TANF Supported Employment Pilot

Participant Characteristics

Taylor Danielson, PhD • Jim Mayfield, MA • Barbara A. Lucenko, PhD • Z. Joyce Fan, PhD
Barbara E.M. Felver, MES, MPA

Prepared for the Division of Behavioral Health and Recovery, Melodie Pazolt, Section Manager, Office of Federal Programs

THE TEMPORARY ASSISTANCE FOR NEEDY FAMILIES Supported Employment Pilot (TANF SEP) was implemented by the Washington State Health Care Authority's Division of Behavioral Health and Recovery (DBHR) in partnership with the Department of Social and Health Services' (DSHS) Economic Services Administration (ESA) and community mental health service providers. Sunrise Services, Inc., a certified and licensed agency in the North Sound Behavioral Health Organization (BHO), provided evidence-based supported employment services to TANF clients from April 2015 through December 2017 using the Individual Placement and Support (IPS) model. The program's primary goal was to help participants with mental health treatment needs and co-occurring substance use disorders obtain and maintain competitive employment.

This report provides detailed demographic information for the 219 participants who enrolled in the program between April 2015 and June 2017, including: 1) baseline characteristics of program participants and their associated households; 2) participants' behavioral health, physical, and social barriers to employment; 3) behavioral health services received by participants while enrolled in the program; and 4) participant employment 12 months before and after TANF SEP enrollment.

Key Findings

- The majority of TANF SEP participants were female (84 percent). The average age was 33 at program entry. One-third received TANF for a year or more before enrolling in the program, and 50 percent were unstably housed for at least one month in the 12 months prior to program entry.

- For those individuals enrolled in the program as of June 2016, employment rates almost doubled from 32 percent in the 12 months prior to program entry to 61 percent in the year following enrollment in TANF SEP.

- Median earnings were 48 percent higher among employed participants after program entry, relative to the median among participants who were employed prior to program entry.

- Housing instability rates declined by 22 percent following program enrollment.

FIGURE 1.

Any Employment 12 Months Before or After TANF SEP Enrollment

+91%

61%

12 months after enrollment

32%

12 months before enrollment
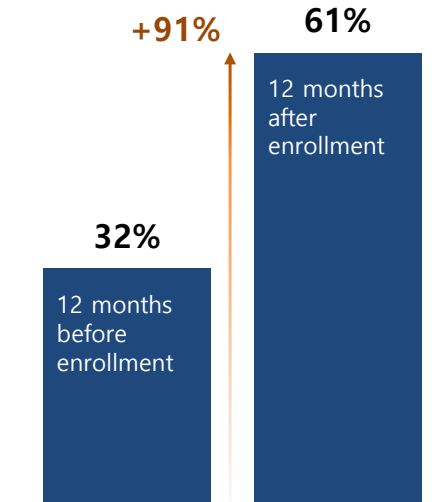
Background and Program Description

Behavioral health treatment needs often prevent individuals from successfully finding or maintaining employment (Butterworth et al., 2012; Dooley et al., 2000; Kokko et al., 2000; Paul & Moser, 2009). Resulting spells of long-term unemployment may lead to further declines in client mental well-being and increased reliance on state and federal assistance programs such as TANF and Supplemental Security Income (Dooley et al., 1994; Dooley et al., 2000; McKee-Ryan et al., 2005; Murphy & Athanasou, 1999; Paul & Moser 2009).[1]

The TANF SEP program attempted to disrupt this cycle by providing evidence-based supported employment services to eligible TANF recipients. Sunrise Mental Health Services, a certified mental health services agency in North Sound Mental Health BHO, provided supported employment services for the pilot in Skagit and Snohomish counties from April 2015 through December 2017. TANF clients were eligible to participate in the program if they were unemployed at program entry, met access to care standards for mental health treatment, expressed an interest in being employed, and lived in the service area. Sunrise Mental Health Services also collaborated with Seattle-based nonprofit Building Changes to perform additional outreach to TANF clients who met program eligibility criteria and were homeless or at risk of becoming homeless.

FIGURE 2.
Serving 219 Participants in Skagit and Snohomish Counties

Skagit County
Snohomish County

Under the TANF SEP program, Sunrise Mental Health Services adopted an evidence-based approach known as IPS (Bond et al., 2011). This model of supported employment focuses on providing ongoing support to clients prior to and following job placement, and ensures that clients receive appropriate behavioral health treatment services. Employment specialists help participants identify competitive jobs[2] that aligned with participant interests and preferences concerning work schedule, location, and environment. Employment specialists also provide technical assistance with resumes and job applications, and contact employers on a client's behalf. In the case of the TANF SEP program, five employment specialists across two sites worked with participants' mental health providers to integrate supported employment services into their broader mental health treatment plan. This integration allowed mental health providers familiar with a client's needs to consult on an employment plan, tailor treatment services to the participant's employment situation, and maximize the participant's ability to remain employed.

Methods

We use longitudinal, integrated administrative data (see Technical Notes) to provide a descriptive profile of the 219 TANF SEP participants who enrolled in the program between April 2015 and June 2017 and were successfully linked to their administrative records. Information on program participation for these participants was taken from participant logs maintained by TANF SEP providers. Additional pre-post comparisons of participant employment rates, earnings, hours worked, and housing status were performed for 132 participants enrolled in the program between April 2015 and June 2016. Measures and measurement timeframes used for these analyses are presented in Figure 3 below.
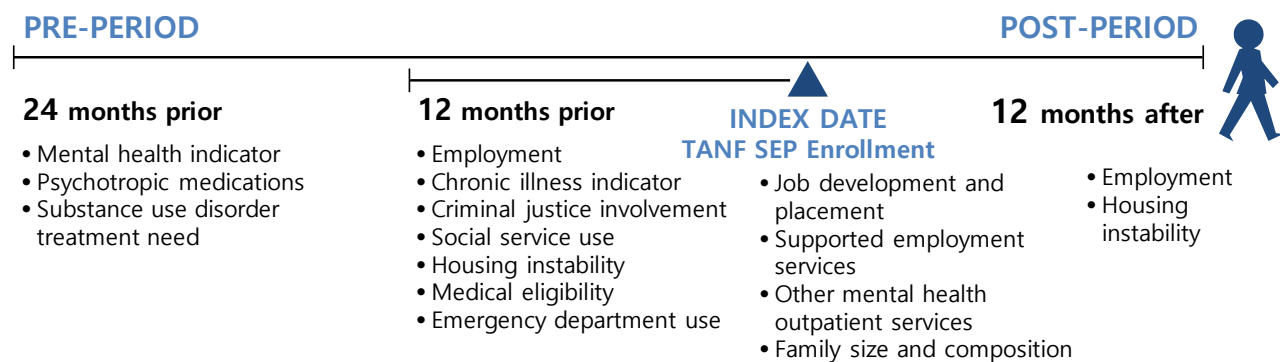
---
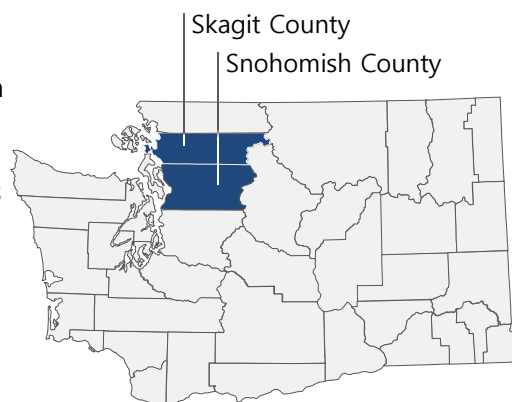
[1] This relationship has been repeatedly established not only in the United States but in a broader cross-national context as well. *See*, for examples, Bambra & Eikemo, 2009; Crowe et al., 2016; Drydakis, 2015; Ford et al., 2010; Jefferis et al., 2011; Kokko et al., 2000. For an exception, *see* Schmitz, 2011.

