Iowa PPW

The Iowa Pregnant and Postpartum Women's Residential Treatment Program

THE IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION

Iowa Pregnant and Postpartum Women
Annual Report
October 2017

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Annual Report
October 2017

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http://iconsortium.subst-abuse.uiowa.edu/

EXECUTIVE SUMMARY

The Iowa Consortium for Substance Abuse Research and Evaluation (Consortium) is under contract with the Iowa Department of Public Health (IDPH) for evaluation of the Iowa Residential Treatment for Pregnant and Postpartum Women (PPW) Program. The PPW program is intended to expand the availability of comprehensive, residential substance use disorder treatment, prevention and recovery support services for pregnant and post-partum women and their minor children, including services for non-residential family members of both the women and the children. The purpose of this report is to assess whether the Iowa PPW grant was used to implement an evidence-based program that provides recovery support services and addresses behavioral health disparities across three residential treatment sites (Area Substance Abuse Council, Heartland Family Services and Jackson Recovery Centers) from September 30, 2015 to September 29, 2017.

Key Findings

Treatment Outcomes

- One-hundred-eighty clients were admitted between February 2016 and September 15, 2017.
- The treatment completion rate was 76.0%. The median length of stay was 71 days.
- Treatment completion rates increased at both Heartland Family Services (HFS) and Jackson Recovery Centers (JRC) by 230.0% and 18.8%, respectively from the 2016 fiscal year to the 2017 fiscal year. Treatment completion decreased by 16.6% for clients admitted to the Area Substance Abuse Council (ASAC).
- While length of stay was similar for Iowa PPW clients (71 days) and clients enrolled in Women's and Children's residential treatment centers receiving IDPH funding (71.5 days), rates of treatment completion were significantly higher for Iowa PPW clients (75.8%) than Women's and Children's clients (54.2%).
- Ninety-six percent of Iowa PPW clients reported abstinence from alcohol and illicit drugs at follow-up.
- Of the 63 discharged clients who completed follow-up surveys by September 15, 2017: 1) all clients reporting homelessness at admission (n=12) were housed at follow-up and 2) median increased from $192 per month at admission to $1,000 a month at follow-up.

Service Provision

- Four out of five clients (79.7%) received at least one family-oriented evidence-based intervention.
- Agencies spent over $100,000 in recovery support services on the 180 Iowa PPW clients.
- Iowa PPW clients attended over 1,200 hours of parenting classes and participated in over 400 hours of family therapy from June 1, 2016 to August 31, 2017.
- Seventy-two minor children and extended family received an evidence-based intervention.
- Five of 51 children (9.8%) assessed for Fetal Alcohol Spectrum Disorder (FASD) screened positive for FASD.
- Since January 1, 2017, 55 children were reunited with one or more parents.

Recommendations

- **Address staffing issues that may diminish program quality and sustainability.** Staff turnover was a substantial barrier to maintain program quality for ASAC in particular. Key informant interviews revealed that agencies would benefit from one staff member who could "own" the project rather than juggling grant responsibilities among several staff lack full knowledge of grant guidelines and procedures.

- **Support the use of MAT for clients with opioid use disorder.** Completion of Iowa PPW was lowest among women using opioids. It may be advantageous to suggest Medication Assisted Treatment (MAT) for clients with opioid use disorders to improve treatment completion for this group. Educating clients on the safety of some forms of MAT during pregnancy and while breastfeeding may encourage clients to use MAT, and ideally, increase treatment completion for Iowa PPW clients with opioid use disorder.

- **Increase efforts to complete GPRA follow-up interviews.** While results from follow-up interview are promising in that 90.5% of clients reported abstinence from drugs and alcohol five to eight months post-admission, this data is not representative of all Iowa PPW clients. Over half of clients completing the follow-up interview were admitted to JRC, which was also the treatment site with the highest rates of treatment completion. Program staff can learn a great deal by following-up with clients who did not complete the program to identify potential gaps in service delivery.

- **Update Memorandums of Agreement and Understanding.** A majority of the MOAs/MOUs received by the evaluation team will expire or have already expired by the start of the 2018 fiscal year. It is unclear whether expired agreements represent unsuccessful agreements or if the documents have not been updated. Furthermore, no new MOAs/MOUs were established in the 2017 fiscal year. Discussion and actions towards identifying avenues for increased involvement with outside organizations may facilitate program sustainability.

- **Consider implementing client incentives for returning from outside events sober.** Staff have reported clients occasionally use alcohol or illicit drugs at events outside of the treatment center (e.g. wedding or graduation ceremonies). In an attempt to reduce the occurrence of substance use at outside events, agencies may consider providing an incentive when clients return from outside events with a clean urinalysis test.

- **Maintain Seeking Safety Modifications sheet.** Staff can regularly update the Seeking Safety Modifications sheet prior to all Seeking Safety calls to share lessons learned from adapting Seeking Safety for new populations to increase client engagement during Seeking Safety sessions.

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PROGRAM DESCRIPTION

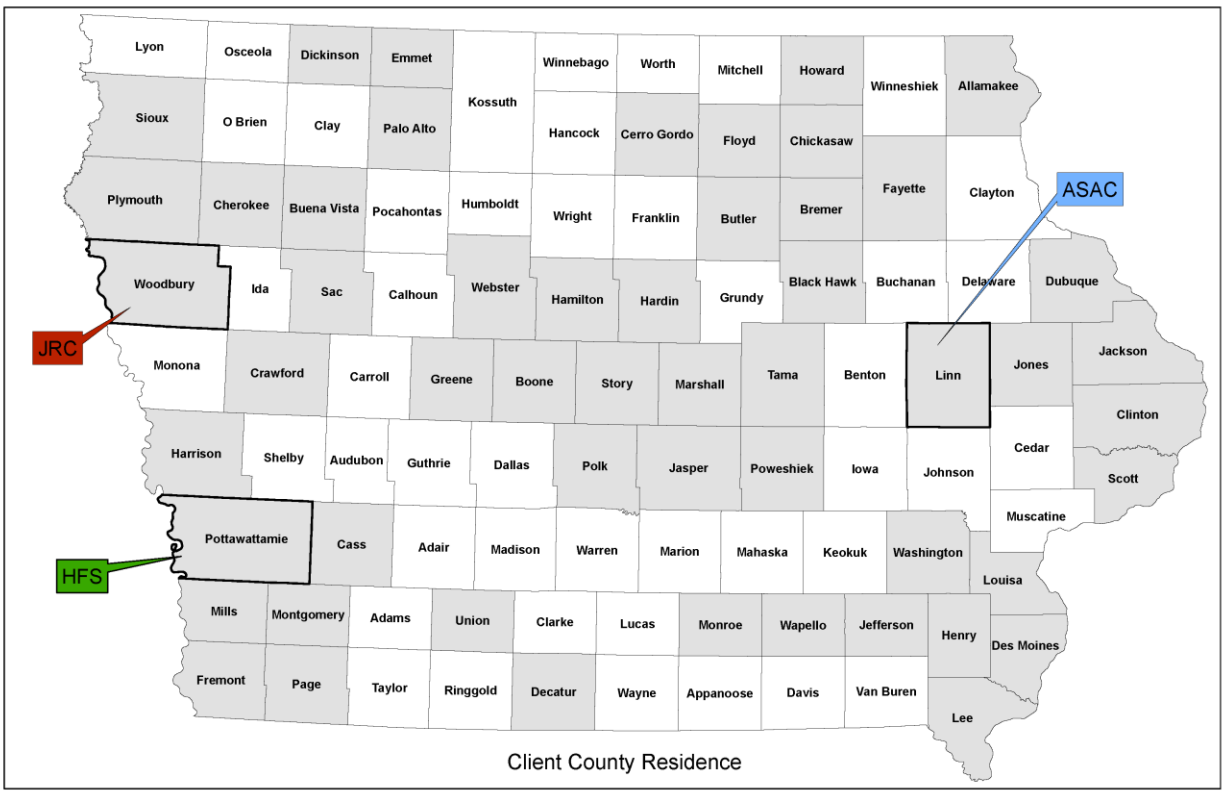
The Iowa Department of Public Health was awarded a three-year grant from the Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Treatment (CSAT). The purpose of this grant is to expand the availability of comprehensive, residential substance use disorder treatment, prevention and recovery support services for pregnant and post-partum women and their minor children, including services for non-residential family members of both the women and their children. Three established residential treatment programs in major cities throughout Iowa implemented the Iowa Pregnant and Postpartum Women's Residential Treatment Program (Iowa PPW): Area Substance Abuse Council in Cedar Rapids, Heartland Family Service in Council Bluffs and Jackson Recovery Centers in Sioux City.

The Iowa Consortium for Substance Abuse Research and Evaluation (Consortium) conducts the evaluation component of the project. The Consortium's evaluation involves the collection of data to assess the degree to which project goals and objectives are met. The evaluation includes data from The Government Performance and Results Act (GPRA), information collected from residential treatment providers, and interviews with staff providing PPW services**.** This report provides data for clients admitted during the first and second years of the grant period from October 1, 2015 to September 29, 2017.

Site Descriptions

Figure 1 displays the geographical location of Area Substance Abuse Council (ASAC), Heartland Family Service (HFS) and Jackson Recovery Center (JRC) within the state of Iowa and the distribution of clients throughout the State of Iowa. Each PPW site is located in a highly populated area of Iowa. ASAC is located in eastern Iowa while both JRC and HFS are located in western Iowa.

Figure 1. Map of Program Sites and Client County of Residence



Area Substance Abuse Council. ASAC is located in Cedar Rapids, Iowa, the second largest city in Iowa as of 2015, with approximately 131,127 residents[1]. Cedar Rapids is located in Linn County. Heart of Iowa is the residential Women and Children's program that is housed within ASAC. Heart of Iowa's residential services include a primary residential treatment center, a halfway house, and family living in furnished on-site apartments. Heart of Iowa can house 36 residential women. More than 36 residential women can be housed by temporarily placing two women in one unit until another unit is open. The program serves nearly 150 families a year. ASAC admitted their first client into the Iowa PPW program on February 10, 2016.

Heartland Family Service. HFS is located in Council Bluffs, Iowa, the seventh largest city in Iowa as of 2015, with approximately 62,524 residents[2]. Council Bluffs is in Pottawattamie County and borders Nebraska. HFS Family Service serves over 35,000 infants, youth and adults with 17 locations. HFS offers over 50 programs focusing on children and the family unit,

[1] U.S. Census Bureau. (2016). *State & county Quick Facts: Cedar Rapids, Iowa.* Retrieved October 11, 2017, from http://quickfacts.census.gov.

[2] U.S. Census Bureau. (2016). *State & county Quick Facts: Council Bluffs, Iowa.* Retrieved October 11, 2017, from http://quickfacts.census.gov.

counseling and prevention, and housing and financial stability. Iowa Family Works houses the residential Women and Children's program at HFS. This program can house ten to twelve women. Women who are unable to be immediately housed receive services in the center's Intensive Outpatient Program. HFS admitted their first client into the PPW program on February 12, 2016.

Jackson Recovery Centers. JRC is located in Sioux City, the fourth largest city in Iowa as of 2015, with approximately 82,872 residents[3]. Sioux City, Iowa is located in Woodbury and Plymouth counties and borders South Dakota. JRC's Women and Children's residential program can house thirty women. Women who are unable to be immediately housed are provided with services in the Intensive Outpatient Program. JRC admitted their first client into the PPW program on February 24, 2016.

County Residence of Clients

Figure 1 illustrates the distribution of Iowa PPW participants' reported county of residence at the time of admission to Iowa PPW. Nearly one-quarter (23.9%) reside in Woodbury County, and one-tenth live in Linn (10.6%) and Pottawattamie (10.0%) counties. Over two in five clients (44.5%) reside in the same county of the treatment centers. A larger portion of ASAC clients (78.6%) reside in counties outside of the Iowa PPW site's home county than HFS (41.7%) and JRC (43.1%) clients. One HFS client resided outside of the state and is not represented in the figure.

Program Goals and Objectives

The central purpose of Iowa PPW is to expand the availability of comprehensive residential substance use disorder treatment, prevention and recovery support services for pregnant and postpartum women and their minor children, including services for non-residential family members of both the women and children. The following goals originate from the Iowa PPW grant application and are used as benchmarks to assess the success of the PPW program:

Goal 1: Implement an evidence-based program and increase the number of pregnant and postpartum women served with evidence-based programming at three Women and Children's Centers.

[3] U.S. Census Bureau. (2016). *State & county Quick Facts: Sioux City, Iowa.* Retrieved October 11, 2017, from http://quickfacts.census.gov.

Goal 2: To allow client choice in selecting recovery supports while focusing on gender specific issues for pregnant and women in residential treatment for substance use disorders.

Goal 3: To reduce behavioral health disparities among pregnant and postpartum women who as a population tend toward a higher incidence of substance use disorder and related problems.

Appendix A lists corresponding objectives and evaluation question for each goal along with the indicators and data sources used to assess progress towards goal completion. The following section discusses methods of sample selection and data collection implemented to assess program success.

EVALUATION METHODOLOGY

The evaluation includes both qualitative and quantitative methodologies. Some data are collected from state and federal sources while others were developed solely for the purpose of the local evaluation. The following section describes methods of sample selection and data collection used to compile information for the evaluation report as well as the overall evaluation design.

Sample Selection

Treatment Clients

All clients entering Iowa PPW at one of the three residential treatment participated in the evaluation. All clients were either pregnant or postpartum at the time of admission to the program. The PPW grant defines postpartum as having given birth within 12 months of admission to the program. Between the time services began in February 2016 and the end of the second programmatic year, 184 pregnant and postpartum clients participated in Iowa PPW.

Comparison Clients

Admission Comparison Group

A sample of comparison clients was drawn in order to assess whether *characteristics* of Iowa PPW clients at admission were similar to characteristics of clients who did not receive Iowa PPW services. Women who indicated that they were pregnant at the time of admission to an IDPH-funded substance use treatment facility in Iowa between February 1, 2016 and September 15, 2017, but did not go to one of the three Iowa PPW sites were selected as the admission comparison group for the evaluation. It was not possible to include a sample of postpartum comparison clients since state treatment data do not include information on the timing of the clients' most recent birth. One-hundred twenty clients make up the comparison admission group.

Discharge Comparison Group

Another sample of comparison clients was drawn to assess whether *treatment outcomes* significantly differed between Iowa PPW clients and pregnant clients entering treatment at other Iowa treatment centers. The discharge comparison sample includes pregnant women who discharged from an IDPH-funded substance use treatment facility other than the three Iowa PPW sites between February 1, 2016 and September 15, 2017. Sixty-nine clients make up the discharge comparison group. To obtain a better estimate of how treatment completion varied between Iowa PPW clients and clients not enrolled in Iowa PPW, the evaluators created a subsample of the discharge comparison group. The subsample of the discharge comparison group, referred to as the "Women's and Children's group", contains 24 clients who discharged from Women's and Children's centers.

Agency Staff

A purposive sample of three staff from each of the three Iowa PPW sites was drawn to obtain information about barriers and facilitators of the grant program. Both supervisory and non-supervisory staff were contacted to conduct telephone interviews. Seven of the nine staff contacted participated in the interview.

Data Collection

Client Data Collection System

A system of data collection was developed to coordinate data collection efforts between agencies and evaluators at the Iowa Consortium. The following paragraphs describe how the participant data surveillance system is implemented from a client's admission to her discharge and follow-up assessment.

Client Admission to Iowa PPW

Agencies have three days to decide whether a client that is admitted to treatment to their agency would benefit from inclusion in Iowa PPW. When clients are identified as clients who are able to actively participate in the PPW program, and clients accept admission to the program, staff complete the Agency Notification of Intake. The Agency Notification of Intake Form supplements the GPRA admission interview by collecting information on clients' pregnant or postpartum status, birth outcomes of previous children and involvement in open child welfare cases and family Drug Court. New to the second year of Iowa PPW, clients also complete an Assessment of Recovery Capital (ARC) survey[4]. The ARC instrument is designed to measure clients' volume of internal and external assets than can be brought to bear to initiate and sustain recovery from alcohol and other drug problems[5].

Throughout the clients' participation in the program, agency staff submit monthly summaries describing the types and amounts of recovery support services each client used. In addition, the frequency and types of evidence-based interventions, assessments, and screenings clients and their family members received are reported on a monthly basis by agency staff.

Client Discharge from Iowa PPW

At discharge, agency staff complete the Agency Notification of Discharge, which supplements the GPRA Discharge Interview by including information such as client's pregnant or postpartum status, birth outcomes of children born in treatment, health screenings, and referrals to services

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[4] Groshkov, T., Best, D., & White, W. (2013). The assessment of recovery capital: Properties and psychometrics of a measure of addiction recovery strengths. Drug and Alcohol Review, 32(2), 187-194.

[5] Grandfield, R. & Cloud, W. (1999). Coming Clean: Overcoming Addiction Without Treatment. New York: New York University Press.

outside the treatment agency. The Agency Notification of Discharge also includes demographic information of children and supportive adult participants in the PPW program as well as the number of family program participants who were screened for substance use, Fetal Alcohol Spectrum Disorder, and learning and developmental disorders.

Following up with Clients

Agency staff contact clients between five and eight months post admission to conduct a GPRA follow-up Interview. New to the second year of Iowa PPW, clients also complete a follow-up ARC at the time of the GPRA follow-up interview.

Program Staff Data

Semi-structured Key Informant Interviews

In May 2017, care coordinators and supervisory staff were invited to participate in a semi-structured interview to discuss 1) how families are involved in PPW programming, 2) recruitment strategies and 3) efforts to maintain program sustainability. Findings from these interviews are throughout the report in conjunction with quantitative findings to elaborate quantitative findings.

Staff Training and Meeting Summaries

Each month program sites submitted forms summarizing staff attendance at training events and PPW-related meetings. Training materials and staff evaluations of training are used to describe training staff attended in the second year of Iowa PPW. In addition, notes were gathered from monthly provider calls and Seeking Safety provider calls led by the Project Coordinator.

Other Data

Weekend Family Programming Feedback Surveys

Quantitative and Qualitative data from the NIATx project implemented by HFS are also presented. NIATx is a model of process improvement designed specifically for behavioral health care settings. HFS implemented a NIATx project to assess how changes made to programming effected family engagement in weekend family programming.

Memorandums of Agreement/Understanding (MOUs/MOAs)

Each agency submitted formal Memorandums of Agreement (MOAs) and Memorandums of Understanding (MOUs) documenting the relationship between the Iowa PPW site and the organizations it works with to provide client services. The report assesses any change in MOUs/MOAs from the 2016 fiscal year to the 2017 fiscal year.

Evaluation Design

The evaluation report is goal-oriented and will discuss findings as they relate to the following Iowa PPW goals: 1) Implementing an Evidence-Based Program, 2) Providing Recovery Support Services, and 3) Addressing Behavioral Health Disparities. Qualitative and quantitative data at the staff and agency level are used to assess program effectiveness and to offer insight for program improvement. Characteristics of clients at admission including demographic information, patterns of substance use in the 30 days prior to admission, and involvement with justice and health and human services departments are discussed in the following section. An assessment of common characteristics identified among Iowa PPW clients at admission are used to identify client treatment needs.

CLIENT CHARACTERISTICS AT ADMISSION

Target and Performance Indicators

Iowa PPW proposed to provide direct services to 120 pregnant or postpartum clients each year of implementation. However, since agencies did not begin admitting clients until the second quarter of 2016, target admissions were reduced by 25% to 90 clients for the 2016 fiscal year. The number of pregnant and postpartum clients admitted to Iowa PPW increased from 71 in the 2016 fiscal year to 113 in the 2017 fiscal year (a 37.2% increase). The intake coverage rate, the percent of clients admitted relative to target admission goals, increased from 78.9% in the 2016 fiscal year to 94.2% in the 2017 fiscal year. ASAC had the highest levels of client admissions with 55 clients followed by JRC with 45 clients. HFS admitted the fewest clients with 13 admissions.

Figure 2 illustrates patterns in Iowa PPW admissions over the 2017 fiscal year by agency. Monthly patterns in admissions suggest that fewer clients entered Iowa PPW during the winter and early spring months. Agencies may need to modify or enhance existing recruitment methods during low admission months to meet monthly admissions targets. Agencies may also need to intensify follow-up interview strategies in the winter months when a large number of clients will be eligible for follow-up interviews.

