

State Youth Treatment – Implementation (SYT-I) Families in Focus Project

THE IOWA CONSORTIUM FOR SUBSTANCE ABUSE RESEARCH AND EVALUATION

Annual Report Year Two October 2017

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BACKGROUND

In October 2015, the Substance Abuse and Mental Health Services Administration (SAMHSA) awarded the Iowa Department of Public Health (IDPH) a three-year grant to implement the State Youth Treatment – Implementation (SYT-I) Families in Focus project. The purpose of SYT-I is to expand and enhance evidence-based treatment and recovery support services for substance use disorders (SUD) and co-occurring disorders among adolescents (ages 12 to 17) and transitional aged youth (TAY) (ages 18 to 25), and their families. The SYT-I Families in Focus project expands on the efforts of the State Adolescent Treatment Enhancement Dissemination (SAT-ED) Families in Focus project in Iowa, also funded by SAMHSA from October 2012 through March 2016.

The four SAT-ED Families in Focus providers continue participating in the SYT-I Families in Focus project which include: Heartland Family Services (Heartland) in Council Bluffs; Prairie Ridge Integrated Behavioral Healthcare (Prairie Ridge) in Mason City; Prelude Behavioral Services (Prelude) in Iowa City; and Youth and Shelter Services (YSS), Inc. in Ames.

The SYT-I Families in Focus project has three goals as indicated in the original grant application:

- 1. To advance the state in further establishing a coordinated effort to serve adolescents and their families:
 - Hiring a state adolescent treatment/youth coordinator to develop state infrastructure to support youth or family members of youth with SUD at either the policy or program levels.
 - Strengthening the Interagency Council by recruiting representatives from various organizations in the community to serve on the council, developing financial maps, implementing a statewide workforce development plan, and participating in infrastructure reform.
 - Developing the Substance Abuse Financial subcommittee, identifying new financial resources, and coordinating finance sources through financial mapping.
 - Developing new or modifying at least two existing state policies and procedures which affect the population of focus, this includes: 1) developing state standards for licensure/certification/credentialing of professionals and paraprofessionals who serve the adolescent population; and 2) developing a Financial subcommittee and collaborating with managed care organizations (MCO's) to work towards reimbursement of EBP; identifying new financial resources and coordinating finance sources through financial mapping; and finding ways to use existing resources more efficiently and effectively.
 - Strengthening and enhancing the provider collaborative. This includes a monthly provider call to identify and address administrative challenges, as well as continuing to certifying staff in MDFT, MET/CBT, and use of the CASI and the GPRA.
- To expand and enhance youth and family treatment for 360 adolescents and TAY:
 - Increasing evidence-based youth, family, assessment and treatment by continuing to provide MDFT and adding the MET/CBT treatment option as well as Recovery Support Service options. The goal is to serve 120 adolescents/TAY by the end of the first year, 240 by the end of the second year, and 360 by the end of the first year.
 - Increasing minority referral and treatment by expanding outreach and community support services.

- Improving workforce development by training 18 MDFT therapists each year (54 total), two MDFT trainers (6 total), 30 MET/CBT therapists (90 total), 10 MET/CBT trainers, and 30 CASI therapists (90 total).
- Using the workforce map to recruit, prepare, and retain a qualified workforce to serve
 adolescents. Activities include working with local colleges to prepare faculty in
 appropriate college and education settings to deliver curricula that focuses on
 adolescents and TAY specific SUD evidence-based practices (EBP); improving state
 licensure standards; offering online training for CASI; and implementing Feedback
 Informed Treatment (FIT).
- 3. To improve outcomes for adolescents, TAY, and families:
 - Participants will maintain program completion rates at a minimum of 75%.
 - A minimum of 80% of adolescents and TAY will report improved outcomes in abstinence, enrollment in education, vocational training or employment, social connectedness, and decreased criminal and juvenile justice involvement, and health.
 - Six-months post-discharge, 75% of adolescents, TAY and participating family members will report improved family functioning in family interactions, mental health, peer relations, and reduced substance use (SU).
 - In partnership with the Consortium, IDPH and providers will strengthen outcome
 measurements by developing tracking forms in order to track specific, meaningful
 outcomes for all MDFT and MET/CBT clients and their families.
 - Continuing to share the outcomes of this project each year at the Annual Governor's Conference on Substance Abuse and as requested by other groups.

The project will expand evidence-based practices (EBP) and enhance treatment service delivery by assuring greater access to recovery support services for adolescents, transitional aged youth and their families. Treatment providers will continue to offer Multi-Dimensional Family Therapy (MDFT) to high-risk youth and their families. MDFT is widely recognized in the United States and abroad as an effective science-based treatment for adolescent SUD, delinquency, and school problems. I lowa originally selected MDFT because it has been shown to be an effective treatment for 12 to 18-year-old youth with co-occurring SU and mental health problems, thereby addressing lowa's gap in service for this population. Furthermore, MDFT has validated success with different genders, ethnic minorities, and youth involved in the criminal justice system.

MDFT is a family centered treatment approach that addresses substance abuse, delinquency, antisocial and aggressive behaviors, school and family problems, and emotional difficulties. The objectives of MDFT are to engage adolescents and their families and motivate them to enter and complete treatment, enhance family functioning, employ methods that focus on adolescent drug use and dependence, improve school performance and relationships with school personnel, promote prosocial alternatives to delinquent behavior, strengthen family stability, and reduce mental health symptoms.² Treatment can last anywhere from three to six months and the intensity of the sessions are determined by the adolescent and the family; successful completion of MDFT can be delivered across a flexible series of 12 to 16 weekly or twice weekly 60 to 90 minute sessions.

Motivational Enhancement Therapy/Cognitive Behavioral Therapy (MET/CBT) was added as a treatment option to serve a greater number of adolescents and TAY who need more flexible

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¹ Brannigan, R., Schackman, B.R., Falco, M., & Millman, R.B. (2004). The quality of highly regarded adolescent substance abuse treatment programs. Archives of Pediatrics and Adolescent Medicine, 158, 904-909.

² http://www.mdft.org/MDFT-Program/What-is-MDFT

treatment options or for those who do not meet the MDFT eligibility requirements for family involvement. The MET sessions focus on factors that motivate clients to change while the CBT sessions teach clients the skills to cope with problems and meet their needs in ways that do not involve turning to SU. MET/CBT is a brief but effective treatment option and can be provided in a variety of treatment settings to adolescents that may not have a family member that is able to participate in treatment, however, family members are welcome to participate. MET/CBT can be delivered in either as little as four sessions and as many as 12, which include both individual and group sessions for teens and young adults. The initial two sessions are individual sessions and focus on Motivational Enhancement Therapy (MET) while the remaining sessions are group sessions and incorporate Cognitive-Behavioral Therapy (CBT).

In year one, SAMHSA approved the provision of MET/CBT in residential treatment. Therapists agree both residential and outpatient clients receiving MET/CBT follow the same curriculum regardless of the level of care. However, residential sessions are often completed at a quicker pace. If the client is discharged before the clinician is able to complete the curriculum, the opportunity to continue with MET/CBT on an outpatient basis is available. While the curriculum remains the same in residential treatment, there are more opportunities to engage than on an outpatient basis. Therapists are able to encourage, challenge, and educate clients further in residential treatment. Therapists are also able to collaborate with a client's counselor, inform them on their engagement in the sessions so they can use the information and apply it to their individual sessions and treatment plans, which can aid in the success of goal setting.

A key component to MET/CBT is Motivational Interviewing (MI). MI is a collaborative conversation style for strengthening a person's own motivation and commitment. During MI, clients can recognize the difference between where they are on their treatment path and where they would like to be. It is particularly helpful in the early stages of treatment when determining the individuals' functional level and goals. The principles of MI are consistent with strongly held values of recovery, cultural competency, and self-determination. MI is shown to achieve good outcomes for adolescents and TAY and can be used regardless of family participation in therapy. SYT-I providers may participate in MI trainings offered through IDPH or other resources. In 2016-2017, IDPH sponsored three MI trainings.

