

FINAL PROGRAM EVALUATION REPORT
FOR
META HOUSE'S "HOUSED IN RECOVERY" PROGRAM
Grant #T118167

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Prepared by:
Planning Council for Health and Human Services, Inc.
Lisa Larson, Ph.D.
Erin Malcolm, M.A.P.S.

With Assistance from:
Meta House
Andrea Jehly, M.S. and Sidnee Smith



1243 North 10th Street, Suite 200 Milwaukee WI 53205
(414) 224-0404 FAX (414) 224-0243 www.planningcouncil.org
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EXECUTIVE SUMMARY

This report describes the program evaluation results for Meta House's Housed in Recovery (HIR) program, a substance abuse treatment program that provided outpatient treatment and transitional housing for women and their children who were homeless or at risk of being homeless. The HIR program was funded from September, 2006 through September, 2011 by the Center for Substance Abuse Treatment, a center of the Substance Abuse and Mental Health Services Administration (TI# 18167).

Women admitted to the HIR program had already demonstrated some success in prior treatment programs and expressed an interest in maintaining their recovery. The program was therefore focused on solidifying and building upon the progress women made in their previous substance abuse treatment, while providing them with safe housing. The HIR program's goals included assisting women in: 1) maintaining their commitment to recovery, 2) improving their mental health and trauma-related symptoms, 3) developing appropriate parenting attitudes, 4) improving family stability, including self-sufficiency, and 5) securing stable housing.

The report was prepared by the Planning Council for Health and Human Services, Inc., the external evaluators for the program. The Planning Council is a private, non-profit organization whose mission is to advance community health and human services through objective planning, evaluation, and research. The implementation of the program's evaluation was the joint responsibility of the Planning Council's external evaluation team and Meta House's internal evaluation department.

The data for the report is based on structured interviews conducted with women at entry into the program and again approximately 12 months later. The interviews included the National Outcome Measures (NOMs) required by the Government Performance and Results Act (GPRA), local evaluation questions based on the Addiction Severity Index (ASI; McLellan et al., 1980), and administration of the Trauma Symptom Checklist (TSC-40; Briere, 1996) and the Adult-Adolescent Parenting Inventory (AAPI-2; Bavolek & Keene, 2001).

The present report describes: 1) the full set of women admitted to the HIR program, including demographic and program retention information and 2) the challenges and outcomes experienced in each of the key areas targeted by the program, focusing on the women who were followed up approximately one year after their entry into the program.

The Women Enrolled

A total of 166 women were enrolled in the HIR program. The women served by the program were generally mothers (87%), in their late 30's (mean age = 38), and African American (59%) or Caucasian (33%). At the time they were admitted to the program, the majority (81%) were unemployed, although most (95%) did have some type of income, typically in the form of public assistance. While approximately 60% of the women had graduated from high school or earned their GED certificate, almost 40% had not completed high school.

All of the women enrolled had experienced some form of housing instability and most (86%) had been homeless at some point in their lives (e.g., stayed in a shelter, slept on the streets, etc.). In addition to receiving substance abuse treatment, all of the women who participated in the HIR program received housing either through Meta House's transitional living apartments (40%) or through one of the program's community housing partners (60%). Most of these housing arrangements were designed to be long-term (i.e., more than one year), although none were technically permanent housing.

A full continuum of substance abuse treatment services was available to women in the HIR program, including day treatment, outpatient treatment, case management, and aftercare services. Overall, the enrolled women's mean length of stay in treatment was approximately nine months. Women were considered to have graduated from the program if their counselors indicated that they had successfully completed the program or that they had completed with substantial improvement. Approximately three-quarters of the enrolled women (76%) graduated from the program, with the non-graduates either completing without substantial improvement or referred to another program.

Of the 166 women enrolled in the program, 137 women became eligible for a 12 month follow-up interview during the data collection period. A total of 90 women completed the 12 month interview, resulting in a follow-up rate of 66%. The women who completed a follow-up interview were reasonably similar demographically to

the overall population served by the program. However, the women interviewed were somewhat more likely to have resided in Meta House's transitional living apartments, to have remained in treatment longer, and to have graduated from the program. As a result, the outcomes included in the report may not fully represent program participants who remained for brief periods of time or did not graduate.

Substance Use Challenges and Outcomes

Most of the women (88%) who participated in the HIR program and the follow-up interviews had substantial histories of alcohol and drug use (e.g., more than five years of regular cocaine/crack use, regular use of more than one substance per day, etc.). Women entering the program were required to have demonstrated some success in addressing their substance use in prior treatment programming. As a result, approximately three-quarters of the women (77%) had abstained from using illegal drugs, alcohol, and potentially addictive prescription medications during the 30 days prior to the initial interview.

The follow-up data suggests that the HIR program was successful in meeting its main goal of helping women to maintain their recovery. Specifically, approximately three-quarters of the women (73%) were completely free of illegal drugs, alcohol, and potentially addictive prescription medications in the 30 days prior to the 12 month interview. The women who had used during that time were generally either continuing in treatment or had re-engaged in treatment, suggesting a continued commitment to their own recovery. Further, for the women who had children, most (83%) were providing a drug and alcohol free family environment (i.e., neither the mother nor any others in the home were using alcohol or illegal drugs).

Given the relapse rates often associated with substance use disorders (e.g., ranging from 40% to 60%, National Institute on Drug Abuse, 2009), the level of recovery maintained by the HIR women 12 months after entering the program is notable.

Trauma Challenges and Outcomes

Almost all of the women (90%) reported to their counselors that they had experienced some form of emotional, physical, and/or sexual abuse over the course of their lifetime. For example, slightly more than half of the women (56%) had experienced sexual abuse as a child, and almost half (49%) had been sexually assaulted as an adult. However, at the time of the initial interview the women's Total Scores on the Trauma Symptom Checklist indicated only a moderate amount of trauma-related symptoms (with a TSC-40 mean of 30.3).

Nonetheless, the women did experience some improvements in their trauma symptoms from the time of the initial interview to the time of the 12 month follow-up interview. Specifically, there was a statistically significant decrease in the TSC-40 subscale related to Dissociation, suggesting improvements in symptoms such as flashbacks, "spacing out", and not feeling present in one's body. Similarly, there was a statistically significant decrease in the TSC-40 Sexual Abuse Trauma Index, indicating improvements in symptoms such as sexual problems, fear of men, and "bad" thoughts or feelings while sexually active.

No other statistically significant trauma-related improvements were noted. However, the women's overall Trauma Symptom Checklist scores at the 12 month follow-up (mean = 27.3) fell at the lower end of the possible range and were lower than those seen with comparable populations of women in substance abuse treatment. This may reflect the women's experience of the program's trauma-informed services and/or their participation in trauma-specific treatment. For example, either before or during the HIR program, virtually all of the women (93%) had participated in Meta House's Seeking Safety groups (an evidence-based practice designed to simultaneously address substance abuse and trauma symptoms)

Mental Health Challenges and Outcomes

Slightly more than half of the women (56%) reported significant mental health symptoms at the initial interview. These symptoms ranged from serious problems with sleeping and eating to suicidal ideation. For the women who were experiencing symptoms, they were often pervasive. For example, approximately one-third of the women (36%) experienced mental health symptoms daily in the month prior to the initial interview. In general, women were experiencing these symptoms despite already being connected to mental health treatment. Specifically, approximately 70% of the women had received treatment and/or medication for mental health problems in the 30 days prior to the initial interview.

The indicators of mental health remained relatively unchanged from the time of the initial interview to the time of the 12 month follow-up interview (e.g., no significant pre-post differences in the number of days that women experienced mental health symptoms). At follow-up, approximately 45% of the women experienced no significant symptoms while approximately 55% did report significant mental health symptoms during the 30 days prior to the interview. An analysis of the case-specific patterns in symptoms indicated that the most common pattern was consistency in the presence or absence of symptoms. For example, most of the women (75%) who experienced significant symptoms in the 30 days prior to the initial interview also experienced significant symptoms in the 30 days prior to the follow-up interview.

It must be noted that virtually all of the women who were experiencing mental health symptoms at the 12 month follow-up were receiving outpatient mental health treatment and/or psychiatric medication. This suggests that women were engaging in appropriate self-care and were invested in finding ways to manage their mental health symptoms. However, it also suggests that, at least for some women, mental health symptoms remained relatively intractable despite the passage of time, abstinence from substance use, and mental health treatment. It is recommended that the program continue to work with its staff psychiatrist, consulting psychologists, and counseling staff to assure that all avenues have been explored with women who have unremitting symptoms and to identify ways to support those women whose mental health symptoms may be a constant presence in their lives.

Parenting Challenges and Outcomes

Most of the women who were followed up 12 months after entering the program were mothers (89%). At the time of the initial interview, many of the mothers reported parenting attitudes on the Adult-Adolescent Parenting Inventory (AAPI-2) that indicated inappropriate beliefs about parenting. For example, approximately 85% of the mothers scored poorly on at least one of the AAPI-2's five subscales.

The pre-post data suggested that there were no significant improvements in parenting attitudes from the time of the initial interview to the time of the follow-up interview. However, there were some indicators that showed a deterioration over time (e.g., there was a statistically significant pre-post decrease in the AAPI-2 Total Score). It appeared that some areas measured by the AAPI-2 were particularly problematic for the HIR mothers. For example, at both the initial and the follow-up interviews, half or more of the women scored poorly on the subscales measuring Lack of Empathy (parents' awareness of their children's needs) and Power and Independence (parents' emphasis on obedience and parental authority).

The relatively poor outcomes on the AAPI-2 were apparent despite mothers having participated in interventions designed to assist them in developing appropriate parenting skills. Specifically, approximately three-quarters of the mothers (77%) had either participated in the Nurturing Program for Families and Substance Abuse Treatment (an evidence-based parenting group) or received in-home parenting services from the program.

It is possible that the parenting attitudes noted at follow-up may be related to the stress and family dynamics that occur when women resume their role as mothers and do so while in recovery. The literature on women's recovery suggests that as women stabilize and the family is "safer", children may begin to behaviorally "act out" their previous distress. The responsibilities of parenting while sober and managing children's behavioral issues can present challenges for women in recovery. Although the program recognizes these dynamics, it is possible that the program may need to focus more specifically on assisting women in navigating through these challenging transitions.

The AAPI-2 is only one indicator of parenting attitudes, and may or may not be reflective of the mother's overall attitudes, behavior, or risk for child abuse or neglect. It is important to note that the women's scores on the AAPI-2 were significantly related to education. Specifically, mothers who had a GED or a high school diploma had more positive scores on this measure than mothers who had less education. However, based on the AAPI-2 findings alone, it appears that the program could consider integrating additional and/or targeted parenting interventions. Particular areas of focus could include reframing parental authority, developing appropriate expectations for obedience, facilitating empathy for children's perspectives, and promoting the understanding of children's behavior.

Self-Sufficiency Challenges and Outcomes

Despite their extensive substance use histories, many of the women entering the HIR program (71%) had accomplishments that might help them on the road to future employment. For example, approximately 60% had earned a high school diploma or GED certificate and approximately 30% had held a full time job for five years or more. However, very few women (less than 20%) had regular employment at the time of the initial interview.

Over time, there was a modest improvement in women's total income (e.g., a statistically significant pre-post increase in the total monthly income women received). However, women's income remained very limited at follow-up, translating to an average amount of approximately \$11,000 per year. In addition, most of the women (79%) received at least some portion of their income from public assistance in the month prior to the follow-up interview.

At follow-up, approximately one-quarter of the women (27%) had either regular full time or part time employment. This represents a modest increase from the proportion of women who had regular employment at the time of the initial interview (19%). At follow-up, approximately one-quarter of the women (22%) were considered disabled (i.e., receiving disability income). In addition, approximately half (48%) were unemployed at that time. It is important to note, however, that approximately 40% of the women who were unemployed at follow-up were essentially unavailable to work during the previous month (e.g., they were in a controlled environment or they were engaged in treatment appointments for more than half of the month). Further, another 40% of the unemployed women were available to work, but had additional responsibilities or activities that may have served as a focus during that time (e.g., parenting, attending GED classes, etc.). Overall, only a small number of the unemployed women (n=10) appeared to be fully available for employment during the month prior to the follow-up interview.

Housing Challenges and Outcomes

All of the women had experienced housing instability in their lives and virtually all (97%) had an unstable housing situation for most of the month prior to entering the program. There was a modest improvement in housing stability over time. For example, while only 3% of the women were living in their own apartment or home at the time of the initial interview, 18% had this level of stability for most of the month prior to the follow-up interview. The proportion of women residing in their own apartment or home was somewhat higher (39%) for those who had already been discharged from the program at the time of their 12 month interview.

However, a full two-thirds of the women interviewed (67%) were still residing in transitional living in the month prior to the follow-up. Most of these women were living in one of Meta House's long-term transitional living apartments. Although this living situation represented continuity and stability over a full year, all of these women will eventually have to secure more permanent living arrangements.

According to the HIR program's staff and administration, there is a significant shortage of affordable, drug-free housing in the Milwaukee community. Linkages have been established with numerous local agencies in an effort to facilitate access to independent housing for program participants. It is recommended that the development of these and other linkages continue, including connections with groups advocating for increased safe and affordable housing in the community.

Conclusions

The findings suggest that Meta House's Housed in Recovery program served a population that was experiencing numerous challenges as they entered the program, including lengthy substance abuse histories, substantial homelessness, histories of traumatic experiences, and (for some women) pervasive mental health symptoms. The findings from a 12 month follow-up with these women suggest that the program experienced success in several areas including:

- Assisting women in maintaining their recovery approximately one year after entering the program.
- Providing trauma-informed and trauma-specific services that appeared to assist women in decreasing some of their trauma-related symptoms.

- Providing women with transitional living apartments that afforded housing continuity over a 12 month period.
- Assisting women in getting connected to resources that resulted in an increase in total income and a modest increase in employment.

However, the findings also suggest that the women who participated in the HIR program continued to experience challenges in several areas one year after entering this phase of their treatment. Specifically:

- For some women, significant mental health symptoms persisted over time, despite engagement in mental health treatment.
- Many women continued to report parenting attitudes that reflected inappropriate beliefs about parenting, particularly in the areas of empathy for their children's needs and the extent to which they valued obedience and parental authority.
- The increases documented in income and employment did not translate into meaningful or practical improvements in self-sufficiency; i.e., at follow-up, the total income received by most women would not be considered sufficient to support themselves or their families.
- While women experienced continuity in their transitional living arrangements over time, at some point they will be challenged to access affordable, drug-free, permanent housing in the community.

Overall, the findings from a 12 month follow-up with participants suggest that the HIR program experienced success in supporting women's recovery and in providing stable housing, services to address trauma, and assistance with access to income resources. However, the data also suggests several recommendations for the program, including: continued support for women with unremitting mental health symptoms; implementation of additional and/or targeted parenting interventions to assist women with their parenting attitudes; and further development of linkages to resources for affordable, drug-free housing.

META HOUSE'S HOUSED IN RECOVERY PROGRAM: INTRODUCTION

This evaluation report was prepared by the Planning Council for Health and Human Services, Inc., the external evaluators for Meta House's Housed in Recovery (HIR) project. The Planning Council is a private, non-profit organization that has provided independent information, research, and planning to the Southeast Wisconsin community for over 45 years. The Planning Council's mission is to advance community health and human services through objective planning, evaluation, and research. The implementation of the HIR program's evaluation was the joint responsibility of the Planning Council's external evaluation team and Meta House's internal evaluation department. The Planning Council team was responsible for providing training, supervision, and monitoring for data collection; conducting the data analysis; and authoring the final report. The Meta House internal evaluation team was responsible for conducting interviews with HIR clients; managing and entering the quantitative data; and providing formative feedback to the program.

The report summarizes five years of program evaluation results for the Housed in Recovery program (TI# 18167), a substance abuse treatment program for women who were homeless or at risk of being homeless. The report describes: 1) the women who participated in the HIR program, 2) the challenges faced by the women as they entered this stage in their treatment, 3) pre-post changes and/or maintenance of progress that occurred in the year following their admission to the program, and 4) women's level of functioning approximately one year after admission.