Figure 2. Number of Clients Admitted to PPW Program by Agency and Month

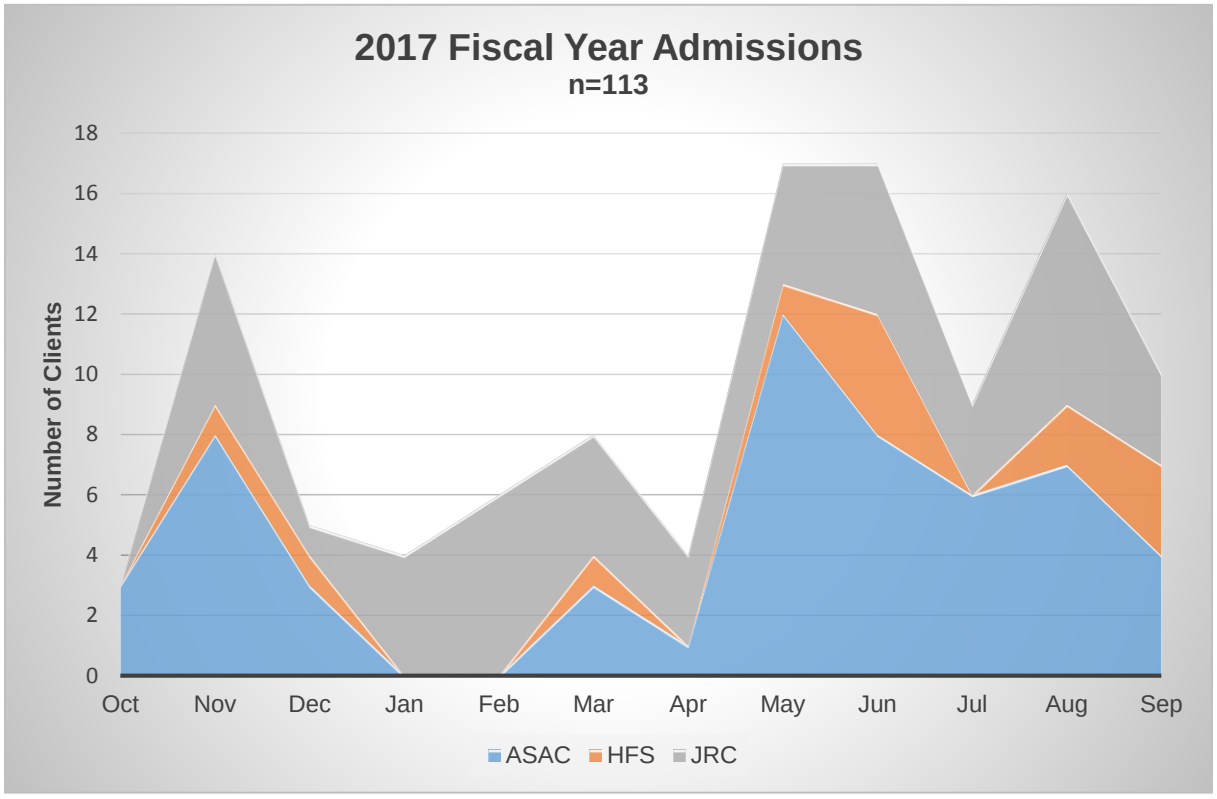


Table 1 compares target and performance numbers for client admissions in the 2017 fiscal year by race/ethnicity. This first column displays clients' reported race/ethnic background. The second column displays target client admissions as outlined in the Iowa PPW grant application and the final column displays actual data for clients admitted in the 2017 fiscal year.

In the second year of the grant, Iowa PPW admitted slightly more multi-racial, Hispanic/Latino and American Indian/Alaska Native clients than expected. However, fewer African American/Black clients were admitted in 2017 than anticipated. The racial/ethnic background of clients did not significantly vary by agency or fiscal year (i.e. between the 2016 and 2017 fiscal years).

Table 1. Program Goals for FY 2017 Client Admissions

	FY 2017 Target n (%)	FY 2017 Performance n (%)
Total Number of Admitted Clients	120 (100.0%)	113 (100.0%)
Race/Ethnicity		
White/Caucasian	100 (83.3%)	88 (77.9%)
Black/African American	12 (10.0%)	3 (2.7%)
Two or more races	4 (3.3%)	6 (5.3%)
Hispanic/Latino	3 (2.5%)	7 (6.2%)
American Indian/Alaska Native	1 (0.8%)	9 (8.0%)
Asian	1 (0.8%)	0 (0.0%)
Hawaiian or Pacific Islander	0 (0.0%)	0 (0.0%)

Client Characteristics

While 113 clients were admitted to Iowa PPW in the 2017 fiscal year, the data cut off for this report ended nearly two weeks before the end of the fiscal year, thus excluding data for four clients who were admitted to Iowa PPW after the data cut-off date. As a result, the following data is gathered from the 180 pregnant and postpartum clients with admission data reported between September 30, 2015 and September 15, 2017.

Maternal Status

Maternal status refers to whether the client was pregnant or postpartum at the time of admission to Iowa PPW. Figure 3 illustrates that nearly half of the women were pregnant (49.4%) at the time of admission while the remaining half of clients were postpartum (50.6%). Among the 89 pregnant clients, nearly half were in their second trimester (46.1%), while 21.4% and 32.6% were in their second and third trimesters, respectively.

Figure 3. Client Maternal Status at Admission

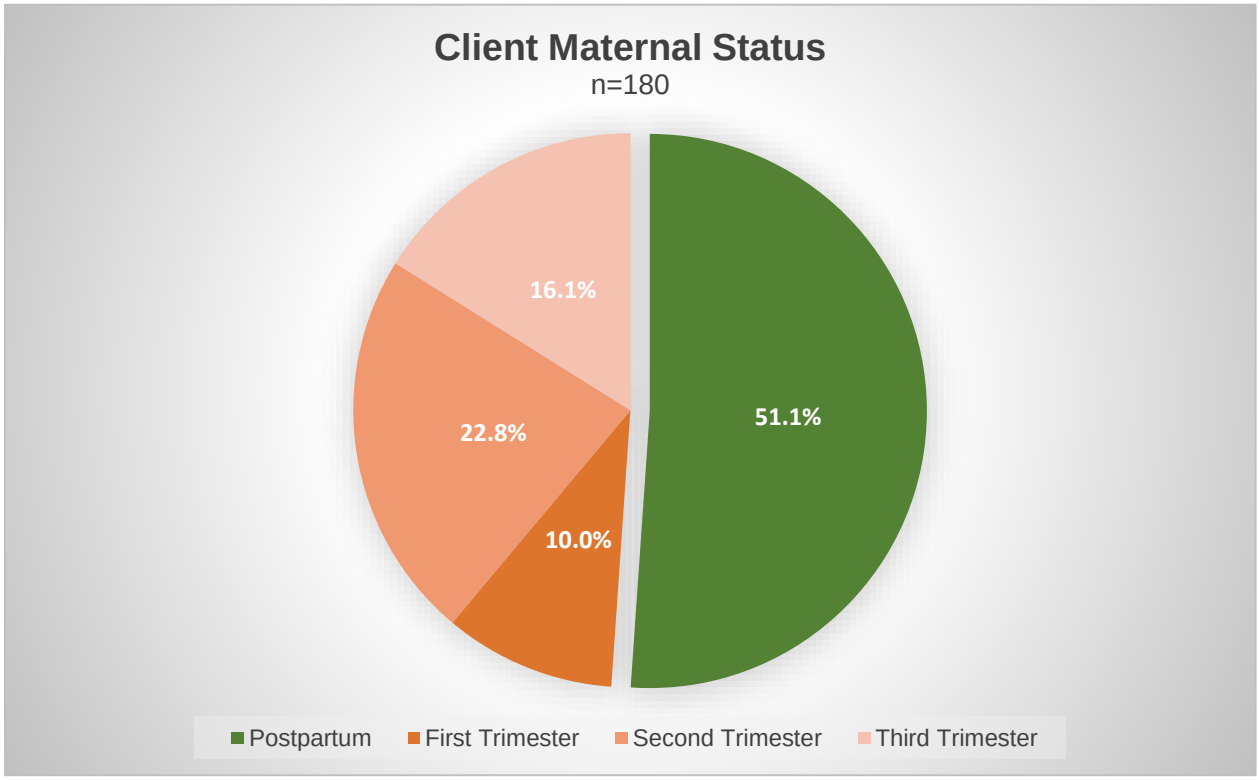


Table 2 shows how the distribution of clients' maternal status differs across agencies. Note that the "trimesters" rows represent the percentage of all clients that are in their first, second or third trimesters at the time of admission to Iowa PPW. While Figure 3 clearly illustrates the near 50/50 split between pregnant and postpartum clients when all agencies are combined, Table 2 indicates that clients' maternal status at admission to Iowa PPW significantly differs across agencies (Fisher's Exact Test, $p < 0.05$). For example, ASAC was the only agency admitting more pregnant clients than postpartum clients. Furthermore, ASAC admitted more clients in their first trimester than HFS or JRC. While there were significant differences in clients' maternal status at admission by agency, there was no significant difference in client maternal status between fiscal years.

Table 2. Maternal Status at Admission by Agency

Maternal Status	ASAC n=84	HFS n=24	JRC n=72	Total n=180
Pregnant	**65.5%**	**41.7%**	**31.9%**	**48.9%**
First Trimester	*19.1%*	*0.0%*	*2.8%*	*10.0%*
Second Trimester	*22.6%*	*29.2%*	*20.8%*	*22.8%*
Third Trimester	*23.8%*	*12.5%*	*8.3%*	*16.1%*
Postpartum	**34.5%**	**58.3%**	**68.1%**	**51.1%**

Client Demographics at Admission

Table 3 displays the clients' age, race/ethnicity, educational attainment, relationship status, living arrangements and number of children at the time of admission to Iowa PPW. The table contains data for three separate samples: 1) postpartum Iowa PPW clients, 2) pregnant Iowa PPW clients and 3) a comparison sample of all women who indicated they were pregnant upon admission to a residential treatment program at an Iowa facility other than ASAC, JRC or HFS supported with IDPH funding. While clients' pregnancy status is tracked in state records, the clients' postpartum status is not tracked. As a result, we focus on differences between pregnant Iowa PPW clients and pregnant comparison sample clients.

Statistical tests were done to assess whether client demographics significantly differed across the three samples (Iowa PPW postpartum, Iowa PPW pregnant and the comparison group). Client demographics were similar across all three client samples with the exception of reported living arrangements at the time of admission (Fisher's Exact Test, $p < 0.01$). A larger proportion of non-Iowa PPW clients were homeless (28.3%) compared to pregnant (17.1%) and postpartum (15.2%) Iowa PPW clients. Additionally, compared to Iowa PPW clients, a smaller portion of non-Iowa PPW clients lived alone or with significant others.

Clients' median age at admission ranged from 27 to 29. Over two-thirds of Iowa PPW pregnant and postpartum clients were White. The second largest racial/ethnic group represented was those reporting more than one race/ethnicity. Information on client's race/ethnicity was largely unavailable for the comparison group. Approximately three-quarter of clients in all samples completed a high school diploma or GED, which is substantially lower than the state average of 88.9%.[6] A majority of clients, roughly 70%, in all samples reported being "single, never married"

[6] U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates. Retrieved October 11, 2017, from http://factfinder.census.gov.

at the time of admission into residential treatment. The second most common relationship status among all groups is divorced or separated. Clients across all three samples reported having a median of two children at the time of admission treatment; however, the range is from zero to eight children.

Table 3. Client Demographics at Admission: Iowa PPW Clients and Comparison Group

	Postpartum Iowa PPW Clients n=92	Pregnant Iowa PPW Clients n=88	Pregnant Comparison Group n=120
Age (median)	27.0	29.0	27.0
Race/Ethnicity			
White/Caucasian	76.1%	78.4%	60.8%
Black/African American	5.4%	2.3%	0.8%
Native American/Alaska Native	6.5%	6.8%	0.0%
Asian/Pacific Islander	0.0%	0.0%	0.8%
More than one race/ethnicity	8.7%	8.0%	0.0%
Hispanic/Latino	3.3%	4.6%	7.5%
Unknown/Not Reported	0.0%	0.0%	30.1%
Educational Achievement (percent)			
0 – 11 years	28.3%	28.4%	22.5%
HS Diploma/GED	39.1%	38.6%	53.3%
Post-Secondary Education	32.6%	33.0%	24.1%
Relationship Status (percent)			
Single, Never Married	71.7%	68.2%	69.2%
Married	3.3%	12.5%	6.7%
Divorced or Separated	8.7%	10.2%	15.0%
Cohabitating	3.3%	4.6%	4.2%
Widowed	1.1%	0.0%	4.2%
Unknown	12.0%	4.6%	0.8%
Living Arrangements (percent)			
Alone (with or without children)	17.4%	17.1%	9.2%
Significant Others	21.7%	20.5%	10.8%
Other Adults	25.0%	27.3%	40.0%
Shelter/Halfway House	2.2%	2.3%	2.5%
Jail/Correctional Facility	5.4%	13.6%	9.2%

Table 3. Continued

	Postpartum Iowa PPW Clients n=92	Pregnant Iowa PPW Clients n=88	Pregnant Comparison Group n=120
Living Arrangements (percent)			
Homeless	15.2%	17.1%	28.3%
Unknown	13.0%	4.6%	0.0%
Number of Prior Children (median)	2.0	2.0	2.0

Client Substance Use at Admission

Table 4 presents clients' reported primary substance use and frequency of use 30 days prior to admission. Additionally, client's tobacco use and other substance use indicators are also presented. The most common primary substance is methamphetamine. Over half of all postpartum Iowa PPW clients (58.7%), Pregnant Iowa PPW clients (64.8%) and comparison group clients (62.5%) reported methamphetamine as their primary substance. The second most common substance was marijuana with approximately 16.0% to 18.0% of clients. When combining percentages from all opioids (heroin, non-prescription methadone, and other opioids), nearly one in ten clients reported an opioid as their primary substance making opioids the third most common substance used. Within the thirty days prior to admission, nearly one-third (32.6%) of postpartum PPW clients, 39.8% of pregnant PPW clients and 45.0% of the pregnant comparison sample reported daily use of their primary substance. Clients started using their primary substance between 16 and 18 years old in all three samples and had used their primary substance for a decade or more at the time of admission. Within the month prior to admission, an estimated four in five clients in all samples used more than one substance. Nearly 80% of clients across all samples smoked cigarettes within the 30 days of admission to residential treatment. Among those smoking cigarettes, smoking one-half to one full pack of cigarettes a day was the most commonly reported frequency of usage. More than two-thirds of clients had previous treatment admissions.

Iowa PPW clients' substance use patterns were similar across agencies with the exception of two indicators: 1) the proportion of clients using more than one substance and 2) the proportion of clients with prior treatment admissions. ASAC treated significantly more clients using more than one substance (90.5%) than either JRC (73.6%) or HFS (73.6%) (Fisher's Exact test, $p < 0.05$). Additionally, ASAC had a higher percentage of clients with prior treatment admissions (86.9%) than Jackson (73.6%) or HFS (58.3%) (Fisher's Exact Test, $p < 0.01$).

Table 4. Substance Use at Admission: Iowa PPW Clients and Comparison Group

	Postpartum Iowa PPW Clients n=92	Pregnant Iowa PPW Clients n=88	Pregnant Comparison Group n=120
Primary Substance			
Methamphetamine	58.7%	64.8%	62.5%
Marijuana/Hashish	16.3%	18.2%	16.7%
Alcohol	10.9%	3.4%	8.3%
Opioids			
Heroin	4.4%	2.3%	3.3%
Other Opioids	5.4%	8.0%	5.8%
Non-Prescription Methadone	1.1%	1.1%	0.0%
Oxycontin	0.0%	0.0%	0.0%
Cocaine	2.2%	1.1%	0.8%
Over the Counter Medication	0.0%	0.0%	0.0%
Other Hallucinogens	0.6%	1.1%	0.0%
Barbiturates	0.0%	0.0%	0.0%
Benzodiazepines	0.0%	0.0%	0.8%
Other Amphetamine	1.1%	0.0%	0.0%
PCP	0.0%	0.0%	0.8%
Frequency of Primary Substance			
1 + Times a Day	32.6%	39.8%	45.0%
3 – 6 Times per Week	20.7%	31.8%	18.3%
1 – 3 Times per Month	20.7%	12.5%	13.3%
No Use in Past Month	25.0%	15.9%	23.3%
Unknown Frequency	1.1%	0.0%	0.0%
Age at First Use (median)	17.5	18.0	16.0
Years of Primary Substance Use (median)	9.0	11.0	10.0
Use More than One Substance	81.5%	85.2%	76.7%
Cigarette Use			
At Least 1 Pack a Day	5.4%	14.8%	16.7%
½ to 1 Pack a Day	39.1%	38.6%	35.0%
Less than ½ Pack a Day	32.6%	23.9%	28.3%
No Cigarette Use	22.8%	22.7%	20.0%
Prior Treatment Admissions	77.2%	78.4%	80.0%

Client DHS and Criminal Justice Involvement at Admission

Table 5 presents the percentage of Iowa PPW clients involved with Department of Human Services (DHS) and the correctional system by agency. Overall, 23.3% of Iowa PPW clients reported involvement in one of Iowa's Drug Court program; however, there is a significant difference in Drug Court involvement by agency (Fisher's Exact Test, $p < 0.001$). While approximately one-third of clients at ASAC and HFS have clients in Drug Court, only one in ten JRC clients reported involvement in Drug Court. This difference may be a reflection of to the absence of a Family Treatment Court in the county where Heartland Family Service is located. There are Family Treatment Courts in counties where the ASAC and JRC PPW programs are located. There were fewer clients in Drug Court in the 2017 fiscal year (Fisher's Exact Test, $p < 0.001$). Over half of clients at all agencies reported involvement with DHS with postpartum women being significantly more likely to report involvement with DHS (83.7%) than pregnant clients (38.6%) (Fisher's Exact Test, $p < .001$). Lastly, an estimated one in ten of all Iowa PPW clients had been arrested in the 30 days prior to admission to Iowa PPW.

Table 5. Involvement in DHS and Correctional System at Admission

	ASAC n=84	HFS n=24	JRC n=72	Total n=180
Drug Court Involvement	31.0%	37.5%	9.7%	23.3%
DHS Involvement	54.8%	62.5%	69.4%	61.7%
Arrested within Past 30 Days	14.3%	8.3%	6.9%	10.6%

Self-Reported Physical and Mental Health at Admission

Physical and mental health indicators of Iowa PPW clients' health at admission are presented in Table 6. Approximately two-thirds of clients reported that their health was either excellent, very good, or good upon admission to Iowa PPW. Over four in five clients experienced violence or trauma in their lifetime (83.2%) or had a mental health condition at the time of admission (82.2%). The proportion of clients with a mental health condition at admission significantly differs across agencies (Fisher's Exact Test, $p < 0.01$). Nine in ten clients admitted to ASAC (91.7%) had a co-occurring mental health condition compared to approximately three-quarters of HFS and JRC clients. Nearly one in four clients (23.9%) reported engaging in at least one risky sexual behavior including unprotected sexual contact with an individual who was using injection drugs, high on a substance or was diagnosed with HIV or AIDS.

The lower portion of Table 6 displays the median number of days within the past 30 days clients report serious depression, serious anxiety, brain dysfunction or hallucinations that were not due to their use of alcohol or drugs. Approximately half of all clients report experiencing serious depression for at least one week and serious anxiety for at least 10 days within the month prior to admission. However, clients at JRC reported significantly fewer days of serious anxiety than ASAC or HFS clients (Kruskal Wallis Test; df =2, χ^2= 8.07, $p < 0.05$). Significantly fewer clients reported brain dysfunction; characterized as experiencing trouble understanding, concentrating or remembering, at JRC than ASAC or HFS (Kruskal Wallis Test; df = 2, χ^2= 5.90, $p < 0.05$). Reports of hallucinations were very rare among Iowa PPW clients.

Table 6. Self-Reported Health at Admission

	ASAC n=84	HFS n=24	JRC n=72	Total n=180
Self-Rated Health				
Excellent	9.6%	8.3%	9.9%	9.6%
Very Good	14.5%	12.5%	19.7%	16.3%
Good	39.8%	25.0%	46.5%	40.5%
Fair	31.3%	50.0%	22.5%	30.3%
Poor	4.8%	4.2%	1.4%	3.4%
Experienced Violence or Trauma	78.6%	79.2%	90.1%	83.2%
Self-Reported Mental Health Condition	91.7%	75.0%	73.6%	82.2%
Engaged in Risky Sexual Behavior	27.4%	22.2%	16.7%	23.9%
Median Number of Days in Past 30 Days Client Reported Experiencing				
Serious Depression	10.0	11.0	3.0	7.0
Serious Anxiety	15.0	14.5	3.0	10.0
Trouble Concentrating, Understanding, or Remembering	12.0	10.0	0.0	6.0
Hallucinations	0.0	0.0	0.0	0.0

Assessment of Recovery Capital (ARC) at Admission

Because the implementation of the ARC instrument did not begin until October 24, 2016, 90 clients, representing half of all clients in the admission sample for this report, completed the ARC at admission to treatment. The ARC instrument is present in Appendix B. The ARC contains ten dimensions:

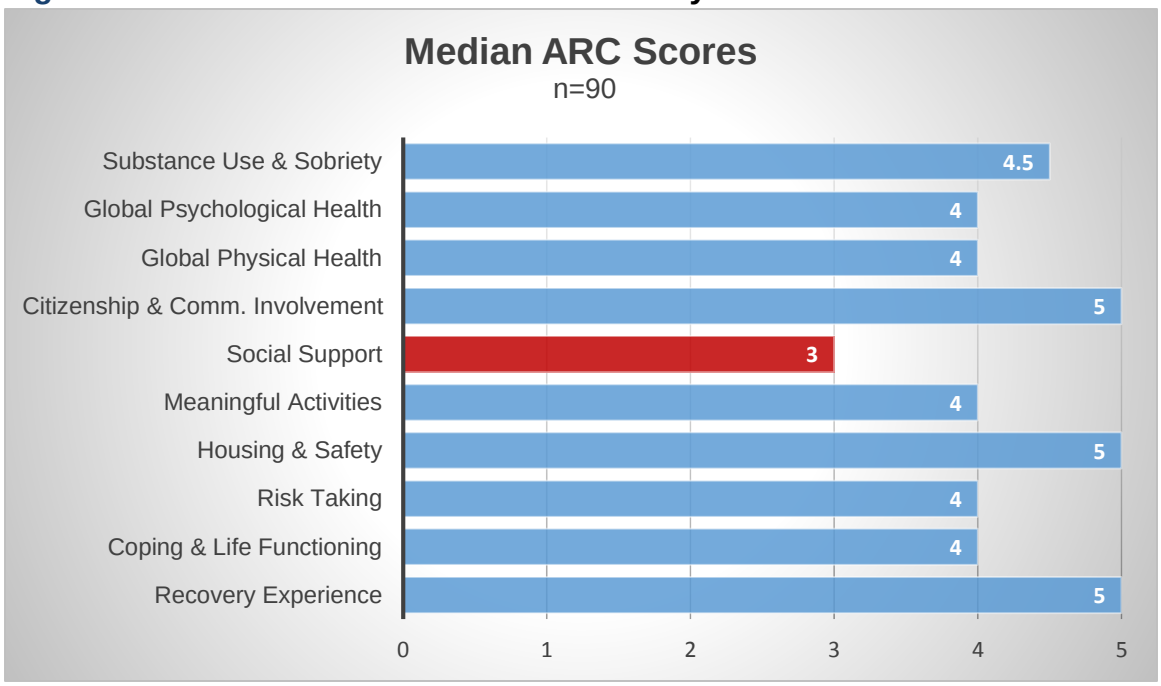
1. Substance Use and Sobriety
2. Global Psychological Health

3. Global Physical Health
4. Citizenship and Community Involvement
5. Social Support
6. Meaningful Activities
7. Housing and Safety
8. Risk Taking
9. Coping and Life Functioning
10. Recovery Experience.

