Women's Recovery Services in Minnesota: Key Findings from Year 1 (2022-23)

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Key Findings: Year 1 (2022-23)

Women's Recovery Services

The Minnesota Department of Human Services Behavioral Health Division (BHD) contracted with eight grantees across Minnesota to provide treatment support and recovery services for pregnant and parenting women who have substance use disorders, and their families, through an initiative known as Women's Recovery Services (WRS). The following provides a description of women and children served by WRS programs between May 1, 2022 and May 31, 2023, and outcomes for families during the third iteration of this five-year grant.

Women served by WRS programs: Year 1

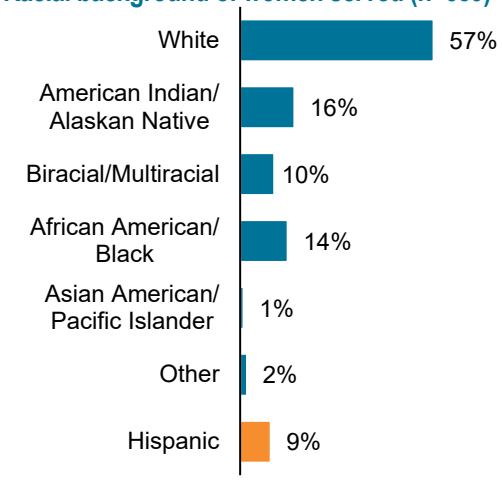
Women served	**Children** of women served	Median length of **participation**	Number of women who **exited a WRS program**	Average **staff contact time** per woman
559	1,049	4.2 months	375	240 hours

Service areas of greatest client need: According to program staff, women needed the most help with mental health and counseling (70%), parenting (53%), housing (38%), and relationship issues (27%).

Most common service areas: Besides treatment and recovery support, program staff were most likely to work with women on mental health or counseling (86%), parenting (75%), wellness or recreation (67%), physical/dental health (63%), housing (53%), relationship issues (52%), transportation (46%), public benefits (41%), and childcare (41%).

Chemical dependency treatment: 85% of women were in treatment when they entered a WRS program – most often in inpatient/residential (53%). About half (49%) of those who were in treatment during their program had successfully completed treatment by closing.

Racial background of women served (n=559)

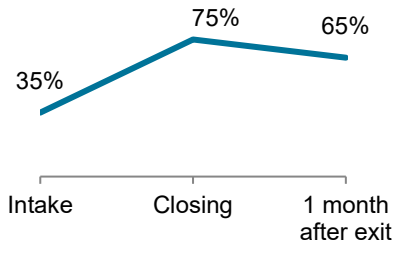


Outcomes for families: Year 1

Substance use and sobriety

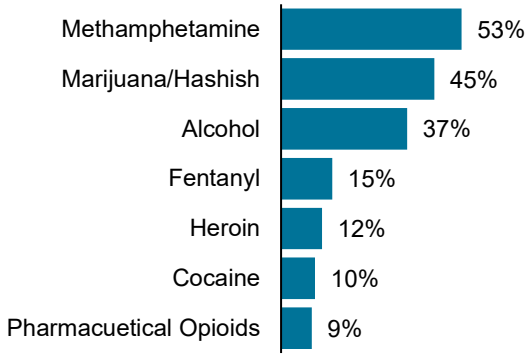
Significant increases in sobriety at closing are generally maintained after exit. Significantly more women were substance-free at closing (75%) when compared to intake (35%), and most women (65%) continued to report sobriety one month after exit.

Sobriety at intake, closing, and follow-up (n=52)



Meth is the most commonly used and preferred drug at intake. Methamphetamine was the most commonly used drug at intake among the 327 women reporting recent substance use; it was also the most commonly preferred drug at intake among the 559 women served.

Most commonly used drugs at intake (n=327)

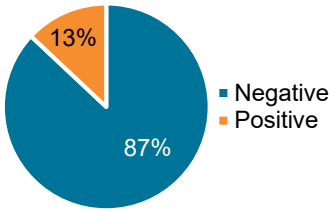


Infant health

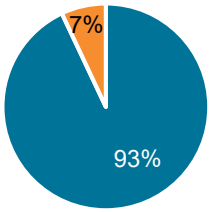
Most babies were born healthy. In Year 1, 61 babies were born to women served by WRS programs. Most babies were born full term (92%) and with a normal birth weight (84%).

Most babies and mothers had negative toxicology results. At birth, most babies (87%) and mothers (93%) tested negative for substances. Those with positive toxicology results at birth most commonly tested positive for marijuana and amphetamines. Toxicology results were unknown for 25% of women or babies.

Babies' toxicology at birth (N=46)



Women's toxicology at birth (N=46)



Reunification

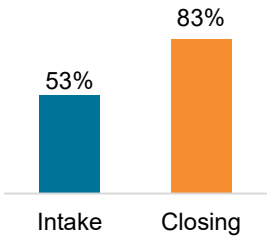
After a formal out-of-home placement…

83 children were reunified with their mothers **by closing**

Connection to recovery supports

Women were more likely to be connected to recovery supports at closing. Significantly more women were connected to recovery support activities at closing (83%) than at intake (53%).

Recovery support participation (n=253)

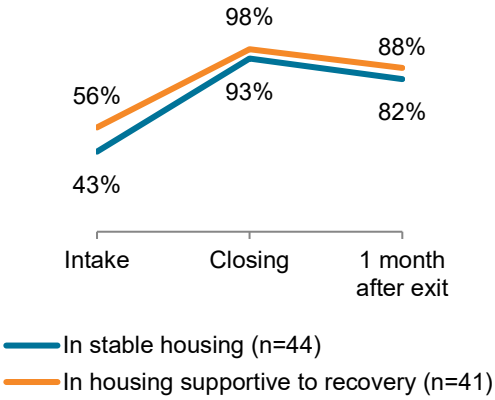


By closing, women sought support primarily through AA or NA (52%), a support group through their WRS program (26%), a culturally specific recovery support activity (12%), an unspecified support group (11%), or a faith-based support group (9%; N=375).

Housing

Women's housing situations improved by closing. Compared to intake, significantly more women were in housing supportive to recovery and stable housing at closing; these gains were mostly maintained one month after exiting a WRS program.

Percentage of women in stable or supportive housing over time



Overall, WRS programs directly provided housing for 80% of clients while they were in a program.

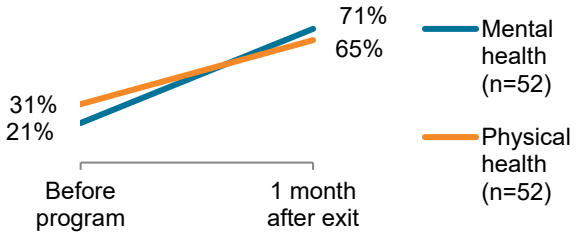
Many women participated in a coordinated assessment or were on a Section 8 waiting list by closing. While in a WRS program, 38% of women went through a coordinated assessment for housing, and 25% were on a waiting list for Section 8 or other subsidized housing at exit (this information was unknown for 12%-14% of women at closing).

Health

Mental health diagnoses are common among women served by WRS programs. At intake, 88% of women had a mental health diagnosis. Among those with a diagnosis, the most common were anxiety disorders (91%) and depressive disorders (75%; n=493).

Physical and mental health improve by follow-up. When asked to rate their physical and mental health, women reported that their health significantly improved from intake to the 1-month follow-up.

Percentage of women rating their health as "good" or "excellent"



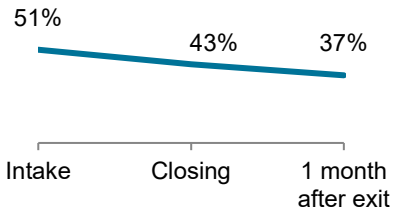
Parenting relationships and child protection

Women report improved relationships with children. Significantly more women (87%) described their relationship with their child(ren) as "good" or "excellent" at the 1-month follow-up when compared with intake (47%; n=45).

Most infants remain with their mothers after birth. 89% of babies born stayed with their mothers following birth; 10% were placed outside of the home following birth (N=61).

Fewer women are involved in child protection over time. Fewer women were involved with child protection at closing (43%) and the 1-month follow-up (37%), compared to intake (51%; n=51). Although not statistically significant, the trendline suggests a slight but steady decline over time.

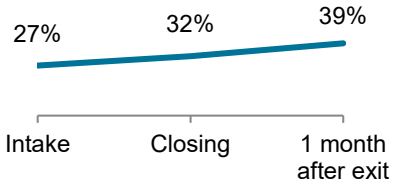
Percentage of women involved with child protection (n=51)



Employment and schooling

Rates of employment increase slightly over time. Although not statistically significant, more women were employed either full time or part time at closing (32%) and the 1-month follow-up (39%) when compared to intake (27%; n=44).

Percentage of women employed over time (n=44)

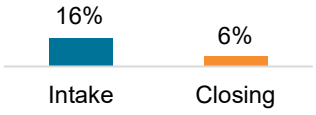


While relatively few women reported enrollment in school or a job training program overall, significantly more women were enrolled at closing (6%) compared to intake (3%, n=327).

Criminal justice system involvement

Arrests declined during program involvement, while system involvement overall remained flat. While 16% of women had been arrested in the month prior to intake, significantly fewer women had been arrested in the month prior to closing (6%; n=298). The proportion of women involved in the criminal justice system overall remained steady between intake (52%) and closing (51%; n=316).

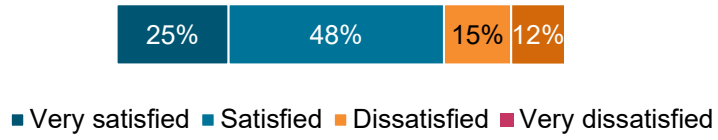
Percentage of women arrested (n=298)



Program satisfaction

At follow-up, the majority of women (73%) were satisfied with their WRS program. In addition, most women agreed that staff were sensitive to cultural issues (84%), helped them develop their goals (83%), and knew a lot about community services and programs (79%; n=55-59).

Most women were satisfied with their WRS program (n=59)



Additional outcomes

Percentage of women. . .

who were engaged with **program goals** at exit: **62%**

who participated in an evidence-based **parenting program** by closing: **64%**

who were **doing well** at program exit according to program staff: **55%**

Peer Recovery Support Specialists

A Peer Recovery Support Specialist (PRS) - also called a Recovery Coach - is a person with lived experience of alcohol or substance use that helps women on their recovery journey. Each Women's Recovery Services program grantee has a PRS on staff.

67% of women utilized a PRS while in a WRS program. Of those that reported contact with a PRS, 50% interacted with them every day or almost every day; 34% were in contact with their PRS once a week

30% of women who had a PRS while in the program were *still* in contact with them after leaving their WRS program

86% agreed their PRS listened to them and treated them with respect

87% agreed that with the help of their PRS, they felt emotionally supported throughout their recovery; 81%-83% had more confidence and motivation as a result of their PRS

76% agreed that with the help of their PRS, they better understood their addiction and behaviors and were able to achieve their recovery goals

78% felt their PRS helped them to develop healthier habits

70% said that their PRS provided unique support that was different from other program staff

Dosage of services

Women who received a *high dosage* of services – participating in their program for 90 days or more, and receiving at least 180 hours of staff contact time and 12 hours of in-person contact time – were more likely to:

- Be "doing well" at exit
- Be abstinent from substances at exit
- Have reduced their use of substances at exit and 1-month follow-up
- Be reunified with their children at exit
- Have successfully completed treatment by exit
- Be in housing (not homeless) at exit
- Have participated in Alcoholics Anonymous or Narcotics Anonymous by exit
- Have achieved a longer period of sobriety at exit (median days)

Contributors to positive outcomes

Stable and supportive housing makes a difference. Securing safe and stable housing by program exit was significantly linked to:

- Sobriety at exit
- Decreased substance use at exit
- Successful completion of treatment at exit
- Lower likelihood of child protection involvement at exit
- Reunification with one or more children at exit

Connections to mental health services are linked to sobriety and reunification by exit. Access to mental health services at exit was significantly connected to:

- Sobriety at exit
- Decreased substance use at exit
- Successful completion of treatment at exit
- Reunification with one or more children at exit

Successfully completing treatment increases the likelihood of achieving positive outcomes. Women who successfully completed their most recent treatment episode were significantly more likely to be:

- Sober at exit and the 1-month follow-up
- Have decreased substance use at exit
- Reunified with one or more children at exit
- Not involved with child protection at exit

The likelihood of achieving positive outcomes differs by drug of choice and racial identity. A woman's race and preferred drug of choice made a difference in the likelihood of achieving positive outcomes. Women identifying as White and, to some extent, those preferring to use meth were more likely to complete treatment and be sober at exit. To ensure that positive outcomes are equally attainable (and sustainable) for all women, regardless of their race or drug of choice, DHS and WRS programs should consider these findings and examine the ways in which they work with women of color.

Children served by WRS programs: Year 1

Total number of children. . .

of women who exited a WRS program 701

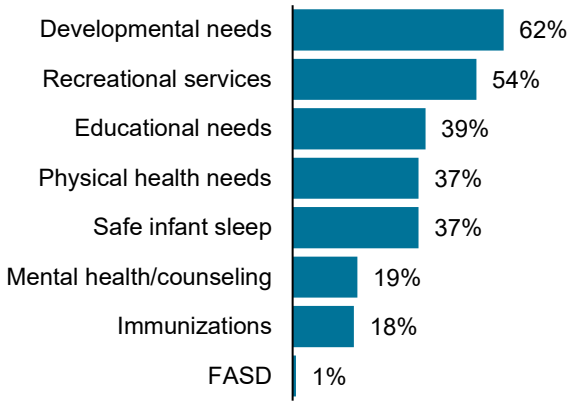
who received services from a WRS program 264[a]

[a] This is 38% of children of women who exited a WRS program in year 1. Service data was missing for 32% of the 701 children of women who exited in 2022-23.