[2] Competitive jobs are jobs that pay at least minimum wage and are not specifically set aside for people with disabilities.

FIGURE 3.

Study Timeline

PRE-PERIOD   **POST-PERIOD**

24 months prior
- Mental health indicator
- Psychotropic medications
- Substance use disorder treatment need

12 months prior
- Employment
- Chronic illness indicator
- Criminal justice involvement
- Social service use
- Housing instability
- Medical eligibility
- Emergency department use

INDEX DATE
TANF SEP Enrollment
- Job development and placement
- Supported employment services
- Other mental health outpatient services
- Family size and composition

12 months after
- Employment
- Housing instability

Demographics

TANF SEP participants were between 19 and 54 years of age (Figure 4). They were 33 years old on average, and almost half were 25 to 34 years of age. Most participants were female (84 percent), and 39 percent identified as a member of a minority group. The two largest minority groups participating in the program were Hispanic (15 percent) and American Indian (13 percent).
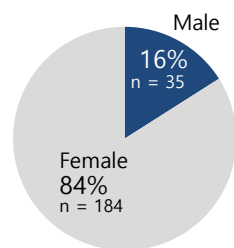
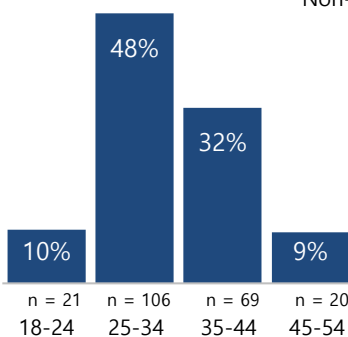FIGURE 4.

Demographics at Baseline
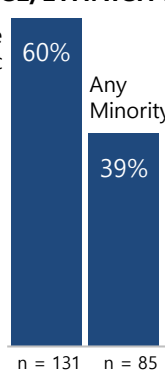TOTAL Participants = 219

GENDER
Both sites

Male
16%
n = 35

Female
84%
n = 184

AGE
Average at baseline
= **33.3** years

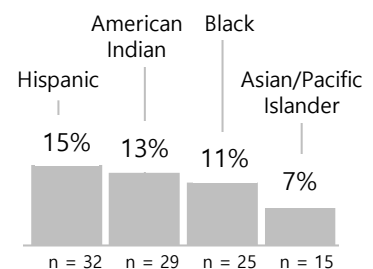| 10% | 48% | 32% | 9% |
| n = 21 | n = 106 | n = 69 | n = 20 |
| 18-24 | 25-34 | 35-44 | 45-54 |

RACE/ETHNICITY

White Non-Hispanic
60%

Any Minority
39%

n = 131   n = 85

Minority Detail
Where race is known
Persons can be in multiple categories

American Indian

Black

Hispanic

Asian/Pacific Islander

| 15% | 13% | 11% | 7% |
| n = 32 | n = 29 | n = 25 | n = 15 |

1% of clients had neither race nor ethnicity reported (n = 3).
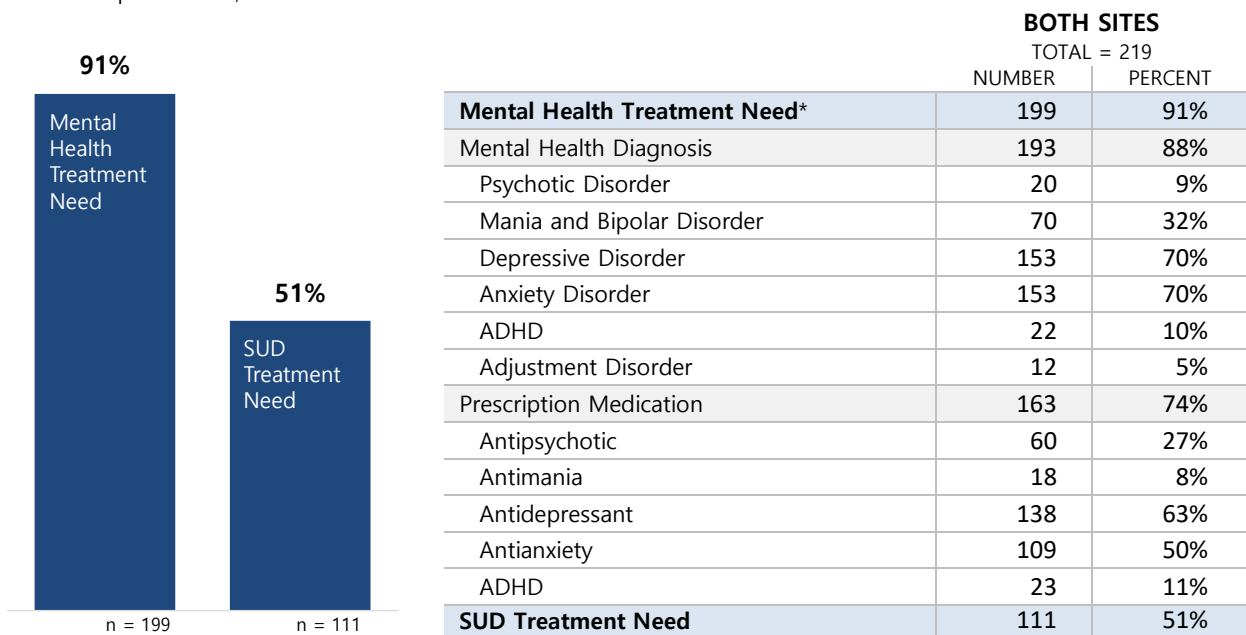
Behavioral Health Status

To be eligible to participate in the program, TANF SEP participants had to meet access to care standards for mental health treatment. Based on administrative records, more than 9 out of 10 participants had a documented mental health treatment need in the 24 months prior to enrollment, 88 percent were diagnosed with a mental health disorder, and 74 percent had filled a prescription for psychotropic medication.[3] The most commonly occurring mental health diagnoses were depressive and anxiety disorders. Seventy percent of participants were diagnosed with either disorder, and 55 percent of participants diagnosed with both anxiety and depressive disorders in the 24 months prior to program entry. In addition to a high prevalence of mental health treatment needs, 51 percent of participants also had a substance use disorder (SUD) treatment need, indicating a high rate of co-occurring mental health and SUD disorders in this population.