Prior to treatment, providers administer an assessment tool to identify whether a client is suitable for treatment. Potential clients ages 12 to 17 receive the Comprehensive Adolescent Severity Inventory (CASI), which is a semi-structured clinical assessment and outcomes interview. The CASI was selected because of its completeness and ease of delivery. It is comprised of independent modules, each incorporating objective, focused, and concrete questions. Questions are formatted to identify whether certain behaviors have ever occurred, whether they occur regularly, how old the adolescent was when they occurred, and whether they occurred regularly during the past year (past month and other 11 months). Interview questions include health, family, stressful life events, legal status, sexual behavior, alcohol and other drug use, mental health functioning, peer relationships, education, and use of free time. In addition to collecting information on risk factors and maladaptive behaviors, the CASI also includes questions designed to assess the strengths of the youth. Providers can use an approved IDPH assessment tool for clients ages 18 to 25.

Recovery Support Services (RSS) are a way to enhance treatment delivery and are available to adolescents, TAY, and their families. Services available during year two include:

- Behavioral Health Assessment/Consultation to help clients and family members cope with immediate stressors, identify and utilize available resources and strengths, and return the client/family to their usual functioning level
- Celebrating/Strengthening Families
- Child Care
- Crisis Respite
- Drug Testing
- Drug Testing Incentive Gift Card based on the number of consecutive negative drug test screens
- Education/Vocational Training
- Electronic Recovery Support Messaging messaging in the form of text messages
- In-Home Services designed to assist clients in their recovery by having a therapist come into their home to provide support
- Life Skills Coaching to help clients make informed decisions, communicate effectively, and develop self-management skills to assist in their recovery
- Pharmacological Interventions
- Sober Living Activities e.g. organized community recovery events, fitness memberships, recreational activities and educational supports
- Supplemental Needs gas cards
- Supplemental Needs clothing
- Transportation bus cards

DATA COLLECTION PROCESS

Evaluators obtained data from several sources for this report:

- Government Performance and Results Act (GPRA) instrument at admission, discharge, and six-months post-admission (follow-up);
- Treatment admission data from IDPH's Central Data Repository (CDR);
- Intake forms, Discharge forms, Staff Certification tracking forms, Recovery Support Service Tracking forms, and Global Outcome Measure forms from treatment providers to the Consortium:
- Meeting notes and agendas;
- Key informant interviews with provider staff;
- Site visit reports;
- MDFT web-based clinical management system.

Client level data across the GPRA, CDR, and forms provided to the Consortium are linked by a unique client number. Grant admissions began on October 22, 2015. Data presented here are admissions through August 31, 2017. Client level data are from the GPRA and intake and discharge forms received, with 268 interviews conducted at admission, 93 at follow-up, and 210 at discharge. Within these discharge records, 91 have missing interview dates as well as missing GPRA responses. These 91 records are presumed to be administrative discharges; consequently, the sample size is reduced for all GPRA related variables. Missing responses in the GPRA or other questions further cause reduced sample sizes.

EVALUATION OUTCOME QUESTIONS

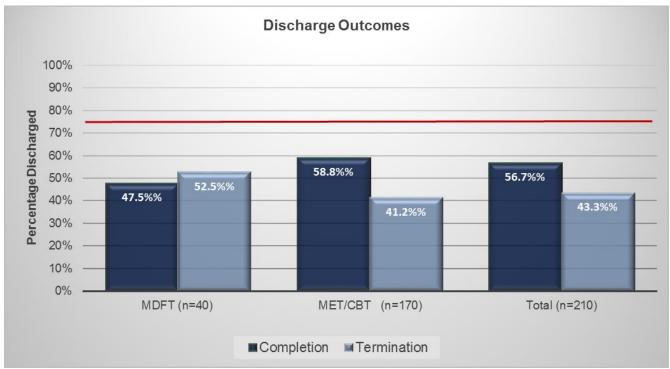
What are the effects of the intervention on key outcome goals for Adolescents and Transitional Aged Youth (TAY)

Treatment Completion

Goal: Participants will maintain program completion rates of a minimum of 75%.

Overall, the program did not meet the 75% completion rate. The program completion rate was 56.7% as shown in Figure 1 and Table 1.

Figure 1: Discharge Outcomes



Two providers use MDFT and MET/CBT and two providers use only MET/CBT.

Table 1: Discharge Status by Program Provider

Discharge Status	All Sites	Heartland Family Services	Prairie Ridge	Prelude Behavioral Services	Youth & Shelter Services
Completion/Graduation	119	19	40	48	12
Termination	91	18	20	38	15
Total Discharges	210	37	60	86	27
Success Rate	56.7%	51.4%	66.7%	55.8%	44.4%

YSS and HFS use both MDFT and MET/CBT, Prairie and HFS use MET/CBT.

Treatment Outcomes

Goal: A minimum of 80% of adolescents and TAY who complete family treatment will report improved outcomes in a minimum of four of six post-discharge GRPA measures: **(1)** Increased rates of abstinence; **(2)** Increased enrollment in education; **(3)** Increased vocational training, and/or employment; **(4)** Increased social connectedness; **(5)** Decreased criminal and juvenile justice involvement; **(6)** Increased health.

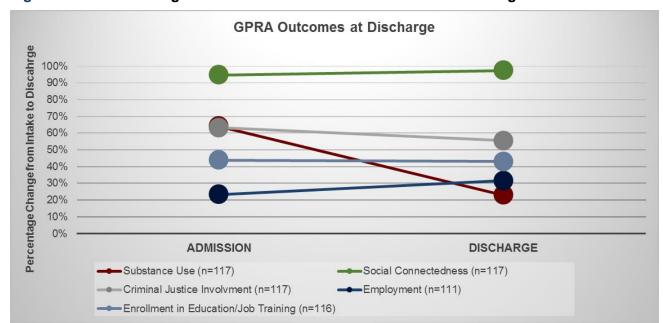


Figure 2: Percent Change in GPRA Measures at Admission and Discharge

Health is not included in this figure; see separate analysis on page 11.

Table 2: Percent Change and Rate of Change by Discharge GPRA Measure

GPRA Measures	Percentage Point Change	Rate of Change
Substance Use	-41.0	-64.0%
Social Connectedness	2.6	2.7%
Criminal Justice Involvement	-7.7	-12.2%
Employment	8.1	34.6%
Enrollment in Education/Job Training	-0.9	-1.9%

Adolescents and TAY are asked questions about the past 30 days that relate to the six GPRA measures. Clients did not meet the 80% improved goal in four of six categories; however, many did maintain or improve in all six categories.

Substance use decreased by 41.0 percentage points and is statistically significant³. In addition, 77.0% of clients were abstinent at discharge.

Ninety-five percent of adolescents and TAY reported social connectedness at admission and 97.4% reported social connectedness at discharge, a 2.6 percentage point increase. Clients report social connectedness if they have attended voluntary self-help groups for recovery or attended meetings with recovery organizations, or interacted with family or friends who support their recovery in the past 30 days.

Criminal justice involvement decreased by 7.7 percentage points; involvement includes an arrest, jail time, if they are awaiting charges, trial, or sentencing, or if they are on parole or probation in the 30 days before the interview.

Employment increased by 8.1 percentage points from admission to discharge, a statistically significant increase.⁴ Twenty-six clients were employed at admission and 35 were employed at discharge; 11 clients who were initially unemployed were employed at discharge and another 24 maintained employment.

One hundred percent of adolescents and TAY enrolled in school or a job-training program at admission, were also enrolled at discharge, therefore no change in this category should be expected.

Table 3: Overall Health at Discharge

Overall He Admission (Overall at Discharge (n=113)				
Health	Number	Excellent	Very Good	Good	Fair	Poor
Excellent	9	77.79	22.2%	0.0%	0.0%	0.0%
Very Good	25	16.0%	44.0%	40.0%	0.0%	0.0%
Good	52	9.6%	42.3%	38.5%	7.7%	1.9%
Fair	24	0.0%	25.0%	50.0%	25.0%	0.0%
Poor	3	33.3%	33.3%	0.0%	0.0%	33.3%

Among clients, 45.1% indicated improved health at discharge compared to intake and this is a significant increase.⁵ The table above shows the health change for each category from admission to discharge. The "number" column is equal to the total clients at admission in each category. Green cells are clients who reported improved health from admission to discharge, grey cells are clients who reported no change, and red cells are clients who reported a decline in health.

