Hospital-Community Linkages Project

Adult HCL Project Annual Report

July 2021 to June 2022

Behavioral Health Network of Greater St. Louis

Creating a better system of care for those impacted by mental health and substance abuse issues.

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History and Summary of Hospital Community Linkages Projects

The **Behavioral Health Network of Greater St. Louis (BHN)** manages, on behalf of Missouri's Eastern Region[1], initiatives which we categorize under the umbrella term "Hospital Community Linkages" (HCL). With variations, all utilize outreach staff to support vulnerable patients' transition from a hospital-based acute behavioral health (BH) episode (mental health and/or substance use) to engagement in ongoing community care. This report details two HCL projects: HCL Inpatient and adult Emergency Room Enhancement (ERE). BHN serves as the "backbone" organization for these projects, coordinating regional meetings and training, analyzing data and outcomes, and supporting stakeholders and funders in monitoring and continuous quality improvements.

The HCL Inpatient Project was created as part of a regional response to the April 2010 closure of Metropolitan St. Louis Psychiatric Center, which provided acute and emergency BH services. To help the region respond to the closure, the Missouri Department of Mental Health (DMH) pledged dollars to the Eastern Region which included funds for psychiatric inpatient transition of care to a Community Mental Health Center (CMHC). Outreach staff pre-screen patients at the hospital and help them secure admission to CMHC care after discharge from acute services.

In October 2014, HCL was expanded to include the Adult Emergency Room Enhancement (Adult ERE) Project, which aims to enhance supports for high utilizers of ER and hospital settings, with the primary goals to prevent avoidable ER visits and hospitalizations, plus decrease rates of homelessness, unemployment, arrests/law enforcement involvement, and improve quality of life. The ERE strategy is, via intensive outreach, to have providers coordinate care for the whole person by addressing behavioral, physical, and basic needs.[2]

Participating HCL Providers
Adapt (*Adult ERE only*)
Barnes Jewish Hospital (BJH)
BJH Psychiatric Support Center
Behavioral Health Response
BJC Behavioral Health
Christian Hospital Northeast (*Adult ERE only*)
Compass Health Network
COMTREA Comprehensive Health Center
ALM Hopewell Center
Independence Center
Places for People
Preferred Family Healthcare
Queen of Peace Center
Mercy Hospital St. Louis
Mercy Hospital Jefferson
Mercy Hospital Lincoln (*Adult ERE only*)
Mercy Hospital South
Mercy Hospital Union/Washington (*Adult ERE only*)
South City Hospital
SSM Health DePaul Hospital
SSM Health St. Joseph Hospital - St. Charles
SSM Health St. Joseph Hospital - Wentzville
SSM Health St. Louis University Hospital
SSM Health St. Mary's Hospital

Table 1: HCL Programs Participating Providers

Adult ERE functions via outreach staff are hired through the region's 7 CMHCs and Preferred Family Healthcare, and benefits from partnerships over 30 BH service provider partners—hospitals, substance use providers (chart above), as well as advocates, law enforcement, and more. Key collaborators include: CMHC's Community Behavioral Health Liaisons (CBHLs) working with police Crisis Intervention Team (CIT) officers; St. Louis Integrated Health Network's (IHN) hospital-based Community Referral Coordinators (CRCs); EPICC[3] Program's recovery coaches; Dunnica Sobering Support Center; and BHN's Bridges to Care and Recovery initiative.

The target population for both the HCL IP and ERE projects includes adults who have a BH need with indicators of severity and duration, living in Missouri's Eastern Region, and are un/under insured (e.g., have traditional Medicaid). Both projects are funded by the Department of Mental Health, with the goals of increasing access to community services, improving quality of life for clients served within the safety net system, and reducing preventable hospital utilization.

Together, these HCL projects foster a collaborative effort of acute and community providers to develop an accessible and coordinated system of BH care throughout Missouri's Eastern Region. A summary and comparison of the two projects can be found in Appendix A.

[1] The Missouri Eastern Region is defined by Missouri DMH and consists of St. Louis City, plus the counties of Franklin, Jefferson, Lincoln, St. Charles, St. Louis, and Warren.

[2] https://dmh.mo.gov/behavioral-health/treatment-services/specialized-programs/emergency-room-enhancement.

[3] EPICC (Engaging Patients in Care Coordination), an opioid overdose response initiative which employs Recovery Coaches to support individuals from emergency rooms (ER) and emergency medical services (EMS) to community substance use treatment.

Overview Key Outcomes, Goals, and Thresholds

The key goal of both programs is to improve clients' health outcomes through engagement in community-based care, and to reduce non-emergent hospital utilization.

The **HCL Inpatient project** seeks to achieve this by pre-screening and effectively linking adults from Inpatient psychiatric hospitalization to outpatient care at a Community Mental Health Center (CMHC) or Certified Community Behavioral Health Organization (CCBHO). Outcomes tracked for the HCL Inpatient program include:

- Post-hospital referral patient "Show rates" to a CMHC, to reflect a step toward service admission and engagement (since FY21, this includes a virtual intake/admission appointment); and
- Admission to a CMHC/CCBHO for a service, either admission to DMH-funded treatment programs (e.g., Community Psychiatric Rehabilitation, Comprehensive Substance Treatment and Rehabilitation, etc.) and/or other services offered by the CMHC.

The **Adult ERE project** tracks the following outcomes:

- Engagement rates with the Adult ERE outreach staff (at least one face to face meeting post-hospital discharge), to reflect a step toward service admission
- Admissions to any type of community BH services – DMH funded treatment programs and other, offered by any provider in the community
- Reduced non-emergent hospital care - ER and/or hospitalizations
- Improved overall functioning & health (mGAF /DLA 20) (DMH plans to eliminate this data indicator in FY22)
- Improved housing stability
- Improved employment
- Reduced involvement with law enforcement (arrests)
- Improved health care coverage (payer source)

BHN is also committed to periodically studying cost of care before and after ERE and HCL IP interventions to inform return on investment. This will be a focus area in FY23.

Governance

Oversight of the HCL Projects is the responsibility of the BHN Board of Directors. The projects are also supported by (A) Quarterly meetings of executive level leadership from participating partners – CMHC/SU/Hospital; (B) quarterly HCL Managers meeting, which guides strategic design, implementation and evaluation efforts; and (C) quarterly HCL Liaison Committee, comprised of representatives from each of the participating providers who are responsible for referral and linkage to care. These groups monitor regional implementation of the projects, address coordination issues and system barriers, identify best practices, foster effective communication and collaboration among partners, and pursue continuous quality improvement. A roster of the current HCL managers and clinical directors who participate in the quarterly HCL Managers and/or executive level meetings can be found in Appendix B.

The HCL initiatives were studied through the BHN-led Eastern Region Visioning process, led via the "Outreach & Engagement (O&E) Team" in FYs 18-19 (culminating in spring 2019 recommendations). The O&E Team aspired to "design a regional response system, which integrates the BHN-managed Hospital Community Linkages programs to focus on timeliness and enrollment in services and enhanced high utilizer outreach." Out of those commitments, BHN applied for and secured a 3-year grant to advance "complex care." **Complex care** is a person-centered approach to improve the health and well-being of a small group of individuals who repeatedly cycle through multiple healthcare, social service, and other systems. There is a group of patients who experience any combination of medical, behavioral, and/or social challenges that result in extreme patterns of healthcare utilization and cost, but do not derive lasting benefit from those care interactions. BHN aims to lead local implementation, following national complex care models, with consultation from the National Center for Complex Health and Social Needs (and its affiliated Camden Coalition of Healthcare Providers). Systems change efforts are through three hospital systems (Barnes, SSM, Mercy) and the CMHCs/SU providers delivering the Eastern Region's Emergency Room Enhancement (ERE) initiative. The systems change grant is branded as "BEACN, Building Engagement to Address Complex Needs" and is a BH Systems Change grant from Missouri Foundation for Health (MFH) to BHN, 2/2020-1/2023. BEACN seeks to implement complex care systems change efforts through Adult ERE. This grant has a new monthly Regional Advisory Committee, plus allows BHN staff to participate in a MFH-sponsored learning collaborative. While the systems change accomplishments of the BEACN initiatives are described in other reports, FY21-22

have yielded movement in key components of the complex care model to better serve Adult ERE clients (high utilizers of hospital), which included:

1. **Data driven identification** of complex care patients (vs. relying solely on a hospital staff-to-ERE referral process).
2. **Info sharing** Mercy made it possible for Adult ERE and HCL IP staff to have real-time, read only access to patients' electronic health records (EHR). This was also negotiated for outreach staff working on the following initiatives: Youth ERE, and EPICC.
3. **Alerting** Mercy developed a means by which ERE outreach staff (and CMHC managers for CMHC-admitted clients) are alerted when a patient re-presents to Mercy.
4. **Collaborative Case Staffings** We are pursuing regular collaborative, multi-sector, multi-discipline, case staffings, involving staff from hospital, CMHC, and other involved providers, to develop a shared care plan for the highest utilizers of hospital referred to ERE, using a structure suggested by the Camden Coalition consultants.
5. **Sharing Care Plans** All parties who participate in a collaborative case staffing receive a copy of the "care map" and aim to post it as part of the patient's EHR with the hospital and CMHC/SU provider.