Most common assessments received by children served: Informal Fetal Alcohol Spectrum Disorders (FASD) screenings (40%) and developmental assessments (27%) were the most common assessments administered to children.

Child immunizations and medical insurance: Of the children with known information (n=484), 99% of children had medical insurance and were up-to-date on their immunizations at closing, although this information was unknown for 30%-31% of children.

Most common service areas that program staff worked on with children (n=264)



Methodology

In order to evaluate women's progress and the effectiveness of the Women's Recovery Services initiative at each program, Wilder Research, in partnership with BHD and grantee staff, collected information from women at multiple points in time. The information collected generally remained the same across the year, with the exception of some additional questions to select instruments (such as the addition of fentanyl as a stand-alone substance). The primary data collection methods included:

Client-level forms: Program staff collected information about each woman who entered a WRS program at the point of program intake, program closing, and after pregnancy. Staff also collected information about UAs, the types of services programs provided, and the amount of contact with each woman. Information was tracked on paper forms as well as in a web-based database, into which all data were ultimately entered.

Follow-up interviews: In order to track the progress of women and the maintenance of their goals, follow-up interviews were conducted with women 1-and 6-months after they left a WRS program (12-month interviews will begin in the next year). Wilder Research interviewers asked women about their social support, education and employment, housing, transportation, physical and mental health, substance use, involvement with the criminal justice and child protection systems, self-efficacy, parenting and their relationship with their child(ren), children's health and well-being, and their satisfaction with the WRS program.

This summary presents highlights of *Women's Recovery Services in Minnesota: Key Findings from Year 1 (2022-2023).* For more information about this report, contact Monica Idzelis Rothe at Wilder Research at monica.idzelis@wilder.org.

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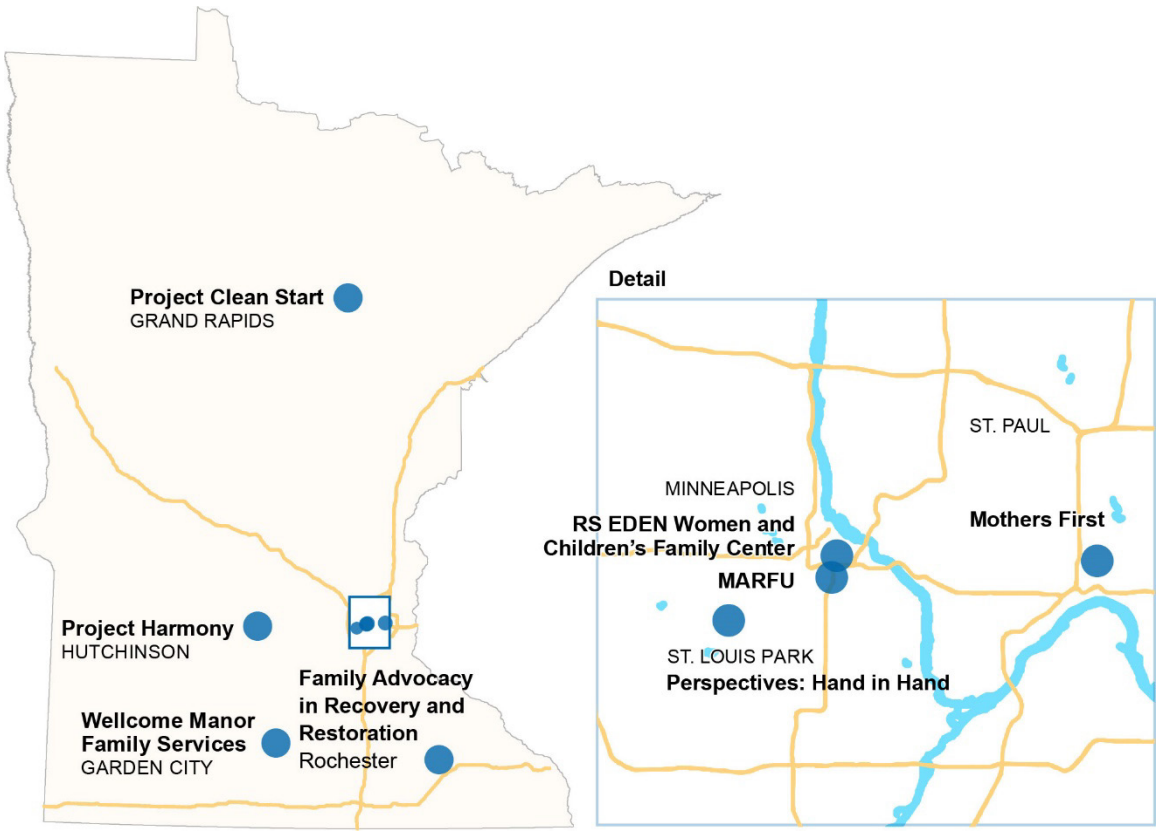
Project overview

In spring 2022, the Minnesota Department of Human Services Behavioral Health Division (BHD) contracted with 8 grantees across Minnesota to provide treatment support and recovery services for pregnant and parenting women who have substance use disorders, and their families (Figures 1 & 2). Through this initiative, known as Women's Recovery Services (WRS), grantees provided comprehensive, gender-specific, family-centered services for the women in their care. This is the third iteration of this five-year grant and evaluation. See Appendix A for more grant information.

In order to evaluate women's progress and the effectiveness of the Women's Recovery Services grantees, the Department of Human Services asked Wilder Research to conduct an evaluation of the program for the duration of the grant. See Appendix B for more information about the methods used to conduct the evaluation.

1. Map of Women's Recovery Services grantees (Year 1: 2022-2023)



2. Women's Recovery Services grantees in Year 1 (2022-23)

Grantee	Program	# of women served by the program	# of women who exited the program
Avivo	Mothers Achieving Recovery for Family Unity (MARFU)	91	63
Family Service Rochester	Family Advocacy in Recovery and Restoration (FARR)	54	24
Hope House of Itasca County	Project Clean Start	40	22
Meeker-McLeod-Sibley Community Health Services	Project Harmony	19	12
Perspectives Inc.	Women and Children: Hand in Hand	62	26
Ramsey County Community Human Services	Mothers First	43	22
RS EDEN	Women and Children's Family Center	110	90
Wellcome Manor Family Services	Wellcome Manor Family Services	140	116
Total		**559**	**375**

Note. This table provides the numbers of women who received services from a WRS grantee at any point from May 1, 2022 through May 31, 2023.

Overview of report

This report presents findings across all eight funded programs from May 1, 2022 through May 31, 2023 (year 1 of the grant cycle). The report begins with a description of the families served and services provided, and then moves into a detailed discussion of outcomes for women from intake to closing, or program exit. Note that descriptive information about families and services is based on all women and children served from 2022 - 2023, while outcome information is generally based on all women whose cases were *closed* during that period.

The report then explores how women were doing after exiting WRS programs by comparing outcome data for women at three time points: at intake, closing, and the 1-month follow-up interview. (Wilder is also conducting 6- and 12-month follow-up interviews with women but none of those interviews had occurred yet during year 1). Finally, the report includes an analysis of how the amount and intensity of services impacted outcomes and other factors that contributed to positive outcomes for women.

Description of women served

WRS grantees served a total of 559 women[1] from May 1, 2022 – May 31, 2023 (185 of these women remained from the previous period/grant, while 374 were new to the programs). A total of 375 women exited a WRS program during this time.

> Exiting a program includes both women who completed the program and those who left without completing it (e.g., stopped attending the program or were asked to leave).

- **Women's race and ethnicity:** At intake, women largely identified as White (57%), American Indian/Alaska Native (16%), African American/Black (14%), or multiracial (10%); 9% reported being of Hispanic origin.
- **Women's age:** The majority of women served were age 25-48 (80%).
- **Pregnancy at intake:** 22% of women were pregnant at intake (81% of these women had at least one prior pregnancy).
- **Children of women served:** Women served had a total of 1,049 children, including 61 babies born while women were in a WRS program; 701 children exited in year 1 (along with the 375 women reported above), and 38% of these children were reported to have received services in year 1, although service information was missing for 32% of children.
- **Income and public benefits:** Most women served (93%) had incomes at or below the federal poverty line. Women were connected to a variety of public benefits and community resources at intake, with the most common being food support or SNAP (41%), MFIP cash assistance (32%), WIC (19%), and General Assistance (14%).
- **Educational background of women served:** The majority of women served had earned a high school diploma or GED (73%); 34% had completed some college or obtained a post-secondary degree.

[1] Because it is possible for women to leave and then re-enter the program, this number may include some duplication.

Program participation

The following section includes data for the 375 women *who exited their program* in year 1 (2022-23).

Program dosage

- **Average length of participation:** 6.6 months; median 4.2 months (range: <1 month to 5.9 years[2])
- **Average number of contacts between program staff and women:** 227 contacts, among the 84% of women (n=316) who had a minimum level of contact with staff while in the program; 86% of women had at least one in-person contact with staff per month.

  Average number of **phone call** contacts: 23 contacts – 30% of women participated in a phone call with program staff

  Average number of **one-on-one** contacts (in-person): 34 contacts – 99% of women participated in a one-on-one contact with program staff

  Average number of **group** sessions (in-person): 194 contacts – 89% of women participated in a group session with program staff

  Average number of **text message** contacts: 55 contacts – 27% of women texted with program staff
- **Average number of hours program staff spent with women:** 240 hours (range: <1 hour to 1,636 hours) for the 316 women with recorded contact hours; 59 women did not have any recorded contact time with program staff, likely due to either missing data or women who completed an intake with program staff but left before receiving services.

[2] While length of participation varied by program and by person, 86% of women who closed in year 1 participated for a year or less; 7 women (2%) participated for 3 or more years.

Services and assessments

- **Most common service areas**: Besides treatment and recovery support, program staff were most likely to work with women on mental health or counseling (86%), parenting (75%), wellness or recreation (67%), physical/dental health (63%), housing (53%), relationship issues (52%), transportation (46%), public benefits (41%), and childcare (41%).
- **Service areas of highest need**: Program staff reported that women needed the most help with mental health and counseling (70%), parenting (53%), housing (38%), and relationship issues (27%).
- **Assessments provided**: Women most commonly received a mental health assessment (69%), a physical health assessment (50%), a mental health screening (49%), a chemical health assessment (42%), or a Fetal Alcohol Spectrum Disorder (FASD) screening through informal questions (22%).
- **Percentage of women who received urinalysis tests** (UAs) while in a WRS program: 68% of all women who exited during 2022-23.
- **Average number of UAs** provided to women during their program: 18 UAs; 67% of women provided with a UA had at least one positive UA, most commonly for marijuana (49%), methamphetamine (28%), other amphetamines (22%), other opiates (15%), benzodiazepines (14%), and alcohol (11%).
- **Percentage of women who completed an evidence-based parenting program**: 64% of women *participated* in an evidence-based program or curriculum while in a WRS program, while another 10% participated in other types of parenting support; 41% *completed* an evidence-based parenting program.

In-depth results: Comparing intake to closing

The following section summarizes information collected about women and their children from May 1, 2022 – May 31, 2023. It includes information about how women were doing *at intake*, when they first entered the program, as well as a comparison of outcomes from *intake to closing or program exit.*

► **Matched analysis:** For many of the outcome areas, a matched analysis was used to see if there were significant changes for women in key areas from intake to closing. Because the matched analysis can only be conducted when data are available at both intake and closing, these results are based on a different (usually smaller) number of women than the total number of women served from 2022-23 (as described in the previous section).

Among all eight WRS programs, between 161 and 334 women had matched information on key outcome areas available at both intake and closing, representing 43% - 89% of all women who exited WRS programs in year 1. The varied range of women represented in the results for each outcome area is due to incomplete information for women participating in a WRS program. Therefore, matched results may not be representative of all 375 women who exited a WRS program between May 2022 and May 2023.

For a complete list of matched analysis results, please see Appendix C.

WHAT IS A STATISTICALLY SIGNIFICANT CHANGE?

Wilder uses statistical analysis when looking at differences in outcomes between intake, closing, and follow-up interviews. Statistical software is used to determine whether a difference detected is "real" and more than likely not due to chance. When the report uses the term "significant" to describe change over time, this means the statistical test indicates that we can be confident that actual change occurred from intake to closing in a given outcome area.

While a statistical analysis may reveal that a change is statistically significant, the meaningfulness of these differences should be examined further. Relatively small differences between time points or groups sometimes emerge as "statistically significant" because the large number of women yields more "power" in the analysis to detect even small differences. The extent to which this statistical difference suggests a meaningful difference for women from one time to another should be considered for each individual outcome and the broader context in which it occurs. For example, a difference of 3 or 5 percentage points, even if statistically significant, is not necessarily practically significant and should not be over-emphasized; in contrast, a difference of 10 or more percentage points suggests a more meaningful difference.

Substance use

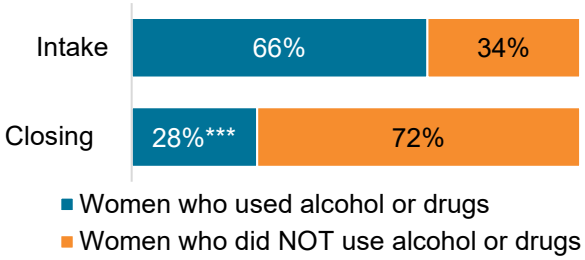
At intake (all women served in year 1)

- **Substance use and sobriety:** At intake, 59% of women reported having used alcohol and/or other drugs (excluding tobacco) in the 30 days prior to program enrollment or prior to a forced sobriety situation (e.g., jail, treatment) preceding enrollment. For the 184 women[3] (40%) reporting no alcohol or drug use within 30 days of intake, their length of sobriety at intake ranged from 1 month to over 4 years, with an average of 5.9 months.
- **Primary drug of choice:** For the women served during year 1, the primary drug of choice was most often methamphetamine (40%), followed by alcohol (20%), heroin (10%), marijuana (10%), and fentanyl (8%).[4]
- **Most common substances used:** Among those reporting substance use in the 30 days prior to intake, women were most likely to have used methamphetamine (53%), followed by marijuana (45%), alcohol (37%), fentanyl (15%),[4] heroin (12%), cocaine (10%), and pharmaceutical opioids (9%). The majority of women (81%) also reported recent tobacco use at intake.