---

[3] Of the 20 participants without a mental health treatment need indicated in health care claims and encounter data in the 24 months prior to entry, 11 had some indication of a mental health treatment need in their enrollment month. Another six participants had a mental health treatment need identified in the month following enrollment.

FIGURE 5.

Mental Health and Substance Use Disorder Treatment Need

TOTAL Participants = 219, 24 Months Prior to TANF SEP Enrollment

	BOTH SITES TOTAL = 219	
	NUMBER	PERCENT
Mental Health Treatment Need*	199	91%
Mental Health Diagnosis	193	88%
Psychotic Disorder	20	9%
Mania and Bipolar Disorder	70	32%
Depressive Disorder	153	70%
Anxiety Disorder	153	70%
ADHD	22	10%
Adjustment Disorder	12	5%
Prescription Medication	163	74%
Antipsychotic	60	27%
Antimania	18	8%
Antidepressant	138	63%
Antianxiety	109	50%
ADHD	23	11%
SUD Treatment Need	111	51%

91%

Mental Health Treatment Need

n = 199

51%

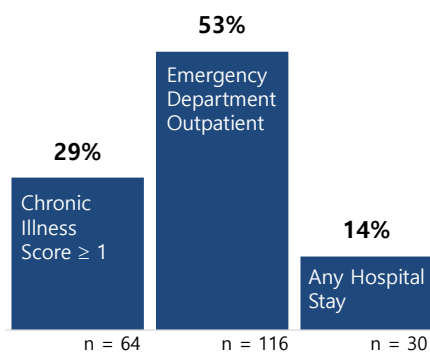SUD Treatment Need

n = 111

*See technical notes for definition.

Health Risk and Health Service Utilization

Chronic health conditions may make it more difficult for individuals to find and retain employment compatible with their healthcare needs. A measure called the "chronic illness risk score," based on health service diagnoses and pharmacy claim information (Gilmer et al., 2001; Kronick et al., 2000), was used to assess the overall health of TANF SEP participants. The score is normalized so that a score of 1.0 indicates that a person's health care expenditures over the following 12 months are expected to be at the level of the average person enrolled in disability-related Medicaid coverage in Washington State.

FIGURE 6.

Physical Health Indicators

TOTAL Participants = 219, 12 Months Prior to TANF SEP Enrollment

53%

Emergency Department Outpatient

29%

Chronic Illness Score ≥ 1

14%

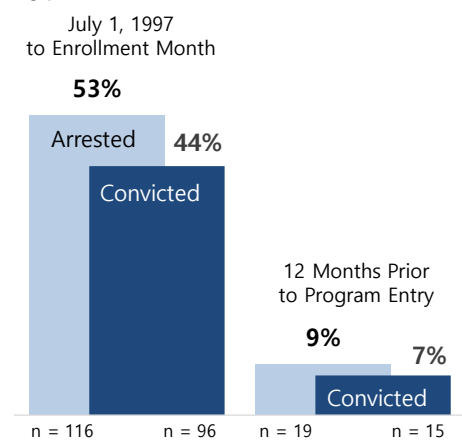Any Hospital Stay

n = 64   n = 116   n = 30

We found that 29 percent of TANF SEP participants had a chronic illness risk score of 1.0 or above at the time of program entry. In other words, 29 percent of TANF SEP participants had chronic health risk at or above the level of the average persons enrolled in disability-related Medicaid coverage in Washington State.

Additional indicators of health risk include levels of outpatient emergency department (ED) utilization and hospitalization: 53 percent of participants visited the ER and 14 percent were hospitalized in the 12 months before intake.

TANF Supported Employment Pilot
Participant Characteristics

DSHS

Criminal Justice Involvement

Arrests or Convictions, Any Type TOTAL Participants = 219

July 1, 1997
to Enrollment Month

53%

Arrested

44%

Convicted

12 Months Prior
to Program Entry

9%

7%

Convicted

n = 116   n = 96   n = 19   n = 15

Prior contact with the criminal justice system may present barriers to employment (Pager, 2007). About 53 percent of TANF SEP participants had been arrested in their lifetime,[4] while 44 percent had been convicted of a crime over this same period (Figure 7).
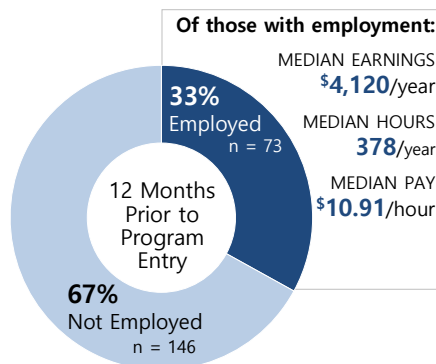
By comparison, a relatively low percentage of TANF SEP participants were arrested or convicted in the 12 months prior to program intake. Nine percent of TANF SEP participants were arrested and 7 percent were convicted of a crime at any point in the year prior to enrollment.

Recent Employment

Employment and Earnings

TOTAL Participants = 219

12 Months Prior to TANF SEP Enrollment

Of those with employment:

MEDIAN EARNINGS
$4,120/year

MEDIAN HOURS
378/year

MEDIAN PAY
$10.91/hour

33%
Employed
n = 73

12 Months
Prior to
Program
Entry

67%
Not Employed
n = 146

Only 33 percent of TANF SEP participants had earnings identified in the Washington State Employment Security Department (ESD) Unemployment Insurance wage file at any point in the year prior to enrolling in the program. The median annual earnings of participants employed in the year prior to enrollment was $4,120, which is roughly 35 percent of the 2015 federal poverty level for a single-person household.[5,6]

The median hours worked by TANF SEP participants was 378 hours over the course of the year. This is slightly more than two-and-a-half months of full-time work.[7] The median hourly pay for these individuals—$10.91 an hour—was higher than the 2015 state minimum wage.

NOTE: All earnings and wage data are adjusted for inflation and are presented in Q1 2015 dollars.

---

[4] Arrest and conviction data in the Integrated Client Database (ICDB) are available from July 1, 1997 onward. Any arrests or convictions prior to this date are not captured in these data.

[5] The federal poverty level for single-person household was $11,770 in 2015 (Department of Health and Human Services 2015).

[6] Evidence of poverty was observed among TANF SEP participants even after adjusting for family size and all household member earnings. In most cases, median household earnings were less than 45 percent of the 2015 federal poverty levels for households of a given size.

