EMERGENCY ROOM ENHANCEMENT
Improving Access to Behavioral Health Care

Emergency Room Enhancement Annual Summary Report - Year 5

Reporting Period: July 1, 2017 - June 30, 2018
Report Completed: August 14, 2018

This report describes ERE evaluation activities for fiscal year 5. Key findings are presented below, followed by in-depth descriptions. MIMH conducts the outcome evaluation by analyzing data collected from the twelve implementation sites regarding primary outcomes. **Fiscal Year 5 ERE Project Annual Report includes an overall review of the ERE project characteristics, year 5 ERE evaluation results, a review of quarterly meeting trainings, and summary and recommendations for the project:**

1. Overall ERE Project Characteristics (Years 1 – 5):

- ERE enrollment and follow-up completion by year and region
- Client demographics and presenting mental health, substance use and physical health concerns

2. Primary ERE Outcomes for Year 5: Examining changes in outcomes for those engaged in ERE services in year 5 specifically.

- **Number of ER Visits**: Reduced by 67.8% after 3months and 74.6% at 6 months.
- **Number of Hospitalizations:** Reduced by 62.1% after 3 months and 80.1% after 6 months.
- **Homelessness:** Reduced by 39.0% after 3 months and 60.7% after 6 months.
- **Unemployment Status:** Reduced by 14.7% after 3 months and 34.5% after 6 months.
- **Contact with Law Enforcement (in the past 90 days):** Reduced by 41.7% after 3 months and 44.9% after 6 months
- **Primary ERE Outcomes by Region for Year 5**

3. Process Evaluation: MIMH also conducts process evaluation to assess participants' and stakeholders' perceptions of the implementation and impact of ERE. These evaluation activities consist of: 1) focus groups with ERE consumers at each site and 2) an online collaboration survey with stakeholders.

- **Focus Groups:** Participants described the program's positive impact on their lives, including provision of basic needs and supportive mental health resources that deter utilization of the ER.
- **Online Collaboration Survey:** A majority of ERE collaborators agree ERE is working well and that the collaboration has generated high quality working relationships.

4. Review of Quarterly Meeting Trainings

5. Report Summary and Recommendations

UMSL MIMH Missouri Institute of Mental Health
MISSOURI DEPARTMENT OF MENTAL HEALTH
COALITION

Overall ERE Project Characteristics (Years 1 – 5):

MIMH analyzes data collected by the twelve ERE sites to evaluate whether improvement is demonstrated for the following primary outcomes: 1) number of ER visits, 2) number of hospitalizations, 3) rates of unemployment, 4) rates of homelessness, and 5) involvement with the criminal justice system. Data collection forms and web-based data storage were managed by MIMH during years 1-3; forms were revised and data storage moved to the Coalition during Year 4. Assessment entails a brief interview in which participants report their current residential and employment status and their number of arrests in the past 30 days (MIMH data collection forms) or number of general law enforcement encounters in the past 90 days (Coalition data collection forms). Previous 90-day ER and hospital use data are also collected from the consumers or hospital records when available. Data are collected at three time-points: enrollment in ERE (i.e., intake), 3-months after intake, and 6-months after intake. Findings for fiscal year 5 are presented below. For these analyses, outcomes data reflect clients who: 1) were *engaged* in ERE and 2) for whom *data were available for baseline and at least one follow-up (either 3-month OR 6-month).* As a result, sample sizes and means/percentages differ across outcomes.

ERE Enrollment: Table 1 presents the total number of consumers engaged in the ERE project and overall follow-up rates by fiscal year. Because these rates include both 3- and 6-month follow-up assessments, they are somewhat higher than the separate 3- and 6-month rates reported quarterly.

Table 1: Number of Consumers Engaged in ERE and Follow-up Completion Rates by Year and Region

	Total			Year 1		Year 2		Year 3		Year 4		Year 5		
	Engaged	Follow-up	Follow-up*	Engaged	Follow-up	Engaged	Follow-up	Engaged	Follow-up	Engaged	Follow-up	Engaged	Follow-up	Follow-up*
Region	n	%	%	n	%	n	%	n	%	n	%	n	%	%
Columbia	1365	41%	46%	81	78%	156	44%	279	43%	424	49%	425	24%	36%
Hannibal	871	89%	92%	156	100%	215	100%	207	100%	177	67%	116	65%	91%
Kansas City	1153	91%	97%	119	99%	286	100%	262	100%	254	90%	232	65%	96%
Poplar Bluff	645	90%	96%	116	100%	82	100%	123	98%	166	93%	158	68%	92%
Rolla	614	87%	100%	78	100%	68	99%	78	99%	142	103%	248	68%	98%
Springfield	1100	47%	47%	178	84%	381	30%	150	32%	246	45%	145	63%	71%
St. Louis	1112	76%	81%	98	90%	225	82%	242	85%	252	77%	295	59%	77%
Cape Girardeau	65	68%	105%	-	-	-	-	-	-	-	-	65	68%	105%
Joplin	84	44%	65%	-	-	-	-	-	-	-	-	84	44%	65%
Monett	6	17%	50%	-	-	-	-	-	-	-	-	6	17%	50%
St. Joseph	53	15%	28%	-	-	-	-	-	-	-	-	53	15%	28%
Trenton	10	-	-	-	-	-	-	-	-	-	-	10	-	-
Total	7078	70%	76%	826	93%	1413	72%	1341	77%	1661	70%	1837	52%	74%

Note. Follow-up rates reflect the completion of any follow up (at 3-month or 6 month); *rates marked with asterisk are corrected to only include those who were enrolled in ERE services long enough to be eligible for a 3-month assessment (n = 6536 for Total; n = 1295 for Year 5).

Overall, 4944 follow-ups assessment were administered (follow-up rate = 76%) over the project to date across all sites (including only those who were eligible for at least a 3-month follow-up). Declining rates of follow-up across years (93% average in YR1, 72% in YR2, and 77% in Y3, and 70% in Y4, 74% in Y5), point to a potential area of improvement for the ERE Project. That said, several sites consistently report high follow-up completion rates (i.e., Kansas City, Rolla, and Poplar Bluff).

