type of service. Therefore, in all regression models we include an indicator of phase and an indicator of type of service.

For the purposes of answering this research question, Employment Security staff did not study career counselling, transportation services and other support services, since completion of these services does not always require a learning process and does not lead to the bestowal of a certificate or credential.

For the remaining training and WEX services, Employment Security staff used an indicator variable to identify service type. This independent variable *TypeOfService* is equal to one if they receive training services and equal to zero if they receive WEX services. The variable *Phase* is an indicator variable for whether the services were provided in phase one or phase two. It is equal

to one if the service was provided in phase two and equal to zero if it was provided in phase one. These two indicator variables are variables of interest. In addition, there are six sets of control variables related to improved completion rate in phase two. The regression specification is as follows.

$$\log\left(\frac{P_i^{ServiceCompletion}}{1-P_i^{ServiceCompletion}}\right) = \beta_0 + \beta_1^{phase} Phase_i + \beta_2^{type} TypeOfService_i + \beta_3 Control_i + \epsilon_i$$

Where groups of control variables are:

- Pre-enrollment quarter earnings: Quarterly earnings for the first to eighth quarters before the start of the program;
- Demographics: age, an indicator for gender, indicators for race, an indicator for ethnicity, an indicator for disability, and an indicator for veteran status;
- Goal ONET: a factor of goal occupations listed in Figure 4;
- ITA funding: amount of individualized and training account funding;
- SS funding: amount of support service funding.

Figure 8 displays results from seven models, each having service type and phase indicators. The service type variable is likely to be significant because training and WEX services have innate differences. Training is normally easier to complete and requires less time, so completion rates for training are expected to be greater than for WEX. The variable of phase summarizes comprehensive and systematic differences by phase. The differences between phases include, but may not be limited to, those discussed in the previous section: demographic characteristics, pre-enrollment quarterly earnings, factors of goal occupations, and funding of different uses. We are interested in the key differences between phases that are associated with higher service completion rate in phase two.

The dependent variable is the indicator variable of completion for the two types of services. We choose this intermediate outcome variable, because the final employment data is not available at the completion of this report.

In Figure 8, some of the rows have a "Y" or nothing in them. This indicates how the models differ from each other. Some models have some of the control variables included, but not others. The variables included are indicated by a "Y." This type of analysis – fitting the same model but with different sets of explanatory variables – allows the researcher to assess the relationship between training success probability and demographic information in detail. The conclusions drawn below are generated by assessing how the value in the first row changes as different information is included in the model.

Figure 8. Regression results for service completion for opioid program participants: Logit regressions

Washington state, 2019 through 2023. Source: Employment Security Department/DATA

Individual Variables	Dependent Variable						
	Service Completion Indicator						
	Logit Model 1	Logit Model 2	Logit Model 3	Logit Model 4	Logit Model 5	Logit Model 6	Logit Model 7
Phase: Phase two = 1; Phase one = 0	0.89*	0.93*	0.99*	0.72	1.44*	0.92†	1.00
	(0.38)	(0.41)	(0.41)	(0.47)	(0.62)	(0.48)	(0.78)
Type: Training =1; WEX = 0	1.09**	1.17**	1.07**	0.72†	1.55*	1.21**	1.01
	(0.38)	(0.40)	(0.40)	(0.38)	(0.63)	(0.45)	(0.80)
Pre-Enrollment Quarter Earnings		Y					
Demographics			Y				
Goal ONET				Y			
ITA Funding					Y		Y
SS Funding						Y	Y
Constant	Y	Y	Y	Y	Y	Y	Y
Observations	278	278	278	312	130	212	91
Odds Ratio (phase)	2.44	2.53	2.68	2.06	4.21	2.50	2.73
Odds Ratio (type)	2.98	3.21	2.92	2.05	4.72	3.34	2.74
Predicted Probability							
Phase one, training	86.20%	87.10%	86.90%	86.90%	84.80%	87.80%	87.30%
Phase one, WEX	67.70%	67.70%	69.50%	76.30%	54.10%	68.40%	71.60%
Phase two, training	93.80%	94.40%	94.70%	93.20%	95.90%	94.80%	95.00%
Phase two, WEX	83.70%	84.10%	85.90%	86.90%	83.20%	84.40%	87.30%

Notes: † indicates $p \leq 0.10$, * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$; standard error statistics are in parentheses.

Odds of completing services increases in phase two

Individuals enrolled in training have a greater probability of completion than those enrolled in work experience. Individuals enrolled in the same service have a greater probability of completion in phase two than in phase one. This can be verified by comparing the predicted probability over phases and across types in the last four rows in *Figure 8*.

Differences can be explained by variations in goal occupations and funding

In *Figure 8*, model one is the basic model. From model two to model seven, each has a set of explanatory variables added, controlling for an aspect of factors associated with the difference in probability of service completion. The parameter of phase indicator is insignificant in model four and model seven where the additions are goal occupations and ITA and SS funding. This implies that the variation in phase indicator can be explained by variation in goal occupation and funding amounts. The difference in service completion rate between phase one and phase two may be explained in the following ways:

1. Goal occupation changes from a large proportion of hand movers to a large proportion of peer navigators. These two types of occupations require different training and work experience, which is associated with increased completion rates.
2. ITA funding and SS funding change from phase one to phase two. With changed funding for each type of service, participant needs are supported to different degrees and completion rates for these services increase.
3. Since the regression sample of model seven is a subsample of the total services, one possible interpretation of higher completion of services is that those participants who require both ITA and SS funding self-select into this subsample who are also more likely to complete the services.

Conclusion

In conclusion, the evaluation of the Opioid Disaster Recovery Dislocated Worker Grant program has provided valuable insights into the program's process for addressing the multifaceted challenges presented by the opioid crisis.

Through a comprehensive analysis of the program's affected population, structure and outcomes in two phases, it is evident that a greater portion of program participants that engaged in a training or WEX activity completed their activity in phase two compared to phase one. Therefore, people achieve better intermediate outcomes, such as better skill development and longer temporary work experience, in phase two.

There are still areas for improvement, such as the need for analyzing employment outcomes. Data unavailability is the main issue for a more extensive evaluation. It is recommended that the program continues to evolve, incorporating best practices such as counseling, training, and work experience, and adapting to emerging needs. The opioid program remains a vital

resource for recovery and rebuilding in communities affected by the ongoing public health crisis.

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