# 2018 St. Louis Adult Behavioral Health Community Needs Assessment

Prepared for St. Louis Mental Health Board

Prepared by Behavioral Health Network of Greater St. Louis

September 2018



#### **ACKNOWLEDGEMENTS**

It is with deep appreciation that Behavioral Health Network of Greater St. Louis acknowledges those who show their commitment to improving behavioral health in our region. We are grateful for the contributions of:

- More than 100 community members and individuals with lived experience, providers, and administrators who generously gave their time and expertise to this process, particularly in the participatory groups.
- St. Louis Mental Health Board (St. Louis MHB) Membership of the Board of Directors and leadership staff, particularly Jama Dodson and Cassandra Kaufman.
- Behavioral Health Network of Greater St. Louis (BHN) Membership of the Board of Directors, Adult Services Advisory Board, Hospital Community Linkages Liaisons Committee, Bridges to Care & Recovery Steering Committee and volunteer Wellness Champions. Efforts from the following staff members were instrumental: Alison Kraus, Susan Scribner, Wendy Orson, Tamela Strayhorn, and Rose Jackson-Beavers as were those of practicum students, Gina Aitch, Evan Griffin, and Matthew Grossman.
- Leadership at entities instrumental to conducting the Participatory Group Sessions Haven Recovery Homes, Mental Health America of Eastern Missouri, NAMI St. Louis, St. Louis Association of Community Organizations (SLACO), Thomas Dunn Learning Center, Vision for Children at Risk (VCR), and Lane Tabernacle CME Church.

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#### **EXECUTIVE SUMMARY**

#### BACKGROUND AND PURPOSE OF THE 2018 ADULT BH NEEDS ASSESSMENT

St. Louis Mental Health Board (MHB) collaborated with Behavioral Health Network of Greater St. Louis (BHN) to design and implement a 2018 Adult Behavioral Health Community Needs Assessment. The purpose of this Needs Assessment is to identify St. Louis City's assets and strengths, barriers and gaps, and opportunities concerning mental health and substance use (SU) of adults 18 years of age and older. The findings will then inform recommendations and opportunities to respond to those needs. Findings from this systematic assessment of adult behavioral health (BH) will also inform future community investments in programs and services by MHB. The information will support MHB's vision of "...an integrated system of social, behavioral and physical health services to build an equitable, thriving community," so that City residents can reach their highest potential.

#### SCOPE AND OVERVIEW OF APPROACH

To meet the purpose of the 2018 Adult BH Community Needs Assessment, BHN focused on BH services, while remaining attentive to a wide range of fields related to adult wellbeing. For our purposes, "behavioral health" is a broadly applied term that encompasses needs and services for mental health and/or SU at all levels of severity and points on the service continuum. Data collection and analysis applies a health equity lens, with attention to geographic and demographic disparities. This report combines findings from three categories of source information:

- Review of Regional Reports To build on the areas' existing work, BHN conducted a review, summary and analysis of key recent regional reports and identified common themes related to adult BH needs. This review included a total of 21 sources (14 regional reports produced since 2013, and seven recent Hospital Community Health Needs Assessments).
- Qualitative Data Analysis BHN solicited perspectives from more than 125 people through five BHN staff-led participatory group sessions with community members (adults with a past or present BH condition, family caregivers, general community residents) and service providers of BH and related services across community-based and hospital settings, plus a re-convening of these stakeholders. BHN also analyzed summary notes from seven other recent focus group sessions led by other organizations.
- Quantitative Data Analysis BHN gathered and analyzed BH-specific key indicator data trending over time, and provided comparisons between St. Louis City, St. Louis County, State of Missouri, as well as zip code data when available. Sources include governmental, private and non-profit secondary and primary data sources.

Through all three categories of source information, BHN sought insights regarding aspects of BH services such as strengths and assets, needs and gaps, and barriers and opportunities to inform the findings and recommendations. A synopsis of key findings from each method can be found in the three respective sections of this report.

A Donabedian model of quality of care<sup>1</sup> was used to guide the process of inquiry with the participatory groups. Three major domains are considered: Service delivery structure, process and outcome, as shown in the diagram below. This model served as the framework when considering strengths and assets, needs and gaps, and barriers and opportunities, to ensure probing in each of these domains with the participatory groups.