The Meta House Treatment Model and the HIR Program

Meta House has been treating women with substance use disorders in Milwaukee, WI, since 1963. Its mission is to help women struggling with drug and alcohol addiction to reclaim and transform their lives and to rebuild their families. Meta House offers a range of prevention, treatment, and support services designed to address the effects of substance abuse in ways that are culturally competent and clinically effective. These services are designed to meet the unique needs of each woman and her children in an effort to strengthen family relationships and end the generational cycle of substance abuse.

Meta House has based its treatment model on a culturally sensitive and gender responsive treatment philosophy. Traditional substance abuse treatment was developed in response to the needs of white men, who were historically the majority of people entering treatment. Gender responsive treatment was developed in response to the lack of success and even detrimental effects seen among women and women of color treated within the traditional models. The intervention approach used at Meta House is rooted in the distinctive characteristics of the female physiology and women's roles, socialization, and relative status within the culture. Meta House derived this model based on a self-in-relation/cultural theory of female development which proposed that emotional growth and development is organized around making and maintaining affiliations and relationships. In addition, recognizing the impact of sexual and physical abuse and its association with substance abuse in women, Meta House has embraced a trauma-informed approach.

Meta House's Housed in Recovery (HIR) program was funded from September of 2006 through September of 2011 by the Center for Substance Abuse Treatment (CSAT), a center of the Substance Abuse and Mental Health Services Administration (SAMHSA), through the Treatment for Homeless funding initiative. The HIR program was developed to serve women and their children who were homeless or at risk of being homeless and who had also demonstrated some success in addressing their substance use disorders in prior treatment programming. Women entering the program typically began in the day treatment level of care (often after having completed some period of residential treatment), and had a full continuum of care available to them as treatment progressed (e.g., outpatient treatment, after care, etc.).

Women in the HIR program also received housing, either through Meta House's transitional living apartments or through community partners. Primarily, these housing arrangements were drug and alcohol free, but ranged widely in the length of stay allowed. The Meta House transitional living apartments provided women and their families either limited term housing (up to 24 months) or long-term housing (indefinite for women with disabilities who continued to utilize services). Community partners provided

either short-term shelter or longer term transitional living arrangements. Regardless of housing location, the HIR program's intent was to provide a modified therapeutic community for women, including recreational and social activities.

The services provided by the HIR treatment program were based in Meta House's gender-responsive, trauma-informed model and included: case management; individual, family and group therapy; services to children; medical care; and programming designed specifically to support women's functioning as mothers and in the community. A number of evidence-based practices were used, including: Comprehensive Case Management for Substance Abuse Treatment, Motivational Interviewing, Stages of Change, Seeking Safety, and the Nurturing Program for Families in Substance Abuse Treatment and Recovery.

The HIR program was focused on maintaining, solidifying, and building upon the progress women made in their previous substance abuse treatment. Specifically, the HIR program's goals included assisting women in: 1) maintaining their commitment to recovery, 2) improving their mental health and trauma-related symptoms, 3) developing appropriate parenting attitudes, 4) improving family stability, including self-sufficiency, and 5) securing stable housing.

Data Collection

The Government Performance and Results Act (GPRA) requires funded programs to report National Outcome Measures (NOMs) data about program participants. CSAT expects their Treatment for Homeless funded programs to interview clients at initial assessment, six months after the initial assessment interview, and at discharge from the program. To this mandated interview schedule, Meta House added another interview 12 months after the initial assessment. Meta House's internal evaluation research assistants conducted face-to-face interviews with clients at each point in time. In addition to the required NOMs questions, each of the interview points also included data collection to support the local evaluation. Specifically, the evaluation interviews included: NOMS questions supplemented by additional questions based on the Addiction Severity Index (ASI; McLellan et al., 1980); the Trauma Symptom Checklist-40 (TSC-40; Briere, 1996); and the Adult-Adolescent Parenting Inventory (AAPI-2; Bavolek & Keene, 2001).

All women enrolled in the HIR program between the time the program began admitting clients until the close of the grant (January 1st, 2007 through September 29th, 2011) completed the GPRA and local evaluation interviews within three days of their admission to the program. Data from these initial interviews served as a baseline or pre-participation description of the women, including information about their substance use, mental health, trauma symptoms, parenting attitudes, self-sufficiency, and living situations. Women enrolled in the HIR program were also encouraged to complete follow-up interviews, including the interview 12 months after the initial assessment.

The 12 month interviews were taken as the best available evidence about women's long-term recovery and stability. It was expected that many women entering the HIR program would experience a variety of stressors as they transitioned from their previous treatment to a more independent living situation. As a result, the 12 month interviews were considered to provide the best description of women's ability to maintain their recovery status after navigating these stressors. In addition, it was anticipated that some women entering the HIR program would reside in transitional living for an extended period of time. As a result, the 12 month interviews (as opposed to the six month interviews) provided the best possible opportunity to explore the extent to which women secured permanent housing.

The GPRA guidelines for Treatment for Homeless grantees provide a four month window of time during which follow-up interviews could be conducted (i.e., two months prior to and two months after the actual interview due date). Thus, the 12 month interviews with HIR participants were conducted anytime between 10 and 14 months after the initial assessment interviews. Typically, interviews were conducted towards the beginning of the follow-up window to assure that the required GPRA follow-up rates were met. The mean length of time between the baseline and 12 month follow-up interviews was approximately 11 months (327 days), and the median length of time was approximately 10 months (313 days).

Data Analysis and Limitations

The present report first describes the full set of women who participated in the HIR program. Data from the initial interview and from the program itself are used to describe all enrolled women with respect to demographics, length of stay in treatment, and discharge status. The report then provides a similar description for those women who completed a 12 month follow-up interview (comparing them to the women who were eligible for a follow-up interview).

The bulk of the report then focuses on the women who completed a 12 month follow-up interview. It provides descriptive information about the challenges faced by these women as they entered the HIR program. In addition, comparisons are made between baseline and 12 month follow-up data for ASI/NOMS questions that asked about frequency of a behavior in the 30 days prior to the interview and for additional local evaluation measures (i.e., TSC-40, AAPI-2). Paired t-tests are used to describe the statistical significance of any pre-post differences.

Although statistically significant pre-post changes may provide assurance that change occurred beyond that expected by chance fluctuations, these changes may not capture whether or not women have attained a satisfactory level of functioning. As a result, the report also examines levels of functioning at the 12 month follow-up interview.¹ Specifically, the report describes six areas of functioning: developing a commitment to recovery, maintaining a drug-free family environment, managing mental health symptoms, developing appropriate parenting attitudes, moving towards economic self-sufficiency, and achieving housing stability.

The analysis of the results has several limitations. Specifically:

- The analysis includes only those women who completed a 12 month follow-up interview. Although the follow-up rate was relatively high (65.7%), it is possible that women who did not complete a follow-up interview entered the program with different challenges or had different treatment outcomes than those women who completed a follow-up interview.
- The HIR program's length of stay was relatively long, with some women participating for one year or longer. As a result, approximately 55% of the 12 month follow-up interviews were conducted while the women were still engaged in the HIR program. Therefore, for some women a picture of post-discharge functioning was not available.
- The analysis is based on self-report data. Although the approach to the program evaluation interviews was carefully designed to support the accuracy and integrity of the data, it is possible that some women may not have been fully candid in their responses.
- The analysis is limited to the information gathered in the interviews. Although the questions included in the interview cover many aspects of women's lives, inevitably they are not fully representative of women's life experiences either prior to entering treatment or at follow-up.

¹ In each area, there is no assumption that all women are able to attain the highest level of functioning. The levels merely describe the level of functioning at follow-up for women who participated in the program.

META HOUSE'S HOUSED IN RECOVERY PROGRAM: PARTICIPANT DESCRIPTIONS

In order to provide an overview of all program participants, the full set of women who were enrolled in the HIR program are described with respect to their demographics, length of stay, and discharge status. Similar information is provided for the subset of women who completed a 12 month follow-up interview, as these women are the focus of the report's outcomes reporting for the program. In addition, descriptive comparisons are made on key data points for the women who completed a 12 month interview and all women who were eligible for a follow-up interview during the grant period.

Description of the Women Participating in HIR

All women who entered the HIR program between the time the program began admitting clients until the close of the grant (January 1st, 2007 through September 29th, 2011) were enrolled in the GPRA tracking and follow-up interviews. During that time, there were a total of 166 women admitted to the program and enrolled in the interview process. The total number of women admitted over the five year grant period was somewhat less than originally anticipated. Specifically, the program served 85.6% of the targeted 194 women, which exceeded the CSAT intake benchmark of 80% but did not fully reach the expected number to be served. According to the program, several factors contributed to the lower than anticipated number of clients. For example, at the outset of the project one of the main community housing partners closed, necessitating that new relationships and arrangements be established for women who were not moving into Meta House's transitional living apartments. In addition, women served by the program generally remained in the transitional living sites longer than had been projected at the outset of the project, reducing the availability of these sites for "new" participants. Finally, the program reported that it was periodically challenging to find additional transitional living sites for women due to limited capacity throughout the community and due to funding issues. Although Meta House continued to serve women who were unable to enter transitional living, these women were not included in the numbers served for the Housed in Recovery project.

Data from the initial interview and from the program were used to describe the 166 enrolled women with respect to: 1) demographics, 2) length of stay in treatment, and 3) discharge status.

Demographics

Table 1 and Table 2 present demographic information for the 166 women enrolled in the HIR program (including all women who completed an initial GPRA interview).

Table 1: Basic Demographics at Admission for All Enrolled Participants

Demographic Characteristics	HIR Participants (N=166)	
	N	%
Race/Ethnicity		
African American/Black	98	59.0%
Caucasian/White	55	33.1%
Latina/Hispanic	8	4.8%
Multiracial	5	3.0%
Age at Admission		
19 years and younger	0	0.0%
20 to 24 years	13	7.8%
25 to 29 years	31	18.7%
30 to 34 years	16	9.6%
35 to 39 years	27	16.3%
40 to 44 years	34	20.5%
45 to 49 years	24	14.5%
50 years and over	21	12.7%
Age statistics (in years)	Mean=38.16 Median=39.00	Range=20-66 SD=9.77
Family Status at Admission		
Mothers	145	87.3%
Number of children (for those who were mothers)	Mean=3.07 Median=3.00	Range=1-9 SD=1.87
Pregnant	8	4.8%

Half of the women participating in the HIR program (n=85 or 51.3%) were between the ages of 35 and 49, with a mean age of 38.2 and a median age of 39.0. Almost 60% of the women (n=98 or 59.0%) described their ethnicity as Black or African American and one-third (n=55 or 33.1%) described themselves as White or Caucasian.

Most of the women (n=145 or 87.3%) were mothers when they were admitted to the program. For those women who were mothers, the mean number of children they had given birth to was 3.1. While approximately 20% of the women (n=31 or 21.4%) had only adult children at the time of admission, most women (n=114 or 78.6%) had at least one minor child when they began the HIR program. A small number of women (n=8 or 4.8%) were also pregnant at admission to the program.

Table 2: Socioeconomic Demographics at Admission for All Enrolled Participants

Socioeconomic Demographic Characteristics	HIR Participants (N=166)	
	N	%
Highest Level of Education Completed at Admission		
8th grade or less	7	4.2%
9th to 11th grade	54	32.5%
High school diploma / GED	55	33.1%
Some college or vocational / technical school	42	25.3%
College degree	8	4.8%
Employment Status at Admission		
Employed full time or part time	31	18.7%
Unemployed	135	81.3%
Income at Admission*		
Any income (past 30 days)	154	95.1%
Income from wages (past 30 days)	34	20.6%
Income statistics (past 30 days) (all sources of income combined)	Mean=\$667.45 Median=\$700.50	Range=\$0-\$2,000 SD=\$440.40
Legal Status at Admission		
In jail or prison in previous 30 days	4	2.4%
On probation or parole	43	26.1%
Awaiting charges, trial, or sentencing	1	0.6%

*N=162 for total income and N=165 for wages, with 4 women and 1 woman missing data respectively.

Approximately 60% of the women (n=105 or 63.3%) had either graduated from high school or earned their GED certificate, including a small number of women (n=8) who had completed a college degree. However, almost 40% of the women participating in the HIR program (n=61 or 36.7%) had not completed high school, including a small number of women (n=4) whose highest level of education was eighth grade or less.

At the time of their admission to the program, most of the women (n=135 or 81.3%) were unemployed. However, most women (n=154 or 95.1%) did have some source of income during the 30 days prior to admission, primarily from public assistance (e.g., W2, food stamps, disability).² For the women who did have some source of income, the average dollar amount for those 30 days was quite low (mean=\$667.45).

Legal issues did not appear to be the precipitating factor for women's entry into treatment as only a small number of women (n=5) had been in jail in the 30 days prior to admission or were awaiting charges, trial, or sentencing. However, approximately one-quarter of the women were on probation or parole at the time of admission (n=43 or 26.1%).

Housing Instability

The Housed in Recovery program was designed to provide treatment to women who were homeless or at risk of being homeless. Table 3 presents information on the history of housing instability among the 166 women enrolled in the program.

² To be eligible for Meta House's transitional living apartments, women were required to have some source of income to serve as a contribution to rent. Given the number of women who resided in these apartments, this requirement may have contributed to the proportion of HIR women who had a source of income at program entry.

Table 3: Lifetime History of Housing Instability for All Enrolled Participants

Type of Housing Instability	HIR Participants (N=166)	
	N	%
Stayed overnight / lived at some point in lifetime		
Transitional living, residential treatment, institution (with no other place to live)	162	97.6%
Rent-free with friends	129	77.7%
Shelter	121	72.9%
Rent-free with parents	112	67.5%
Drug house	85	51.2%
Streets or park	66	39.8%
Rented room or motel (with no other place to live)	60	36.1%
Car	57	34.3%
Empty building	33	19.9%
Public place (library, bus station, etc.)*	27	16.4%

*N=165 for staying overnight in a public place, with 1 woman missing data.

All of the women who participated in the HIR program had experienced some form of housing instability in their lifetime. At some time in their lives, most of the women (n=143 or 86.1%) had actually been homeless, i.e. had slept on the streets or in a park, empty building, public place, car, drug house, or shelter for the homeless. In fact, a full 40% (n=66 or 39.8%) reported that they had slept on the streets or in a park during their lifetime. In addition, most of the women (n=156 or 94.0%) had lived in some sort of unstable housing arrangement, including staying rent-free with family or friends or living in a rented hotel or motel room. Virtually all of the women (n=162 or 97.6%) had resided in transitional living, residential treatment, or an institution at some point in their lifetime.

Housing Arrangement

All of the women who participated in the HIR program received housing in addition to substance abuse treatment, either through Meta House's transitional living apartments or through an array of community partners. Table 4 provides detailed information about the housing arrangements made for women at the outset of their participation in the program.

Table 4: Housing Arrangements at Admission for All Enrolled Participants

Housing Facility	Housing Type	HIR Participants (N=166)	
		N	%
Meta House, First Street	Long-term transitional living apartments (indefinite)	34	20.5%
Meta House, Locust Street	Long-term transitional living apartments (up to 24 months)	32	19.3%
Project H.E.A.T.	Limited term transitional living apartments	35	21.1%
Saint Catherine's Residence for Women	Long-term transitional living apartments (indefinite)	29	17.5%
Other	Transitional living facilities, shelters	36	21.7%

Approximately 40% of the women (n=66 or 39.8%) moved into Meta House's transitional living apartments at the time of their admission to the program. Specifically, approximately 20% (n=34 or 20.5%) entered Meta House's long-term apartments with the possibility of an indefinite stay and approximately 20% (n=32 or 19.3%) entered Meta House's long-term apartments with the possibility of a stay up to two years.