At closing (women who exited a program in year 1)

► **Matched analysis:** The number of women who reported recent substance use **significantly decreased** from intake to closing (Figure 3). While 66% of those with matched data had used substances in the month prior to intake, 28% reported using in the month prior to closing. For more information on women's substance use at closing – including the number who reported *reduced* use from intake to closing – please see Appendix C.

3. Change in substance use from intake to closing (n=306)



Note. Differences between intake and closing were tested using the McNemar's test and are significant at: ***p < .001.

[3] A total of 222 women reported no recent alcohol or drug use at intake; however, information on length of sobriety is only reported for 184 of those women for whom sobriety data were available and who had a minimum of 30 days of sobriety.

[4] Because fentanyl began being tracked as a separate, standalone substance partway through year 1 of the evaluation, this proportion may be an undercount of actual fentanyl usage, while the pharmaceutical opioids category may include participants who used fentanyl.

Infant health

All babies born to women served in year 1

- **Most babies were born healthy and stayed with their mother following birth.** In 2022-2023, 61 babies were born to women served by a WRS program. Most babies were born full term (92%) and with a normal birth weight (84%). In addition, 16% of babies (n=10) spent time in the NICU and 10% of babies (n=6) were placed outside of the home following birth.
- **Infant toxicology:** Of infants tested (n=46), 13% of babies had positive toxicology results, most commonly for marijuana (33%) or amphetamines other than methamphetamine (33%). (25% of babies did not receive a toxicology test or had results unknown to program staff.) Infant toxicology was most often obtained through a meconium test (82%).
- **Mothers' toxicology:** While toxicology results were also unknown or untested for 25% of women who gave birth in year 1, 7% of women (n=3) with available results tested positive for substances at birth, including other amphetamines (n=2), methamphetamine (n=1), and marijuana (n=1).[5] Toxicology results for women were obtained through either a blood test (50%) or a urine test (48%).

Recovery support

At intake (all women served in year 1)

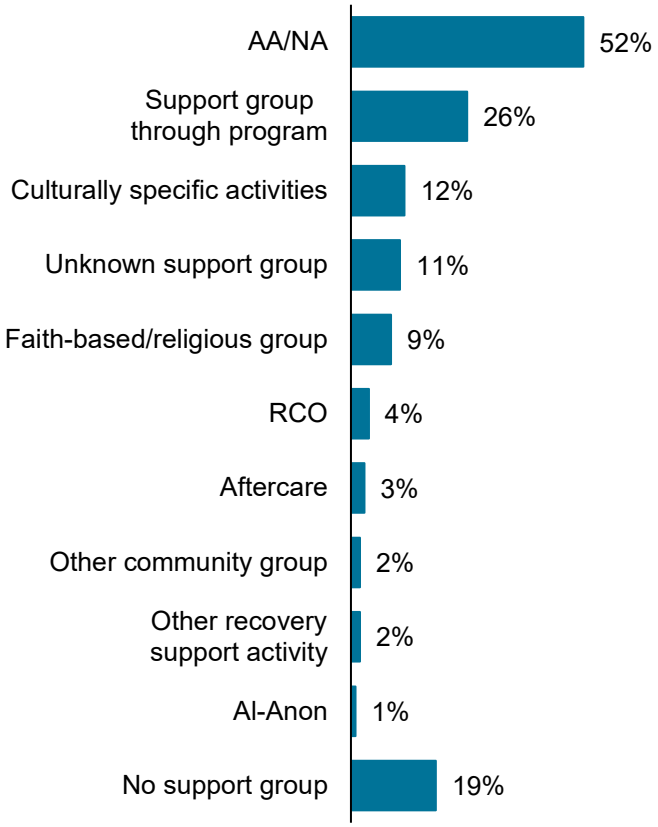
- **Sources of recovery support:** Upon entering their Women's Recovery program, 34% of women were participating in Alcoholics Anonymous (AA) or Narcotics Anonymous (NA). Fewer women were connected to recovery support through unspecified recovery support activities (13%), faith-based groups (8%), Recovery Community Organizations (RCOs; 6%), aftercare (5%), and culturally specific groups (4%).

At closing (women who exited a program in year 1)

- **Sources of recovery support:** By closing, women (n=375) sought support primarily through AA or NA (52%), a support group through their WRS program (26%), a culturally specific recovery support activity (12%), an unspecified support group (11%), a faith-based support group (9%), Recovery Community Organizations (RCOs; 4%), or aftercare (3%; Figure 4).

[5] This excludes two women who tested positive only for medications taken as directed.

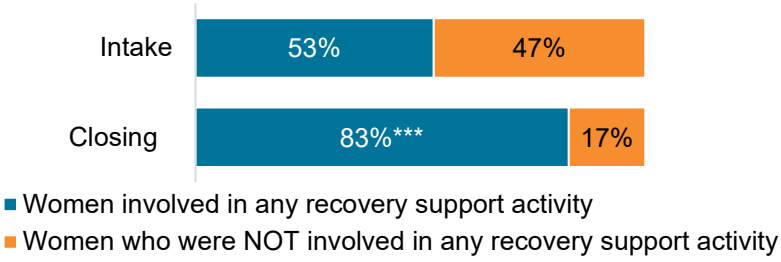
4. Types of recovery support used by women at closing (n=375)



Note. Women could indicate multiple forms of recovery support used, so percentages total more than 100%.

► **Matched analysis:** Significantly more women were connected to recovery support activities at closing (83%) than at intake (53%) (Figure 5). This was also true in terms of participation in AA and/or NA (39%, intake vs. 71%, closing, n=253).

5. Change in recovery support participation from intake to closing (n=253)



Note. Differences between intake and closing were tested using the McNemar's test and are significant at: ***p < .001. "Any recovery support activity" includes involvement in AA and/or NA, a support group through the program, a support group in the community, support from family/friends, a faith-based/religious group, or other recovery support activities.

System involvement

At intake (all women served in year 1)

- **Child protection:** 54% of women were involved with child protection at intake, and 20% had been referred to their program through that system.[6] Of the 238 women who were required to participate in a WRS program, 63% of those were required to do so by child protection.
- **Criminal justice system:** Half of all women (50%) were involved with the criminal justice system, and 14% had been arrested in the 30 days prior to program entry; 11% had been referred through corrections or drug court.

At closing (women who exited a program in year 1)

- **Reunification:** 83 children were reunified with their mothers by closing (after a formal out-of-home placement).
- **Babies placed out of home:** 10% of the babies (n=6) born to mothers served during year 1 were placed out of the home by child protection following their birth.

► **Matched analysis:** Women were significantly less likely to be arrested in the 30 days prior to closing (6%) than in the 30 days prior to intake (16%). In addition, significantly fewer women were involved with child protection at closing when compared to intake. The percentage of women involved in the criminal justice system was similar from intake to closing (Figure 6).

6. Changes in system involvement from intake to closing

		Intake		Closing	
System Involvement	Total n	n	%	n	%
Women arrested in the prior 30 days	298	48	16%	17	6%***
Women involved in child protection	322	184	57%	161	50%**
Women involved with the criminal justice system	316	165	52%	162	51%

Note. Differences between intake and closing were tested using the McNemar's test and are significant at: ***p < .001 and **p < .01.

[6] Child protection was among the top three referral sources for women entering their Women's Recovery program, as were treatment programs (23%) and self-referrals (23%).

Housing

At intake (all women served in year 1)

- At intake, women were most likely to be living in their own house or apartment (28%), in a relative or friend's home (22%), or in an inpatient treatment facility (20%).
- In addition, 6% of women were living in a shelter or a place not intended for housing (such as a car, vacant building, or outside) at intake.
- Living arrangements were considered "supportive to recovery" for 57% of women and "stable" for 51% of women.
- The majority of program participants (71%) had experienced homelessness at some point in their lives, with 19% having been homeless five or more times.

At closing (women who exited a program in year 1)

- At closing, women were most likely to be living in their own house or apartment (38%), in a relative or friend's home (18%), or a sober/halfway house (8%), although living arrangements were unknown for 19% of women at closing.
- The WRS programs directly provided housing for 80% of clients while they were in the programs.
- 38% of women went through a coordinated assessment for housing while in the program and 25% were on a waiting list for Section 8 or other subsidized housing at exit (this information was unknown for 12%-14% of women at closing).

► **Matched analysis:** Housing situations improved for many women by the time they exited a WRS program. By closing, women were significantly more likely to be housed (not homeless), in housing considered stable, and in housing supportive to their recovery (Figure 7). Note that matched housing information was available for 43%-75% of women; therefore, these findings may not be representative of all women who exited a WRS program in year 1.

7. Changes in housing from intake to closing

Changes in housing	Total n	Intake		Closing	
		n	%	n	%
Women in housing/not homeless[a]	186	162	87%	178	96%***
Women in own home or permanent supportive housing[b]	161	97	60%	105	65%
Women in "stable" housing[c]	280	151	54%	233	83%***
Women in housing "supportive to recovery"[d]	263	162	62%	227	86%***

Note. Differences between intake and closing were tested using the McNemar's test and are significant at: ***p < .001.

[a] Woman lives in her own home, a friend's/relative's home, transitional housing, permanent supportive housing, or a sober house, rather than no home (homeless, a shelter or motel, or a correctional facility).

[b] Woman lives in her own home or permanent supportive housing, rather than a friend's/relative's home, transitional housing, or sober house.

[c] Woman's living arrangements are **stable**, as perceived by staff. Factors considered in this determination are woman's permanency of arrangements, affordability, safety, and adequacy of space and amenities.

[d] Woman's living arrangements are **supportive to recovery**, as perceived by staff. Factors considered in this determination are woman's safety, proximity to others who are using alcohol or drugs, presence of supportive relationships, and access to alcohol or drugs.

Treatment participation

- **Treatment *at intake*:** 85% of women were in treatment when they entered a WRS program; 53% were in inpatient/residential treatment, 31% were in outpatient treatment with housing, and 16% were in outpatient treatment without housing. Of those in treatment at intake, 26% had children living with them while in treatment.
- **Prior treatment participation:** The majority of women (83%) reported having been in treatment at some point prior to entering their current program, typically one to four times (69%).
- **Treatment outcomes *by closing*:** Women who enter treatment more than once during their time in the program might have different outcomes for each treatment episode. For the 334 women who were in treatment at some point during their time in a WRS program, their most recent treatment outcomes were as follows: 49% successfully completed 245G or Rule 31 treatment, 40% were noncompliant or left the program without staff approval, 6% had some "other" treatment outcome, and 5% were still in treatment.
- **Medication-assisted treatment and detox**: While in a WRS program, 26% of women received medication-assisted treatment (MAT), primarily suboxone and methadone (medications used to treat heroin or opioid addiction); 5% spent time in detox while in their program.

Health and safety

At intake (all women served in year 1)

- **Physical health and access to care:** 41% of women reported having a severe or chronic physical health problem at intake. Among those with a health issue, the most common were tooth and/or gum problems (27%), chronic neck or back problems (21%), lung or respiratory illnesses (15%), other types of chronic pain (14%), migraines (13%), and arthritis or carpal tunnel (13%). In the 6 months prior to intake, 34% had been to the emergency room. The majority of women had medical insurance (96%), typically through a public option (e.g., MA, MNCare), and 72% had a primary care physician, clinic, or both.
- **Mental health diagnoses:** 88% of women had at least one mental health diagnosis at intake. Among those with a mental health diagnosis, women were most often diagnosed with an anxiety disorder (91%) or depressive disorder (75%). In addition, 61% of all women had been diagnosed with Post-traumatic Stress Disorder (PTSD). A small proportion of women reported a diagnosed Traumatic Brain Injury (TBI; 8%) or Fetal Alcohol Spectrum Disorder (FASD; 3%).
- **Intimate partner violence:** When asked at program exit, 19% of women reported that, at intake, they were in a relationship with a partner who was physically or emotionally violent. Data were unknown for 25% of women.

At closing (women who exited a program in year 1)

- **Mental health services:** By closing, 61% of women were receiving mental health services or were connected to a specific clinic or therapist if services were needed; an additional 26% needed mental health services at closing but were not connected to a clinic or therapist. This information was missing for 10% of women.
- **Intimate partner violence:** 65% of women who reported an abusive relationship at intake said that their personal safety had improved by closing; 26% reported that their personal safety stayed the same or worsened by closing. This information was missing for 8% of women.

► **Matched analysis:** Significantly more women had a primary care physician and/or clinic at closing (81%) when compared with intake (70%). While nearly all women had medical insurance at intake (97%), significantly more women had medical insurance by closing (99%), although this was only a 2 percentage point increase (Figure 8).

8. Changes in health care access from intake to closing

		Intake		Closing	
Health Care Access	**Total n**	**n**	**%**	**n**	**%**
Women with a primary care physician and/or clinic	320	225	70%	259	81%***
Women with medical insurance	334	324	97%	332	99%**

Note. Differences between intake and closing were tested using the McNemar's test and are significant at: ***p < .001 and **p < .01.

Education and employment

At intake (all women served in year 1)

- **Education:** 73% of women had a high school diploma or GED at intake; 34% had completed some college or obtained a post-secondary degree.
- **Employment and career-training programs:** Most women (81%) were unemployed or not working at intake; 16% were actively looking for work. Fewer (18%) were employed either full time or part time, or involved in school or a career-training program (4%).

