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Co-Located Supportive Services to Reduce Recidivism in Batterer Intervention

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PROJECT SUMMARY

Batterer Intervention Programming (BIP) is a widely used strategy to reduce Intimate Partner Violence. There is an estimate of over 2000 BIPs operating in the U.S., serving a predominantly court-mandated population through psychoeducational services to promote personal accountability and support behavioral change (Cannon et al., 2016; Murphy & Richards, 2022). Research summaries have found mixed evidence of program effectiveness, with most identifying only a small positive benefit in reducing re-offense (Babcock et al., 2024). Thus, there is a great need to develop and study promising new approaches to reduce reoffending among BIP participants in order to enhance the safety of victims and others affected by IPV. Our project investigated a currently under-utilized and under-studied strategy to reduce recidivism among IPV offenders by assessing and addressing common psychosocial problems associated with increased risk for program noncompliance and criminal re-offense.

Major goals and objectives

The primary goal of the project was to determine whether recidivism for IPV and other crimes can be reduced by identifying and addressing key psychosocial risk factors in the BIP context. The factors addressed in the current project were employment difficulties, mental health problems, substance use problems, and parenting concerns. The project examined a co-located, supportive services model to address these co-occurring risks. The planned intervention involved clinical assessment during BIP intake to identify client problems in these areas and active referral to appropriate supportive services delivered by community partner agencies and co-located with the batterer program. The second project goal was to determine whether participation in specific supportive services is associated with lower recidivism for IPV

and other crimes. The third project goal was to refine, enhance, and advance best practices for co-located supportive services within BIPs using in-depth interviews to identify factors that promote or inhibit participation in supportive services and to examine participant satisfaction with the supportive services model.

Research questions

The project set out to answer the following research questions:

1) Does assessment and referral to readily accessible supportive services for common psychosocial difficulties enhance BIP completion and reduce IPV-related and non-IPV-related criminal recidivism among a high-risk, urban IPV offender population?
2) Do IPV offenders who participate in supportive services have lower criminogenic risk factors for recidivism at the time of BIP completion in contrast to offenders who are referred, but do not attend supportive services?
3) Does participation in each specific supportive service (employment support, parenting support, mental health treatment, substance use services) reduce criminal recidivism?
4) What factors promote or inhibit participation in supportive services, and how do program participants experience and value the assessment and referral process and the supportive services offered?

Research design, methods, analytical and data analysis techniques

The overall impact of co-located supportive services on BIP recidivism was tested by comparing recidivism rates for IPV-related and other criminal offenses for individuals referred to the BIP prior to implementation of the supportive services model (the Control Cohort) and individuals referred to the BIP after implementation of the supportive services model (the

Supportive Services Cohort). We originally planned to examine the effect of each specific supportive service by comparing recidivism rates for those who received that service to rates for those who were referred to that service but did not receive it. However, as noted in the section on study changes (below), due to COVID-19-related complications in service delivery and limitations in service uptake, there was an insufficient number of participants to conduct these analyses for some of the specific supportive services.

In order to examine facilitators and barriers to supportive service engagement, and to examine participant perspectives on this intervention approach, we conducted in-depth interviews with 29 program participants. Those interviews were transcribed and subjected to thematic analysis and used to provide suggestions for future improvements in service delivery.

Expected applicability of the research

The results were expected to contribute to generalized knowledge of BIP practice by providing evidence on whether supportive services for common psychosocial risk factors can reduce criminal recidivism for IPV offenders. If the effects of specific supportive services can be isolated, this would be expected to help BIP providers prioritize service provision and resource allocation to address co-occurring problems that confer risk for re-offense. Finally, the qualitative results were expected to provide additional guidance to BIPs regarding effective implementation of supportive services and target areas for program improvements and innovation.

Participants and other collaborating organizations

The target population for the current project was a predominantly African American and low-income sample of individuals residing in Baltimore, Maryland, a city with high rates of

violent crime and intimate partner homicide. In prior research with this sample, our team has identified a high level of criminogenic risk factors, complex psychosocial needs, and a high rate of re-involvement in court proceedings, for both IPV-related offenses as well as other violent and non-violent charges (e.g., Holliday et al., 2019; Murphy et al. 2021).

A multi-disciplinary team of BIP researchers and practitioners conducted this project. The team included staff members from the House of Ruth Maryland's BIP (the practice partners). The practice partners had many years of experience developing a BIP curriculum that is trauma-informed and sensitive to the cultural and community context in which many participants experience discrimination, marginalization, economic disenfranchisement, and exposure to violence and other traumatic stressors. The co-located, supportive services model represents a significant advancement in the House of Ruth Maryland's efforts to enhance victim safety and improve the lives of individuals and communities affected by IPV in the city of Baltimore. The research team consisted of a Clinical Psychologist, a Criminologist, and a Public Health researcher, each of whom has extensive experience in BIP research and a long-standing collaboration with the House of Ruth, Maryland.

Changes in approach from original design and reason for changes

The research team altered aspects of our research plan in response to three unanticipated challenges. The first was the COVID 19 pandemic. The co-located supportive services were implemented at the beginning of the funding period (in November, 2019) but were halted in March, 2020 when the program shifted to virtual provision of core BIP services. Supportive services could not be sufficiently re-implemented to facilitate the research

evaluation until April 2022. As a result, the number of BIP participants exposed to the supportive services model was smaller than originally expected.

The second unanticipated challenge involved difficulties in establish and sustaining full implementation of the supportive services model. There was considerable variation in the agency service partners with respect to staff enthusiasm for working with the BIP population, staff availability for on-site service provision at the BIP, and continuity. HRM staff have worked consistently through the project to establish and maintain working agreements with supportive service partners, and have had to change partner when necessary. As a result, some supportive services have been more consistently available to program participants than other services. This creates an evaluability concern that has reduced the ability to detect program effects through statistical analysis.

The third unanticipated challenge arose from limited uptake of some supportive services by program participants. The data available for tracking service uptake come from assessments of participants at the end of stage 1 in the program (typically 4-6 weeks after program initiation) and again at the exit interview at completion of the 26 week BIP. These data reveal low rates of supportive service engagement for all of the services with the exception of employment support. Again, this limited the capacity to detect potential benefits from the services offered.

As a result of these unanticipated challenges, the reporting of project results has a greater emphasis than originally intended on understanding the referral, engagement and uptake process for the delivery and receipt of supportive services, relying both on quantitative data on service referrals and engagement gathered by the agency as well as qualitative analysis

of interviews conducted with program participants regarding their perspectives on supportive services, facilitators and barriers to service uptake, and suggestions for program improvements. In addition, there were insufficient numbers of participants to test some of the hypotheses regarding the effects of supportive services, most notably the goal of isolating effects of specific service uptake. Overall, this shifts the emphasis of the evaluation approach toward more early-stage questions regarding the processes involved in program development and implementation, with less emphasis on later-stage evaluation questions regarding program efficacy. **Our team is continuing to meet regularly and we intend to leverage the long-standing and ongoing collaboration to continue data collection, work together on program enhancements, and address later-stage evaluation questions of supportive service delivery in future research.**

OUTCOMES

Activities/accomplishments

The agency research partners initiated the supportive services model prior to the pandemic, and re-established these service offerings again after returning to normal program operations. The PI provided additional training to the agency staff in motivational interviewing strategies to support assessment and referral to supportive services. The House of Ruth Maryland, in collaboration with Dr. Holliday (Project Co-I), also secured additional service-oriented funding through a grant from Johns Hopkins University to support the establishment of service partnerships with other local agencies to deliver supportive services.

Our team completed all of the data collection, data coding, and basic data analyses in order to complete the aims of this project and to prepare this final report summary. This

involved an extensive commitment of effort identifying and coding criminal histories and recidivism data on the set of over 1900 cases studied. Those data were then integrated with several other complex data sets, including electronic data sets obtained from the House of Ruth Maryland (focused on program referrals, program attendance and completion, intake assessments, mid-program assessments, and post-program assessments. Additional data was extracted from paper files at the agency for the historical control cohort and then merged with the electronic data and criminal history data. We also completed in-depth interviews with 29 program participants, transcribed them, and completed initial coding using a multi-step thematic analysis approach (Braun & Clark, 2022).

Results and findings

Supportive Services Cohort

A total of 490 individuals were referred to the Gateway project between April 1, 2022 and June 30, 2023. These referred cases constitute the Supportive Services Cohort. Individuals who presented at the agency during this period underwent assessment of psychosocial risk factors and were offered a sufficient range of supportive services to evaluate the impact of this programmatic effort. However, the availability and ease of access for specific supportive services varied over time as a function of service partner agreements, staffing, and resources. Therefore, in addition to initial analyses of the impact of supportive services, **our results emphasize implementation challenges and barriers to service uptake that may be of particular interest to practitioners and policy makers.**

We were able to locate criminal justice data in the State of Maryland for 469 of the 490 cases (95.7%). Complete program intake data were available on 337 (68.8%) of the 490 cases

referred for services (i.e., some individuals were referred HRM but did not present at HRM to complete an intake or receive any intervention sessions). Data gathered at the transition from Stage 1 to Stage 2 of the intervention program were available for 308 cases (62.9%), and at the exit interview at the successful completion of the BIP for 237 cases (48.4%).

The left columns of Table 1 present demographic and background information on the 490 referred cases in the Supportive Services Cohort. Their median age at the time of program referral was 33, with an age range from 19 to 77.The sample predominantly identified as male (90%) and Black/African American (91%). Approximately 20% of the sample had less than high school education, 62% completed high school, high school equivalency, and/or vocational training, and 11% had attended college. Slightly over half of the sample had full-time employment and just under 40% were unemployed. The vast majority (98%) were court-referred to attend BIP.

Historical Control Cohort

A total of 1269 individuals were referred to the Gateway project between January 1, 2016 and December 31, 2018. These referred cases constitute the Historical Control Cohort. Individuals who presented at the agency during this period underwent a relatively brief intake assessment that asked general questions about important risk factors (such as mental health and substance use problem and treatment history). This intake assessment was quite different from the more detailed assessment developed for the Supportive Services Cohort. Therefore, the data available to evaluate similarities and differences between these two cohorts were limited to demographic background characteristics.