#### SUMMARIZED KEY FINDINGS

Throughout the past 10 years, the St. Louis City population has experienced improvements in economic and community-wellbeing (such as median household income, unemployment, violent crime and most BH emergency room visits). However, other key factors, such as housing instability and homelessness, poverty rates and BH hospital utilization have persisted or grown. Regardless of these improvements, most St. Louis City BH risk indicators and outcomes are far worse than neighboring St. Louis County and the State of Missouri. Thus, St. Louis City adults face greater challenges and greater BH needs than their counterparts. Moreover, certain areas of the City, primarily in eastern areas of far North and far South City experience the greatest impact.

In addition to the findings conveyed by numeric data, key regional reports and qualitative sessions with community members and providers indicate the following strengths, weaknesses, and opportunities in St. Louis City.

#### Resources and assets:

- Strong support services
- Growing range of treatment services and settings
- Attention paid to outreach and transitions of care support
- Providers oriented toward and addressing BH and broad recovery needs
- Collaborative provider relationships

<sup>&</sup>lt;sup>1</sup> NHS Improvement. "A Model for Measuring Quality of Care." 2017. www.improvement.nhs.uk/documents/2135/measuring-quality-care-model.pdf.

#### Needs and gaps:

- Access and options for mental health and SU services and support
- Community level violence and trauma support
- Services for specific, vulnerable populations
- Focus on crisis prevention
- Intergenerational interventions and support
- Attention to broad recovery needs

#### **Barriers that pose challenges:**

- Affordability of services
- Accessibility of services (physical access and communication and awareness)
- Availability of services/provider capacity
- System complexity and lack of navigational support
- Negative experiences with services
- Stigma associated with services and support
- Social determinants of health

### Opportunities and recommendations that leverage existing resources or invest in the aforementioned areas of need:

- Expand capacity, access and enhance navigation to BH Services
- Strengthen follow-up and transitions of care support
- Promote training, education and public awareness of BH services throughout the community
- Advance recovery-orientated services and support
- Address critical recovery needs to reduce barriers and enhance long term stability
- Expand BH and cross-sector provider integration and collaboration
- Improve data monitoring and alignment

#### **RECOMMENDATIONS**

### RECOMMENDATION 1: EXPAND SERVICE CAPACITY TO MEET THE NEEDS OF MORE PEOPLE AND DEVELOP INNOVATIVE APPROACHES TO ADDRESS BEHAVIORAL HEALTH NEEDS

Participatory groups, regional reports and quantitative indicators consistently emphasized a strong need for more BH services and supports. These challenges necessitate concerted efforts to expand BH services in areas of greater need or gaps.

### RECOMMENDATION 2: IMPROVE ACCESS TO EXISTING BEHAVIORAL HEALTH SERVICES BY REMOVING BARRIERS AND OFFERING MORE NAVIGATIONAL ASSISTANCE

Findings describe a highly complex and fragmented system that poses challenges to accessing existing services. These challenges result in under-utilization of services and also negatively impact consumer experience. Efforts should be made to address barriers such as hours of operation, physical location/transportation, navigation support, awareness, and affordability. Additional enhancements should include: better transitions of care, increased service collaboration within and across providers.

### RECOMMENDATION 3: IMPLEMENT MORE RECOVERY-ORIENTED, EVIDENCE-BASED ADULT BEHAVIORAL HEALTH SERVICES

Regional reports, focus groups and key informants agree that more evidence-based services and support addressing critical aspects of recovery are needed. Such services are often overlooked in a narrow focus on traditional BH service delivery. Quantitative data point to the prevalence of community violence and trauma that have a direct impact on BH needs. Additionally, support for holistic recovery approaches that engage and recognize natural support in adults' lives are needed. Improving BH service options and quality through investment in evidence-based practices toward recovery would advance individual and systemic outcomes.