³ McNemar's, Exact p < 0.001

⁴ Mcnemar's, Exact p < 0.022

⁵ Wilcoxon sign-rank z = 4.32, p < 0.001

Table 4: Substance Used from Admission to Discharge

Alcohol and Drugs	Admission % (n)	Total # of respondents	Discharge % (n)	Total # of respondents
Binge Drinking (Five or More Drinks in One Sitting)	47.1 (48)	102	33.3 (4)	12
Used Alcohol or Drugs on Same Day	75.3 (61)	81	100.0 (4)	4
Injection Drug Use	% (n)	Total # of respondents	% (n)	Total # of respondents
Injected Drugs in Past 30 Days	10.1 (27)	268	4.3 (5)	117
Susbtance Use	% (n)	Total # of respondents	% (n)	Total # of respondents
Marijuana/Hashish	49.8 (133)	267	13.0 (15)	115
Alcohol	39.1 (104)	266	10.4 (12)	115
Methamphetamine	21.6 (58)	268	5.3 (6)	114
Heroin	7.1 (19)	267	4.4 (5)	114
Other Opiates	13.4 (36)	268	.08 (1)	114
Benzodiazepine	11.6 (31)	267	0.0	114
Cocaine	5.97 (16)	268	0.0	115
Hallucinogens	4.8 (13)	268	0.0	114
Inhalents	0.7 (2)	268	0.0	114
Other illegal drugs	2.8 (7)	268	0.0	114

Family Functioning

Goal: Six-month post-discharge 75% of participating adolescents, TAY's, and their family members will report improved functioning in personally relevant areas including: general improvement, improvement in family interactions, mental health, peer relations, and reduction in substance use.

Approximately six months following grant admission, treatment providers administer the Client Global Outcomes Measures (GOM) to SYT-I clients. Providers also administer a Family GOM to family members participating in MDFT. The questions on the survey ask about changes in the client related to general behavior, family interactions, substance use, mental health, and peer relations to determine if there is improvement. Questions about the convenience of attending treatment sessions, satisfaction, and consideration of cultural needs are also included.

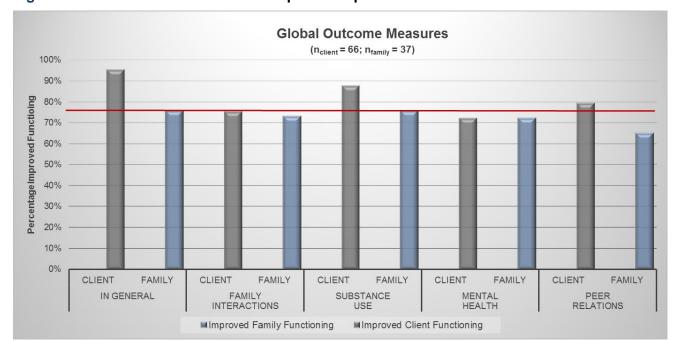


Figure 3: Global Outcome Measures Reported Improvement

Adolescents and TAY reported at least 75% improved functioning in four of five categories and families reported at least 75% improved functioning in two of five categories. The lowest category reporting improved functioning was "Mental Health" for adolescents (72.3%) and "Peer Relations" for family members (64.9%). The highest category reporting improved functioning was "In General" for clients (95.4%), and "In General" and "Substance Use" for families (75.7%).

It is important to note that Global Outcome Measures were completed at six-months post discharge for the first year and a half of the grant and at six-months post admission starting in April 2017. Providers requested the change in follow-up period as they felt they could complete an interview more easily if it was done at the same time as the GPRA follow-up interview.

What program/contextual/cultural/linguistic factors associated with outcomes?

Agency Level Factors

Agency level factors are any efforts that agencies can control to improve success; defined as completion of the treatment program. The significant finding of an agency level factor associated with outcomes was Recovery Support Services. For all agencies combined, simply receiving RSS is associated with success and is significant⁶ and the total dollars spent on RSS is associated with success and is significant.⁷ Upon a disaggregation of RSS and the relationship between the most frequently used services, receipt of service, and dollars spent on these

⁶ Pearson $\gamma^2 = 10.31$, df = 1, p < 0.001

 $^{^{7}}$ Mann-Whitney z = -4.304, p < 0.001

services, it was found that there were significant associations between just receiving RSS as well as the amount spent per client and success. Dollars spent per client and success were significant for the following: Sober Living Activities⁸, Supplemental Needs – Gas Cards⁹, Supplemental Needs – Clothing¹⁰, and Drug Testing Incentive Card.¹¹

Other agency level factors were considered but no association with success was found, these include length of stay, treatment type, provider, and staff makeup of male and minority clinicians. Clinician linguistics were not considered because there are no clinicians currently participating in the grant who are bi-lingual.

What individual factors are associated with outcomes, including race/ethnicity/sexual identity?

Individual Level Factors

The significant individual level factors associated with a success; defined as completion of the treatment program, are education, housing, and employment. Stable housing at both follow-up¹² and discharge¹³ is associated with success. The evaluators considered stable housing to be owning/renting an apartment, room, or house, or staying at someone else's apartment, room, or house. Being employed at follow-up¹⁴ and discharge associated with success.¹⁵ Adolescents and TAY enrolled in school or a training program full-time or part-time at discharge is associated with success.¹⁶ Race, ethnicity, and sexual identity were not associated with success.

⁸ Mann-Whitney z = -5.32, p < 0.001

⁹ Mann-Whitney z = -3.56, p < 0.001

 $^{^{10}}$ Mann-Whitney z = -3.31, p < 0.009

¹¹ Mann-Whitney z = -2.94, p < 0.003

 $^{^{12}}$ Wilcoxon z = 9.23, P < 0.001

 $^{^{13}}$ Wilcoxon z = 10.52, p < 0.001

¹⁴ Pearson χ^2 = 6.27, df = 1, p < 0.012

¹⁵ Pearson χ^2 = 4.44, df = 1, p < 0.035

¹⁶ Pearson χ^2 = 8.40, df = 4, p < 0.038

How durable were the effects and was the intervention effective in maintaining the project outcome at 6-month follow-up?

Global Outcome Measures

Six-month post intake clients and family members were asked to rate their total improvement in five areas (ranging from improved – no change – worse) due entirely to the treatment program. The questions are as follows:

- In general, would you say you are... (In General)
- Would you say your family interactions are... (Family Interactions)
- Would you say your substance use is... (Substance Use)
- Would you say your mental health is... (Mental Health)
- Would you say your peer relations are... (Peer Relations)

Client Global Outcome Measures (n = 66)63 58 51 48 13 IN GENERAL SUBSTANCE PEER FAMILY **MENTAL** INTERACTIONS USE HEALTH RELATIONS ■Worse ■Stayed the Same ■Improved

Figure 4: All Global Outcome Measure Responses

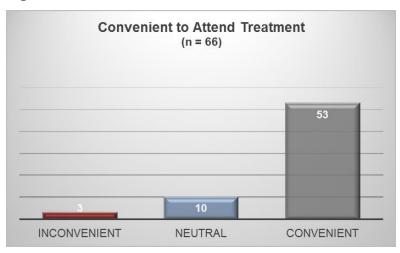
Two people did not respond to the question about peer relations (n=64).

Overall, at least 72.3% or more clients reported improvement in each measure. The highest category indicating improvement was "In General" with 95.5% of clients reporting that they had improved. One-quarter of clients indicated that their mental health stayed the same. A small percentage of clients indicated that they had worsened in all categories except peer relations.

Clients are also asked three additional questions:

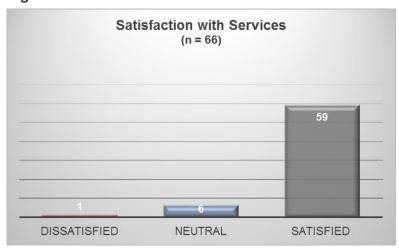
- Were provider staff considerate of your cultural needs?
- Are you satisfied with the services you received?
- How convenient was it to attend treatment?

Figure 5: Global Outcome Measures - Convenient to Attend Treatment



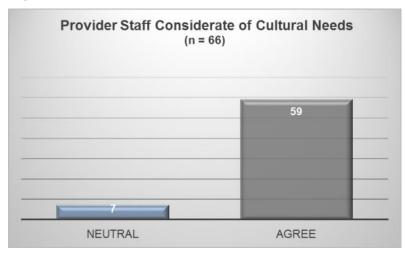
80.3% of clients reported that it was convenient for them to attend treatment.

Figure 6: Global Outcome Measures - Satisfaction with Services



Nearly 90% of clients reported they were satisfied with the services they received.

Figure 7: Global Outcome Measures – Considerate of Cultural Needs



Nearly 90% of clients reported that treatment providers were considerate of their cultural needs.