The instrument contains five items per dimension, therefore the maximum ARC score for any dimension is five and the maximum score for the total of all dimensions is 50.

Figure 4 displays the median ARC score for 90 clients at admission. The following dimensions had the highest median ARC score: citizenship and community involvement, housing and safety, and recovery experience. The median score for these dimensions was five, indicating that at least half of clients taking the survey responded positively to every item in the dimension. Clients scored lowest in the social support dimension. The median for this sample is three, indicating that at least half of clients taking the survey responded positively to three of the five questions in the social support dimension. The lowest scoring item in the social support dimension was, “I sleep well most nights” with only 55.6% responding positively. Approximately three-quarters of clients responded positively to the remaining four items of the social support dimension.

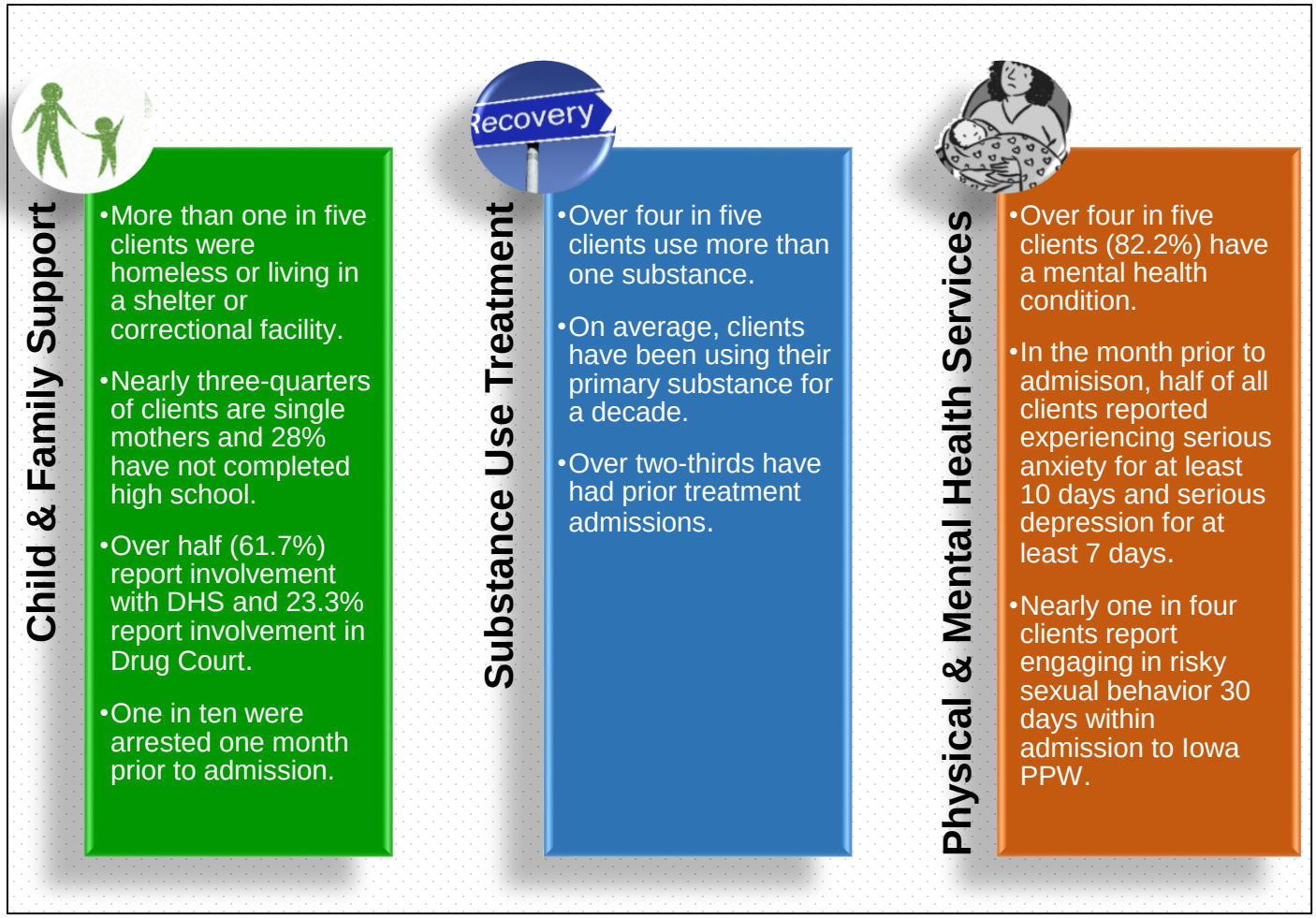
Figure 4. Median ARC Scores at Admission by Dimension



Summary

At admission, Iowa PPW clients were similar to clients entering residential treatment at other non-Iowa PPW treatment centers throughout Iowa in terms of demographics and substance use patterns. Based upon client characteristics at admission, Iowa PPW client needs include child and family support, substance use treatment and physical and mental health services. Figure 5 presents the clients' needs at admission and the evidence used to support each category of need. The following sections of the report will focus on how Iowa PPW implemented evidence-based practices, provided recovery support services, and addressed behavioral health disparities.

Figure 5. **Client Needs at Admission**



IMPLEMENTING AN EVIDENCE BASED PROGRAM

The first goal of Iowa PPW is to implement an evidence-based program and increase the number of pregnant and postpartum women served with evidence-based programming at three Women and Children's Centers. The following objectives correspond with the first Iowa PPW goal:

a. Initiate PPW services at three high volume community based substance use disorder treatment centers.
b. Provide training in Seeking Safety to staff at the three substance use disorder treatment centers.
c. Hire or appoint a Care Coordinator who works at least 20 hours a week at each site.

d. Care Coordinators lead the Seeking Safety (SS) training and ensure program delivery to the target population.

Since all objectives listed above were met within the first year of the program, this section of the report will assess how Iowa PPW deepened its overarching aim of providing an evidence-based program to an increasing number of pregnant and postpartum clients. More specifically, the following section will assess 1) the augmentation of Seeking Safety training, 2) the implementation of other evidence-based practices for clients, and 3) family participation in evidence-based practices. Special focus will be placed on how evidence-based practices implemented at Iowa PPW sites address client needs as presented at admission to the program. Data from this section are gathered from monthly tracking forms tracking the duration of evidence-based practices and the number of clients receiving them. Because tracking of evidence-based practices did not begin until June 1, 2016, data in this section reflect 153 clients rather than the full admission sample of 180 clients. In addition, because data cut-off occurred on September 15, 2017, data reflect services provided from June 1, 2016 to August 30, 2017.

Seeking Safety

Iowa PPW chose Seeking Safety as the evidence-based practice all agencies implement weekly. Seeking Safety is an evidence-based counseling model that is designed to assist clients in acquiring safety in their personal relationships, thinking, behavior and emotions. In addition, Seeking Safety is intended to help clients address traumatic experiences and substance use disorder without the necessity of revisiting traumatic experiences.

Each agency has designated a therapist or counselor who leads Seeking Safety sessions with clients. In addition, each agency identified one staff member who, as a Site Trainer, is responsible for training future staff members in Seeking Safety to improve program sustainability after grant funding ends. Therapists and counselors that implement Seeking Safety across other programs within the agency participate in a monthly Seeking Safety provider conference call. These calls discuss Seeking Safety implementation methods in detail and share how Seeking Safety is implemented across programs with varying client demographics and needs.

Topics of Seeking Safety Provider calls include:

- Adaptations to Seeking Safety
- Seeking Safety Training

- Expanding Seeking Safety to other populations (e.g. adult outpatient groups, family groups, and children's coping skills group)
- Seeking Safety Fidelity

Seeking Safety Training

Sixteen agency staff across all three sites implementing PPW were trained in Seeking Safety in January and February 2016. Both ASAC and HFS trained five staff each in Seeking Safety (one trained staff member at ASAC is no longer at the agency) and JRC trained six staff members.

In the second year of Iowa PPW, staff underwent two additional Seeking Safety trainings to deepen the staff's understanding of and ability to implement Seeking Safety with fidelity and to enhance the sustainability of the evidence-based practice at each of the Iowa PPW sites. Twelve staff attended an Advanced Seeking Safety training in February 2017 and nine staff attended the Seeking Safety Fidelity training in September 2017.

Advanced Seeking Safety Training

Two ASAC staff, five HFS staff and five JRC staff attended the Advanced Seeking Safety training February 7, 2017. Topics included in the Advanced Seeking Safety Training included a brief review of Seeking Safety, fidelity to Seeking Safety, creating adaptions of Seeking Safety and a review of the Healthy Relationships curriculum. Staff had opportunities to role-play to address topics including client triggers and compassion. Staff received both a long and abbreviated version of the Seeking Safety Adherence Scale to facilitate the assessment of Seeking Safety fidelity among their staff. Fidelity to Seeking Safety focused on the four elements of the session: check-in, quotation, handouts, and check-out.

Two Day Seeking Safety Training

Nine PPW staff attended at least one day of the two-day Seeking Safety training September 6 to September 7, 2017. Two staff each from HFS and ASAC, one staff member from JRC, and four staff members from House of Mercy (HOM), an agency that will provide Iowa PPW services in the final year of the grant, attended the first day of the training, "Trauma Informed Care Seeking Safety". Four staff, two staff from HFS and one staff member each from JRC and ASAC attended the second day of the training, "Fidelity Monitoring and Seeking Safety".

The nine training participates completed a 10 item pre-test of Seeking Safety knowledge prior to the beginning of the training (pre-test) and took the same test again at the end of the second

day of training (post-test). Analysis of the nine pre and post-tests suggested that there was a significant increase in Seeking Safety knowledge (Wilcoxon $z = 3.31$, $p < 0.001$). On average, participants answered 72.2% of the knowledge survey items correctly at the pre-test and 98.9% of the items correctly on the post-test.

Participants also completed a post-training evaluation form. Table 7 presents the results of the Seeking Safety Fidelity Evaluation Results. All nine participants "strongly agreed" that the presenter was knowledgeable of the material, the format of the training was appropriate, and the training adequately met the objectives for Trauma Informed Care Training.

Table 7. Seeking Safety Fidelity Training Evaluation Results

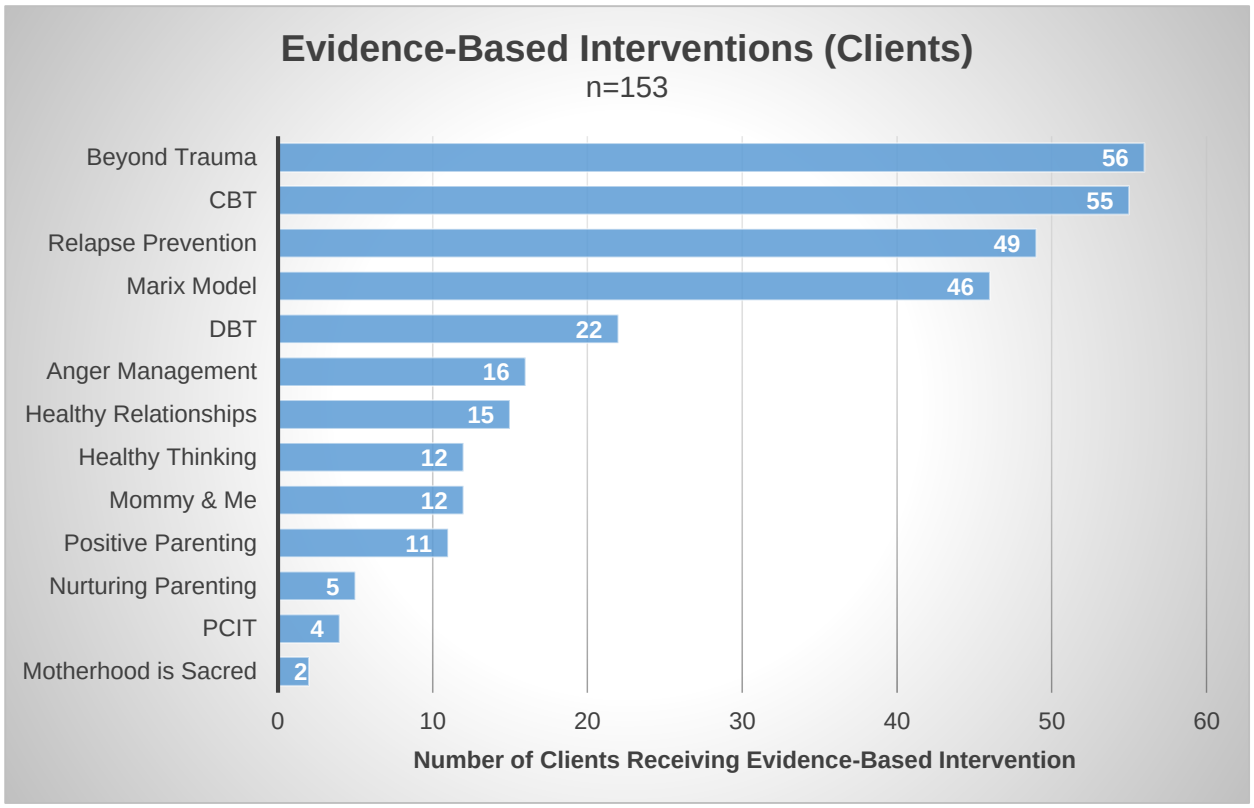
Survey Item	n	Median	Minimum	Maximum
Presenter was knowledgeable about the subject.	9	1.0	1	1
The format was appropriate for the subject matter.	9	1.0	1	1
This activity addressed Sustainability Training in Seeking Safety learning objective	9	2.0	1	2
This activity addressed Fidelity in Seeking Safety Training learning objective.	8	1.5	1	3
This activity addressed Trauma Informed Care Training learning objective.	9	1.0	1	1
The material was organized clearly for learning to occur.	9	1.0	1	2
I would recommend this activity to others.	9	1.0	1	2
Response categories: 1 = "strongly agree"; 2 = "agree"; 3 = "no opinion"; 4 = "disagree"; 5 = "strongly disagree"				

Other Evidence-Based Interventions

Iowa PPW implements a variety of targeted evidence-based interventions in addition to Seeking Safety. Figure 6 presents the number of clients receiving evidence-based interventions by type. Because tracking of evidence-based practices did not begin until June 2016, data in this section reflect 153 clients rather than the full admission sample of 180 clients.

All clients received an evidence-based intervention other than Seeking Safety. The most common interventions are Beyond Trauma, Cognitive Behavioral Therapy (CBT), Relapse Prevention and the Matrix Model.

Figure 6. Evidence-Bsed Interventions Implemented



Evidence-Based Interventions Addressing Mental Health

In addition to Seeking Safety, ASAC and JRC used Beyond Trauma; the most commonly reported evidence-based intervention, with its clients to address trauma and Post Traumatic Stress Disorder (PTSD). Relational Therapy, CBT, art and exercise are the foundation of Beyond Trauma. Roughly two-fifths (42.9%) of Iowa PPW clients who reported experiencing trauma at ASAC or JRC participated in Beyond Trauma.

Substance-Specific Evidence-Based Interventions

Staff also reported a sizeable participation of clients in substance-specific evidence-based interventions. ASAC and HFS reported the use of two evidence-based interventions targeted for specific substance: 1) the Relapse Prevention Model for alcohol use and 2) the Matrix Model for stimulant use (e.g. methamphetamine and cocaine). Exactly half of ASAC and HFS

clients who reported methamphetamine as their primary substance received the Matrix Model intervention.

Family-Oriented Interventions

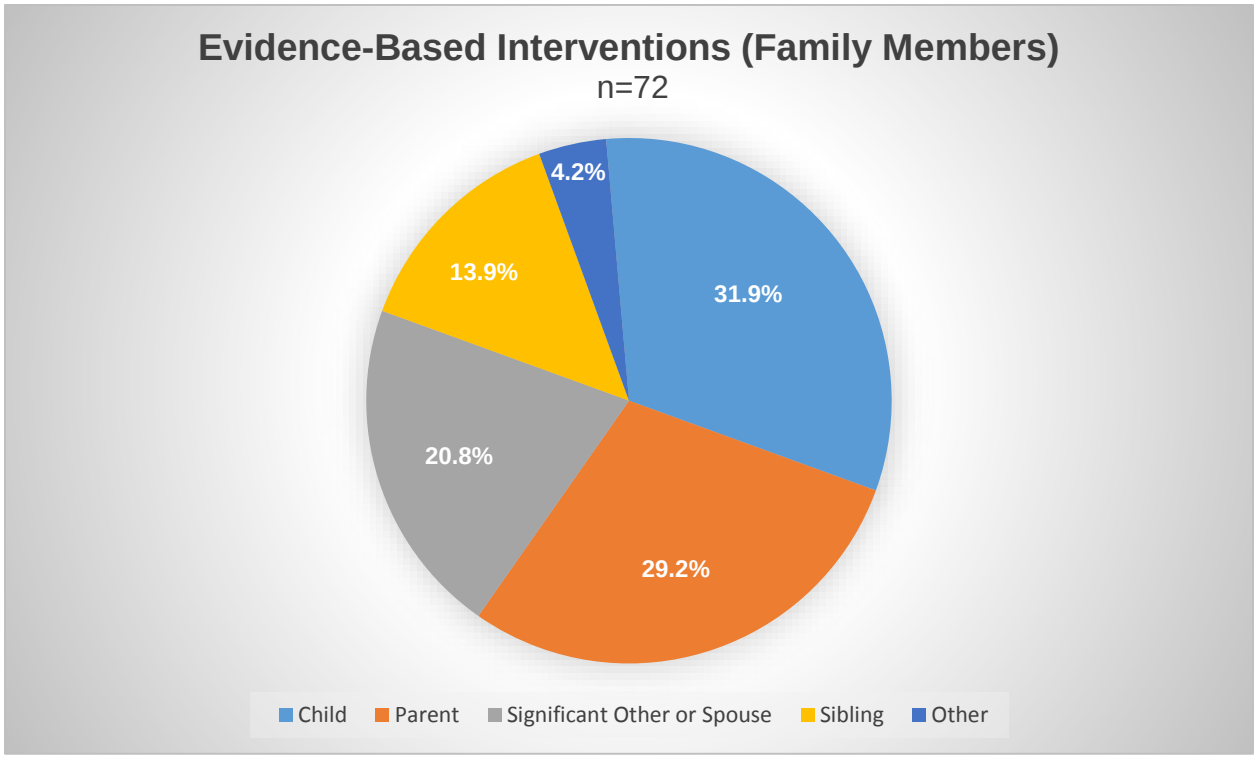
Since all Iowa PPW clients are parents or parents-to-be, family-oriented evidence-based interventions are an appropriate means to address the need for clients to improve family relationships. Family-oriented evidence based interventions Iowa PPW staff provided include Healthy Relationships, Mommy & Me, Positive Parenting, Nurturing Parenting, Parent-Child Interaction Therapy (PCIT) and Motherhood is Sacred. Nearly four-fifths (79.7%) of clients received at least one family-oriented evidence-based intervention or participated in at least one parenting education class.

Family Receipt of Evidence-Based Interventions and Screenings

Nearly one-fifth of clients in this sample (n=28) had at least one family member who participated in an evidence-based intervention or screening, representing 72 family members. Of these 72 family members, 11 were family members of ASAC clients and 61 were family members of JRC clients. No evidence-based interventions were reported among family members of HFS clients.

Figure 7 displays the type of family member receiving evidence-based interventions. All family member types are in relation to the client (e.g., “parent” refers to the client’s parent). Nearly one-third of family members receiving an evidence-based intervention or screening were the clients’ children (n = 23). The second most family member type was the client’s parent followed by the client’s spouse or significant other. The three family members included in the “other” category are an aunt and two grandmothers. Twenty-five evidence based screenings and 130.5 hours of family therapy were completed with the 72 family members.

Figure 7. **Type of Family Member Receiving Evidence-Based Interventions**



24/7 Dads Training

At the end of the 2017 fiscal year, staff began training to implement the 24/7 Dads program across all Iowa PPW sites. The National Fatherhood Initiative's 24/7 Dads is a fatherhood program designed to assist men's improvement in parenting skills and fathering knowledge. The core components of the program include developing self-awareness, self-caring and parenting, fathering and relationship skills.

Eleven staff members attended the 24/7 Dad Training Institute on August 2, 2017. Topics covered in the training included how to facilitate a 24/7 Dads group, identifying retention and recruitment strategies, and investigating previous evidence of program effectiveness. Three sessions throughout the training allowed attendees to practice facilitation of a 24/7 Dads group. Results of a post-evaluation assessment conducted by the 24/7 Dad trainer indicates that all attendants either "strongly agreed" or "agreed" that they were satisfied with several aspects of the training including the level of interaction between the trainer and the participants, the explanation provided by the trainer, and the ability of the trainer maintain control of the room.