Table 1: Background and Demographic Characteristics for the Supportive Services and Historical Control Cohorts

	Support Services Cohort (N = 490)				Historical Control Cohort (N = 1269)			
Characteristic	**N**	**%**	**% Missing Data**		**N**	**%**	**% Missing Data**	**Cohort Difference Test**
Sex			8.8%				0%	X^2 (1) = 9.9 **
Man	403	90.2			1067	84.1		
Woman	44	9.8			202	15.9		
Employment Status [a]			31.4%				40.6%	X^2 (2) = 50.5***
Full-Time	175	52.1			227	30.1		
Part-Time [b]	28	8.3			124	16.7		
Retired	2	0.6			7	0.9		
Unemployed	131	39.0			396	52.5		
Race / Ethnicity			29.4%				9.1%	X^2 (6) = 44.9***
Black/African-American	314	90.8			920	79.8		
White/Caucasian	18	5.2			117	10.1		
Hispanic	2	0.6			90	7.8		
Asian	1	0.3			4	0.3		
Native American	0	0.0			3	0.3		
Bi- or Multi-Racial	7	2.0			4	0.3		
Other	4	1.2			15	1.3		
Education			38.0%				35.3%	X^2 (2) = 14.8***
Did not complete High School	61	20.1			213	25.9		
High School / GED Vocational	188	61.8			402	49.0		
Attended College	55	11.1			206	25.1		
	Mean	**SD**			**Mean**	**SD**		
Age	34.4	10.2	0%		32.3	9.9	0.2%	t(1755) = 4.0***
Criminal History [c]			4.3%				6.3%	
Domestic Abuse	0.7	1.0			1.0	1.4		t(1656) = 4.4***
Other Violence	0.9	0.8			0.9	1.0		t(1656) = 0.6 *ns*
Total Offenses	1.9	1.3			2.6	2.4		t(1656) = 5.4***

[a] Tested as full-time, part-time, and not employed.

[b] includes temporary, seasonal, and self-employed.

[c] Number of offense incidents in 5 years before referral in each category.

** p < .01; *** p < .001, *ns* = not statistically significant

We were able to locate criminal justice data in the State of Maryland for 1189 of the 1269 cases in the Historical Control Cohort (93.7%). Program intake data, extracted from paper case files at the agency, were available on 945 (74.5%) of the 1269 cases referred for services. Program completion (final disposition status) data were available from the program's electronic and/or paper case files for 849 cases (66.9%).

The right columns of Table 1 present demographic and background information on the 1269 referred cases in the Historical Control Cohort. Their median age at the time of program referral was 30, with an age range from 17 to 67. The sample predominantly identified as male (84%) and Black/African American (80%). Just over one-fourth of the sample had less than high school education, 49% had completed high school, high school equivalency, and/or vocational training, and one-fourth had attended college. Approximately 30% of the sample had full-time employment at the time of program intake, and over half were unemployed.

Project Aim 1: Comparisons in Program Attendance and Criminal Recidivism for the Supportive Services and Historical Control Cohorts

Overview and Background

Our study design called for addressing the first research question (whether the implementation of supportive services is associated with higher program attendance and lower criminal recidivism) by comparing program attendance and recidivism for two cohorts of cases referred to the Gateway Project at House of Ruth Maryland. The supportive services cohort (described above) was compared to individuals who were referred to the agency between January 1, 2016 and December 31, 2018. This cutoff date for the Historical Control Cohort was chosen to provide a sufficiently large comparison sample (3 years of case referrals) that was

relatively close in time to the implementation of supportive services, originally scheduled for the end of 2019. The buffer of approximately one year between the cohorts provided time for the HRM program to move to a new location, establish supportive service contracts with partner agencies, and roll out their implementation of the supportive services model. The new program location was closer geographically to a number of possible service partner agencies with expanded space and facilities for provision of co-located supportive services.

Subsequent to the initiation of OVW funding, the evaluation of supportive services had to be paused due to COVID 19 pandemic. Rather than being initiated in late 2019, the Supportive Services Cohort was therefore initiated in April, 2022. Unfortunately, this pause also created a much longer gap in time between the historical control and supportive services cohorts, and a somewhat smaller sample than originally expected for the Supportive Services Cohort.

Cohort Differences in Demographic and Background Characteristics

Table 1 displays statistical tests of differences in demographic and background characteristics between the Historical Cohort and Supportive Services Cohort. These preliminary analyses revealed a number of significant differences, which need to be taken into consideration in analyzing cohort differences in program attendance and recidivism. The Historical Control Cohort members were two years younger, on average, at the time of program referral, had a significantly higher representation of women, and were more likely to be unemployed and less likely to have full-time employment.

A different distribution of race / ethnicity was also apparent, likely due in part to the selection method used to create the Supportive Services Cohort. In addition to the main

Batterer Intervention Program, HRM operates a Spanish language program at a different agency site in the city of Baltimore. Due to limitations in resources and available agency partners, the initial implementation of supportive services by HRM was conducted only at the main intervention site, and therefore participants assigned to the Spanish language program were not included in the study sample. This same screening could not be readily conducted with the available data on the Historical Cohort. This difference is further apparent in the fact that less than one percent of those in the Supportive Services Cohort were Hispanic, as compared to approximately 8 percent in the Historical Control Cohort. In an attempt to correct for this disparity, Hispanic individuals within the Historical Control Cohort were not included in further analyses of cohort differences.

Cohort differences were also apparent in criminal history. During the 5 years before referral to the HRM program, individuals in the Historical Control Cohort, on average, had a significantly higher number of total criminal offense incidents and domestic abuse incidents than individuals the Supportive Services Cohort. There was no notable difference in arrests for other violent offenses during the five years before referral. This difference may reflect the fact that the five years before referral for the Supportive Services Cohort included the period of the COVID 19 pandemic, during which time arrest rates for many crimes were lower than usual.

In light of these observed differences in demographic and background characteristics and criminal history between cohorts, the analyses of cohort differences in program completion and outcome were conducted both with and without statistical controls. Due to the substantial number of individuals who did not complete program intake in both cohorts there was a large amount of missing data on some demographic variables. Therefore, statistical controls were

analyzed in two steps. The first involved controlling for sex, age, and criminal history. These variables were available on almost everyone in the study and thus allowed for analyses that preserved as many participants as possible in the full sample. The second set of analyses limited the sample to those who had data on the other demographic factors that differed significantly between the cohorts and were gathered during program intake. In addition to the covariates listed above, these analyses also included employment (coded as full-time versus other) and education (coded on a 3 point scale for less than high school graduate, high school or equivalent, or college).

Program Attendance and Completion by Cohort

Program attendance was analyzed in 3 categories using outcomes tracked by the agency: those who failed to complete the agency intake, those who attended intervention groups but dropped out before completing the 26-session program, and those who successfully completed the program. Table 2 displays the rates of these three attendance outcomes by study cohort. In preliminary analyses that did not control for demographic factors, a statistically significant difference was observed in program attendance between the two study cohorts. **The percentage of participants who successfully completed the HRM program was 10 points higher for the Supportive Services Cohort than for the Historical Controls.**

The next set of analyses examined cohort differences in program completion while controlling for age, sex, and criminal history (total number of offenses in the 5 years before program referral) using logistic regression. For these analyses, the dependent variable was coded dichotomously as those who did, and did not, successfully complete the program. Although age, sex, and criminal history all significantly predicted program completion, when

Table 2: Program Attendance and Completion for Supportive Services and Historical Control Cohorts

	Support Services Cohort (N = 490)				Historical Control Cohort (N = 1179)			
Outcome	**N**	**%**	**% Missing Data**		**N**	**%**	**% Missing Data**	**Cohort Difference Test**
Program Attendance			2.2%				24.4%	X^2 (2) = 14.5 p < .001
Did not complete program intake	102	21.3			230	27.4		
Dropped out during program	104	21.7			228	27.1		
Completed Program	247	51.6			351	41.8		
Other [a]	26	5.4			31	3.7		

[a] Includes cases who were referred elsewhere, incarcerated, or could not attend due to medical reasons. These cases were not included in the cohort difference analysis.
NOTE: Cohort difference test does not include any control variables. Analyses with statistical controls are included in the following table.

those three variables were controlled, the difference between the cohorts remained statistically significant. In the reduced sample that included controls for education and employment together with sex, age, and criminal history, the difference between cohorts was marginally significant (p = .068). The results of this analysis are presented in Table 3.

These findings provide evidence consistent with the expectation that the addition of co-located supportive services would enhance AIP program completion. However, these results should be interpreted cautiously in light of other known and unknown factors that may have influenced program attendance during the period of this investigation. First, the implementation of the supportive service model coincided with re-location of the HRM intervention program to new and updated facilities that were centrally located in the city, and more readily accessible for many residents in contrast to the previous facilities and location. Second, the HRM program secured additional financial support part-way through the time frame represented by the supportive services cohort that allowed for the elimination of program fees. Finally, the supportive services model also included staff training in motivational interviewing strategies to support program services and a more extensive intake assessment. These innovations may have influenced participant engagement into the HRM program independent of the availability and receipt of supportive services for co-occurring problems and life stressors. In the final analysis, **the increases in program completion provide an encouraging support for agency changes made during the period of this investigation,** even though it is not possible to isolate the provision of supportive services as the direct cause of the observed increase in program completion.

Table 3: Logistic Regression Analyses Predicting Program Completion

Variable	*B*	*S.E.*	*Wald*	*P*
MODEL 1 (N = 1175)				
Age	.025	.006	16.6	.001
Sex (Female)	.459	.167	7.5	.006
Criminal History	-.105	.031	11.3	.001
Cohort	-.497	.129	14.9	.001
MODEL 2 (N = 861)				
Age	.026	.007	12.3	.001
Sex (Female)	.524	.190	7.6	.006
Full-Time Employment	.187	.106	3.1	.078
Education	.394	.152	6.7	.010
Criminal History	-.079	.036	4.9	.027
Cohort	-.295	.161	3.3	.068

Cohort Differences in Criminal Justice Re-Offense

Criminal justice system re-involvements during the 12 months after referral to the HRM program were coded from Maryland Judiciary Case Search, a publicly available database containing information on legal cases in the state. Each criminal case (i.e., each arrest incident or protection order) was coded into one of six mutually exclusive categories based on the specific criminal statute associated with an offense (Bouffard & Zedaker, 2016): (1) partner abuse-related legal involvements, which included issuance of a new personal protective order (PPO), a new peace order (PO), a stalking charge, or violation of a PPO or PO; (2) other violent offenses (e.g., assault, battery, sex crimes); (3) property offenses (e.g., burglary, fraud, theft); (4) drug offenses (e.g., possession or distribution); (5) driving while intoxicated/under the influence offenses; and (6) all other offenses (e.g., disorderly conduct, public urination). Traffic violations other than driving under the influence were not coded. Coding was hierarchical; each offense incident was coded into the applicable category with the lowest number, starting with partner abuse-related incidents. These codes were then used to construct four outcome variables: 1) any criminal offense; 2) partner abuse-related legal involvements; 3) other violent offenses, and 4) any partner abuse or violent offense (i.e., either 2 or 3). Because the victim's identity or relationship to the offender is not consistently present in the Maryland Case Search database, many incidents involving abuse or violence toward an intimate partner were likely captured by the other violence code (e.g., assault charges that were not accompanied by a protection or peace order). This creates a rationale for analyzing either partner abuse or other

violent offenses as a combined variable. All four of the re-offense variables were coded dichotomously.