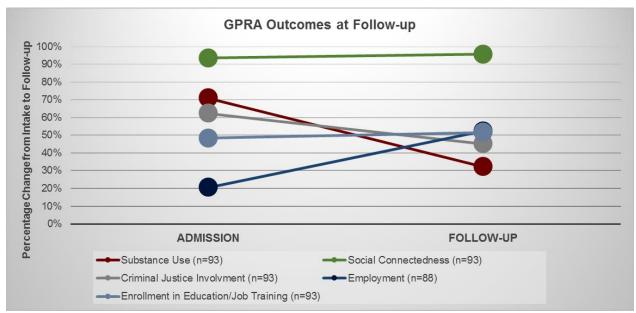


Figure 8: Percent Change in GPRA Measures at Admission and Follow-up

Health is not included in this figure; see separate analysis on the following page.

Table 5: Percent Change and Rate of Change by Discharge GPRA Measure

GPRA Measures	Percentage Point Change	Rate of Change
Substance Use	-38.7	-54.5%
Social Connectedness	2.2	2.3%
Criminal Justice Involvement	-17.2	-27.6%
Employment	31.8	155.6%
Enrollment in Education/Job Training	3.2	6.7%

Substance use at follow-up was not associated with successful completion¹⁷, however, substance use from admission to follow-up significantly decreased by 38.7 percentage points.¹⁸ In addition, 67.7% were abstinent at follow-up.

Adolescents and TAY enrolled in school or a job-training program at admission remained enrolled at follow-up. Employment increased by 31.8 percentage points and is statistically significant.¹⁹ Ninety-three percent of clients reported social connectedness at admission and 95.7% reported social connectedness at follow-up. Criminal justice involvement decreased by 17.2 percentage points and is statistically significant.²⁰

¹⁷ Pearson χ^2 = .0252, df = 4, p < 0.874

¹⁸ Mcnemar's, Exact p < 0.001

¹⁹ Mcnemar's, Exact p < 0.001

²⁰ Mcnemar's, Exact p < 0.009

Table 6: Overall Health at Follow-up

Overall Health at Admission (n=90)		Overall Health at Follow-up (n=90)				
Health	Number	Excellent	Very Good	Good	Fair	Poor
Excellent	8	62.5%	37.5%	0.0%	0.0%	0.0%
Very Good	16	25.0%	37.5%	31.3%	0.0%	6.3%
Good	46	15.2%	23.9%	43.5%	17.4%	0.0%
Fair	18	0.0%	22.2%	72.2%	5.6%	0.0%
Poor	2	0.0%	0.0%	100.0%	0.0%	0.0%

Among all clients, 45.6% indicated improved health at follow-up compared to intake, which is a significant increase.²¹ The table above shows the health change for each category from admission to follow-up. The "number" column is equal to the total clients at admission in each category. Green cells are clients who reported improved health from admission to follow-up, grey cells are clients who reported no change, and red cells are clients who reported a decline in health.

Adolescents and TAY were also asked about their mental health during the past 30 days at both admission and follow-up, analysis shows that a decrease at follow-up in anxiety, depression, and how much mental health issues bothered them are statistically significant. Clients reported that their anxiety had decreased from a median of seven days at admission to zero days at follow-up.²² Depression decreased from a median of four days at admission to zero days at follow-up.²³ The number of day's clients were bothered by mental health issues decreased from four days at admission to two days at follow-up.²⁴

 $^{^{21}}$ Wilcoxon z = 3.43, p < 0.001

 $^{^{22}}$ Wilcoxon z = 3.25, p < 0.001

 $^{^{23}}$ Wilcoxon z = 3.79, p < 0.001

 $^{^{24}}$ Wilcoxon z = 3.35, p < 0.001

How has the array of publically supported treatment and recovery services and supports for the population of focus expanded over the program?

RSS Used

Table 7: Recovery Support Services Used

Recovery Suport Services	Units Received	Dollars Spent on RSS	Number Clients Served
Behavioral Health Assessment	26	780	8
Celebrating/Strengthening Families	1	50	1
Chid Care	0	0	0
Crisis Respite	1	1	1
Drug Testing	54	1,728	16
Drug Testing Incentive Card	78	780	21
Education/Vocational Training	517	517	6
Electronic Recovery Support Messaging	425	425	9
In-Home Services	9	540	2
LifeSkills Coaching	119	2,380	18
Pharmacological Interventions	0	0	0
Sober Living Activities	6,703	6,703	43
Supplemental Needs - Clothing	2,420	2,430	23
Supplemental Needs - Gas Cards	3,428	3,428	83
Transportation - Bus	809	809	17
Total	14,590	20,571	*113

Total number of clients served per RSS does not equal the total number of clients receiving RSS because clients can use more than one service.

The total amount spent on RSS for both year one and year two was reported as \$20,571, with 113 adolescents and TAY using services. The most widely used services were Sober Living Activities, Supplemental Needs – Clothing and Gas Cards, Life Skills Coaching, and Drug Testing and Drug Testing Incentive Card. Supplemental Needs – Clothing was added in the second year of the grant.

Table 8: Year One Recovery Support Service Dollars by Provider

Recovery Support Services	YSS	Prairie Ridge	HFS	Prelude
Behavioral Health Assessment	570	0	210	0
Celebrating/Strengthening Families	0	0	0	0
Child Care	0	0	0	0
Crisis Respite	1	0	0	0
Drug Testing	0	640	832	0
Drug Testing Incentive Card	110	100	160	0
Education/Vocational Training	75	0	0	0
Electronic Recovery Support Messaging	242	0	0	0
In-Home Services	540	0	0	0
Life Skills Coaching	1,120	0	420	0
Pharmacological Interventions	0	0	0	0
Sober Living Activities	377	3,178	0	0
Supplemental Needs - Clothing	0	0	0	0
Supplemental Needs - Gas Cards	4	1,273	106	0
Transportation - Bus	0	270	1	0
Total	3,039	5,461	1,729	0

Table 9: Year Two Recovery Support Service Dollars by Provider

Recovery Support Services	YSS	Prairie Ridge	HFS	Prelude
Behavioral Health Assessment	0	0	0	0
Celebrating/Strengthening Families	0	0	50	0
Child Care	0	0	0	0
Crisis Respite	1	0	0	0
Drug Testing	0	0	128	128
Drug Testing Incentive Card	10	300	20	80
Education/Vocational Training	359	83	0	0
Electronic Recovery Support Messaging	183	0	0	0
In-Home Services	0	0	0	0
Life Skills Coaching	840	0	0	0
Pharmacological Interventions	0	0	0	0
Sober Living Activities	106	3,014	1	27
Supplemental Needs - Clothing	204	2,033	1	192
Supplemental Needs - Gas Cards	16	1,975	4	50
Transportation - Bus	32	314	0	192
Total	1,751	7,719	204	669

In terms of dollars spent, Prairie Ridge spent more on RSS in both the first year and the second year of the grant.

Grant Level RSS Changes

Three new RSS were added, Supplemental Needs – Clothing, Supplemental Needs – Utility Assistance/Cellular Service Assistance, and Supplemental Needs – Wellness. Utility Assistance and Wellness had not been given the final approval in year two; therefore, providers were required to submit exception requests to obtain approval to utilize these RSS and instructed to categorize the RSS under Sober Living Activities. Providers have been brainstorming additional Sober Living Activities in an effort to create more options for clients.

Grant level changes occurring at each agency were asked about during key informant interviews with clinicians and directors. One provider hired an additional staff member to serve as a care coordinator, which improved their ability to give family access to RSS; case management aspects that clinicians do not have time to focus on. The care coordinator is able to reach out to adolescents and their families to complete needs assessments, they are able to find out what their barriers are and what could improve treatment and provide those supports so that clinicians can focus on therapy goals. Another provider started giving clients the opportunity to choose eligible RSS from a list they created, they hoped this would spark more ideas from clients and keep them thinking about their needs throughout treatment.

Another provider is working on putting together lists of RSS (that have been approved) so they can keep adding to this and give it to new clinicians. In year two, IDPH created a list of acceptable and unacceptable RSS and noted RSS that would require an exception request. One provider indicated that as an agency, they are meeting more regularly to discuss which RSS are being used and which are not to ease confusion. This provider discussed more aggressively pursuing certain services or making a pitch for it.

The use of RSS is discussed regularly on monthly provider calls; the SYT-I Project Director asks the type of services clients have accessed, if any new services have been used and barriers and solutions. There is an open discussion about what clients have said they wanted and needed.

To what degree has there been an increase in the number of clinicians trained/certified in evidence-based practices?