Approximately 60% of the women (n=100 or 60.2%) moved into transitional housing provided by an array of community partners. The most typical community partners included Saint Catherine's Residence for Women and Project H.E.A.T. (each housing approximately 20% of the HIR women). Saint Catherine's Residence provided long-term single and shared apartments for low-income women, with the possibility of an indefinite stay. Project H.E.A.T. provided limited term apartments for men and women in recovery, with stays ranging from short-term to long-term during the course of the grant period. The remaining women (approximately 20%) moved into transitional housing provided by a wide range of community partners, some of which offered housing for a relatively limited duration (e.g., shelters) and others that provided longer term arrangements (e.g., agency sponsored apartments).

Length of Stay in Treatment

Women admitted to the HIR program were required to have demonstrated some success in addressing their substance use disorders in a prior treatment setting. Approximately three-quarters of the women (n=126 or 75.9%) were documented as having participated in treatment at Meta House prior to being admitted to the HIR program. Most of these women (n=91 of the 126) had participated in Meta House's residential treatment program.

The program's expectation was that women in the HIR program would remain in treatment for as long as needed to address substance use, trauma, and other mental health symptoms; to mitigate the risk of becoming homeless again; and to enhance the stability of the family. A full continuum of care was available to HIR women, including day treatment, outpatient treatment, and limited case management (i.e., case management services only, without continued counseling/therapy). Following their formal discharge from treatment, aftercare services were available to women on an as-needed basis.

Table 5 describes the overall length of participation in Meta House services for all enrolled women, including the combined length of stay in day treatment, outpatient services, and limited case management.

Table 5: Overall Length of Stay for All Enrolled Participants

Overall Length of Program Participation	HIR Participants (N=140*)	
	N	%
Less than 1 month	7	5.0%
1 month to 2.99 months	25	17.9%
3 months to 5.99 months	34	24.3%
6 months to 8.99 months	25	17.9%
9 months to 11.99 months	12	8.6%
12 months to 17.99 months	16	11.4%
18 months to 23.99 months	16	11.4%
24 months or more	5	3.6%
Overall length of stay statistics (in months)	Mean=8.75 Median=6.32	Range=0.23 - 31.27 SD=7.18

*Of the 166 enrolled women, 26 had not yet been discharged from treatment at the end of the data collection period for length of stay (11/30/2011). These 26 women were not included in the length of stay analysis, but had been engaged in treatment from 2 months to 2 ½ years at the end of the data collection period.

The overall length of stay ranged from one week to approximately two and one-half years. Approximately 50% of the women had an overall length of stay of less than six months (n=66 or 47.1%). However, approximately half of the women remained in treatment for six months or longer (n=74 or 52.9%), with many of these women staying longer than one year. Across the group of enrolled women, the mean length of stay was approximately nine months and the median length of stay was approximately six months.

Program Discharge Status

Graduation was the goal for all women enrolled in the HIR program. At discharge from the program, counselors coded women's treatment progress and the reason for discharge. Women were considered to have graduated if their counselors indicated that they had successfully completed the program or that they had completed with substantial improvement in some areas.

Approximately three-quarters of the enrolled women (n=107 or 76.4%) were considered to have graduated when they were discharged from the program.³ The average length of stay in treatment for women who graduated was fairly substantial (mean = 10.3 months; median = 7.4 months).

Approximately one-quarter of the women (n=33 or 23.6%) did not graduate from the program. The average length of stay for those who did not graduate was relatively short (mean = 3.7 months; median = 2.1 months). Most of the non-graduates either completed service without substantial improvement (n=14 of the 33) or were transferred or referred to another program (n=12 of the 33, including 7 who were transferred to Meta House's residential treatment facility).

Description of the Women Interviewed at 12 Month Follow-Up

There were 166 women admitted to the program and enrolled in the interview process. Only 137 of these women became eligible for a 12 month follow-up interview during the data collection period; i.e., their 12 month follow-up window opened prior to the close of the grant.⁴ A total of 90 women completed a 12 month interview, resulting in a follow-up rate of 65.7% for those who were eligible for a follow-up during the data collection period.

Representativeness

The data were reviewed to determine the extent to which the 90 women who completed a 12 month interview were representative of the full set of 137 women who were eligible for a follow-up interview. Specifically, those eligible for a follow-up interview and those who actually completed the follow-up were compared with respect to: 1) demographics, 2) housing arrangement, 3) length of stay in treatment, and 4) discharge status. Detailed information regarding these comparisons can be found in Appendix A.

In general, the women who completed a follow-up interview were reasonably similar demographically to the full set of women who were eligible for a follow-up. The two groups closely resembled one another in terms of education, the proportion of mothers, and their number of children. However, there was a slight trend for more of the women who completed a 12 month interview to describe themselves as Black/African American and to be older as compared to the women who were eligible for a follow-up interview.⁵

³ N=140, with 26 enrolled women not yet discharged from treatment at the end of the data collection period (11/30/2011) and therefore excluded from the analyses for discharge status.

⁴ The 137 women eligible for a follow-up included 3 women whose follow-up window had not yet closed as of the end of the data collection period (i.e., September 29, 2011). It is possible that with the benefit of a full follow-up window, these 3 women also would have been interviewed.

⁵ Of the women interviewed at 12 months, 65.6% described themselves as Black/African American, as compared to 58.4% of the women eligible for an interview. The mean and median ages for women interviewed at 12 months were 41.3 and 42.0 respectively; the mean and median ages for women eligible were 39.3 and 40.0.

The two groups did differ to some extent in their housing arrangements at the time of admission. Specifically, the women who completed a follow-up interview were more likely to have moved into Meta House's transitional living apartments than were women who were eligible for a follow-up interview. While approximately half of the women who completed a 12 month interview (n=48 or 53.3%) resided in Meta House's apartments, only about 40% of all women eligible for follow-up (n=57 or 41.6%) resided at Meta House.

Women who completed a 12 month follow-up interview were similar to women who were eligible for an interview with respect to their prior treatment experience at Meta House (approximately three-quarters of both groups were documented as having had treatment at Meta House prior to their admission to the HIR program). However, there were some differences between the groups with respect to length of stay in the HIR program and status at discharge. Specifically, a higher proportion of the women interviewed remained in treatment for 12 months or longer (n=35 or 43.8% of women followed-up remained for 12 months or longer; n=37 or 29.1% of women eligible remained for that period of time). In addition, women who completed a 12 month interview were somewhat more likely to have graduated from the program than women who were eligible for an interview (n=72 or 90.0% of women followed-up graduated; n=100 or 78.7% of women eligible graduated).

Description of the Women Interviewed at Follow-Up

Demographically, two-thirds of the women who completed a 12 month interview (n=59 or 65.6%) were between the ages of 35 and 49, with a mean age of 41.3 and a median age of 42.0. Two-thirds of the women (n=59 or 65.6%) described their ethnicity as Black or African American and approximately one-quarter (n=23 or 25.6%) described themselves as White or Caucasian. Most of the women who were interviewed were mothers and/or were pregnant when they were admitted to the program (n=80 or 88.9%). Approximately 60% of the women (n=55 or 61.1%) had either graduated from high school or earned their GED certificate. However, almost 40% (n=35 or 38.9%) had not completed high school.

With respect to housing arrangements at intake, the 90 women who completed a follow-up interview generally resided in Meta House's apartments (n=48 or 53.3%) or transitional living arrangements with one of the program's two main housing partners, Project H.E.A.T. and Saint Catherine's Residence (n=33 or 36.7%). Few of the women who were followed up (n=9 or 10.0%) resided in a transitional living facility run by another housing partner.

Women admitted to the HIR program were required to have demonstrated some success in addressing their substance use disorders in a prior treatment setting. Approximately three-quarters of the women who completed a 12 month interview (n=71 or 78.9) were documented as having had treatment at Meta House prior to being admitted to the HIR program (primarily residential treatment).

In the HIR program itself, a full continuum of care was available to the women, including day treatment, outpatient treatment, and limited case management. The women who were interviewed at 12 months generally remained in the program for approximately one year (mean = 11.95 months; median = 10.97 months). In fact, approximately 55% of the women interviewed (n=51 or 56.7%) were still engaged in the HIR program at the time of the 12 month follow-up interview. Overall, 90% of the women interviewed (n=72 or 90.0%) ultimately graduated from the program (i.e., successfully completed or completed with substantial improvement in some areas). As a result, the group of women who completed a 12 month follow-up were generally women who had participated in the program for a substantial length of time and were considered by staff to have successfully completed the program.

META HOUSE'S HOUSED IN RECOVERY PROGRAM: 12 MONTH INTERVIEW FINDINGS

The Meta House Housed in Recovery program's goals included helping women to: solidify and maintain their recovery, improve their mental health symptoms, develop appropriate parenting attitudes, move towards economic self-sufficiency, and establish a basis of stable housing. Evaluation data was gathered to address progress towards each of these goals, and the specific objectives associated with them.

Recovery

Women admitted to the HIR program were required to have demonstrated some success in addressing their substance use disorders in prior treatment programming. As a result, the HIR program was designed to provide support to help women:

- Continue to be alcohol and drug free;
- Maintain their commitment to recovery; and
- Provide a drug-free, non-using environment for their children.

Mental Health

One of the challenges that many women face in developing a life in recovery is a substantial history of trauma, including physical abuse and sexual abuse. Many of the women also experience psychological symptoms and distress that may be associated with their prior trauma experiences, prior drug use, personal situations, and/or underlying mental health problems. The HIR program provided an evidence based group intervention (Seeking Safety; Najavits, 2002), psychiatric services, counseling, and case management intended to help women:

- Experience fewer overall mental health symptoms;
- Decrease the amount of trauma-related symptoms experienced; and
- Become connected to mental health treatment to address any continuing or reoccurring mental health symptoms.

Parenting

Women with histories of substance use often experience difficulties in parenting, sometimes including child abuse or neglect. The HIR program included an evidence based parenting group (the Nurturing Program for Families in Substance Abuse Treatment and Recovery; Camp & Finkelstein, 1997) as well as individual parenting and parent-child services. The program was intended to provide parenting support to help women:

- Improve their parenting attitudes; and
- Develop or maintain parenting attitudes that do not indicate a risk for child abuse or neglect.

Self-Sufficiency

Women entering treatment often have limited economic resources and educational backgrounds. The HIR program provided support to assist women in making gains with respect to their economic self-sufficiency, including helping women:

- Increase their monthly income and the amount earned from employment; and
- Engage in employment, enroll in educational programs, or access benefits (e.g., SSI/SSDI, W-2, food stamps) in an effort to support themselves and their families.

Housing

The women enrolled in the HIR program were homeless or at risk of being homeless at the time of their entry into treatment. As part of the program, women received housing, either through Meta House's transitional living apartments or through community partners. While some of these arrangements were designed to continue beyond the 12 month follow-up point, it was expected that when women left the housing coordinated through the program they would:

- Live primarily in their own or shared apartments/homes, without having to resort to overnight sleeping arrangements that would indicate housing instability.

For each of these program goal areas, the analysis describes:

- The challenges faced by women as they entered treatment;
- The pre-post changes that occurred, comparing the 30 days prior to the initial interview and the 30 days prior to the 12 month interview; and
- The degree to which women had attained a satisfactory level of functioning at the 12 month follow-up interview.

Alcohol / Drug Use and Recovery

To be admitted to the HIR program, women were required to have demonstrated some success in addressing their substance use disorders in prior treatment programming. As a result, the program was designed to support women in continuing to be alcohol and drug free and in maintaining their commitment to recovery. However, like other chronic medical conditions, relapse for those who have substance use disorders is an expected part of recovery (Center for Substance Abuse Treatment, 2009; National Institute on Drug Abuse, 2010). The literature suggests that the relapse rates for substance addictions can range from 40% to 60% (e.g., National Institute on Drug Abuse, 2009; Stocker, 1998) and that the factors associated with relapse differ for women (e.g., Walitzer & Dearing, 2006). As a result, the program was designed to assist women in identifying relapse triggers and to support ongoing abstinence.

In the area of substance use, the analysis examined: 1) the women's history of alcohol and drug use as a challenge to recovery, 2) the status of women's alcohol and drug use at the initial interview and at the 12 month follow-up interview, 3) women's level of functioning with respect to maintaining a recovery commitment at follow-up, and 4) women's level of functioning at follow-up with respect to providing a family environment free of alcohol and illegal drug use.⁶

History of Alcohol / Drug Use as a Treatment Challenge

Most of the women who participated in the HIR program and the follow-up interviews had substantial histories of lifetime alcohol and drug use. Specifically, 87.8% of the women (n=79) had one or more of the following substance use characteristics associated with serious addiction:^{7,8}

- More than five years of regular cocaine use (n=43 or 48.9%);
- Regular use of heroin (n=8 or 8.9%);
- More than ten years of regular use of a substance other than cocaine or heroin (n=48 or 54.5%),⁹ and/or
- Regular use of more than one substance on the same day (n=51 or 58.0%).¹⁰

⁶ Given the small number of women using substances during the month prior to the initial and the follow-up interviews, a pre-post analysis for the number of days of use was not possible.

⁷ N=90.

⁸ "Regular use" was defined as using the substance three or more times per week for at least a month in one's lifetime.

⁹ N=88. Two women were missing data on length of lifetime use of other substances, but had one of the other characteristics associated with serious addiction.

¹⁰ N=88. Two women were missing data on length of lifetime use of more than one substance per day, but had one of the other characteristics associated with serious addiction.

The women had used a wide variety of substances in their lifetime, the most common of which were alcohol (n=88 or 97.8%), cocaine/crack (n=82 or 91.1%), and marijuana (n=79 or 87.8%). In addition, approximately 20% of the women (n=20 or 22.2%) had used heroin at least once. Lifetime use of potentially addictive prescription medications was also relatively common, including use with and without a prescription. The typical medications used included prescription-strength Tylenol (n=47 or 52.2%), Percocet (n=33 or 36.7%), benzodiazepines such as Valium or Xanax (n=27 or 30.0%), and Oxycontin or Oxycodone (n=24 or 26.7%).

Although their lifetime history of substance use was extensive, many of the women had refrained from using in the month prior to entering the HIR program.¹¹ Specifically, 76.7% of the women (n=69) were completely free of illegal drugs, alcohol, and potentially addictive prescription medications during the 30 days prior to the initial interview.¹² For some of these women (27 of the 69 who were clean), their abstinence was supported by having been in a controlled environment during that time. For example, 22 of the 69 women who were abstinent had been in residential substance abuse treatment for two weeks or more during the 30 days prior to the interview. However, for other women (42 of the 69 who were clean) their abstinence could be considered voluntary, as they spent no time in a controlled environment in the month prior to entering the program.

Approximately one-quarter of the women (n=21 or 23.3%) did use alcohol, drugs, and/or prescription medications in the 30 days prior to the initial interview. However, the type of use varied. Specifically:

- Many of the women who used (15 of 21) had only used potentially addictive medications with a prescription (e.g., benzodiazepines, prescription-strength Tylenol, Percocet, Oxycontin, and Vicodin).
- Only a small number of the women (n=3 of 21) had used illegal drugs during that time period, including cocaine (n=1) and medication without a prescription (i.e., benzodiazepines and prescription-strength Tylenol).
- Only a small number of women (n=3 of 21) had drunk alcohol, including two who drank to intoxication.

Overall, the women who did use substances during the month prior to the initial interview varied widely in the number of days used (i.e., from one day to 30 days, with a mean of 14.8 days and a median of 7.0 days). Finally, some of the women (n=7 of the 21) had used despite being in residential substance abuse treatment for at least part of the month.

Remaining Alcohol and Drug Free

Given that women were required to have demonstrated some success in addressing their substance use disorders prior to admission, the goal of the HIR program was to maintain and solidify women's abstinence over time. In the 30 days prior to the 12 month interview, almost three-quarters of the women (n=66 or 73.3%) were completely free of illegal drugs, alcohol, and potentially addictive prescription medications.¹³ For most of these women (65 of the 66 who were clean), their abstinence could be considered voluntary, as they spent no time in a controlled environment in the month prior to the interview. However, one of the women was in residential treatment for all 30 days prior to the interview; as a result, her ability to remain abstinent outside of the controlled environment is unknown.