Due to the compressed time frame for follow-up of the Supportive Services Cohort, criminal justice outcomes were available on all cases for only one year after program referral. In addition, there is a lag between program referral and program attendance, and therefore the assessment of potential outcomes associated with the supportive services assessment, referral, and uptake process requires some delay in initiating the window for measuring re-involvement with the criminal justice system. In order to create an equivalent time frame that could be applied to all individuals in the study sample (with an outer limit of one year from the date of referral), we selected two points in time to initiate the assessment window. Both were pegged to average lags observed within the Supportive Service Cohort. One method for assessing outcomes initiated the window for re-offense at the median lag to intake assessment (54 days) and the other initiated the window at the median lag to Stage 2 of the program (134 days). Thus, one set of outcome variables reflected any re-offense between 54 and 366 days after program referral and the other (overlapping) set of outcome variables indicated any re-offense between 134 and 366 days after program referral. The logic for the first approach was to evaluate program outcomes starting with the typical time that individuals would receive assessment and referrals to supportive services. The logic behind the second approach was to evaluate outcomes starting at a point in time at which individuals would have had an opportunity to contact and engage with supportive services.

Table 4 displays the percent of individuals who had any re-offense across each outcome (i.e., any offense, domestic abuse, other violent offense, domestic abuse or other violent

Table 4: Criminal Recidivism for Supportive Services and Historical Control Cohorts at One Year Follow-up

	Support Services Cohort (N = 490)	Historical Control Cohort (N = 1179)	Cohort Difference Test
Outcome	**%**	**%**	
Re-Offense Between Average Time to Intake and 12-Month Follow-up [a]			
Any legal system Involvement	16.6	23.1	X^2 (1) = 8.2 p = .004 **
Domestic abuse	5.8	8.3	X^2 (1) = 3.0 p = .084 #
Other violent Offense	5.8	8.2	X^2 (1) = 2.8 p = .094 #
Domestic abuse or violent offense	10.4	15.5	X^2 (1) = 7.1 p = .008 **
Re-Offense Between Average Time to Stage 1 Transition and 12-Month Follow-up[b]			
Any legal system Involvement	13.0	17.6	X^2 (1) = 5.1 p = .023 *
Domestic abuse	4.7	6.3	X^2 (1) = 1.5 p = .215 *ns*
Violent offense	4.5	6.1	X^2 (1) = 1.7 p = .198 *ns*
Domestic abuse or violent offense	8.1	11.7	X^2 (1) = 4.5 p = .035 *

NOTE: Cohort difference tests do not include any control variables. Analyses with statistical controls are provided in the subsequent table.

[a] Includes re-offenses between 54 and 366 days after program referral.

[b] Includes re-offenses between 134 and 366 days after program referral.

# p < .10; * p < .05; ** p < .01; *ns* = not statistically significant.

offense) for the Supportive Service and Historical Control Cohorts at one-year follow-up after program referral, using the two overlapping time windows described above (one beginning at the median delay to program intake and one beginning at the median time to complete Stage 1 of the HRM program). For all 8 indicators, the percentage of individuals with re-offenses were higher in the Control Cohort than in the Supportive Services Cohort. In preliminary analyses that did not control for demographic and background factors, this difference was statistically significant for 4 of the 8 re-offense indicators analyzed, including any re-offense (for both time windows) and any domestic abuse or other violent offense (for both time windows).

The next set of analyses examined cohort differences in re-involvement with the criminal justice system after controlling for age, sex, and criminal history using logistic regression for the outcome variables that had statistically significant findings in uncontrolled analyses. The results for any re-offense are displayed in Table 5. The difference between the cohorts was no longer statistically significant for either time window after controlling for age, sex, and criminal history. For any domestic abuse or other violent re-offense, after controlling for age, sex, and criminal history, the difference between cohorts remained marginally significant for offenses between the median time to intake and one-year follow up ($p = .075$), but was no longer significant for offenses between the median time to Stage 1 transition and one-year follow up (see Table 6). When education and employment were controlled along with sex, age, and criminal history, the difference between cohorts was no longer significant for any of the re-offense variables.

Table 5: Logistic Regression Analyses Predicting Any Re-offense

	Beginning at Average Time to Intake				Beginning at Average Time To Stage 1 Transition			
Variable	***B***	***S.E.***	***Wald***	***p***	***B***	***S.E.***	***Wald***	***p***
MODEL 1 (N = 1547)								
Age	-.049	.008	38.4	.001	-.049	.009	30.5	.001
Sex (Female)	-.388	.197	3.9	.049	-.385	.220	3.1	.080
Criminal History [a]	.150	.027	31.9	.001	.137	.028	23.9	.001
Cohort	.219	.153	2.0	.154	.152	.169	0.8	.367
MODEL 2 (N = 968)								
Age	-.033	.010	12.0	.001	-.031	.011	8.4	.004
Sex (Female)	-.567	.248	5.2	.022	-.551	.280	3.9	.049
FT Employment	-.118	.185	0.4	.524	-.100	.205	0.2	.624
Education	-.139	.125	1.2	.267	-.089	.138	0.4	.518
Criminal History [a]	.163	.036	20.9	.001	.156	.038	17.1	.001
Cohort	.212	.199	1.1	.286	.080	.218	0.1	.714

[a] Total number of criminal justice incidents in 5 years before program referral.

These findings provide mixed evidence regarding the expectation that the addition of co-located supportive services would enhance AIP program outcomes as assessed by criminal justice re-offense data. In analyses without statistical control variables, re-offense rates for any criminal justice involvement and for domestic abuse or violent offenses were significantly lower for the Supportive Services Cohort in contrast to the Historical Controls. However, in models that adjusted for age, sex, and criminal history, the findings were no longer statistically significant. In all of the models, the extent of criminal history in the past 5 years was a strong predictor of re-offense. The data reveal that the implementation of the supportive model, along with the coinciding program changes noted above (new program location and elimination of program fees) was associated with reductions in key criminal re-offense variables assessed during the year after referral to the program. However, further analyses suggest that changes in the population served over the time interval of this investigation, most notably cohort differences in average age and the number of criminal offenses in the 5 years prior to program referral, may account for the observed differences in criminal justice outcomes. Statistical control of correlated variables is an imperfect solution to complex data from non-randomized research designs such as the present study, and can at times under-correct, or over-correct, estimated program effects depending upon the actual causal processes involved in producing outcomes. It is also important to note that help-seeking, policing, arrest, and other processes (e.g., ease of access to and supports for obtaining protection orders) that can impact the criminal justice outcomes evaluated here may also change over time. Available evidence indicates that all of these factors did, in fact, change during the COVID-19 pandemic period between that intervened between the referrals for the cohorts investigated in the current

Table 6: Logistic Regression Analyses Predicting Any Domestic Abuse or Other Violent Re-offense

	Beginning at Average Time to Intake				Beginning at Average Time To Stage 1 Transition			
Variable	***B***	***S.E.***	***Wald***	***p***	***B***	***S.E.***	***Wald***	***P***
MODEL 1 (N = 1547)								
Age	-.039	.009	18.8	.001	-.040	.010	15.5	.001
Sex (Female)	-.321	.226	2.0	.156	-.414	.264	2.5	.117
Criminal History [a]	.137	.039	12.2	.001	.136	.043	10.1	.001
Cohort	.321	.180	3.2	.075	.287	.204	2.0	.158
MODEL 2 (N = 968)								
Age	-.027	.011	6.1	.013	-.022	.012	3.2	.075
Sex (Female)	-.483	.280	3.0	.085	-.511	.326	2.5	.116
FT Employment	-.201	.213	0.9	.017	-.159	.240	0.4	.508
Education	-.058	.142	0.2	.684	.049	.160	0.1	.760
Criminal History [a]	.167	.051	10.7	.001	.187	.055	11.5	.001
Cohort	.284	.232	1.5	.221	.242	.263	0.8	.357

[a] Total number of domestic abuse and other violent offense incidents in 5 years before program referral.

project (Richards et al., 2021). Overall, the data showing reductions in criminal re-offense across cohorts are encouraging of continued efforts to improve implementation and further evaluate the supportive service model, while exercising caution in attributing differences to the program implementation thus far.

Project Aim 2: Examining the Impact of Participation in Specific Supportive Services

Referrals to Supportive Services

Table 7 presents data on referral to supportive services based on two sources: 1) information entered into the electronic record by program staff at intake and 2) reports by program participants provided during the transition from Stage 1 to Stage 2 of the program, which typically occurs after about 6 weeks of group attendance. According to the intake worker reports, just over half of the BIP participants were referred to at least one supportive service. The most common referrals were for parenting support (26.4%), mental health treatment (22.8%), and employment support (21.7%). In participant reports provided after the initial stage of BIP services, once again just over half of individuals indicated having received a referral to at least one supportive service (52.3%), with the most common being employment support (44.2%), and the least common being substance use treatment (6.2%). When the two data sources were combined, just over two-thirds of participants were referred to at least one supportive service (68.4%) The relatively low rate of referral for substance use services likely reflects the fact that individuals with these problems were typically court-mandated to a different agency that provided combined services for substance use disorders and domestic violence. Overall, these data indicate that the agency assessment and referral process for supportive services was quite robust.

Table 7: Supportive Services Referrals

	Referrals to Supportive Services		
Service	**Staff Report at Program Intake (N = 337)**	**Participant Report at Stage 1 Transition (N = 308)**	**Referred at either Intake or Stage 1 Transition (N = 377)**
Employment Support	73 (21.7%)	136 (44.2%)	182(48.3%)
Mental Health Treatment	77 (22.8%)	108 (35.1%)	160 (42.4%)
Parenting Support	89 (26.4%)	101 (32.8%)	164 (43.5%)
Substance Use Services	21 (6.2%)	83 (26.9%)	99 (26.3%)
At least 1 Supportive Service	170 (50.4%)	161 (52.3%)	258 (68.4%)

Uptake of Supportive Services

Table 8 displays participant report data on contacting and receiving supportive services at the transition from Stage 1 to Stage 2 of the program, and reports on receiving services during the exit interview at program completion. By the time of Stage 1 completion, just over one fifth of referred participants reported making some effort to contact at least one supportive service (21.3%), with the most common being employment support (20.2%). Only a relatively small number of participants reported having reached out to mental health (6.3%) or substance abuse service providers (7.5%). By Stage 1 transition, about 13% of referred cases reported having experienced one or more supportive service contact, again employment support was by far the most common service received (11.9%).

The exit interviews revealed that by the time of BIP completion, about one-fourth of all program clients had participated in at least one of the supportive services offered. Employment support was by far the most commonly received service (18% of all program completers and 27% of those referred) followed by parenting support (4% of those referred). Only a very small number of program completers reported having received mental health treatment (2%) or substance use services (1%).