Staff Certifications: Year One and Year Two

Goal: 54 MDFT clinicians, 10 MDFT trainers, 30 MET/CBT clinicians, 10 MET/CBT trainers, 90 CASI clinicians by the end of Year Three.

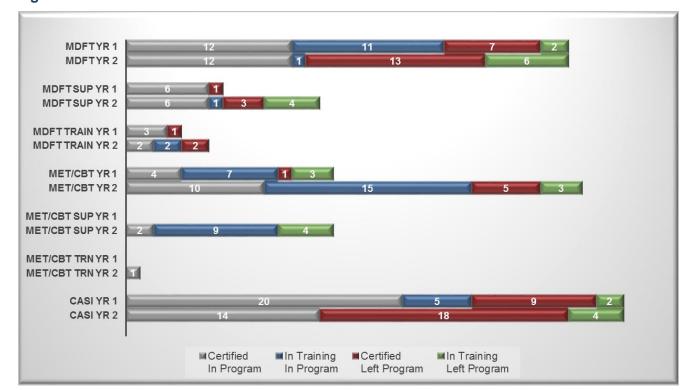


Figure 9: Staff Certifications Year One and Year Two

Overall, MDFT clinician certifications have maintained or decreased from year one to year two. The goal of 54 trained clinicians by Year Three may be difficult to attain given the shift in focus from MDFT to MET/CBT, the lengthy certification process, and staff turnover. MDFT Supervisor certifications have stayed the same from year one to year two, and MDFT Trainers have decreased by one, however, there are two currently in training.

MET/CBT trained clinicians have increased by six from year one to year two. There were no MET/CBT supervisors or trainers in year one as clinicians spent the first year of the grant getting their MET/CBT certifications, but there are two supervisors in year two. There is currently one MET/CBT Trainer and she has recently conducted two trainings.

During both years, 20 certified MDFT clinicians, 27 CASI clinicians, and six MET/CBT clinicians left the program. This includes clinicians who were trained in MDFT and CASI during the previous SAT-ED grant.

How has the grantee/provider partnership identified barriers/solutions to widen the use of effective evidence-based practices in the population of focus?

Provider Level Barriers/Solutions

Provider level barriers and solutions were asked about during key informant interviews with clinicians and directors. Clinicians reported that staff turnover or internal transitions have been one of the biggest barriers that providers deal with on a regular basis. In general, they believe

that expansion of the EBP's is constrained by the cost to train and the cost to maintain training and fidelity to the models. The solution that was identified was to continue training as many staff as possible each time a training is offered.

Another barrier identified was clear communication about expectations of the grant and the reality of what can actually be accomplished. Providers mentioned that not all staff were fully versed and knowledgeable about the expectations and there was information that was missed in terms of reporting and getting information entered correctly. According to providers, there are a lot of expectations and requirements from IDPH, SAMHSA, NREPP, and the Consortium. Providers feel as though what they are doing is making a difference, but that not meeting required goals takes away from the positive things they are doing. The most common solution discussed was making sure that everyone understands expectations from the beginning. This includes expectations from IDPH, SAMHSA, EBP, and the Consortium. Possibly having more in depth meetings at the beginning of grants to make sure everything is clear, from simple data entry to complex contractual requirements. Another solution was making sure staff who have been involved with the grant from the beginning train new staff adequately and streamlining of paperwork.

Another barrier that was identified was decreased referrals for MDFT and the ability for providers to pull down funds. Juvenile Court was the primary referral for MDFT, however, they have shifted their practices and have implemented a model that bases referrals on risk level. They have found that combining low risk adolescents with high-risk adolescents does more harm than good. Therefore, not all risk levels are being referred.

Some providers feel as though the contract itself is a barrier and feel as though MDFT is set up to fail and MET/CBT is set up to succeed. Using a case rate model, providers can draw down funding at admission, continued service involvement, and at completion of the GPRA Follow-up Interview. While the MDFT case rate provided by SYT-I grant funds is higher than the MET/CBT case rate, treatment providers utilizing MDFT felt the case rate was not adequate to support the costs associated with implementation. They believe that because the rate is too low, the costs to implement MDFT are not fully supported through grant funding. Providers also felt that they can easily exceed the intake numbers and not come close to receiving the full amount of the case rate due to the minimum session requirements to receive the continued service distribution included in the provider contracts. To receive the continued service distribution portion of the case rate, 12 minimum sessions must be completed for MDFT and four minimum sessions must be completed for MET/CBT. SAMHSA requires grants to follow NREPP guidelines, thus the minimum session requirements align with these guidelines and the fidelity of the models. However, clinicians indicate that MDFT clients can be successfully discharged in as little as eight sessions if they believe the client demonstrates readiness to discharge. Providers feel as though it is not good clinical work to continue to 12 sessions if it is not necessary, but struggle with not receiving the full case rate when they do not provide the required minimum sessions. Near the end of year two, the MDFT case rate was adjusted to support the costs associated with the model.

One provider thought that it was difficult to follow the MET/CBT model to fidelity when it is implemented into a residential setting. They believe flexibility in session sequence would be helpful in continuing to use this EBP. They felt it was challenging to complete the correct

number of sessions and in the correct sequence (individual versus group) because there is a short amount of time to incorporate that into the rest of residential treatment.

In year two, the sustainability of MDFT was questioned due to the high cost associated with the model. One provider thought that widening the use of effective EBP's was difficult when there was the possibility of eliminating MDFT. This would eliminate the number of adolescents they would serve so they have focused on shifting to MET/CBT and implementing an effective marketing plan to generate referrals for that. This provider also discussed the possibility of integrating peer support or recovery coaching into Iowa services.

Sustainability of these models is one of the biggest barriers mentioned by providers. Providers are working on sustainability plans and focusing on different ways to implement these EBP's once the grant funding is gone. One provider hopes to use MDFT as a transition for adolescents leaving residential and going home. Another provider is training outpatient staff in MET/CBT in addition to continuing to train their residential staff. Providers are also training MET/CBT supervisors and trainers to ensure a strong infrastructure is in place when funding ends. One provider has identified the value of meeting with local community agencies that have the potential to refer clients and engage them in conversation about available services. Another provider would like to explore the possibility of implementing MET/CBT for clients with second offense Operating While Intoxicated.

How closely did implementation match the plan?

The evaluation provides information on whether or not the program is implemented as intended. This includes examination of planned project activities and time frames compared to the actual activities implemented during the report period.

For the most part, the SYT-I project is on track with incorporating the planned project activities within the planned timeframes. As to be expected during the implementation of a large project involving coordination of many staff members and processes, there are challenges and barriers encountered which may lead to changes in the original plan. These changes are highlighted in the next section.

What types of changes were made to the originally proposed plan?

Changes during year one and year two include:

- Expanding MET/CBT services into residential facilities at both Prairie Ridge and Prelude.
 YSS is piloting MDFT in residential and has completed two MDFT cases. YSS has
 requested that SYT-I expand MDFT services to residential clients, which was still being
 reviewed at the end of year two.
- Prelude expanded MET/CBT to outpatients in their Des Moines location where two clinicians there are trained in MET/CBT.

- Global Outcome Measures are now done at follow-up instead of six months afterdischarge. Providers felt they would be more successful completing the interview if they did it at the same time as the follow-up interview.
- Three new RSS were added, Supplemental Needs Clothing, Supplemental Needs Utility Assistance/Cellular Service Assistance, and Supplemental Needs – Wellness.
- MET/CBT has been expanded into group home settings to increase efficiency and build support among clients participating in group therapy sessions.
- Prairie Ridge increased their follow-up gift card incentive from thirty dollars to fifty dollars in an effort to increase completion of follow-ups.
- The MDFT Case Rate was adjusted, taking into consideration the high costs associated with the model.

What types of changes were made to address Disparities in access, service use, and outcomes across subpopulations to the program, including the use of National CLAS standards?

During key informant interviews, all providers indicated that they follow National CLAS standards or base their cultural competency policy around them. Providers discussed the fact that they are CARF (Commission on Accreditation of Rehabilitation Facilities) accredited and as a requirement of CARF they have to implement CLAS standards into their own policies and procedures.