RECOVERY SUPPORTS

The second goal of Iowa PPW is to allow client choice in selecting recovery supports while focusing on gender specific issues for pregnant and postpartum women in residential treatment for substance use disorders. The following objectives correspond with the second Iowa PPW goal:

a. Identify service gaps that hinder successful completion of substance use disorder treatment by pregnant and postpartum women.
b. Provide essential health and wellness services which improve safe and healthy pregnancies and improve health outcomes.
c. Provide essential services which are focused on improving parenting skills, family functioning, economic stability and quality of life.
d. Providers offer at least four additional hours of weekend programming per month that increases extended family involvement.
e. Care Coordinators develop and implement an extended recovery support services array that supports women, children, and extended family members.

The following section uses Recovery Support Services data, substance use and health screening data from the Discharge Notification Forms, and evidence-based services data for the 2016 and 2017 fiscal years. Of special note are the differences in sample sizes for these analyses. For example, because substance and health screenings are reported on discharge forms, the sample size for these data is limited to clients who discharged from Iowa PPW at the time of data cut-off (n=129). In addition, Recovery Support Service (RSS) data is available for all clients since the beginning of Iowa PPW implementation, but due to the implementation of Iowa PPW occurring in February 2016, RSS data for the 2016 fiscal year represents 8 months of program implementation. In addition, because data cut-off occurred on September 15, 2017, RSS data for the 2017 fiscal year represents 11 months, rather than 12 months, of program implementation. Figures comparing funding spent in 2016 and 2017 fiscal years compare unequal durations of service provision (i.e. 8 months for 2016 fiscal year and 11 months for the 2017 fiscal year).

Service Gaps and Successful Completion of Treatment

Upon the conclusion of the first year of Iowa PPW, staff indicated that housing, employment, unhealthy relationships, and finances were among the most salient service gaps that hinder successful completion of the program. Concerning the client needs discussed throughout this evaluation report, the gaps are most closely aligned with child and family support. During key informant interviews in 2016, staff expressed the difficulty clients had in finding suitable housing after clients were discharged from Iowa PPW. In several cases, there was not enough space at the agency for clients to transition to halfway housing or the number of children clients had precluded them from finding low cost housing. Staff also anticipated that clients would have difficulty balancing recovery with full-time employment and parenting with few vocational skills. Lastly, staff suggested recovery would be difficult for clients who were returning home where friends and family may be actively using substances. There were also concern that clients may resume unhealthy relationships with friends, family and significant others.

To assess whether housing, employment and finances, and unhealthy relationships were significant barriers to successful treatment completion, the following sections:

- Compare treatment completion and length of stay among Iowa PPW clients and non-Iowa PPW clients.
- Assess whether housing, education, employment and earnings are associated with treatment completion.
- Evaluate whether housing situation, education, employment and earnings are associated with abstinence and harm reduction five to eight months' post-admission.

Length of Stay and Discharge Status

Length of stay is defined as the number of days from admission to discharge from Iowa PPW. As of September 17, 2017, 129 clients (71.7% of admitted clients) discharged from Iowa PPW. Table 8 shows the median length of stay and discharge status for four groups:

1. Pregnant PPW clients
2. Postpartum PPW clients
3. A comparison group of pregnant women discharged from an IDPH-funded residential treatment program other than the three Iowa PPW sites between February 1, 2016 and September 15, 2017 ("Pregnant Comparison Group")
4. A subset of clients in the discharge comparison group who discharged from a Women's and Children's residential program ("Women's and Children's Group")

The median length of stay for all Iowa PPW clients is 73 days. When comparing the pregnant PPW sample with the pregnant comparison sample, median length of stay is significantly higher among pregnant Iowa PPW clients than in the comparison sample (28 days) (Mann Whitney $z = 3.162$, $p < 0.01$). However, length of stay is similar for Iowa PPW clients and the subset of pregnant sample attending a Women's and Children's facility (71.5 days).

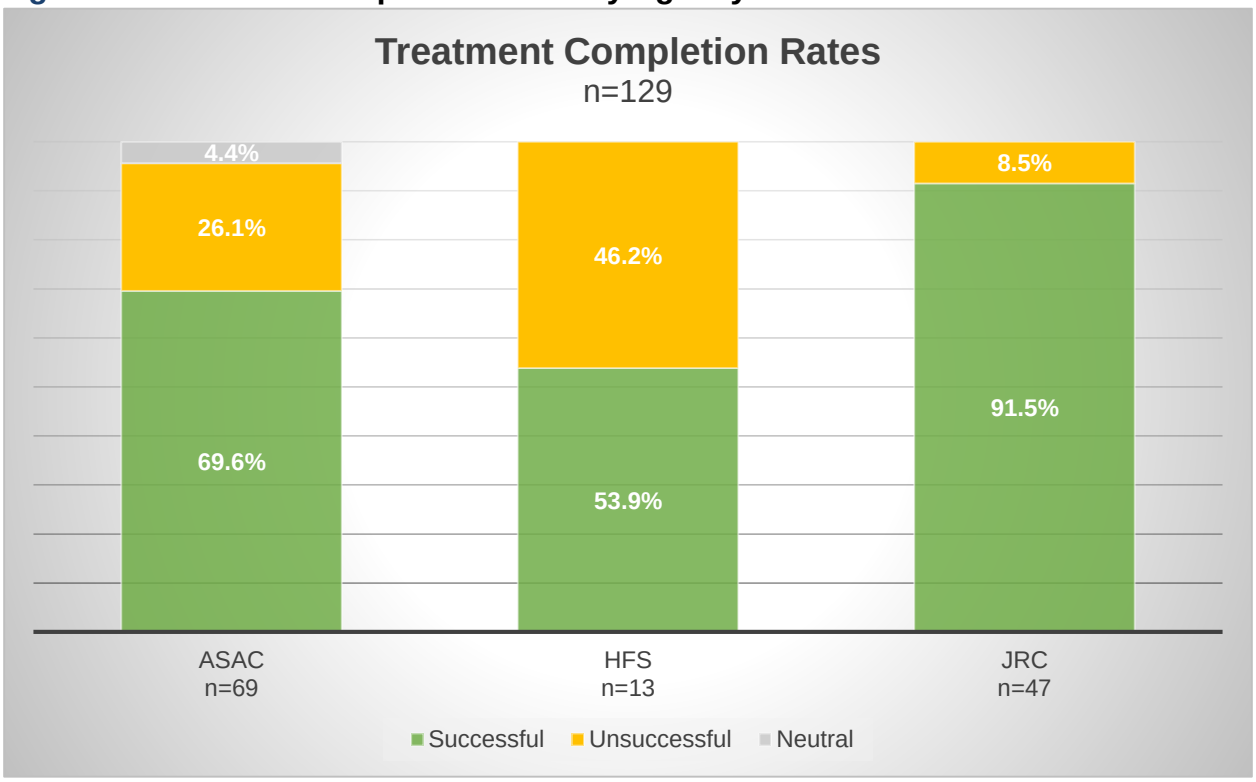
Iowa PPW clients are significantly more likely to successfully complete treatment (76.2%) compared to the pregnant comparison sample (42.0%) (Mann Whitney $z = 3.985$, $p < 0.001$). Furthermore, while the length of stay was similar between Iowa PPW clients and the Women's and Children's sample, Iowa PPW clients were significantly more likely to complete treatment than clients in the Women's and Children's sample (Kruskal Wallis Test; df = 2, $\chi^2 = 3.12$, $p < 0.05$). Pregnant Iowa PPW clients also have significantly higher rates of successful treatment completion compared to the pregnant comparison sample. Among Iowa PPW clients, length of stay significantly varies by treatment completion status (Kruskal Wallis Test; df = 2, $\chi^2 = 3.156$, $p < 0.001$). Clients who successfully discharge from Iowa PPW have longer median lengths of stay at 83 days compared to clients who do not successfully discharge at 32 days.

Table 8. Length of Stay and Discharge Status

	Postpartum PPW Clients n=63	Pregnant PPW Clients n=66	Pregnant Comparison Group n=69	Women's and Children's Group n=24
Length of Stay in Days (Median)	71.0	77.0	28.0	71.5
Discharge Status				
Successful Treatment Completion	76.2%	75.8%	42.0%	54.2%
Unsuccessful Treatment Completion	20.6%	22.7%	52.2%	37.5%
Neutral Discharge	3.2%	1.5%	5.8%	8.3%

Figure 8 shows rates of treatment completion for each Iowa PPW agency. There are three discharge categories: successful; unsuccessful (clients discharged from the program due to noncompliance, lack of treatment progress, or client leaving); and neutral (clients discharge from the program due to a managed care decision, referral to another program, incarceration, or death). Treatment completion rates are highest at JRC at 91.5% followed by ASAC with 69.6% and HFS with 53.9%. The observed disparities in treatment completion rates are statistically significant (Fisher's Exact Test, $p < 0.01$).

Figure 8. **Treatment Completion Rates by Agency**



Service Gaps, Treatment Completion and Length of Stay

A series of analyses assessed whether clients exhibiting needs associated with staff-identified service gaps at admission experienced lower rates of successful treatment completion and shorter lengths of stay. Client characteristics measured at admission to Iowa PPW were used to index staff-identified service gaps (living situation, employment, income, and relationship status). If client indicators are associated with discharge status and/or length of stay, then we might conclude that modifying grant services to target clients with the specified characteristics could potentially improve client outcomes. The following section discusses the results of statistical tests aiming to measure relationships between client characteristics at admission with discharge completion and length of stay.

Housing Situation

Housing situation at admission is measured using clients' reported living accommodations during the 30 days prior to admission. Housing situation is categorized as living alone, with significant others, with other adults, in a group home or shelter, in a correctional facility or homeless. There is no significant relationship between discharge status and living situation at admission. Clients in all types of housing situations have roughly similar chances of completing treatment successfully. Furthermore, length of stay does not significantly vary by housing

situation reported at admission. Even when comparing length of stay for clients who are homeless at admission versus those who were housed at admission, average length of stay is not significantly different for the two groups; 71 days for homeless group and 76 days for the housed group.

Employment Status

All discharged clients were either employed full-time, unemployed but looking for work or unemployed and not looking for work during the 30 days prior to their admission to Iowa PPW. Clients who were unemployed and not looking for work at admission had the highest rates of treatment completion (Fisher's Exact Test, $p < 0.01$). Among those who were unemployed and not looking for work, 82.1% successfully completed treatment compared to less than half (47.62%) of clients were unemployed and looking for work and 50% of the two clients who were employed full time at admission. There is not a significant relationship between length of stay and employment at admission.

Income

Among the discharged clients, reported monthly income from all sources within 30 days prior to admission ranged from $0 to $3,267 per month. The median income was $194 per month. Nearly three-quarters of clients (73.6%) reported that they did not have a primary source of income at admission. Income at admission was not associated with discharge status or length of stay.

Relationship Status

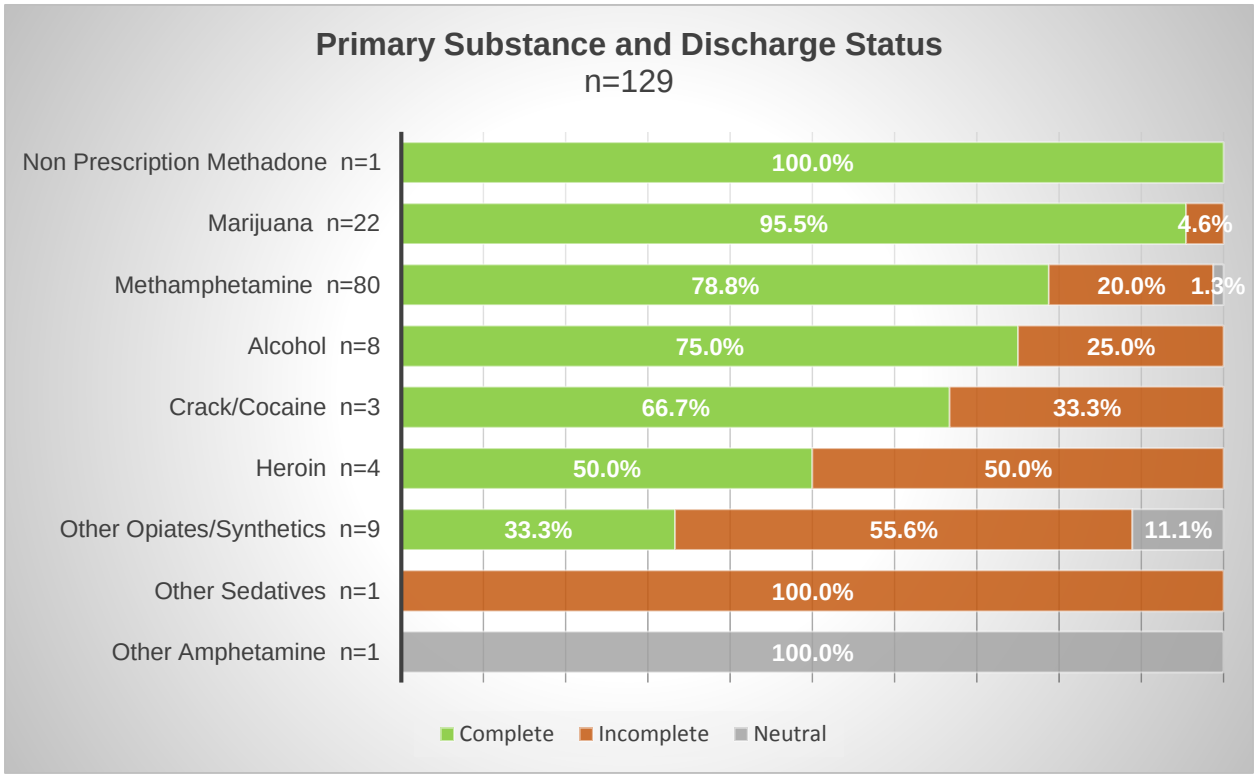
Due to lack of a suitable indicator for "unhealthy relationships", tests were run to assess whether discharge status and length of stay significantly vary by clients' relationship status at admission. Categories of relationship status include single, married, cohabitating, divorced or separated and widowed. Results indicate there is no significant relationship between a clients' marital status at admission and discharge status or length of stay.

Substance Type

Although type of substance use was not identified as a potential service gap, there is a significant relationship between discharge status and clients' reported primary substance use (Fisher's Exact Test, $p < 0.01$). Figure 9 shows treatment discharge status by clients' reported primary substance at admission. Clients using marijuana had high rates of treatment completion (95.5%). In contrast, of the 14 clients who reported using some type of opioid (i.e.

heroin, non-prescription methadone, oxycontin, or an “other opiate/synthetic”), only six (42.9%) successfully completed treatment.

Figure 9. Client Discharge Status by Primary Substance at Admission



Abstinence at Follow-Up

By September 15, 2017, 75 clients had completed the GPRA follow-up interview. Sixty-three clients completing a GPRA follow-up interview had discharged from Iowa PPW. The number of clients completing a follow-up interview significantly differed across Iowa PPW agencies (Fisher’s Exact Test $p < 0.001$). Just over one-quarter of all ASAC (27.4%) and all HFS (29.2%) clients completed a follow-up interview compared to 62.5% of all JRC clients. Therefore, follow-up data disproportionately represent JRC clients, who also had significantly higher rates of treatment completion. The following results focus on the 63 clients who discharged from Iowa PPW and completed a follow-up interview.

All but six clients (90.5%) reported abstinence from alcohol and illegal drugs within the 30 days before the follow-up interview. Client reported abstinence does not significantly vary by agency. Of the six clients who reported the use of either alcohol or illegal drugs at follow-up, all but one client successfully discharged from Iowa PPW. Three clients reported that they used an illegal drug within the 30 days prior to the follow-up interview. One of the clients reported using

methamphetamine, one client reported using marijuana, and another reported using both opiates and methamphetamine. The client reporting methamphetamine use only had also injected illegal drugs 30 days within the follow-up interview. In addition to the three clients reporting illicit drugs at follow-up, three clients reported using alcohol within the 30 days of the follow-up interview. One client reported drinking four or fewer drinks to intoxication on one occasion within the past 30 days.

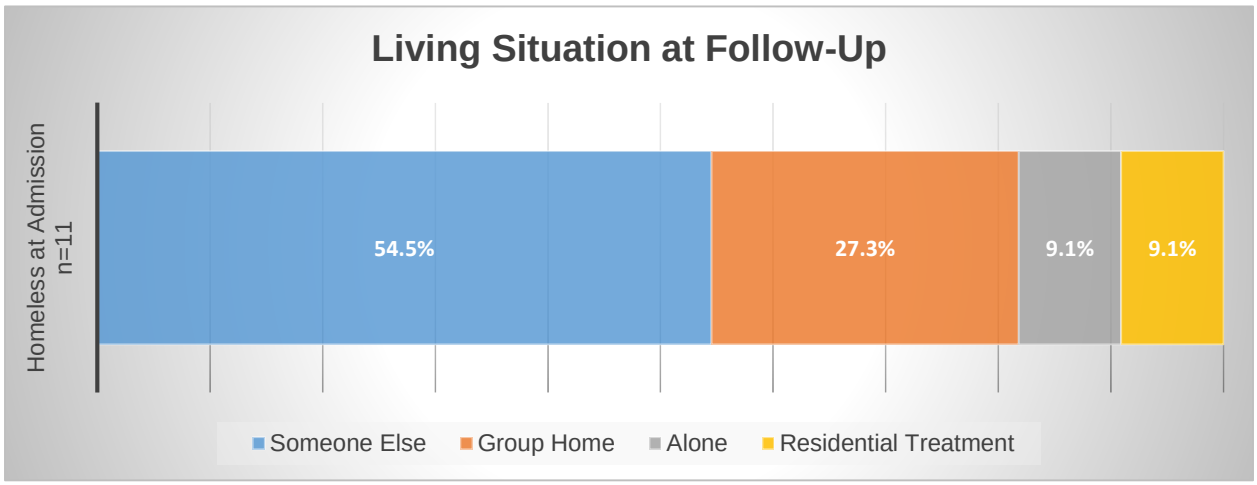
Service Gaps, Abstinence and Changes in Client Need

A series of tests were run to assess whether clients exhibiting needs associated with staff-identified service gaps at admission experienced lower rates of abstinence or a significant change in needs at follow-up. The following section discusses the results of statistical tests aiming to measure relationships between: 1) client characteristics at admission (living situation, employment, income, and relationship status) and abstinence at follow-up and 2) client characteristics at admission and client characteristics at follow-up.

Housing Situation

There is no relationship between substance use at follow-up and living situation at either admission or follow-up. However, there is a significant reduction in the number of clients reporting homelessness at admission and follow-up (McNemar χ^2, df=1, $p < 0.01$). Eleven discharged clients completing a follow-up interview reported homelessness at admission. At follow-up, all of the clients were housed. Figure 10 displays the housing situation of discharged clients at follow-up who reported homelessness at admission. Over half of the clients were living with a significant other or other adults and three were living in a group home. One client each was living alone or in residential treatment at the time of the follow-up interview. One client reported homelessness at follow-up; however, this client reported being housed at admission.

Figure 10. Living Situation of Discharged Clients at Follow-Up Reporting Homeless at Admission



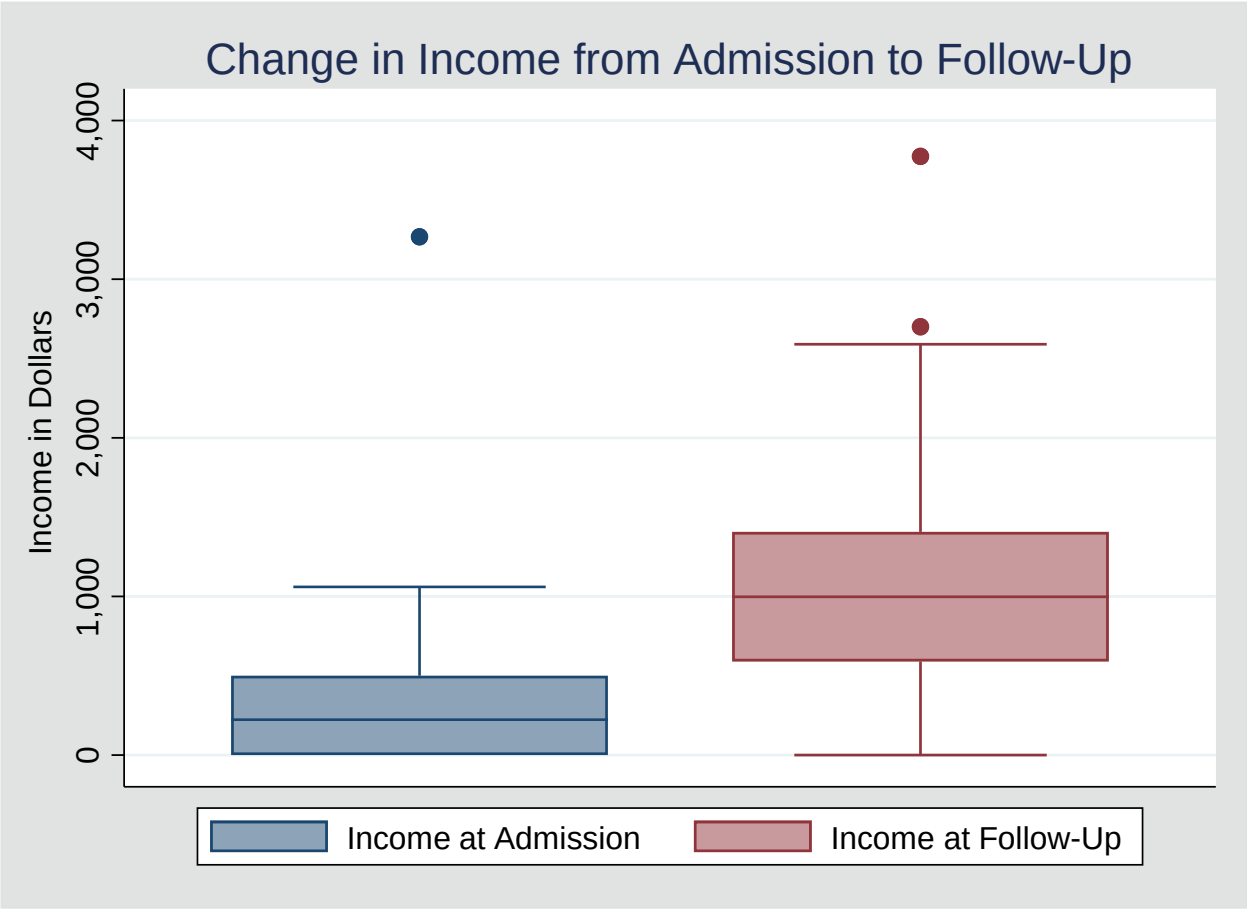
Employment

There was no relationship between clients' abstinence at follow-up and employment status. There was also no significant change in employment from admission to follow-up. Nonetheless, of the three clients who were unemployed but looking for employment at admission, two were employed at follow-up.