Initial Conclusions from Referral and Uptake Data on Supportive Services

The data on service contact and uptake reveal several important trends. First, a relatively large proportion of those referred to each supportive service did not attempt to contact the recommended intervention provider. Second, uptake of employment support was much higher than the other services offered. Third, uptake of mental health services, parenting support, and substance use services was very low overall, and the number of service recipients

Table 8: Supportive Services Uptake by Client Report

	Client Report of Service Uptake								
	At Stage 1 Transition (N = 308)						At Exit Interview (N = 237)		
Service	**Contacted this Service**			**Attended this Service**			**Attended this Service**		
	N	% of those assessed	% of those referred	N	% of those assessed	% of those referred	N	% of those assessed	% of those referred
Employment Support	34	11.0%	20.2%	20	6.5%	11.9%	43	18.1%	24.6%
Mental Health Treatment	9	2.9%	6.3%	7	2.3%	4.9%	4	1.7%	5.6%
Parenting Support	14	4.5%	9.4%	5	1.6%	3.4%	10	4.2%	3.5%
Substance Use Services	8	2.6%	7.5%	1	0.3%	1.1%	2	0.8%	1.4%
At least 1 Supportive Service	49	15.9%	21.3%	29	9.4%	12.9%	57	24.1%	26.6%

Those referred included anyone who was referred by staff report at intake and/or participant report at the end of Stage 1.

was not sufficient to support quantitative analysis of the benefits of those specific interventions. Finally, a reasonable proportion of those who completed the program engaged with at least one of the supportive services. These data suggest that it may take more time than originally expected for BIP participants to engage in voluntary service uptake, and also that more effort may be needed to facilitate engagement with some supportive services (e.g., mental health treatment) than others (e.g., employment support). The in-depth interviews (described later in this report) shed additional light on emotional and practical barriers to voluntary service access. In addition, these observations regarding service engagement over time indicate that a longer follow-up timeframe may be needed to detect potential benefits of engagement with supportive services.

Characteristics of Those Referred to Supportive Services

In order to better understand any observed differences in program completion or criminal justice outcomes associated with supportive service engagement, we first explored potential differences in demographic and criminogenic risk for individuals who were, and were not, referred to the various supportive services. These analyses may also help explore the common finding that risk factors such as unemployment, substance use concerns, and mental health challenges often co-aggregate, which can complicate adjunctive service delivery and uptake. We used the following measures to accomplish these analyses:

- Personal Health Question (PHQ-9) Depression Inventory (Kroenke et al., 2001).
- Kansas Parenting Satisfaction Scale (adapted by adding an item on satisfaction with one's co-parent(s) (James et al., 1985).
- Alcohol Use Disorders Identification Test (Bohn et al., 1995).

- Measure of Criminal Attitudes (Mills et al., 2002).
- Inventory of Relationship Problems (Lavner et al., 2014)

Referral to Employment Support. Table 9 displays data on background characteristics, study-relevant risk factors, and criminal history for individuals who were and were not referred to employment support (with referral indicated by staff member report at program intake and/or participant report at the end of program Stage 1). Those who were referred to employment support, in contrast to those who were not, were significantly less likely to be employed full-time. Contrary to what might be expected, referred cases also had significantly lower average scores on a measure of risky drinking. Marginally significant differences in age and relationship problems were also detected, with those referred to employment support being somewhat younger, on average, and reporting somewhat more overall relationship problems. There were no notable differences by employment support referral in sex, education level, depression symptoms, parenting satisfaction, criminogenic attitudes, or criminal history.

Additional analyses help validate the targeted nature of employment support referral. Looking only at program intake data, the rate of referral to employment support was 3 times higher for those who were not employed full-time compared to those who were (33% vs. 11%). By the time of Stage 1 transition, those referral rates increased for both groups (56% for those without full-time employment, and 44% for those with full-time employment). These results indicate that referral to employment support was quite common for those who were already employed full-time, suggesting a need to consider initial employment in subsequent efforts to analyze whether engagement with employment support services was associated with gaining employment during the intervention program.

Table 9: Characteristics of Individuals Referred to Employment Support

	Referred to Employment Support (N =182)			Not Referred to Employment Support (N = 195)			
Characteristic	**N**	**%**	**% Missing**	**N**	**%**	**% Missing**	**Difference Test**
Full-Time Employment			18.7%			23.1%	X^2 (1) = 4.3 *
Yes	68	45.9		87	58.0		
No	80	54.1		63	42.0		
Education			28.0%			30.8%	X^2 (2) = 0.2 *ns*
Less than High School	24	18.3		27	20.0		
High School / GED	83	61.5		83	61.5		
Attended College	24	18.3		25	18.5		
Sex			3.8%			6.7%	X^2 (1) = 0.3 *ns*
Man	160	91.4		169	92.9		
Woman	15	8.6		13	7.1		
	Mean	**SD**		**Mean**	**SD**		
Age	33.9	10.2	0%	35.4	10.0	0%	*t*(375) = 1.4 #
Depression Symptoms	3.6	5.6	6%	4.4	6.1	17.4%	*t*(330) = 1.2 *ns*
Risky Drinking	4.2	4.3	29.7%	6.5	7.4	34.9%	*t*(253) =3.1 **
Parenting Satisfaction	20.6	4.6	31.9%	20.3	4.8	35.9%	*t*(247) = 0.5 *ns*
Relationship Problems	70.8	41.0	6.0%	63.2	42.6	18.5%	*t*(328) = 1.7 #
Criminogenic Attitudes	1.8	1.9	6.6%	1.6	2.0	20.0%	*t*(324) = 0.5 *ns*
Criminal History [a]			2.7%			2.6%	
Domestic Abuse	0.7	0.9		0.7	1.0		*t(365) = 0.5 ns*
Other Violence	0.9	0.8		0.8	0.6		*t(365) = 0.9 ns*
Total Offenses	2.0	1.4		1.8	1.2		*t(365) = 1.6 ns*

[a] Number of offense incidents in 5 years before referral in each category.

# p < .10; * p < .05; ** p < .01; *ns* = not statistically significant

Referral to Mental Health Treatment. Table 10 displays data on background characteristics, study-relevant risk factors, and criminal history for individuals who were and were not referred to mental health treatment (with referral indicated by staff member report at program intake and/or participant report at the end of program Stage 1). Those who were referred to mental health treatment, in contrast to those who were not, had significantly higher average scores on a measure of depression symptoms and on a measure of relationship problems. There was also a significantly higher proportion of women among those referred for mental health treatment than among those not referred. Marginally significant differences in age and criminogenic attitudes were also detected, with those referred to mental health treatment being somewhat younger, on average, and reporting somewhat higher average levels of criminogenic attitudes. There were no notable differences by mental health referral status in full-time employment, education level, risky drinking, parenting satisfaction, or criminal history. One additional analysis helps to validate the targeted nature of mental health referral. Those who were referred for mental health treatment scored significantly higher than those who were not on a screening measure of bipolar (manic-depression) symptoms, $t(329) = 2.3$, $p < .05$.

Referral to Parenting Support. Table 11 displays data on background characteristics, study-relevant risk factors, and criminal history for individuals who were and were not referred to parenting support (with referral indicated by staff member report at program intake and/or participant report at the end of program Stage 1). Those who were referred to parenting support, in contrast to those who were not, had significantly lower average scores on a measure of parenting satisfaction and were significantly younger, on average. A marginally

Table 10: Characteristics of Individuals Referred to Mental Health Treatment

	Referred to Mental Health Treatment (N =160)			Not Referred to Mental Health Treatment (N = 217)			
Characteristic	**N**	**%**	**% Missing**	**N**	**%**	**% Missing**	**Difference Test**
Full-Time Employment			15.6%			24.9%	X^2 (1) = 0.8 *ns*
Yes	74	54.8		82	50.3		
No	61	45.2		81	92.7		
Education			28.1%			30.4%	X^2 (2) = 0.6 *ns*
Less than High School	20	17.4		31	20.5		
High School / GED	72	62.6		94	62.3		
Attended College	23	20.0		26	17.2		
Sex			2.5%			7.4%	X^2 (1) = 5.3 *
Man	138	88.5		191	95.0		
Woman	18	11.5		10	5.0		
	Mean	**SD**		**Mean**	**SD**		
Age	33.6	9.7	0%	35.5	10.3	0%	*t*(375) = 1.8 #
Depression Symptoms	5.2	6.4	5.6%	2.9	5.2	16.6%	*t*(330) = 3.6***
Risky Drinking	5.3	5.9	29.4%	5.4	6.3	34.6%	*t*(253) = 0.0 *ns*
Parenting Satisfaction	20.2	4.5	30.6%	20.6	4.9	36.4%	*t*(247) = 0.6 *ns*
Relationship Problems	73.3	41.5	5.6%	61.9	41.7	17.5%	*t*(328) = 2.5*
Criminogenic Attitudes	1.9	2.1	6.2%	1.5	1.8	18.9%	*t*(324) = 1.9 #
Criminal History [a]			3.1%			2.3%	
Domestic Abuse	0.7	0.9		0.7	1.0		*t(365) = 0.1 ns*
Other Violence	0.9	0.8		0.8	0.7		*t(365) = 0.6 ns*
Total Offenses	1.9	1.3		1.8	1.3		*t(365) = 0.5 ns*

[a] Number of offense incidents in 5 years before referral in each category.

# p < .10; * p < .05; ** p < .01; *ns* = not statistically significant

significant difference in relationship problems was also detected, with those referred to parenting support having somewhat higher average problem levels. There were no notable differences by parenting support referral status in sex, full-time employment, education level, depression symptoms, risky drinking, criminogenic attitudes, or criminal history. As for the other referrals above, these results help validate the match between relevant concerns (in this case parenting dissatisfaction) and the referral for parenting support.

Referral to Substance Use Treatment. Table 12 displays data on background characteristics, study-relevant risk factors, and criminal history for individuals who were and were not referred to substance use treatment (with referral indicated by staff member report at program intake and/or participant report at the end of program Stage 1). Those who were referred to substance use treatment, in contrast to those who were not, had significantly higher average scores on a measure of risky drinking. Contrary to what might be expected, the rate of full-time employment was significantly higher among those referred to substance use treatment than among those not referred. There were no notable differences by substance use referral status in sex, education level, depression symptoms, parenting satisfaction, relationship problems, criminogenic attitudes, or criminal history.