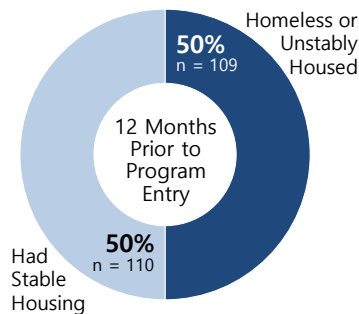[7] We define full-time work as working 35 or more hours a week.

Housing Instability

FIGURE 9.

Housing Instability*

TOTAL Participants = 219

12 Months Prior to Entry and at Enrollment

50%
n = 109

Homeless or Unstably Housed

12 Months Prior to Program Entry

50%
n = 110

Had Stable Housing

Housing stability and homelessness are both a product of long-term unemployment and a potential barrier to finding a job (Desmond & Gershenson 2016). Rates of housing instability were very high among TANF SEP participants:

- Fifty percent of participants were homeless or unstably housed (e.g., "couch surfing") at any time in the year prior to enrollment.
- Nine percent of participants were homeless and without housing (e.g., "living in a car") at any time in the year prior to enrollment.
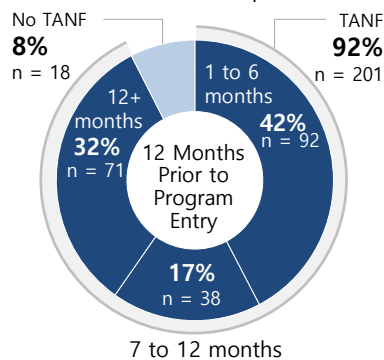
* See technical notes for homelessness definition.

Receipt of Social and Health Services

FIGURE 10.

TANF Participation

TOTAL Participants = 219

Prior to SEP Enrollment and Length of Most Recent TANF Span

No TANF
8%
n = 18

TANF
92%
n = 201

12+ months
32%
n = 71

1 to 6 months
42%
n = 92

12 Months Prior to Program Entry

17%
n = 38

7 to 12 months

Overall, 92 percent of TANF SEP participants received TANF at some point in the 12 months before enrolling in the pilot:[8]
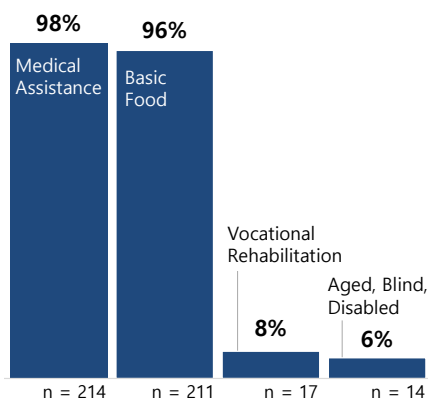
- The median length of the most recent TANF span prior to enrolling in TANF SEP was 7 months;
- 42 percent of the TANF SEP participants were on TANF for 1 to 6 months;
- 17 percent were on TANF for 7 to 12 months; and
- 32 percent received the benefit for more than a year prior to entering the program.

FIGURE 11.

Receipt of Social Services

TOTAL Participants = 219

12 Months Prior to TANF SEP Enrollment

98%
Medical Assistance

96%
Basic Food

Vocational Rehabilitation
8%

Aged, Blind, Disabled
6%

n = 214   n = 211   n = 17   n = 14

Almost all TANF SEP participants (98 percent) had Medicaid or other medical coverage through the Washington State Health Care Authority (HCA) during the 12-month period prior to enrollment. Additionally, almost all TANF SEP participants (96 percent) received Basic Food assistance in the 12 months prior to program enrollment (Figure 11).
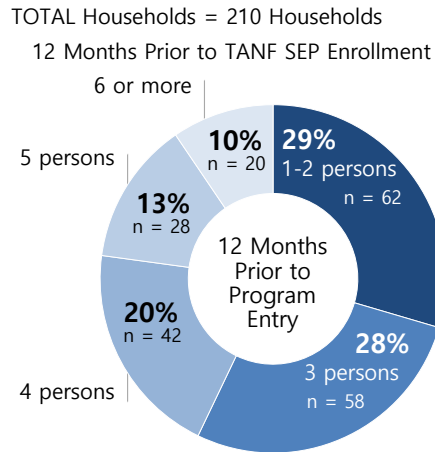
Compared to these more widely used programs, a smaller percentage of participants received additional services and benefits targeting persons with disabilities. Eight percent received a service from the Division of Vocational Rehabilitation, while 6 percent received Aged, Blind, and Disabled (ABD) cash assistance from the state.

---

[8] Of the remaining 18 clients who did not receive TANF in the 12 months prior to program entry, 13 received TANF as of their entry into the program and 1 received the benefit in the month following enrollment.

TANF Supported Employment Pilot
Participant Characteristics

DSHS

Children in the Household

Household Size

TOTAL Households = 210 Households

12 Months Prior to TANF SEP Enrollment

Based on assistance unit (AU) information obtained from the system used to determine eligibility for financial assistance programs (ACES), we identified 210 distinct households (207 with children) for the 214 participants who were successfully linked back to their ACES records.[9] Seventy-seven percent of these households had four or fewer members and 13 percent had five members (Figure 11). Larger households were less common, with 10 percent having six or more members. Almost all (99 percent) TANF SEP participants were members of a household with a dependent youth present when they enrolled in the program.[10] There were 439 dependent youth associated with TANF SEP households, and almost all of these youth (95 percent) were the natural-born or adopted children of the head of household. The majority of these dependent youth (75 percent) were 12 or younger. The average age was 9.

Age Distribution of Dependent Youth in TANF SEP Household

TOTAL Dependent Youth at Baseline = 439

NOTE: "Other Dependent Youth" includes 1) stepchildren of the head of household; children of a co-parent who is currently a member of the assistance unit; 2) any related child or dependent youth residing within the household; 3) any unrelated child residing within a household or child who was not assigned to another relationship code. See technical notes for full list of relationship codes.
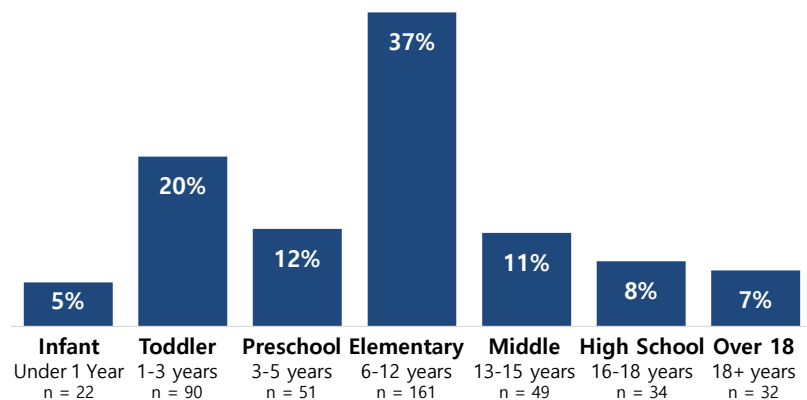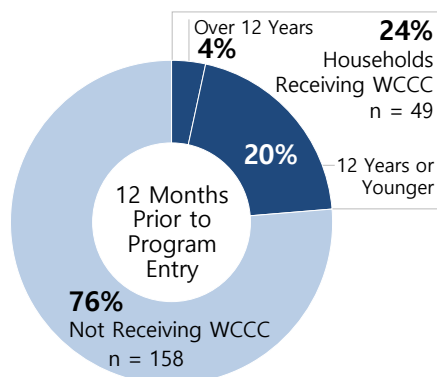