ERE Client Demographics: Table 2 depicts demographics and presenting concerns for participants engaged in the ERE program across sites and for each individual site. The average age of an ERE consumer is 38 years (range 17-87 years), and the population is roughly even by gender (54.8% male). ERE consumers are largely White (74.5%) and uninsured (56.3%) or have Medicaid (25.6%), and/or Medicare (3.6%). Approximately thirty-five percent (35.5%) of consumers are experiencing homelessness. ERE consumers present with a variety of complicated symptoms. Over eighty percent exhibit psychiatric concerns (88.2%), 45.7% have substance use problems, and over a third (36.5%) reported a significant health concern. Further, a significant portion of clients (42.8%) present with both psychiatric and substance use concerns. **These findings indicate that ERE consumers tend to be under-served and in critical need of mental health services. Fortunately, as detailed in this report, the ERE program facilitates a high rate of engagement and addresses multiple behavioral outcomes to improve the lives of individuals engaged in services.**

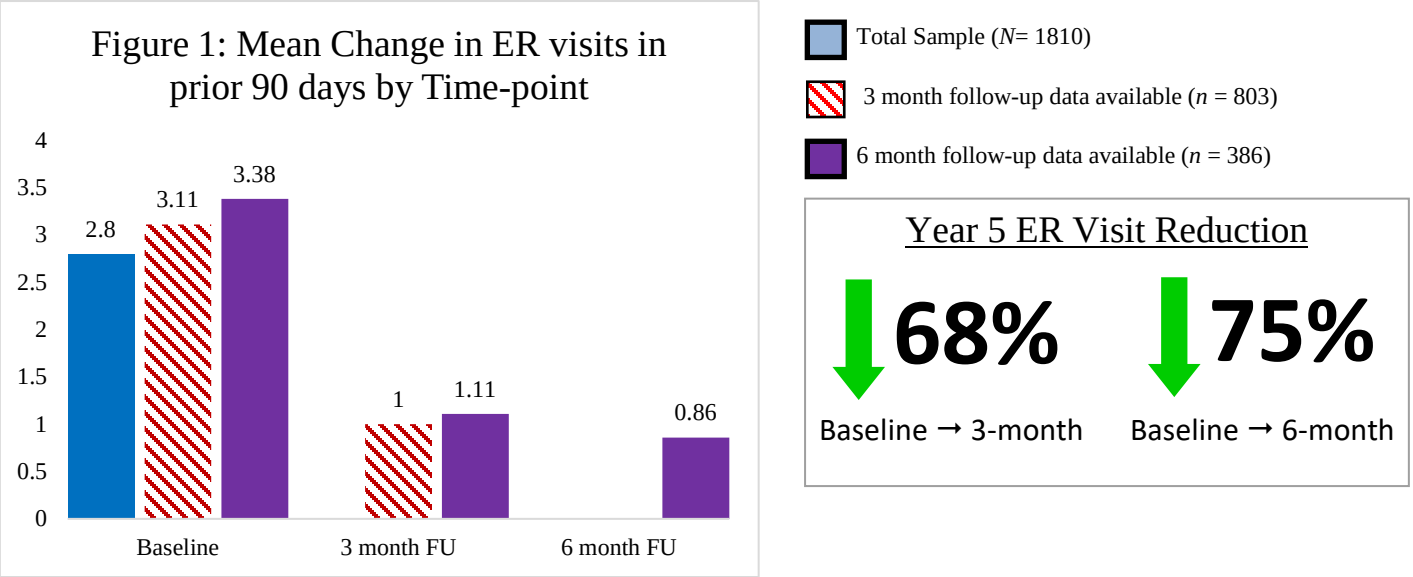
Table 2. Participant characteristics at baseline across sites, project-to-date (N = 7078)

	All Regions	Columbia	Hannibal	Kansas City	Poplar Bluff	Rolla	Springfield	St. Louis	Cape Girardeau	Joplin	Monett	St. Joseph	Trenton
N	7078	1365	871	1153	645	614	1100	1112	65	84	6	53	10
Mean Age	38.1	36.9	34.7	41.2	36.8	39.3	39.1	37.6	39.9	39.4	39.3	41.6	36
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
Gender													
Male	54.8	51.6	56.9	64.4	47.8	48	51.2	57.1	61.5	66.7	50	62.3	54.5
Female	44.7	47.9	42.8	35	51.9	51.6	48.2	42.6	36.9	33.3	50	37.7	45.5
Transgender	0.3	0.4	0.1	0.3	0.3	0.3	0.5	0.3	1.5	0.0	0.0	0.0	0.0
Other/Refused	0.1	0.1	0.1	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Race													
White	74.5	74.1	88.4	62.9	86.2	94.1	85.9	45.6	81.5	89.3	100	73.6	100.0
Black	19.4	19.3	9	30.2	10.1	3.9	6.9	44.8	15.4	4.8	0	9.4	0.0
Other	4.8	6	2.7	6.6	3.3	2	5.8	4.8	3.1	4.8	0	13.2	0.0
Unk/Refused	1.2	0.6	0.0	0.4	0.5	0.0	1.4	4.8	0.0	1.2	0.0	3.8	0.0
Military Status													
Civilian	92.2	95.5	95.6	92.1	94.7	94.8	89.6	80.8	93.8	76.2	83.3	71.7	100.0
Veteran	4.1	3.4	3.8	5.6	2.0	4.4	4.2	3.7	3.1	2.4	0.0	17	0.0
Active	0.3	0.4	0.3	0.2	0.2	0.2	0.3	0.5	0.0	0.0	0.0	0.0	0.0
Refused	3.4	0.7	0.2	2.1	3.1	0.7	6	15.1	3.1	21.4	16.7	11.3	0.0
Payer Source													
Medicaid	20.5	3.4	10	32.2	29	32.7	24.6	20.7	43.1	23.8	33.3	11.3	18.2
Medicare	3.6	2.3	2.0	8.2	1.9	4.4	3.6	1.9	7.7	7.1	0	5.7	0.0
M & M	5.1	0.7	0.7	11.8	8.2	11.6	5.4	1.3	6.2	6	0	3.8	9.1
Private	3.5	1.8	4.2	5.1	0.8	5.9	6.6	0.4	0.0	3.6	0.0	5.7	0.0
Uninsured	56.3	84.5	80.3	34.8	45.1	42.3	52.4	45.9	41.5	35.7	50	62.3	18.2
Other	3.3	1.6	1	2.0	13.8	2.3	3.1	3	1.5	3.6	0.0	0.0	0.0
Unk/Refused	7.7	5.5	1.8	6	1.3	0.8	4.3	26.7	0.0	20.2	16.7	11.3	54.5
Homeless	35.5	24.4	22.2	63.6	24.3	27.1	33.2	42.8	39.1	56.8	40	51.9	22.2
Legal Inv.	15.5	8.9	31.4	18.0	5.8	27.4	10.6	9.7	26.2	27.5	0	2.0	11.1
Presenting Concerns	%	%	%	%	%	%	%	%	%	%	%	%	%
Psychiatric	88.2	90.8	93.5	86.9	95.3	82.8	89.1	78.4	100.0	96.4	66.7	98.1	100.0
Substance Use	45.7	42.4	49.2	55.6	38.9	51.1	39.7	38.0	66.0	66.0	66.0	66.0	66.0
Health	36.5	40.4	23.2	38.1	29.7	53.5	34.3	29.7	92.3	66.7	83.3	77.4	70.0
Co-occurring	42.8	35.9	47.1	51.5	38.2	49.4	34.6	37.2	81.5	81.3	20.0	79.1	0.0