At closing (women who exited a program in year 1)

► **Matched analysis:** Relatively few women were employed or involved in school or career-training programs at either intake or closing. However, there was a small but statistically significant increase in the proportion of those who were in school or a career-training program by closing (6%) when compared to intake (3%). Taken together, the percentage of women employed or enrolled in a school or career training program increased slightly from intake (22%) to closing (25%; Figure 9), although this increase was not statistically significant.

9. Changes in employment and schooling from intake to closing

		Intake		Closing	
Employment and Schooling	**Total n**	**n**	**%**	**n**	**%**
Women employed full time or part time	312	62	20%	67	22%
Women in school/career-training program	327	10	3%	20	6%*
Women either employed OR enrolled in a school/career-training program	310	67	22%	76	25%

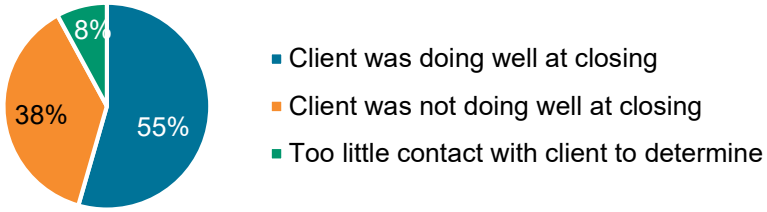
Note. Differences between intake and closing were tested using the McNemar's test and are significant at: *p < .05.

Additional outcomes

At closing (women who exited a program in year 1)

- **Engagement in case plan and continuing care plan:** At the time of closing, 62% of women were at least somewhat engaged in carrying out their program goals and case plan (as reported by program staff); 64% of women had a continuing care plan in place when they exited a WRS program.
- **Doing well at closing:** Using their own professional judgment and internal set of criteria, program staff assess the extent to which women are "doing well" or "not doing well" when they leave the program. Overall, staff reported that 55% of women who exited a WRS program this past year were "doing well" at closing. Staff had too little contact with 8% of women to make this determination (Figure 10).

10. Staff perception of women's status at closing (n=375)



There were a range of reasons why staff perceived women as "not doing well" at closing or reported that they had too little contact to determine, including that women were not compliant with program requirements (65%), they were not engaged in carrying out the goals of their case plan (57%), they were actively using substances (38%), they disappeared or could not be reached (17%), or because they were in crisis or experiencing a traumatic life event (21%).

Children of women served

Description of children

Women served by a WRS program in year 1 (2022-23) had a total of 951 dependents at the time of intake. Key characteristics of these children include:

- **Children's race and ethnicity:** At intake, children were identified as White (37%), multiracial (21%), American Indian/Alaska Native (16%), African American/Black (11%), and Asian American/Pacific Islander (1%). In addition, 10% were identified as Hispanic.
- **Children's age:** The majority of children (85%) for whom age information was available (n=701) were under age 12.
- **Babies born:** A total of 61 babies were born to women served by a WRS program in year 1. Babies were most commonly identified as White (34%), multiracial (30%), African American/Black (20%), American Indian/Alaska Native (15%), and Asian American/Pacific Islander (2%). In addition, 13% of babies born in year 1 were of Hispanic origin.

Services provided to children

While WRS programs offer children's services, programs do not always have the opportunity to serve the children of women participating in the program. Oftentimes, women may not have custody of their children while in their program or do not bring their children with them to the program. In addition, many children are in school or involved in outside programming during the day, limiting program staff's ability to provide services to children.

Overall, WRS programs directly provided services to at least 264 children, or 38% of the 701 children of women who exited a WRS program in year 1. The following provides additional information about the services provided to these 264 children. (Service data was missing for 11% of children.)

- **Service areas that program staff worked on with children:** For those who received services, program staff most commonly worked with children on developmental needs (62%), recreational services (54%), and educational needs (39%). Children also received services related to physical health/medical care (37%), safe infant sleep (37%), mental health/counseling (19%), immunizations (18%), and FASD (1%).
- **Assessments provided to children:** 40% of children received an FASD screening or assessment, most often an informal screening, while 27% received a developmental assessment while in the program; 51% of the children served did not receive any of the screenings or assessments listed on the closing form.

Children at closing

At closing, program staff collected information on the 701 children of women who had participated in a WRS program – regardless of whether or not each child received services from a program. The following section summarizes information on the children of all women who exited a WRS program in year 1, for whom data are available.

- **Custody status:** At closing, 45% of children were involved with child protection (child protection involvement was unknown for 14% of children). Of those children, 55% had a formal out-of-home placement.
- **Medical insurance and immunizations by closing:** Of the children with known information (n=484), 99% of children had medical insurance and were up-to-date on their immunizations at closing. However, this information was unknown for 30%-31% (n=212-217) of the 701 children.
- **Mental health services at closing:** Of the children with known information (n=466), 23% of children were receiving mental health services at closing. However, this information was unknown for 34% (n=235) of the 701 children.
- **Participation in an evidence-based children's program:** While this information was unknown or missing for 19% of children, 20% of children participated in an evidence-based program in year 1 and fully completed the program; an additional 7% partially completed an evidence-based program.

Life after WRS programs

Follow-up interview results

Number of women who **exited in year 1**
375

Number of women who **completed a 1-month follow-up interview**
59

Number of women with results **at the 3 time points (intake, closing, and 1-month follow-up)**
36-52

Wilder Research contacts women by telephone approximately 1, 6, and 12 months after exit to assess their well-being and satisfaction with the program. A total of 59 1-month interviews were completed with women in year 1 (no 6- or 12-month interviews were completed in year 1 as interviewing began in December 2022). The number of interviews completed by program can be found in Figure 11, and detailed responses from all women interviewed during the 1-month follow-up can be found in Appendix E.

To learn how changes from intake to closing are maintained after women leave the program,[7] Wilder conducted an analysis of data at three time points – intake, closing, and 1-month follow-up. Because this analysis requires women to have information available at all three of these time points, the following results represent findings for 10%-14% of all 375 women who exited a WRS program between December 1, 2022 and May 31, 2023.[8] Therefore, these findings are not representative of all women who exited a WRS program during year 1.

[7] Generally, information collected at intake and closing was based on *staff* report, while information collected during the follow-up interviews was based on *client* self-report. Collecting data from two different sources can impact the accuracy of the data; please see the Limitations section in Appendix B.

[8] Please note that not all women are eligible for follow-up interviews. See the Limitations section in Appendix B for more information about the women interviewed.

Please note that programs are not evenly represented in follow-up interview results. Given differences across WRS programs, Wilder Research is more likely to interview women from programs that serve a larger number of women per year and that average a shorter participation length. As Figure 11 shows, 65% of women included in the follow-up analysis participated in one of three programs. Therefore, some programs are represented more than others in the follow-up analysis; these findings are not equally representative of all programs.

11. Number and proportion of women included in the follow-up interview analysis, by program (n=52)

Grantee	Number of women included in follow-up interview analysis	Proportion of women included in follow-up interview analysis
Wellcome Manor Family Services	15	29%
RS EDEN	12	23%
Avivo	7	13%
Family Advocacy in Recovery and Restoration	5	10%
Hope House of Itasca County	5	10%
Perspectives Inc.	5	10%
Ramsey County Community Human Services	3	6%
Meeker-McLeod-Sibley Community Health Services	0	0%
Total	**52**	**100%**

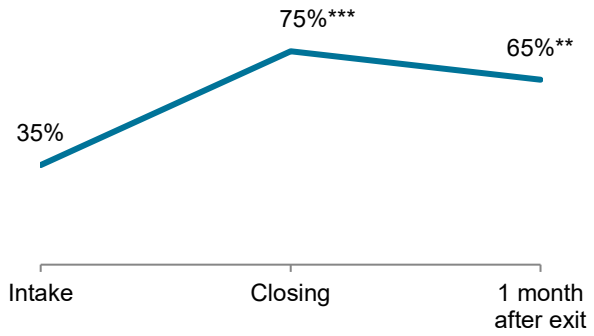
Note. Only women with information available at three time points – intake, closing, and 1-month follow-up – were included in the follow-up interview analysis.

Substance use

Significant increases in sobriety by closing are generally maintained immediately after exit

After making significant gains in sobriety during their WRS program, women are generally able to maintain these gains one month after closing (Figure 12). While significantly more women were sober at closing (75%) when compared to intake (35%), a slightly smaller proportion of women reported sobriety at the 1-month follow-up (65%).

12. Percentage of women reporting sobriety (n=52)



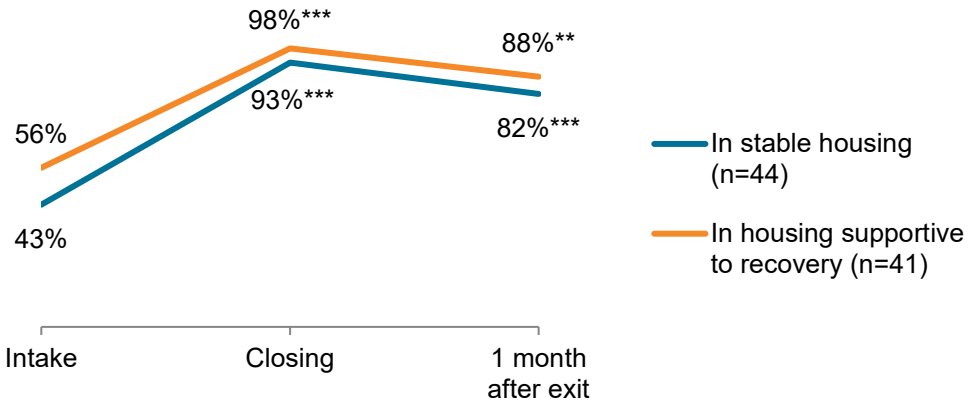
Note. Differences between each point in time were tested using Cochran's Q Test and follow-up pairwise comparisons. See Appendix C for more detailed information. Differences are significant at: ***p < .001 and **p < .01.

Housing

More women had stable and supportive housing after exit and gains are generally maintained immediately after exit

Women's housing situations significantly improved by program exit, and although there were slight declines in the month following program exit, the improvements were generally maintained (Figure 13). Significantly more women were in stable housing at closing (93%) and the 1-month follow-up (82%) when compared to intake (43%). Similarly, significantly more women were in housing considered supportive to their recovery at closing (98%) and the 1-month follow-up (88%) when compared to intake (56%).

13. Percentage of women in housing considered "stable" and "supportive to recovery"



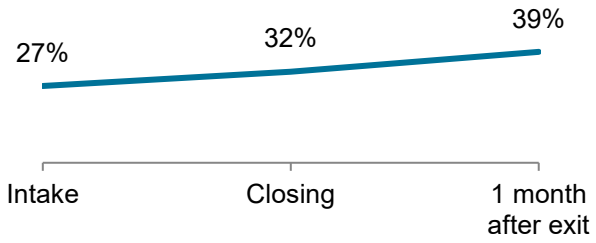
Note. Differences between each point in time were tested using Cochran's Q Test and follow-up pairwise comparisons. See Appendix C for more detailed information. Differences are significant at: ***p < .001 and **p < .01.

Employment, schooling, and job training

Employment rates for women increased slightly over time

Women saw slight gains in employment after participating in a WRS program (Figure 14). The percentage of women who were employed full or part time at intake increased slightly from 27% at intake, to 32% at closing and 39% at the 1-month follow-up. While these differences were not statistically significant, the modest trend indicates positive gains in employment over time.

14. Percentage of women employed (n=44)



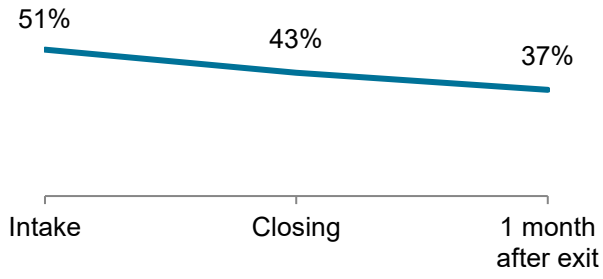
Note. Differences between each point in time were tested using Cochran's Q Test and follow-up pairwise comparisons. See Appendix C for more detailed information. Differences are not significant.

Child protection

Child protection involvement decreased slightly but steadily over time

Fewer women were involved with child protection at closing (43%) and the 1-month follow-up (37%) when compared to intake (51%; Figure 15). Although this decrease was not statistically significant, the findings indicate a steady decline in rates of child protection involvement over time.

15. Percentage of women involved with child protection (n=51)



Note. Differences between each point in time were tested using Cochran's Q Test and follow-up pairwise comparisons. See Appendix C for more detailed information. Differences are not significant.

Quality of life

During their follow-up interviews, women are asked to reflect back and rate various aspects of their life before they started the program, and to then rate those same aspects *currently*. Women reported significant improvements in many areas of their lives at the 1-month follow-up (Figure 16), including:

- ✓ Improved physical and mental health (Figure 17)
- ✓ Better access to good advice from family and friends
- ✓ More supportive relationships with family and friends
- ✓ Improved relationships with their children
- ✓ More frequently making good parenting decisions, expressing love for their children, and otherwise being a more supportive parent

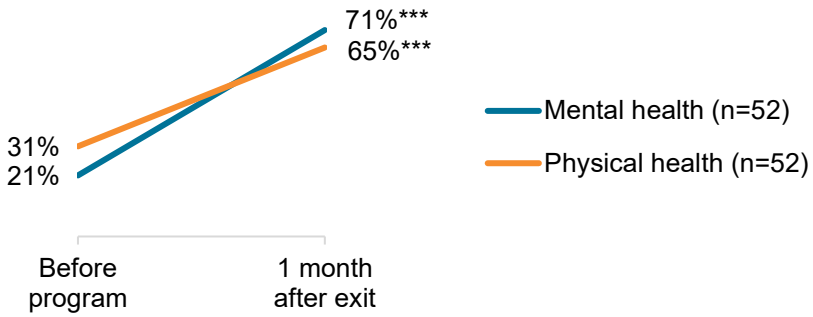
Women also demonstrated improvements in terms of access to reliable transportation and their ability to afford basic living expenses, although these improvements were not statistically significant or approaching statistical significance.