Income

There is no significant relationship between clients' abstinence at follow-up and income at follow-up. However, there was a significant increase in wages from admission to follow-up (Wilcoxon $z = 7.48$, $p < 0.001$). Figure 11 presents changes in wages from admission to follow-up among clients who had discharged from Iowa PPW using a box plot. The dark horizontal line in the middle of each box represent the median income. Outlying values, i.e. incomes that are substantially larger than most observations in the data, are represented by dots extending above the top horizontal bar of each graph. The figure illustrates a strong difference in client reported income at admission and follow-up. At admission, clients reported a median income of $192 a month compared to $1,000 a month at follow-up.

Figure 11. Client Income at Admission and Follow-Up



Relationship Status

We do not have a measure of "unhealthy relationships". However, tests were run to assess whether relationship status at admission was associated with abstinence at follow-up. There is a significant relationship between abstinence at follow-up interview and marital status (Fisher's Exact Test, $p < 0.01$). Of the six clients who reported alcohol or illegal drug use in the 30 days prior to the follow-up interview, three were single and three did not have a marital status recorded at admission.

Summary

A series of analyses were performed to evaluate whether clients who were housing insecure, low-income, and/or lacking employment had shorter lengths of stay, and lower rates of treatment completion and abstinence. Employment status at admission is the only indicator of a service gap that is significantly associated with discharge status. Clients who were unemployed and not looking for work at admission had higher rates of treatment completion than employed clients or clients who were unemployed and looking for work. Discharge status did not

significantly vary by housing situation, income or relationship status at admission. The clients' reported primary substance at admission was also significantly associated with discharge status. Clients who reported using marijuana as their primary substance had relatively high levels of treatment completion (95.5%) compared to clients using opioids (42.9%) at admission. Clients who reported being single or whose relationship status contained missing information at admission were significantly less likely to report abstinence at follow-up. Regarding indications of reductions in client needs between admission and follow-up, there was a decline in homelessness and an increase in median wages among discharged clients completing at follow-up. Length of stay was not associated with any of the indicators.

Health and Wellness Services

As discussed earlier in the report, Iowa PPW clients have substantial mental and physical health needs. For example, roughly one-third of all clients reported that their health was fair or poor upon admission to Iowa PPW and over four-fifths had a co-occurring mental health condition. An objective of Iowa PPW is to address health needs by providing health and wellness services that improve the health of the client. Since approximately half of the clients in Iowa PPW were pregnant, pregnancy outcomes are also a vital measure of client health. The following section summarizes client utilization of recovery supports aimed at improving health and wellness, client referrals to health and wellness services, health screenings, and infant health outcomes among clients giving birth during their participation in Iowa PPW.

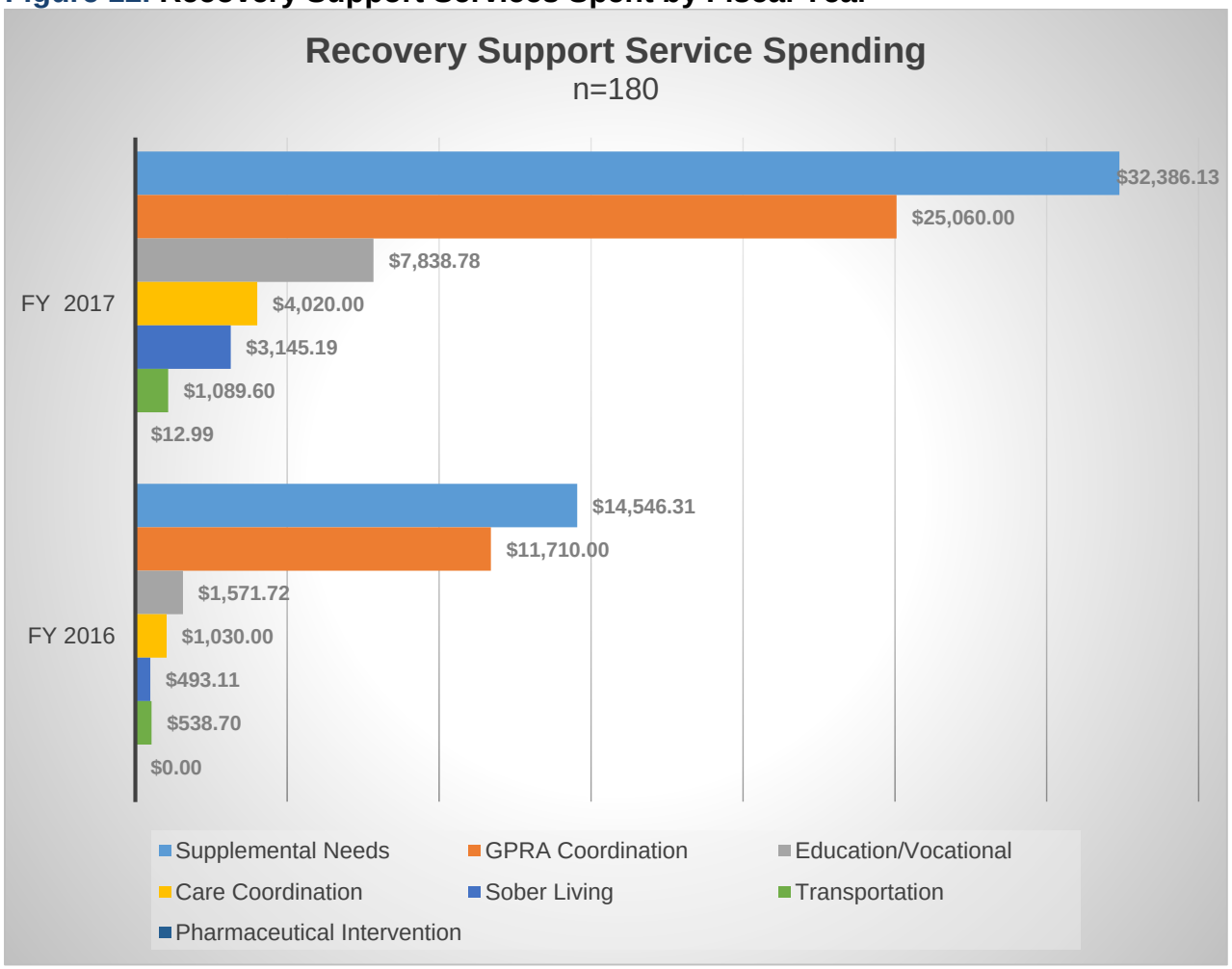
Provision of Health and Wellness Services

Recovery Support Services

On a monthly basis, each agency submits the amount of grant funds used for per client for recovery support services (RSS). Figure 12 shows amounts of recovery support services spent by fiscal year sorted from the largest to smallest amount for seven categories: supplemental needs, GPRA coordination, educational/vocational, care coordination, sober living, transportation, and pharmacological interventions. A total of $102,243.28 was spent on RSS for the 2016 and 2017 fiscal years. For all categories of spending, amounts of RSS funding spent are much higher for the 2017 fiscal year than the 2016 fiscal year since 2017 represents 11 months of grant activity (October 2016 to August 2017) while 2016 represents only 8 months of grant activity (February 2016 to September 2016). However, the median amount of recovery supports spent per client for each category is similar for the 2016 and 2017 fiscal years. Recovery supports spent on supplemental needs, which include items such as clothing,

wellness, gas cards and utility and phone cards, are the highest spending categories for 2017 and 2016 and make up nearly half of all RSS dollars spent. Pharmacological interventions are the least used type of service.

Figure 12. Recovery Support Services Spent by Fiscal Year



Wellness Services

Funds spent on wellness services are categorized as "supplemental needs" and can be used to assist clients with purchasing items and services such as fitness memberships, smoking cessation support, or eye exams. A total of $7,720.92 of recovery support funds were used for wellness activities, representing 7.6% of all RSS funds spent in 2016 and 2017. Fifty clients used RSS funds for wellness services with a median of $167.30 spent per client.

Health Services

Pharmacological interventions are another category of recovery supports that encompass health and wellness services. Recovery support funds can be used for pharmacological interventions

to purchase prescription medications for the treatment of substance use disorder, including only Acamprosate, Antabuse, Naltrexone and Suboxone. Pharmacological interventions were the least utilized recovery support service for both 2016 and 2017. Only one client received recovery support funds for a pharmacological intervention throughout the duration of grant activities. Three other clients used pharmacological interventions; however, a Medication Assisted Treatment grant covered the funds for the medication.

Health Screenings and Referrals to Health Services

Each agency completes health and substance use disorder assessments for clients. Additionally, health and substance use screenings are used as tools to identify needed health and wellness services for family members, fathers, partners, and non-residential children. PPW staff complete health and substance use screenings for clients, their residential and non-residential children and supportive adults. Health and substance use screenings are used as tools to identify needed health and wellness services. The number of clients represented in the following section only includes the 129 clients discharged from Iowa PPW after April 5, 2016 since health and substance use screening data 1) were not collected until April 5, 2016 and 2) are gathered upon clients' discharge from treatment.

Table 9 summarizes the types of screenings and assessments completed and the population screened. The first column of Table 9 displays the dimension of health assessed. Column two presents the types of measurement tools that staff reported using to assess each of the dimensions listed in the first column. Types of instruments used to screen for health and substance use vary across agencies. For example, one agency may use urinalysis and the AUDIT or DAST to screen for substance use while another agency relies solely on the AUDIT or DAST. The final columns identify which population was screened: clients, residential and non-residential children, or adults.

Table 9. Health and Substance Use Screening Tools

Dimension	Measurement Tool	Who is Assessed?		
		Clients	Children	Non-Residential Adults
Substance Use	4P's Plus, AUDIT, DAST, SASSI SBIRT, Urinalysis	✓		✓
Mental Health	Clinical Interview GAIN-SS PHQ-9	✓		
Fetal Alcohol Spectrum Disorder (FASD)	Clinical Interviews, Physician Exams, Screening for Effects of Prenatal Alcohol/Drug Exposure	✓	✓	✓
Learning, Developmental and Behavioral	Child Behavioral Checklist Clinical Interviews		✓	

Substance Use Screenings

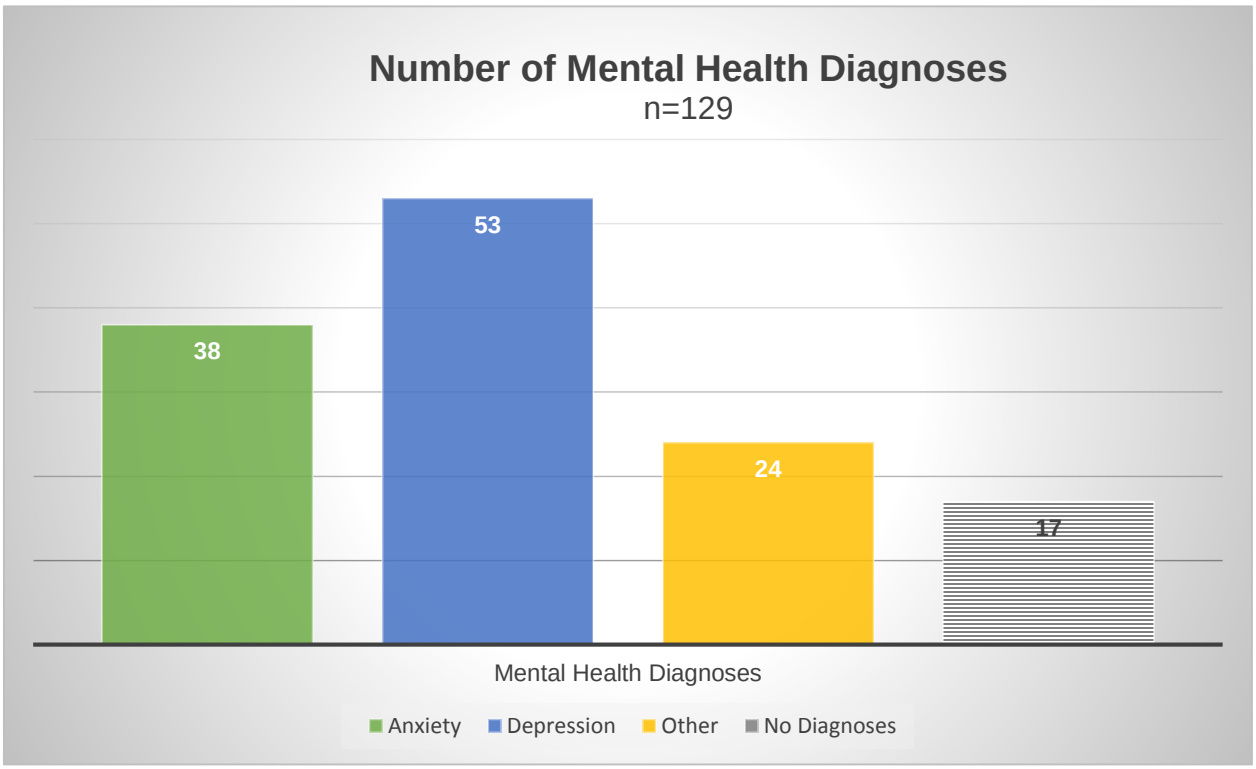
All Iowa PPW clients were assessed for substance use upon admission to the program. Staff reported screening clients with validated instruments such as the Alcohol Use Disorders Identification Test (AUDIT), the Drug Abuse Screening Test (DAST), Substance Abuse Subtle Screening Inventory (SASSI), and urinalysis. In the 2017 fiscal year, staff also reported using 4P's Plus, a validated screening instrument to identify patients at risk for tobacco, alcohol and illicit drugs use. Ninety-seven supportive adults were screened for alcohol and illicit drugs, and eight were identified to be engaging in potentially risky alcohol or illicit drug use. Staff screened more supportive adults in the 2017 fiscal year (n=76) than in the 2016 fiscal year (n=21).

In key informant interviews, staff members discussed their procedures for screening supportive adults for alcohol and illicit drug use. Some staff reported that screening for substance use is done on a case-by-case basis. If a family member is known to be actively using alcohol or illicit drugs, then he or she may need to undergo substance use screening in order to visit the client. Other staff screen family members during a family visitation event. In the case that family members are not able to come to the facility, some staff reported briefly screening family members for substance use over the phone.

Mental Health Screenings

All clients were assessed for mental health disorders. Iowa PPW providers use clinical interviews, the Global Appraisal of Individual Needs Short Screener (GAIN-SS), and the Patient Health Questionnaire (PHQ-9) to screen for mental health conditions. Figure 13 present the number of mental health diagnoses Iowa PPW staff made in the first and second fiscal years of Iowa PPW. Numbers in Figure 13 may exceed the total number of clients in the sample since clients can have more than one mental health diagnosis. Depression is the most common mental health diagnoses with 53 clients being diagnosed with depression. Anxiety is the second most common diagnosis. The "other" category includes diagnoses for Attention Deficit Hyperactivity Disorder (ADHD), Bipolar Disorder, Posttraumatic Stress Disorder (PTSD), Borderline Personality Disorder, and Obsessive Compulsive Disorder (OCD). Seventeen clients did not screen positive for any mental health condition.

Figure 13. Number of Client Mental Health Diagnoses



FASD and Learning, Developmental and Behavioral Screenings

A goal for Iowa PPW staff was to screen all residential and non-residential children for learning, developmental and behavioral health issues and to screen both children and supportive adults for FASD. Staff reported using the Child Behavior Checklist and clinical interviews as tools to assess learning, developmental, and behavioral conditions. Iowa PPW used the Screening for

Effects of Prenatal Alcohol/Drug Exposure developed by Dr. Ira Chasnoff, a leading researcher in the field of prenatal exposure to alcohol and illicit drugs. Two screening tools were used: one for children 0 to 23 months old and another for children 24 to 60 months old. In the first and second fiscal years of Iowa PPW, 46 clients and 51 children were screened for FASD. Staff reported completing a FASD screening for only one supportive adult. FASD screening results were negative for all clients and supportive adults; however, five children screened positive for FASD.

Pregnancy Outcomes

An objective of Iowa PPW is to improve safe and healthy pregnancies through the provision of health and wellness services. While it cannot be said for certainty whether or not Iowa PPW services improved client pregnancies, we can compare pregnancy outcomes between Iowa PPW clients with estimates of pregnancy outcomes for women using tobacco. Pregnancy outcomes among women using tobacco was chosen since over four-fifths of Iowa PPW clients used tobacco and because scientific literature indicates that pregnancy outcomes can vary considerably by the type of substance women used during pregnancy. Data for the tobacco comparison sample contain pregnancy outcomes for 1,219,159 singleton births in Missouri from 1989 to 2005.[7] The two birth outcomes of focus are gestational age and birthweight.

For women who were postpartum at admission, the birthweight and gestational age of the most recent child(ren) was assessed. Analysis also include the birthweight and gestational age of infants born to clients during treatment. Because birthweight was not captured on evaluation forms until June 2016 and because some clients could not remember their child's weight at birth, birthweight data is only available for 87 of the 92 clients who were postpartum at admission. The following section describes two common pregnancy outcomes: low birthweight and preterm birth. Low birthweight is defined as an infant weighing less than five pounds and eight ounces (2,500 grams) at birth. An infant is considered "preterm" if he or she is born earlier than 37 weeks.

Table 10 describes pregnancy outcomes for 90 births to clients who were postpartum at admission and 19 births to clients who gave birth during treatment. Birthweights of children born to clients before admission range from 1 pound 11 ounces to 8 pounds 15 ounces. The

[7] Preventive Medicine 2010: The Annual Meeting of the American College of Preventive Medicine (ACPM): Abstract 212669. Presented February 19, 2010.

average birthweight for infants born to mothers using tobacco in the Missouri sample was 6 pounds and 15 ounces. Approximately one in six (16.7%) of the infants born to Iowa PPW clients were low birthweight.

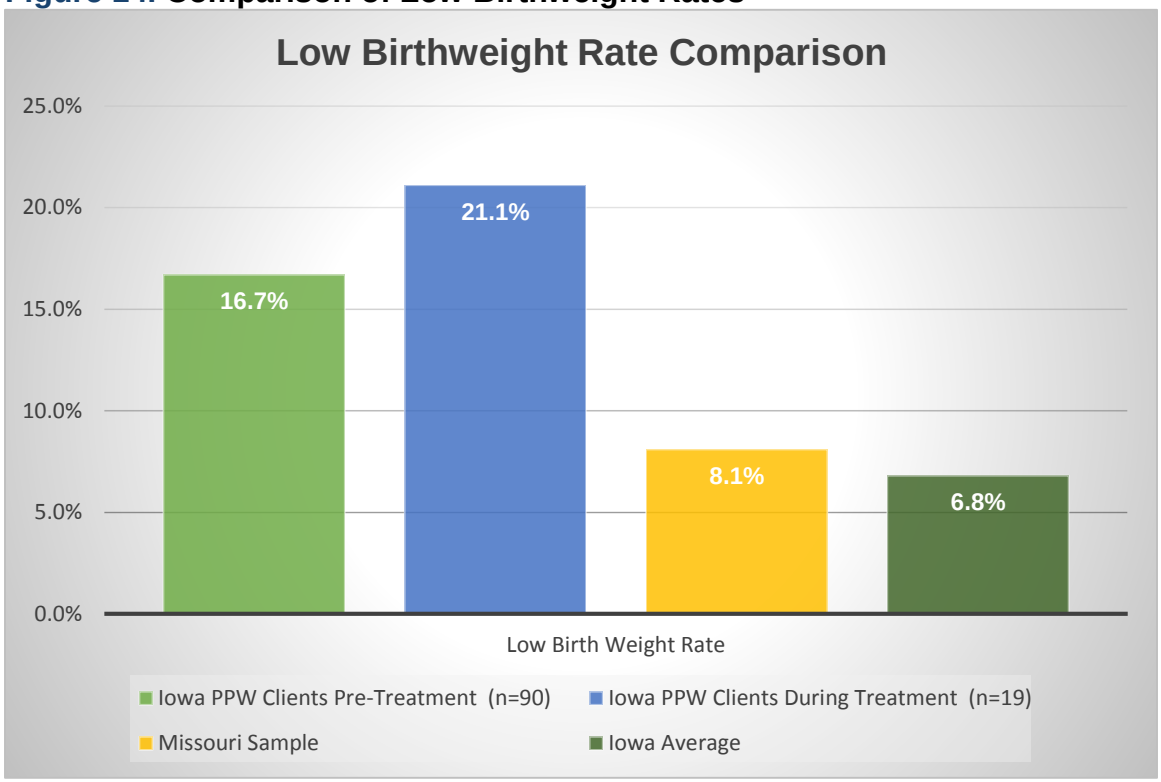
Regarding preterm birth, over one in five (22.2%) of infants born to clients before treatment were preterm compared to 15.8% of infants born to clients during treatment. Gestational ages of infants at birth ranged from 25 to 43 weeks for infants born to clients before treatment and 31 to 40 weeks for infants born during treatment. Nevertheless, the median gestational age for both groups is 38 weeks. The mean gestational age for infants in the Missouri sample was 38.8 weeks.