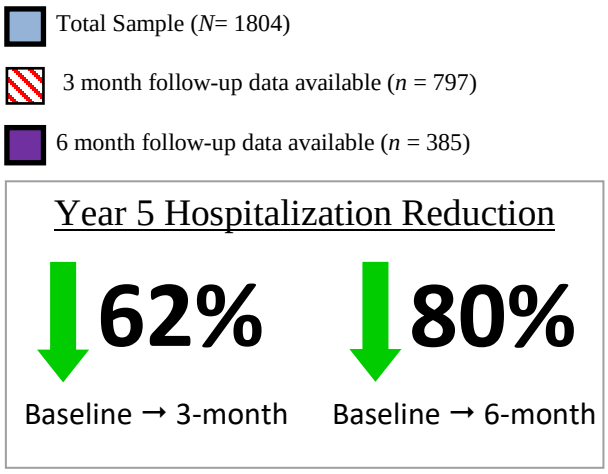
Note. M & M = Both Medicaid and Medicare were endorsed as payer sources; Some data do not equal to 100 as percentages were rounded to one decimal place. More than one presenting concern could be endorsed for each consumer; Co-occurring refers to endorsement of both a psychiatric disorder and substance use; Numbers reflect participants engaged in ERE services only

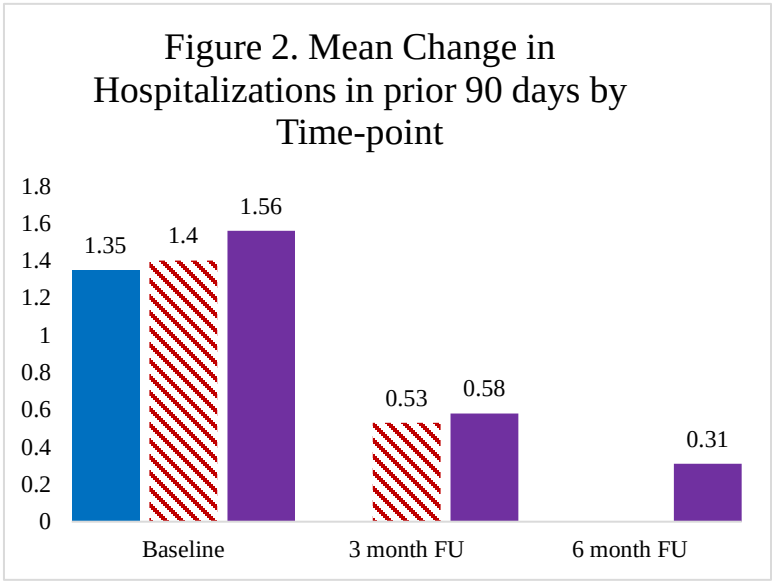
Primary ERE Outcomes for Year 5

In Year 5 1837 consumers were eligible and engaged in services**. Of the total sample, 1295 (71%) were enrolled long enough to be eligible for 3-month follow-up and 959 completed the assessment (74% return rate). For the 6-month follow-up, 844 (46%) of consumers were eligible and 528 completed the assessment (63% return rate).** Change statistics for each outcome were calculated using the following comparisons: baseline to 3-months; baseline to 6-months; and 3-months to 6-months. For each analysis, only participants with data available at the relevant time points were included. Figures 1 – 5 illustrate change in outcomes across the assessment time-points (e.g. Baseline, 3-month follow-up, and 6-month follow-up). Data reflect: 1) overall sample scores at baseline for all engaged; 2) sample scores where 3-month follow-up data are available, and 3) sample scores where 6-month follow-up data are available.

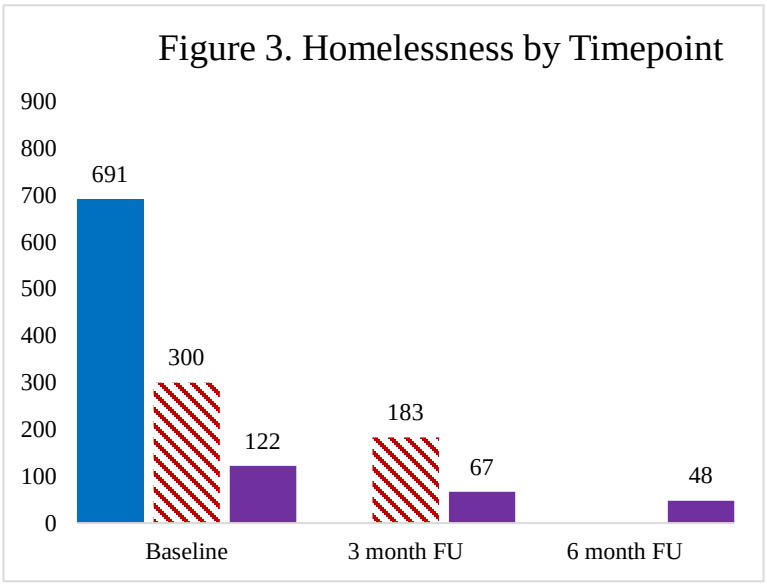


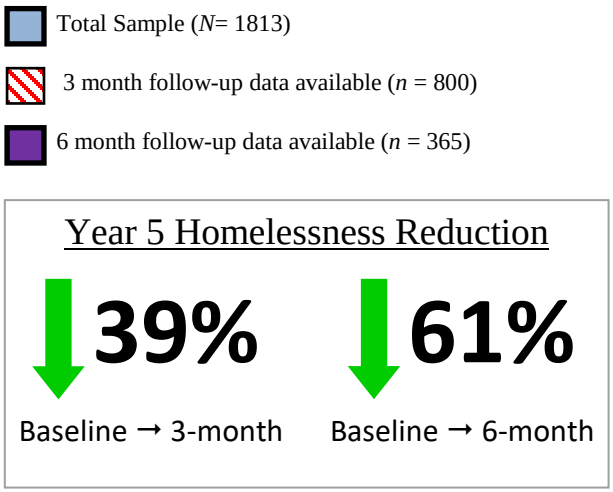
Past 90-Day ER Use: Figure 1 displays the mean number of ER visits 90 days *prior* to engagement in ERE and mean number of past 90-day ER visits at 3- and 6-month follow-ups. Changes in sample size – based on availability of 3- and 6-month follow-up data are reflected. To assess the degree of reduction in ER visits, the rate of change was calculated ([PreERE mean – 3-month mean]/PreERE mean). **A 67.8% reduction in ER visits was observed between baseline and 3 months**. **For those with 6-month follow-up data available, a 74.6% reduction in ER visits was observed.** When examining change from 3- to 6- month follow-up, (for those with data at both time-points) a 22.5% reduction in ER visits was observed. Repeated-measures ANOVA with post hoc pair-wise comparisons yielded significant change over time (p <.001): ER visits were significantly lower at both 3- and 6-month follow-up compared to intake and lower at 6-month compared to 3-month follow-up. These results are consistent with findings reported in previous years, suggesting that improvements in outcomes are stable over time.