In year two providers are continuing to train their outreach offices in MET/CBT or MDFT in an effort to cover more contract area, reach more rural clients, and make it easier for clients and their families to receive treatment. One provider discussed the fact that they have trained many of their staff in the CASI, including those in outreach offices as well as an MDFT supervisor and trainer who can provide those services in rural counties. Another provider has an MDFT supervisor in one of their rural offices who spends time on outreach and holding community-based meetings. Once more clinicians are trained in MET/CBT, they will put those staff in the rural offices as well. As it relates to minorities, one provider discussed how they try to conduct outreach at hospitals or juvenile justice to reach minority clients. For YSS, many of their referrals came from juvenile court so they have focused a lot of their outreach there, however, the new changes to juvenile referrals has reduced clients from this population.

One agency discussed that by expanding grant services to residential clients, they are able to serve more clients from across the state from rural areas. They believe if they were just doing outpatient, there would not be many clients from the rural population because it would be too difficult to attend treatment. Another agency indicated that being able to work in client's homes helps them adapt to their culture, the client feels more comfortable, and they are more likely to continue with treatment.

Providers continue to work towards becoming more culturally competent; one agency has a diversity officer dedicated to competency issues, they have forms translated into Spanish and an interpreter, and they are recruiting and maintaining a diverse workforce. Another provider has a cultural plan in place to look at sensitivity to religion and race and they have completed trainings on topics such as cultural humanity and stigma. One provider is addressing cultural

competency by providing training in Safe Zone, Culture of Poverty, topics related to disability, and Islamic diversity. They also have an LGBT subcommittee, they bring the service to the client in their home when possible to address any cultural barriers, and they have bi-lingual staff.

What effect did the changes have on the planned intervention (EBP) and performance assessment?

Admission of minority clients has increased from year one to year two but it is unclear to what extent outreach and efforts to increase cultural competency have had. In year one of the grant there were a total of 13 clients reporting themselves as a minority and at the end of year two there were a total of 57 (including year one). However, during key informant interviews clinicians did not seem to think any additional outreach to racial and ethnic minorities made a lot of difference given the overall demographic of lowa.

Admission of rural clients from year one to year two increased from nine clients in year one of the grant to 42 clients during the second year of the grant (including year one).

Expanding MET/CBT services into residential facilities has increased intakes for both Prelude and Prairie Ridge. In addition, expanding MET/CBT to Prelude in Des Moines has allowed clinicians there to use this EBP with outpatient clients.

Providers feel as though completing the Global Outcome Measures at follow-up instead of six months after discharge has either increased completion or made no difference.

Supplemental Needs – Clothing has been used frequently during year two and is also associated with successful completion of the program and clients have also indicated that they appreciate this RSS.

Increasing the gift card incentive to fifty dollars did not significantly increase the follow-up rate at Prairie Ridge.

Who provided (program staff) what services (modality, type, intensity, duration) to whom (individual characteristics) in what context (system, community) and at what cost (facilities, personnel dollars)?

Agency Information

Table 10: Total Intakes by Provider

Number of Intakes	All Sites (n=268)	Heartland % (n=52)	Prairie Ridge % (n=80)	Prelude % (n=99)	YSS % (n=37)
MDFT	19.4 (52)	63.5 (33)	0 (0.0)	0.0 (0)	51.3 (19)
MET/CBT	80.6 (216)	36.5 (19)	100.0 (80)	100.0 (99)	48.7 (18)
Total Discharges	100.0 (210)	17.6 (37)	28.6 (60)	41.0 (86)	27 (12.9)

The initial intake goal was 240 intakes by year three, which was exceeded in year two. The modified goal is now 360 by year three.

Table 11: Number of Clinicians Serving Clients

Provider	# of Clinicians	# of clients discharged	Median # of clients	Min # of Clients	Max # of Clients
HFS	13	37	2	1	10
Prairie Ridge	10	60	4.5	1	22
Prelude	6	86	13.5	2	49
YSS	16	27	1	1	11

During year one and year two there were 13 clinicians from HFS seeing 37 clients, 10 clinicians from Prairie Ridge seeing 60 clients, six clinicians from Prelude seeing 86 clients, and 16 clinicians from YSS seeing 27 clients.

Table 12: Provider Sessions

Provider	EBP	# of Clients Discharged	Success Rate of EBP %(n)	Median # Sessions per Client	Min # Sessions per Client	Max # Sessions per Client
HFS	MDFT	25	48.0% (12)	9	0	23
	MET/CBT	12	58.3% (7)	4.5	0	12
Prairie	MDFT	0	0.0% (0)	0	0	0
	MET/CBT	60	66.7% (40)	5	0	21
Prelude	MDFT	0	0.0% (0)	0	0	0
	MET/CBT	86	55.8% (48)	4	0	5
YSS	MDFT	15	46.7% (7)	8.5	1	43
	MET/CBT	12	41.7% (5)	5	0	14

The number of MET/CBT sessions completed is associated with success²⁵; clients cannot be successfully discharged unless they complete a minimum of four MET/CBT sessions. However, the number of MDFT sessions completed is not associated with success as there is a larger range of sessions completed for successful clients. In addition, intensity and duration of treatment depends on the EBP. MDFT is more intense and typically longer in duration than MET/CBT. The median length of stay for MDFT clients is 152.5 days while the median length of stay for MET/CBT clients is 22 days. On average, the median number of sessions was higher for MDFT than for MET/CBT.

Table 13: Residential Treatment by Provider

Provider	Residential	Non Residential	
HFS	0	52	
Prairie	30	50	
Prelude	95	4	
YSS	0	37	

At this time, Prairie Ridge and Prelude are the only providers to use MET/CBT in residential treatment.

Table 14: Clinician Demographics

All Clinician Demographics	(n=59)		
Gender			
Men	11	18.6%	
Women	46	78.0%	
Missing Data	2	3.4%	
Race			
Caucasian	50	84.7%	
African American	6	10.2%	
American Indian	1	2%	
Missing Data	2	3.4%	
Ethnicity			
Hispanic/Latino	2	3.4%	
Non-Hispanic/Latino	43	72.9%	
Missing Data	14	23.7%	

Clinician demographics include all clinicians who have participated in the SYT-I grant.

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²⁵ Mann-Whitney z = 9.84, p < 0.001

Client Information

Table 15: Client Demographics

Client Demographics		All Sites	Client Demographics		All Sites
		(n=268)%			(n=268)%
Sex	Male	179 (66.8)		Hispanic/Latino	21 (7.8)
	Female	89 (33.2)	Ethnicity	Not Hispanic/Latino	247 (92.2)
	Other/Transgender	0 (0.0)		Missing Data/Refused	0 (0.0)
	Missing Data/Refused	0 (0.0)	Adolescent Age (12-17)	Median	16
	White	232 (86.6)	(n=73)	Minimum	13
	African American	21 (7.8)		Maximum	17
	American Indian	3 (1.1)	TAY Age (18-24)	Median	21
Race	Hawaiian/Pacific Islander	1 (0.4)	(n=195)	Maximum	18
	Alaska Native	1 (0.4)		Minimum	25
	Asian	1 (0.4)		Urban	226 (84.3)
	Multi-Racial	9 (3.4)	Rural ²⁶		
				Rural	42 (15.7)

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 $^{^{26}}$ As defined by the Office of Management and Budget, February 2013 delineations.

What strategies were used to maintain fidelity to the evidence-based practice or intervention across providers over time?

During key informant interviews, clinicians were asked what strategies they used to maintain fidelity. MET/CBT fidelity can be more difficult than MDFT to maintain because there is no monitoring portal like there is with MDFT. In an effort to maintain MET/CBT fidelity, one provider consults with two MET/CBT supervisors on site. These supervisors set clear fidelity expectations from the beginning and are able to help clinicians in the process of certification assist with prep work for each session. Supervisors are able to talk with the clinicians in depth about what went well and what did not in each session. The supervisors are able to supervise group sessions and help clinicians improve engagement and skill transfer. In addition, the supervisors do continuous DVD review and help co-facilitate groups. Another agency is in the process of training a supervisor to increase fidelity monitoring. Clinicians do have access to the MET/CBT Trainer, Kate Weiner, LISW, at Prairie Ridge, who consults as needed with IDPH and Win Turner, a National MET/CBT Trainer. Near the end of year two, a MET/CBT refresher training was developed and conducted by the MET/CBT trainer, Kate Weiner. The purpose of the MET/CBT refresher training was to help clinicians that were currently certified or were in the process of certification to review and practice the skills of the model.

Clinicians maintain fidelity to MDFT by completing weekly case reviews, DVD supervision, and live supervision. All of this information is entered into a portal that tracks fidelity and produces reports that clinicians use to track progress and make improvements.