Review of HCL FY22 Program Refinements for Implementation (7/21-6/22)

FY22 HCL Inpatient and Adult ERE projects' direct programmatic enhancements continue to focus on **Increased Capacity** (ability to engage more clients and admit them to BH services) via:

1. **Increased goal:** The Eastern Region has increased the goal for number of ERE clients served from 295 (the goal since program inception) to 379. The new goal is based on the average number of ERE clients engaged over the past three years.
2. **Support of CMHC Active High Utilizers** In FY20, the Eastern Region's implementation of Adult ERE began to include hospital-referred patients who are (a) admitted to a CMHC or (b) on a DMH Disease Management (DM) list for outreach. We eliminated these exclusions and worked to strengthen collaborations with DM outreach staff and managers of services to admitted clients. In FY21, we began reporting to providers information on CIMOR[4] active and DM clients. In FY22, we repurposed some regional funds to support transitions of care for high utilizers, referred from hospitals, who are open and active with a CMHC. The intention is to preserve the ERE outreach team to focus on supporting clients' initial access to community BH care. The ERE Complex Care Specialist position was created, protocols developed, and a clinician was hired 9/2022. He resigned 12/2021 (for personal reasons) and the position has been vacant since. The Regional Coordinator has aimed to fulfill on some duties of the new position.
3. **Substance Use Referrals** For the past three years, the Eastern Region ERE outreach team has had a team member from Preferred Family Healthcare (PFH). The PFH worker and PFH, as an agency, has capacity to serve additional clients. We have sought additional means by which referrals are assigned to the PFH worker directly, including bolstered collaborations with the EPICC program and the Dunnica Sobering Support Center.
4. **BHR**
    a. **Q-set:** Fall 2021, we made refinements to shorten Behavioral Health Response's (BHR) call center centralized referral line question set.BHR call center gives hospitals an infrastructure to refer, ensuring they will have a 24/7/365 response (initiated 1/2020), and support outreach staff by processing initial referrals.
    b. **AFTER HOURS RESPONSE** Since Adult ERE's inception, the Eastern Region has collaborated with Behavioral Health Response's (BHR) Mobile Outreach Team (MOT). BHR MOT only provided telephonic outreach 3/2021-9/2021 (FY21) due to COVID and staffing challenges, thus not providing Adult ERE evening / weekend / holiday face-to-face coverage for Adult ERE-referred patients at the hospital. November 2021, the MOT resumed hospital outreach.
5. BHN is a grant recipient from the Bridgeton Landfill Community Project fund (6/2019-5/2022), a component fund of the St. Louis Community Foundation. The grant added a Community Health Worker[5] who contributes telephonic support to client outreach for patients who reside in the targeted Bridgeton area.

Staffing Challenges

Hiring and retaining staff has been a challenge in the past two years. The ERE and HCL IP programs have 4 current vacancies and 3 staff who are new in their positions within last 3 months.

[4] CIMOR, Customer Information Management Outcomes and Reporting, is DMH's billing database.
[5] A Community Health Worker (CHW) is hired for their knowledge of and commitment to residents in a targeted service area.

Table 2: Adult HCL Programs Staffing Needs

CMHC/SUD Providers	HCL	Adult ERE
Places for People	Staffed	Staffed
Adapt of MO		Staffed
BJC BH	Staffed	Staffed
Compass	Staffed	Staffed
Hopewell	Vacant (interim)	Staffed
Independence Center	Staffed	Staffed
COMTREA	Staffed	Staffed
Preferred Family Healthcare		staffed

Adult Emergency Room Enhancement Project Impact, FY2022

Eligibility criteria for the ERE project continues to be: a) age of 18 or older; b) residence within the seven county Missouri Eastern Region; c) diagnosed or presumed BH concern with severity/duration/impairment; d) minimum of 3 hospital contacts (ER visits or hospitalization) in the past 3 months or 6 in the past year; and e) insurance status of uninsured, Medicaid, and/or Medicare.

Volume of Referrals

Table 3 shows the hospitals from which the Adult ERE referrals originated and number of referrals which were scheduled with the Adult ERE Outreach Team. **How are referrals made?** Beginning February 2020 (mid-FY2020), Adult ERE and HCL Inpatient hospital referral calls were directed to a centralized referral line answered by Behavioral Health Response's (BHR) 24/7 call center staff. During weekday business hours, hospitals may still refer via an outreach worker; however, use of the call center is encouraged as preferable. Adult ERE referral calls on evenings, weekends, and holidays receive an immediate client contact through BHR's Mobile Outreach Team (MOT). Due to COVID-19, MOT outreach was telephonic during the period 6/2019-5/2022.

During FY2022 (07/01/2021-06/30/2022), participating referral sources made 794 ERE referrals. Mercy - St. Louis and SSM Health - DePaul were the two highest referring hospitals in FY2022, with 209 and 146 referrals respectively. See Table 3 for data on all referring hospitals

Table 3: Referrals by Referral Source, FY2020 - FY2022

Referring Agency	FY2020		FY2021		FY2022	
	Number of Referrals	Percentage of Total Referrals	Number of Referrals	Percentage of Total Referrals	Number of Referrals	Percentage of Total Referrals
BJC - Barnes-Jewish Hospital	137	16%	79	9%	97	12%
BJC - Barnes-Jewish Hospital Psychiatric Support Center	13	1%	9	1%	3	<1%
BJC - Christian Hospital	23	3%	17	2%	16	2%
CBHL - Community Behavioral Health Liaison	8	<1%	12	1%	8	1%
HCL Inpatient Liaison	4	<1%	0	0%	0	0%
Mercy - Jefferson	28	3%	29	3%	27	3%
Mercy - Lincoln	1	<1%	1	<1%	0	0%
Mercy - South	197	22%	216	26%	121	15%
Mercy - St. Louis	124	14%	153	18%	209	26%
Mercy - Washington	15	2%	9	1%	6	<1%
Other Community Referral Source	23	3%	27	3%	44	6%
South City Hospital	5	<1%	0	0%	25	3%
SSM Health - DePaul	206	23%	220	26%	146	18%
SSM Health - SLU	50	6%	26	3%	60	8%
SSM Health - St. Joseph (Lake St. Louis)	1	<1%	0	0%	0	0%
SSM Health - St. Joseph (St. Charles)	5	<1%	0	0%	1	<1%
SSM Health - St. Joseph (Wentzville)	17	2%	18	2%	16	2%
SSM Health - St. Mary's	23	3%	18	2%	15	2%
Total	**880**	**100%**	**834**	**100%**	**794**	**100%**

As noted, during FY2022, participating referral sources initiated 794 referrals, representing a 5% decrease from the prior fiscal year. See Table 4 for detail on all referring agencies.

Table 4: Percentage Change in ERE Referrals by Source From FY2021 to FY2022.

Referring Agency	2021	2022	Percentage Change from FY2021 to FY2022
BJC - Barnes-Jewish Hospital	79	97	23%
BJC - Barnes-Jewish Hospital Psychiatric Support Center	9	3	-67%
BJC - Christian Hospital	17	16	-6%
CBHL - Community Behavioral Health Liaison	12	8	-33%
HCL Inpatient Liaison	0	0	NA
Mercy - Jefferson	29	27	-7%
Mercy - Lincoln	1	0	-100%
Mercy - South	216	121	-44%
Mercy - St. Louis	153	209	37%
Mercy - Washington	9	6	-33%
Other Community Referral Source	27	44	63%
South City Hospital	0	25	NA
SSM Health - DePaul	220	146	-34%
SSM Health - SLU	26	60	131%
SSM Health - St. Joseph (Lake St. Louis)	0	0	NA
SSM Health - St. Joseph (St. Charles)	0	1	NA
SSM Health - St. Joseph (Wentzville)	18	16	-11%
SSM Health - St. Mary's	18	15	-17%
Total	**834**	**794**	**-5%**

Eligible Adult ERE clients are scheduled for immediate outreach and initial screening, ideally within 60 minutes at the ER/hospital, or at a mutually agreed time, or next business day. After outreach, assessments are conducted at the hospital or in the community, ideally face-to-face by an Adult ERE Outreach clinician.

Scheduling Referrals

In FY2022, **420 referred clients were scheduled with an ERE Outreach Team member**. This means that 53% of all referrals met eligibility criteria, agreed to the referral, and were scheduled with the Adult ERE Outreach Team. An additional 145 referrals were supported by the ERE Team to connect to another type of care. **Combined, this means 565 ERE referrals (71%) received a positive action after referral.**

In FY2022, we began calculating a "positive action rate", meaning the hospital referred a patient and the ERE Team took a positive action to support the patient's connection to community care. In September 2019, ERE began accepting referrals of CMHC-admitted and Disease Management (DM) roster patients, with the intent that Adult ERE would support the hospital/patient to make a rapid connection to their usual care or the DM outreach team. In addition to these "reconnections", we tracked when clients were referred to other regional programs, such as EPICC or the DMH-funded Missouri Transition-Aged Youth Local Engagement and Recovery (MO TAY-LER) project. The Adult ERE scheduled rate, plus "reconnections", plus "referred to another program" combined to make a "positive action rate".

Among referrals not scheduled with an ERE Outreach Team member without a positive action (236 clients), the largest portion (49%) were disposed as "Not Viable Referral (not provided with appropriate info on homeless client)". The referral dispositions "Ineligible" and "Client declined services" accounting for 25% and 20% respectively.

Table 5: Referrals to Adult ERE Scheduled by CMHC, FY2022.