Infant	**Toddler**	**Preschool**	**Elementary**	**Middle**	**High School**	**Over 18**
Under 1 Year	1-3 years	3-5 years	6-12 years	13-15 years	16-18 years	18+ years
n = 22	n = 90	n = 51	n = 161	n = 49	n = 34	n = 32

Working Connections Child Care

TOTAL Households with Children = 207

Receipt among Households with Dependent Youth Present

There were 207 TANF SEP households with children present. Child care is often a significant barrier to employment outside of the household. We examined the use of Working Connections Child Care (WCCC) by TANF SEP households:

- About one-quarter of TANF SEP households with children received WCCC services in the year prior to beginning TANF SEP (Figure 14).

- Among households that had children 12 years of age or younger, only 30 percent received WCCC in the prior year. Their WCCC participation increased to 38 percent after enrolling in TANF SEP.

---

9   Four different pairs of program participants were members of the same households. In each of these instances, both the head of household and their spouse/co-parent were enrolled in the TANF SEP program.

10 Those households that did not have children present either had a pregnant mother present or were receiving concurrent benefits following the placement of a dependent youth in foster care.

Individual Placement and Support Services

Participant log data maintained by the TANF SEP sites indicates that the median length of program enrollment was 6 months. As of June 2017, 86 percent (n = 189) of the 219 TANF SEP participants completed a job development plan based on their preferences, abilities, and strengths, and 41 percent (n = 91) were placed in a job. It took 18 days on average from initial contact to complete a job plan, and 69 days (10 weeks) on average to place participants in a job. Nineteen participants were placed in multiple jobs as part of the ongoing support they received while enrolled in the program. Employment specialists contacted potential employers 3,476 times on behalf of program participants.

FIGURE 15.

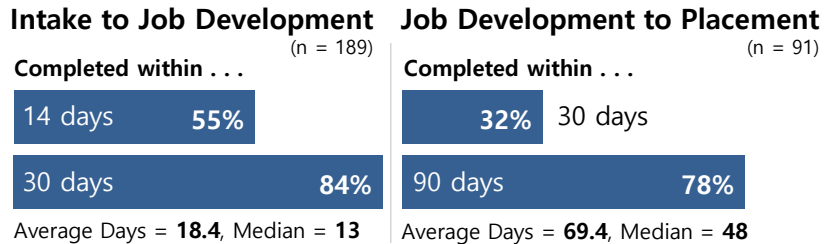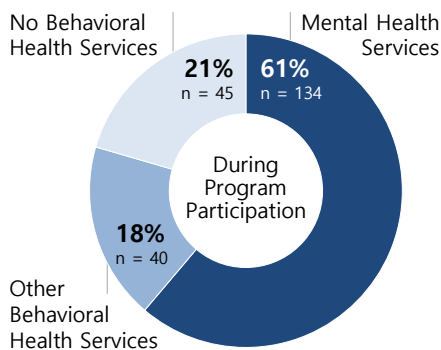## Intake to Completed Job Development Plan and Job Placement

Intake to Job Development (n = 189)

Completed within . . .

14 days	**55%**
30 days	**84%**

Average Days = **18.4**, Median = **13**

Job Development to Placement (n = 91)

Completed within . . .

32%	30 days
90 days	**78%**

Average Days = **69.4**, Median = **48**

FIGURE 16.

Behavioral Health Treatment
TOTAL Participants = 219

No Behavioral Health Services — **21%** n = 45

Mental Health Services — **61%** n = 134

During Program Participation

Other Behavioral Health Services — **18%** n = 40

In addition to supported employment, approximately 80 percent of TANF SEP participants received behavioral health services while in the program.

Almost two-thirds of the participants (61 percent) received mental health services, while 18 percent received other behavioral health services, such as SUD treatment services or co-occurring mental health and SUD treatment.

Pre-Post Comparisons

FIGURE 17.

Housing Instability
TOTAL Enrolled as of June 2016 = 132

Before and During Participation

56% 12 months before enrollment

− **22%**

44% 12 months after enrollment

n = 74   n = 58
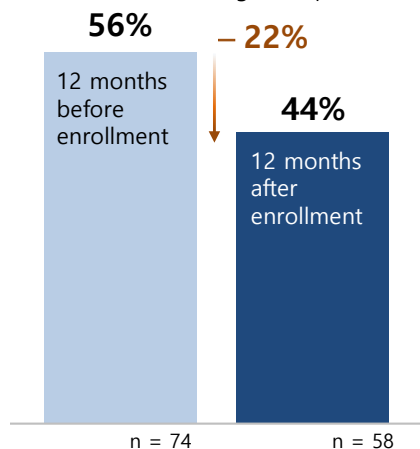
In this section, we compare selected measures regarding housing stability and employment rates for the 12 months before and after program enrollment for 132 individuals who had sufficient follow-up time for the analysis.

Given that additional outreach was performed to homeless TANF participants eligible for the pilot, we examine changes in housing instability rates for program participants. As shown in Figure 17, participation in the TANF SEP program was associated with a 21 percent decrease in housing instability in the 12 months follow-up period among the 132 participants who enrolled in the program as of June 2016.

TANF Supported Employment Pilot
Participant Characteristics

DSHS

FIGURE 18.

Employment Status

TOTAL Enrolled as of June 2016 = 132

12 Months Before and After Enrollment

+91%

61%

12 months after enrollment

32%
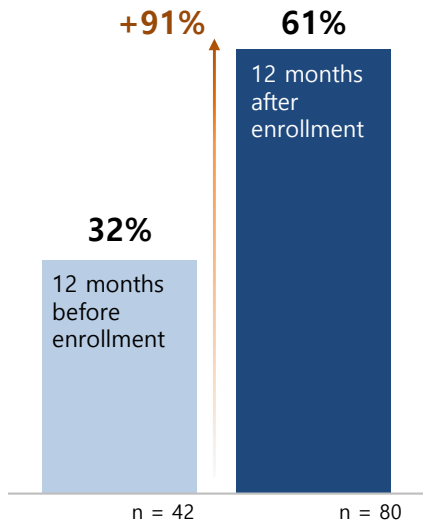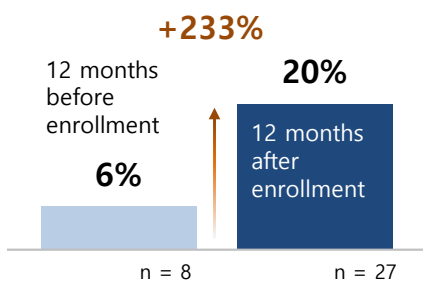
12 months before enrollment

n = 42   n = 80

FIGURE 19.