Past 90-Day Hospital Use: As shown in Figure 2, past 90-day hospital visits declined for consumers engaged in ERE services from intake to both 3- and 6-month follow-up. The**re was a 62.1% reduction in hospitalizations by 3-month follow-up for ERE consumers. For those with 6-month follow-up data, an 80.1% reduction in hospitalizations was observed compared to intake**. When examining change from 3- to 6-month follow-up, (for those with data at both time-points) a 36.6% reduction in hospital visits was observed. Repeated-measures ANOVA and post hoc pair-wise comparisons revealed significant change over time (p <.001): hospitalizations were lower at both 3- and 6-month follow-up compared to intake and lower at 6-month compared to 3-month follow-up.





Homelessness: The Residential Status item asks consumers to indicate their current living situation, including whether they are housed independently, live with relatives, reside in a residential facility, or are experiencing homelessness. Figures 3 displays the number of consumers who reported their status as "homeless" at intake and at 3- and 6-month follow-up, respectively. **There was a 39.0% reduction in homelessness at 3 months. At 6-months, the rate of change from intake to 6-months was 60.7%.** Furthermore, a 28.4% reduction in homelessness was observed when examining change from 3- to 6-month follow-up (for those with data at both time-points). Chi-square testing indicated a significant reduction in homelessness for all three comparisons (intake to 3 months, intake to 6 months, 3 to 6 months), p <.001.

Total Sample (*N*= 1771)

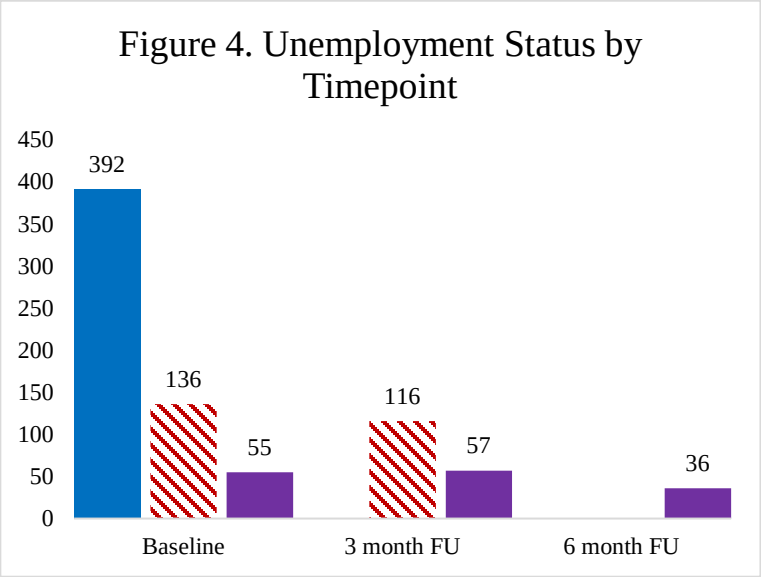
3 month follow-up data available (*n* = 768)

6 month follow-up data available (*n* = 351)

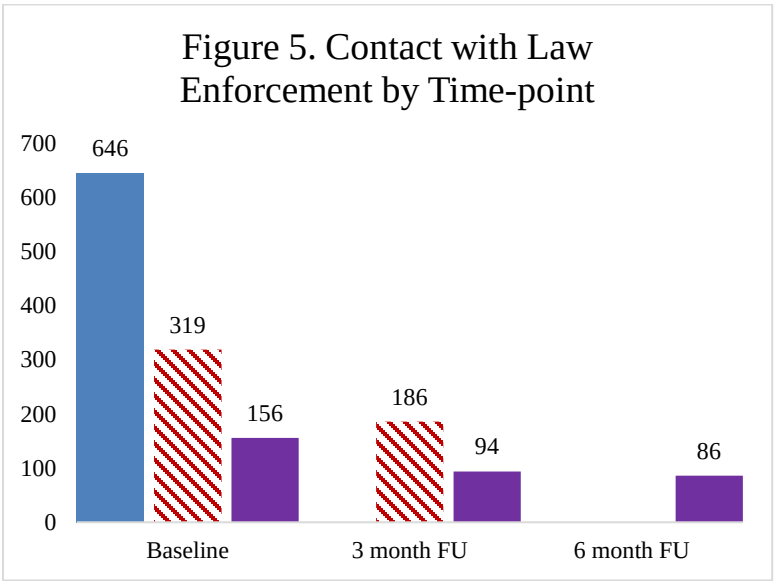
Year 5 Unemployment Reduction

15% Baseline → 3-month

35% Baseline → 6-month



Employment: Figure 4 displays the number of consumers engaged in ERE who reported unemployment at intake compared to 3- and 6-month follow-up. **A 14.7% reduction in unemployment was observed from intake to 3-months, and a 34.5% reduction was observed from intake to 6-months**. When examining change from 3 to 6-month follow-up (for those with data at both time-points), a 36.8% reduction in unemployment was also observed. Chi-square analyses revealed significant reductions for all three comparisons ($p < .001$).



Total Sample (*N*= 1784)

3 month follow-up data available (*n* = 784)

6 month follow-up data available (*n* = 378)

Year 5 Law Enforcement Contact Reduction

42% Baseline → 3-month

45% Baseline → 6-month

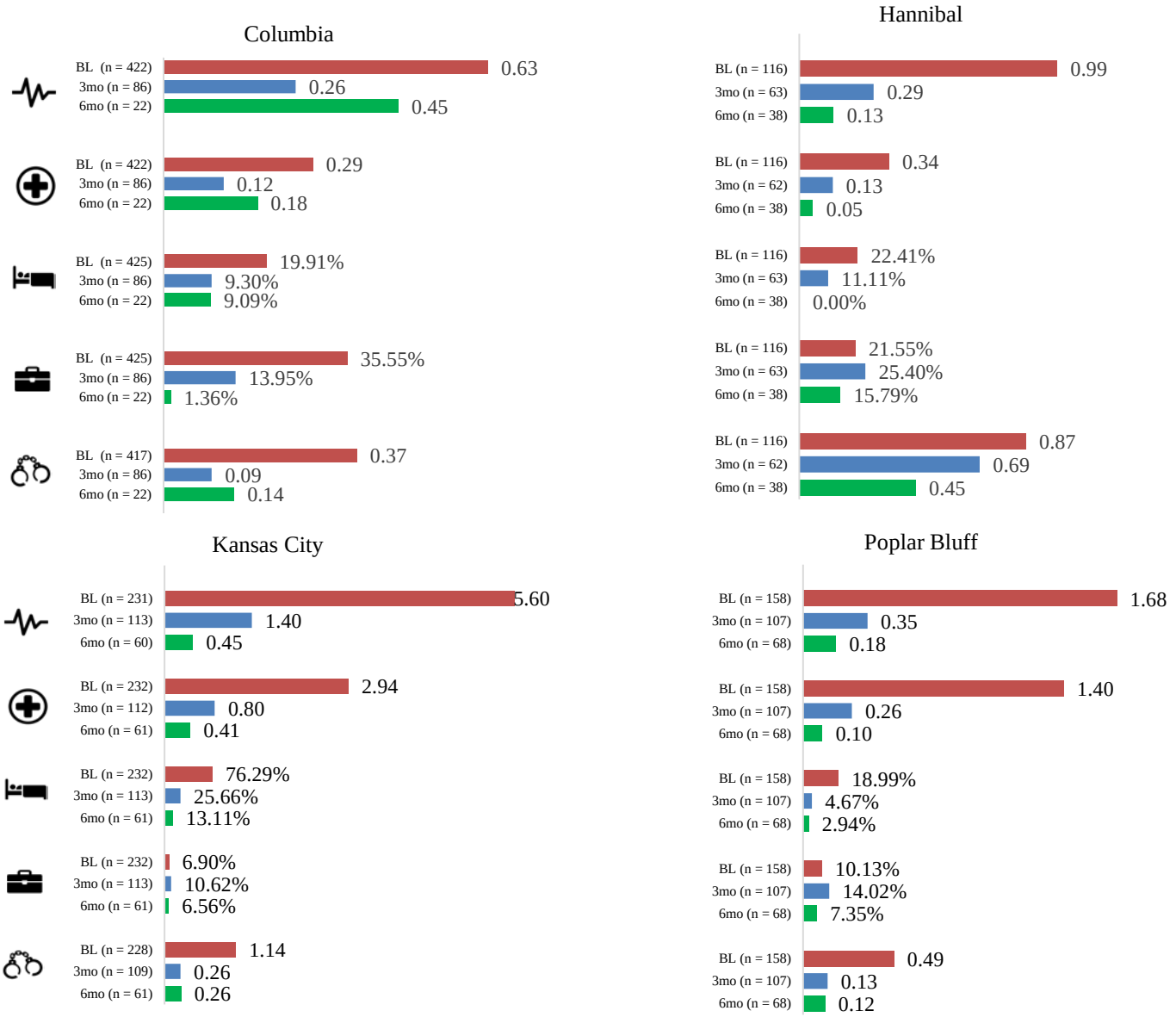
Involvement with Law Enforcement:

Figure 5 displays the number of consumers who reported contact with law enforcement at intake compared to 3- and 6-month follow-ups. **A 41.7% reduction was observed from intake to 3-monthsand a 44.9% was observed from intake to 6-months**. When examining change between follow-ups (for those with data at both time-points), an 8.5% reduction in contact with law enforcement was also observed. Chi-square analyses revealed significant reductions for all three comparisons, $p < .001$

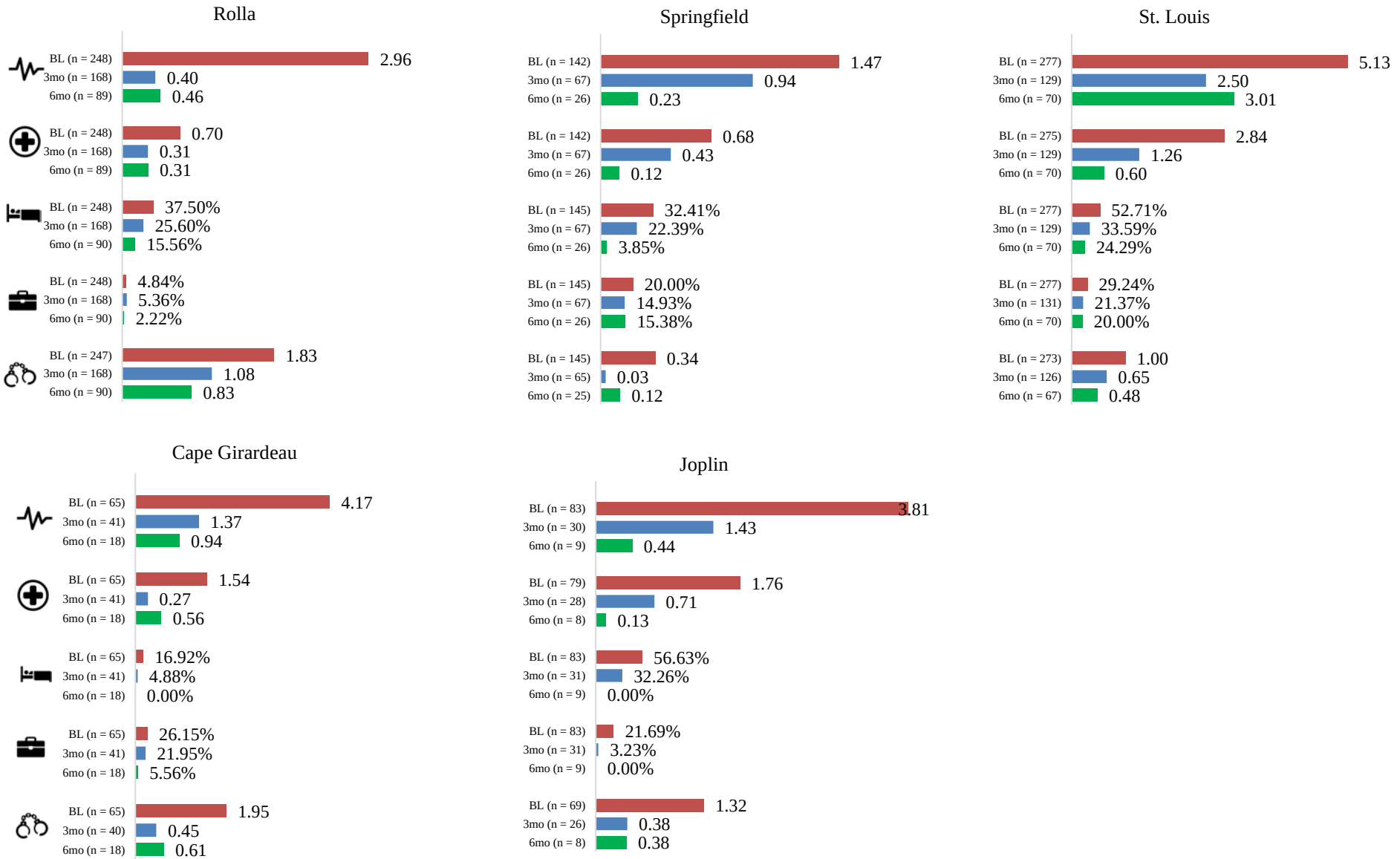
Primary ERE Outcomes for Year 5 by Region

Figures 6-14 display changes in ERE outcomes from baseline through the reassessment time-points for each region. In each figure, the average value for the five outcomes is provided at each time-point. For instance, in Kansas City, the average number of emergency room visits over 90 days was 5.60 at baseline; at 3-months, this decreased to 1.40, and at 6 months it decreased to 0.45. To provide a more straightforward overview of regional trends, all available participant data was aggregated for each time-point rather than categorizing participants by follow-up status. Figures are not provided for Monett, Trenton, and St. Joseph because these regions do not currently have follow-up data available for the 6-month assessment period.

Across all regions, consistent reductions are observed for each outcome measure, with the largest reductions occurring in ER use, hospitalizations, and homelessness. The reductions are greatest between baseline and 3-month assessment points, although, as noted, not all participants included in these figures have follow-up data available. These figures also reflect regional idiosyncrasies in client needs and reasons for entry into the ERE program, with high variability observed for outcomes measures at all time-points.