CMHC	Frequency of Referrals	Percentage of Total Referrals
Adapt	36	9%
BJC Behavioral Health	71	17%
Compass Health	72	17%
Comtrea	41	10%
Hopewell	49	12%
Independence Center	47	11%
Places for People	51	12%
Preferred Family Healthcare	53	13%
Total	**420**	**100%**

Slot Utilization

To manage accountability and capacity to serve clients in the HCL IP and Adult ERE projects, a goal number of clients to programmatically serve with outreach are allocated via the annual collaborative budgeting process and called “slots.” An Adult ERE filled / utilized slot is defined as a client who kept a post-hospital appointment with the Adult ERE Outreach Team member[6] (or their agency representative). Table 6 illustrates the allocated number of slots for FY2022 by Adult ERE participating provider, as well as the utilization of slots. There was variation in utilization across CMHCs, with some exceeding their allocated slots and serving many additional clients. Overall, slot utilization for FY2022 was 103% of 379 slots, while slot utilization rate for FY2021 was 141% of 379.

Table 6: Adult ERE Slot Utilization by Community Provider FY2022 and FY2021.

CMHC	FY2022 Slots	FY2022 Engaged Clients	Percent of FY2022 Slots Filled	FY2021 Engaged Clients	Percent of FY2021 Slots Filled
Adapt	39	28	72%	53	156%
BJC Behavioral Health	79	67	85%	100	147%
Compass Health	39	64	164%	79	232%
Comtrea	54	40	74%	39	83%
Hopewell	40	44	110%	52	149%
Independence Center	40	47	118%	38	109%
Places for People	49	49	100%	39	93%
Preferred Family Healthcare	39	50	128%	16	NA
Total	**379**	**389**	**103%**	**416**	**141%**

Adult ERE Client Demographics at Baseline

Age, Gender, Race

Demographic measures for the ERE project, age, gender, and race are shown below. These reflect the demographics of patients presenting to Eastern Region hospitals with BH challenges and referred to the ERE program.

The age group with the most frequent referrals in FY2022 was 26 to 64 with 83% of referrals. See Figure 1 for additional details.

[6] An Adult ERE Outreach Team member receives their salary from a “home” CMHC or Preferred Family Healthcare, who is contracted to participate in the program.

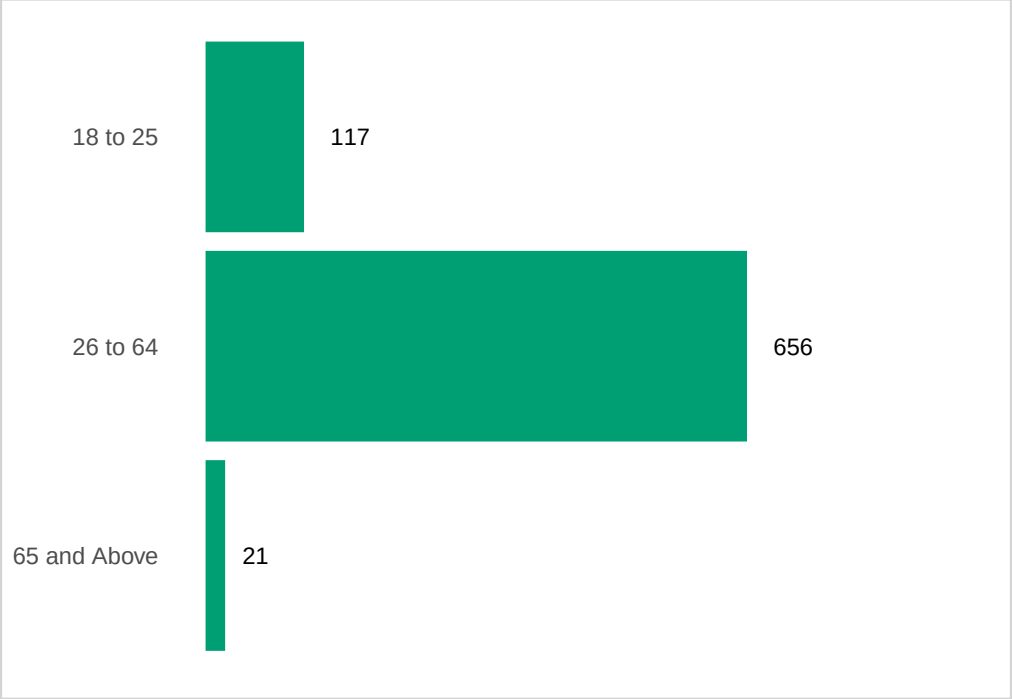


Figure 1: Referrals to Adult ERE by Age Range, FY2022.

In FY2022, among clients referred to Adult ERE, 65% identified as Male and 34% identified as Female. See Figure 2 for additional details.

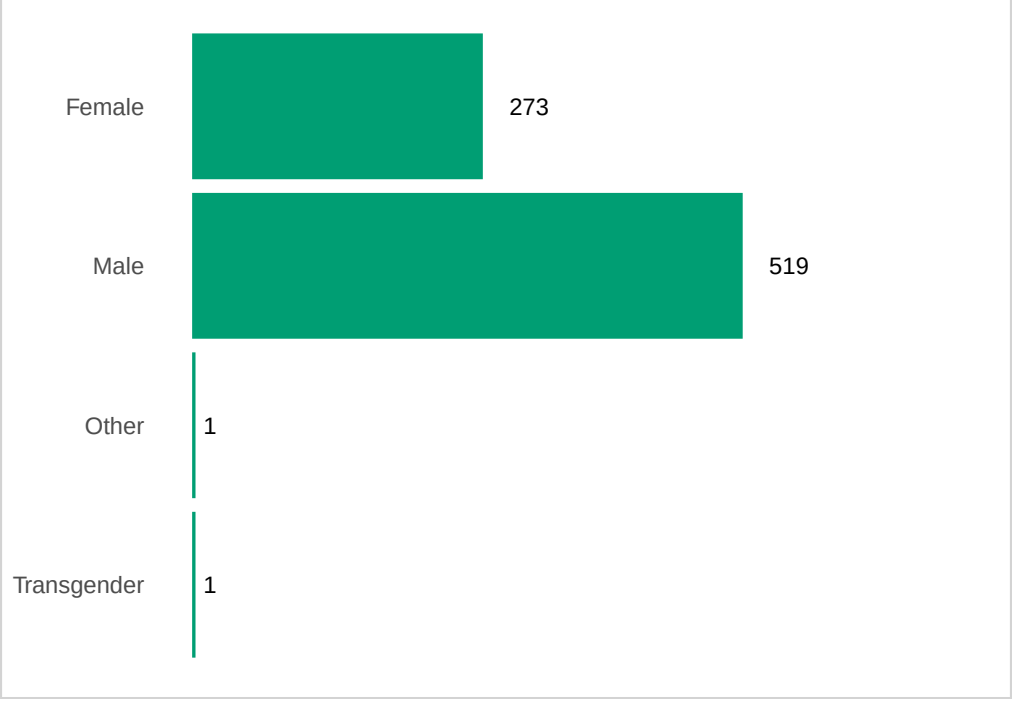


Figure 2: Referrals to Adult ERE by Sex, FY2022.

In FY2022, among clients referred to Adult ERE, 54% identified as White and 42% identified as Black or African American.[7] See Figure 3 for additional details.

[7]These demographics have remained fairly steady across the history of the program. In 2019, we compared the racial composition of BH patients presenting to the ERE and HCL IP participating hospitals. The racial break-down of patients presented, referred, and engaged/served matched the patient presenting population.

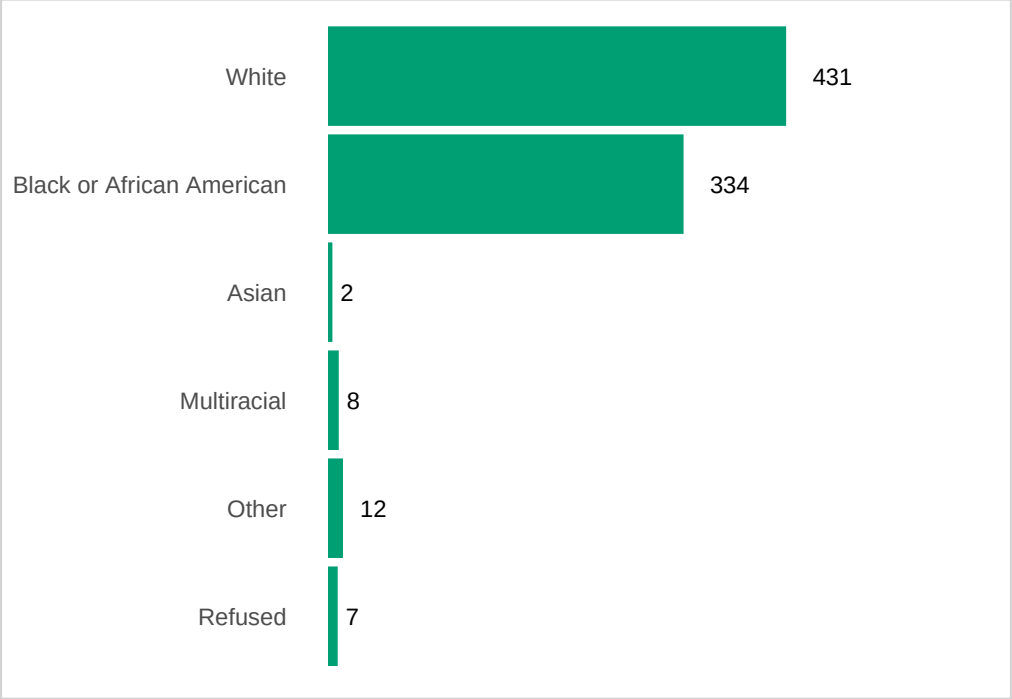


Figure 3: Referrals to Adult ERE by Race/Ethnicity, FY2022.