16. Quality of life before and after the program (n=36-52)

		Before program		At 1-mo follow-up	
Quality of life	**Total n**	**n**	**%**	**n**	**%**
Women's **mental** health is "excellent" or "good"	52	11	21%	37	71%***
Women's **physical** health is "excellent" or "good"	52	16	31%	34	65%***
Women's family and friends give good advice "most of the time" or "some of the time"	51	33	65%	43	84%*
Women have access to reliable transportation "most of the time"	52	29	56%	39	75%
Women's relationships with family and friends are "very supportive" or "somewhat supportive"	52	40	77%	48	92%*
Women consider their relationship with their child(ren) to be "excellent" or "good"	45	21	47%	39	87%**
Women are able to afford basic living expenses "most of the time"	52	17	33%	29	56%†
Women are making good parenting decisions "most of the time" or "some of the time"	36	23	64%	36	100%***

Note. Differences between time periods were tested using the Cochran's Q Test and follow-up pairwise comparisons, and are significant at *p < .05, **p < .01, and ***p < .001, and are approaching significance at †p < .10.

17. Percentage of women who rated their health "good" or "excellent" (n=52)



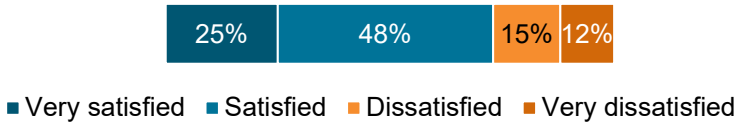
Note. Differences between the three time periods were tested using the McNemar's Test. The following differences are significant at ***p < .001.

Program satisfaction and support

During follow-up interviews, respondents were asked to provide feedback about their experience in their WRS program, including their satisfaction with the program and the areas in which they felt they received support. Please see Appendix E for more information on satisfaction results. Key findings include:

- **Most women are satisfied with the program.** The majority of women (73%) were "very satisfied" or "satisfied" with their WRS program and would recommend the program to women like themselves (Figure 18).

18. Program satisfaction (n=59)



- **Women gave high ratings to program staff.** When asked about specific program elements, the majority of women agreed that program staff were sensitive to cultural issues (84%), helped them develop their goals (83%), and knew a lot about community services and programs (79%).
- **Women reported sobriety support as most helpful.** In terms of the services they found most helpful, women were most likely to report that their program helped them to get or stay sober (81%) and provide emotional support and encouragement (80%). These were also the most helpful supports to them and their children while in the program (26% and 23%, respectively). Programs also helped the majority of women address physical or mental health needs (71%), parenting (63%), and find a support network of people to help them stay sober (54%).
- **Women needed more help with housing and basic needs.** 4 in 10 women (42%) said they did not receive help with housing but needed it, and about one-quarter also did not receive help but needed assistance with finding a sober support network (27%) and paying for things like housing, transportation, or bills (24%).

Peer Recovery Support Specialists

A Peer Recovery Support Specialist (PRS) - also called a Recovery Coach - is a person with lived experience of alcohol or substance use who helps women on their recovery journey. Each Women's Recovery Services program grantee has a PRS on staff. In a role distinct from case workers or therapists, a PRS serves as a mentor, role model, and advocate for women in their substance use recovery.

Women are asked to provide feedback about their program's PRS in follow-up interviews. The results below reflect the experiences of 36-39 women who provided feedback on their PRS during the 1-month interview. Please see Appendix E for more information on women's experiences with peer supports.

Peer supports make a difference

- **67% of women utilized a Peer Recovery Support Specialist while in the program.** Of those that reported contact with a PRS, half interacted with them every day or almost every day (50%); 34% were in contact with their PRS once a week. Fewer (30%) were in contact with their PRS *after* leaving the program.
- **Working with a Peer Recovery Support Specialist increased the likelihood of successful treatment completion and reunification.** When comparing the results of women who interacted with a PRS during their time in a WRS program with women who did not, those that worked with a PRS were more likely to: successfully complete treatment at closing and be reunified with one or more children at closing. See the Contributors to Positive Outcomes section for more information on this analysis.
- **Peer Recovery Support Specialists provided dependable, respectful support and helped women to live healthier lives.** About 8 in 10 women felt that their PRS listened to them and treated them with respect (86%), were there for women when needed (81%), and helped them to develop healthier habits (78%; Figure 19). In addition, women felt that, with the help of their PRS, they felt emotionally supported throughout their recovery (87%), had more confidence in themselves (81%), and felt more motivated (83%). Three-quarters of women (76%) said that, with the help of their PRS, they better understood their addiction and behaviors and were able to achieve their recovery goals.

19. Feedback on Peer Recovery Support Specialists (n=36-37)

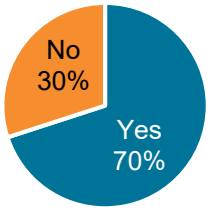
At least 8 out of 10 women agreed that…

- Their PRS listened to them and treated them with respect
- Their PRS was there for them when needed and helped them to establish healthier habits
- They felt more emotionally supported throughout their recovery with the help of their PRS
- They had more confidence and felt more motivated with the help of their PRS

Peer supports provide unique recovery support

- **7 out of 10 women felt their Peer Recovery Support Specialist provided unique support**. In follow-up interviews, 70% of women felt their PRS provided unique support that differed from the support offered by other program staff (Figure 20).

20. Did your Peer Recovery Support Specialist provide unique support that was different from other program staff? (n=37)



Dosage: The impact of service amount and participation levels on women's outcomes

Women's length of participation in WRS programs and the amount of service received while in the program varies widely: across the eight grant-funded programs in year 1, length of participation ranged from less than a month to nearly six years, while the amount of contact staff had with women ranged from less than one hour to 1,636 hours. Given this wide variation in service intensity or "dosage" among women, it is possible that outcomes differ for women based upon the amount of service they received while in their program.

In order to explore the impact of dosage, analyses were conducted that compare outcomes for women who received a higher level of service to outcomes for those who received a lower level of service; these analyses include data from those who exited a WRS program from May 1, 2022 through May 31, 2023. Figure 21 illustrates how "high dosage" and "low dosage" were defined, which was based upon women's length of enrollment in the program and the total number of hours of contact time with program staff. The threshold between "high" and "low" was based upon the range of data available for all women and is an attempt to assess the impact of dosage on their outcomes. Women had to meet both criteria to fit into the high-dosage or low-dosage group.

21. Criteria used to define high- and low-dosage groups

Criteria	High dosage	Low dosage
Length of program participation	90 days or more	Less than 90 days
Total contact hours (group, phone, and one-on-one)	180 hours or more	Less than 180 hours
Total one-on-one (in-person) contact hours	12 hours or more	Less than 12 hours

Using these criteria, two groups were created: a high-dosage group of 123 women across six programs and a low-dosage group of 48 women across seven programs. Together, the 171 women included in the dosage analysis represent 46% of women whose cases closed in year 1. The number of women by program represented within each group is illustrated in Figure 22. Only women who had matched information available (intake to closing, and in some cases, 1-month follow-up data as well) and had data available for both criteria (i.e., no missing data) are included in these counts and in the subsequent analysis.

22. Number of women in high- and low-dosage groups by program (n=171)

Women's Recovery Services grantee	Number of women in high-dosage group	Number of women in low-dosage group
Wellcome Manor	74	17
RS EDEN	36	15
Avivo	9	5
Hope House of Itasca County	2	5
Ramsey County Community Human Services	1	4
Family Advocacy in Recovery and Restoration	1	0
Perspectives	0	1
Meeker-McLeod-Sibley Community Health Services	0	1
Total	**123**	**48**

When high dosage makes a difference

When comparing the outcomes of women who received a high dosage of services to those who received a low dosage, women in the high-dosage group were significantly more likely to:

- Be "doing well" *at exit*
- Be abstinent from substances *at exit*
- Have reduced their use of substances *at exit* and *at 1-month follow-up*
- Be reunified with their children *at exit*
- Have successfully completed 245G treatment *by exit*
- Be in housing (not homeless) *at exit*
- Participate in Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) *by exit*
- Have a longer period of sobriety *at exit* (median days)

Women in the high-dosage group had significantly better outcomes in a variety of areas, including abstinence from substance use at exit, and reduced use of substances at exit and the 1-month follow-up (Figure 23). The high-dosage group was also more likely to achieve a number of positive outcomes by exit, including an increased likelihood of "doing well" as determined by program staff, to be in housing, to have successfully completed treatment, to be reunified with their children, and to be involved in AA or NA at exit. For those reporting no substance use at exit, the median number of days sober was significantly higher for women in the high-dosage group (146 days) when compared to the number of days sober for women in the low-dosage group (47 days).

23. Outcomes significantly linked to a high dosage of services

Outcome	Total n	Proportion of women in *high dosage* group	Proportion of women in *low dosage* group
"Doing well" at exit	167	89%***	11%
Abstinent at exit	167	90%***	52%
Abstinent or using less at exit	164	99%***	68%
Abstinent or using less at 1-month follow-up	29	100%*	75%
Median length of sobriety at exit	130	146 days***	47 days
Reunified with one or more children at exit[a]	73	56%**	8%
Involved in AA/NA at exit	146	90%***	50%
Successfully completed treatment by exit	155	88%***	5%
In housing (not homeless) at exit	138	98%*	88%

Note. Differences between high- and low-dosage groups were tested using chi-square tests and t-tests. Differences are significant at: ***p < .001, **p < .01, and *p < .05.

[a] Please note that children who were not in placement at any point of a woman's participation in a WRS program were excluded from the analysis on the impact of dosage on the likelihood of reunification at exit.

In addition, the analysis suggests that some outcomes are *not* significantly linked to the amount and intensity of services received while in a WRS program (although this may be due to the small number of women included in some of the analyses). When comparing outcomes of women who received a high dosage of services and those who received a low dosage, at program exit, there were no significant differences in whether or not women had positive toxicology results for themselves or their babies at birth. There were also no significant differences between groups in terms of women who were: abstinence at 1-month follow-up; involved with the criminal justice or child protection systems at exit; employed at exit or the 1-month follow-up; living in their own home or permanent supportive housing at exit; and reunified with one or more children at 1-month follow-up (Figure 24).

24. Outcomes *not* significantly linked to a high dosage of services

Outcome	Total n	Proportion of women in *high dosage* group	Proportion of women in *low dosage* group
Abstinent at 1-month follow-up	29	67%	50%
Negative toxicology results for babies	16	93%	100%
Negative toxicology results for mothers	16	100%	100%
Not involved with the child protection system at exit	167	40%	51%
Not involved with the criminal justice system at exit	160	50%	49%
Employment at exit	164	14%	9%
Employment at 1-month follow-up	25	29%	0%
In own home or permanent supportive housing at exit	133	62%	46%
Reunified with one or more children at 1-month follow-up[a]	12	46%	0%

Note. Differences between high- and low-dosage groups were tested using chi-square tests and t-tests, and were not found to be statistically significant although employment at 1-month follow-up was approaching significance (p=.09).

Overall, the most substantial impact of receiving a "high dosage" of services can be seen in women's substance use at exit, such that a significantly higher proportion of women in the "high dosage" group reported abstinence from substances at exit, reduced substance use at exit, and a higher median length of sobriety at exit. It will be important to examine the impact of dosage on outcomes when more data become available at the follow-up interview time points.

Contributors to positive outcomes

Although research has examined the treatment and recovery process for women, the factors that contribute to successful outcomes are still not well understood. Using the data collected for women who closed in year 1 of this initiative, we examined potential factors influencing positive outcomes at the 1-month follow-up for women and their children in recovery, including:

- Being in housing considered by staff to be stable and supportive to recovery at closing
- Participating in medically assisted treatment (MAT) while in the program
- Having a mental health diagnosis at intake
- Being connected to mental health services at closing (including women currently using mental health services and those who have access to mental health services should the need arise)
- Having a severe or chronic physical health problem at intake
- Successfully completing 245G treatment in one's most recent treatment episode while in the program
- Being connected to the criminal justice system at intake
- Being pregnant at intake
- Using alcohol, methamphetamine, marijuana, fentanyl, or heroin/other opiates as the primary drug of choice
- Race
- Being involved in child protection at intake
- Having a Peer Recovery Specialist while in the program

The analysis examined to what extent the above factors had a statistically significant impact on key outcomes. The following section provides an overview of key findings from this analysis. A detailed chart of statistical findings can be found in Appendix C.

Results

Stable and supportive housing makes a difference. Results show that securing safe and stable housing by program closing was significantly linked to several positive outcomes, including:

- Sobriety at *exit*
- Decreased substance use *at exit*
- Successful completion of treatment *at exit*
- Lower likelihood of child protection involvement *at exit*
- Reunification with one or more children *at exit*

While statistically significant, the nature of these correlations needs more consideration. It is likely that a woman's sobriety (or decreased substance use) and successful completion of treatment increases the likelihood that she could obtain safe and secure housing at program exit.

Successfully completing treatment increases the likelihood of achieving multiple positive outcomes. While women may sometimes enter and exit treatment multiple times while in a program, those who successfully completed their most recent 245G treatment episode were significantly more likely to achieve the following outcomes:

- Sobriety *at exit* and *1-month follow-up*
- Decreased substance use *at exit*
- Lower likelihood of child protection involvement *at exit*
- Reunification with one or more children *at exit*

Connections to mental health services are linked to sobriety, treatment completion, and reunification by closing. While having a mental health diagnosis was not associated with outcomes for women, connections to mental health services were significantly linked to several positive outcomes for women, including:

- Sobriety *at exit*
- Decreased substance use *at exit*
- Successful completion of treatment *at exit*
- Reunification with one or more children *at exit*

White women are more likely to achieve certain positive outcomes when compared to women of other races. When looking across all WRS programs, the race of the participating woman makes a difference in the likelihood of achieving a number of outcomes. Please note that this analysis of contributors to positive outcomes does not account for confounding factors that might also contribute to differences in outcomes by race, nor for other historical and systemic discriminatory practices and structures that disproportionately affect people of color and Indigenous communities.