Additional analyses of some specific questions asked during the intake assessment help further validate the targeted nature of substance use treatment referral. Those who were referred for substance use treatment, in contrast to those who were not, were significantly more likely to report that they have concerns about their use of alcohol or drugs (17% of those referred vs. 6% of those not referred), X^2 (1) = 8.4, $p < .01$. They were also more likely to report having had a problem with alcohol or drugs in the past (45% of those referred vs. 27% of those

Table 11: Characteristics of Individuals Referred to Parenting Support

	Referred to Parenting Support (N =164)			Not Referred to Parenting Support (N = 213)			
Characteristic	**N**	**%**	**% Missing**	**N**	**%**	**% Missing**	**Difference Test**
Full-Time Employment			15.9%			23.1%	X^2 (1) = 0.2 *ns*
Yes	70	50.7		85	53.1		
No	68	49.3		75	46.9		
Education			28.9%			30.0%	X^2 (2) = 1.2 *ns*
Less than High School	19	16.2		32	21.5		
High School / GED	75	64.1		91	61.1		
Attended College	23	19.7		26	17.4		
Sex			3.0%			7.0%	X^2 (1) = 0.0 *ns*
Man	146	91.8		183	92.4		
Woman	13	8.2		15	7.6		
	Mean	**SD**		**Mean**	**SD**		
Age	33.4	8.9	0%	35.6	10.9	0%	*t*(375) = 2.1*
Depression Symptoms	3.8	6.1	3.8%	4.1	5.7	18.3%	*t*(330) = 0.5 *ns*
Risky Drinking	4.9	5.8	28.7%	5.7	6.4	35.2%	*t*(253) = 1.0 *ns*
Parenting Satisfaction	19.9	4.7	18.3%	21.0	4.6	46.0%	*t*(247) = 2.0*
Relationship Problems	71.5	40.5	3.0%	63.0	42.9	19.7%	*t*(328) = 1.8 #
Criminogenic Attitudes	1.6	1.8	4.9%	1.8	2.1	20.2%	*t*(324) = 0.8 *ns*
Criminal History [a]			2.4%			2.8%	
Domestic Abuse	0.7	0.9		0.7	1.1		*t(365) = 0.0 ns*
Other Violence	0.9	0.8		0.8	0.7		*t(365) = 1.4 ns*
Total Offenses	2.0	1.3		1.8	1.3		*t(365) = 1.3 ns*

[a] Number of offense incidents in 5 years before referral in each category.

# p < .10; * p < .05; ** p < .01; *ns* = not statistically significant

not referred), X^2 (1) = 8.4, $p < .01$. However, those referred for substance use problems were not more likely to report having experienced negative consequences from alcohol or drug use in the year prior to the intake assessment (22% of those referred vs. 16% of those not referred), X^2 (1) = 1.9, p = .168.

Summary of Results on Characteristics of Those Referred to Specific Supportive Services.

Overall, these data help validate the intake and referral process for the supportive services model by demonstrating a match between available indicators of concerns or difficulties and referral to the relevant supportive service. In addition, although many individuals were referred to multiple supportive services, there was very limited evidence to indicate that those referred to each specific supportive service had higher levels of other problems not directly related to the service referral. Some of the findings in that regard were counter-intuitive, such as higher full time employment among those referred for substance use services and lower levels of risky drinking among those referred to employment support.

Supportive Service Attendance, Risk Factors at Post-Intervention, and Re-Offense

In light of the relatively low rates of uptake for some of the supportive services (as described above), the sample size was only sufficient to analyze outcomes associated with engagement in employment support, as well as overall engagement with any supportive service. The sample sizes were not sufficient to test associations with engagement in parenting support, substance use services, or mental health support.

Participation in Employment Support. As noted earlier, at the post-intervention assessment, a total of 43 individuals reported that they had engaged with the employment support service, which represented 18% of those assessed at post-intervention and 25% of

Table 12: Characteristics of Individuals Referred to Substance Use Treatment

	Referred to Substance Use Treatment (N =99)			Not Referred to Substance Use Treatment (N = 278)			
Characteristic	**N**	**%**	**% Missing**	**N**	**%**	**% Missing**	**Difference Test**
Full-Time Employment			19.2%			21.6%	X^2 (1) = 4.8*
Yes	50	62.5		105	48.2		
No	30	37.5		113	51.8		
Education			32.3%			28.4%	X^2 (2) = 1.0 *ns*
Less than High School	13	19.4		38	19.1		
High School / GED	39	58.2		127	63.8		
Attended College	15	22.4		34	17.1		
Sex			6.1%			5.0%	X^2 (1) = 1.1 *ns*
Man	88	94.6		241	91.3		
Woman	5	5.4		23	8.7		
	Mean	**SD**		**Mean**	**SD**		
Age	35.4	9.3	0%	34.4	10.4	0%	*t*(375) = 0.8 *ns*
Depression Symptoms	3.2	4.8	7.1%	4.2	6.3	13.7%	*t*(330) = 1.4 *ns*
Risky Drinking	6.9	7.2	29.3%	4.8	5.6	33.5%	*t*(253) = 2.6 *
Parenting Satisfaction	20.6	4.1	36.4%	20.3	4.9	33.1%	*t*(247) = 0.4 *ns*
Relationship Problems	68.9	40.3	7.1%	66.4	42.6	14.4%	*t*(328) = 0.5 *ns*
Criminogenic Attitudes	1.8	2.0	8.1%	1.7	1.9	15.5%	*t*(324) = 0.3*ns*
Criminal History [a]			4.0%			2.2%	
Domestic Abuse	0.7	0.9		0.7	1.0		*t(365) = 0.1 ns*
Other Violence	0.9	0.7		0.8	0.7		*t(365) = 0.5 ns*
Total Offenses	2.0	1.4		1.8	1.2		*t(365) = 1.0 ns*

[a] Number of offense incidents in 5 years before referral in each category.

# p < .10; * p < .05; ** p < .01; *ns* = not statistically significant

those referred to this service. We hypothesized that individuals who engaged with employment support, in contrast to those who were referred but had not engaged, would have higher levels of employment at the post-intervention assessment. This was tested by selecting participants who were referred to employment support and who reported that they were not employed full-time at program intake. Among those individuals, 24% (15 of 62 cases) reported engaging with employment support and 76% did not. Of those who engaged with employment support, 47% reported being employed at the post-intervention assessment. Of those who did not engage with employment support, 51% reported being employed at the post-intervention assessment. These values were very similar, and not significantly different, $\chi^2 = 0.1$, df = 1, p = .767.

A second analysis examined responses to the question "Did you become employed during the program?" posed at post-intervention assessment. Participant answers revealed that 52% of program graduates who had engaged with the employment support services reported that they had become employed during the program in contrast to 32% of program graduates who had not engaged with employment support services. This difference was statistically significant, $\chi^2 = 4.3$, df = 1, p = .038. These two analyses provide mixed support for the hypothesis that those who engaged in employment support would be more likely to be employed at the end of the intervention program.

Engagement with Any Supportive Service. Table 13 displays post-intervention and re-offense data on individuals who were referred to one or more supportive service, broken down by those who did, and did not, report engagement with one or more supportive service at the post-intervention assessment. At the post-intervention assessment, those who participated in

Table 13: Risk Factors at Post-Intervention and Re-Offense Rates for Those Who Did, and Did Not Attend Any Supportive Service

	Attended Supportive Services (N =46)			Did Not Attend Any Supportive Services (N = 127)			
Variable	**Mean**	**SD**	**% Missing**	**Mean**	**SD**	**% Missing**	**Difference Test**
Alcohol Frequency [a]	1.3	1.3	10.9%	1.5	1.3	18.9%	$t(142) = 0.9$ *ns*
Parenting Satisfaction	20.7	3.5	21.7%	20.4	4.5	18.9%	$t(131) = 0.3$ *ns*
Relationship Problems	69.0	40.0	23.9%	55.8	40.2	18.5%	$t(136) = 1.7$ #
Criminogenic Attitudes	0.8	1.2	0%	0.7	1.3	1.6%	$t(160) = 0.4$ *ns*
	N	**%**		**N**	**%**		
Employed	28	62.2	2.2%	93	73.8	0.8%	$X^2(1) = 2.2$ *ns*
Re-Offended [b]			0%			3.1%	
Domestic Abuse	2	4.3		4	3.3		*ns* [c]
Other Violence	2	4.3		1	0.8		*ns* [c]
Any Re-Offense	3	6.5		7	5.7		*ns* [c]

NOTE: The sample for these analyses consisted of individuals who were referred to one or more supportive service and completed the post-intervention assessment.

[a] Scored on a 5 point scale from "Never' to "4 or more times per week."

[b] Any re-offense in each category between the average time to intake and 12 month follow up.

[c] Fisher's exact test was used due to low expected cell frequencies.

# $p < .10$; *ns* = not statistically significant

supportive services reported marginally higher levels of relationship problems compared to those who were referred but did not attend. No notable differences were found for frequency of alcohol consumption, parenting satisfaction, and criminogenic attitudes. The rates of any re-offense for domestic abuse, other violence, and overall criminal justice involvement were very low for both groups, and not significantly different.

Aim 3: Qualitative Analysis of Interviews with Program Participants

We conducted in-depth interviews with 29 participants who were at various stages of the HRM intervention program. The goal of these interviews was to explore factors that influence the uptake of supportive services and participant satisfaction with the supportive services model, and to provide suggestions for future improvements and enhancement of supportive services within Batterer Intervention. The interview guide is presented as an Appendix to this report. The following presentation describes results from our initial qualitative thematic analysis as relevant to these core project goals.

Factors Influencing Uptake and Participant Satisfaction with Supportive Services Offered Through the House of Ruth Maryland Batterer Intervention Program

Many interview participants at this urban Batterer Intervention Program recognized that supportive services could play an important role in addressing employment, parenting, mental health, and substance use challenges that are commonly experienced by individuals in their communities. However, the degree to which participants currently engage with these services and their satisfaction levels with them vary substantially due to a combination of structural, psychological, and situational factors.

This section of the final report synthesizes findings from qualitative analyses examining uptake and satisfaction factors across the four supportive services that were the target of the current evaluation project: employment support; parenting support, mental health services, and substance use services. Understanding these influences provides insights into how intervention programs can increase the accessibility and effectiveness of adjunctive service offerings designed to help participants respond to challenging life circumstances and reduce criminogenic risks.

***Factors Influencing Supportive Service Uptake*.** Understanding the factors that influence engagement with an AIP's supportive services is crucial for designing services that meet the needs of participants. Across all four of the supportive services offered, a variety of factors appear to impact whether individuals choose to participate. Some individuals actively seek support due to financial necessity, legal requirements, or personal challenges, while others remain disengaged due to skepticism, logistical difficulties, or a perceived lack of relevance.

Common Factors Influencing Uptake Across Services. Despite differences in focus, interview participants described a number of overarching factors that appear to influence uptake and engagement for all of the supportive services offered. These factors include logistical barriers, skepticism toward the service, personal circumstances, and perceived need for support. One of the most common barriers to service uptake by program participants is logistical constraints. Participants across all four of the supportive services addressed in the interviews reported difficulties in attending due to scheduling conflicts, transportation challenges, and competing responsibilities. Many individuals had existing commitments, such as employment, legal obligations, or caregiving duties, which made it difficult to participate in

additional programming beyond the core intervention. In some cases, the location of services were inconvenient, or the time required for participation was perceived as excessive. It is important to note here that the original program goal of having all of the supportive services offered in the HRM community engagement center was not consistently feasible for some service partners, and therefore some of the programming was offered off-site at the service partner locations. In addition, the rigidity of service structures, including inflexible scheduling and unclear policies, further discouraged engagement. Financial concerns were also a deterrent for some services, particularly mental health support, where interview participants reported uncertainty about costs and insurance requirements.