Housing Status

In FY2022, 50% of post-referral initial contacts identified the client as unhoused or housing unstable at the time of IHNA, NA FY2021, when 50% of post-referral initial contacts at IHNA were persons with housing instability or unhoused.

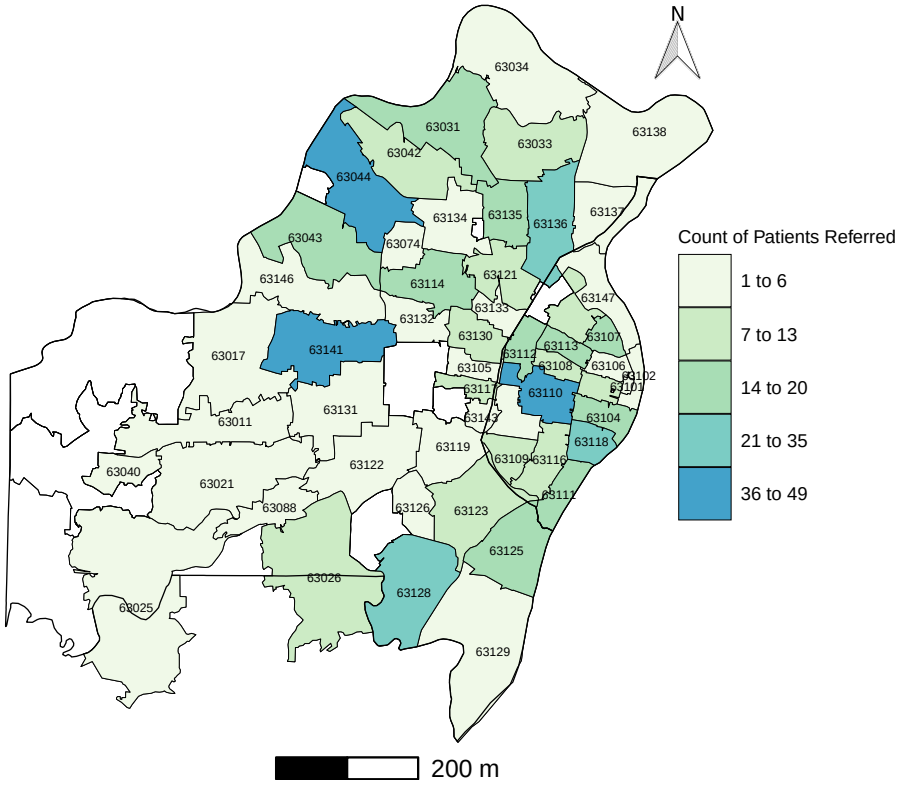
Area of Residency

The Adult HCL project serves seven counties in Missouri's Eastern Region: St. Louis City and the Counties of Franklin, Jefferson, Lincoln, St. Charles, St. Louis, and Warren. These maps reflect the dispersion of residency at time of Adult ERE referral. Unhoused clients are represented by the ZIP code where they spend their time OR (as a last resort) the ZIP code of the hospital from which they were referred to the Adult ERE Project. The map shading is divided in quintiles by natural breaks in the data with darker colored ZIP codes indicating higher numbers of referrals. The top five ZIP codes [8] of Adult ERE client residence include: 63044 (St. Louis), 63110 (St. Louis City), 63141 (St. Louis), 63118 (St. Louis City), 63128 (St. Louis), and 63136 (St. Louis).

[8] The top five ZIP codes by frequency includes more than five ZIP codes, because ties are allowed.

Referrals to Adult ERE Program: St. Louis City and St. Louis County Only

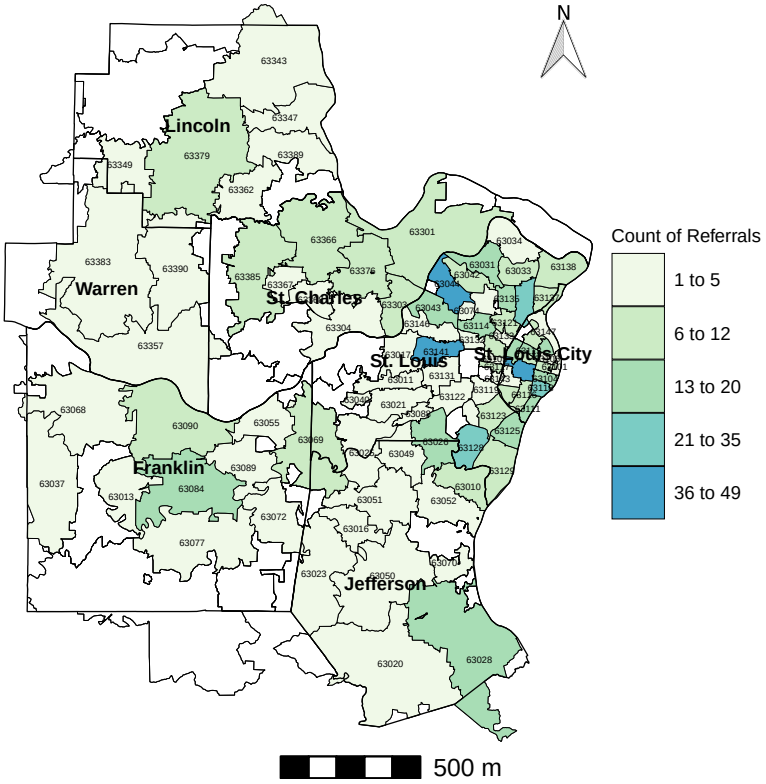
July 2021 to June 2022



Based on US Census Bureau ZIP Code Tabulation Area (ZCTA) Boundary Data

Referrals to Adult ERE Program: Seven Counties Served

July 2021 to June 2022



Based on US Census Bureau ZIP Code Tabulation Area (ZCTA) Boundary Data

Insurance Status

By design, Adult ERE focuses on clients who are un/under-insured at the time of referral. 29% of FY2022 Adult ERE-referred clients were uninsured at the time of referral. This is lower than the 38% uninsured in FY2021. The Outreach Team works to help Adult ERE clients to secure health coverage, including assisting with and tracking clients' Medicaid applications in process. At referral, 534 clients had Medicaid and/or Medicare. better payer coverage thanFY2021 when 38% of referred clients were uninsured. Of 794 clients uninsured at referral, 33 clients (15%) had a payer source 6 months after Adult ERE engagement. See Table 7 for full details about payer source.

Table 7: Insurance Status at Referral to Adult ERE, FY2022.

Insurance Status at Referral	Number of Referrals	Percentage of Referrals
Medicaid	504	63%
Uninsured	227	29%
Medicare	22	3%
Private Insurance	20	3%
Unknown/Refused	13	2%
Medicaid and Medicare	8	1%
Total	**794**	**100%**

Utilization History

The median number of **ER Visits in the 90 days prior to Adult ERE referral** experienced by ERE clients in FY2022 was 3, while the mean (or average number) was 4.6, while the median number of **hospitalizations in the 90 days prior to Adult ERE referral** was 2, while the mean was 2.3. Providing supports and resources that engage clients in alternatives to the hospital and reduce ER and hospital utilization is fundamental to the ERE project.

Outcomes

Engagement in Adult ERE Project

With the Adult ERE Outreach Team model, hospital referred-clients' engagement rates with the Adult ERE Outreach Team have remained high (85-90%) for the past five years. Adult ERE engagement (a slot filled) is defined as a client who kept a post-hospital appointment with the Adult ERE Outreach Team member. The FY2022 engagement rate of 93% was an increase from the engagement rate of 87% for FY2021. See Table 8 for details.

Table 8: Adult ERE Engagement Rates by Community Provider FY2022 and FY2021

CMHC	FY2022 Scheduled	FY2022 Engaged	FY2022 Engagement Rate	FY2021 Scheduled	FY2021 Engaged	FY2021 Engagement Rate
Adapt	36	28	78%	60	53	88%
BJC Behavioral Health	71	67	94%	112	100	89%
Compass Health	72	64	89%	91	79	87%
Comtrea	41	40	98%	50	39	78%
Hopewell	49	44	90%	61	52	85%
Independence Center	47	47	100%	38	38	100%
Places for People	51	49	96%	45	39	87%
Preferred Family Healthcare	53	50	94%	19	16	84%
Total	**420**	**389**	**93%**	**476**	**416**	**87%**

Collectively, the Adult ERE Outreach Team has fine-tuned their intensive outreach skills through a variety of trainings organized by BHN and partner organizations. The Adult ERE Team utilizes weekly meetings and periodic case staffing meetings with hospital managers to "staff" challenging cases.

Connection to Behavioral Health Services

Among those who attended an intake appointment, Outreach Team Members reported the time elapsed from initial engagement to the date of the appointment. Overall, 72% attended intake in the first 30 days in FY2022, whereas 73% attended intake within a month in FY2021. Refer to Figure 4 for full detail.