When compared to women of all other races, White women are significantly *more* likely – and African American women significantly *less* likely – to achieve the following positive outcomes:

- Sobriety *at exit*
- Successful completion of treatment *at exit*

The Department of Human Services and WRS programs should consider these findings and examine how they work with women who identify as African American in order to ensure that positive outcomes are equally attainable (and sustainable) for all women, regardless of their race.

Outcomes differ by drug of choice. When looking at positive outcomes by a woman's primary drug of choice, those who prefer **methamphetamine** are significantly *more* likely to successfully complete treatment by exit when compared to women who preferred other drugs.

However, women who prefer **pharmaceutical opioids** are significantly more likely to report (or for staff to report) a range of *negative outcomes* by program exit. Specifically, they are significantly *less* likely to achieve the following:

- Sobriety *at exit*
- Decreased substance use *at exit*
- Negative toxicology results at birth for mother and baby
- Successful completion of treatment *at exit*
- Reunification with one or more children *at exit*

Women who prefer **heroin/opiates** are also less likely to show decreased substance use at closing, less likely to have successfully completed treatment at closing, and less likely to be reunified with one or more children at closing.

It should be noted that differences in drug of choice (and drug of use) often vary by race, geographical location, and a number of other individual factors. More research is needed to learn how individual characteristics and other factors confound the statistical links seen between certain drugs and the likelihood of achieving positive outcomes.

Other contributors:

Peer Recovery Support (PRS) Specialists make a difference. When looking at the impact of working with a Peer Recovery Support Specialist, results show that women who interacted with a PRS during their time in a WRS program were more likely to achieve certain positive outcomes:

- Successful completion of treatment *at exit*
- Reunification with one or more children *at exit*

Systems involvement is associated with certain positive outcomes. Women's involvement in child protection is significantly associated with sobriety at the 1-month follow-up, while women involved in the criminal justice system are significantly more likely to give birth to babies who test negative for substances at birth.

The presence of physical health problems shows mixed associations. Women who reported having a severe or chronic physical health problem at intake were more likely to be sober at exit but less likely to test negative for substances when they gave birth.

Appendix

A. Project background

B. Evaluation methods

C. Additional data tables

D. Evaluation tables (from database)

E. 1-month follow-up interview tables

A. Project background

Overview of grant

In spring 2022, the Minnesota Department of Human Services Behavioral Health Division (BHD) contracted with 8 grantees across Minnesota to provide treatment support and recovery services for pregnant and parenting women who have substance use disorders, and their families. Through this initiative, known as Women's Recovery Services, grantees provided comprehensive, gender-specific, family-centered services for the women in their care. The primary goals of the Women's Recovery Services initiative were to help program participants remain alcohol and drug free, obtain or retain employment, remain out of the criminal justice system, find and secure stable housing, access physical and mental health services for themselves and their children, and deliver babies who test negative for substances at birth (if pregnant). In addition, the initiative aimed to provide participants with information and support with regard to parenting. This cycle for the Women's Recovery Services initiative began May 1, 2022 and will end June 30, 2026.

BHD contracted with Wilder Research to conduct a comprehensive evaluation of these treatment support and recovery services. This report generally covers program activities that occurred from May 1, 2022 through May 31, 2023 (year 1 of the grant). The eight grantees are listed below:

Grantee	Program
Avivo	Mothers Achieving Recovery for Family Unity (MARFU)
Family Service Rochester	Family Advocacy in Recovery and Restoration (FARR)
Hope House of Itasca County	Project Clean Start
Meeker-McLeod-Sibley Community Health Services	Project Harmony
Perspectives Inc.	Women and Children: Hand in Hand
Ramsey County Community Human Services	Mothers First
RS EDEN	Women and Children's Family Center
Wellcome Manor Family Services	Wellcome Manor Family Services

Eligibility guidelines for the grant

To be eligible to receive services through the grant, women must have a substance use disorder (SUD) and be pregnant or parenting dependent children under age 19.

Program services

Services offered to program participants through the Women's Recovery Services initiative varied somewhat across sites, but generally included the following:

Treatment and recovery services and supports

This included: ongoing case management (including home and office visits); recovery coaching and/or support from peer recovery specialists; chemical dependency brief intervention, screening, assessment, and referrals for treatment; comprehensive needs assessments and individualized care plans; trauma-informed approaches to providing services; and ongoing urinalyses (UAs).

Basic needs and daily living services and supports (offered directly or by referral)

This included: housing; financial education; emergency funds; transportation; job training; and childcare.

Mental and physical health services and supports (offered directly or by referral)

This included: medical and mental health assessments and services for women and children; Fetal Alcohol Spectrum Disorders education and screening for children; prenatal and postnatal health care and nutrition consultation for pregnant women; toxicology testing for mothers and infants; safe sleep education for infants; monitoring immunization status for children; and tobacco cessation services.

Parenting services and supports

This included: parenting education using an evidence-based parenting curriculum; parenting support; recreational activities for families; and children's programming.

B. Evaluation methods

Overview

In order to evaluate the progress of program participants and the effectiveness of the Women's Recovery Services initiative at each site, BHD asked Wilder Research to conduct an evaluation of the program for the duration of the grant.

Over the course of the initiative, Wilder Research addressed the following evaluation questions:

Process evaluation

1. How many women are referred to a program, have a case opened and closed, and are served by the program?
2. What are the characteristics of women served?
3. What services and referrals are women receiving through their participation in the program?

Outcome evaluation

4. To what extent does participation in the program:
   - Result in women reducing their use of drugs and alcohol, or maintaining their sobriety?
   - Increase women's access to community resources to meet their (and their children's) basic needs?
   - Help women meet their (and their children's) basic needs?
   - Help women find/maintain stable housing?
   - Help women obtain or maintain employment, job training, or enroll in school?
   - Help women stay out of the child protection and criminal justice systems?
   - Improve women's (and their children's) overall physical and mental health?
   - Help women improve their knowledge and skills related to parenting?
   - Help pregnant women deliver healthy, drug-free infants?
5. How are the above outcomes influenced by the amount of service received (dosage) and various characteristics of the women?

Data collection instruments

Research staff, in partnership with BHD, developed seven instruments in order to collect information about women receiving program services. All forms were available in paper format as well as in a web-based database, into which all data were ultimately entered. Data collection instruments generally remained the same across the year, with the exception of some additional questions to select instruments. Most notably, this includes the addition of several questions about client well-being added to the closing form, but self-reported by clients. Data collection instruments are described in more detail below.

Client-level forms

Intake form: Program staff completed a new intake form for each woman who entered their program. This form collected basic demographic and other descriptive information about each woman and her dependent children. It served as a baseline for assessing changes over time in primary outcome areas of interest such as substance use, employment, housing, criminal justice involvement, child protection involvement, and physical and mental health.

UA and Contacts form: This form captured information about urinalysis (UA) tests performed and their outcomes (positive or negative) and logged the amount of direct contact the woman had with the program.

Pregnancy Outcome form: Program staff completed a pregnancy outcome form for all pregnant women served through the grant. This form gathered information about a mother's and baby's health at delivery including toxicology status for both the mother and infant. The form also gathered descriptive information about the infant. Other birth outcomes such as miscarriage, abortion, and stillbirth were also documented on this form.

Closing form: Program staff completed a closing form for each woman when they left a WRS program. The closing form gathered information about maternal health data, child health data, use of services while enrolled, length of sobriety in the program, treatment status, program referrals, and closing status. In addition, the closing form was used to capture information about services and referrals related to recovery support, physical and mental health, employment, housing, emergency needs, culturally specific needs, and child-specific needs. It also asked program staff to record all screenings and assessments administered to women and their children while in a WRS program, including those administered directly by the programs and by other agencies, if known. In addition, clients are asked to complete a brief well-being survey at closing; these data are added to the closing form in the database.

Follow-up interviews

In order to track the progress of women and the maintenance of their goals, follow-up interviews were conducted with women 1 month after they left a WRS program. Wilder Research began conducting 1-month interviews in December 2022. Follow-up interviews at 6- and 12-months after exit will begin in year 2. Interviewers asked women about their access to social support, education and employment, housing, transportation, physical and mental health, substance use, involvement with the criminal justice and child protection systems, self-efficacy, parenting and their relationship with their child(ren), children's health and well-being, and their satisfaction with the WRS program. To learn how changes from intake to closing were maintained after women leave a WRS program, Wilder conducted an analysis of data at three time points – intake, closing, and the 1-month follow-up. Because this analysis requires women to have information available at all three time points, the results in this report reflect a smaller group of women than those who had exited a WRS program in year 1. Generally, information collected at intake and closing was based on *staff* report, while information collected during the follow-up interviews was based on *client* self-report (see "Limitations" section below).

Technical assistance

Throughout the grant period, Wilder Research provided programs with evaluation technical assistance (TA) as requested, primarily related to data collection and data management.

Data analysis

For this report, Wilder Research conducted analysis of the data described above, entered by program staff into the Women's Recovery Services database, for activities that occurred from May 1, 2022, through May 31, 2023. Wilder used the database to conduct basic analysis such as frequencies (number of women in the program) and percentages. Additional analyses (e.g., chi-square tests, McNemar's tests) were conducted using statistical software (SPSS) in order to assess changes in outcomes over time. This includes pretest/posttest matched analysis, which reflects women whose cases were closed during the grant cycle and who had matching data available at intake and closing. Women who were served less than 15 days in a WRS program were excluded from outcome analyses, as it is not expected that women with such limited program exposure will benefit from programs to the same degree as those involved for a longer term.

Statistical significance

Wilder used statistical analysis when looking at differences in outcomes between intake, closing, and follow-up interviews. Statistical software was used to determine whether a difference detected was "real" and more than likely not due to chance. When the report uses the term "significant" to describe change over time, this means the statistical test indicated that we can be confident that actual

change occurred from intake to closing in a given outcome area. While a statistical analysis may reveal that a change is statistically significant, the meaningfulness of these differences should be examined further. Relatively small differences between time points or groups sometimes emerge as "statistically significant" because the large number of women yields more "power" in the analysis to detect even small differences. The extent to which this statistical difference suggests a meaningful difference for women from one time to another should be considered for each individual outcome and the broader context in which they occur. For example, a difference of 3 or 5 percentage points, even if statistically significant, is not necessarily practically significant and should not be overemphasized; in contrast, a difference of 10 or more percentage points suggests a more meaningful difference.

Limitations

The following summarizes the limitations that should be considered when interpreting evaluation data for 2022-23.

Completeness of data

All information included in this report is based upon data entered into the Women's Recovery Services database, which is completed by program staff. Program staff were trained how to use and administer the data collection forms and enter data into the database. Due to the high demands on program staff and issues of staff turnover, it is possible that errors have been introduced into the database or that some participant or program information has not been entered and is unaccounted for in the findings reported here.

In order to best meet the needs of BHD and the programs, the data collection instruments were updated on an ongoing basis. For this reason, it is likely there will be a certain amount of missing data due to recent additions of data collection questions during the current reporting period.

In addition, much of the outcome analysis included in this report is based on a matched-case analysis for women who participated in a WRS program for at least 15 days. Only those women with complete information at both intake and closing (for the pre/post comparative analysis) were included to determine if statistically significant changes occurred during their participation in a WRS program. Often, the total number of women who were served or who exited the program exceeds the number of women who met these criteria. Thus, the results of the outcome analysis reflect changes observed among a more limited number of women.

Comparing information collected from multiple sources

Analysis of follow-up data comparing outcomes at intake and closing with outcomes after exiting a WRS program combines data collected by program staff and participants. Program staff collect

intake and closing information for women participating in each program. At the follow-up interviews (1, 6, and 12 months after closing), women who participated in a WRS program provided information about their well-being and other related issues. Therefore, analyses that compare intake, closing, and follow-up data are using information gathered from various sources, which may introduce bias and lessen the accuracy of statistical analysis.

C. Additional data tables

C1. Change in alcohol and drug use from intake to closing (n=375)

Not using substances at closing	**n**	**%**
No change: not using drugs/alcohol at intake or closing	34	9%
Decreased use: not using drugs/alcohol at closing	210	56%
Using substances at closing		
Decreased use: using drugs/alcohol less at closing	39	10%
No change: using drugs/alcohol at same level at intake and closing	39	10%
Increased use: using drugs/alcohol more at closing	16	4%
Substance use unknown	37	10%

C2. Complete list of matched analysis results from intake to closing

Matched Analysis Results	Total n	Intake		Closing	
		n	%	n	%
Abstinence from alcohol or drug use within 30 days prior to intake/closing	306	103	34%	221	72%***
Abstinence from tobacco use within 30 days prior to intake/closing	293	36	12%	34	12%
Involvement in AA and/or NA	253	98	39%	180	71%***
Involvement in any form of recovery support[a]	253	134	53%	210	83%***
Involvement with child protection	322	184	57%	161	50%**
Involvement with the criminal justice system	316	165	52%	162	51%
Arrested in the 30 days prior to intake/closing	298	48	16%	17	6%***
In housing/not homeless[b]	186	162	87%	178	96%***
In own home or permanent supportive housing[c]	161	97	60%	105	65%
In housing supportive to recovery[d]	263	162	62%	227	86%***
In stable housing[e]	280	151	54%	233	83%***
Has medical insurance	334	324	97%	332	99%**
Has a primary care physician and/or clinic	320	225	70%	259	81%***
Employed full or part time	312	62	20%	67	22%
In school or a career-training program	327	10	3%	20	6%*
Employed full or part-time OR In school or a career-training program	310	67	22%	76	25%

Note. Differences between intake and closing were tested using the McNemar's test and are significant at *p < .05, **p < .01, and ***p < .001.