All providers try to maintain accurate paperwork in their system and have meetings regularly to reinforce all tasks that need completed to track fidelity and invite discussion among clinicians. In addition, providers also indicated during interviews that having case coordinators helps to maintain fidelity because they are able to focus on therapy sessions without focusing on all other tasks that need to be completed for each client. Lastly, training more clinicians has allowed providers to maintain fidelity because they now have smaller caseloads and more time for sessions, which allows them to focus on adherence to the EBP curriculums.

MDFT Fidelity

The MDFT fidelity reports requested by the evaluator from Cindy Rowe at MDFT International are used to give indicators to agencies of areas of success and areas that need more attention. These reports are dependent on the data that providers enter into the portal by the date specified by MDFT International, thus some data may not be represented here.

These data reflect the period from January 1, 2016 to December 31, 2016 for Heartland Family Services and Youth and Shelter Services. During this period, Heartland served 29 cases and closed 22 of those cases while Youth and Shelter Services served 30 cases and closed 22 of those cases.

Year One Case Duration

Heartland:

Averaging 147-day case duration or 4.9 months per case on average (target 90-180 days).

- Cases closed with eight sessions or more completed was 50% (target is 85%)
- Twenty-seven percent of youth/family dropped out of treatment before the treatment goals were met.

YSS:

- Averaging 160- day case duration or 5.34 months per case on average (target 90-180 days).
- Cases closed with eight sessions or more completed was 86.4% (target 85%)
- Thirty-six percent of youth/family dropped out of treatment before the treatment goals were met.

Year One Session

Heartland:

- Average weekly session dose was 27 minutes (target 1.5 hours). This is 108 minutes per month on average (benchmark 270 minutes per month for outpatient MDFT).
- Therapists averaged 10 minutes of family sessions per week, 41 minutes per month (weekly target 22 minutes for outpatient MDFT).
- Nearly 30% of sessions were video recorded (target 10% or higher)

YSS:

- Average weekly session dose was 64 minutes (target 1.5 hours). This is 255 minutes per month on average (benchmark 270 minutes).
- Therapists averaged 20 minutes of family sessions per week, 79 minutes per month (weekly target 22 minutes for outpatient MDFT).
- Twenty-three percent of sessions were video recorded (target 10% or higher)

MDFT recommends that therapist pay attention to their overall time and family session dose. Family sessions relative to other contacts should be the majority of time spent during the last month of treatment, even if overall time tapers down in stage 3.

Year One Session Locations

Heartland:

• About 98% of sessions were held in the clinic, which reflects the nature of the agency's clinic-based approach (target is 40%/60% ratio of in-clinic/in-home work).

YSS:

 About 67% of sessions are held in the clinic (recommendation is 40%/60% ratio of inclinic/in-home work).

MDFT recommends sessions be delivered both on site and in the home. Sessions held in the office can reduce therapist burnout, increase the opportunity for live sessions, and facilitate productive and efficient sessions. However, in-home work is also recommended by MDFT as it may increase retention rates, overall contact time, and family session time but is considered to be the more intensive version of MDFT with several sessions a week.

Year One Clinical Supervision

Heartland:

- Average monthly case review per therapist was 0.73 (benchmark 3 or more a month or 12 a year).
- Average monthly live supervision per therapist was 0 (benchmark 0.3 or more per month, at least 3 a year).
- DVD review supervision averaged 0.11 per month (benchmark 0.5 or more per month, at least 6 per year).

YSS:

- Average monthly case review per therapist was 2.24 (benchmark 3 or more a month or 12 a year).
- Average monthly live supervision per therapist was 0.3 (benchmark 0.3 or more per month, at least 3-4 a year).
- DVD review supervision averaged 0.2 per month (benchmark 0.5 or more per month, at least 5- 6 per year).

MDFT International notes that year one was a year of heavy training burden for both agencies. Heartland had both new therapists and a new supervisor. In addition, the two therapists who were already certified were supervisors themselves, which could have accounted for lower supervision time.

These data reflect the period from January 1, 2017 to June 30, 2017 for Heartland Family Services and Youth and Shelter Services. Six-month fidelity reports give indicators to agencies of areas that need more attention in order to improve full-year report outcomes. During this period, Heartland served 10 cases and closed eight of those cases while Youth and Shelter Services served eight cases and closed six of those cases.

Year Two (6 Months) Case Duration

Heartland:

- Averaging 129-day case duration or 4.3 months per case on average (target 90-180 days).
- Cases closed with eight sessions or more completed was 37.5% (target is 85%)
- Seventy-five percent of clients/family dropped out of treatment before the treatment goals were met (25% closed successfully).

YSS:

- Averaging 238- day case duration or 7.94 months per case on average (target 90-180 days).
- Cases closed with eight sessions or more completed was 100% (target 85%)
- No youth/family dropped out of treatment before the treatment goals were met.

Year Two (6 Months) Session Dose

Heartland:

- Average weekly session dose was 35 minutes (target 1.5 hours). This is 141 minutes per month on average (benchmark 270 minutes per month for outpatient MDFT).
- Therapists averaged 21 minutes of family sessions per week, 82 minutes per month (weekly target 22 minutes for outpatient MDFT).
- Nearly 15% of sessions were video recorded (target 10% or higher)

YSS:

- Average weekly session dose was 54 minutes (target 1.5 hours). This is 216 minutes per month on average (benchmark 270 minutes).
- Therapists averaged 12 minutes of family sessions per week, 49 minutes per month (weekly target 22 minutes for outpatient MDFT).
- Eleven percent of sessions were video recorded (target 10% or higher)

Year Two (6 Months) Session Locations

Heartland:

 Ninety percent of sessions were held in the clinic, which reflects the nature of the agency's clinic-based approach (target is 40%/60% ratio of in-clinic/in-home work).

YSS:

 About 43% of sessions are held in the clinic (recommendation is 40%/60% ratio of inclinic/in-home work).

Year Two (6 Months) Clinical Supervision

Heartland:

- Average monthly case review per therapist was 1.22 (benchmark 3 or more a month or 12 a year).
- Average monthly live supervision per therapist was 0 (benchmark 0.3 or more per month, at least 3 a year).
- DVD review supervision averaged 0.32 per month (benchmark 0.5 or more per month, at least 6 per year).

YSS:

- Average monthly case review per therapist was 2.43 (benchmark 3 or more a month or 12 a year).
- Average monthly live supervision per therapist was 0.29 (benchmark 0.3 or more per month, at least 3-4 a year).
- DVD review supervision averaged 0.23 per month (benchmark 0.5 or more per month, at least 5- 6 per year).

MDFT Sessions

The number of MDFT sessions that a client must complete to be considered successful can vary based on client progress however, the State of Iowa supports SAMHSA's requirement to provide EBP's in accordance with NREPP guidelines. MDFT delivery consists of 12 to 16 weekly or twice weekly 60 to 90 minute sessions.

The median number of MDFT sessions is nine, the minimum is zero, and the maximum is 43.

MET/CBT Sessions

Therapists practicing MET/CBT do not submit their session information for fidelity assessment like they do for MDFT, however, because of the briefness of this treatment, clients are expected complete at least 80% of the treatment (four sessions) in order to be considered treatment completers. The median number of MET/CBT sessions completed is five, the minimum is zero, and the maximum is 21.

How many individuals were reached through the program?

There are 268 adolescents and TAY that have enrolled in the grant, of those, 195 are TAY (ages 18-25) and 73 are adolescents (ages 13-17). MDFT family participation includes eight parents, 28 mothers with one attending 26 sessions, 13 fathers with one attending 26 sessions, seven siblings, and three grandparents.

Have evidence-based practices been adopted and disseminated statewide?

While MET/CBT and MDFT have not been adopted by other providers in the state as of year two, efforts have been made to disseminate information about these EBP statewide. In March and June 2017 MET/CBT trainings were held and open to SYT-I treatment agencies and outside agencies. Forty-three staff from treatment agencies not involved in the SYT-I, participated in these two MET/CBT trainings.

During the second year of the grant, two clinicians located at Prelude in Des Moines were trained in MET/CBT for outpatient care. In addition, YSS has a clinician providing MET/CBT at the lowa Homeless Youth Center.

In collaboration with IDPH and Criminal and Juvenile Justice Planning, YSS provided MDFT services to youth and families that were being discharged from the State Training School (STS) in Eldora, Iowa. This project, called the Juvenile Re-entry Systems grant occurred from July 2016 to September 2017, serving 5 youth and their family members.