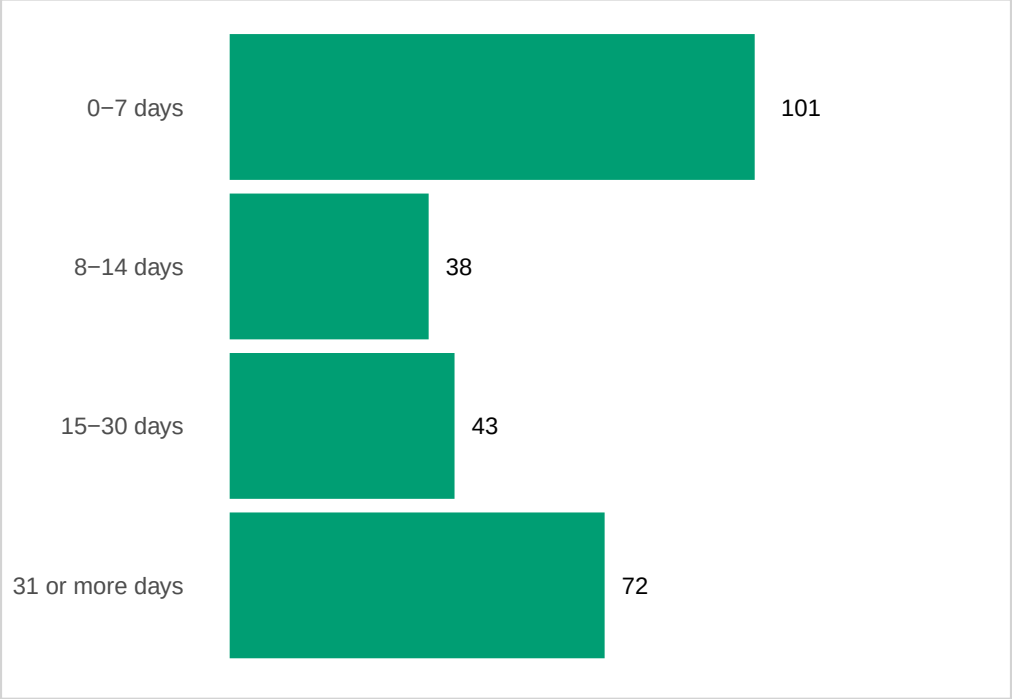


Figure 4: Adult ERE Time From Engagement With Outreach Team to Intake Appointment, FY2022.

Admission to Behavioral Health Services

For the purposes of the Adult ERE project, admission is defined as enrollment in one or more formal behavioral health (BH) services. This includes both Department of Mental Health (DMH) programs (CIMOR[9] documented) and non-DMH programs, offered by any community provider (e.g., health centers).[10] Of Adult ERE clients who engaged with an Adult ERE Outreach Team Member, 254 attended an intake appointment with a BH provider. Admission to behavioral health services is a prioritized outcome of Adult ERE Outreach Team interventions as it allows for connection to longer-term recovery support services. The chart below exhibits the admission rate to behavioral health services, disaggregated by the agency of the Outreach Team Member. Overall, 246 of FY2022 clients who engaged with an Adult ERE Outreach Team Member were admitted to behavioral health services; which is 63% of clients initially scheduled with an Adult ERE Team member being admitted to a BH service. See Table 9 for details.

[9]CIMOR database - Customer Information Management Outcomes and Reporting, Missouri Department of Mental Health's service and billing platform.
[10]Note: Prior to FY20, Adult ERE admission was defined as enrollment in DMH programming only.

Table 9: Adult ERE Admission Rates by Agency FY2022

Scheduling Agency	Admission Agency	Number of Appointments Scheduled	Number of Admissions	Percent Admitted
Adapt	ARCA	28	1	4%
	Center for Life Solutions		1	4%
	MO TAY-LER - Places for People		1	4%
	Other Organization		3	11%
	Other SU Agency		1	4%
	Preferred Family Healthcare		4	14%
	Queen of Peace Center		1	4%
	Salvation Army		1	4%
BJC Behavioral Health	ARCA	67	1	1%
	BJC Behavioral Health		29	43%
	Hopewell		1	1%
	Other Organization		4	6%
	Other SU Agency		2	3%
	Preferred Family Healthcare		2	3%
Compass Health	Centerpointe	64	1	2%
	Compass Health		26	41%
	Independence Center		1	2%
	Other Organization		1	2%
	Other SU Agency		2	3%
	Preferred Family Healthcare		6	9%
	Queen of Peace Center		1	2%
Comtrea	Comtrea	40	36	90%
Hopewell	Hopewell	44	18	41%
	Other SU Agency		1	2%
	Preferred Family Healthcare		1	2%
Independence Center	ARCA	47	1	2%
	Gateway Foundation		1	2%
	Independence Center		12	26%
	Other Organization		8	17%
	Other SU Agency		1	2%
	Preferred Family Healthcare		3	6%
	Queen of Peace Center		1	2%
	Salvation Army		1	2%
	Westend Clinic		1	2%
Places for People	BJC Behavioral Health	49	1	2%
	Hopewell		1	2%
	Other Organization		5	10%
	Other SU Agency		4	8%
	Places for People		18	37%
	Preferred Family Healthcare		1	2%
	Salvation Army		3	6%
Preferred Family Healthcare	BJC Behavioral Health	50	1	2%
	Center for Life Solutions		2	4%
	Other SU Agency		11	22%
	Preferred Family Healthcare		24	48%
Total	**-**	**389**	**246**	**63%**

Note: Please note that clients may not necessarily be admitted to the agency where they were originally scheduled.

Reconnection to Existing Behavioral Health Services

The Adult ERE and HCL IP projects count as "eligible" clients who were (a) already open with a CMHC at time of referral or (b) on a Disease Management (DM) cohort roster. A hospital would have no means of knowing if a patient is open and active with a CMHC or listed for DM outreach. Outreach Team Members seek to reconnect these clients to their existing providers or to a DM outreach team. Reconnection can happen prior to scheduling with Adult ERE (see above). In FY2022, after hospital referral to Adult ERE, 18% (145) of total client ERE services were considered "reconnections." The Adult ERE Outreach Team Members worked with 145 CMHC open clients and 10 DM Clients in FY2022.

Connection to Broader Supports and Services

The Adult ERE Outreach Team seeks to impact clients beyond engagement and admission to behavioral health services (see program goals above). Working with clients to identify their self-determined goals, the Adult ERE Outreach Team actively engages clients in addressing a myriad of other areas which support or pose barriers for recovery. Table 10 details volume of connections by service type among those with a need established at baseline.[11]

Table 10: Adult ERE Broader Service and Support Connections FY2022 and prior two fiscal years

Broader Service Type	Volume With Need at Baseline	Volume Referred to Resources at Three Months	Volume With Need Met or Stable at Three Months	Percent Need Met or Stable at Three Months
Basic Needs Assistance	367	72	84	23%
Community-based Assistance	482	123	116	24%
Crisis Service	225	61	79	35%
Dental Care	207	38	37	18%
Developmental Disabilities Services	45	3	57	127%
Employment Services	280	30	37	13%
Food Assistance	466	111	104	22%
Housing	605	175	117	19%
Legal Services	81	17	51	63%
Medication Assistance	475	180	181	38%
Mental Health Services	822	387	317	39%
Payer Assistance	389	124	92	24%
Physical Health Service	467	115	87	19%
Psychiatry	749	371	269	36%
Substance Use Service	469	157	109	23%
Transportation Assistance	369	92	89	24%
Total	**6,498**	**2,056**	**1,826**	**28%**

HCL Inpatient Project Impact, FY2022

Volume of Referrals

In the HCL Inpatient project, referrals were historically received directly from the hospitals to the Community Mental Health Center (CMHC) partner staff Liaisons during business hours, to their cell phones. In 2/2020, we collectively implemented a centralized phone line, answered by Behavioral Health Response (BHR), for all ERE and HCL Inpatient referral calls 24/7/365. This process enables BHR to help direct referred patients to which program and provides an algorithm for case assignment, which includes BHR checking the patient's CIMOR and Disease Management status, then their area of residence. This process provides accountability for tracking referrals received. The hospitals can still call the HCL IP outreach staffs' cell phones to initiate referral if they choose.

During FY2022 (07/01/2021 to 06/30/2022), participating referral sources[12] made 719 HCL Inpatient referrals. Mercy - St. Louis and Mercy - South were the two highest referring hospitals in FY2022 with 177 and 128 referrals respectively. See Table 11 for data on all referring hospitals.

[11] Any percentages over 100% are the result of data entry errors.
[12] Only hospitals with an adult inpatient psychiatric unit refer to HCL Inpatient.

Table 11: Referrals by Referral Source, FY2020 - FY2022

Referring Agency	FY2020		FY2021		FY2022	
	Number of Referrals	Percentage of Total Referrals	Number of Referrals	Percentage of Total Referrals	Number of Referrals	Percentage of Total Referrals
BJC - Barnes-Jewish Hospital	76	7%	48	5%	73	10%
BJH Psychiatric Support Center (PSC)	78	7%	40	4%	30	4%
Mercy - Jefferson	35	3%	93	9%	44	6%
Mercy - South	185	17%	177	18%	128	18%
Mercy - St. Louis	143	13%	219	22%	177	25%
SSM Health - DePaul	335	30%	196	20%	124	17%
SSM Health - SLU	75	7%	93	9%	55	8%
SSM Health - St. Joseph (St. Charles)	11	<1%	2	<1%	1	<1%
SSM Health - St. Joseph (Wentzville)	137	12%	85	9%	38	5%
SSM Health - St. Mary's	41	4%	42	4%	43	6%
South City Hospital	0	0%	1	<1%	4	<1%
BJC - Christian Hospital	0	0%	0	0%	2	<1%
Total	**1116**	**100%**	**996**	**100%**	**719**	**100%**

As noted, during FY2022, participating referral sources initiated 719 referrals from the 11 regional participating hospitals, representing a 28% decrease from the prior fiscal year. See Table 12 for detail on all referring agencies.