Table 10. Pregnancy Outcomes of Iowa PPW Clients

	Births Preceding Treatment n=90	Births During Treatment n=19
Birthweight		
Range	1 lb., 11 oz. – 8 lbs., 15 oz.	3 lbs., 4 oz. – 9 lbs., 0 oz.
Median	6 lbs., 13 oz.	7 lbs., 0 oz.
Low Birthweight (%)	16.7%	21.1%
Gestational Age		
Range	25 – 43 weeks	31 – 40 weeks
Median	38 weeks	38 weeks
Preterm (%)	22.2%	15.8%

Figure 14 compares low birthweight rates from the two Iowa PPW samples (births prior to treatment and births during treatment) with national and state rates. In the United States, approximately one in twelve infants (8.1%) are born with low birthweight. The low birthweight rate is even lower among infants born in Iowa at 6.8%.

Figure 14. **Comparison of Low Birthweight Rates**



Child and Family Support

A central need for Iowa PPW clients is services geared towards supporting the family unit emotionally, socially and financially. As discussed throughout this report, a majority of clients is single mothers, is housing insecure, and has substantial financial and health barriers. One way Iowa PPW supports the cohesion of the family unit is to advocate for clients to be reunited with their children. Starting January 2017, the local evaluation team began collecting the number of clients' children who 1) had an open reunification case or 2) had been reunified with the client or the child's father upon client discharge from Iowa PPW. Within the eight months of data tracking for 135 clients, 55 children were reunited with one or more parents. Forty-two children were reunited with the client only, five were reunited with the father only, and eight were reunified with both the client and the father. The following section describes services offered to Iowa PPW clients, such as parent education classes and various recovery supports that are aimed at improving parenting skills, family functioning and economic stability.

Recovery Support Services for Child and Family Support

Sober Living Activities

According to one Iowa PPW staff, client and family participation in sober living activities are an opportunity for clients to, "Work on their relationships while they are sober, do fun things together, and just bond. A lot of women would say they never spent time with their families while they were sober." The amount of funds spent on recovery support services increased by over 300% from the 2016 fiscal year ($713.90) to the 2017 fiscal year ($2,894.00); however, RSS data for the 2016 fiscal year only reflect three-quarters of the fiscal year. Clients have used sober living activity funds for one-time events such as going to the movies with their children and other family members, attending seasonal events such as apple picking and pumpkin patches, and creating Christmas ornaments. Clients have also used recovery support funds to obtain memberships to the YMCA and children's museums for use after discharge from Iowa PPW.

Parenting Education

All Iowa PPW sites offer parenting classes to facilitate the improvement of parenting skills and parent-child bonding. Since involvement in evidence-based practices began in June 2016, 167 clients participated in 1,204.5 hours of parenting classes and 404 hours of family therapy.

Transportation

Key informant interviews revealed staff continue to mention transportation as a vital recovery support service to bring clients together with their family. One Iowa PPW staff commented that, "Before [Iowa PPW] we would have not been able to support the family members to come down to see the client." The staff member continues to describe how gas cards persuaded a client's mother in law to support the client during treatment. Family support was especially important for the client since her significant other was unable to visit due to incarceration and the mother-in-law, who was taking care of the clients' stepchildren while the client was in treatment, did not live close to the treatment center. "The gas cards eliminated that barrier; [the mother-in-law] was able to be more of a supportive family member rather than just a phone call or a regular visitation.

> "[Sober living activities are for clients to] w*ork on their relationships while they are sober, do fun things together, and just bond. A lot of women would say that they never spent time with their families while they were sober."*

Economic Stability

A majority of clients face substantial obstacles to financially supporting their children for a variety of reasons. Because seven in ten clients are single mothers, several Iowa PPW clients may head single-earner households while having few vocational skills. In addition, many PPW clients faced housing instability when they entered the program. Clients can use recovery support funds related to completing or continuing education such as completing GED coursework and testing or purchasing books or tuition. Recovery support spending on education increased substantially from $2,840.96 in the 2016 fiscal year to $6,554.54 in the 2017 fiscal year.

Weekend Programming

All three agencies provide approximately four hours of programming that includes family education, family therapy and family visitation. However, each agency does not hold programming on the weekends. Family nights offer an opportunity for clients to have a meal with their visiting family members and to participate in activities such as playing board games, fishing, or having a cook out. Key informant interviews with staff revealed family members visiting clients occasionally arrive intoxicated, and at times clients leaving the facility to attend significant family events such as a wedding or graduation return from the event intoxicated as well.

In the second fiscal year of Iowa PPW, efforts were taken to improve program services. When making changes to programming it is strategic to document whether changes in implementation strategies are associated with programmatic outcomes. The University of Wisconsin-Madison's NIATx is a model of process improvement to improve access to and retention in behavioral health treatment. NIATx model offers methods for treatment centers to deliberately plan for, implement and measure improvements in client retention and access.

In the 2017 fiscal year, HFS implemented the NIATx model with the goal of increasing participation in family night programming. HFS decided to test whether moving family night from a weekend to a weekday would increase family participation. To test whether changing the day of programming was associated with increased family participation, six family participants of a family night in February 2017 completed a survey prior to the move of family night from a weekend to a weekday. The same survey was given to family participants each succeeding family night to assess changes in family participation and to identify services family members desired.

Table 11 presents results of one survey pre-intervention (i.e. before family night was moved to a weekday) and post-intervention surveys at two time points (March and August 2017). The first column presents the survey items while columns two through four presents the percent of family participants who responded positively to the item. For example, for the "day and time offered is appropriate" item, 83.3% (n=5) of family participants responded that they felt the day and time of the family visitation was suitable for their schedule.

The pre-intervention survey was not identical to the survey given to participants post-intervention; one question was added to the post-intervention survey and the wording of two questions were changed. The first question, "Does family night help engage you in your loved one's treatment?" was changed to "How does family night help engage you in your loved one's treatment?" to illicit open-ended responses. Additionally, a question was added asking family participants whether the length of family night was sufficient. Lastly, in the pre-intervention survey, family participants answered an open-ended question designed to elicit feedback about other ways the family members wanted to be incorporated into the client's treatment. However, in the post-intervention survey gave participants four options to choose from: family counseling, family education, relapse prevention, and visitation.

Pre-Intervention Family Night

The second row of Table 11 presents survey results of the pre-intervention family night. Five out of six family participants indicated that family night was on a day and time that worked well with their schedule. All participants responded that they would likely attend another family night. Three participants suggested increasing the frequency of family visitations and one participant wanted to be involved in family counseling with their loved one.

Post-Intervention Family Nights

Family participation decreased slightly from six participants to four participants the pre-intervention to the first post-intervention family night. However, in August family participation increased by over two-fold compared to the February and March family nights. All four supportive adults attending the March family night and 12 of the 13 supportive adults attending the August family night felt that the day and time of family night programming was convenient for them. Regarding the length of family night programming, three March family night participants and 11 August family night participants felt that the length of family night programming was sufficient. One March family participant responded that family nights "could be longer." Among August family night participants who did not respond positively to the length of programming survey item, one replied "n/a" and another indicated, "no time is sufficient".

"Being engaged gave us hope."

All March family night participants and 11 August family night participants reported that they would be likely to return to family night. Of the two clients who did not respond positively to returning to family night, one participant did not answer the question and another participant wrote "n/a". A majority of family night participants in both March (75.0%) and August (84.6%) responded that family visitation was one aspect that they wished to have further involvement in. One March family night participant and six August family night participants requested to be more involved in relapse prevention education.

Regarding responses to the question: "How has family night helped you engage in your loved one's treatment?" the most commonly occurring words include "support" (five times), "hope" (three times), and "proud" (three times). One family member responded, "Being engaged gave us hope".

Table 11. HFS Family Night NIATx Survey Results

	Pre-Intervention Feb 2017 n=6	Post-Intervention Mar 2017 n=4	Post-Intervention Aug 2017 n=13
Timing of Programming	83.3%	100.0%	92.3%
Length of Programming	n/a	75.0%	84.6%
Family Member Will Return	100.0%	100.0%	84.6%
Preferences for Further Family Involvement			
Family Counseling	16.7%	0.0%	23.1%
Family Education	0.0%	0.0%	38.5%
Relapse Prevention Education	0.0%	25.0%	46.2%
Visitation	50.0%	75.0%	84.6%

In summary, although the targeted intervention was to change the day family night was offered, it appeared that a majority of participants attending the pre-intervention family night was satisfied with the current day and time family programming was offered. Responses to post-intervention surveys indicated that several family members would have participated in family night "anytime" regardless of the program's day and time. However, family participation increased in one of the two post-intervention family nights—which was a central goal of changing the time of family night programming. The increase in participation could be due to a variety of factors outside of changing the time of family night programming. For example, family activities planned in August could have been more appealing to family members than activities planned in March or February. Nonetheless, all family participants indicated that they would likely return to HFS family night programming (among clients providing any response other than "n/a" or leaving the answer to this question blank) regardless of when the programming is offered.

Extended Support Services Array

A Memorandums of Agreement (MOAs) and Memorandums of Understanding (MOUs) are formal documents outlining agreements between two business entities. A description of MOUs and MOAs Iowa PPW agencies developed with other organizations to support PPW services are in the Year One Evaluation Report. Staff submitted MOUs and MOAs again in summer 2017 to assess whether organizational networks established through MOUs and MOAs expanded, contracted or remained unchanged.

Table 12 presents organizations with whom Iowa PPW agencies had developed MOUs and MOAs in the 2017 fiscal year. Data were gathered from MOA and MOU documents received in summer 2017 by agency. MOAs/MOUs received in 2017 were compared to those received in 2016 to assess change in organizational networks. The first column presents the names of organizations with whom agencies developed MOAs and MOUs. The second column shows the expiration date of the MOA or MOU as presented in the document. Dates listed in grey indicate agreements that existed beyond the beginning of the 2017 fiscal year (October 1, 2016), but were expired before the end of the 2017 fiscal year (September 30, 2017). Dates listed in yellow indicate agreements that were active throughout the entire 2017 fiscal year, but expired on the last day of the 2017 fiscal year. Finally, dates listed in green represent agreements that were active during the entire 2017 fiscal year and will remain active in the 2018 fiscal year. MOU and MOA documents indicate that all collaborations developed in the 2016 fiscal year were maintained for at least part of the 2017 fiscal year, but no new collaborations were reported in the 2017 fiscal year.

ASAC. All four MOAs/MOUs ASAC developed in the 2016 fiscal year were renewed so that they were effective in the 2017 fiscal year. Nevertheless, two of the agreements, the Linn County Agricultural Extension Council and the Young Parent Network, expired one quarter into the 2017 fiscal year. MOAs/MOUs with Abbe Center for Community Health and the Eastern Iowa Health Center both expired in the third quarter of the 2017 fiscal year.

HFS. HFS developed only one agreement with the Visiting Nurses Association, which expired in the second quarter of the 2017 fiscal year.

JRC. Ten MOAs/MOUs were developed between JRC and local organizations supporting Iowa PPW. Three of the MOAs/MOUs (Briar Cliff University's Baccalaureate Program, Briar Cliff University's Graduate Program and the Community Action Agency of Siouxland) will extend into the 2018 fiscal year. Of the remaining seven agreements, two expired on the first day of the 2017 fiscal year and five expired during the 2017 fiscal year.

Table 12. MOAs/MOUs in the 2017 Fiscal Year

2017 MOAs/MOUs	Expiration Date
ASAC	
Abbe Center for Community Mental Health	5/19/2017
Eastern Iowa Health Center	5/22/2017
Linn County Agricultural Extension Council	12/31/2016
Young Parents Network	12/31/2016
HFS	
Visiting Nurse Association	4/1/2017
JRC	
Briar Cliff University (Baccalaureate Level)	12/31/2019
Briar Cliff University (Graduate Programs)	8/31/2019
Community Action Agency of Siouxland Crossroads for Women and Children	3/31/2018
Council on Sexual Assault and Domestic Violence	6/30/2017
Iowa Coalition Against Domestic Violence	9/30/2017
Iowa Judicial Branch—Woodbury County Family Treatment Court	1/31/2017
Morningside College	5/27/2017
Sanctuary Transitional Housing	6/30/2017
Siouxland Human Investment Partnership—Early Childhood Iowa	6/30/2017
Siouxland WIC	9/30/2017

BEHAVIORAL HEALTH DISPARITIES

The final goal of Iowa PPW is to reduce behavioral health disparities among its target population: families involved in Iowa's child welfare system, individuals involved in adult, juvenile and family drug courts, and those with co-occurring substance use disorder and mental health disparities. The following objectives are associated with the final Iowa PPW goal:

a. Care Coordinators develop comprehensive treatment plans for the women as well as a family treatment plan.
b. Increase and expand services to pregnant and postpartum women and their families involved in adult, juvenile and family Drug Court.
c. Improve the treatment success rate, defined as successful completion of the Iowa PPW program, by 5% at each center.

The first objective was met in the 2016 and 2017 fiscal years. The Year One Evaluation Report outlined how agencies develop treatment plans tailored to the client and her family. For this report, focus was directed towards identifying strategies used and barriers encountered when incorporating family members into the treatment plan. To address the second objective, quantitative analyses examine whether receipt of RSS and evidence-based interventions per client significantly increased from the 2016 to 2017 fiscal years for clients who reported involvement in Drug Court at admission. Because the overall goal was to reduce behavioral health disparities among clients in Iowa PPW's target population, we assess differences in treatment completion and length of stay between clients who do and do not: have a mental health condition, or report DHS or Drug Court involvement at admission. Finally, treatment success rates in the 2017 fiscal year are compared to 2016 rates by agency to assess whether treatment success rates have improved.

Incorporating Family Members in Treatment

During key informant interviews, Iowa PPW supervisors and care coordinators spoke about barriers and strategies surrounding folding family members into the clients' treatment. All three agencies reported a similar process to incorporating family members into treatment. Staff ask clients at admission to Iowa PPW if they have any family members that they would like to participate in the program. The family members are contacted by phone, or if the client was accompanied by a family member, in-person, to ask if they would like to participate in Iowa PPW. Common themes surrounding barriers to incorporating family members into treatment among PPW agencies included:

- Difficulty initiating contact with family members
- Family members engaged in addictive or unhealthy behaviors
- Reluctance among family members to participate in the client's treatment program
- Distance between location of PPW treatment center and family members' residence

Barriers and Strategies to Incorporating Family Members

For some clients, the largest barrier to incorporating family members in treatment is the client's lack of family support. Even though clients may identify family members they would like to be a part of their treatment plan, family members are sometimes difficult to reach or when reached, do not agree to participate in Iowa PPW. As a one key informant stated, "Relationships with addiction have destroyed their relationships with their families. So we are not able to reach families in many cases."

"Relationships with addiction have destroyed their relationships with their families. So we are not able to reach their families in many cases."

All interviewed staff reported screening family members for substance use; however, the timing at which the screening occurs varies by agency. For example, HFS typically screen family members over the phone before they have permission to participate in Iowa PPW. In contrast, ASAC and JRC complete substance use screenings for family members in person; JRC requires family members to undergo screening during the second client session and ASAC screens family members at family education days or visitations. Lastly, one staff member faced client resistance to family participation due to a belief that recovery supports spent on family members would take away from clients' support services. As a result, staff reassure all clients that family member utilization of recovery supports does not take away from any funding available to clients.

Increase and Expand Services

To assess whether services increased or expanded from the 2016 fiscal year to the 2017 fiscal year, we calculate differences in RSS funds spent per client and client receipt of any evidence-based intervention other than Seeking Safety between clients who did and did not report involvement with Drug Court. Differences in evidence-based interventions, screenings and assessments between the 2016 and 2017 fiscal years were not assessed since detailed evidence-based services data were not collected until the 2017 fiscal year.

Table 13 displays the median amount of recovery support funds spent per client in the 2016 and 2017 fiscal years. Amounts are presented separately for clients that did and did not report involvement in Drug Court at admission. There were no significant differences in RSS funds used in the 2016 and 2017 fiscal years suggesting that recovery supports did not increase for Drug Court clients.

Table 13. Service Provision by Drug Court Involvement

	FY 2016	FY 2017	Significant Difference?
RSS Funds (median per client)			
Drug Court Involvement	$315.93	$450.60	**No**
No Drug Court Involvement	$400.00	$355.69	**No**

To detect the presence of behavioral health disparities in treatment outcomes for 129 clients discharging from Iowa PPW, the evaluation team assessed differences in treatment completion rates and length of stay between clients with and without a mental health condition at admission and between clients who did and did not report involvement with DHS or Drug Court at admission.

Table 14 compares treatment completion and length of stay between clients who did and did not have a mental health condition or report involvement with DHS or Drug Courts at admission. The first column of the table present the fiscal year and outcomes measured. The second column of Table 14 lists outcomes for clients who did have a mental health condition or reported involvement in Drug Court or DHS at admission. The final column presents the results of statistical tests examining whether the differences between groups are statistically significant.

Table 14. Treatment Outcomes and Recovery Support Services by Client Mental Health Status and Drug Court and DHS Involvement at Admission

Co-Occurring Mental Health Condition	Yes n=112	No n=17	Significant Difference?
Treatment Completion	75.9%	76.5%	**No**
FY 2017	70.3%	60.0%	**No**
FY 2016	78.7%	83.3%	**No**
Length of Stay (median)	73.5 days	71 days	**No**
FY 2017	74 days	74.5 days	**No**
FY 2016	70 days	71 days	**No**
Drug Court	**Yes** n=39	**No** n=90	**Significant Difference?**
Treatment Completion	79.5%	74.4%	**No**
FY 2017	87.5%	87.5%	**No**
FY 2016	73.9%	63.2%	**No**
Length of Stay (median)	76 days	72 days	**No**
FY 2017	105 days	72 days	**Yes**
FY 2016	70 days	71 days	**No**

Table 14. Continued

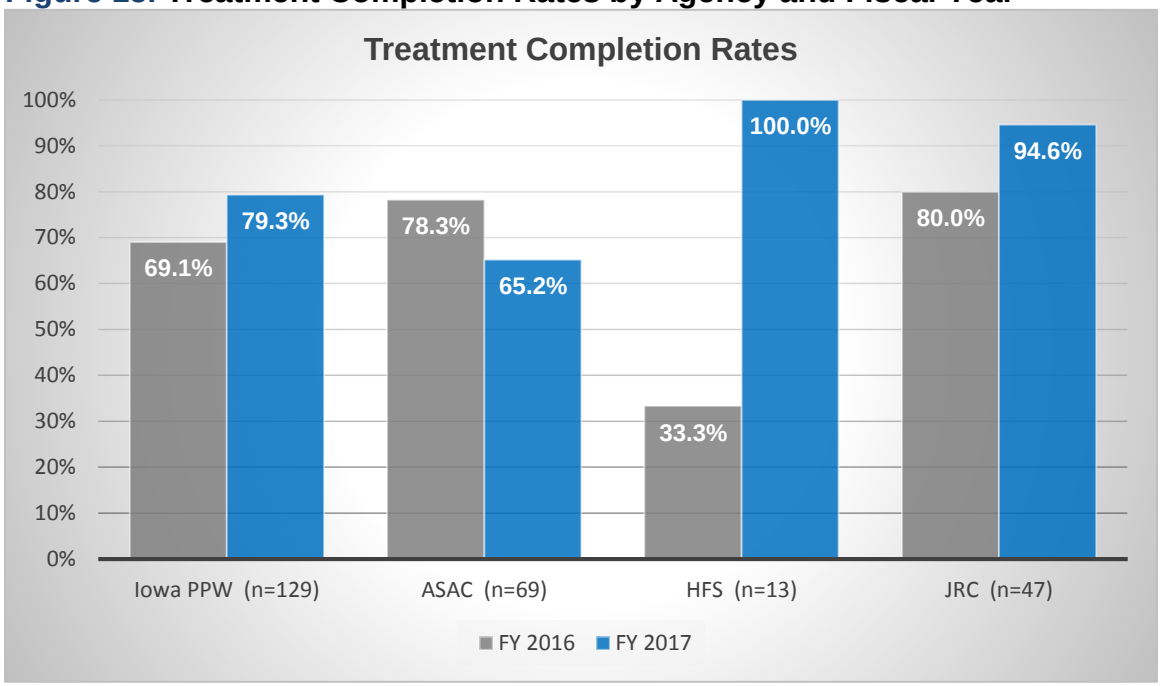
DHS	Yes n=82	No n=47	Significant Difference?
Treatment Completion	79.3%	70.2%	**No**
FY 2017	82.5%	73.3%	**No**
FY 2016	72.0%	64.7%	**No**
Length of Stay (median)	72 days	74 days	**No**
FY 2017	76 days	73 days	**No**
FY 2016	70 days	74 days	**No**

In summary, with the exception of a longer length of stay among clients reporting involvement in Drug Court at admission in the 2016 fiscal year, no disparities in treatment completion or length of stay were detected.

Treatment Completion Rates

Two of the three Iowa PPW agencies met and exceeded the objective of increasing treatment completion rates by 5% when comparing the 2016 and 2017 fiscal years. Figure 15 illustrates the treatment completion rates for all Iowa PPW agencies and for each site by fiscal year. The treatment completion rate for all Iowa PPW clients discharged in the 2016 fiscal year is 69.1% and increased to 79.3% in 2017 resulting a 14.8% increase. However, the change in treatment completion rates for all Iowa PPW clients is not significant. The largest increase in treatment completion rates between the 2016 and 2017 fiscal years was among HFS clients. For the 2016 fiscal year, one of the three clients discharged in 2016 completed treatment; however, in 2017, all ten of HFS clients completed treatment yielding a 100% treatment completion rate. The 230% increase in treatment completion rates for HFS clients was statistically significant (Fisher's Exact Test, $p < 0.05$). The treatment completion rate for JRC was 80% in the 2016 fiscal year and increased to 94.6% in the 2017 fiscal year, representing an increase of 18.8%. ASAC is the only Iowa PPW site whose clients completed treatment at lower rates in the 2017 (65.2%) fiscal year than 2016 (78.3%).