Figures 6-9. *Note*. = ER visits, = hospitalizations, = homelessness, = unemployment, = law enforcement contacts. Timepoints include all participants with available data, regardless of follow-up status.



Figures 10-14. *Note.* = ER visits, = hospitalizations, = homelessness, = unemployment, = law enforcement contacts. Timepoints include all participants with available data, regardless of follow-up status.

Process Evaluation – Collaborator and Focus Group Reports

MIMH annually conducts focus groups with ERE consumers and a collaborative survey with personnel from participating agencies. These activities supplement the outcome evaluation data, providing quantitative and qualitative data regarding the experiences of consumers, agency leadership, and the staff who plan and implement services. Below is a summary of key findings from each process evaluation activity for Year 5.

Focus Groups: As part of the ERE program evaluation, MIMH has annually conducted focus groups with participants engaged in services at each of the seven original sites (regions implementing ERE since Year 1). These focus groups are held to obtain qualitative data regarding consumers' perceptions of the program. **This data provides insight into the experiences that participants had prior to ERE and during their engagement.** Between March and April 2018, eight focus groups were held across these seven regions, yielding a total of 71 total participants. Overall, findings support that ERE has played a pivotal role in bettering the lives of those engaged in the program.

Key Findings from the Focus Groups:

- Participants reported dissatisfaction with treatment by emergency department (ED) staff during previous attempts to access help for behavioral health issues prior to enrollment in ERE – **feeling judged, unimportant, and tolerated rather than cared for.** They recommended education and training on mental illness and substance use disorders for providers and staff alike to **mitigate the stigma** they experienced, in order to improve care for themselves and others.
- The majority of participants indicate **hospitals/EDs as the primary referral source to ERE**. Additional key sources are other agencies, shelters and providers, law enforcement, and the corrections system.
- Client **suggestions for improving the ERE referral process** include **educating ED staff** and the community about the program and the program's importance in addressing behavioral health issues, and to **strengthen a "warm hand-off"** model to ensure referred patients make it to their first appointment with the community mental health centers (CMHC).
- **The Case Management services indicated as most valuable** to participants were coordination of services and resources, social support & motivation, and transportation. Valuable Behavioral **Health Resources** included psychiatric medications, psychiatrists, and counseling/therapy – both individual and in-group format.
- Most respondents reported feeling **comfortable asking questions and taking part in their own treatment planning and goal-setting.**
- Primary **Gaps in Service** included unmet **psychiatric and medication needs**, and **housing.**
- Positive experiences with ERE center on appreciation for program personnel being **understanding, non-judgmental, and genuinely caring**; numerous types of **wrap-around support from case managers** and other staff, and enthusiasm about reaching their treatment goals and "getting our lives back together."
- Negative stories were relatively few but involved **poor treatment from staff** – disrespect, non-caring attitudes, etc. – as well as limited staffing/resources and **lack of behavioral health support outside normal business hours**.
- The **#1 reported plan of action** when faced with future behavioral health concerns or crises **is to contact their caseworker or call the agency crisis line.**
- **A majority of participants (93.3%) affirmed positive outcomes** including reductions in ED visits for behavioral health issues, decreased involvement with the criminal system and incarcerations, lessening of symptoms, and better relationships with family and others.
- The majority (69.2%) of participants' **comments to the Governor** and state legislators were comprised of **praise for the ERE program** with calls for **increased funding and promotion.** Another 23% highlighted the need for **enhanced mental health resources** in Missouri.

Success Stories: Below are participant quotes highlighting improvements in their lives due to ERE participation. Specific outcomes in these comments included symptom reduction, reduced involvement in the criminal justice system, improved family relationships, improved attitudes, sobriety in recovery, and improved work stability.

Quotes

- ***"I'm actually pursuing a long hidden passion of mine*** *which is content creation via videos and things of that nature. I'm doing it… using video games, giving reviews, live streams…combining the passion for video creation with the tool of game-playing in my own space.* ***Getting stable has given me the courage to pursue it."***
- ***"Pretty much every aspect of my life.*** *I'm not depressed all the time. My anxiety is doing better. I'm having less night terrors."*
- ***"I haven't gone back to prison since I've been here."***
- ***"I'm alive and I'm clean and sober*** *and I got my head screwed back on my shoulders right."*

Online Collaboration Survey: ERE providers were invited via email to complete an anonymous web-based survey assessing their impressions of the program and their collaborations with regional partners, including existing strengths and room for growth. In addition to traditional quantitative questioning, the 2018 ERE Community Collaboration Survey included qualitative responses to improve our understanding of the strengths and weaknesses of the program's implementation. A total of 376 individuals were identified to participate in the 2018 survey with an overall rate of survey response at 31.9% (n = 120). Key findings from the Year 5 survey are highlighted below.

Project Communication, Familiarity, and Clarity

- 60% of respondents reported meeting with site administrators at least once per month
- The majority of respondents feel familiar with program goals, processes, and outcomes achieved through implementation of the ERE project
- The majority of respondents endorsed a high level of individual and institutional role clarity, which were both associated with increased familiarity with goals, processes, and outcomes.

Interagency Collaboration and Working Relationships

- The survey found evidence for a positive collaboration between agencies and even some integration in services
- Data across survey years, while not based on matched respondents, suggest increased perceptions of trust and reciprocity across agencies in FY 2018 compared to previous years. This has steadily improved annually from 34.2% in 2014 to 83.0% in 2018.
- A large proportion of respondents reported a strong alignment between their respective agency/organization and ERE administration.
- In open-ended questions, collaborators identified strengths in their collaborative relationships, including enhanced communication and coordination of care and administrative services. Areas in need of improvement included agency knowledge of the ERE program and implementation of program services.
- The feedback indicated differing strengths and weaknesses within each administrative region along with suggestions for improvement.

Program Implementation: Strengths, Weakness, Improving in the Future

Many collaborators reported that involvement in the ERE initiative has elevated their confidence in delivering coordinated care for their clients, allowing them access to a larger network of resources

- The majority of respondents felt ERE was successful in meeting program objectives overall.
- A number of barriers to effective implementation were apparent, with over half of respondents reporting lack of capacity (i.e., treatment slots or beds) and lack of financial resources as a significant barrier.
- Respondents identified a need for greater access to housing resources for consumers, with specific attention paid to housing options that support medication assisted treatments for SUDs.
- Consistent with these concerns, gaps identified in ERE services included lack of housing, transportation, and overall implementation of the program itself.

Impact on Providers and Clients: Highlights, Limitations, and Success Stories

Respondents indicated that the ERE project has had numerous benefits for the clients they serve as highlighted by both the provider and client success stories.

- Overall benefits of the project include improved access to services, improved care coordination, and increased quality of life for clients.
- Ongoing areas in need of improvement included interagency coordination and communication and increased consumer-housing resources.
- Opportunities for growth included support for basic life skills development, revision of eligibility requirements and increased availability of staff and services.
- Although program implementation is imperfect, ERE continues to make a significant positive impact on both providers and clients, as indicated by the shared success stories.