Table 12: Percentage Change in HCL Inpatient Referrals by Source From FY2021 to FY2022.

Referring Agency	2021	2022	Percentage Change from FY2021 to FY2022
BJC - Barnes-Jewish Hospital	48	73	52%
BJH Psychiatric Support Center (PSC)	40	30	-25%
Mercy - Jefferson	93	44	-53%
Mercy - South	177	128	-28%
Mercy - St. Louis	219	177	-19%
SSM Health - DePaul	196	124	-37%
SSM Health - SLU	93	55	-41%
SSM Health - St. Joseph (St. Charles)	2	1	-50%
SSM Health - St. Joseph (Wentzville)	85	38	-55%
SSM Health - St. Mary's	42	43	2%
South City Hospital	1	4	300%
BJC - Christian Hospital	0	2	NA
Total	**996**	**719**	**-28%**

Table 13 shows the number and proportion of referrals by hospital cross-tabulated by the CMHCs to which referrals were made.

Table 13: HCL Inpatient Referrals by Hospital and CMHC, FY2022.

Referring Hospital	BJC Behavioral Health	Compass Health	Comtrea	Hopewell	Independence Center	Places for People	Total	Percent of Total Referrals
BJC - Barnes-Jewish Hospital	4	1	0	10	38	13	**66**	**11%**
BJC - Christian Hospital	0	1	0	1	0	0	**2**	**< 1%**
BJH Psychiatric Support Center (PSC)	0	0	0	11	8	8	**27**	**5%**
Mercy - Jefferson	1	0	42	0	0	0	**43**	**7%**
Mercy - South	33	12	45	0	1	4	**95**	**16%**
Mercy - St. Louis	51	31	15	5	2	31	**135**	**23%**
South City Hospital	0	0	0	0	0	4	**4**	**1%**
SSM Health - DePaul	26	29	1	15	15	12	**98**	**17%**
SSM Health - SLU	0	1	0	6	36	9	**52**	**9%**
SSM Health - St. Joseph (St. Charles)	0	0	0	1	0	0	**1**	**< 1%**
SSM Health - St. Joseph (Wentzville)	0	24	0	0	0	1	**25**	**4%**
SSM Health - St. Mary's	6	3	0	22	1	5	**37**	**6%**
Total	**121**	**102**	**103**	**71**	**101**	**87**	**585**	**100%**
Percent of Total Referrals	**21%**	**17%**	**18%**	**12%**	**17%**	**15%**	**100%**	**NA**

Scheduling Referrals

Table 14: Referrals to HCL IP Scheduled by CMHC for the Past Three Fiscal Periods.

Scheduled CMHC	2020	2021	2022
BJC Behavioral Health	254	201	96
Compass Health	211	143	95
Comtrea	107	151	96
Hopewell	47	40	61
Independence Center	125	99	82
Places for People	59	92	87
Total	**803**	**726**	**517**

Of those referred by a participating hospital in FY2022, 517 clients were scheduled for an appointment at a CMHC. This yielded a 72% scheduling rate - meaning that 72% of individuals referred by a hospital met eligibility criteria, agreed to the referral, and were scheduled for a CMHC intake appointment. This reflects an increase from FY2021, in which the scheduling rate was 73%. Sixty-eight referrals were reconnected to existing services at a CMHC/Disease Management (DMH outreach project). Of those reconnected, a total of 11 distinct DM clients worked with HCL Inpatient Liaisons in FY2022. Of those not scheduled or reconnected to a CMHC/Disease Management, 62% declined services and 9% were ineligible (see HCL Inpatient scheduling information above). See Table 15 for more detail.

Table 15: HCL Inpatient Scheduling Rate by Referring Hospital, FY2022.

Referring Agency	Number Referred	Number Reconnected to CMHC/DM	Number Scheduled	Scheduling Rate
BJC - Barnes-Jewish Hospital	73	13	53	73%
BJC - Christian Hospital	2	1	1	50%
BJH Psychiatric Support Center (PSC)	30	5	22	73%
Mercy - Jefferson	44	3	40	91%
Mercy - South	128	8	87	68%
Mercy - St. Louis	177	13	122	69%
South City Hospital	4	0	4	100%
SSM Health - DePaul	124	11	87	70%
SSM Health - SLU	55	8	44	80%
SSM Health - St. Joseph (St. Charles)	1	0	1	100%
SSM Health - St. Joseph (Wentzville)	38	2	23	61%
SSM Health - St. Mary's	43	4	33	77%
Total	**719**	**68**	**517**	**72%**

Note: Scheduling Rate is the number scheduled over the number referred minus those reconnected to CMHC/DM.

Slot Utilization

To manage commitments to serve clients in the HCL projects, "slots" or openings for referred clients to engage in project services are allocated. Beginning in FY21, a slot was defined as a client that was enrolled in one or more services at a CMHC, funded by Department of Mental Health (DMH) (CIMOR enrollment).[13] In spring 2020, the goal of HCL IP clients to serve was increased and slots were adjusted.

Table 16 illustrates the allocated number of slots for FY2022 and FY2021 by CMHC provider and their utilization. The goal of slots to fill per quarter is 25%. Overall, the slot utilization rate was 74% for FY2022 (a decrease from the 106% in FY2021). Historically, HCL IP has received more referrals and admitted more clients than slots.

Table 16: HCL IP Slot Utilization by Community Provider FY2022 and FY2021.

CMHC	FY2022 Slots	FY2022 Admitted Clients	Percent of FY2022 Slots Filled	FY2021 Admitted Clients	Percent of FY2021 Slots Filled
BJC Behavioral Health	132	71	54%	149	122%
Compass Health	156	72	46%	83	58%
Comtrea	81	88	109%	129	172%
Hopewell	53	37	70%	37	76%
Independence Center	63	73	116%	81	142%
Places for People	63	67	106%	58	100%
Total	**548**	**408**	**74%**	**537**	**106%**

HCL Inpatient Client Demographics at Baseline

Age, Gender, Race

Demographic measures for the HCL Inpatient project include age, gender, and race reflected below:

The age group with the most frequent referrals in FY2022 was 26 to 64 with 76% of referrals. See Figure 5 for additional details.

[13] From HCL Inpatient project inception through FY19, a utilized slot was defined as a client who kept an initial intake appointment at a CMHC.

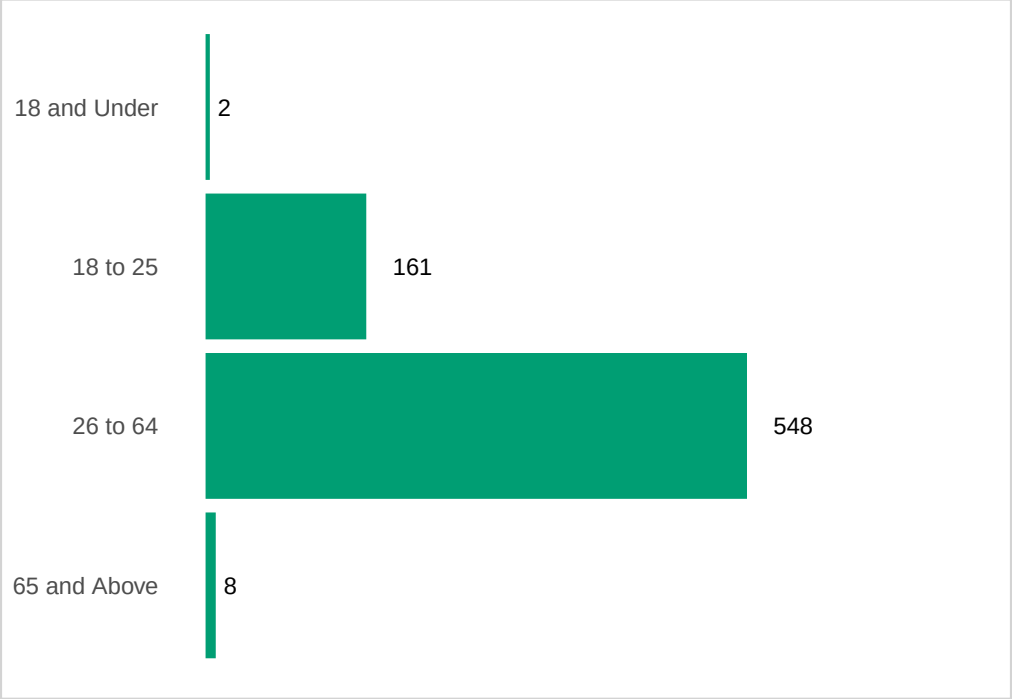


Figure 5: Referrals to HCL Inpatient by Age Range, FY2022.

In FY2022, among clients referred to HCL IP, 51% identified as Male and 47% identified as Female. See Figure 6 for additional details.