Approximately one-quarter of the women (n=24 or 26.7%) did use alcohol, drugs, and/or prescription medications in the 30 days prior to the follow-up interview. While some of these women had clearly relapsed, others were using only potentially addictive medications with a prescription. Specifically:

- Some of the women who were using at follow-up (11 of 24) had used illegal drugs, primarily cocaine (with one woman injecting heroin during that month). These women had clearly experienced a relapse, with 6 of the 11 using more than one substance per day (primarily cocaine and alcohol).

¹¹ N=90 for all 30 day use data at the initial interview.

¹² According to Meta House's model of recovery, abstinence is generally considered to include abstinence from potentially addictive prescription medications as well as from alcohol and illegal drugs. For some women, the use of these medications may be part of their addiction (even with a prescription); for other women, their use may put them at some risk for relapse in the future.

¹³ N=90 for all 30 day use data at the follow-up interview.

- Some of the women (9 of 24) had used only potentially addictive medications with a prescription (e.g., Percocet, prescription-strength Tylenol, and Vicodin). Although no longer using alcohol or illegal drugs, the use of these medications may be cause for continued concern and/or may put them at some risk for relapse in the future.
- A small number of women (4 of 24) had used only alcohol during the 30 days prior to follow-up. However, most of these women (3 of 4) had drunk alcohol to intoxication.

Overall, the women who did use substances during the month prior to the follow-up interview varied in the number of days they used, from one day to 30 days (with a mean of 11.5 days and a median of 7.5 days of use). Finally, several of those who had used at follow-up (n=5 of 24) had spent time in a controlled environment during that month, including alcohol or drug detox, residential treatment, or the hospital.

Case-Specific Pre-Post Patterns

A case-specific exploration of pre-post patterns regarding substance use suggests several different patterns, the most common of which was maintenance of baseline abstinence at the follow-up interview. Specifically, the pre-post patterns for the use of any substances in the month prior to the initial and the follow up interviews included:

- *Maintenance of abstinence.* Approximately 80% of the women who were abstinent in the 30 days prior to the initial interview were also abstinent in the 30 days prior to the follow-up interview (n=55 or 79.7% of the 69 abstinent at baseline).
- *Improvement in abstinence.* Approximately half of the women who had used substances in the 30 days prior to the initial interview were no longer using in the 30 days prior to the follow-up interview (n=11 or 52.4% of the 21 who used at baseline).
- *Continued use.* Approximately half of the women who had used substances in the 30 days prior to the initial interview had also used substances in the 30 days prior to the follow-up interview (n=10 or 47.6% of the 21 who used at baseline). While some of these women's continued use was confined to prescription medications (n=4) at follow-up, others were using illegal substances (n=4) and/or alcohol (n=2).
- *Relapse.* A small proportion of the women who were abstinent in the 30 days prior to the initial interview were using substances in the 30 days prior to the follow-up interview (n=14 or 20.3% of the 69 abstinent at baseline). While some of these women's relapse was confined to prescription medications (n=5), most had returned to some use of illegal drugs (n=7) and/or alcohol (n=2) in the month prior to follow-up.

Maintaining Recovery Commitment at Follow-Up

In addition to comparing the status of women's alcohol and drug use at the initial and follow-up interviews, the analysis examined the extent to which women maintained a recovery commitment at the 12 month follow-up. Women with substantial histories of substance use have a chronic relapsing condition and a variety of physical, social, and personal stressors can trigger a relapse. Treatment includes preparing women to deal with any relapse by re-engaging with treatment. When a woman experiences a relapse and re-engages in treatment, she is demonstrating her commitment to her recovery. Similarly, when a woman is not using and engages in treatment to further support her recovery, she is demonstrating her continued commitment to her recovery. On the other hand, when a woman uses illegal drugs or alcohol and does not re-engage in treatment, she is either in denial about the fact that she has relapsed or she has given up on her recovery, at least for the present. Women's commitment to their recovery at the 12 month follow-up can be described using the following levels of functioning:

Level 1 is defined as being completely alcohol and drug free for the 30 days prior to the interview, without participating in substance abuse treatment. Women who have remained alcohol and drug free for the 30 days prior to the interview are demonstrating success in maintaining their recovery.

Level 2 is defined as being completely alcohol and drug free for the 30 days prior to the interview, while continuing or re-engaging in substance abuse treatment. Women who have remained alcohol and drug free for the 30 days prior to the interview and have been engaged in a treatment program are demonstrating a commitment to their recovery, both by their abstinence and their engagement with treatment.

Level 3 is defined as being abstinent from alcohol and illegal drugs, but using potentially addicting medications with a prescription (e.g., narcotics or prescription pain killers such as Vicodin or Oxycontin).¹⁴ While these women are no longer using alcohol or illegal drugs, their use of potentially addictive medications may put them at some risk for relapse in the future. However, women at this level have engaged in substance abuse treatment while using prescription medications, which may lessen their risk of relapse.

Level 4 includes women who are abstinent from alcohol and illegal drugs, but using potentially addicting medications with a prescription but without treatment support. These women have neither continued nor re-engaged in substance abuse treatment. It is possible that their use of potentially addictive medications may put them at some risk for relapse in the future, particularly without the added support of a treatment environment.

Level 5 is defined as having some alcohol and/or illegal drug use in the 30 days prior to the interview, and continuing or re-engaging in some form of substance abuse treatment. Women engaged in a treatment program are demonstrating a commitment to their recovery, although they are not completely successful with respect to their actual use.

Level 6 is defined as having some alcohol and/or illegal drug use in the 30 days prior to the interview, and not re-engaging in substance abuse treatment. Given the substantial history of addiction in this group of women, the resumption of alcohol and/or drug use without treatment suggests that the woman is in denial about the fact that she has relapsed or that she has given up on her recovery.

Table 6 describes the level of functioning at follow-up with respect to commitment to recovery.

Table 6: Levels of Recovery Commitment at Follow-Up

Levels	N	%	Cumulative %
Level 1: No alcohol, prescription drug, or illegal drug use – without treatment support.	16	17.8%	17.8%
Level 2: No alcohol, prescription drug, or illegal drug use – while engaged in treatment.	50	55.6%	73.3%
Level 3: Prescribed drug use only – while engaged in treatment.	8	8.9%	82.2%
Level 4: Prescribed drug use only – without treatment support.	1	1.1%	83.3%
Level 5: Some alcohol or illegal drug use – while engaged in treatment.	10	11.1%	94.4%
Level 6: Some alcohol or illegal drug use – without treatment support.	5	5.6%	100.0%

N=90.

As Table 6 shows, approximately three-quarters of the women who participated in the HIR program (n=66 or 73.3%) used no alcohol, prescription drugs, or illegal drugs in the 30 days prior to the 12 month follow-up interview. Approximately 20% of the women (n=16 or 17.8%) were alcohol and drug free without participating in substance abuse treatment during that time. Slightly more than half of the women (n=50 or 55.6%) were abstinent with the support of primarily outpatient substance abuse treatment. These women’s engagement in treatment represented a continued commitment to recovery and may have been an important components supporting their continued abstinence.

¹⁴ Women who used these medications without a prescription were categorized as engaged in illegal drug use.

Table 6 also shows that 10% of the women (n=9 or 10.0%) were using prescribed medications such as narcotics or strong prescription pain killers (e.g., Percocet, Vicodin). While these women were abstinent from alcohol and illegal drugs, their use of potentially addictive medications may put them at some risk for relapse in the future. However, almost all of these women were engaged in substance abuse treatment, which may lessen their risk of relapse.

Finally, approximately 15% of the women (n=15 or 16.7%) had some days of alcohol or illegal drug use in the 30 days prior to the 12 month follow-up interview. Many of these women were using illegal drugs, as opposed to just alcohol (n=11 of 15). However, many (n=10 of 15) were either continuing in treatment or had re-engaged in treatment, suggesting a continued commitment to their own recovery. A small number of women (n=5) had not sought out treatment support during the month of their use, suggesting that they were either in denial about their use or had given up on their recovery, at least for the present.

Alcohol and Illegal Drug-Free Family Environment at Follow-Up

In addition to the HIR program's goals of decreasing substance use and maintaining a commitment to recovery, one of the treatment goals was to prepare women to provide a drug-free, non-using environment for their children. Women with substance use disorders often have intimate partners or family members who are substance abusers (Center for Substance Abuse Treatment, 2009). As a result, a non-using family environment requires both the woman's abstinence and a choice on her part to live with others who are not using.

Women's ability to provide a drug-free family environment at the 12 month follow-up can be described using the following levels of functioning:

Level 1 represents the long term goal, women strengthening their role as mothers and providing a non-using environment for their children. Women who are functioning at Level 1 have their minor children living with them in a home free of the use of alcohol or illegal drugs.¹⁵ There is no assumption that all women have the ability to function at Level 1. For example, some women will not be able to resume full parenting responsibilities, either because their children are now adults, their children are permanently placed outside of their care, or because the decision to return their children has not yet been made.

Level 2 is defined as living in a home free of the use of alcohol or illegal drugs.¹⁶ While these women do not have their children living with them, they have created a non-using family environment which may benefit visiting minor children, adult children, and/or grandchildren. For some women whose children have been removed, a non-using environment may be a pre-condition for having their children returned to them.

Level 3 is defined as living in a home in which the woman is using and/or she is living with another adult who has a current alcohol or drug problem. Although these women do not have their children living with them, visiting children, adult children, and/or grandchildren may be exposed to an environment in which someone is using.

Level 4 represents the most undesirable situation. Minor children are residing in a family environment in which their mother and/or another adult are using alcohol or illegal drugs.

Table 7 describes the level of functioning at follow-up with respect to providing a family environment free of alcohol use and the use of illegal drugs.

¹⁵ Women at Level 1 had no days of alcohol or illegal drug use. However, a small number (n=5 of the 41) were using prescribed narcotics or painkillers.

¹⁶ Women at Level 2 had no days of alcohol or illegal drug use. However, a small number (n=4 of the 25) were using prescribed narcotics or painkillers.

Table 7: Levels of Alcohol and Illegal Drug-Free Family Environment at Follow-Up

Levels	N	%	Cumulative %
Level 1: Children living in a home free of alcohol & illegal drugs.	41	51.3%	51.3%
Level 2: Home is free of alcohol & illegal drugs, without children.	25	31.3%	82.5%
Level 3: Someone using alcohol or illegal drugs in the home, without children.	12	15.0%	97.5%
Level 4: Children living in a home with someone using alcohol and/or illegal drugs.	2	2.5%	100.0%

N=80, excluding the 10 women who did not have children.

As Table 7 indicates, at the 12 month follow-up most of the women (n=66 or 82.5%) were providing a drug and alcohol free family environment for children who were living with them, visiting children, and/or adult children. Specifically, approximately half of the women (n=41 or 51.3%) were living with one or more of their minor children in a home free of alcohol or illegal drug use. These women were parenting anywhere from one to four minor children (mean=1.7, median=1.0), all of whom were now living in a drug-free family environment.

In addition, approximately 30% of the women (n=25 or 31.3%) were providing a home free of alcohol and illegal drug use, although they did not have minor children residing with them. Many of these women (n=16 of 25) had only adult children, but were still able to provide a drug-free family environment for them in adulthood and/or for any grandchildren.

However, some of the women (n=14 or 17.5%) were living in homes that were not drug and alcohol free at follow-up, either due to their own use or to the use of others living in the home. Most of these women did not actually have children residing with them (n=12 or 15.0%), but two women (2.5%) were parenting minor children in an environment in which there was a substance abuser (i.e., the woman herself in both of these cases).

Trauma History and Symptoms

A substantial body of literature suggests that women who enter substance abuse treatment have often experienced significant trauma in their lives (e.g., Farley, et. al., 2004; Najavits, Weiss, & Shaw, 1997; Rohsenow, Corbett, & Devine, 1988; Savage et al., 2007). Specifically, high proportions of women with substance use disorders have experienced sexual or physical abuse, domestic violence, and/or witnessed violence as a child (Center for Substance Abuse Treatment, 2009). As a result, post-traumatic stress disorder and other trauma-related symptoms are common among women in treatment (e.g., Chilcoat & Menard, 2003) and may present a unique treatment challenge (e.g., Eggleston et al., 2009; Hein et al., 2010). To address this challenge, the HIR program provided trauma-informed treatment and Seeking Safety, an evidence-based practice designed to simultaneously address substance abuse and symptoms of post-traumatic stress disorder (Najavits, 2002).

In the area of trauma, the analysis of the HIR data examined: 1) the treatment challenge of women's trauma histories, 2) the status of trauma symptoms prior to admission, and 3) pre-post changes that occurred in women's trauma-related symptoms. The level of functioning with respect to general mental health and self-care at follow-up are addressed in the section on Mental Health and Treatment.

Trauma History as a Treatment Challenge

Meta House has embraced a trauma-informed approach, and therefore routinely assesses each woman for a history of trauma throughout the course of her treatment. Counselors from the HIR program regularly reported information about women's trauma histories at discharge.¹⁷ According to the counselors' reports, almost all of the women (n=73 or 90.1%) had experienced some form of emotional, physical, and/or sexual abuse in their lifetime.¹⁸ Specifically, the counselor report indicated that:

- Approximately 80% of the women (n=67 or 82.7%) had experienced emotional abuse.
- Approximately 70% of the women (n=58 or 71.6%) had experienced physical abuse.
- Slightly more than half of the women (n=45 or 55.6%) had experienced sexual abuse as a child.
- Approximately half of the women (n=40 or 49.4%) had experienced some form of sexual assault as an adult.
- Focusing just on physical abuse, childhood sexual abuse, and/or adult sexual assault, 82.7% of the women (n=67) were reported as having experienced one or more of these types of abuse.

Status of Trauma-Related Symptoms at Admission

Given the prevalence of trauma histories in the lives of the women in the program, it was anticipated that some women may have been experiencing trauma-related symptoms at treatment entry and/or have been using substances to cope with these past traumas. The Trauma Symptom Checklist-40 (TSC-40) was administered at the initial interview (and at the 12 month interview) to assess the extent to which women were experiencing trauma-related symptoms in the two months prior to the interview. The TSC-40 asks women to rate 40 symptoms according to frequency of occurrence over the past two months, using a four point scale ranging from 0 ("never") to 3 ("often"). The TSC-40 is comprised of a Total Score and six subscale scores related to different trauma symptom clusters. Total scores on the TSC-40 can range from 0 to 120, with higher scores indicative of a higher number and frequency of symptoms.

A total of 74 women completed the TSC-40 at both the initial interview and the 12 month follow-up interview.¹⁹ Designed solely as a research measure, a clinical cut-off score is not available for the TSC-40. However, information is available in the literature that provides some context for the level of trauma symptoms endorsed by the women at the time they entered the HIR program. For example:

- The HIR women's mean Total Score of 30.3 (SD=17.7) was somewhat higher than Elliott and Briere's (1992) original samples of professional women who had not been abused (mean=20.9, SD=11.1) and of women who did have sexual abuse histories (mean=26.0, SD=12.1).
- The HIR women's mean Total Score of 30.3 (SD=17.7) was substantially lower than Ghee et al.'s (2010) sample of socioeconomically disadvantaged African American and Caucasian women enrolled in residential substance abuse treatment (mean=48.1, SD=23.0).

The comparisons with the data found in the literature suggest that the overall mean TSC-40 score for HIR women at program entry was somewhat higher than the scores documented in the literature for a community sample of women, but lower than scores from a sample of women enrolled in residential substance abuse treatment. Overall, this suggests that the HIR women were experiencing a moderate degree of trauma-related symptoms in the two months prior to the initial interview.

The moderate level of trauma-related symptoms experienced by women at admission to the HIR program may have reflected previous treatment received to address these symptoms. Specifically, prior to entering the HIR program most of the women (n=62 or 83.8%) had participated in at least one session of Meta House's Seeking Safety (i.e., the evidence-based practice designed to simultaneously address substance abuse and

¹⁷ These figures represent the proportion of women for whom counselors were able to make a determination of abuse history. It is possible that some of the women who were not reported as having abuse histories may simply not have disclosed their histories to their counselors.