Qualitative Responses:

- **Strength of ERE working relationships** Collaborators were asked to list three things that are going well with their ERE working relationships. The three most common themes were: **1) communication, 2) care coordination and 3) program and/or administrative coordination.** Collaborators who mentioned communication as a strength specifically appreciated ERE staff availability, responsiveness, and transparency, and the regularity of meetings. They explained that shared care plans and continuity of care between providers has improved care coordination for vulnerable populations. Program coordination was a common theme in responses, as collaborators commented on the easy and timely referral process, familiarity with the ERE team at the administrative agencies and clear expectations attributing to strong working relationships.
- **Aspects of ERE *working relationships* in need of improvement** Collaborators were asked to list three things that could be improved regarding working relationships. The three themes that were identified were: **1) collaboration, 2) program coordination and 3) knowledge of the ERE program.** A need for improved collaboration between agencies and with the administrative agent was endorsed. Respondents also commented on how they would like more information about program goals and outcomes. They requested more information regarding resources available (n=2) and listed additional service resources needed, including housing, transportation, and substance use resources,
- **Overall beneficial impact of ERE** On a five-point rating scale, the majority of respondents endorsed feeling successful in meeting their clients' needs at least most of the time (70.4%) while about a quarter (23.5%) felt they were successfully meeting their clients' needs about half of the time. On an open-ended item, respondents were asked how they would describe the overall benefits of the ERE program. The three themes that emerged from qualitative analysis included: **1) consumer access to services, 2) improved care coordination, and 3) improved consumer quality of life.**
- **Improving ERE consumer outcomes** Respondents were also asked to provide suggestions for improving outcomes for ERE participants, including mental health, employment, housing, involvement in the legal system, and overall quality of life. The two major themes that emerged from these responses were **1) interagency coordination and communication and 2) increased consumer housing resources.** Over half of respondents identified lack of capacity/slots/beds (56.5%) and lack of financial resources (48.4%) as significant barriers to implementing ERE. In an improvement from FY17's report, only a minority of respondents reported documentation load and staff/personnel capacity as barriers to implementation. Furthermore, most respondents felt knowledge about ERE services and communication among collaborating agencies were strong overall.
- **Gaps in ERE Services** Respondents were asked to think about the services they provide for ERE participants, as well as those they do not provide, and list up to three gaps in services they perceive to exist for the ERE participant population. **Below are the top three themes that emerged from the qualitative analysis with representative quotes regarding what respondents feel are gaps in services: lack of housing (n=29), lack of transportation (n=14), and programmatic improvements (n=13).**
- There is a positive correlation between respondents' perception of meeting ERE participant needs and their rating of changes in how they perceive high utilizers of the ED (also 1 to 5 scale, 1="My views are much more negative" to 5="My views are much more positive") r=.43, p<.001. This finding indicates that the higher perceived ability to meet ERE participant needs is associated with greater positive change in respondents' views of high utilizers.

Success Stories. Collaborator respondents shared numerous stories of client success and below are four examples covering different types of success:

- **Reducing ER utilization,** "A client was able to obtain access to a long term substance use program which resulted in stable housing and sobriety for 9 months. This drastically reduced his use of ER/hospital services and ended a period of homelessness for him."
- **Stabilizing mental health** "Several months ago, an individual in their late twenties [whom was homeless at the time] was referred to ERE services … [he] experienced severe bipolar symptoms with psychotic features, and was immediately enrolled into ERE services. While in ERE program we were able to provide [the] consumer with appropriate psychiatric, psychotherapeutic, and care coordination services resulting in successful medication management, emotional regulation/monitoring, and [he] obtained employment and permanent housing. During last session with consumer, he expressed gratitude for ERE services, as well as new found hope and purpose, which he shares has been absent from life for as long as he could remember. Consumer has been successfully maintaining employment, housing, and his mental health for the past 2 months."
- **Stabilizing Substance Use** "I have worked with a [person with alcohol use disorder] for the past 3 yrs. This year she has been clean and sober. She has reconnected with her family, been doing volunteer work and she presents at our CIT trainings. She has come such a long way. About every cop in our county has arrested her 5 or more times due to public intoxication. She is now hugging our police officers thanking them for all the times they tried to help her. She has really turned her life around and I feel that it would not have been possible if it was not for the ERE Program and joint efforts of all the providers working together."
- **Homelessness to stability** "[The client] who struggles with staying clean, being back and forth between 2 agencies where she has a worker at both for 2-3 yrs., she was finally able to sit through a group, with taking her psyche [sic] medication regularly, and moving up to staying in group for a full day, to getting her housing voucher, so that she doesn't have to be homeless anymore, She is getting better."
- **Trauma-informed Care** "One of my patients with high ED visits, substance abuse and heart issues was kicked out of her mother's home after discharge from the hospital. She had been on the 'watch' list for the ERE administrative team, but had refused intervention previously. The day after discharge the patient called me and told me she was living at a bus stop and was having SI. I called the ERE team and they dispatched a police officer, but she apparently refused to talk to the police. I called the ERE team back and they agreed to send a female case manager to visit with the patient. Long story short, the patient agreed to the help of the ERE team who assisted her in getting her things from her mother's, agreeing to behavioral health treatment and even consenting to drug rehab. I know this patient is alive today because of their intervention, which I called 'above and beyond!' The team worked a bit beyond the boundaries of the emergency department on this one [after ongoing perseverance to establish a relationship with this patient in the ED] to save her life. To my knowledge, this patient is still periodically engaged with the case manager who extended a hand of life to this patient when she was in crisis. Of note is that later when I talked to the case manager from the ERE team, I was told that the patient had early onset trauma and was benefiting from trauma informed care. They know what they are doing and a difference is being made."

Summary of Quarterly Meeting Trainings

Each year ERE administrative agents and evaluators attend quarterly Emergency Room Enhancement Project meetings at the Missouri Coalition for Community and Behavioral Healthcare. At these meetings, ERE partners are provided an opportunity to review project goals, collaborate with personnel from other ERE regions, and take part in professional development trainings aimed at building skills and providing resources to support individual development and increase awareness about relevant initiatives throughout Missouri. Below are brief summaries of the trainings provided this fiscal year.

Self-Care and Professional Ethics – Melissa Smyser. During the September 2017 quarterly meeting, Melissa Smyser presented on the importance of self-care for professionals in the social services field. By promoting healthy living and well-being for the professional, self-care improves our ability to serve clients in an ethical and meaningful way. The presentation included ways to assess self-care (Saakvitne, Pearlman, & Staff, 1996) and professional quality of life (Stamm, 2009), and provided tips and suggestions to improve self-care within our daily lives and within our work communities. These suggestions included preventive self-care and coping strategies such as: getting enough sleep,

balancing work and leisure time, keeping realistic expectations about work, and seeking support before stress becomes a problem.