[a] Any form of recovery support includes involvement in AA and/or NA, a support group through the program, a support group in the community, support from family/friends, a faith-based/religious group, or other recovery support activities.

[b] Woman lives in her own home, a friend's/relative's home, transitional housing, permanent supportive housing, or a sober house, rather than no home (homeless, a shelter or motel, or a correctional facility).

[c] Woman lives in her own home or permanent supportive housing, rather than a friend's/relative's home, transitional housing, or sober house.

[d] Woman's living arrangements are **supportive to recovery**, as perceived by staff. Factors considered in this determination are woman's safety, proximity to others who are using alcohol or drugs, presence of supportive relationships, and access to alcohol or drugs.

[e] Woman's living arrangements are **stable**, as perceived by staff. Factors considered in this determination are woman's permanency of arrangements, affordability, safety, and adequacy of space and amenities.

C3. Sobriety: 3-point matched analysis results from intake, closing, and 1-month follow-up (n=52)

Matched Analysis Results	Intake		Closing		1-month follow-up	
	n	%	n	%	n	%
Sobriety at **intake** compared to **closing**	18	35%	39	75%***		
Sobriety at **intake** compared to **1-month follow-up**	18	35%			34	65%**
Sobriety at **closing** compared to **1-month follow-up**			39	75%	34	65%

Note. Differences between each point in time were tested using Cochran's Q Test and follow-up pairwise comparisons. Differences are significant at: **p < .01 and ***p < .001.

C4. Living arrangements supportive to recovery: 3-point matched analysis results from intake, closing, and 1-month follow-up (n=41)

Living Arrangements	Intake		Closing		1-month follow-up	
	n	%	n	%	n	%
In housing supportive to recovery at **intake** compared to **closing**	23	56%	40	98%***		
In housing supportive to recovery at **intake** compared to **1-month follow-up**	23	56%			36	88%**
In housing supportive to recovery at **closing** compared to **1-month follow-up**			40	98%	36	88%

Note. Differences between each point in time were tested using Cochran's Q Test and follow-up pairwise comparisons. Differences are significant at: **p < .01 and ***p < .001.

C5. Stable living arrangements: 3-point matched analysis results from intake, closing, and 1-month follow-up (n=44)

Living Arrangements	Intake		Closing		1-month follow-up	
	n	%	n	%	n	%
In stable housing at **intake** compared to **closing**	19	43%	41	93%***		
In stable housing at **intake** compared to **1-month follow-up**	19	43%			36	82%***
In stable housing at **closing** compared to **1-month follow-up**			41	93%	36	82%

Note. Differences between each point in time were tested using Cochran's Q Test and follow-up pairwise comparisons. Differences are significant at: ***p < .001.

C6. Employment: 3-point matched analysis results from intake, closing, and 1-month follow-up (n=44)

	Intake		Closing		1-month follow-up	
Employment	**n**	**%**	**n**	**%**	**n**	**%**
Employed full or part time at **intake** compared to **closing**	12	27%	14	32%		
Employed full or part time at **intake** compared to **1-month follow-up**	12	27%			17	39%
Employed full or part time at **closing** compared to **1-month follow-up**			14	32%	17	39%

Note. Differences between each point in time were tested using Cochran's Q Test and were not statistically significant.

C7. Child protection involvement: 3-point matched analysis results from intake, closing, and 1-month follow-up (n=51)

	Intake		Closing		1-month follow-up	
Child Protection Involvement	**n**	**%**	**n**	**%**	**n**	**%**
Involvement with child protection at **intake** compared to **closing**	26	51%	22	43%		
Involvement with child protection at **intake** compared to **1-month follow-up**	26	51%			19	37%
Involvement with child protection at **closing** compared to **1-month follow-up**			22	43%	19	37%

Note. Differences between each point in time were tested using Cochran's Q Test and were not statistically significant.

Contributors to positive outcomes

C8. Contributors to positive outcomes: Pregnancy at intake

Pregnancy status at intake was not found to have a statistically significant influence on any of the positive outcomes examined.

C9. Contributors to positive outcomes: Successfully completed treatment by exit

Women who had successfully completed treatment by exit were…

Correlation direction	Positive outcome	P-Value	% point difference	n	*General terms*
More likely	Sober at closing	0.000***	+42%	284	Women who successfully completed Tx were more likely to be sober at closing (92%) compared to those who did not successfully complete Tx (50%)
More likely	Sober at 1-month follow-up	0.05*	+28%	46	Women who successfully completed Tx were more likely to be sober at the 1-month follow-up (76%) compared to those who did not successfully complete Tx (48%)
More likely	Using less or no substances at closing	0.000***	+28%	283	Women who successfully completed Tx were more likely to be substance-free or using less at closing (99%) compared to those who did not successfully complete Tx (71%)
Less likely	Not involved with child protection at closing	0.05*	-12%	171	Women who successfully completed Tx were less likely to be involved with child protection at closing (73%) when compared to those who did not successfully complete Tx (89%).
More likely	Reunified with one or more child at closing	0.000***	+37%	124	Women who successfully completed Tx were more likely to be reunified with one or more children at closing (63%) compared to those who did not successfully complete Tx (26%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: *p < .05 and ***p < .001.

C10. Contributors to positive outcomes: Heroin, opiates, or non-prescription methadone as primary drug of choice

Women who reported heroin, opiates, or non-prescription methadone as their primary drug of choice were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
Less likely	Using less or no substances at closing	0.046*	-10%	307	Women who reported heroin, opiates, or non-prescription methadone as their primary drug of choice were less likely to be substance-free or using less at closing (77%) when compared to those who preferred other drugs (88%)
Less likely	Successfully completed Tx by closing	0.015*	-19%	305	Women who reported heroin, opiates, or non-prescription methadone as their primary drug of choice were less likely to have successfully completed Tx by closing (37%) when compared to those who preferred other drugs (56%)
Less likely	Reunified with one or more child(ren) at closing	0.048*	-21%	133	Women who reported heroin, opiates, or non-prescription methadone as their primary drug of choice were less likely to be reunified with one or more children by closing (29%) when compared to those who preferred other drugs (50%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: *p < .05.

C11. Contributors to positive outcomes: Methamphetamine as primary drug of choice

Women who reported methamphetamine as their primary drug of choice were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
More likely	Successfully completed Tx by closing	0.002**	+18%	305	Women who reported meth as their primary drug of choice were more likely have successfully completed Tx by closing (63%) when compared to women who preferred other drugs (45%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: **p < .01.

C12. Contributors to positive outcomes: Alcohol as primary drug of choice

Alcohol as the primary drug of choice was not found to have a statistically significant influence on any of the positive outcomes examined.

C13. Contributors to positive outcomes: Fentanyl as primary drug of choice

Fentanyl as the primary drug of choice was not found to have a statistically significant influence on any of the positive outcomes examined.

C14. Contributors to positive outcomes: Pharmaceutical opioids as primary drug of choice

Women who reported pharmaceutical opioids as their primary drug of choice were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
Less likely	Sober at closing	0.003**	-33%	309	Women who reported pharmaceutical opioids as their primary drug of choice were less likely to be sober at closing (41%) when compared to those who preferred other drugs (74%)
Less likely	Using less or no substances at closing	0.003**	-27%	307	Women who reported pharmaceutical opioids as their primary drug of choice were less likely to be substance-free or using less at closing (60%) when compared to those who preferred other drugs (87%)
Less likely	*Mom* with negative toxicology results at birth	0.001**	-96%	24	Women who reported pharmaceutical opioids as their primary drug of choice were less likely to test negative for substances at birth (0%) when compared to those who preferred other drugs (96%)
Less likely	*Baby* with negative toxicology results at birth	0.007**	-91%	24	Women who reported pharmaceutical opioids as their primary drug of choice were less likely to give birth to babies who tested negative for substances at birth (0%) when compared to the babies of women who preferred other drugs (91%)
Less likely	Successfully completed Tx by closing	0.000***	-48%	305	Women who reported pharmaceutical opioids as their primary drug of choice were less likely to have successfully completed Tx by closing (7%) when compared to women who preferred other drugs (55%)
Less likely	Reunified with one or more child(ren) at closing	0.023*	-47%	133	Women who reported pharmaceutical opioids as their primary drug of choice were less likely to be reunified with one or more children by closing (0%) when compared to those who preferred other drugs (47%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: *p < .05, **p < .01 and ***p < .001.

C15. Contributors to positive outcomes: Marijuana as primary drug of choice

Marijuana as the primary drug of choice was not found to have a statistically significant influence on any of the positive outcomes examined.

C16. Contributors to positive outcomes: Participation in Medication Assisted Treatment (MAT) while in a WRS program

Participation in MAT was not found to have a statistically significant influence on any of the positive outcomes examined.

C17. Contributors to positive outcomes: In stable and supportive housing at closing

Women who were living in stable and supportive housing at closing were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
More likely	Sober at closing	0.000***	+51%	263	Women who were living in stable and supportive housing at closing were more likely to be sober at closing (86%) when compared to those who were not in stable and supportive housing at closing (35%)
More likely	Using less or no substances at closing	0.000***	+38%	260	Women who were living in stable and supportive housing at closing were more likely to be substance-free or using less at closing (96%) when compared to those who were not in stable and supportive housing at closing (58%)
More likely	Successfully completed Tx by closing	0.000***	+55%	251	Women who were living in stable and supportive housing at closing were more likely to have successfully completed Tx by closing (72%) when compared to those who were not in stable and supportive housing at closing (17%)
Less likely	Not involved with child protection at closing	0.022*	-20%	156	Women who were living in stable and supportive housing at closing less likely to be involved with child protection at closing (71%) when compared to those who were not in stable and supportive housing at closing (91%)
More likely	Reunified with one or more child(ren) at closing	0.004**	+33%	108	Women who were living in stable and supportive housing at closing were more likely to be reunified with one or more children by closing (57%) when compared to those who were not in stable and supportive housing at closing (24%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: *p < .05, **p < .01 and ***p < .001.

C18. Contributors to positive outcomes: White women compared to women of all other races

When compared to WRS women of all other races, White women were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
More likely	Sober at closing	0.002**	+16%	310	White women were more likely to be sober at closing (79%) when compared to women of all other races (63%)
More likely	Successfully completed Tx by closing	0.009**	+15%	306	White women were more likely to have successfully completed Tx by closing (59%) when compared women of all other races (44%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: **p < .01.

C19. Contributors to positive outcomes: American Indian/Alaska Native women compared to women of all other races

Being American Indian/Alaskan Native relative to other races was not found to have a statistically significant influence on any of the positive outcomes examined.

C20. Contributors to positive outcomes: African American/Black women compared to women of all other races

When compared to WRS women of all other races, African American/Black women were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
Less likely	Sober at closing	0.017*	-19%	310	African American/Black women were less likely to be sober at closing (56%) when compared to women of all other races (75%)
Less likely	Successfully completed Tx by closing	0.005**	-10%	306	African American/Black women were less likely to have successfully completed Tx by closing (32%) when compared to women of all other races (56%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: * p <.05 and **p < .01.

C21. Contributors to positive outcomes: Involvement with child protection at intake

Women involved with child protection at intake were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
More likely	Sober at 1-month follow-up	0.046*	+16%	54	Women who were involved with child protection at intake were more likely to be sober at the 1-month follow-up (78%) when compared to women who were not involved with child protection at intake (52%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: *p < .05.

C22. Contributors to positive outcomes: Involvement with criminal justice system at intake

Women involved with the criminal justice system at intake were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
More likely	*Baby* with negative toxicology results at birth	0.044*	+27%	24	Women who were involved with the criminal justice system at intake were more likely to give birth to babies who tested negative for substances at birth (100%) when compared to the babies of women who were not involved with the criminal justice system at intake (73%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: *p < .05.

C23. Contributors to positive outcomes: Severe or chronic physical health problem at intake

Women with a severe or chronic physical health problem at intake were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
More likely	Sober at closing	0.007**	+14%	216	Women with a severe or chronic physical health problem at intake were more likely to be sober at closing (81%) when compared to women without a severe or chronic physical health problem at intake (67%)
Less likely	*Mom* with negative toxicology results at birth	0.043*	-25%	23	Women with a severe or chronic physical health problem at intake were less likely to test negative for substances at birth (75%) when compared to those who did not have a severe or chronic physical health problem at intake (100%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: *p < .05 and **p < .01.

C24. Contributors to positive outcomes: Mental health diagnosis at intake

Having a mental health diagnosis at intake was not found to have a statistically significant influence on any of the positive outcomes examined.

C25. Contributors to positive outcomes: Connected to mental health services at closing

Women who were connected to mental health services at closing were…

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
More likely	Sober at closing	0.000***	+33%	286	Women who were connected to mental health services at closing were more likely to be sober at closing (81%) when compared to women who were not connected to mental health services at closing (48%)
More likely	Using less or no substances at closing	0.001**	+16%	284	Women who were connected to mental health services at closing were more likely to be substance-free or using less at closing (90%) when compared to women who were not connected to mental health services at closing (74%)
More likely	Successfully completed Tx by closing	0.000***	+49%	276	Women who were connected to mental health services at closing were more likely to have successfully completed Tx by closing (68%) when compared to women who were not connected to mental health services at closing (19%)
More likely	Reunified with one or more child(ren) at closing	0.001**	+22%	124	Women who were connected to mental health services at closing were more likely to be reunified with one or more children by closing (56%) when compared to women who were not connected to mental health services at closing (24%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: **p < .01 and ***p < .001.