Another significant factor was skepticism toward the effectiveness of services. Many program participants expressed doubt about whether the service would provide meaningful benefits to them. Other described past negative experiences that shaped their reluctance to engage. This skepticism was particularly pronounced for the mental health and employment services. Some participants distrusted the service providers due to fears of confidentiality breaches or concerns that background checks would limit job opportunities. In the case of parenting support, some participants believed that the service was not necessary, as they felt capable of managing their parenting responsibilities independently. Similarly, with respect to substance use services, some participants were hesitant to engage due to a preference for self-reliance or a belief that they could manage their substance use without external intervention.

Personal circumstances and perceived need for support also played a critical role in determining service uptake by program participants. Many of those interviewed reported assessing whether a service was relevant to their immediate needs and whether participation

would provide tangible benefits. Some participants did not perceive themselves as requiring assistance, while others prioritized other forms of support. For example, individuals who were already receiving mental health care from private therapists or the Department of Veterans Affairs (VA) were less likely to engage with additional services. Similarly, with employment services, individuals who were already working or self-employed did not see the need for additional job placement assistance. The extent to which individuals recognized the potential benefits of services often shaped their willingness to engage.

Service-Specific Factors Influencing Uptake. While common themes emerged regarding all of the supportive services offered, the interviews also identified unique challenges and facilitators that shaped engagement patterns for each specific service offered, as detailed below.

For the employment support service, key barriers included logistical constraints, such as scheduling conflicts and transportation issues, as well as requirements for documentation, such as identification and proof of vaccinations. Some individuals expressed dissatisfaction with the types of jobs offered, as they did not align with their qualifications or career aspirations. Skepticism about the effectiveness of the service further limited engagement.

In contrast, facilitators of employment service uptake included strong outreach efforts by the provider, personalized job support, and incentives such as transportation assistance. Individuals with pressing financial needs were more willing to engage, as were those who viewed the service as a stepping-stone toward career advancement.

For the parenting support service, a major barrier was the perception that assistance was unnecessary. Some individuals felt confident in their parenting abilities and did not see the

value in structured guidance. Others struggled with logistical constraints, including geographic inaccessibility and scheduling conflicts. The expectation of additional work, such as homework assignments, discouraged participation, particularly for those who already felt overwhelmed by other responsibilities.

With respect to facilitators of parenting support, legal requirements played a significant role in driving engagement, as individuals involved with Child Protective Services or court proceedings often viewed participation as a means of demonstrating responsibility. Participants who engaged in the program reported benefits such as improved co-parenting strategies, better emotion regulation, and stronger relationships with their children.

Mental health service uptake was influenced by concerns about confidentiality, uncertainty regarding the relevance of therapy, and negative past experiences with mental health care. Some individuals questioned whether therapy would be beneficial, particularly if they had never received mental health support before. Financial concerns and scheduling conflicts further deterred participation.

Facilitators for mental health services included strong referral systems, trust in staff recommendations, and the perception of therapy as a tool for personal growth. Participants who engaged with mental health services often did so due to an awareness of their own mental health challenges, such as anxiety, depression, or trauma.

Substance use service uptake was shaped by personal motivation, perceptions of need, and service visibility. One of the most significant barriers was low motivation, with some participants acknowledging that they were not ready to seek help. Others believed they could

manage their substance use independently or did not see themselves as needing support. The lack of awareness about available services further limited engagement.

With respect to facilitating factors, some individuals recognized a need for support, particularly those struggling with emotion regulation or the consequences of substance use. A few participants expected the service to help them develop alternative coping strategies, highlighting the importance of clear communication about service benefits.

Summary of Factors that May Influence Uptake of Supportive Services

These findings highlight the complexity of factors influencing the uptake of supportive services within a high-risk and high-need context. Both common and service-specific barriers shape attitudes toward participation. Improving engagement may require providers to address logistical barriers, increase outreach efforts, more fully explain any costs associated with the service, and foster trust between service providers and potential participants.

To improve service accessibility, program staff and their supportive service partners should consider offering more flexible scheduling options, including virtual participation for those facing transportation challenges. Increasing outreach efforts through multiple channels can enhance awareness and encourage participation. Personalized engagement strategies that align with participants' needs and priorities may also help overcome skepticism and perceived irrelevance. Building trust between service providers and participants is essential, and may be enhanced by providing explicit assurances of confidentiality, addressing individual concerns arising from past experiences with similar supports, and fostering positive interactions between service partner staff and potential service recipients.

Factors Influencing Satisfaction with Supportive Services

Understanding the common and service-specific factors influencing participant satisfaction with AIPs' supportive service offerings is also essential for improving their accessibility and effectiveness. Across all four supportive services offered, several themes related to participant satisfaction emerged from the interviews, including staff engagement, perceived relevance, logistical barriers, and perceived effectiveness. These themes shape how program participants interact with the supportive services offered to them and their overall satisfaction. However, each specific supportive service also presented unique challenges and facilitators, requiring tailored improvements to better meet participant needs.

Common Factors Influencing Satisfaction Across Services. Despite the differences in focus among the employment, parenting, mental health, and substance use services, several common factors appear to influence participant satisfaction and engagement. One crucial factor was the role of service coordinators and program facilitators. Across all four services, satisfaction increased when the participant experienced the HRM staff and service partners as proactive, supportive, and engaged. Many participants expressed appreciation for staff members who provided guidance and emotional support. However, when the HRM program staff members or service partners did not follow-through, were perceived as passive, or seemed impersonal, participants reported feeling frustrated and disengaged.

Relevance to individual needs also played a significant role. In responses focused on all of the different supportive services, participants expressed dissatisfaction when offerings did not align with their specific needs. With the employment support service, participants reported frustration if the job opportunities presented did not match their skills. With the mental health service, limited session availability deterred engagement. The parenting service did not

sufficiently address the challenges with legal custody, visitation, and contact often faced by BIP participants, leaving them feeling unsupported in that domain. Some participants perceived substance use service as relevant only for hard drug users, excluding those with other substance-related challenges. These mismatches often led to disengagement and dissatisfaction. It is also important to note that some of the participant perceptions of the various service offerings may have been based on limited or incomplete information or past experiences with similar services.

Logistical and structural barriers further impacted service engagement. Participants frequently cited scheduling conflicts, transportation difficulties, and bureaucratic hurdles as obstacles to participation. These factors often prevented individuals from fully engaging with the supportive services, contributing to lower satisfaction rates.

Perceived effectiveness and follow-through also shaped participant attitudes. When the services were perceived as providing clear, tangible benefits, such as securing a job, improving parenting skills, or gaining better coping mechanisms, participants felt encouraged to continue engaging with them. Conversely, when the services lacked transparency, failed to meet participant expectations, or did not deliver meaningful outcomes, participants felt increasingly skeptical of them and tended to withdraw from further engagement.

Factors Specific to the Employment Service. The employment service often provided valuable support to participants, but not all participants were satisfied with it. Many participants appreciated the accessibility of the service, particularly resources such as job boards, resume assistance, and interview coaching. The presence of an engaged employment coordinator on site at the HRM community engagement center further enhanced satisfaction

by providing hands-on guidance. Job fairs and immediate job placements were particularly well-received, as they provided tangible employment opportunities.

However, some participants faced dissatisfaction due to unrealistic expectations. Some individuals expected to secure employment quickly and were discouraged when results were not immediate. Job mismatches also contributed to dissatisfaction. Some participants felt that they were overqualified for the positions offered, while others, particularly those with physical limitations or criminal records, struggled to find suitable jobs. Additionally, some participants felt that the employment service coordinator did not tailor job recommendations to their needs. They desired more personalized support and stronger advocacy from the employment service coordinator, particularly in cases where background checks limited employment options.

To improve satisfaction, employment services offered in partnership with BIPs should focus on more personalized job matching and job search strategies based on skills and career aspirations. Greater employer engagement might also help support individuals facing hiring barriers. Additionally, employment services could assist some participants in obtaining necessary documentation, such as work permits and identification, to remove bureaucratic obstacles to hiring.

Factors Specific to the Mental Health Service. Engagement with the mental health service was influenced by participants' perceptions of the relevance of therapy for their personal needs, as well as the responsiveness of the service partners. Participants with prior knowledge of the benefits of therapy were more likely to engage. Therefore, psychoeducational efforts that normalize mental health support may help reduce stigma and encourage

participation. Additionally, flexible service options, including telehealth, were seen as beneficial, although participants reported that the mental health service partner did not provide this option.

Additional barriers to engagement with the mental health service were evident. The most significant challenge was the lack of follow-up from the service partner. A number of participants reported reaching out to the program's service partner for therapy but never receiving a response, leading to frustration and disengagement. Skepticism about the effectiveness of therapy also deterred participation. Some individuals believed their issues were not severe enough for professional intervention, whereas others doubted that therapy would provide meaningful benefits. Trust concerns further complicated engagement, particularly among those who had previously experienced confidentiality breaches or abrupt terminations of service.

To improve engagement, mental health services offered to BIP participants should have very strong and responsive communication and follow-up procedures. Expanding virtual and flexible scheduling options would further accommodate participants with time constraints and complex life demands. Efforts to build trust, ensure confidentiality, and provide clear explanations of the potential benefits of mental health treatment may also increase participation and satisfaction.

Factors Specific to the Parenting Service. The parenting service faced engagement challenges but also provided meaningful benefits to those who fully participated. Many participants recognized and valued the opportunity to improve their parenting skills, particularly in areas such as emotion regulation and child discipline. Supportive facilitators

played a key role in enhancing participant experiences, and peer connections fostered a sense of community among parents.

However, multiple barriers prevented full engagement. Many participants had competing responsibilities, including work schedules and attendance at other mandated programming which made it difficult to prioritize parenting support. Misconceptions about program expectations also deterred participation. Some individuals believed the program was overly rigid or not applicable to their needs. Additionally, parenting services often lack direct support for legal and visitation challenges, which was a major concern for individuals navigating relevant concerns.

To enhance participant satisfaction, parenting services offered by AIPs should improve outreach efforts to clarify program benefits and expectations. Offering flexible participation options, including virtual sessions, could accommodate busy schedules. Expanding services to include navigation support for legal, custody, and visitation challenges would further address participant concerns and increase engagement.

Factors Specific to the Substance Use Service. The subsample of participants who completed interviews had very low engagement with the substance use service, likely due to participants' perceptions of need and readiness for change. Some individuals recognized the potential of substance use supports to provide coping strategies, but many opted out due to low motivation or external constraints. Lack of awareness about the service further hindered engagement, as it was not widely advertised.