Four Quarters of Employment

TOTAL Enrolled as of June 2016 = 132

All Four Quarters in the 12 Months Before and After TANF SEP Enrollment

+233%

12 months before enrollment

20%

12 months after enrollment

6%

n = 8   n = 27

We next compare selected employment measures in the 12 months prior to and following program enrollment for those 132 individuals who had sufficient follow-up time for the analysis.

Overall, participants experienced positive changes in employment across a number of domains:

- The employment rate for participants increased from 32 to 61 percent between the 12-month pre- and post-periods (approximately a 91 percent increase; see Figure 18).

- Fifty-four percent of participants who were unemployed in the pre-period found a job following program entry.

The percentage of participants who were employed in all four quarters increased from 6 percent to 20 percent (a 233 percent increase). Gains were concentrated among participants who were unemployed in the year prior to program entry; 17 percent of participants unemployed in the pre-period were employed for all four quarters following enrollment.

More on Supported Employment Services in Washington State

Becoming Employed Starts Today (BEST)
Fan, Black, Felver, Lucenko, Danielson
SEPTEMBER 2017

Improving Employment Outcomes for People with Mental Health Disorders in Washington State
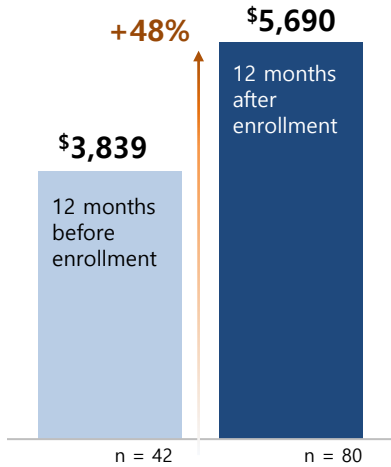Fan, Lucenko, Estee, Felver, Black, Mancuso
JUNE 2016

ON OUR WEBSITE
https://www.dshs.wa.gov/ffa/rda/research-reports

FIGURE 20.

Total Annual Earnings
TOTAL Enrolled as of June 2016 and Employed 12 Months after Enrollment = 132

MEDIAN EARNINGS
12 Months Before and after TANF SEP Enrollment

+48% **$5,690**

$3,839

12 months before enrollment
n = 42

12 months after enrollment
n = 80

The median earnings of participants employed in the-pre period was $3,839; in the 12-month post-period, median earnings of employed participants increased by 48 percent to $5,690. The percentage of participants earning up to $7,500 increased by 13 percentage points, while those earning $7,501 and above increased by 16 percentage points.
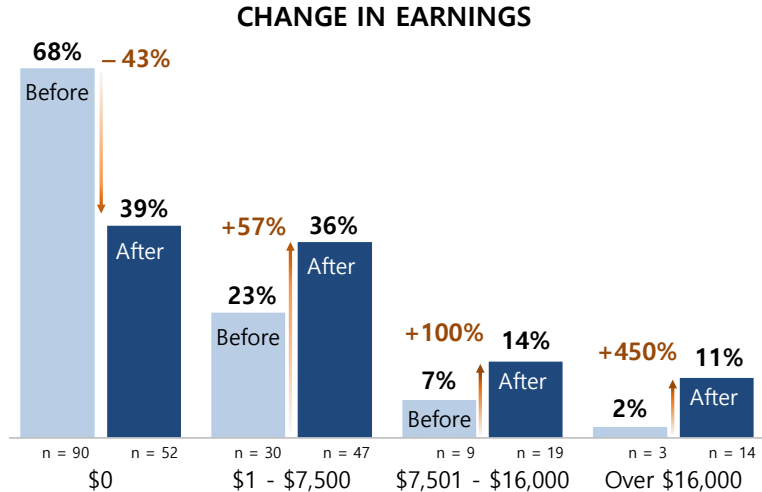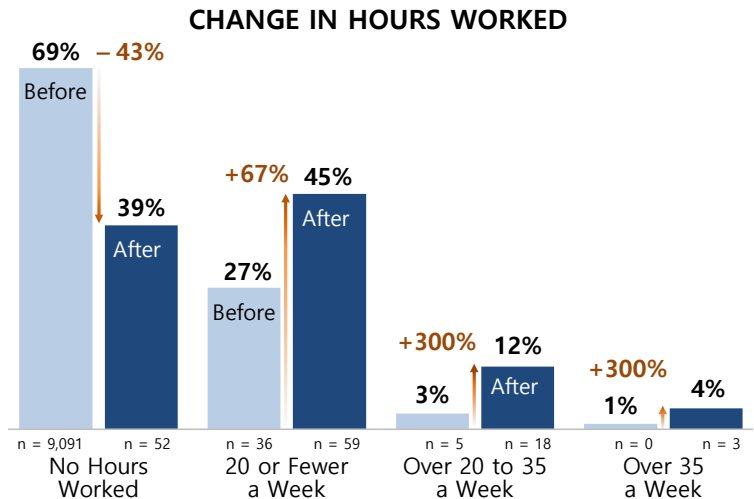
CHANGE IN EARNINGS

	$0	$1 - $7,500	$7,501 - $16,000	Over $16,000
Before	68%	23%	7%	2%
Change	− 43%	+57%	+100%	+450%
After	39%	36%	14%	11%
	n = 90 / n = 52	n = 30 / n = 47	n = 9 / n = 19	n = 3 / n = 14

FIGURE 21.

Hours Employed
TOTAL Enrolled as of June 2016 and Employed in the 12 Months after Enrollment = 132

MEDIAN HOURS WORKED
12 Months Before and after TANF SEP Enrollment

+26% **452**

360

12 months before enrollment
n = 42

12 months after enrollment
n = 80
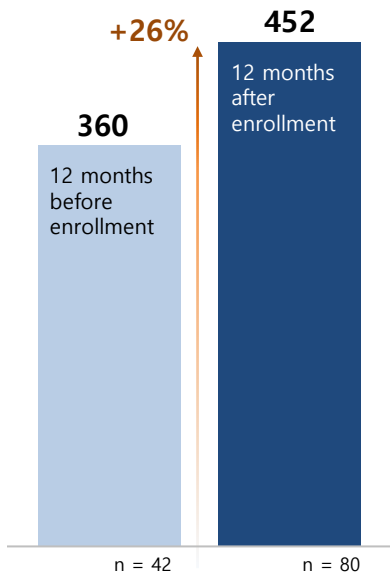
Given that participant wage rates (not shown) were similar across both periods, averaging about $12 an hour, the observed increase in participant earnings is primarily attributable to an increase in hours worked rather than wage rates. As shown in Figure 21, the median number of hours worked by employed participants increased by 26 percent between the pre- and post-period. In the post-period, about 45 percent of participants worked 20 hours or less a week, 12 percent worked between 20 and 35 hours, and 4 percent worked full-time.[11]

CHANGE IN HOURS WORKED

	No Hours Worked	20 or Fewer a Week	Over 20 to 35 a Week	Over 35 a Week
Before	69%	27%	3%	1%
Change	− 43%	+67%	+300%	+300%
After	39%	45%	12%	4%
	n = 9,091 / n = 52	n = 36 / n = 59	n = 5 / n = 18	n = 0 / n = 3

---

[11] This assumes that a client worked all 52 weeks in a year.