C26. Contributors to positive outcomes: Working with a Peer Recovery Support (PRS) Specialist

Women who worked with a Peer Recovery Support Specialist (PRS) while in the WRS program …

Correlation direction	Positive outcome	P-Value	% point difference	n	General terms
More likely	Successfully completed Tx by closing	0.001**	+54%	45	Women who worked with a PRS while in the program were more likely to have successfully completed Tx by closing (69%) when compared to women who did not work with a PRS while in the program (15%)
More likely	Reunified with one or more child(ren) at closing	0.005**	+67%	19	Women who worked with a PRS while in the program were more likely to be reunified with one or more children by closing (67%) when compared to women who did not work with a PRS while in the program (0%)

Note. Differences were tested to determine whether each variable was found to have a statistically significant influence on positive outcomes. Differences are significant at: **p < .01.

C27. Racial background of women served (n=559)

Race	%
White	57%
American Indian/Alaskan Native	16%
Biracial/Multiracial	10%
African American/Black	14%
Asian American/Pacific Islander	1%
Other	2%
Hispanic	9%

D. Evaluation tables (from database)

Link to evaluation tables

E. 1-month follow-up interview tables

E1. Women's satisfaction with program (n=55-59)

Program Satisfaction	Total n	Percentage who agree or strongly agree	Percentage who disagree or strongly disagree
The staff were available when you needed their support.	59	75%	25%
The staff understood your problems or concerns.	58	76%	24%
You would recommend this program to women like yourself.	58	76%	24%
You and the staff worked together to develop your goals for you and your family.	59	83%	17%
The staff were sensitive to cultural issues.	55	84%	16%
The services you received through the program met your expectations.	57	70%	30%
You feel you got the right level of support from the program.	59	66%	34%
The staff knew a lot about services and programs in the community that could help you and your family.	58	79%	21%

Note. Cumulative percentages may vary from 100% due to rounding.

E2. Parenting program participation (n=58)

Did you participate in a parenting program while you were in the program?	n	%
Yes	43	74%
No	15	26%

Note. Cumulative percentages may vary from 100% due to rounding. Of the 15 respondents who answered "no," to this question, 3 respondents did not have any children.

E3. Parenting program impact (n=43)

Of those reporting participation in a parenting program

Would you say…	Strongly agree n	Strongly agree %	Agree n	Agree %	Disagree n	Disagree %	Strongly disagree n	Strongly disagree %
The parenting program you participated in helped you learn new parenting techniques or strategies to deal with your child's behavior?	10	23%	22	51%	5	12%	6	14%
The parenting program you participated in helped you learn more about child development and what to expect of children at different ages?	11	26%	22	51%	4	9%	6	14%

Note. Cumulative percentages may vary from 100% due to rounding.

E4. Overall satisfaction with program (n=59)

Satisfaction	Very satisfied	Satisfied	Dissatisfied	Very dissatisfied
Overall, how satisfied were you with the services you received through the program?	25%	48%	15%	12%

Note. Cumulative percentages may vary from 100% due to rounding.

E5. Types of support obtained through the program (n=59)

Did the program help you…	Yes, program helped with this	No, and I needed this type of help	No, but I did not need this type of help	Percentage who felt this was most helpful to them or children (n=1090)
Get or stay sober?	81%	15%	3%	26%
With parenting?	63%	20%	17%	7%
By just being there to provide emotional support or encouragement?	80%	19%	2%	23%
Address your physical or mental health needs?	71%	19%	10%	18%
Find a support network of people who could help you stay sober?	54%	27%	19%	5%
Pay for things like housing, transportation, or bills?	44%	24%	32%	4%
With getting benefits like MFIP or WIC?	46%	14%	41%	16%
Find housing?	31%	42%	27%	2%

Note. Cumulative percentages may vary from 100% due to rounding.

E6. Use of Peer Recovery Support while in program (n=58)

While in the program, did you have a Peer Recovery Specialist or Recovery Coach?	n	%
Yes	39	67%
No	19	33%
How often were you in contact with your Peer Recovery Specialist while in the program? (n=39)		
Every day or almost every day	19	50%
Once a week	13	34%
Every couple of weeks	2	5%
Once a month	1	3%
Every couple of months	2	5%
Never	1	3%

Note. Cumulative percentages may vary from 100% due to rounding.

E7. Use of Peer Recovery Support after leaving the program (n=37)

Have you had any contact with your Peer Recovery Specialist since leaving the program?	n	%
Yes	11	30%
No	26	70%
Since leaving the program, how often are you in contact with your Peer Recovery Specialist? (n=11)		
Everyday or almost everyday	1	9%
Once a week	5	46%
Every couple of weeks	2	18%
Once a month	2	18%
Every couple of months	1	9%
Once or twice a year	0	0%
Never	0	0%
Don't know	0	0%

Note. Cumulative percentages may vary from 100% due to rounding.

E8. Impact of Peer Support Specialist (n=36-37)

			Agree		Disagree		Strongly disagree	
With the help of my Peer Recovery Specialist…	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
I was able to achieve my recovery goals	10	27%	18	49%	5	14%	4	11%
I have felt emotionally supported throughout my recovery	17	46%	15	41%	1	3%	4	11%
I better understand my addiction and behavior	13	35%	15	41%	5	14%	4	11%
I have more confidence in myself	11	30%	19	51%	4	11%	3	8%
I feel more motivated	13	36%	17	47%	5	14%	1	3%
Thinking specifically about the services your Peer Recovery Specialist provided you, please say whether you agree or disagree with the following:								
My Peer Recovery Specialist connected me to helpful resources in my community	8	22%	15	41%	8	22%	6	17%
My Peer Recovery Specialist helped me establish healthier habits	11	30%	18	49%	7	19%	1	3%
My Peer Recovery Specialist listened to me and treated me with respect	23	62%	9	24%	2	5%	3	8%
My Peer Recovery Specialist was there for me when I needed them	18	49%	12	32%	4	11%	3	8%

Note. Cumulative percentages may vary from 100% due to rounding.

E9. Cultural background of Peer Recovery Specialist (n=32-34)

Did your Peer Recovery Specialist reflect your race/ethnicity?	n	%
Yes	18	56%
No	14	44%
Did your Peer Recovery Specialist understand your cultural background and respond to your needs in culturally responsive ways?		
Yes	32	94%
No	2	6%

Note. Cumulative percentages may vary from 100% due to rounding.

E10. Uniqueness of Peer Recovery Support (n=37)

Did your Peer Recovery Specialist provide unique help or support that was different from other program staff?	n	%
Yes	26	70%
No	11	30%

Note. Cumulative percentages may vary from 100% due to rounding.

E11. Participation in culturally responsive services and programing while in program (n=59)

While in the program, did you participate in cultural education, ceremonies, groups, or other events that were focused on your culture?	n	%
Yes	16	27%
No	22	37%
These services were not available to me	21	36%
How many activities did you participate in? (n=16)		
1 or 2 activities	7	44%
3 or more activities	9	56%

Note. Cumulative percentages may vary from 100% due to rounding.

E12. Connection to culture because of program involvement (n=16)

Because of your involvement in the program, do you feel more connected to your culture?	n	%
Yes, a lot	3	19%
Yes, a little	8	50%
No	5	31%

Note. Cumulative percentages may vary from 100% due to rounding.

E13. Women's well-being before and 1 month after the program (n=59)

How would you describe the following areas of your life?	Before starting program	At 1-month follow-up	Good: Before starting program	Good: At 1-month follow-up	Fair: Before starting program	Fair: At 1-month follow-up	Poor: Before starting program	Poor: At 1-month follow-up
Your physical health	9%	22%	25%	48%	31%	25%	36%	5%
Your mental health	5%	24%	15%	49%	29%	19%	51%	9%

Note. Cumulative percentages may vary from 100% due to rounding. At the 1-month interview, women reflected back on their physical and mental health before participating in the program (a retrospective rating) and then described their health since leaving the program.

E14. Relationship with child before and 1 month after the program (n=52-57)

	Excellent		Good		Fair		Poor	
Relationship	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Before entering the program, how would you describe your relationship with your child?	11	21%	14	27%	18	35%	9	17%
Since you left the program, how would you describe your relationship with your child?	31	54%	20	35%	3	5%	3	5%

Note. Cumulative percentages may vary from 100% due to rounding. At the 1-month interview, women reflected back on their relationship with their child before participating in the program (a retrospective rating) and then described their relationship since leaving the program.

E15. Use of alcohol and other drugs at 1-month follow-up (n=59)

Have you used alcohol, marijuana or cannabis, or other drugs since leaving the program?	n	%
Yes	19	32%
No	40	68%
Change in substance use among those who have used (n=19):		
Using more at follow-up	3	16%
Using about the same amount at follow-up	2	11%
Using less at follow-up	14	74%
Frequency of substance use since leaving the program (n=19)		
1 time	2	11%
2 or 3 times	2	11%
More than 3 times	15	79%

Note. Cumulative percentages may vary from 100% due to rounding.

E16. Types of substances used by 1-month follow-up (n=19)

Substances used:	n	%
Marijuana/cannabis/pot/weed/hashish	11	58%
Alcohol	10	53%
Methamphetamine (meth)	8	42%
Fentanyl	3	16%
Heroin	2	11%
Crack/cocaine	2	11%
Other opioids	0	0%
Other substances	3	16%

Note. To ensure the anonymity of respondents, responses were combined into the "other substances" category when only one woman reported using a given drug, which included: non-prescription methadone, ecstasy, prescribed cannabis, psychedelic mushrooms, MDMA, GHB, and DMT. Some women reported using more than one of these "other substances".

E17. Length of sobriety at 1-month follow-up (n=36)

How long have you been abstinent/clean/sober?	n	%
Less than 6 months	15	42%
6-11 months	5	14%
12-18 months	8	22%
More than 18 months	8	22%
Average (mean) length of sobriety: 14 months		
Median length of sobriety: 10 months		

Note. Cumulative percentages may vary from 100% due to rounding.

E18. Supportiveness and stability of living situation at 1-month follow-up (n=58-59)

When thinking about your current living situation…	Very supportive or stable	Somewhat supportive or stable	Not very supportive or stable	Not at all supportive or stable
How **supportive** to recovery is your current living situation?	64%	22%	2%	12%
How **stable** to recovery is your current living situation?	66%	19%	5%	10%

Note. Cumulative percentages may vary from 100% due to rounding.

E19. Employment situation at 1-month follow-up (n=59)

Current employment situation at 1–month follow-up	n	%
Employed full time or part time	18	31%
Unable to work due to a disability	1	2%
Unemployed, and looking for work	21	36%
Unemployed, and not currently looking for work, including those in school	11	19%
Something else	8	14%

Note. Cumulative percentages may vary from 100% due to rounding. Employment includes temporary work and self-employment.

E20. Financial situation and access to transportation before and 1 month after the program (n=59)

How often are you/were you able to…	Before starting program	At 1-month follow-up	Some of the time: Before starting program	Some of the time: At 1-month follow-up	Rarely: Before starting program	Rarely: At 1-month follow-up	Never: Before starting program	Never: At 1-month follow-up
Afford basic living expenses (rent, food, etc.)	34%	54%	24%	20%	32%	15%	10%	10%
Access reliable transportation	54%	73%	20%	14%	20%	10%	5%	3%

Note. Cumulative percentages may vary from 100% due to rounding. At the 1-month interview, women reflected back on their ability to afford basic living expenses and access to reliable transportation before participating in the program (a retrospective rating) and then described these aspects of their life since leaving the program.

E21. Number of children living with you at 1-month follow-up (n=362)

How many children are you currently living with or parenting at least half of the time?	n	%
No children	262	29%
1 child	24	57%
2 children	13	31%
3 children	5	12%
4 or more children	58	6%

Average (mean) number of children among women living with children (n=42): 1.5 children

Median number of children among women living with children (n=42): 1 children

Note. Cumulative percentages may vary from 100% due to rounding.

E22. Parenting decisions before and 1 month after the program (n=41-42)

Parenting decisions	Most of the time: n	Most of the time: %	Some of the time: n	Some of the time: %	Rarely: n	Rarely: %	Never: n	Never: %
Before entering the program, how often did you feel you were making good parenting decisions?	11	27%	15	37%	10	24%	5	12%
Since you left the program, how often did you feel you were making good parenting decisions?	38	91%	4	10%	-	-	-	-

Note. Cumulative percentages may vary from 100% due to rounding. At the 1-month interview, women reflected back on their parenting decisions before participating in the program (a retrospective rating) and then described their parenting decisions since leaving the program. These questions were only asked of the women who were living with their children or parenting their children at least half of the time.

E23. Involvement with Child Protection, children removed or reunified by 1-month follow-up (n=22-59)

Since you left the program…	n	%	n	%
Have you had any involvement with Child Protection?	22	37%	37	63%
Of those involved with Child Protection (n=22)				
Have any of your children been reunited with you?	7	32%	15	68%

Note. Cumulative percentages may vary from 100% due to rounding.

E24. Relationships with family and friends before and 1 month after the program (n=59)

	Very supportive		Somewhat supportive		Not at all supportive	
Relationships	n	%	n	%	n	%
Before entering the program, how would you describe your relationship with family and friends?	12	20%	33	56%	14	24%
Since you left the program, how would you describe your relationship with family and friends?	35	59%	20	34%	4	7%

Note. Cumulative percentages may vary from 100% due to rounding. At the 1-month interview, women reflected back on their relationships before participating in the program (a retrospective rating) and then described their relationships since leaving the program.

E25. Access to good advice before and 1 month after the program (n=58-59)

	Most of the time		Some of the time		Rarely		Never	
Advice Access	n	%	n	%	n	%	n	%
Before entering the program, how often did you have friends or family available to give you good advice when you were facing a crisis?	15	26%	23	40%	16	28%	4	7%
Since you left the program, how often did you have friends or family available to give you good advice when you were facing a crisis?	33	56%	18	31%	4	7%	4	7%

Note. Cumulative percentages may vary from 100% due to rounding. At the 1-month interview, women reflected back on the availability of good advice before participating in the program (a retrospective rating) and then described the availability of good advice since leaving the program.

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