Additionally, many participants did not perceive substance use services as personally relevant. Some individuals had already achieved sobriety, while others preferred self-regulation

over professional intervention. Misconceptions about the focus on hard drug users also led some participants to believe it was not applicable to their substance use patterns.

To improve engagement, substance use services offered to BIP participants should strive for high visibility and awareness. Expanding these services' scope to emphasize harm reduction, general coping strategies, and a range of substances (including challenges with legal drugs such as cannabis in many states) may attract a broader participant base. Flexible engagement options, including virtual support groups and drop-in formats, could further remove barriers to participation.

Summary of Thematic Analysis of Participant Satisfaction with Supportive Services

While each of the supportive services offered had unique satisfaction determinants, common themes emerged, particularly regarding accessibility, alignment with participant needs, and service responsiveness. Addressing barriers through tailored outreach, flexible service delivery, and strengthened follow-through may enhance participant engagement and satisfaction. Future research should explore additional targeted strategies to improve service uptake and delivery, including greater information sharing and proactive communication processes often labeled as a "warm handoff," particularly for services that may be associated with social stigma.

Although common themes influenced both uptake and satisfaction across the supportive services offered, each service had unique determinants. Addressing logistical barriers, increasing outreach, enhancing service flexibility, and ensuring follow-through can improve both engagement and participant satisfaction with supportive services. Future

research should explore strategies for better aligning services with individual needs and reducing disengagement risks.

Recommendations for Improvements to the Supportive Services Model

The interview participants provided a number of helpful suggestions to consider for future refinement of the supportive services model and general implementations of supportive services within BIPs. Some of the suggestions focus on the general process of assessment and referral, whereas other suggestions focus on specific supportive services.

The program intake and assessment process are an important component of the supportive services model. The interviews revealed some concerns about the length and extensiveness of the intake assessment (which was expanded in order to obtain relevant information for supportive service referrals). The intake typically lasts about 90 minutes, and one concern raised was that this part of the program doesn't "count" toward the sessions required for overall completion of the court mandate. Similar concerns were raised regarding the potential time spent in receiving supportive services – i.e., that this time and effort is "extra" beyond the court requirement rather than counting toward completion of the court mandate in some way.

Participants seemed generally content with the topics covered during the program intake and did not suggest improvements. However, they expressed a desire for more human connection, relatability, and acknowledgment of their personal needs and perspectives. For instance, being able to reach a person or have calls returned promptly was important. Additionally, participants wanted to be asked open-ended questions regarding whether they

believed they should be in the program and how they perceived their need for assistance and services.

Several participants discussed wanting more male representation among staff to achieve balance, facilitate social learning, and reduce resistance. Access to male staff would foster connection, particularly among participants who lack positive male role models, and may potentially reduce resistance to messaging regarding services and help-seeking. A related theme focused on the idea that male-identified participants may be able to speak more freely with male staff members.

Another identified theme involved the desire to have supportive services more integrated with the routine program sessions. Supportive services were largely separate from the traditional abuse intervention services. Incorporating aspects of these services into the regular 90-minute sessions may boost engagement by facilitating access for participants who otherwise would not engage and raising awareness of available services. While the intake process is essential for establishing a baseline for the staff, a participant offered that "people are aware of their needs." Therefore, exposure to the range of resources to all may be beneficial.

Participants shared the desire for more flexible access to supports. One example mentioned was virtual appointments to facilitate more rapid engagement with a service provider. In addition to virtual access, one participant suggested alternative forms of communication such as email or electronic form submissions to accommodate work schedules that overlap with regular business hours. Interview participants also alluded to the convenience of text messaging communication to enhance reach and accessibility. This approach would be

more amenable to participants' competing priorities and create a sense of having someone to lean on during times of need.

Another theme emphasized greater optionality in the supportive services offered. At any given time point, the agency endeavored to partner with a total of four community agencies, one for each of the supportive services topic areas. Organizational representation shifted during the course of the intervention due to the challenges brought on by the COVID-19 pandemic and inter-agency partnerships in general. However, some interview participants expressed a preference for a menu of potential organizations with additional information to help them make informed decisions about the uptake of their services and to find an agency that could best fit their needs. For example, one participant familiar with a local organization selected to provide mental health services suggested a potential lack of fit as a barrier to service uptake.

Some participant comments focused on the organization of service delivery. One example suggestion is drop-in sessions at convenient times. Another participant indicated a desire to do double sessions, which would reduce time and expense in traveling to the agency. A request for some type of mutual engagement together with relationship partners or co-parents was also brought up. A suggestion for smaller group sizes to reduce distractions, side conversations, etc. was also provided A final, related suggestion focused on a desire for more active outreach by the program staff and supportive service providers. Note that for some of these suggestions it was not always clear whether participants were focusing on the general HRM BIP programming, on supportive service offerings, or on both aspects of the HRM BIP.

The interviews also inquired about suggestions for supportive services that were not currently offered by the program. Participants provided a number of suggestions for consideration. These included housing support, community re-integration support to address barriers to life stabilization and employment for formerly incarcerated participants, assistance with money management, anger management through yoga or mediation, and on-site job fairs. One relatively common and final theme worth noting is a desire for more depth and customization in arranging assistance that is carefully matched to each participant's strengths and needs.

Limitations

A number of important limitation need to be considered to help understand and interpreting the project findings. We have separated these into three categories: 1) limitations associated with the overall study design; 2) limitations associated with the available measures and samples; and 3) limitations associated with the implementation of supportive services.

First, the use of a quasi-experimental cohort control evaluation design in order to test the overall efficacy of the supportive services program implementation has important limitations relative to the gold standard randomized control trial. The use of a historical control group leaves open some questions regarding the possibility that ongoing changes in the population served by the agency, changes in the social context, and historical events may increase, decrease, or otherwise alter observed differences between cohorts. In designing this evaluation project, the research team was pretty confident that there would be relative constancy in the population served by the HRM program over time with respect to background characteristics such as average age, gender distribution, education levels, and criminal histories.

It was therefore somewhat surprising that the cohort who was exposed to the supportive services model differed in a number of these characteristics from the cohort who were referred to the HRM program in the years preceding the implementation of this intervention approach. Although it is possible to adjust for some of these factors statistically, it remains quite challenging to isolate influences that can be attributed to the program innovations from potential differences in the population served over time.

A related set of challenges arose from unexpected historical events, specifically the COVID-19 pandemic which severely disrupted the initial implementation of the supportive services model. The pandemic produced changes in arrest rates for a variety of crimes, as well as policing and prosecution of domestic abuse. It also put considerable strain on the HRM staff members who were working to maintain core program services as well as the supportive service partners struggling to continue providing regular service activities. As noted previously in this report, the pandemic also created a much greater time lag between the historical control cohort and supportive services cohort than was originally intended, approximately 3.5 years intervening rather than the original plan for a one year lag to organize and implement the supportive services. The pandemic also brought a variety of social and community adaptations that likely influenced the delivery of supportive services, service uptake by clients, and re-offense rates. Adjustments to the pandemic also reduced the expected sample size for the supportive services cohort, thus limiting statistical power to detect potential effects.

Second, there are a number of limitations associated with the sample and available measures for this evaluation project. Notably, the study sample was relatively homogenous in racial background (approximately 90% Black / African American), and geography (residing in a

large east-coast urban center). In addition, the vast majority of HRM BIP clients are court-referred to services and many have an extensive history of interactions with the criminal justice system. Thus, the study findings may not generalize to other geographic contexts, to samples with lower levels of criminal justice involvement and related risk factors, or to samples with a high level of self-referred (voluntary) participants.

With respect to measurement, the reliance on criminal justice data to assess program effects, along with the relatively brief (one-year) follow-up window which began at the date of program referral, raise important concerns. On the positive side, our team was able to identify criminal history and re-offense data for a very large proportion of BIP participants, thus providing good assessment coverage and relatively low rates of missing data. In addition, criminal justice data allow for detection of violence and abuse toward new partners, violent offenses in general, and a range of socially-and personally-important involvements with the legal system. On the other hand, with respect to domestic violence research, criminal justice data in general provides a lower detection rate for ongoing violence in contrast to reports by relationship partners (Babcock et al., 2004). Further, our team only had access to publically-available data within the state of Maryland. Therefore, criminal justice involvement in other states, or any records that were not included in the public database could not be detected by our coding team.

In a related vein, the duration of the follow-up period, 12 months from the date of program referral, created additional measurement limitations. Identification of the study sample as all individuals who were referred to the HRM BIP during specific time periods was the most efficient strategy to create the study cohorts using the agency data systems, and it

allowed the researchers to establish a consistent tracking period for assessment of re-offense for everyone referred to the program. However, approximately one-fourth of cases never followed through on the referral, and were thus included in an “intent to treat” sample in the broadest sense of the term given that these individuals had little or no contact with the HRM program.

As is common in BIPs, for those who did follow through, there was also considerable variation in the time it took to contact and engage with the HRM program after the initial referral. This required the researchers to select a time lag after the referral date to allow time for referred cases to enroll in the program and engage with supportive services so that subsequent criminal justice involvements could plausibly reflect outcomes from the supportive service intervention model. Given that the outer limit for the assessment of re-offense was set at 12 months after referral, this decision also meant that the follow-up windows for re-offense analyses were less than a full year in duration. This shortened assessment period is a limitation of the study because it provides a relatively brief snapshot of participant outcomes.

In addition, our initial expectation was that a reasonable number of program participants would initiate supportive services soon after completing program intake and during early the first 4-6 weeks of group sessions (in Stage 1 of the 2 Stage HRM program). Thus, we decided to use a 12-month follow-up window in order to maximize the supportive services sample size within the time constraints imposed by the overall funding period for the study, and projected that this time frame would be sufficient to detect potential intervention effects from supportive service delivery. However, the study data revealed that uptake of supportive

services often takes longer to begin, and unfolds more slowly over time than originally anticipated. Therefore future research may benefit from a longer follow-up interval.

The third important category of limitations focuses on implementation challenges with supportive services. The HRM staff invested a great deal of time and effort over an extended period of time to establish and maintain agreements for partner agencies to provide on-site supportive services for the risk factors identified in the original plan. As with many inter-agency collaborations, some of these partnerships progressed smoothly, some took more time than expected to initiate, and some posed persistent challenges. Notably, some partner agencies were inconsistent in their capacity to provide on-site presence at the HRM community engagement center. The employment support partner was a notable exception, and allocated a full-time staff member to work on site at the HRM program. Some partner organizations experienced staffing changes that made it difficult to offer the supportive service consistently across time, and some providers were not fully attuned to working with populations that have significant barriers or mistrust of providers. Emerging from the pandemic, one service partner was only able to offer virtual services, and some were unable to provide sufficient outreach staffing to support robust engagement of BIP participants. Thus, these complexities provide a "real world" test of the intended implementation of the supportive services model while also limiting our ability to evaluate a fully operational and fully implemented version of this approach.