Figure 15. Treatment Completion Rates by Agency and Fiscal Year



Recovery Capital at Follow-Up

Since the ARC instrument was not introduced into the data collection, system until October 24, 2016, therefore only 36 clients were able to complete the ARC at admission and follow-up. Table 16 presents ARC items with the largest difference of clients responding positively at admission and follow-up. Only responses from clients completing the ARC at both admission and follow-up are included in Table 16. The first column displays the ARC item. The second column represents the percentage of clients who completed the ARC at admission. The third column presents the percentage of clients responding positively at follow-up. The fourth column displays the percent point change, the simple difference between the percent of clients responding positively to the item at admission and follow-up. Significance tests (McNemar's Chi Square Test) were run to assess whether the observed difference in positive responses admission and follow-up are statistically significant.

The items in Table 16 represent facets of recovery that may be the most amenable to change through treatment. Three of the ten items in Table 16 are a part of the ARC's Global Physical Health domain. For eight out of ten of the items presented in Table 16, there was a statistically significant difference in the proportion of clients responding to the item at admission and follow-up.

Table 16. ARC Items with Largest Change Admission to Follow-Up

ARC Item n=36	Admission	Follow-Up	Percentage Point Change	Significant Difference?
I do not let other people down.	44.4%	94.4%	50.0%	**Yes**
I have no problems getting around.	55.6%	94.4%	38.8%	**Yes**
I feel I am in control of my substance use.	55.6%	88.9%	33.3%	**Yes**
I feel physically well enough to work.	55.6%	88.9%	33.3%	**Yes**
I am happy with my personal life.	55.6%	88.9%	33.3%	**Yes**
I meet all of my obligations promptly.	61.1%	94.4%	33.3%	**Yes**
I sleep well most nights.	61.1%	88.9%	27.8%	**Yes**
I have access to opportunities for career developments (job opportunities, volunteering or apprenticeships).	50.0%	77.8%	27.8%	**No**
I am satisfied with my involvement with my family.	66.7%	94.4%	27.7%	**Yes**
In general, I am happy with my life.	55.6%	83.3%	27.7%	**No**

CLIENT SATISFACTION

Clients at all agencies reported their satisfaction with counselors, staff, facilities, and program services upon discharge from the program. This section of the evaluation report summarizes the results of client satisfaction surveys from 72 clients.

A majority of the surveys were from JRC clients (65.3%). ASAC clients (20.8%) completed fifteen surveys and ten were complete by HFS clients (13.9%). Since client satisfaction surveys

were anonymous, an analysis of client demographics outside of those collected on the Client Satisfaction Survey is not possible. In addition, because some clients did not reply to all questions, the total number of respondents may vary by question.

Among clients who responded to the Client Satisfaction Survey, over half (58.8%) were continuing their care with the agency. Three clients indicated they were no longer in treatment at the time of the survey administration. Treatment involvement status is unknown for nearly a quarter (23.5%) of participating clients.

Dimensions of Client Satisfaction

The following section reports results from 72 completed client satisfaction surveys for the following four dimensions: 1) Client-Counselor Interaction, 2) Staff-Client Interaction, 3) Building and Facility, and 4) Program Services. Tests were run to assess significant differences for each question by agency, fiscal year, and client demographics (race/ethnicity, age, and whether the client was still receiving services at the time the survey was completed). Results of all tests indicated that there were no significant differences in client satisfaction by agency, fiscal year or client demographics.

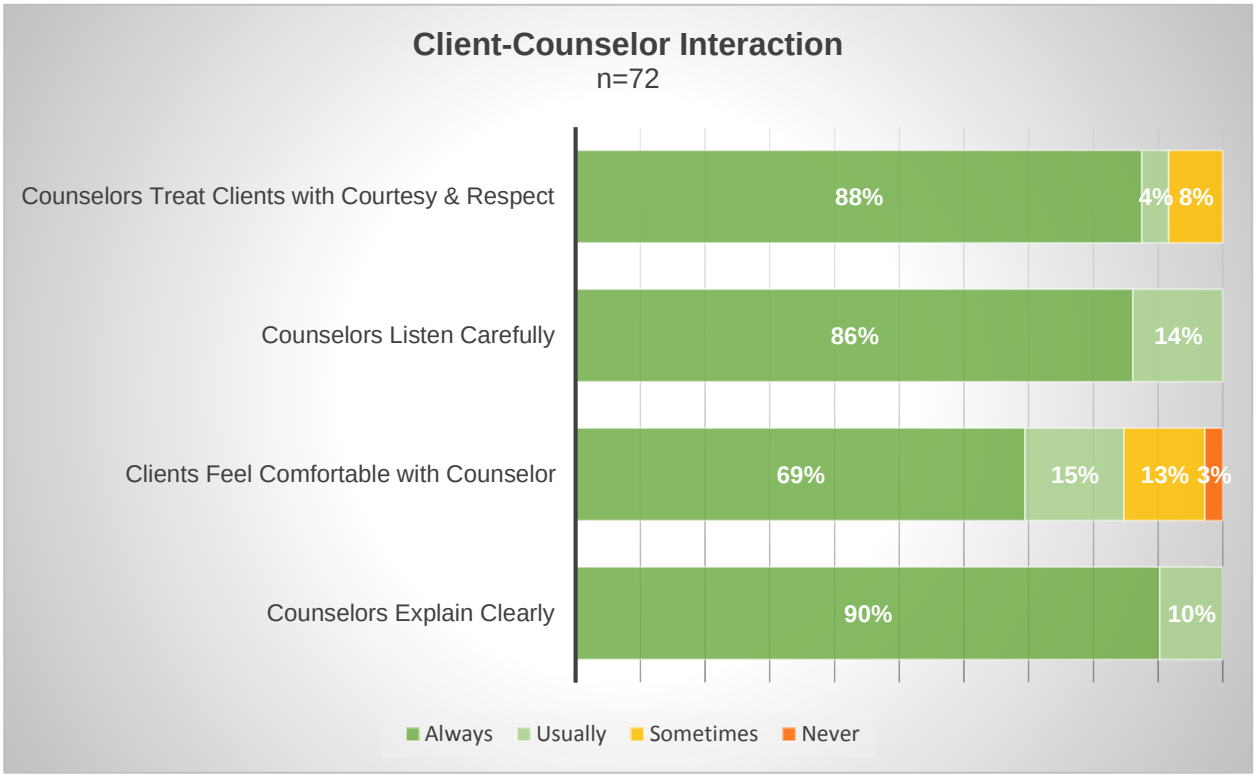
Client-Counselor Interaction

Figure 16 displays clients' perceptions of their interaction with counselors. Clients rated how often:

- counselors treat clients with courtesy and respect
- counselors listen carefully to clients
- clients feel comfortable discussing concerns about their treatment with counselors
- counselors explain things to clients in a way they can understand

Nearly nine out of ten clients felt that counselors always treat them with courtesy and respect (87.5%), listened carefully to them (86.1%) and explained things in a way they could understand (90.3%). However, only seven in ten (69.4%) clients reported *always* feeling comfortable with discussing concerns about their treatment with counselors. Fifteen percent of clients reported *usually* feeling comfortable discussing concerns about their treatment with counselors, 12.5% reported they *sometimes* felt comfortable and 2.8% reported *never* feeling comfortable.

Figure 16. Perceptions of Client-Counselor Interaction



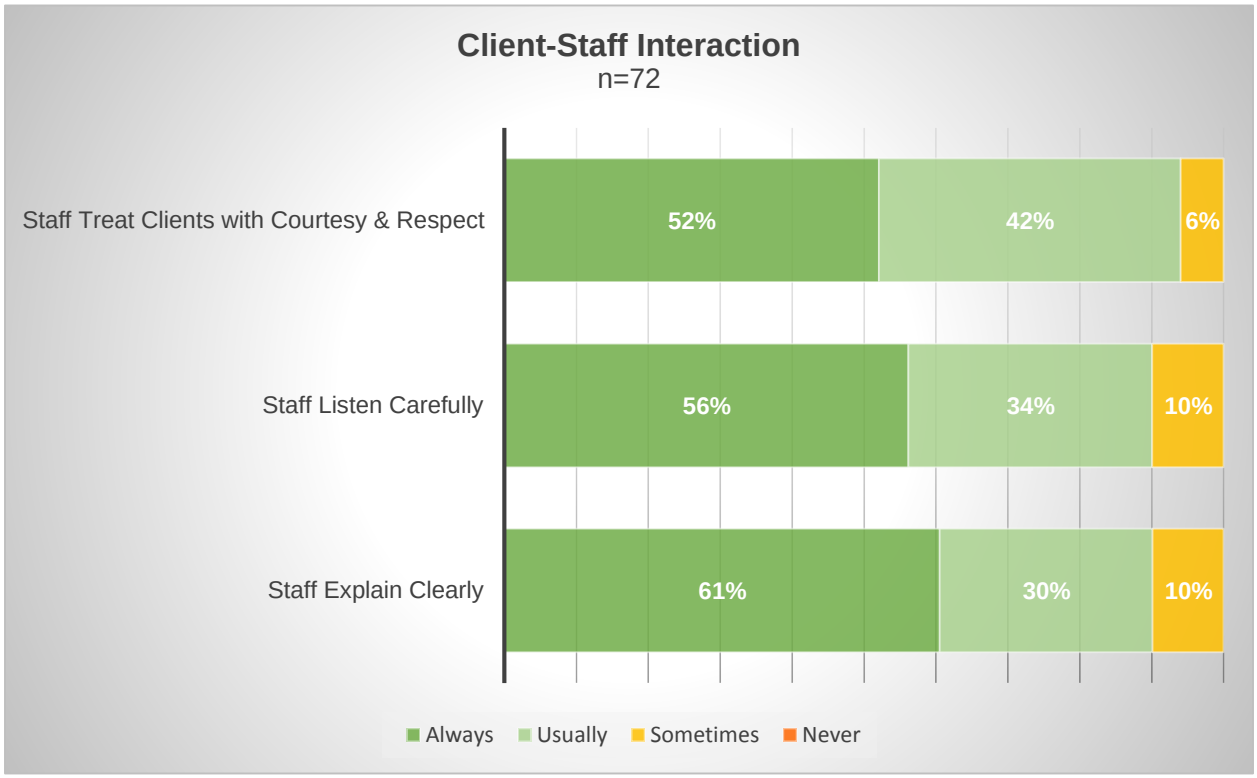
Client-Staff Interaction

Figure 17 displays clients' perceptions of their interaction with staff members other than the counselor. Clients were asked to rate how often staff:

- treat clients with courtesy and respect
- listen carefully to clients
- explain things to clients in a way they can understand

While nearly 90% of clients reported that counselors *always* treated them with courtesy and respect, listened to them carefully and explained things carefully, only 50% to 60% of clients felt this same way about agency staff. Approximately one-third of clients felt that staff *usually* listen carefully and explain things clearly and 42.0% felt that staff *usually* treated them with courtesy and respect.

Figure 17. Perceptions of Client-Staff Interaction



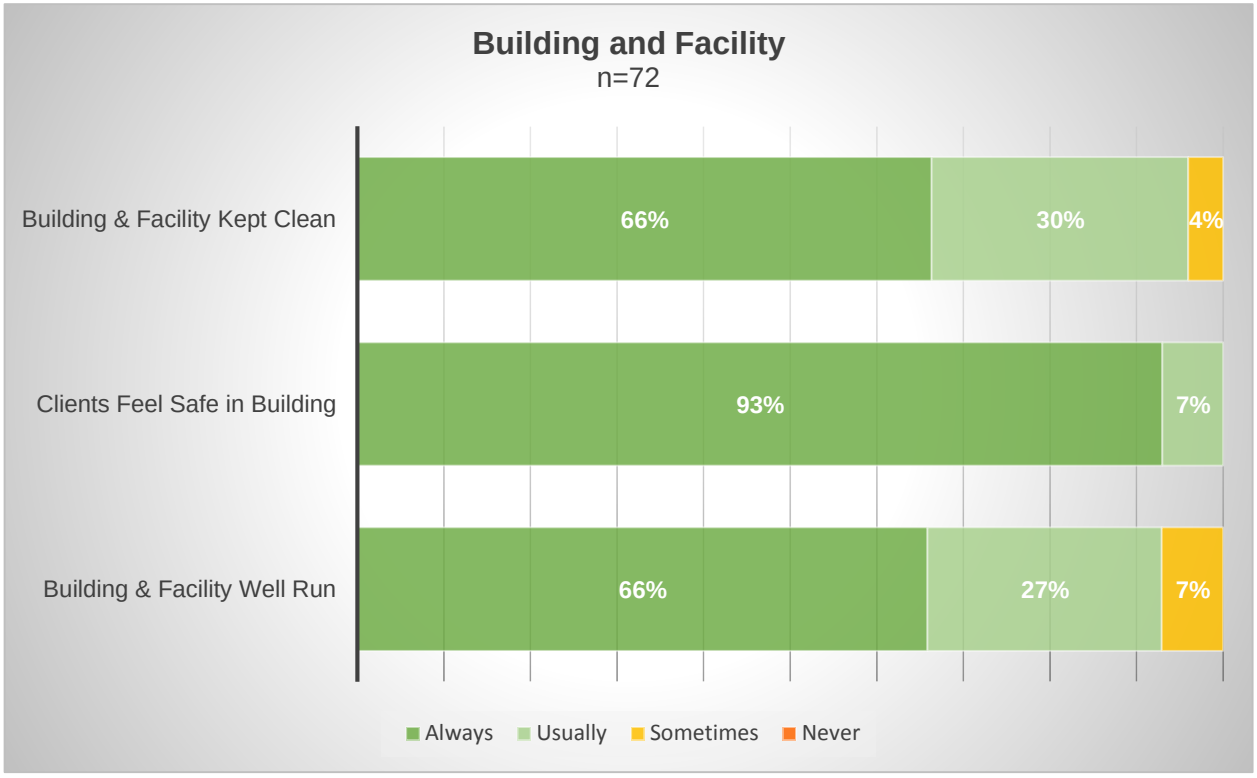
Building and Facility

Figure 18 shows clients' perceptions of the building and facility housing Iowa PPW grant services. Clients were asked to rate how often:

- rooms, bathrooms and hallways were kept clean
- clients felt safe when they were in or around the building
- the facility and building seem efficient and well run

Figure 18 shows that nearly all clients completing the survey felt *always* safe in the building. Approximately two-thirds of clients felt that the building and facility were always kept clean and that the building and facility was *always* well run. The remaining one-third of clients felt that the building and facility was *usually* or *sometimes* kept clean and well run.

Figure 18. Perceptions of Building and Facility



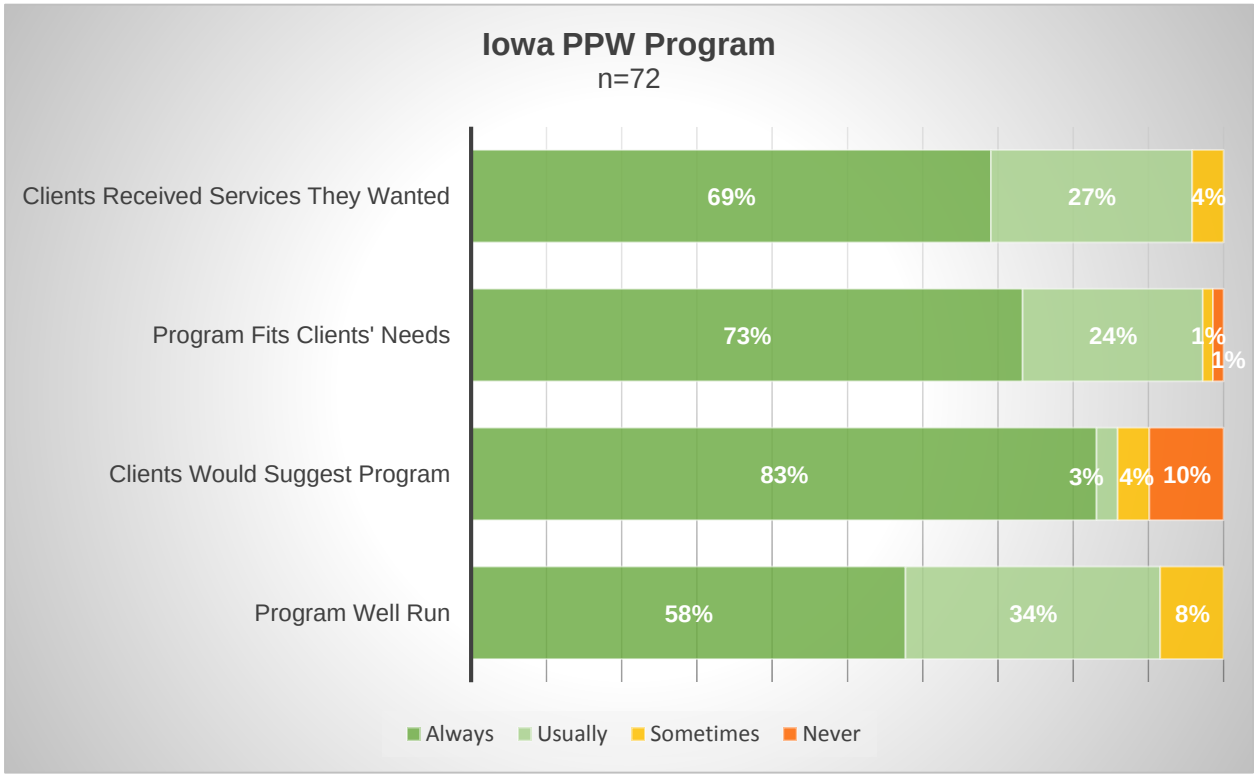
Program Services

Figure 19 illustrates clients' perceptions of the Iowa PPW program services in general. Clients were asked to rate how often:

- clients received the services they wanted
- the program seems to fits the clients' needs
- the client would suggest this program to a friend or family member
- programs seem efficient and well run

Nearly all clients completing the survey felt that Iowa PPW *always* (69.0%) or *usually* (26.7%) provides them with the services they wanted. Furthermore, nearly all clients in the sample believed the Iowa PPW program *always* (73.2%) or *usually* (23.9%) fits their needs. Over four in five clients (83.1%) would *always* suggest Iowa PPW to a friend or family member. However, seven clients (9.9%) indicated that they would *never* suggest the program to a friend or family member. Lastly, over 90% of clients felt that Iowa PPW *always* or *usually* seemed efficient and well run.

Figure 19. Perceptions of Iowa PPW Program



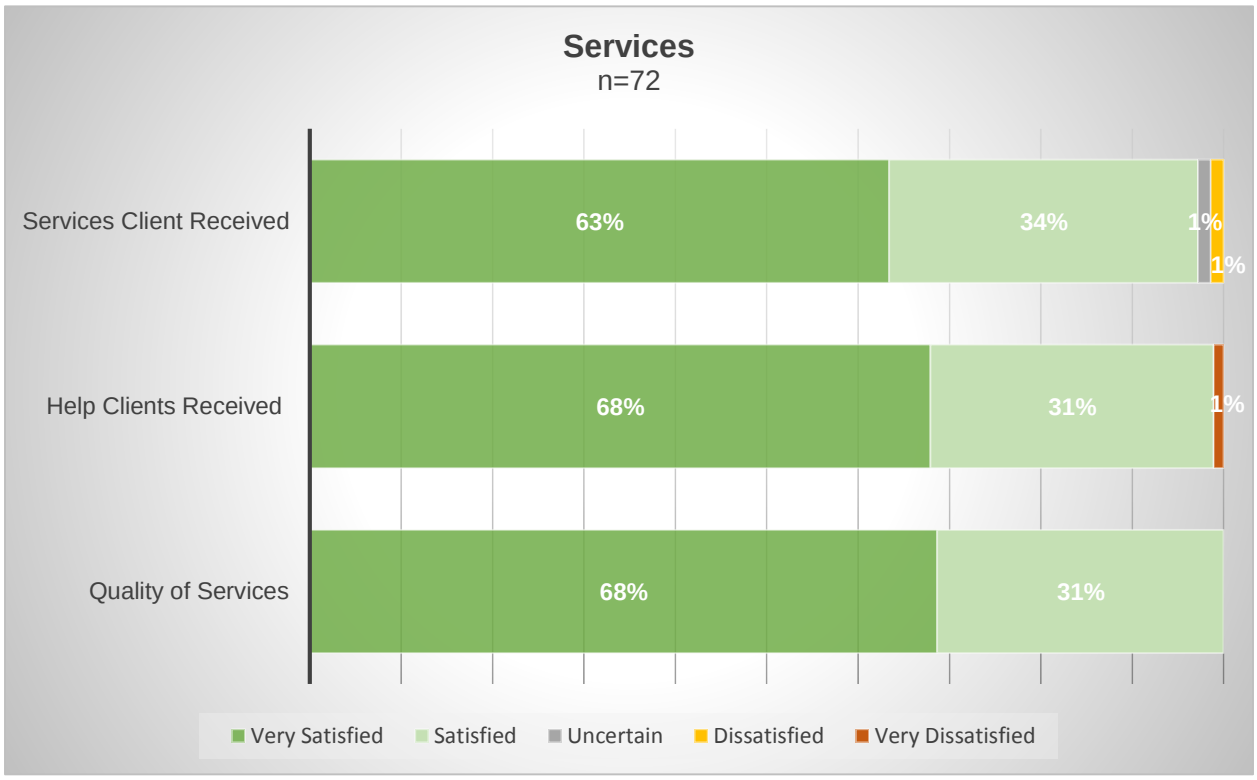
Satisfaction and Dissatisfaction with Services

Figure 20 displays clients' perceptions of how *satisfied* or *dissatisfied* they were with the:

- services they received
- help they received for the problem they came for
- quality of the services they received

Approximately two-thirds of clients were *very satisfied* with the services they received, the help they received for the problem they came for, and the quality of the services they received. With the exception of three clients, the remaining clients were *satisfied* with the Iowa PPW services.