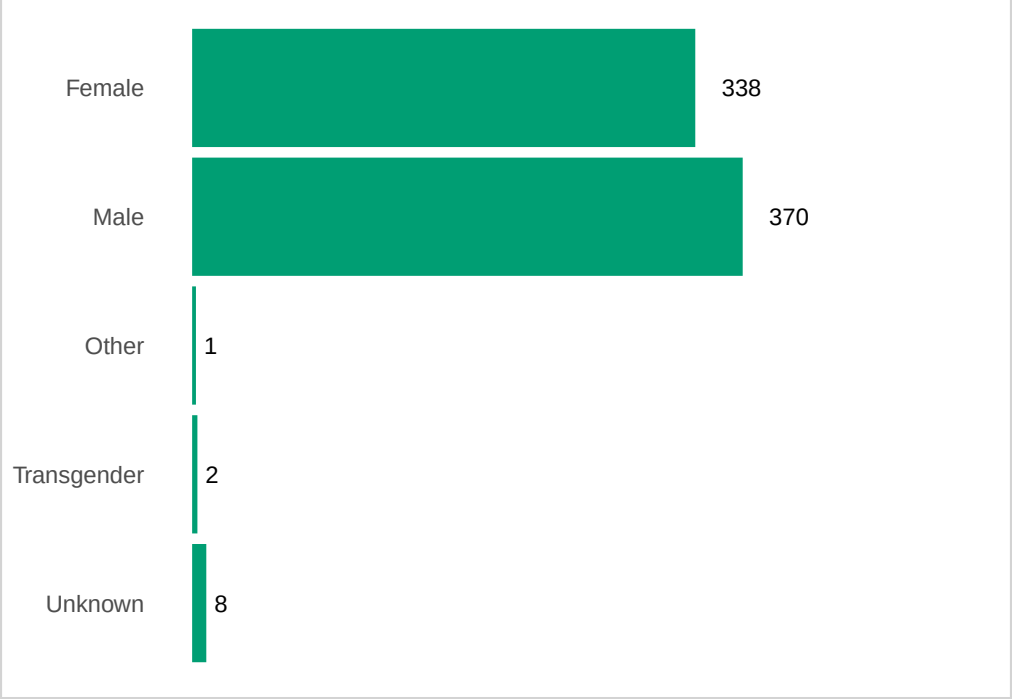


Figure 6: Referrals to HCL Inpatient by Sex, FY2022.

In FY2022, among clients referred to HCL IP, 50% identified as White and 31% identified as Black or African American. Please see Figure 7 for additional details.

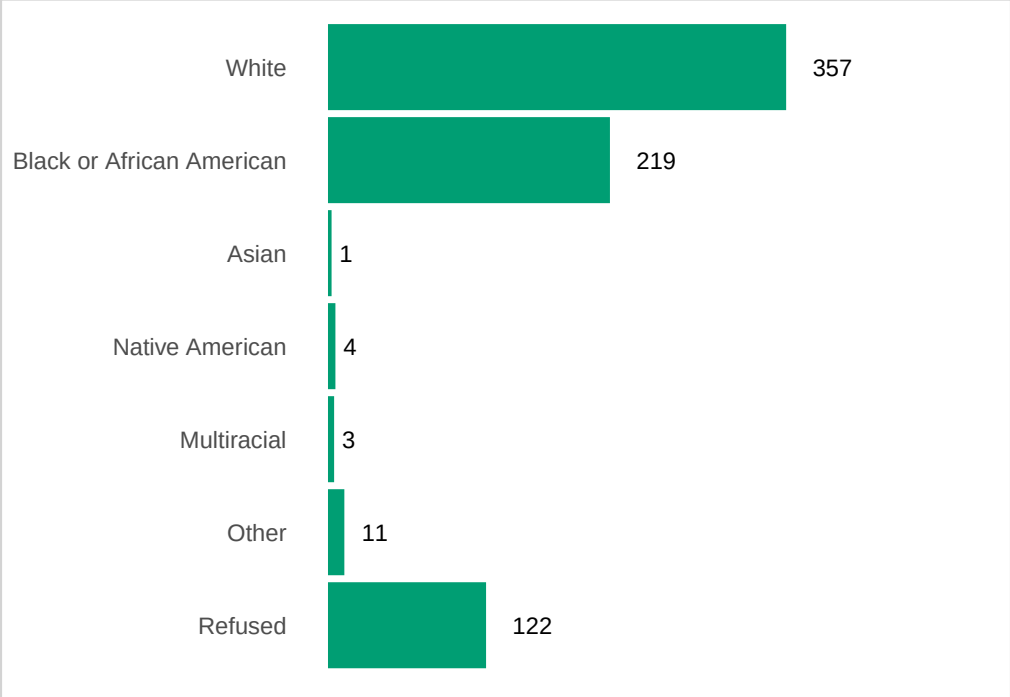


Figure 7: Referrals to HCL Inpatient by Race/Ethnicity, FY2022.

Housing Status

In FY2022, 16% of referrals identified the person referred as unhoused at the time of referral.[14] This is NA FY2021, when 16% of referrals were persons who were identified as unhoused. This proportion of unhoused clients indicates that HCL Inpatient clients are a substantially more stable population when compared to the 50% unhoused among Adult ERE clients in FY2022.

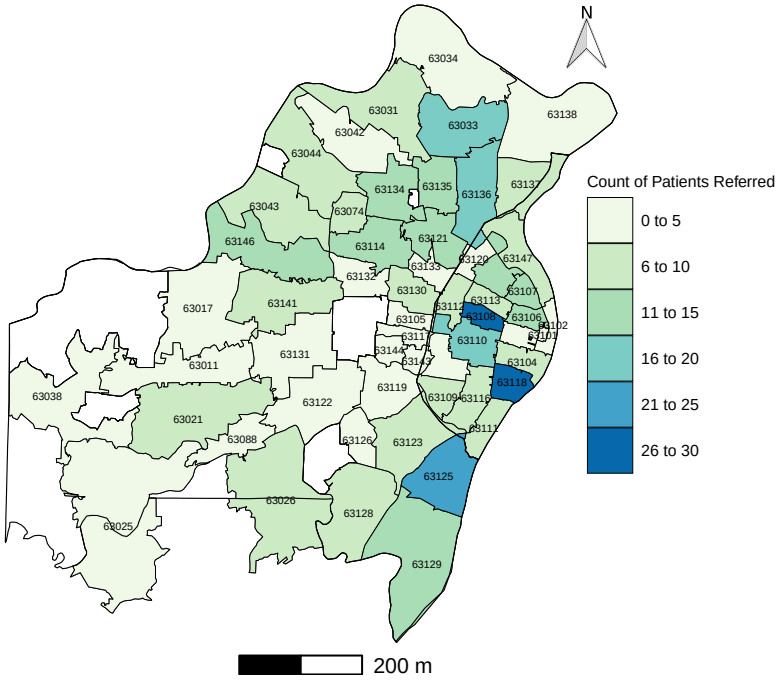
Area of Residency

The Adult HCL project serves seven counties in Missouri's Eastern Region: St. Louis City and the Counties of Franklin, Jefferson, Lincoln, St. Charles, St. Louis, and Warren. These maps reflect the dispersion of residency at time of referral. Unhoused clients are represented by the ZIP code where they spend their time OR (as a last resort) the ZIP code of the hospital from which they were referred to the ERE Project. The map shading is divided in quintiles by natural breaks in the data with darker colored ZIP codes indicating higher numbers of referrals. The top five ZIP codes of HCL Inpatient client residence include: 63108 (St. Louis City), 63118 (St. Louis City), 63301 (St. Charles), 63125 (St. Louis), and 63033 (St. Louis).

[14] Due to a change in reporting, it is not possible to report on persons with housing instability for HCL IP.

Referrals to HCL IP Program: St. Louis City and St. Louis County Only

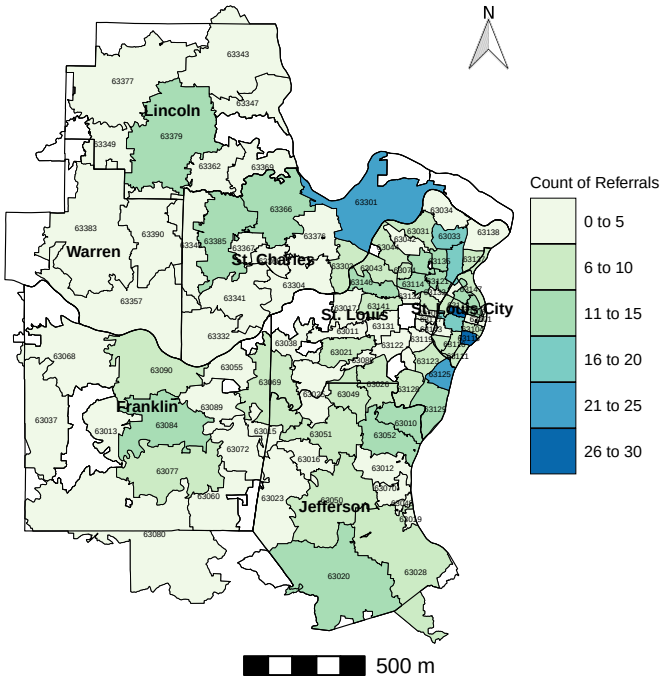
July 2021 to June 2022



Based on US Census Bureau ZIP Code Tabulation Area (ZCTA) Boundary Data

Referrals to HCL IP Program: Seven Counties Served

July 2021 to June 2022



Based on US Census Bureau ZIP Code Tabulation Area (ZCTA) Boundary Data

Insurance Status

The HCL Inpatient program provides a vital linkage between acute and community care, particularly for un- and under-insured clients. In FY2022 43% of FY2022 Inpatient referrals were uninsured at time of referral, while 36% had

Medicaid and/or Medicare. See Table 17 for full details about payer source.