¹⁸ N=81, with 9 women missing data on all types of abuse history.

¹⁹ N=74 for all TSC-40 analyses, with 16 women missing data on the TSC-40 at either the initial or follow-up interviews.

trauma-related symptoms). Those who had participated had attended an average of approximately 11 sessions (mean = 11.6; median =10.0), with most having attended more than five sessions (n=47 of 62). As a result, it is possible that the women had already experienced a reduction in trauma-related symptoms prior to their admission to the HIR program.

Pre-Post Change in Trauma-Related Symptoms

Paired t-tests were conducted to compare women’s trauma-related symptoms prior to the initial interview and prior to the 12 month interview. The t-tests were conducted for: 1) the TSC-40 Total Score and 2) for each of the six TSC-40 subscale scores (Anxiety, Depression, Dissociation, Sexual Abuse Trauma, Sexual Problems, and Sleep Disturbance). Table 8 lists the results of these statistical tests.

Table 8: Pre-Post Means and Paired T-Tests for TSC-40 Total Scores and Subscale Scores

TSC-40 Scores	In the Two Months Prior to Initial Interview	In the Two Months Prior to 12 Month Interview	t Value	p Value
TSC-40 Total Score	30.26	27.32	1.64	.105
Anxiety	6.09	5.41	1.38	.172
Depression	8.00	7.36	1.19	.239
Dissociation	4.96	4.14	2.36	.021*
Sexual Abuse Trauma Index	4.64	3.93	2.07	.042*
Sexual Problems	3.50	3.01	1.10	.276
Sleep Disturbance	8.12	7.50	1.23	.223

N=74, with 16 women missing data at either the initial or the follow-up interview.

High scores on the TSC-40 are indicative of higher number and frequency of symptoms; low scores are indicative of lower number and frequency of symptoms.

The p value refers to the level of statistical significance of the t value from the paired samples t-test. P-values of less than 0.05 are considered statistically significant and are marked with an asterisk (*).

As Table 8 shows, the mean Total Score and all six subscale scores generally decreased from the time of the initial interview to the time of the follow-up interview. However, the decreases only reached the level of statistical significance for two of the subscales. Specifically, there was a statistically significant improvement in the Dissociation subscale, a scale which includes items related to flashbacks, “spacing out”, and a feeling of not always being in one’s body. In addition, there was a statistically significant improvement in the Sexual Abuse Trauma Index subscale, a scale which includes sexual problems, fear of men, and “bad” thoughts or feelings while sexually active.

While the pre-post improvement in the TSC-40 Total Scores (and four of the subscale scores) did not reach the level of statistical significance, it must be noted that the overall scores were relatively low at both the initial and the 12 month interviews. For example, TSC-40 Total Scores can range from 0 to 120. The HIR women’s Total Scores at both time points (mean = 30.3 at initial; mean = 27.3 at 12 months) fell at the lower end of the possible range and were substantially lower than scores from a comparable population of women enrolled in substance abuse treatment (Ghee et al., 2010). Again, it is possible that the moderate level of trauma symptoms experienced by women at either point in time may have been related to the trauma-specific treatment received both before and during the program. For example, almost all of the women (n=69 or 93.2%) had participated in Seeking Safety either before entering the HIR program or during the program itself (and 67.5% had participated at both points in time).²⁰

²⁰ Exploratory analyses were conducted to examine whether women’s level of participation in Seeking Safety was related to the amount of trauma symptoms reported at the follow-up interview. The results of these exploratory analyses yielded no significant findings. This may have been related to the fact that Seeking Safety was embedded in the trauma-informed setting of the HIR program, including trauma-focused counseling, which provided opportunities for women to also address their trauma symptoms outside of the Seeking Safety groups.

Mental Health and Treatment

Women with substance use disorders have a relatively high incidence of co-occurring mental health disorders such as major depression, anxiety disorders, eating disorders, and post-traumatic stress disorder (e.g., Center for Substance Abuse Treatment, 2009; Newman & Sallmann, 2004). One of the challenges that women face in recovery is the persistence of mental health symptoms and the distress that may be associated with prior traumatic experiences, prior substance use, and situational distress (e.g., homelessness).

In the area of mental health, the analysis of the HIR data examined: 1) the treatment challenge of women's mental health symptoms, 2) pre-post changes that occurred in women's mental health symptoms, and 3) women's level of functioning with respect to mental health, trauma, and self-care at follow-up.

Mental Health Symptoms as a Treatment Challenge

Questions from the Addiction Severity Index (ASI) were used to determine the frequency and severity of eight specific mental health symptoms in the 30 days prior to each interview. These questions included: 1) four relatively mild symptoms that were considered significant if experienced for five consecutive days or more (serious depression, serious anxiety, cognitive confusion, or serious problems with eating or sleeping) and 2) four relatively severe symptoms that were considered significant if experienced at any time (hallucinations, trouble controlling violent behavior, suicidal ideation, or attempted suicide).

In the 30 days prior to the initial interview, slightly more than half of the women (n=49 or 55.7%) experienced either five or more consecutive days of the mild symptoms or at least one incident of the relatively severe symptoms.²¹ Specifically:

- Slightly more than half of the women (n=48 or 55.2%) experienced at least five consecutive days of one or more of the relatively mild mental health symptoms (i.e., serious depression, serious anxiety, cognitive confusion, or serious problems with eating or sleeping).²² Serious problems with sleeping or eating and serious anxiety were the most commonly endorsed symptoms in this category.
- A small number of the women (n=8 or 8.9%) experienced at least one incidence of one or more of the severe mental health symptoms during the 30 days prior to the initial interview (i.e., hallucinations, trouble controlling violent behavior, suicidal ideation, or attempted suicide).²³ Suicidal ideation was the most commonly endorsed severe symptom.

During the month prior to the initial interview, the number of days that women experienced any mental health symptoms was fairly substantial (mean days of symptoms = 14.7 days; median days = 10.0 days).²⁴ Specifically:

- Approximately one-quarter of the women (n=21 or 24.1%) reported experiencing no days of symptoms in the month prior to the interview.
- Approximately 60% (n=53 or 60.9%) experienced at least seven total days (one week) of symptoms.
- Approximately one-third of the women (n=31 or 35.6%) experienced mental health symptoms daily in the month prior to admission.

Approximately 70% of the women (n=64 or 71.1%) had received treatment and/or medication for mental health problems in the 30 days prior to their initial interview.²⁵ Specifically:

- In the month prior to the initial interview, 62.2% of the women (n=56) took psychiatric medication.

²¹ N=88, with 2 women missing initial data on experiencing five days or more of the mild mental health symptoms and also experiencing none of the more severe mental health symptoms.

²² N=87, with 3 women missing initial data on experiencing five days or more of the mild mental health symptoms.

²³ N=90 for initial severe symptoms.

²⁴ N=87, with 3 women missing initial data on the number of days of mental health symptoms

²⁵ N=90 for all initial mental health treatment data.

- In the month prior to the initial interview, 30.0% (n=27) received inpatient or outpatient treatment for mental or emotional difficulties.

Overall, it appears that many of the women were connected to mental health treatment in the month prior to their admission to the program (possibly initiated during the earlier stage of their substance abuse treatment). However, despite receiving treatment and/or taking medication, slightly more than half of the women continued to experience fairly significant mental health symptoms in the month prior to admission.

Pre-Post Change in Mental Health Symptoms

Paired t-tests were run to compare women’s mental health symptoms prior to the initial interview and prior to the 12 month interview. The t-tests were conducted for: 1) the number of days in the prior 30 days that women experienced any of the mental health symptoms identified by the ASI questions and 2) the total number of different mental health symptoms experienced (including five days or more of the mild symptoms and any of the relatively severe symptoms). Table 9 lists the results of these statistical tests.

Table 9: Pre-Post Means and Paired T-Tests for Mental Health Symptoms

Mental Health Symptoms	In the 30 Days Prior to Initial Interview	In the 30 Days Prior to 12 Month Interview	t Value	p Value
Days of Mental Health Symptoms*	14.86	13.76	0.75	.458
Number of Different Mental Health Symptoms**	1.33	1.37	0.24	.810

* N=85 for days of symptoms, with 5 women missing data at either the initial or the follow-up interview.

** N=79 for number of different symptoms, with 11 women missing data at either the initial or the follow-up interview.

The p value refers to the level of statistical significance of the t value from the paired samples t-test. P-values of less than 0.05 are considered statistically significant, while P-values greater than 0.05 are considered non-significant.

As Table 9 shows, there was no statistically significant pre-post change in either the number of days that women experienced mental health symptoms or in the number of different significant mental health symptoms experienced. Both of these indicators of mental health remained relatively unchanged from the time of the initial interview to the time of the 12 month follow-up interview.

The consistency in mental health symptoms experienced was also apparent in the proportion of women who reported experiencing symptoms in the month prior to each interview. Specifically, at each point in time:

- Approximately three-quarters of the women reported one or more days of any mental health symptoms (n=64 or 75.3% at the initial interview; n=65 or 76.5% at the follow-up interview).²⁶
- Slightly more than half of the women reported experiencing significant mild symptoms or any severe symptoms (n=48 or 55.8% at the initial interview; n=49 or 57.0% at the follow-up interview).²⁷

However, there was some suggestion in the data that more women were connected with mental health treatment at the time of the follow-up interview than were at the initial interview. Specifically:

- In the 30 days prior to the initial interview, approximately 20% of the women (n=16 or 17.8%) had received either inpatient or outpatient treatment. In the 30 days prior to the follow-up interview, this had increased to 30% of the women (n=27 or 30.0%) participating in mental health treatment.²⁸
- The proportion of women taking psychiatric medication, however, was relatively consistent over time (n=58 or 64.4% at the initial interview; n=56 or 62.2% at the follow-up interview).²⁹

²⁶ N=85, with 5 women missing data on the number of days of mental health symptoms at either the initial or the follow-up interview.

²⁷ N=86, with 4 women missing data on the number of days of mental health symptoms at either the initial or the follow-up interview.

²⁸ N=90 for mental health treatment at both the initial and the follow-up interview.

²⁹ N=90 for medication at both the initial and the follow-up interview.

Case-Specific Pre-Post Patterns

A case-specific exploration of pre-post patterns regarding mental health symptoms suggests several different patterns, the most common of which was pre-post consistency in the presence or absence of symptoms. This pattern of consistency was apparent in several mental health indicators (e.g., the presence of any symptoms, having all 30 days of symptoms, and the presence of either significant mild symptoms or any severe symptoms). For example, the pre-post patterns for the presence of either significant mild symptoms or any severe symptoms included:³⁰

- *Consistent presence of symptoms.* Three-quarters of the women who experienced significant symptoms in the 30 days prior to the initial interview also experienced this level of symptoms in the 30 days prior to the follow-up interview (n=36 or 75.0% of the 48 with symptoms at baseline).
- *Consistent absence of symptoms.* Approximately two-thirds of the women who had no significant symptoms in the 30 days prior to the initial interview also had none of these symptoms in the 30 days prior to the follow-up interview (n=25 or 65.8% of the 38 without symptoms at baseline).
- *Remittance of symptoms.* A small number of the women who experienced significant symptoms in the 30 days prior to the initial interview no longer reported these symptoms in the 30 days prior to the follow-up interview (n=12 or 25.0% of the 48 with symptoms at baseline).
- *Appearance of symptoms.* A small number of the women who had no significant symptoms in the 30 days prior to the initial interview did experience these kinds of symptoms in the 30 days prior to the follow-up interview (n=13 or 34.2% of the 38 without symptoms at baseline).

Level of Mental Health Functioning at Follow-Up

Given that pre-post changes were not apparent in either the number of mental health symptoms or the number of different symptoms, it was important to examine women's level of mental health functioning and self-care at follow-up. Women in recovery may still experience mental health symptoms related to their life situation, prior traumatic experiences, prior drug use, and/or underlying mental health problems. For women who continue to use drugs, some mental health symptoms may be associated with this continued use. Women's ability to become or remain alcohol and drug free, to participate in treatment, and to function in the community may be greatly enhanced by participation in mental health treatment that addresses any symptoms they may be experiencing. Women's experiences of mental health symptoms and engagement in mental health treatment at follow-up can be described using the following levels of functioning:

Level 1 functioning is defined as having no significant mental health symptoms in the 30 days prior to the interview, with or without treatment. There is no suggestion that all women could function at this level. For example, some women with severe and persistent mental health problems may achieve only limited symptom management through treatment.

Level 2 functioning is defined as having a significant period of relatively mild symptoms in the 30 days prior to the interview, and having recent treatment for these symptoms. Included in this level of functioning are women who experienced at least five consecutive days of depression, anxiety, disturbances in sleeping and eating, and/or trouble understanding or concentrating. These symptoms could be the result of previous mental health problems, the stress of functioning without substance use, the stress of resuming parenting responsibilities, and/or other past and present life events. Participating in mental health treatment (outpatient therapy and/or psychiatric medication in the last 30 days) is an appropriate way to manage the problems and is an indicator of good self-care.

Level 3 functioning is defined as having a significant period of the relatively mild symptoms described in Level 2, without receiving recent treatment for these symptoms. The woman may have other self-care strategies, but none are documented by the ASI.

³⁰ N=86, with 4 women missing data on experiencing five days or more of the mild mental health symptoms or any of the more severe mental health symptoms at either the initial or follow-up interview.

Level 4 functioning is defined as having any of the relatively severe mental health symptoms in the 30 days prior to the interview, and having received treatment for these symptoms. Included in this level of functioning are women who reported any incidents of hallucinations, trouble controlling violent behavior, suicidal ideation, or suicide attempts. These symptoms are much more serious than the more mild symptoms in Levels 2 and 3. Participating in mental health treatment (outpatient therapy and/or psychiatric medication) is an appropriate way to manage these symptoms and indicates appropriate self-care.

Level 5 functioning is defined as having the relatively severe mental health symptoms described in Level 4, without having recent treatment for these symptoms. Given the severity of these symptoms, failure to engage in treatment is likely to contribute to poor symptom management and indicates a lack of appropriate self-care.

Table 10 describes women's level of functioning at follow-up with respect to mental health and self-care.

Table 10: Levels of Mental Health Functioning at Follow-Up

Levels	N	%	Cumulative %
Level 1: No significant mental health symptoms.	39	44.3%	44.3%
Level 2: Significant, but not severe mental health symptoms with recent treatment.	33	37.5%	81.8%
Level 3: Significant, but not severe mental health symptoms with no recent treatment.	5	5.7%	87.5%
Level 4: Significant and severe mental health symptoms with recent treatment.	11	12.5%	100.0%
Level 5: Significant and severe mental health symptoms with no recent treatment.	0	0.0%	100.0%

N=88, with 2 women missing data on mental health symptoms at the time of the follow-up interviews.

As Table 10 shows, approximately 45% of the women (n=39 or 44.3%) experienced no significant or severe mental health symptoms in the 30 days prior to the follow-up interview. (It should be noted that 19 of these 39 women were successfully managing their mental health with the assistance of psychiatric medication and/or outpatient mental health treatment.)

Approximately 55% of the women (n=49 or 55.7%) did experience significant mild symptoms or any severe symptoms during the 30 days prior to the follow-up interview. Virtually all of the women who were experiencing symptoms at follow-up (n=44 of the 49) were receiving outpatient mental health treatment and/or psychiatric medication in the 30 days prior to the interview, indicating appropriate self-care.³¹

Symptom Picture at Follow-Up

Clearly, some women continued to experience significant mental health symptoms approximately 12 months after their admission to the HIR program (even though most were engaged in mental health treatment). Table 11 provides detailed information about the types of symptoms that women reported experiencing in the 30 days prior to the follow-up interview.

³¹ One woman who was experiencing symptoms had an inpatient psychiatric hospitalization in addition to taking psychiatric medication in the 30 days prior to the follow-up interview.