Trauma-Informed Care – Marsha Morgan. At the December meeting, Marsha Morgan presented an overview of the biopsychosocial effects of trauma, how to consider traumatic experiences when working with clients, and the importance of building trauma-informed communities. By taking a trauma-informed approach, programs can account for the widespread impact of trauma, understand potential paths for recovery, and recognize the signs and symptoms of trauma in clients, families, staff, and others involved. A trauma-informed approach reflects adherence to six key principles rather than a prescribed set of practices or procedures including safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, voice and choice, and awareness of/responsiveness to cultural, historical, and gender issues.

Suicide Prevention Presentation – Stacey Williams. At the April meeting Stacey Williams introduced Missouri's role in the National Suicide Prevention Lifeline. The initiative supports 24/7 response to suicide and links people in distress with local crisis centers to support and provide resources. The Missouri Department of Mental Health/Division of Behavioral Health is partnering with crisis centers across to the state to provide support for the suicide prevention lifeline throughout Missouri. Additional information pertaining to DMH Suicide prevention can be found at: https://dmh.mo.gov/mentalillness/suicide/getinvolved.html

A State Targeted Response to the Opioid Crisis - Tim Rudder. Also at the April meeting, Tim Rudder provided the group with an overview of initiatives and progress during the first year of the State Targeted Response to the Opioid Crisis grant (Opioid STR). The project is focused on expanding access to integrated prevention, treatment, and recovery support services for individuals with opioid use disorder (OUD) throughout Missouri. The multi-pronged approach includes direct funding for OUD treatment, training and education on evidence-based treatment of OUD, prevention activities including increased awareness about OUD and naloxone distribution, and support of recovery support services in the form of Recovery Community Centers, recovery housing, and recovery management checkups. Additional information on the Opioid STR project can be found at missouriopioidstr.org.

Overview of Missouri Forensic Services – Dr. Jeanette Simmons, PsyD. Dr. Jeanette Simmons, the Director of Forensic Services at the Missouri Department of Mental Health provided an overview of the complexities of forensic services and the associated policies and procedures to address mental illness within the Missouri criminal justice system. She provided information pertaining to why these policies are in place, to whom the policies pertain, who implements forensic services in the state of Missouri, and how to support clients that might potentially be involved in the criminal justice system: https://dmh.mo.gov/mentalillness/forensics.html

Narcan Training – Samantha Tracy. In our July training, Samantha Tracy provided the group with an overview of the opioid crisis in Missouri and how to respond to an opioid overdose with the use of naloxone. The training included a brief overview of the effects of opioids, trends in and causes of opioid overdose, current efforts to combat the opioid crisis and legislative protections for naloxone use and dispensing. In addition, the training included specific instruction on how to correctly identify and respond to an overdose event, including how to properly administer naloxone, and how to effectively and compassionately work with individuals who have just experienced or witnessed an overdose. Information about the Missouri opioid overdose field report to track fatal and non-fatal overdoses was also provided. To request a training or naloxone for your agency, please visit: https://mohopeproject.org/

Report Summary and Recommendations

As Missouri's ERE program concludes its fifth year of funding, it is associated with significant improvements across all primary client outcomes identified as key indicators of success. As of June 2018, when examining improvements in outcomes across the life of the project, the number of ER visits has been reduced on average by 2.52 visits per 90 days per client served. Extrapolating out, this is a potential reduction of over 18,500 visits to the emergency room just this year [2.52 X 1837(# clients engaged this year) X 4 (4 - 90 day periods in one year)]. Similarly, hospitalizations have been reduced, on average across project year and provider region, by 1.25 visits per 90 days – amounting to a potential 9,185 hospitalizations avoided.

Changes observed in ERE Year 5 are consistent with these overall outcomes across the life of the program: The overall number of ER visits was reduced by 68% after 3-months and 75% at 6 months across all regions during Year 5. Similar reductions were observed in number of hospitalizations with a 62% reduction after 3-months and 80% after 6-months. Strong gains were also observed for those who identified as experiencing homelessness at baseline with a 39% reduction in those self-identifying as homeless after 3-months, and 61% reduction in reported homelessness after 6-months. Changes in unemployment status were also promising with the number of individuals who endorsed being unemployed reduced by 15% after 3-months and 35% after 6-months. A 45% reduction in contact with law enforcement was also observed from intake to 6-month follow-up assessment.

Consistent reductions are observed for each outcome measure by region, with the largest reductions occurring in ER use, hospitalizations, and homelessness. The reductions are greatest between baseline and 3-month assessment points and also reflect regional differences in client needs and reasons for entry into the ERE program, with high variability across regions observed for outcome measures at all time-points.

In addition to tracking client outcomes overtime, the Consumer Focus Groups and Collaborator Survey allowed for additional data pertaining to provider and client perceptions of the success and limitations of the ERE project. Providers identified three major areas of perceived success of the ERE program: 1) consumer access to services, 2) improved care coordination, and 3) improved consumer quality of life. These areas were extremely consistent with the areas of success identified by the clients in focus group interviews. Additionally, providers and clients identified areas in need of improvement including more housing and transportation for clients.

The ERE program team provided quarterly meeting trainings for the administrative agents at all twelve sites. The meetings were held at the Missouri Coalition for Community Behavioral Health and included presentations on the well-being of mental health professionals and trainings on current services and approaches being practiced the state of Missouri. Topics included Self-Care and Professional Ethics, Trauma Informed Care, Suicide Prevention, A State Targeted Response to the Opioid Crisis, Missouri Forensic Sciences, and Narcan Training.

In summary, both quantitative and qualitative outcomes reveal sustainable benefits of the ERE program. Significant improvements in client outcomes across the life of the program as well as within the current fiscal year are evident, although heterogeneity across regions in outcome improvement and engagement is apparent. Collaborator surveys and consumer focus group interviews yielded convergent perspectives on areas of success as well as areas for improvement from those who receive and those who provide ERE services. This feedback can help us leverage strengths and address areas of concern when expanding to the new ERE sites.

Recommendations:

1. As there is significant variability in follow-up completion rates across sites, it may be useful to continue to consult with sites regarding best practices to promote data collection. In addition, collecting data on WHY follow-ups could not be completed could be useful in understanding the ongoing and chronic needs of the ERE population. This will be particularly important when training new regions in the data collection and the evaluation component of ERE.
2. To increase focus group participation, it may be useful to increase the number of participants recruited and incentives. With ERE leadership, MIMH will work with sites to ensure consistent efforts to recruit participants. Additionally, Year 6 ERE Focus Groups will be held in the new six ERE regions only. Responses and feedback

from these participants will be compared to themes identified in ERE Year 5 to gauge consistencies and differences in client needs and project implementation across Missouri.

3. For the collaborative survey, greater participation is needed to best inform system level evaluation and potential areas of success and limitation.
4. MIMH and ERE leadership will review previous reports and discuss details regarding future evaluation activities to maximize the utility of evaluation activities and products. We will also explore analyses linking outcomes to additional variables assessed in ongoing quantitative data collection, including demographic subgroups and identified client needs.