Figure 20. Perceptions of Iowa PPW Services



Clients were also able to include comments about the PPW program at the end of the Clients Satisfaction Survey. All open-ended responses are displayed in Appendix D. Figure 21 is a word cloud generated from all open-ended responses from the 2016 and 2017 fiscal years. The most commonly occurring words in the open-ended responses are indicated the more prominent text (i.e. larger font). The most commonly used word was “help”, appearing 16 times in clients’ responses. Clients mentioned “staff”, “care”, “group”, “program”, “able”, “great”, and “therapist” at least five times in their open-ended responses.

Figure 21. Word Cloud of Open-Ended Client Satisfaction Survey Responses

CONCLUSION

A wide array of recovery support services, evidence-based practices, programming and coordination with outside agencies were used to deliver an evidence-based program to serve pregnant and postpartum clients, their children and network of supportive adults from February 1, 2016 to September 29, 2017. Below are the responses to questions based on Iowa PPW goals as stated in the program grant proposal.

Goal 1: To implement an evidence-based program and increase the number of pregnant and postpartum women served with evidence-based programming at three Women and Children's Centers.

a. Did Iowa initiate PPW services at three high volume community based substance use disorder treatment centers?

   *Answer: **Yes.** All Iowa PPW sites initiated services at three high volume community based substance use treatment centers by February 26, 2016. Iowa PPW admitted 184 clients in the first and second fiscal years.*

b. Did Iowa provide training in Seeking Safety to staff at the three substance use disorder treatment centers?

   *Answer: **Yes.** In February 2016, 16 staff were trained in Seeking Safety. In the 2017 fiscal year, staff from each agency deepened their knowledge of Seeking Safety by attending two additional Seeking Safety trainings.*

c. Hire or appoint a Care Coordinator who works at least 20 hours a week on Iowa PPW?

   *Answer: **Yes.** Each PPW site hired or appointed a Care Coordinator who works at least 20 hours a week on Iowa PPW.*

d. Does the Care Coordinator lead the Seeking Safety training and ensure program delivery to the target population?

   *Answer: **Partially.** A therapist or counselor, rather than the Care Coordinator, leads Seeking Safety training and ensures program delivery to the target population.*

Goal 2: To allow client choice in selecting recovery supports while focusing on gender specific issues for pregnant and postpartum women in residential treatment for substance use disorders.

a. Did Iowa identify service gaps that hinder successful completion of substance use disorder treatment program by pregnant and postpartum women?

   *Answer. **Yes.** Through questionnaires and semi-structured interviews, staff identified housing, employment and finances, and unhealthy relationships as barriers to successful treatment completion. Clients who were unemployed and not looking for work at admission had higher rates of treatment completion compared to employed clients or clients who were employed and looking for work. However, treatment completion rates did not vary by housing status, income, or relationship status.*

b. Did Iowa provide essential health and wellness services, which improve safe and healthy pregnancies and improve health outcomes?

Answer: ***Yes.*** *Throughout the first and second years of implementation, Iowa PPW clients received $7.720.92 in recovery support funding for wellness services. Of the 129 clients discharged by data cut-off, 131 diagnoses of mental health were made. In addition, 46 clients and 51 children were screened for FASD.*

c. Did Iowa provide essential services which are focused on improving parenting skills, family functioning, economic stability and quality of life?

Answer: ***Yes.*** *Between the 2016 and 2017 fiscal year, there was a three-fold increase in the amount of recovery support funds used for sober living activities. Clients and their family members attended 1,204.5 hours of parenting classes and 40.4 hours of family therapy.*

d. Do providers offer at least four additional hours of weekend programming per month that increases extended family involvement?

Answer: ***Yes.*** *All three Iowa PPW implementation sites reported implementing at least four hours of weekend programming per month to involve clients' extended family. The structure of family visitation privileges and content of family programming varies across agency. A quality improvement project in progress at HFS revealed an overwhelming majority of participants of family night programming are likely to return.*

e. Do Care Coordinators develop and implement an extended recovery support services array that supports women, children and extended family members

Answer: ***Yes.*** *Over $100,000 in recovery support funds were spent on Iowa PPW clients, their minor children, and extended family. Iowa PPW sites established fifteen Memorandums of Agreement/Memorandums of Understanding with outside agencies; however, twelve of these agreements expired or will expire by the beginning of the 2018 fiscal year.*

Goal 3: To reduce behavioral health disparities among pregnant and postpartum women who as a population tend toward a higher incidence of substance use disorder and related problems.

a. Do Care Coordinators develop comprehensive treatment plans for the women as well as a family treatment plan?

Answer: ***Yes.*** *Staff at each agency identified three components to treatment plan development: screening, goal development and service planning. Two barriers were identified regarding family member involvement in the treatment plan: 1) some clients no longer have stable relationships with family members and 2) the family members of some clients may also have difficulties with their own substance use.*

b. Did Iowa increase and expand services to pregnant and postpartum women and their families involved in adult, juvenile and family Drug Court?

Answer: **Not yet.** *Interviews with Care Coordinators and supervisory staff indicates that the services available to pregnant and postpartum women and their families in adult, juvenile and family drug court largely remain unchanged after implementation of the Iowa PPW grant. Further analyses reveal RSS spending was similar in the 2016 and 2017 fiscal years for clients reporting involvement in Drug Court.*

c. Did Iowa improve the treatment success rate by 5% at each center?

Answer: Both HFS and JRC increased treatment success rates by 230% and 18.8%, respectively between the 2016 and 2017 fiscal years. However, treatment success rates at ASAC decreased by 16.7%.

RECOMMENDATIONS

- **Address staffing issues that may diminish program quality.** Staff turnover was a substantial barrier to maintain program quality for ASAC in particular. Additionally, one staff member stated that their agency was in need of someone who could "own" the project rather than having to juggle the grant responsibilities among a variety of staff who may have limited knowledge of grant guidelines and procedures. To address staffing issues, agencies may:
    - *Implement, review, and regularly update Iowa PPW program protocols to mitigate the effects of agency turnover.* One approach to maintain consistency of Iowa PPW services is to create a PPW protocol document that lists vital aspects of grant maintenance and review the document on a regular basis in staff meetings. In the event of staff turnover, program quality may be more stable if the locations

of documents, methods of gathering data, and timelines and procedures of report generation are available to new or provisional staff.

- *Rearrange current organizational structure to allow one staff to assume a majority of the workload associated with Iowa PPW.* The designated Iowa PPW staff could create and maintain project protocols, fulfill grant requirements and complete outreach activities to distribute information about Iowa PPW to the surrounding community.

- **Support the use of MAT for clients with opioid use disorder.** Analysis of treatment completion and clients' primary substance use suggested completion of Iowa PPW was lowest among women using opioids. It may be advantageous to suggest the use of Medication Assisted Treatment (MAT) for clients with opioid use disorders to improve treatment completion for this group. Educating clients on the safety of some forms of MAT for pregnant and breastfeeding clients (CITE) may encourage clients to use MAT, and ideally, increase treatment completion for Iowa PPW clients with opioid use disorder.

- **Increase efforts to complete GPRA follow-up interviews.** While results from follow-up interview are promising in that 90.5% of clients reported abstinence from drugs and alcohol five to eight months post-admission, these data may not represent of all Iowa PPW clients. Over half (60.0%) of clients who completed the follow-up interview were admitted to JRC, which was also the treatment site with the highest rates of treatment completion. Program staff can learn a great deal by following-up with clients who did not complete the program to identify potential gaps in service delivery. As a result, it is recommended Iowa PPW staff:
    - Collect more collateral contacts upon admission.
    - Keep in contact with staff from other organizations clients are connected with to track clients after discharge.
    - Use text messages or social media to maintain contact with clients after discharge.
    - Modify incentives for participation in GPRA follow-up interview. Ask clients what types of incentive would motivate them to complete a follow-up interview.
    - Link clients with peer recovery mentors throughout treatment. The mentor can serve as both social support and a method to contact the client post-discharge.

- **Update Memorandums of Agreement and Understanding.** A majority of the MOAs/MOUs received by the evaluation team will expire or have already expired by the start of the 2018 fiscal year. It is unclear whether expired agreements represent unsuccessful or ineffective agreements or the documents simply have not been updated. Furthermore, no new MOAs/MOUs were established in the 2017 fiscal year. Discussion and actions towards identifying avenues for increased involvement without outside organizations may facilitate program sustainability following the end of grant funding in 2019.

- **Consider implementing client incentives for returning from outside events sober.** Staff have reported clients occasionally use alcohol or illicit drugs at events outside of the treatment center (e.g. wedding or graduation ceremonies). In an attempt to reduce the occurrence of substance use at outside events, agencies may consider providing an incentive when clients return from outside events with a clean urinalysis test.

- **Maintain Seeking Safety Modifications sheet.** Staff can regularly update the Seeking Modifications sheet prior to all Seeking Safety calls to share lessons learned from adapting Seeking Safety to new populations or to improve client engagement in Seeking Safety sessions.

APPENDIX A

Program Goals, Questions and Data Sources for Evaluation

Evaluation Question	Measures	Data Sources
Goal 1: Program Implementation--To implement an evidence-based program and increase the number of pregnant and postpartum women served with evidence-based programming at three Women and Children's Centers.		
a. Did Iowa initiate PPW services at three high volume community based substance use disorder treatment centers?	Earliest intake data by provider; Number of clients served by each provider	GPRA Intake Interviews, Intake Notification Form
b. Did Iowa provide training in Seeking Safety to staff at the three substance use disorder treatment centers?	Number and demographics of staff receiving Seeking Safety Training per provider	Staff Training Tracking Form
c. Did each provider hire or appoint a Care Coordinator who works at least 20 hours a week on Iowa PPW?	Date Care Coordinator hired; Job description for Care Coordinator; Care Coordinator credentials	Job Description of Care Coordinator, Survey Care Coordinators
d. Does the Care Coordinator lead the Seeking Safety (SS) training and ensure program delivery to the target population?	Names of therapists/ counselors leading SS and undergoing advanced SS training	Seeking Safety Provider Meeting Notes, Staff Training Tracking Form
Goal 2: Provide Recovery Support Services—To allow client choice in selecting recovery supports while focusing on gender specific issues for pregnant and postpartum women in residential treatment for substance use disorders.		
a. Did Iowa identify service gaps that hinder successful completion of substance use disorder treatment by pregnant and postpartum women?	Identification of service gaps by agency staff; Clients' statement of needed services	Client Satisfaction Survey; Interviews with Care Coordinators and supervisory staff
b. Did Iowa provide essential health and wellness services which improve safe and healthy pregnancies and improve health outcomes?	Number and description of services provided, comparison of number of preterm, low birthweight, and infant deaths to national averages	Evidence Based Practices Tracking Form, Recovery and Support Services Tracking Form, Agency Intake Notifications, Agency Discharge Notifications, Peer-reviewed journal articles

Evaluation Question	Measures	Data Sources
c. Did Iowa provide essential services which are focused on improving parenting skills, family functioning, economic stability and quality of life?	Number and description of services, number of clients experiencing improved quality of life	Recovery Support Services Tracking Form; Evidence Based Practices Tracking Form
d. Do providers offer at least four additional hours of weekend programming per month that increases extended family involvement?	Number of hours weekend programming per month offered, Description of weekend programming activities	Interviews with Care Coordinators and supervisory staff, Agency feedback survey
e. Do Care Coordinators develop and implement an extended recovery support services array that supports women, children and extended family members?	Type and frequency of services offered; Description of agencies with which providers have MOAs/MOUs	Recovery Support Services Tracking Form, Evidence Based Practices Tracking Form; Agency MOAs and MOUs
Goal 3: Address Behavioral Health Disparities— To reduce behavioral health disparities among pregnant and postpartum women who as a population tend toward a higher incidence of substance use disorders and related problems.		
a. Do Care Coordinators develop comprehensive treatment plans for the women as well as a family treatment plan?	Description of methods used to develop treatment plans for clients and their families	Interviews with Care Coordinators
b. Did Iowa increase and expand services to pregnant and postpartum women and their families involved in adult, juvenile and family Drug Court?	Number of clients and participating family members involved in Drug Court.	Intake and Discharge Notification Form
c. Did Iowa improve the treatment success rate by 5% at each center?	Number of clients completing treatment by provider (baseline)	GPRA Discharge Interview

APPENDIX B

Assessment of Recovery Capital (ARC)

Please place a ✓ *only* in the boxes for statements that you agree with and that describe your experiences as of today.

I am currently completely sober.	☐
I feel I am in control of my substance use.	☐
I have had no 'near things' about relapsing.	☐
I have had no recent periods of substance intoxication.	☐
There are more important things to me in life than using substances.	☐

Section 1: Total ✓ = ____

I am able to concentrate when I need to.	☐
I am coping with the stresses in my life.	☐
I am happy with my appearance.	☐
In general I am happy with my life.	☐
What happens to me in the future mostly depends on me.	☐

Section 2: Total ✓ = ____

I cope well with everyday tasks.	☐
I feel physically well enough to work.	☐
I have enough energy to complete the tasks I set myself.	☐
I have no problems getting around.	☐
I sleep well most nights.	☐

Section 3: Total ✓ = ____

I am proud of the community I live in and feel part of it – sense of belonging.	☐
It is important for me to contribute to society and or be involved in activities that contribute to my community.	☐
It is important for me to do what I can to help other people.	☐
It is important for me that I make a contribution to society.	☐
My personal identity does not revolve around drug use or drinking.	☐

Section 4: Total ✓ = _____

I am happy with my personal life.	☐
I am satisfied with my involvement with my family.	☐
I get lots of support from friends.	☐
I get the emotional help and support I need from my family.	☐
I have a special person that I can share my joys and sorrows with.	☐

Section 5: Total ✓ = _____

I am actively involved in leisure and sport activities.	☐
I am actively engaged in efforts to improve myself (training, education and/or self awareness).	☐
I engage in activities that I find enjoyable and fulfilling.	☐
I have access to opportunities for career development (job opportunities, volunteering or apprenticeships).	☐
I regard my life as challenging and fulfilling without the need for using drugs or alcohol.	☐

Section 6: Total ✓ = _____

I am proud of my home.	☐
I am free of threat or harm when I am at home.	☐
I feel safe and protected where I live.	☐
I feel that I am free to shape my own destiny.	☐
My living space has helped to drive my recovery journey.	☐

Section 7: Total ✓ = ____

I am free from worries about money.	☐
I have the personal resources I need to make decisions about my future.	☐
I have the privacy I need.	☐
I make sure I do nothing that hurts or damages other people.	☐
I take full responsibility for my actions.	☐

Section 8: Total ✓ = ____

I am happy dealing with a range of professional people .	☐
I do not let other people down.	☐
I eat regularly and have a balanced diet.	☐
I look after my health and wellbeing.	☐
I meet all of my obligations promptly.	☐

Section 9: Total ✓ = ____

Having a sense of purpose in life is important to my recovery journey.	☐
I am making good progress on my recovery journey.	☐
I engage in activities and events that support my recovery.	☐
I have a network of people I can rely on to support my recovery.	☐
When I think of the future I feel optimistic.	☐

Section 10: Total ✓ = ____

APPENDIX C

Client Satisfaction Survey

	Less than a week (1)	Less than a month (2)	More than a month (3)
1. How long have you been receiving services? (1)	❍	❍	❍

2. What month and year were you admitted to [insert agency name]? (MM/YYYY)
3. Are you still in treatment at [insert agency name]?
❍ Yes (1)
❍ No (2)

4. What month and year were you discharged from [insert agency name]? (MM/YYYY)
5. Who referred you to [insert agency name]?
❍ Self (21)
❍ Health Care Provider (22)
❍ Community Mental Health Clinic (23)
❍ Alcohol/Drug Abuse Provider (24)
❍ Other Individual (25)
❍ Employer/EAP (26)
❍ School (27)
❍ TASC (28)
❍ OWI (29)
❍ Other Criminal Justice/Court (30)
❍ Civil Commitment (31)
❍ Promise Jobs (32)
❍ Zero Tolerance (33)
❍ Drug Court (34)
❍ Other Community (38)
❍ DHS Child Abuse (39)
❍ DHS Child Welfare (40)
❍ DHS Drug Endangered Child (41)
❍ DHS Other (42)
❍ Division of Vocational Rehabilitation (43)
❍ Parole Board (44)
❍ State Probation (45)
❍ Federal Probation (46)

These questions are about your Counselor. If you had more than one, pick the one you had the most contact with.

	Never (1)	Sometimes (2)	Usually (3)	Always (4)
6. How often did your counselor treat you with courtesy and respect? (1)	❍	❍	❍	❍
7. How often did your counselor listen carefully to you? (2)	❍	❍	❍	❍
8. How often did you feel comfortable raising any concerns that you had about your treatment? (3)	❍	❍	❍	❍
9. How often did your counselor explain things to you in a way you could understand? (4)	❍	❍	❍	❍

These questions are about Other Staff in the agency you interacted with other than your counselor.

	Never (1)	Sometimes (2)	Usually (3)	Always (4)
10. How often did staff treat you with courtesy and respect? (1)	❍	❍	❍	❍
11 .How often did staff listen carefully to you? (2)	❍	❍	❍	❍
12. How often did staff explain things to you in a way you could understand? (3)	❍	❍	❍	

These questions are about the physical facility and building where you received services.

	Never (1)	Sometimes (2)	Usually (3)	Always (4)
13. How often were the rooms, bathrooms, and hallways kept clean? (1)	❍	❍	❍	❍
14. How often did you feel safe when you were in or around the building? (2)	❍	❍	❍	❍
15 .How often did the facility and building seem efficient and well run? (3)	❍	❍	❍	❍

These questions are about the Program you received in general.

	Never (1)	Sometimes (2)	Usually (3)	Always (4)
16.How often did the program seem efficient and well run? (1)	❍	❍	❍	❍
17.How often would you suggest this program to a friend or family member? (2)	❍	❍	❍	❍
18.How often did the program seem to fit your needs? (3)	❍	❍	❍	❍
19.How often did you get the kind of service you wanted? (4)	❍	❍	❍	❍

10. Please indicate how dissatisfied or satisfied you were with:

	Very Dissatisfied (1)	Dissatisfied (2)	Uncertain (3)	Satisfied (4)	Very Satisfied (5)
20. The service you received? (1)	❍	❍	❍	❍	❍
21. The help you received for the problem you came for? (2)	❍	❍	❍	❍	❍
22. The quality of the services you received? (3)	❍	❍	❍	❍	❍

	Under 18 (1)	18 to 24 (2)	25 to 34 (3)	35 to 44 (4)	45 to 54 (5)	55 or over (6)
23. How old are you? (1)	❍	❍	❍	❍	❍	❍

24. Are you... ?
❍ Male (1)
❍ Female (2)

	White (1)	Black (2)	Hispanic or Latino (3)	Other (4)
25. What best describes you? (1)	❍	❍	❍	❍

26. Would you please take a few minutes to describe what about the service experience stands out:

APPENDIX D

Open-Ended Responses to Client Satisfaction Survey by Agency

ASAC
Groups not always organized but pretty structured environment
I was able to deliver a healthy baby and was able to be in treatment with a newborn. I was able to avoid having DHS involved. I was able to gain my mental health again and gain sobriety.
The staff was always open/available to discuss diff issues or areas of concern. I enjoyed my stay here and I learned a lot of different coping skills.
Groups lead help you learn to live a healthy sober life outside the facility. Not repetitive about just one topic, assisted well w/ mental health, medical, pregnancy concerns.
Staff and client relationships, staff seems to truly care about clients here at ASAC.
Learning to cope. I loved my counselor.
I would recommend this place to anyone wanting to change their life.
great place helped me and still helps me relive my life. Thank you!
Great classes.
HFS
I felt as if staff was very compassionate with me and my kids.
That they had programs to help get things we needed. (ex PPW)
Respectful, helpful, and caring
The program does work if your will to make the commitment to change and let it help you!
It was very helpful
JRC
The overall help I needed was met...Thank you!
The staff/therapists are always willing to go above/beyond for the ladies here at WCC.
Primary groups- I enjoyed getting to do assignments with our small groups and therapist. It helped to cope with past situations.
Everyone was so welcoming and very supportive/understanding
The program structure and service provided was just what I needed and this is an amazing program.
The way they take roll call and making sure they know where everyone is, and how welcoming the community is when I came in.

Table Continued

JRC
The love, care, and support.
Excellent therapists! I would highly recommend this facility to other women because it has helped me in ways I could never imagine. Support, resources, structure, stability for both mother and child.
Everything I loved it here is not as bad as I thought
Great Recovery based program. Very Positive staff.
The steps of recovery.
Liked attending group regularly.
Everyone helps each other out, questions get answered. It's a great place to call home.
How the staff and therapist can relate to the life I once lived.
They help me get myself back.
I learned a lot here, being ready for change helped a great deal also.
Unconditional love, support, nonjudgmental, a very good 12 step program
That they really care about your kids and fight hard for you to get in their care.
All the other women at W.C.C. and how caring they are for one another.
Being able to have your children while you're working on yourself is amazing. It gave me opportunities to become a better parent.
Helped me focus on myself help recover self-emotional issues
How well my therapist understood me and how helpful all of the group sessions were for me.