Table 11: Mental Health Symptoms Experienced at Follow-Up

Mental Health Symptom	HIR Participants at Follow-Up (N=90)	
	N	%
Mild Symptoms (5 consecutive days or more)*		
Anxiety, tension, or nervousness	31	34.4%
Serious problems with sleeping or eating	29	32.6%
Trouble understanding, concentrating, remembering	24	27.3%
Serious depression	24	26.7%
Severe Symptoms (any days)		
Thoughts of suicide	6	6.7%
Trouble controlling violent behavior	5	5.6%
Hallucinations	4	4.4%
Suicide attempt	1	1.1%

*N=89 for sleeping/eating and N=88 for trouble understanding, with 1 woman and 2 women missing data respectively.

As Table 11 shows, at follow-up each of the relatively mild symptoms was experienced for five consecutive days or more by about 30% of the women. Only a small number of women experienced each of the severe symptoms; however, the types of symptoms experienced (e.g., suicidal thoughts, suicide attempt) were severe.

Parenting Attitudes

Women in substance abuse treatment are often motivated towards recovery by their relationship with their children and their role as a mother (Center for Substance Abuse Treatment, 2009). However, women with substantial histories of drug or alcohol use often experience difficulties in parenting, at times including child abuse or neglect (Camp & Finkelstein, 1997). In addition, children whose mothers have substance use disorders are at increased risk for social-emotional, physical, and academic problems (Center for Substance Abuse Treatment, 2009; Rinehart et al., 2005). To address these challenges, the HIR program provided clinical and case management support for women in their roles as mothers. In addition, the program offered the Nurturing Program for Families in Substance Abuse Treatment and Recovery (NPFSTR), an evidence-based parenting group designed specifically for women in treatment (Camp & Finkelstein, 1997).

To explore parenting attitudes among women participating in the HIR program, the initial and follow-up interviews included the Adult-Adolescent Parenting Inventory (AAPI-2; Bavolek & Keene, 2001).³² The AAPI-2 is a 40-item measure designed to assess parenting attitudes and to provide an index of possible risk for child abuse and neglect. It is the standard pre-post measure for the Nurturing Program and for its adaptation for families in substance abuse treatment (i.e., NPFSTR).

The AAPI-2 provides a Total Score and five subscale scores: 1) inappropriate parental expectations of children, 2) parental lack of empathy of children's needs, 3) strong belief in the use of corporal punishment, 4) reversing parent-child family roles, and 5) oppressing children's power and independence. High scores are indicative of appropriate, nurturing parenting attitudes, while low scores are indicative of inappropriate attitudes that may contribute to the potential for child abuse or neglect.

³² All of the evaluation questions, including the AAPI-2, were administered as oral interviews to avoid any concerns about women's literacy levels. Following conventional practice, Form A of the AAPI-2 was used during the initial interview as a pre-test and Form B was used during the 12 month follow-up interview as a post-test.

In the area of parenting attitudes, the analysis for the present report examined: 1) the women's parenting attitudes as a treatment challenge (using AAPI-2 standard scores at the initial interview), 2) pre-post changes that occurred in women's Total Scores and in their mean scores on each AAPI-2 subscale (using AAPI-2 raw scores), and 3) women's level of functioning at follow-up with respect to risk for child abuse or neglect (using AAPI-2 standard scores).³³

A total of 74 women completed an AAPI-2 at both the initial interview and the 12 month follow-up interview.³⁴ It must be noted that women who had a GED or high school diploma generally had significantly more positive scores on the AAPI-2 at both the initial interview and the follow-up interview.³⁵ As a result, all findings related to parenting attitudes must be evaluated in the context of the relationship between AAPI-2 scores and education.

Parenting Attitudes as a Treatment Challenge

At the time of the initial interview, many of the women reported parenting attitudes on the AAPI-2 that indicated inappropriate parenting and suggested a possible risk for child abuse or neglect. Approximately 85% of the women (n=62 or 83.8%) had a low score on at least one of the five subscales (i.e., a standard score of 3 or below on one or more subscales, consistent with a possible risk for abuse or neglect). Approximately half of the women (n=38 or 51.4%) scored low on more than one of the five subscales. Specifically:

- 24.3% (n=18) of the women scored low on Inappropriate Expectations, indicating a general lack of understanding of children's developmental capabilities.
- 55.4% (n=41) of the women scored low on Lack of Empathy, indicating a limited awareness of children's needs.
- 27.0% (n=20) of the women scored low on Physical Punishment, indicating a reliance on physical punishment as a form of discipline.
- 31.3% (n=23) of the women scored low on Role Reversal, indicating a tendency to look to children for emotional and physical comfort.
- 50.0% (n=37) of the women scored low on Power and Independence, indicating a strong emphasis on obedience and parental authority.

The results suggest that at the time of the initial interview, inappropriate parenting attitudes were a treatment challenge for women, particularly in the areas of Lack of Empathy and Power and Independence.

³³ For research purposes, the authors of the AAPI-2 recommend using raw scores, i.e. summing the item scores for each subscale (Bavolek & Keene, 2001). For clinical and interpretation purposes, the authors recommend using standard or sten scores, i.e. converting the scores for each subscale into normalized scores. The standard scores are calculated in relation to one of the AAPI-2's norm groups (i.e., for the purposes of the present report, female adult parents without parent training). Standard scores range from 1 (highly inappropriate parenting attitudes) to 10 (exceptionally appropriate parenting attitudes). Standard scores of 3 or below are considered "low", are obtained by only about 16% of the general population, and suggest a potential risk for abuse or neglect (Bavolek & Keene, 2001).

³⁴ N=74 for all AAPI-2 analyses. There were 16 women who were missing AAPI-2 data at either the initial or the follow-up interview and were excluded from the analyses. These 16 women primarily included women who had no children, but also included several women who had substantial problems with comprehension during the interview.

³⁵ At the initial interview, women who had a GED/high school diploma scored significantly higher (i.e., better) than women who had less education on both the AAPI-2 Total Score and on two of the subscales (Role Reversal and Inappropriate Expectations). Similarly, at the 12 month interview, women who had a GED/high school diploma scored significantly higher than women who did not on the same subscales (Role Reversal and Inappropriate Expectations). However, at follow-up there were no significant differences related to education on the Total Score. In a conflicting finding, those with a GED/high school diploma actually scored lower (more poorly) than those who did not on the Power and Independence subscale at follow-up.

Pre-Post Change in Parenting Attitudes

Paired t-tests were run to compare parenting attitudes at the time of the initial interview and at the time of the 12 month follow-up interview. The t-tests were conducted for raw score means on the AAPI-2 Total Score and on each subscale, including: 1) Inappropriate Expectations, 2) Lack of Empathy, 3) Physical Punishment, 4) Role Reversal, and 5) Power and Independence. Table 12 lists the results of these tests.

Table 12: Pre-Post Means and Paired T-Tests for AAPI-2 Total Scores and Subscale Scores

AAPI-2 Score	At Initial Interview	At 12 Month Interview	t Value	p Value
AAPI-2 Total Score	136.14	132.57	2.41	.018*
Inappropriate Expectations	19.49	19.81	0.75	.457
Lack of Empathy	36.66	37.36	1.46	.148
Physical Punishment	37.81	37.59	0.31	.755
Role Reversal	24.59	23.36	3.13	.003*
Power and Independence	17.58	14.44	6.42	.000*

N=74. At either the initial or the follow-up interview, 16 women were missing data on the AAPI-2 and were therefore excluded from the analyses.

High scores on the AAPI-2 are indicative of appropriate parenting attitudes; low scores are indicative of inappropriate attitudes.

The p value refers to the level of statistical significance of the t value from the paired samples t-test. P-values of less than 0.05 are considered statistically significant and are marked with an asterisk (*).

There was a statistically significant pre-post decrease in the overall AAPI-2 Total Score, indicating a deterioration in parenting attitudes over time. In addition, there were statistically significant pre-post decreases in the subscale scores for Role Reversal and Power and Independence, again indicating a deterioration in these areas. There were no significant pre-post differences in the scores for the subscales related to Inappropriate Expectations, Lack of Empathy, and Physical Punishment.

Exploratory analyses were conducted to examine whether women's level of participation in the HIR program's parenting services was related to parenting attitudes at follow-up. For example, analyses were conducted to explore the possible influence of participation in the Nurturing Program for Families in Substance Abuse Treatment and Recovery (e.g., amount of participation, participation before and after enrollment in the HIR program) and/or in in-home parenting services. The results of these exploratory analyses followed a similar pattern to those suggested by the pre-post AAPI-2 findings for all women; i.e., based on the raw score means, the AAPI-2 scores at the 12 month follow-up were generally unchanged or lower (worse) than those at the time of the initial interview regardless of the extent to which women received parenting services.

Parenting Attitudes at Follow-Up

At the time of the 12 month follow-up, approximately three-quarters of the women who completed an AAPI (n=57 or 77.0%) had minor children and the remainder (n=17 or 23.0%) had only adult children. In addition, approximately 60% of the women (n=43 or 58.1%) had their minor children living with them. This represented a slight increase from the time of the initial interview, when approximately half of the women (n=36 or 48.6%) resided with their minor children.³⁶

³⁶ Approximately half of the women who did not have any of their minor children residing with them at the time of the initial interview were residing with at least one of those children at the follow-up interview (n=10 or 45.5% of the 22 women who did not have their children with them at baseline). However, several of the women (n=3) who were residing with at least one minor child at the time of the initial interview were no longer residing with children at the follow-up interview.

As a result, the analysis utilized the AAPI-2 data to examine the level of possible risk for child abuse or neglect at follow-up combined with information on whether the mother was living with her children. Using AAPI-2 standard scores to benchmark the HIR women's scores in relation to the AAPI-2 norm groups, the number of subscales with low scores was identified.³⁷ The extent to which women's parenting attitudes indicate possible risk for child abuse or neglect can be described using the following levels of functioning:

Level 1 is the targeted level of functioning, i.e., women whose parenting attitudes do not appear to place their children at risk for child abuse or neglect and who have one or more of their children living with them. Women at this level of functioning have no low scores on any of the five AAPI-2 subscales, i.e. no indications that their parenting attitudes place their children at possible risk for child abuse or neglect. In addition, they are living with one or more of their children. Women functioning at Level 1 hold parenting attitudes that are reflective of the attitudes of the general population, while caring for their children.

Level 2 is defined as women having parenting attitudes that do not appear to place children at risk for child abuse or neglect, while not having their children living with them. Women at this level of functioning have no low scores on any of the five AAPI-2 subscales, i.e. no indications that their parenting attitudes place their children at possible risk for child abuse or neglect. However, they do not have any of their children living with them. Their parenting attitudes may be important for children who do not live with them, including visiting children, adult children, and visiting grandchildren. In addition, for some women, demonstrating appropriate parenting attitudes may be helpful in furthering the process of their children being returned to their care.

Level 3 is defined as women having one area of parenting that indicates a possible risk for child abuse or neglect, while not having their children living with them. Women at this level of functioning have a low score on one of the five AAPI-2 subscales, i.e. an indication that, in one area, their attitudes may represent a risk for child abuse or neglect. Women who are functioning at Level 3 might be expected to benefit from continued parenting classes or interventions that target the specific area in which they appear to have more inappropriate attitudes.³⁸

Level 4 is defined as women having one area of parenting that indicates a possible risk for child abuse or neglect (i.e. a low score on one of the five AAPI-2 subscales), with one or more of their children living with them. Women who are functioning at this level, and their children, may benefit from additional intervention and support.

Level 5 is defined as women having more than one area of parenting that indicates a possible risk for child abuse or neglect, while not having their children living with them. Women at this level of functioning have a low score on more than one of the five AAPI-2 subscales, i.e. indications that, in more than one area, their attitudes may represent a risk for child abuse or neglect. Women who are functioning at Level 4 may be in continued need of substantial parenting interventions that address a number of parenting areas.

Level 6 represents the most undesirable situation. Children are residing with a mother who has more than one area of parenting that indicates a possible risk for child abuse or neglect (i.e., a low score on more than one of the five AAPI-2 subscales). While the parenting attitudes measured by the AAPI-2 are only one indirect indicator of risk, it is possible that families at this level may be in need of intervention, monitoring, and/or support.

³⁷ For clinical and interpretation purposes, the AAPI-2 authors recommend using standard or sten scores. Standard scores of 3 or below are considered "low", are obtained by only about 16% of the general population, and suggest a potential risk for abuse or neglect (Bavolek & Keene, 2001).

³⁸ For this population, it is quite possible that one low score on the AAPI-2 represents a measurement error. A subsequent administration of the measure (or another parenting measure) may not yield the same results. The present findings suggested that AAPI-2 scores were related to education, with lower scores more likely among women who did not have a GED or high school diploma. As a result, given that approximately one-third of the women did not have a GED or high school diploma, there may be more measurement error in this population.

Table 13 describes the level of functioning at follow-up with respect to parenting attitudes that indicate a possible risk for child abuse or neglect.

Table 13: Levels of Parenting Risk

Levels	N	%	Cumulative %
Level 1: No areas of high-risk parenting attitudes and children living in the home.	4	5.4%	5.4%
Level 2: No areas of high-risk parenting attitudes, without children living in the home.	5	6.8%	12.2%
Level 3: One area of high-risk parenting attitudes, without children living in the home.	6	8.1%	20.3%
Level 4: One area of high-risk parenting attitudes and children living in the home.	12	16.2%	36.5%
Level 5: More than one area of high-risk parenting attitudes, without children living in the home.	20	27.0%	63.5%
Level 6: More than one area of high-risk parenting attitudes and children living in the home.	27	36.5%	100.0%

N=74. At either the initial or the follow-up interview, 16 women were missing data on the AAPI-2 and were therefore excluded from the analyses.

As Table 13 shows, only a small number of women (n=4 or 5.4%) were caring for their children while having no areas of high-risk parenting attitudes at follow-up. Overall, approximately 10% of the women (n=9 or 12.2%) had no low scores on any of the AAPI-2 subscales. These women held parenting attitudes reflective of those held by the general population, benefiting children living with them, visiting children, or adult children and grandchildren.

However, almost two-thirds of the women (n=47 or 63.5%) had low scores on two or more of the AAPI-2 subscales, potentially suggesting a risk for child abuse or neglect. Some of these women (n=20 of the 47) were not caring for their children at the time of the follow-up interview, including some who had only adult children (n=12 of the 20).

However, approximately one-third of the women who completed an AAPI-2 at follow-up (n=27 or 36.5%) reported parenting attitudes that suggested a possible risk for child abuse or neglect and also had one or more of their minor children residing with them. While the parenting attitudes measured by the AAPI-2 are only one indirect indicator of risk, it is possible that these families were at risk in a number of areas. Particular areas of concern were apparent in two subscale scores. Specifically, virtually all of the women functioning at this level scored low on the Power and Independence subscale (26 of 27) and on the Lack of Empathy subscale (25 of 27). Based on this data, it is likely that these mothers may have strong expectations for children's obedience and a limited awareness of their children's needs.

High-Risk Parenting Attitudes at Follow-Up

Approximately three-quarters of the HIR women who completed an AAPI-2 at the initial and follow-up interviews had participated in some form of parenting intervention (n=57 or 77.0%). Specifically, slightly more than half of the women (n=42 or 56.8%) participated in the Nurturing Program for Families in Substance Abuse Treatment and Recovery while enrolled in the HIR program, and almost two-thirds (n=48 or 64.9%) received in-home parenting services from the program.³⁹ While some of the women (n=28 or 37.8%) received either no parenting services while in the program or a relatively limited amount (i.e., five or fewer total sessions), others received a fairly substantial amount of parenting services. Specifically, for those who participated in parenting services while in the program, the mean number of

³⁹ In addition, approximately 70% of the women (n=53 or 71.6%) had participated in NPFSATR prior to entering the HIR program. As a result, approximately 80% of the women (n=63 or 81.8%) had received at least one type of parenting service (i.e., NPFSATR before and/or after entering the HIR program and/or in-home parenting after entering the program).

sessions was 20.6 and the median was 19.0 (considering sessions of both NPFSATR and in-home parenting).