TANF Supported Employment Pilot
Participant Characteristics

DSHS

Discussion

Individuals with behavioral health treatment needs often have difficulty obtaining and maintaining employment. This can lead to a further deterioration in their mental health due to increased social isolation and a lack of meaningful, structured activities in their lives (Jahoda, 1981; McKee-Ryan et al., 2005). These issues become more pronounced the longer individuals are unemployed, making it progressively more difficult for them to find employment and increasing the likelihood of other negative outcomes such as long-term poverty and homelessness (Bassuk et al., 1997; Caton et al., 2005). This report provides a brief summary of the TANF SEP program, which used the Individual Placement and Support supported employment model to interrupt this cycle and help TANF clients with mental health treatment needs gain competitive employment.

TANF SEP participants faced a variety of barriers to employment, including behavioral health treatment needs, other chronic health conditions, criminal justice system involvement, and childcare needs. Almost all of the 219 participants who enrolled in the program between April 2015 and June 2017 had some indication of mental illness in the two years prior to program entry, while roughly half had co-occurring mental health and substance use disorders during this same time period. TANF SEP participants have significant mental and physical health needs that could affect their ability to obtain and maintain employment. Other barriers, such as prior arrests, convictions, and childcare needs, also make it more difficult to obtain employment.

Barriers to employment help account for the low baseline employment rates among participants. Only one in three TANF SEP enrollees were employed prior to participating in the pilot program, and those participants who were employed had low reported earnings and/or worked relatively few hours. Low employment rates coincided with a high rate of housing instability among program participants.

Despite their challenges, TANF SEP program participants had higher employment rates, higher earnings, and worked more hours following enrollment. These gains were most noticeable among individuals who were unemployed in the year prior to program entry. Participants were also less likely to be unstably housed after enrolling in the program.

This initial report is promising, but there are two key limitations.

1. First, this report is limited to a small subset of TANF recipients in a limited geographic area. Consequently, these findings may not be generalizable to Washington's broader TANF population.

2. Second, the analysis did not include a matched comparison group necessary to assess the net effects of the program.

It is unclear if the changes observed in employment are due to participation in the program or other factors, such as participant motivation, or the state's broader economic recovery.

REFERENCES

Administration for Children and Families (2017). *Characteristics and financial circumstances of TANF recipients, fiscal year (FY) 2016*. U.S. Health and Human Services, Administration for Children and Families.

Bambra, C., & Eikemo, T.A. (2009). Welfare state regimes, unemployment and health: A comparative study of the relationship between unemployment and self-reported health in 23 European countries. *Journal of Epidemiology and Community Health*, 63(2), 92-98.

Bassuk, E.L., Buckner, J.C., Weinreb, L.F., Browne, A., Bassuk, S.S, Dawson, R., & Perloff, J.N. (1997). Homelessness in female-headed families: Childhood and adult risk and protective factors. *American Journal of Public Health*, 87, 241-248.

Bond, G.R., Becker, D.R., Drake, R.E. (2011). Measurement of fidelity of implementation of evidence-based practices: case example of the IPS Fidelity Scale. *Clinical Psychology: Science and Practice*, 18:126–141.

Butterworth, P., Leach, L.S., Pirkis, J., & Kelaher, M. (2012). Poor mental health influences risk and duration of unemployment: A prospective study. *Social Psychiatry & Psychiatric Epidemiology*, 47, 1013-1021.

Caton, C.L., Boanerges, D., Schanzer, B., Hasin, D.S., Shrout, P.E., Felix, A., McQuistion, H., Opler, L.A., & Hsu, E. (2005). Risk factors for long-term homelessness: Findings from a longitudinal study of first-time homeless single adults. *American Journal of Public Health*, 95(10), 1753-1759.

Crowe, L., Butterworth, P., & Leach, L. 2016. Financial hardship, mastery, and social support: Explaining poor mental health amongst the inadequately employed using data from the HILDA survey. *SSM- Population Health*, 2, 407-415.

Department of Health and Human Services. (2015). *Annual Update of the HHS Poverty Guidelines*. Department of Health and Human Services, Office of the Secretary.

Desmond, M., & Gershenson, C. (2016). Housing and employment insecurity among the working poor. *Social Problems*, 63(1), 46-67.

Dooley, D., Catalano, R., & Wilson, G. (1994). Depression and unemployment: Panel findings from the Epidemiologic Catchment Area Study. *American Journal of Community Psychology*, 22(6), 745-765.

Dooley, D., Prause, J., & Ham-Rowbottom, K.A. (2000). Underemployment and depression: Longitudinal relationships. *Journal of Health and Social Behavior*, 41(December), 421-436.

Drydakis, N. (2015). The effect of unemployment on self-reported health and mental health in Greece from 2008 to 2013: A longitudinal study before and during the financial crisis. *Social Sciences and Medicine* 128, 43-51.

Fan, Z.J., Lucenko, B., Estee, S., Felver, B., Black, C., & Mancuso, D. (2016). *Improving employment outcomes for people with mental health disorders in Washington State*. Washington State Department of Social and Health Services, Research and Data Analysis Division, Report 11.230.

Ford, E., Clark, C., McManus, S., Harris, J., Jenkins, R., Bebbington, P., Brugha, T., Meltzer, H.,& Stansfeld, S.A. (2010). Common mental disorders, unemployment and welfare benefits in England. Public Health, 124, 675-681.

Gilmer, T., Kronick, R., Fishman, P., & Ganiats, T.G. (2001). The Medicaid RX Model – Pharmacy-based risk adjustment for public programs. *Medical Care*, 39(11), 1188-1202.

Jahoda, M. (1981). Work, employment, and unemployment: Values, theories, and approaches in social research. *American Psychologist*, 36(2), 184-191.

Jefferis, B.J., Nazareth, I., Marston, L., Moreno-Kustner, B., Bellón, J.Á, Svab, I., Rotar, D., Geerlings, M.I., Xavier, M., Goncalves-Pereira, M., Vicente, B., Saldivia, S., Aluoja, A., Kalda, R., & King, M. (2011). Associations between unemployment and major depressive disorder: Evidence from an international, prospective study (the predict cohort). *Social Science & Medicine*, 73, 1627-1634.