Artifacts

Data sets generated

We have created three data sets from this project. The first is a quantitative data set in SPSS format which includes data on a total of 1759 cases from the combined Historical Control Cohort (all cases referred to the HRM BIP between January 1, 2016 and December 31, 2018), and Supportive Services Cohort (all cases referred between April 1, 2022 and June 30, 2023). This data set contains a limited number of demographic and background variables (e.g, age, sex, education, race) that were gathered on both cohorts, along with data on program attendance and completion, and the full set of criminal history and re-offense variables obtained for these cases. The criminal justice data includes all criminal offense incidents (excluding traffic offenses) as well as protection and peace orders in Maryland throughout the individual's life course. Each unique incident is coded into one of 6 mutually exclusive categories using a hierarchical coding system: 1) domestic abuse; 2) other violent offense; 3) property crime; 4) drug-related offense; 5) driving while under the influence; and 6: other offense. Criminal justice involvements are separated into criminal history (incidents that occurred prior to the date of referral to House of Ruth Maryland), and re-offense (incidents that occurred after program referral).

The second data set includes more detailed quantitative data on cases from the Supportive Services Cohort (490 in total) and is also in SPSS format. In addition to the criminal history, re-offense, and demographic variables described above, this data set also includes detailed information on referral to, and engagement with, supportive services extracted from assessments conducted at program intake, transition from Stage 1 to Stage 2 of the BIP, and the post-program exit interview. This data set also includes extensive information from an assessment of criminogenic risks and needs and other life challenges conducted during program

intake, including item and scale-level data assessing common mental health problems, relationship problems, substance use, parenting concerns, criminogenic attitudes, and experiences of discrimination. This data set also includes post-program data for those who successfully completed the BIP, with assessments focused on a limited set of risk and need variables, including employment status, relationship problems, parenting satisfaction, and criminogenic attitudes.

The third data set is qualitative in nature, and includes transcribed interviews with 29 individuals enrolled in the House of Ruth Maryland BIP. This data set also includes level 1 coding of interview comments focused on facilitators and barriers to engagement with each supportive service; demonstrated and articulated need for supportive services; positive, negative and neutral experiences with the supportive services and providers; supportive service outcomes; and participant recommendations for program enhancement and additional supportive services.

Dissemination activities

During the project period, our team engaged in a number of dissemination activities to inform providers, policy makers, and researchers about the supportive services model and its implementation. The following is a list of relevant dissemination activities:

Presentations to Stakeholders, Policy Makers, Providers, and the Public at the Local and State Level:

- Murphy, C. & Richards, T. (January, 2020). *Overview of the supportive services model*. Presentation to the Family Violence Council of the Maryland Governor's Office of Crime Control and Prevention.

- Nitsch, L. (April, 2022). *Abuse Intervention Services at House of Ruth Maryland.* Presentation to the Baltimore City Office of the Public Defender.
- Nitsch, L. (June, 2022). *House of Ruth Maryland Supportive Services Model*. Discussion with the Baltimore City Mayor and the Director of the Mayor's Office of Neighborhood Safety and Engagement.
- Richards, T. (June, 2022). *Principles of Effective Intervention: Risk, Needs, and, Response*. Presentation at the Best Practices in Domestic Violence Supervision Conference for Maryland Parole and Probation.
- Nitsch, L. (September, 2022). *House of Ruth Program Targets Violence Reduction by Working with Those Who Commit Violence*. Interview published in the Johns Hopkins University HUB online newsletter.
- Nitsch, L. (October, 2022). *Service Expansion of the Gateway Project and Increasing Our Comfort in Offering Support to Individuals Who are Abusive Toward Intimate Partners*. Presentation to Baltimore Communities Assisting and Advancing Neighbors (BCAAN).
- Nitsch, L. (10/12/2022; re-aired 12/13/2022) *Preventing Intimate Partner Violence and Ending Cycles of Abuse*. WYPR Baltimore Public Radio "On the Record" interview.
- Murphy, C.M. (May, 2023). *Effective elements of battering intervention*. Presentation at the Maryland Network Against Domestic Violence Advanced Training for Abuse Intervention Providers.

Presentations to Providers and Policy Makers in Other States and National Audiences (Including Podcasts)

- Brokmeier, A.M., Murphy, C.M., Holliday, C.N., LaMotte, A., Green-Manning, A., Richards, T., & Nitsch, L. (2021, April). *A community-based, co-located services model to prevent subsequent partner violence among men in an abuse intervention program*. National Conference on Health and Domestic Violence. (virtual).
- Nitsch, L. (September, 2021). *Applying Principles of Effective Intervention to Abuse Intervention Programs*. Presentation to Topeka, Kansas' Mayor's Taskforce Against Domestic Violence (virtual).
- Nitsch, L. (December, 2021*). Intentional Design in Domestic Violence Accountability Programs*. Center for Court Innovation (online course recording).
- Nitsch, L. (December, 2021). *Rethinking Our Approach to Batterer Intervention Services*. Plenary, Kentucky Association of Sexual Assault Programs and Kentucky Coalition Against Domestic Violence's Annual Conference.
- Nitsch, L. (2022). *Wraparound Services to Support Safety and Change.* Center for Court Innovation Podcast. https://www.courtinnovation.org/publications/wraparound-services-support-safety-and-change
- Holliday, C. (2022). *The Social Context of Intimate Partner Violence.* American Health Podcast. https://americanhealth.libsyn.com/website
- Richards, T.N. (April 2023). *Integrating principles of effective intervention into batterer intervention treatment.* Presentation hosted by the State Bar of Wisconsin.
- Nitsch, L., & Murphy, C.M. (January, 2023). *Ongoing evaluation of supportive services for battering intervention*. State spotlight at a virtual meeting of the National Battering Intervention Network.

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APPENDIX

HOUSE OF RUTH GATEWAY PROJECT SUPPORTIVE SERVICE STUDY

INTERVIEW GUIDE

Welcome: Hi! Thank you so much for meeting with me. How are you today?

<Re-introduce the recorder to the participant and turn it on. Announce interview number>

Opening: The House of Ruth Gateway Project recently expanded to provide participants access to additional services including employment support, parenting support, mental health counseling, and substance use counseling. Whether or not you have received any of these supportive services, we are interested in learning more about your views and experiences. This interview will ask about what it was like for you to get into the Gateway program and to complete the Gateway intake;

- what it was like to be offered supportive services;
- whether these services fit with what you would want or need; the reasons why you have used or not used these services; and
- any experiences you have had accessing or receiving these services.

Question	Probes
1. I want to start by asking what was it like for you to get into the Gateway program, going from the time you were referred or decided to come here until the time you started the Stage 1 group. **Please talk about your experiences getting started with the House of Ruth Gateway Project**	a) Did you have any challenges or difficulties getting into the program? b) What parts of that process went well? c) What parts of that process did not go well? d) How were you feeling when you first came into the program? e) Have those feelings changed during your time in the program?

2. One of the important steps in starting the Gateway Project is the intake, when you met one-on-one with a staff member who asked a lot of questions about your life and how you were doing. **Please talk about your experiences with the Gateway intake.**	***a) Which parts of the intake were helpful or supportive?*** ***b) Which parts of the intake were not helpful or supportive? Participants would need to remember questions from the intake to answer these questions.*** c) Were you comfortable answering all of the questions you were asked? d) Was there any important information about you that the intake missed, or any questions that should have been asked but weren't? e) Did you feel heard? f) What can be done to improve the intake process?
3. Section on the Gateway program	a) How valuable would you say the program has been for you? b) What has made it [valuable/not valuable]? c) Is the program structure and content the same as what you expected before starting the program? d) In what ways is it the [same/different]? e) Have you had any challenges attending the program sessions? f) How much do you think you have changed as a result of participating in the program? g) In what ways have you [changed/not changed]? h) What about the program led to this change? i) If you could change anything about the program, what would it be and why?

4. Your intake worker referred you to receive additional supportive services or resources. This may have included employment support, parenting support, mental health counseling, or alcohol or drug counseling. **Do you remember which of these services the intake worker recommended for you?** *(NOTE: Ask follow-ups about each service that the individual was referred to)* **What were your thoughts or reactions when the intake worker suggested that you could benefit from this service?**	a) How did you feel when this service was recommended to you by the intake worker? b) What were some initial thoughts or feelings you had about being recommended to service? c) Do you feel there is any stigma associated with using or being recommended these services? d) Did you understand why you were referred to this service? e) Did this referral seem to fit with your needs or concerns?
5. Please tell me about your decision whether or not to use supportive services. *(NOTE: Ask follow-ups about each service that the individual was referred to)* **Why did you decide to use or not use this service?** For any supportive service that the person did not use, go to question 5. For any supportive service that the person has used, go to question 6.	a) What did you think about when making your decision to use or not use this service? b) What factors influenced your decision to use/not use this service? c) What did you think this service would be like? d) What kinds of outcomes do you think would come from you using this service? Good or bad?

6. Additional Prompts for those who did not use the supportive service: **What do you think has prevented you from using this supportive service?** **Would you be interested in using any of Gateway's supportive services that you are not currently using -- employment, parenting, mental health, or alcohol/drug counseling?**	*Note: the interview needs to have information handy for referrals in case anyone indicates that they would like to receive these services* What changes or improvements would you like to see in the way ____ services are offered to make them more accessible or appealing? What do you think would help you be able to access services you are interested in? What do you think about doing anything extra beyond what is required to complete the Gateway Project? What do you think would help motivate you to engage in services that aren't mandatory?
7. If the individual has used one or more of the supportive services: **Please tell me about your experience using this supportive service**	a) What has it been like for you so far? b) Has this supportive service met your expectations? Why or why not? c) Has anything good come from using this service? d) Has anything bad come from using this service? e) How valuable has this service been for you? f) What has made it [valuable/not valuable]? g) Has the service impacted your overall view of the program? h) If so, how has the service impacted it? i) Were there any challenges accessing this service – for example any difficulties getting scheduled or attending sessions? j) Is there anything that the Gateway program or staff can do to make it easier to use this supportive service? k) How much do you think you have changed as a result of using this service?

	l) In what ways have you [changed/not changed]? m) What about the service led to this change? n) If you could change anything about the service, what would it be and why
8. For everyone: **Do you have any personal concerns or life challenges that are not addressed by the supportive services offered at the Gateway Project?** **Are there any additional services that you would like to see offered by the Gateway Project?**	
9. What would you tell other Gateway participants about your experience with the supportive services? **What else can you share about your overall experience with the House of Ruth Gateway Project supportive services?**	
Thank you so much for coming in to speak with me today and for sharing your story. How are you feeling? Do you have any questions that you would like to ask? Any concerns?	