YSS supports the Rethink Recovery Website²⁷to highlight MDFT and bring awareness of the treatment option to adolescents who may need it. The website gives an overview of MDFT, success stories, and locations of service in Iowa. YSS has reported referral sources have mentioned visiting the website to become more educated on the service in order to make a referral. In addition, all providers took part in implementing the My Time to Change website²⁸ to increase MET/CBT awareness. This site includes an overview of the program, personal stories, signs that MET/CBT is for you, and locations of providers. They also used a paid search to target individuals 18-23 actively looking for services related to substance use therapy.

An overview of the SYT-I grant and outcomes were presented at The Youth and Recovery conference in September of 2017. YSS also gave a presentation about MDFT at Ames High School to the Iowa Behavioral Health Association members.

²⁷ http://www.rethinkrecovery.org/

²⁸ http://www.mytimetochange.org/

In what ways is the state moving toward a more coordinated effort to serve the population of focus and their families/primary caregivers? What are the drivers?

The state is moving toward a coordinated effort to serve this population through the activities of the Adolescent Steering Committee. The Committee is fostering connections and creating discussions with treatment providers, human services, juvenile justice, Medicaid, Managed Care Organizations, parents of youth in treatment (lived experience), youth representatives, and child welfare by including them as members, and engaging nonmembers when possible.

The Committee has reviewed the possibility of changing rates with Managed Care Organizations and approving MDFT for reimbursement in order to establish long-term sustainability. The current rates do not necessarily take into consideration the high cost of EBP delivery, for example, the level of training needed to sustain therapists involves more staff time. Providers have expressed that an increased reimbursement rate, particularly for MDFT, is vital to the program continuing once the grant ends. This has been a difficult task given the change in the political landscape. Much of the momentum the state had going from SAT-ED to SYT-I slowed down once Medicaid was privatized.

Committee members are also working on licensure regulations to enhance services for the adolescent population. Currently, the only guidelines that exist in lowa are for inpatient adolescent treatment. The committee is working towards reviewing and potentially, revising guidelines for outpatient treatment. One of the licensure regulations reviewed was the staff qualifications required for staff who work with the adolescent population. One suggestion to address staff qualifications was to complete a number of training hours related to the adolescent population. Iowa clinicians are typically not trained to understand adolescent developmental issues in their coursework; additional training, certifications or endorsements would prepare clinicians for adolescent SUD issues. Committee members, particularly treatment providers, expressed that when establishing licensure standards, to be cautious of how changes may interfere with a growing workforce (certain number of hours specific to adolescent SUD care; this could shrink the workforce rather than growing it). The Committee believes it is the responsibility of the treatment agency to train clinicians in adolescent SUD care and they do not want any barriers that would shrink this workforce.

Another licensure standard currently being reviewed is the language regarding family involvement in treatment services. Family involvement can play an integral role in a client's treatment plan and leads to greater outcomes. The Committee is currently considering how language in licensure can reflect more of a focus on family involvement in treatment services as the current language is limited.

In addition to reviewing licensure standards, the Committee determined that due to limited or no adolescent related curriculum in college level coursework, clinicians may only receive on the job training. The Committee is working with colleges and universities so future clinicians have more preparation on how young adults and children are different from adults in terms of SUD.

Specifically, the Workforce Committee is gathering information from local universities and community colleges, both Bachelor and Master level programs, to understand what curriculum or classes they teach in their programs specific to adolescent treatment and substance use disorder in effort to understand where gaps exist.

In addition, the Committee is considering whether recovery coaching for adolescents and TAY would be possible in Iowa. They are also trying to find a path forward from a sustainability perspective to continue RSS beyond the next year.

There have also been discussions of what can be done on college campuses to provide support to people who are in recovery. Committee members from YSS have formed a relationship with lowa Western to show them what they can provide and are working toward recovery housing on campus. In addition, the Committee is working with graduate and Bachelorette programs at the University of lowa in an attempt to understand some of their practices around adolescents with the goal of increasing their access to adolescent services.

The state has done a great job of advancing these efforts by training clinicians in MET/CBT and MDFT. Multiple trainings take place each year in an effort to expand the workforce for these two EBP's. During the second year of the grant, there were three MET/CBT trainings, one MDFT training, and one MET/CBT refresher training. Both Win Turner, the National MET/CBT trainer, and Kate Weiner of Prairie Ridge co-presented for two of the MET/CBT trainings. There was also one CASI recertification. Heartland, Prelude and YSS have staff in multiple locations in lowa providing MDFT and/or MET/CBT.

The Youth and Family Subcommittee is attempting to identify groups or gatherings specific to substance use for adolescents, TAY, and families. By surveying adolescents and their families through treatment providers, they would like to identify a baseline of services to find out what is needed for this population in Iowa and where gaps in service occur. By knowing why people cannot make it to treatment (i.e. do not have a car, daycare, or they are in a rural location) they can figure out where to focus resources.

One of the most coordinated efforts thus far has been organizing and planning the Youth and Recovery Conference. This event was part of a statewide effort to improve substance use prevention, treatment, and recovery support services for youth and young adults. National and Regional leaders presented on issues surrounding substance use for youth and young adults 12-25 years old.

The main drivers of this coordinated effort are that youth and young adults are in an adult system of care and there is a high level of importance to educate the public regarding this population's specific development and services. The state is also working to change the mindset from serving just the adolescent to also serving the family and working with the entire system. The overall belief from providers and committee members is that the only way to see systematic change is to get everyone involved, this includes families, schools, the criminal justice system, the Department of Human Services, and other systems that involve youth and young adults.

Is capacity being increased? What has been the impact of health disparities in the population served?

Capacity

Capacity has been increased in several ways, the first of which is the number of certified clinicians. There are currently 12 MDFT trained clinicians and six in training; six MDFT supervisors and one in training; two MDFT trainers and two in training; 10 MET/CBT certified clinicians and 15 in training; two MET/CBT supervisors and nine in training; and one MET/CBT trainer.

The second way that capacity has been increased is through the Adolescent Steering Committee, the Workforce Development Subcommittee, the Financial Subcommittee, and the Youth and Family Subcommittee.

The Committees discuss a number of items; some of these items include sustainability of EBP's; clinician licensure regulations and workforce issues; training for clinicians; financial mapping; services available to youth and families in the state; and barriers and solutions for the state and program providers.

In addition, the Committee has formed connections with Managed Care Organizations, Department of Human Rights - Criminal and Juvenile Justice Planning, Department of Human Services – Mental Health & Disability Services, Child Welfare and Medicaid, local colleges and universities, parents of youth, and Achieving Maximum Potential (AMP), and AMP youth which participate in the Committee meetings. These relationships are not only important to inform the grant, but the committee also informs these agencies on issues that are important for them to know given the populations they work with. If the other systems are aware of these EBP's and what each part of the behavioral health system is providing, this can help encourage the integration of services and dissemination of EBP's around the state.

Providers have increased capacity by expanding MET/CBT into residential treatment. Prelude has expanded MET/CBT to their Des Moines location in order to serve outpatient clients. YSS is waiting for approval to expand MDFT into their residential facility. YSS has a clinician providing MET/CBT at the Iowa Homeless Youth Center. YSS has also been providing MDFT services as part of the Juvenile Re-entry Systems grant, funded by CJJP, which served youth discharging from the State Training School. Kate Weiner from Prairie Ridge is currently the only certified MET/CBT trainer in Iowa and has conducted two of the MET/CBT trainings with National MET/CBT trainer, Win Turner. Near the end of year two, Kate Weiner conducted one MET training and an MET/CBT refresher training. In addition, the agencies utilize the Re-Think Recovery website for MDFT and created the My Time to Change website for MET/CBT in order to highlight these EBP's, increase referrals, and increase knowledge about these treatment options.

Health Disparities

When considering clients who have both an intake and follow-up, the median number of days they had anxiety decreased from seven days at admission to zero days at follow-up. When considering clients who have both an intake and a discharge, the median number of days they had anxiety decreased from four days at admission to one day at discharge. The median number of days that clients were depressed decreased from four days at admission to zero days at follow-up, and from one day at admission to zero days at discharge. These findings were statistically significant (refer to results on page 19).

At admission, 192 clients were screened for a co-occurring diagnosis and 151 (72.6%) screened positive. Of the clients who screened positive, 86 (57%) successfully completed treatment. Sixteen percent of those with a co-occurring diagnosis identified their race as non-White or their ethnicity as Hispanic/Latino.