Kokko, K., Pulkinnen, L., & Puustinen, M. (2000). Selection into long-term unemployment and its psychological consequences. *International Journal of Behavioral Development*, 24(3), 310-320.

Kronick, R., Gilmer, T., Dreygus, T., & Lee, L. (2000). Improving health-based payment for Medicaid beneficiaries: CDPS. *Health Care Financing Review*, 21(3), 29-64.

Mancuso, D. (2014). *DSHS Integrated Client Database*. Washington State Department of Social and Health Services, Research and Data Analysis Division, Report 11.205.

McKee-Ryan, F.M., Song, Z., Wanberg, C.R., & Kinicki, A.J. 2005. Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology*, 90(1), 53-76.

Murphy, G.C., & J.A. Athanasou. (1999). The effect of unemployment on mental health. *Journal of Occupational and Organizational Psychology*, 72, 83-99.

Pager, D. (2007). *Marked: Race, Crime, and Finding Working in an Era of Mass Incarceration*. Chicago, IL: University of Chicago Press.

TANF Supported Employment Pilot
Participant Characteristics

DSHS

Paul, K.I., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behavioral*, 74, 264-282.

Schmitz, H. (2011). Why are the unemployed in worse health? The causal effect of unemployment on health. *Labour Economics*, 18, 71-78.

U.S. Census Bureau (2015). *Poverty thresholds for 2015 by size of family and number of related children under 18 years*. U.S. Census Bureau.

TECHNICAL NOTES

OVERVIEW AND STUDY POPULATION

Between April 1, 2015 and June 30, 2017, 235 working-age adults enrolled in the TANF SEP program. Sixteen participant records were excluded from the current analyses because the participant had no prior DSHS service history or they had exited the program and re-entered at a later date. This study describes TANF SEP program service use, including job development and placement for the remaining 219 (95 percent) enrolled participants. Measures reported here were compiled using information collected by sites and data from the DSHS Services Integrated Client Database (ICDB, Mancuso 2014).

TANF SEP program enrollment started in April 2015. As of June 30, 2017, the total months enrolled ranged from 0 to 26.3 months, with an average of 7.7 months per enrollee. Due to data lags, outcomes were only available for 132 participants in the 12 month post-enrollment period.

DATA SOURCES AND MEASURES

Participant Log

- Employment specialists documented information on TANF SEP enrollment, job development, job placement, and participant earnings in a participant log. In addition to contributing to site-specific quality assurance efforts, the monthly data were used for tracking program participation, services and preliminary outcomes such as job placement.

Demographics

- Demographics such as age, race/ethnicity, and gender were extracted from the ICDB, which includes information from all DSHS and health service systems.

Outpatient Mental Health Service Encounters

- Service encounter records in ProviderOne and the Behavioral Health Data System, as well as data provided by Sunrise Mental Health Services, were used to track outpatient mental health services. Specific service modalities were identified using the Division of Behavioral Health and Recovery's (DBHR) Service Encounter Reporting Instruction (SERI) categories and Healthcare Common Procedure Coding Systems (HCPCS) codes and/or Current Procedure Terminology (CPT) codes. Two HCPCS codes, H2023 and H2025, capture initial and ongoing supported employment services.

Medical Coverage

- Medicaid and other medical coverage data were obtained from eligibility codes recorded in ProviderOne.

Behavioral Health and an Indicator of Chronic Illness

- Mental illness, substance use disorder treatment need, and chronic illness indicators are derived from ProviderOne. These measures were calculated over a 12- or 24-month period prior to enrollment and were restricted to those participants with at least one month of medical eligibility during that period.

- Data from two information systems—ProviderOne (medical) and the Behavioral Health Data System (mental health and substance use disorders)— were used to identify the presence of substance use disorders and/or mental illness over a 24-month window prior to enrollment based on diagnoses, prescriptions, and treatment records.

- Drug and alcohol-related arrest data maintained by the Washington State Patrol were also used to identify probable substance use issues and were included in the definition of treatment need for substance use disorders.

- An established indicator of chronic illness was used to identify individuals with significant health problems. A risk score equal to 1 is the score for the average Medicaid participant in Washington State meeting Supplemental Security Income disability criteria. Chronic illness risk scores were calculated from health service diagnoses and pharmacy claim information, with scoring weights based on a predictive model associating health conditions with future medical costs (Gilmer et al., 2001, Kronick et al., 2000).

Emergency Department Use
- Emergency department use by Medicaid participants was identified using ProviderOne medical claims and Medicaid encounter data.

Public Assistance
- Basic Food and TANF receipt were identified using data from the DSHS Automated Client Eligibility System (ACES) summarized in the ICDB.

Household Data
- TANF assistance unit data was used to determine household size and composition. All assistance units associated with a participant's ACES client ID were merged with the participant log data. Issuance information was used to identify the assistance unit which was active during, prior to, or following a participant's enrollment in the TANF SEP program. Records for the different active members of the assistance unit were then linked to their respective information in the ICDB.
- Natural-born or adopted children were identified using the head of household (HOH) relationship code CH in ACES. Other dependent youth included: a co-parent's child (CC), stepchild (SC), dependent sibling child (SI), dependent niece or nephew (NN), child under legal guardianship (CG), great/grandchild (GC), and other unrelated child (OC). No children who were minor parents (CP), former stepchildren (FC), or dependent first cousins (CO) associated with TANF SEP participants' AUs were included.

Housing Instability
- Housing instability was identified through living arrangement status reported to DSHS caseworkers and recorded in ACES using the following codes: homeless with housing (HH), homeless without housing (HO), in an emergency shelter (EH), in a domestic violence shelter (BT), or in an inappropriate living situation without housing (IN). Participants paying nominal rent were identified using the at-home living arrangement code (AH) but were paying $25 or less in rent based on shelter expense data for the same time period.

Employment
- Employer-reported data on quarterly employment status, earnings, and hours worked came from the Washington State Employment Security Department (ESD) Unemployment Insurance wage file. Individuals were flagged as having any employment if they had at least one quarter of non-zero earnings and being employed all four quarters if they had non-zero earnings in each quarter during the calendar year prior to and following program enrollment. Yearly earnings were calculated by summing quarterly earnings within each calendar year.

Criminal Justice Involvement
- Arrest rates were based on offenses reported to the Washington State Patrol (WSP), which include arrests for felonies, gross misdemeanors, and other offenses. WSP records arrests regardless of conviction status. Some less serious misdemeanor offenses or non-criminal infractions handled by local law enforcement agencies are not required to be reported in the WSP database and are not included in the analyses.
- Conviction data comes from the Washington State Institute for Public Policy (WSIPP) and is based on court data collected and maintained by the Administrative Office of the Courts.

REPORT CONTACT: Alice Huber, PhD, 360.902.0707
VISIT US AT: https://www.dshs.wa.gov/SESA/research-and-data-analysis