However, based on their AAPI-2 scores at follow-up, the parenting attitudes reported by many of the women continued to fall into a category that can be associated with a possible risk for child abuse or neglect. Table 14 provides information about the number of women who scored low on each AAPI-2 subscale at the time of the follow-up interview.

Table 14: Women with Low AAPI-2 Subscale Scores at Follow-Up

AAPI-2 Subscale Score	Low Scores at Follow-Up (N=74)	
	N	%
Inappropriate Expectations	20	27.0%
Lack of Empathy	43	58.1%
Physical Punishment	23	31.1%
Role Reversal	22	29.7%
Power and Independence	53	71.6%

^a“Low” score = standard score of 3 or below in relation to AAPI-2 norm group.

As Table 14 shows, at follow-up approximately 70% of the women (n=53 or 71.6%) scored low on the Power and Independence subscale, indicating that they may place a strong emphasis on obedience and parental authority. In addition, approximately 60% of the women (n=43 or 58.1%) scored low on the Lack of Empathy subscale, suggesting that they may have a limited ability to take their children’s perspectives and/or a limited awareness of their children’s needs. Approximately 30% of the women scored low on each of the three other AAPI-2 subscales (Inappropriate Expectations, Physical Punishment, and Role Reversal).

The AAPI-2 is only one indicator of parenting attitudes, and may or may not be reflective of women’s overall attitudes, behavior, or risk for child abuse or neglect. However, based on this measure alone, it appears that a fair number of women may need additional and/or targeted parenting interventions even after participation in parenting services provided by previous treatments and by the HIR program.

Economic Self-Sufficiency

Women in substance abuse treatment often have substantial barriers to obtaining employment, including limited education, minimal work experience, and employment disruptions due to their use histories (Center for Substance Abuse Treatment, 2009). Lack of employment limits the extent to which women can achieve economic self-sufficiency for themselves and their families.

In the area of economic self-sufficiency, the analysis of the HIR data examined: 1) the women’s income and employability as a treatment challenge, 2) pre-post changes that occurred in women’s overall income and income from employment, and 3) women’s level of functioning with respect to economic self-sufficiency at follow-up.

Income and Employability as Treatment Challenges

Women’s educational status and previous work history may influence their ability to attain economic self-sufficiency. Despite their extensive substance use histories, approximately 70% of the women entering the HIR program (n=64 or 71.1%) had one or more of the following accomplishments that might help them on the road to future employment:⁴⁰

- A GED or high school diploma (n=55 or 61.1%);⁴¹
- A full-time job at some time in their lives for five years or more (n=28 or 31.1%);⁴²

⁴⁰ N=90.

⁴¹ N=90.

- A usual occupation that was a skilled manual job or better (n=23 or 25.6%);⁴³ and/or
- A completed training or technical education course of at least 1 year duration (n=2 or 2.2%).⁴⁴

Although the data suggested that many of the women had at least one accomplishment that might support employability, few women had a positive employment status at the time of their admission to the program. Specifically:

- Most of the women (n=73 or 81.1%) had no regular employment at the time of the initial interview. The small number of women who did have a job (n=17) were generally employed only part time (n=12 of 17).
- Approximately one-quarter of the women (n=21 or 23.6%) did earn some money from employment in the full 30 days prior to the initial interview (although not necessarily from a stable full time or part time job).⁴⁵ Almost all of these women (19 of 21) earned less than \$1,000 from employment during that month and almost half (9 of 21) earned less than \$500.

Despite their lack of employment income, almost all of the women (n=85 or 96.6%) did have some source of income in the month prior to admission (including money from public assistance, friends and family, employment, etc.).^{46,47} However, their total monthly income was limited. Specifically:

- In the 30 days prior to the initial interview, women's mean total monthly income from all sources was \$704.39, which could provide an annual income of only about \$8,500.⁴⁸
- Half of the women (n=44 or 50.0%) received less than \$750 during the month prior to the initial interview, while three-quarters of the women (n=68 or 77.3%) received less than \$1,000 during that month.⁴⁹

In the month prior to their admission, some type of public assistance was the most common source of program participants' income. Specifically:

- Almost 80% of the women (n=71 or 79.8%) received at least part of their income from W-2 and/or food stamps.⁵⁰
- Approximately 15% (n=15 or 16.9%) received some money from Social Security Disability (SSDI) or Supplemental Security Income (SSI).⁵¹

Very few women received money from other sources in the month prior to admission, including sources such as family/friends (n=4 or 4.5%) or child support (only two of the 36 women caring for minor children at the time of admission received money from child support).⁵²

Pre-Post Change in Economic Self-Sufficiency

Paired t-tests were run to compare indicators of economic self-sufficiency during the 30 days prior to the initial interview and prior to the 12 month interview. The t-tests were conducted for: 1) women's total income and 2) earnings received from employment. Table 15 lists the results of these statistical tests.

⁴² N=90.

⁴³ N=90.

⁴⁴ N=89, with 1 woman missing data on length of training/technical education; data was available for other employability indicators, so she was included in the employability analysis.

⁴⁵ N=89, with 1 woman missing data on wages at the initial interview.

⁴⁶ N=88, with 2 women missing data on total income at the initial interview.

⁴⁷ To be eligible for Meta House's transitional living apartments, women were required to have some source of income to serve as a contribution to rent. This requirement may have contributed to the proportion of women who had a source of income at program entry.

⁴⁸ N=88, with 2 women missing data on total income at the initial interview.

⁴⁹ N=88, with 2 women missing data on total income at the initial interview.

⁵⁰ N=89, with 1 woman missing data on money from public assistance at the initial interview.

⁵¹ N=89, with 1 woman missing data on disability income at the initial interview.

⁵² N=88 for money from family/friends at the initial interview, with 2 women missing data. N=36 for child support received by women caring for minor children at the initial interview.

Table 15: Pre-Post Means and Paired T-Tests for Income and Employment Earnings

Self Sufficiency Indicators	In the 30 Days Prior to Treatment	In the 30 Days Prior to 12 Month Interview	t Value	p Value
Monthly income	\$708.00	\$895.47	2.46	.016*
Dollars earned from employment	\$134.62	\$250.44	1.64	.105

N=86 for average income, with 4 women missing data at either the initial or the follow-up interview.

N=89 for average wages, with 1 woman missing data at either the initial or the follow-up interview.

The *p* value refers to the level of statistical significance of the *t* value from the paired samples *t*-test. *P*-values of less than 0.05 are considered statistically significant and are marked with an asterisk (*).

As Table 15 indicates, there was a statistically significant increase in the total income women received during the month prior to the follow-up interview as compared to the month prior to the initial interview. However, the total monthly income women received from all sources remained very limited at follow-up. Specifically:

- In the 30 days prior to the follow-up interview, women’s mean total monthly income was \$895.47 which could provide an annual income of only about \$11,000.⁵³
- Half of the women (n=43 or 50.0%) received \$860 or less during the month prior to the follow-up interview, while approximately two-thirds of the women (n=55 or 64.0%) received less than \$1,000 during that month.⁵⁴
- Approximately 80% of the women (n=71 or 78.9%) received at least part of their income from W-2 and/or food stamps in the month prior to the follow-up interview.⁵⁵

Table 15 indicates that there was no significant difference between the amount of money earned from employment during the month prior to the follow-up interview as compared to the month prior to the initial interview. At follow-up, only 29.2% of the women (n=26) had earned income from employment in the 30 days prior to the interview.⁵⁶ For those who did have employment income the amount earned was generally low, with more than half of the women (n=17 of 26) earning less than \$1,000 in the month prior to the follow-up interview.

Case-Specific Pre-Post Patterns

A case-specific exploration of pre-post patterns regarding any income from employment suggests several different patterns, the most common of which was consistency in the lack of money from employment. Specific pre-post patterns included:⁵⁷

- *Consistent lack of wages.* Approximately 80% of the women who received no money from employment in the 30 days prior to the initial interview also had no wages in the 30 days prior to the follow-up interview (n=54 or 79.4% of the 68 with no wages at baseline). The unemployment pattern for these women was relatively consistent. However, 19 of these 54 women were receiving disability at the time of the follow-up interview and therefore considered unable to work.
- *Consistent wages.* Approximately 60% of the women who received money from employment in the 30 days prior to the initial interview also earned wages in the 30 days prior to the follow-up interview (n=12 or 57.1% of the 21 with wages at baseline). The employment pattern for these women could be considered relatively consistent.
- *Wages obtained by the time of follow-up.* Approximately 20% of the women who did not receive money from employment in the 30 days prior to the initial interview did have employment income by the time of the follow-up interview (n=14 or 20.6% of the 68 with no wages at baseline). The

⁵³ N=86, with four women missing data on total income.

⁵⁴ N=86, with four women missing data on total income.

⁵⁵ N=90.

⁵⁶ N=89, with one woman missing data on wages from employment.

⁵⁷ N=89, with one woman missing data on wages from employment.

employment status for these women appears to have improved between the time of the initial and the follow-up interview.

- *Wages lost by the time of follow-up.* Approximately 40% of the women who received money from employment in the 30 days prior to the initial interview received no wages in the 30 days prior to the follow-up interview (n=9 or 42.9% of the 21 with wages at baseline). The pre-post employment status for these women appears to have worsened. However, a closer examination of these nine women's status at follow-up indicates some (n=2 of 9) were full time students, one was now receiving disability, and one was now retired. The remaining women (n=5 of 9) were either looking for work, focusing on treatment, or on unpaid medical leave.

Level of Economic Self-Sufficiency at Follow-Up

The analysis also examined the current and potential level of economic self-sufficiency at follow-up. Women's future earnings and self-sufficiency are related both to their current employment status and to other activities that may contribute to improved employment. For example, working part time or being a student may lay the foundation for later advancements with respect to employment or wages. In contrast, women who are receiving Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI) have disabilities that may impact their potential for economic self-sufficiency. The following levels of self-sufficiency describe where women were at follow-up with respect to their potential for economic self-sufficiency.

Level 1, the most desirable level of functioning with respect to economic self-sufficiency, is defined as regular full time employment. The assumption is that women will be best able to support themselves and their families through full time employment.

Level 2 is defined as being employed part time with regular hours. Women who are functioning at this level have the opportunity to develop job skills and a resume that may lead to a full time position. In addition, they are presently providing some regular income for their families.

Level 3 is defined as being a full time student (without also being employed). Education leads to skills and credentials that may translate into a full time job in the future. However, women who are full time students are typically providing no income for their families.

Level 4 is defined as receiving SSI/SSDI with no employment or enrollment as a student. While the SSI/SSDI benefit is generally a reliable source of income, the amount is usually not sufficient to provide economic self-sufficiency for a woman and her family.

Level 5 is defined as having no regular employment and no SSI/SSDI. The woman and her family have no apparent stable source of income and there is no current activity that is likely to lead to economic self-sufficiency.

Table 16 describes the level of functioning at follow-up with respect to women's current and potential economic self-sufficiency.

Table 16: Levels of Economic Self-Sufficiency at Follow-Up

Levels	N	%	Cumulative %
Level 1: Full time employed.	12	13.3%	13.3%
Level 2: Part time employed (regular hours).	12	13.3%	26.7%
Level 3: Full time student.	3	3.3%	30.0%
Level 4: SSI/SSDI and no employment.	20	22.2%	52.2%
Level 5: No regular employment.	43	47.8%	100.0%

N= 90.

As Table 16 shows, approximately one-quarter of the women (n=24 or 26.7%) were either employed full time or part time with regular hours at follow-up (without receiving SSI/SSDI). It should be noted that 19 of the 24 women who were regularly employed also received public assistance during the month prior to the follow-up interview (food stamps and/or W-2).

Approximately 20% of the women (n=20 or 22.2%) were receiving either SSI or SSDI disability at the time of the follow-up interview. As a result, it would not be expected that they would be employed at follow-up.

Approximately half of the women (n=43 or 47.8%) described their employment pattern at follow-up as being unemployed, with no full time enrollment in education and no disability income. Most (n=35) of the 43 women who had no regular employment at follow-up were receiving public assistance in the form of food stamps and/or W-2 in the month prior to the interview.

Unemployment Status at Follow-Up

A more detailed exploration of the 43 women who were unemployed at the time of the follow-up interview suggests that:

- Some of the women (16, or 37.2% of the 43) were essentially unavailable to work during the 30 days prior to the follow-up interview. Specifically, 6 of these women were unavailable because they were in a controlled environment during that time. In addition, 10 were essentially unavailable because they were engaged in substance abuse treatment, mental health treatment, and/or medical treatment for more than half of the days of that month.⁵⁸
- Some of the women (17, or 39.5% of the 43) were available to work, but had additional responsibilities or activities that may have served as a focus during the 30 days prior to the follow-up interview. Specifically, 15 of these women were occupied with parenting minor children during that time and 3 were occupied with part time GED or college classes.⁵⁹
- However, some of the women (10, or 23.3% of the 43) appeared to be available to work based on the interview data. Specifically, they had no extensive treatment engagement and no apparent responsibilities that would preclude them from working. Many of these women reported at the time of the interview that they were actively seeking employment.⁶⁰

It should be noted that the total monthly income for the women who were unemployed at the time of the follow-up interview was not remarkably different than the total income for the women who were employed (either full time or part time). In addition, both groups had a very limited total income in the month prior to their follow-up interview. Specifically:⁶¹

- The median income for the women who were not employed (median = \$955.50) was actually higher than the median income for those who were employed (median = \$908.00).⁶²
- Approximately two-thirds of the unemployed women (n=28 or 66.7% of those unemployed) had a monthly income less than \$1,000, as compared to one-half of the employed women (n=12 or 50.0% of those employed).

⁵⁸ One of the 6 women in a controlled environment was also engaged in outpatient treatment for more than half of the 30 days prior to the follow-up interview.

⁵⁹ One of the 17 women was occupied with both parenting and school responsibilities.

⁶⁰ Although these 10 women were not heavily engaged in treatment or occupied with parenting or school responsibilities, they may have had other challenges that interfered with their ability to obtain employment. For example, 5 of these 10 women had used substances during the 30 days prior to the interview.

⁶¹ N=42 for unemployed women, with one woman missing data on total income. N=24 for employed women.

⁶² The mean income for women who were employed (mean = \$1,109.94) was higher than that for women who were unemployed (mean = \$736.45). However, this difference was primarily attributable to one employed woman who reported a substantial amount of wage income.

Housing Stability

Women in substance abuse treatment may have experienced homelessness or housing insecurity, and often need assistance finding drug-free housing (Center for Substance Abuse Treatment, 2009). The HIR program was developed to serve women and their children who were homeless or at risk of being homeless.

In the area of housing, the analysis of the HIR data examined: 1) the women's history of housing instability as a treatment challenge and 2) women's level of functioning with respect to maintaining stable housing at follow-up.⁶³

The analysis examined women's experience of housing instability over the course of their lifetime, recognizing that there are different degrees of unstable housing. For example, women who are homeless or at risk for homelessness may be able to stay rent-free with friends or family, or be able to temporarily rent a motel room. These represent resources that women use to remain housed, even if on a temporary basis. On the other hand, some women may not have the social or financial resources to provide them with even temporary housing. These women may instead turn to a homeless shelter for refuge. Alternatively, they may resort to sleeping in a car, an empty building, the streets or a park, a public place (such as a library, a bus station, an all night movie), or to staying in a drug house. Resorting to any of these temporary sleeping arrangements is an indicator of unstable housing.

Housing Instability as a Treatment Challenge

All of the women (n=90 or 100.0%) had experienced at least one form of unstable housing at some point in their lives.⁶⁴ Specifically, over the course of their lifetime:

- Most of the women (n=84 or 93.3%) had stayed rent-free with family or friends or had lived in a rented hotel or motel room.
- Most (n=87 or 96.7%) had stayed in residential treatment, transitional living, or an institution (e.g., jail) with no other place to live.
- Most of the women (n=82 or 91.1%) had slept at a shelter for the homeless, in a car, in an empty building, in the streets or a park, in a public place, or in a drug house.