Table 17: Insurance Status at Referral to HCL Inpatient, FY2022.

Insurance Status at Referral	Number of Referrals	Percentage of Referrals
Uninsured	306	43%
Medicaid	233	32%
Unknown/Refused	125	17%
Private Insurance	20	3%
Medicaid and Medicare	16	2%
Medicare	13	2%
Other	4	1%
VA Benefits	2	< 1%
Total	**719**	**100%**

Outcomes

Engagement in HCL Inpatient Project

HCL Inpatient Liaisons foster access to community-based behavioral health service appointments for those who are acutely hospitalized. Kept appointment rates depict the engagement of clients in a post-hospital initial appointment at a CMHC. In FY2022, the overall kept appointment rate reflected that **99% of those who were scheduled showed for a CMHC appointment**. This marked a decrease from the FY2021 kept appointment rate of 94%.

Time From Discharge to Intake

Among those who showed for an intake appointment at a CMHC, 48% of clients attended that intake within 7 days of hospital discharge. Another 31% attended an intake within 8 to 30 days following hospital discharge. Thus, 79% attended intake in first 30 days. Only 21% attended an intake greater than one month following hospital discharge. This can be seen in the Figure 8.

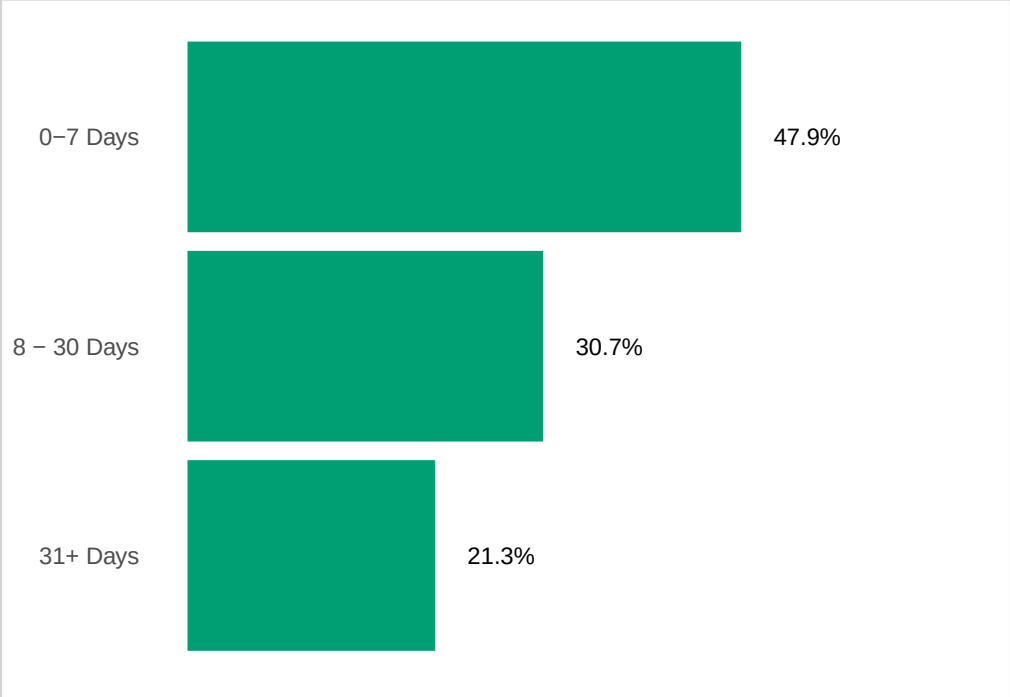


Figure 8: Time From Hospital Discharge to Intake Appointment, FY2022.

HCL Inpatient Admission to CMHC DMH Programs

Admission to longer-term recovery support services offered by a CMHC is the main objective of the HCL Inpatient project. For HCL IP, admission is defined as enrollment in one or more services delivered by a CMHC (DMH-funded / CIMOR indicated or otherwise). Overall, in FY2022 the HCL Inpatient project saw a 64% admission rate (an increase from 42% in FY2021). This means that 64% of those who kept an appointment with an Outreach Team Member (393 clients) were admitted to one or more CMHC programs. Admission rates by Scheduling and Admission CMHC are presented in Table 18.

Table 18: HCL IP Admission Rates by Agency FY2022

Scheduling Agency	Admission Agency	Number of Appointments Scheduled	Number of Admissions	Percent Admitted
BJC Behavioral Health	BJC Behavioral Health	96	70	73%
Compass Health	Compass Health Preferred Family Healthcare	95	68 4	72% 4%
Comtrea	Comtrea	96	88	92%
Hopewell	Hopewell	61	26	43%
Independence Center	Independence Center	82	70	85%
Places for People	Places for People	87	67	77%
Total	**-**	**612**	**393**	**64%**

Note: Please note that clients are usually, but not always, admitted to the agency where they were originally scheduled.

Appendix A

Table 19: Comparison of Flagship HCL Adult Initiatives

HCL Inpatient	Adult Emergency Room Enhancement (ERE)
Aim	
Effectively link adults from Inpatient psychiatric hospitalization to outpatient care at a Community Mental Health Center (CMHC).	Effectively link adults from hospital encounter to community-based outpatient care, with any community provider - CMHC, SU provider, or other.
Client Eligibility	
Clients with significant behavioral health needs, who are un/under-insured, 18 years of age or older, residents or presented as homeless in the targeted region (can include clients open with a CMHC or on the Disease Management (DM) cohort roster).	Same as HCL IP
Hospitalized for psychiatric needs.	High utilizers of hospital services (min. 3 visits in 3 months, 6 visits in 1 year).
Pre-screened for having a severe mental illness meeting admission criterion to a CMHC.	MH or SU concern (DOES NOT need an eligible diagnosis for CMHC services).
	Often needs more intensive outreach to link the person to outpatient services (i.e., homeless).
Additional Resources	
	Grant resources to assist approximately 1/3 (100) clients to access substance use (SU) treatment.
	Flexible funds used to address barriers to service engagement (e.g., basic needs) during engagement period.
Referral Process	
Staff at “onboarded” hospitals call 636-642-4444, any time 24/7/365. BHR manages initial referral calls to discern initial eligibility and assign the case based on: • Program of eligibility. • If patient is open at an agency. • Patient’s area of residence. • A zip code algorithm to disperse referrals.	Same as HCL IP
Hospital staff may refer directly to HCL Liaisons by phone (this is not the preferred method).	
Data Tracking	
Track if client shows at the CMHC and is admitted.	Track client DMH-required outcomes at referral, baseline (first encounter), 3, and 6 months.

Appendix B

Table 20: Hospital Community Linkages (HCL) Managers & Clinical Directors Rosters

Name	Organization
Lekesha Davis	AME Hopewell Center
Teresa Brandon	AME Hopewell Center
Bart Andrews	Behavioral Health Response
Laura Coleman	Behavioral Health Response
Andrea Al-Hussain	BJC Behavioral Health
Shannon Buechler	BJC Behavioral Health
Margo Pigg	BJC Behavioral Health
Scott Bayliff	Compass Health Network (Formerly Adapt)
Cindy Elliott	Compass Health Network (Formerly Adapt)
Jamie Bartin	Compass Health Network (Formerly Adapt)
Liz Koehler	Compass Health Network
Holly Thomas	Compass Health Network
Gary Gendron	COMTREA, Inc.
Amy Phillips	COMTREA, Inc.
Jennifer Higginbotham	Independence Center
Leah Sanders	Independence Center
Brittany Barbour	Places for People
Rhonda Coursey-Pratt	Places for People / BHN since 9/20
Spring Creek	Places for People
Barbara Zawier	Places for People
Brian Quick	Preferred Family Healthcare
Megan Sohn	Preferred Family Healthcare
Karen Bradshaw	St. Louis Integrated Health Network

ERE and HCL IP Contact:

Sally Haywood, Senior Director, Strategic Initiatives
Behavioral Health Network of Greater St. Louis (BHN)
shaywood@bhnstl.org, 314-703-3653

Appendix C

Table 21: St. Louis Region Adult Emergency Room Enhancement Flexible Funds - FY2022

Provider	Flex Funds Annual Allocation	Flex Funds Quarterly Allocation	Q1 Flex Used	Q2 Flex Used	Q3 Flex Used	Q4 Flex Used	Total YTD	Flex Funds REMAINING	% of Flex Funds Used
Adapt of Missouri	$4,200	$1,050	$1,053	$157	$650		$1,861	$2,339	44%
BJC BH	$4,194	$1,049	$54	$278	$1,084		$1,417	$2,777	34%
COMTREA	$5,000	$1,250	$774	$903	$1,697		$3,375	$1,625	67%
Compass	$2,345	$586	$697	$1,013	$763		$2,473	$(128)	105%
Hopewell	$3,950	$988	$133	$0	$171		$304	$3,846	8%
Independence Center	$4,550	$1,138	$787	$513	$643		$1,944	$2,606	43%
Places for People	$6,660	$1,665	$2,592	$1,704	$814		$5,110	$1,550	77%
Preferred Family Health	$4,101	$1,025	$1,557	$770	$863		$3,189	$912	78%
Totals	$35,000	$8,750	$7,647	$5,338	$6,686		$19,761	$15,329	56%

Table 22: Q3 Flex Funds by Category

Category	Amount
Transportation	$752.53
Temporary Housing/Shelter	$2,398.70
Medication	$430.56
Phones/Minutes	$1,786.13
Other (Closing, Food, ID)	$1,281.52
Uncategorized	$36.20