In the month prior to entering treatment, the housing situation for virtually all of the women (n=87 or 96.7%) was unstable.⁶⁵ Specifically, for most of the month prior to the initial interview:

- 55.6% of the women (n=50) were living in a transitional living arrangement.
- 28.9% of the women (n=26) were living in residential treatment.
- 7.8% of the women (n=7) were living in someone else's apartment or home (with or without contributing to the rent).
- 4.4% of the women (n=4) were living in an institution (e.g., in jail, hospitalized, etc.) or in a shelter.
- Only 3.3% of the women (n=3) were living in their own apartment or home.

Securing Stable Housing at Follow-Up

Recognizing the women's history of housing instability, the analysis examined the extent to which women secured stable housing at follow-up. Women's progress towards independent, stable housing can be described in terms of their current living situation as well as whether or not they have recently had to resort to any of the types of sleeping arrangements that indicate homelessness or risk of homelessness. Women's housing stability can be described using the following levels of functioning:

⁶³ The interview did not include housing-related questions that would support a pre-post analysis.

⁶⁴ N=90 for all data on lifetime indicators of housing instability.

⁶⁵ N=90 for all data on housing situation prior to the initial interview.

Level 1 is defined as having lived most of the last 30 days in one's own apartment, room, or house, without having to resort to any of the types of sleeping arrangements that are indicative of an unstable living arrangement. Women at this level may be living alone or with children, significant others, and/or family members. This is the most desirable level of functioning.

Level 2 is defined as having lived most of the last 30 days in someone else's apartment, room, or house. This means that the woman was contributing some portion of the rent and was not just taken in for temporary overnight shelter. Also during this time, the woman did not have to resort to any of the types of sleeping arrangements that are indicative of an unstable living arrangement. At this level of functioning, the woman has a stable living arrangement for most of the last 30 days.

Level 3 is defined as having lived most of the last 30 days in a transitional living setting without having to resort to any of the types of sleeping arrangements that are indicative of an unstable living arrangement. Typically, transitional housing in Milwaukee is not short-term, so there is some expectation of continued housing stability.

Level 4 is defined as having lived most of the last 30 days in residential treatment or in an institution (e.g., jail), without having to resort to any of the other types of sleeping arrangements that are indicative of further instability in living arrangements. Residential treatment in Milwaukee typically involves stays of several months at most, so there is no expectation of continued stability in the same setting.

Level 5 is defined as having lived most of the last 30 days in a shelter, on the street, or in an unstable living arrangement (e.g., in someone else's house without paying rent).

Table 17 describes the level of functioning at follow-up with respect to the stability of women's housing situation.

Table 17: Levels of Housing Stability at Follow-Up

Levels	N	%	Cumulative %
Level 1: Own apartment, room, or house.	16	17.8%	17.8%
Level 2: Someone else's apartment, room, or house while contributing to rent.	2	2.2%	20.0%
Level 3: Transitional living.	60	66.7%	86.7%
Level 4: Residential treatment facility or institution.	3	3.3%	90.0%
Level 5: Shelter, street, or indication of unstable living arrangement.	9	10.0%	100.0%

N=90.

As Table 17 shows, approximately two-thirds of the women (n=60 or 66.7%) lived in a transitional living setting most of the 30 days prior to the follow-up interview. Many of the women in transitional living (n=41 of 60) were residing in one of Meta House's transitional living apartments, which are designed to serve as long-term housing arrangements for women and their families. Some were living in one of the program's community partner's long-term transitional arrangements (n=15 of 60). As a result, most of the women housed in transitional living in the month prior to the follow-up interview experienced continuity in their housing over time. However, all of these women will eventually have to secure more permanent living arrangements.

Only 20% of the women (n=18 or 20.0%) had spent most of the 30 days prior to the follow-up interview living in their own or someone else's apartment, room, or house (while contributing to some portion of the rent). In addition, these women had not needed to resort to any of the types of sleeping arrangements that are indicative of unstable living arrangements.

There were a small number of women (n=9 or 10.0%) who had an unstable living arrangement most of the month prior to the follow-up interview. Most of these women (n=6 of the 9) were staying in someone else's home (or several people's homes) without paying rent and with no place else to stay. However, a small number (n=3 of the 9) had spent most of the 30 days prior to the interview in a shelter (including one woman who had also stayed overnight on the streets) and could be considered homeless.

Housing Status for Those Discharged at Follow-Up

At the time of the 12 month follow-up interview, approximately 55% of the women (n=51 or 56.7%) were still engaged in the HIR program. Women were not required to remain in their transitional living site to remain engaged in the program. However, most of those who were still in the HIR program also still resided in a transitional living setting in the 30 days prior to the follow-up interview (n=48 of the 51 still in the program). Those who were still in transitional living primarily continued to reside at one of Meta House's transitional living sites (n=40 of 48).

There were approximately 45% of the women (n=39 or 43.3%) who had been discharged from the HIR program at the time of the 12 month follow-up interview. Theoretically, women who had been discharged could continue to live in a transitional living facility (e.g., because they had continued need of housing, but did not choose to / need to participate in active treatment or were only participating in aftercare services). However, the general expectation was that women would move into a stable housing situation when they were discharged from the program.

Table 18 presents the level of functioning at follow-up with respect to housing stability for the 39 women who had been discharged from the HIR program at the time of their 12 month follow-up interview.

Table 18: Levels of Housing Stability at Follow-Up for Women Discharged from HIR

Levels	N	%	Cumulative %
Level 1: Own apartment, room, or house.	15	38.5%	38.5%
Level 2: Someone else's apartment, room, or house while contributing to rent.	1	2.6%	41.0%
Level 3: Transitional living.	12	30.8%	71.8%
Level 4: Residential treatment facility or institution.	3	7.7%	79.5%
Level 5: Shelter, street, or indication of unstable living arrangement.	8	20.5%	100.0%

N=39.

As Table 18 shows, approximately 40% of the discharged women (n=16 or 41.1%) had spent most of the 30 days prior to the follow-up interview living in their own or someone else's apartment, room, or house (while contributing to some portion of the rent). However, approximately 30% of the women were still living in a transitional living arrangement (n=12 or 30.8%), primarily at one of the housing sites that provided long-term, indefinite housing (i.e., Saint Catherine's Residence for Women). There were approximately 20% of the discharged women (n=8 or 20.5%) who had experienced unstable housing for most of the month prior to the follow-up interview (e.g., including someone else's house without paying rent and/or a shelter).

It must be noted that those who were still engaged in the program at the time of the 12 month interview (n=51) may or may not follow a similar pattern of housing stability when they eventually discharge from treatment. It is possible that those who remain in treatment for a longer period of time may have a greater likelihood of obtaining stable housing upon discharge.

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Appendix A:

Representativeness of Women Followed Up at
12 Months

Appendix A: Representativeness of Women Followed Up at 12 Months

The 137 women who were eligible for a follow-up interview and the 90 women who completed the follow-up were compared with respect to: 1) demographics, 2) housing arrangement, 3) length of stay in treatment, and 4) discharge status.

Demographics

Table 19 compares the demographic information for all 137 women who were eligible for a follow-up interview during the data collection period to the demographic information for the 90 women who did complete a 12 month interview.

Table 19: Demographic Comparisons between Women Eligible for and Women who Completed a 12 Month Follow-up Interview

Demographic Characteristics	Women Eligible for a 12 Month Interview (N=137)		Women who Completed a 12 Month Interview (N=90)	
	N	%	N	%
Race/Ethnicity				
African American/Black	80	58.4%	59	65.6%
Caucasian/White	46	33.6%	23	25.6%
Latina/Hispanic	7	5.1%	5	5.6%
Multiracial	4	2.9%	3	3.3%
Age at Admission				
19 years and younger	0	0.0%	0	0.0%
20 to 24 years	8	5.8%	2	2.2%
25 to 29 years	23	16.8%	12	13.3%
30 to 34 years	10	7.3%	4	4.4%
35 to 39 years	23	16.8%	13	14.4%
40 to 44 years	32	23.4%	26	28.9%
45 to 49 years	22	16.1%	20	22.2%
50 years and over	19	13.9%	13	14.4%
Age statistics (in years)	Mean=39.30 Median=40.00	Range=20-66 SD=9.55	Mean=41.30 Median=42.00	Range=20-66 SD=9.04
Education at Admission				
8th grade or less	7	5.1%	2	2.2%
9th to 11th grade	44	32.1%	33	36.7%
High school diploma /GED	44	32.1%	27	30.0%
Some college or voc/tech	35	25.5%	23	25.6%
College degree	7	5.1%	5	5.6%
Family Status at Admission				
Mothers and/or pregnant	117	85.4%	80	88.9%
Number of children (for those who were mothers)	Mean=3.12 Median=3.00	Range=1-9 SD=1.86	Mean=3.24 Median=3.00	Range=1-9 SD=1.77
Pregnant	6	4.4%	2	2.2%

Representativeness

As Table 19 shows, with respect to demographic characteristics, the women who completed 12 month interviews were reasonably similar to the women whose follow-up window opened during the data collection period. However, there were minor trends towards differences between the two groups with respect to race/ethnicity and age. Specifically, there was a slight trend for more of the women who completed a 12 month interview to describe themselves as Black/African American and to be older as compared to the women who were eligible for a follow-up interview.

Description of Women Followed Up

Two-thirds of the women who completed a 12 month interview (n=59 or 65.6%) were between the ages of 35 and 49, with a mean age of 41.3 and a median age of 42.0. Approximately two-thirds of the women (n=59 or 65.6%) described their ethnicity as Black or African American and approximately one-quarter (n=23 or 25.6%) described themselves as White or Caucasian. Most of the women who were followed up were mothers and/or were pregnant when they were admitted to the program (n=80 or 88.9%). For those women who were mothers, the mean number of children they had given birth to was 3.24. Approximately 60% of the women (n=55 or 61.1%) had either graduated from high school or earned their GED certificate. However, almost 40% (n=35 or 38.9%) had not completed high school.

Housing Arrangement

Table 20 compares the housing arrangements at admission to the program for the 137 women who were eligible for a follow-up interview during the data collection period to the housing for the 90 women who actually completed a follow-up interview.

Table 20: Housing Arrangements for Women Eligible for and Women who Completed a 12 Month Follow-up Interview

Housing Arrangement	Women Eligible for a 12 Month Interview (N=137)		Women who Completed a 12 Month Interview (N=90)	
	N	%	N	%
Meta House, First Street	28	20.4%	28	31.1%
Meta House, Locust Street	29	21.2%	20	22.2%
Project H.E.A.T.	27	19.7%	18	20.0%
Saint Catherine's Residence for Women	25	18.2%	15	16.7%
Other (transitional living facilities, shelters, etc.)	28	20.4%	9	10.0%

Representativeness

As Table 20 shows, the women who completed a 12 month interview were more likely to have moved into Meta House's transitional living apartments than were women who were eligible for a follow-up interview. Specifically, approximately half of the women who completed a 12 month interview (n=48 or 53.3%) resided in Meta House's apartments as compared to approximately 40% (n=57 or 41.6%) of all women eligible for follow-up. In addition, the women interviewed at 12 months were less likely to have resided in "other" miscellaneous community partner housing than were the women eligible for a follow-up. Specifically, 10% of the women interviewed (n=9 or 10.0%) were housed in miscellaneous transitional living arrangements as compared to approximately 20% (n=28 or 20.4%) of all women eligible for follow-up.

Description of Women Followed Up

The 90 women who completed a follow-up interview generally moved into Meta House’s apartments (n=48 or 53.3%) or transitional living arrangements with one of the program’s two main housing partners (n=33 or 36.7%). Few of the women who were followed up (n=9 or 10.0%) resided in one of the miscellaneous housing partners’ transitional living facilities.

Length of Stay in Treatment

Women admitted to the HIR program were required to have demonstrated some success in addressing their substance use disorders in a prior treatment setting. Approximately three-quarters of the women eligible for a 12 month (n=101 or 73.7%) and of the women who completed a 12 month interview (n=71 or 78.9) were documented as having had treatment at Meta House prior to being admitted to the HIR program (primarily residential treatment).

Women who were eligible for a follow-up interview were compared to women who actually completed a follow-up interview with respect to their length of stay in treatment (including day treatment, outpatient services, and limited case management). Table 21 compares the length of stay for the 137 women who were eligible for a follow-up interview during the data collection period to the length of stay for the 90 women who actually completed a 12 month interview.

Table 21: Overall Length of Stay for Women Eligible for and Women who Completed a 12 Month Follow-up Interview

Length of Program Participation	Women Eligible for a 12 Month Interview (N=127)*		Women who Completed a 12 Month Interview (N=80)*	
	N	%	N	%
Less than 1 month	6	4.7%	1	1.3%
1 month to 2.99 months	21	16.5%	5	6.3%
3 months to 5.99 months	29	22.8%	18	22.5%
6 months to 8.99 months	22	17.3%	10	12.5%
9 months to 11.99 months	12	9.4%	11	13.8%
12 months to 17.99 months	16	12.6%	14	17.5%
18 months to 23.99 months	16	12.6%	16	20.0%
24 months or more	5	3.9%	5	6.3%
Length of stay statistics (in months)	Mean=9.24 Median=6.77	Range=0.39 - 31.27 SD=7.32	Mean=11.95 Median=10.97	Range=0.66 - 31.27 SD=7.65

*10 of the women who completed 12 month interviews had not yet been discharged from treatment by the end of the data collection period for length of stay (11/30/2011). These 10 women were also represented in the group of women eligible for a 12 month interview and were not included in the length of stay analysis.

Representativeness

As Table 21 shows, there were some differences between the groups with respect to length of stay in the program. Specifically, the mean and median length of stay for women who completed the 12 month interview were longer than those for the women eligible for a follow-up. Much of this difference may be attributable to the higher proportion of women who remained in treatment for 12 months or longer among those who completed a follow-up interview (n=35 or 43.8% of women who completed a follow-up remained for 12 months or longer; n=37 or 29.1% of women eligible remained for that period of time).

Description of Women Followed Up

A full continuum of care was available to the HIR women, including day treatment, outpatient treatment, and limited case management (i.e., case management services only, without continued counseling/therapy). Considering this full continuum of care, on average women who completed the follow-up interview had an overall length of stay of approximately one year (mean = 11.95 months; median = 10.97 months). Only 30% of the women interviewed at 12 months had stayed in treatment for less than six months (n=24 or 30.0%).

Program Discharge Status

Women were considered to have graduated if their counselors indicated that they had successfully completed the program or that they had completed with substantial improvement in some areas. Table 22 compares the graduation status for the 137 women who were eligible for a follow-up interview during the data collection period to the graduation status for the 90 women who actually completed a follow-up interview.

Table 22: Graduation Status for Women Eligible for and Women who Completed a 12 Month Follow-up Interview

Program Graduation Status	Women Eligible for a 12 Month Interview (N=127)		Women who Completed a 12 Month Interview (N=80)	
	N	%	N	%
Graduated	100	78.7%	72	90.0%
Did not graduate	27	21.3%	8	10.0%

*10 of the women who completed 12 month interviews had not yet been discharged from treatment by the end of the data collection period for graduation status (11/30/2011). These 10 women were also represented in the group of women eligible for a 12 month interview and were not included in the analysis.

Representativeness and Description of Women Followed Up

As Table 22 shows, women who completed a 12 month follow-up interview were somewhat more likely to have graduated from the program than women whose follow-up interview opened during the data collection period. Overall, 90% of the women who completed the follow-up interview (n=72 or 90.0%) were considered to have graduated from the program (i.e., successfully completed or completed with substantial improvement in some areas).⁶⁶

⁶⁶ It must be noted that the data collection period for length of stay and discharge status continued beyond the close of the grant and, for many women, past the time of their 12 month follow-up interview. Specifically, approximately 55% of the women (n=51 or 56.7%) were still engaged in the HIR program at the time of their 12 month follow-up interview. Length of stay and graduation status was determined for these women after their discharge from the program (i.e., sometime after their 12 month interview).

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1243 North 10th Street, Suite 200 Milwaukee, WI 53205-0243
(414) 224-0404 FAX (414) 224-0243
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