## RECOMMENDATION 4: BUILD THE CAPACITY OF BEHAVIORAL HEALTH SERVICE PROVIDERS TO INTERRUPT OR PREVENT CRISES AT EARLIER STAGES AND RESPOND TO CRISES IN MORE INNOVATIVE AND EFFECTIVE WAYS

Shifting to more proactive and effective interventions both in the prevention of, and the response to, crisis will require transformation in St. Louis City. Minimal change in volume of overall community-based care provision over time, coupled with rising emergency department utilization as well as individual perceptions concur that there is limited access to services until a crisis occurs. Qualitative groups emphasized the challenge that individuals face in waiting until symptoms and needs escalate in order to seek or receive services. Innovative practices in deploying effective crisis intervention practices are needed to change the landscape of crisis in St. Louis City. Earlier intervention in the life- and disease-course would provide upstream approaches to catch and break cycles of crisis.

### RECOMMENDATION 5: PRIORITIZE SERVICES AND SUPPORT FOR HIGH-NEED GEOGRAPHIC AREAS AND VULNERABLE POPULATIONS

The St. Louis region remains one of the most socially and economically segregated cities nationwide. Through systems, policies and practices, the needs of specific populations and communities have been marginalized and inequities exist. Across all data sources, there were calls for investments in systemic responsiveness to BH needs of particular populations. Specific vulnerable populations with unique needs including the following:

- Vulnerable communities (areas experiencing high poverty and risk indicators Eastern Far North St. Louis City and Far South St. Louis City)
- Individuals involved in the criminal justice system
- Transition-age/youth and young adults
- Individuals with co-occurring SU and mental health disorders
- Individuals with co-morbid health concerns (e.g. perinatal women, chronic illness)
- Adults who are homeless or housing unstable
- Lesbian, gay, bisexual, transgender, queer (LGBTQ+) adults (Note: Gender-specific service needs were also flagged, with African-American males among the most vulnerable.)

### RECOMMENDATION 6: FOSTER MORE SUCCESSFUL RECOVERY BY ADDRESSING SOCIAL DETERMINANTS OF HEALTH AS PART OF TREATMENT AND INTERVENTION

The substantial burdens on St. Louis City adults related to social determinants of health are repeated within regional reports, qualitative groups and quantitative data. These challenges contribute to BH concerns and barriers to accessing and maintaining engagement with BH programs. Significant individual and systemic BH improvements can be gained by implementing effective approaches in addressing social determinants of health to foster fuller recovery.

#### INTRODUCTION

#### BACKGROUND AND PARTNERSHIP

St. Louis Mental Health Board (MHB) collaborated with Behavioral Health Network of Greater St. Louis (BHN) to design and implement a 2018 Adult Behavioral Health (BH) Community Needs Assessment. Findings from this systematic assessment of adult mental health and SU (BH) needs in the City of St. Louis will inform future community investments from the City of St. Louis Community Mental Health Fund, administered by MHB.

Established in 1994, the St. Louis MHB "improves the quality of life for city residents by investing and participating in a coordinated system of social, behavioral, and physical health services aligned with community priorities." The board is committed to administering the entrusted tax revenue funds to achieve its vision of "investing in and strengthening an integrated system of social, behavioral and physical health services to build an equitable, thriving community."

BHN of Greater St. Louis is a non-profit network organization, representing a collaborative effort of healthcare providers, advocacy organizations, government leaders, and community stakeholders dedicated to developing an accessible and coordinated system of behavioral health care throughout the seven-county Eastern Region of Missouri. Their mission is "to improve the community by leading behavioral health planning and coordination" with the vision "to develop a coordinated, accessible and accountable system of behavioral health and support services, so the people in our region will reach their highest potential."

Meaningfully aligned in mission and vision for advancing behavioral health in the St. Louis area, MHB and BHN mutually benefit from this coordinated behavioral health assessment. Their collaboration both increases capacity of data-driven decision-making in the behavioral health safety net system as well as guides the region toward a collective set of priorities in addressing the systemic challenges that impact behavioral health.

#### OBJECTIVES OF THE 2018 ADULT BH COMMUNITY NEEDS ASSESSMENT

The objectives of the 2018 Adult Behavioral Health (BH) Needs Assessment included:

- 1. Identifying needs, assets, system-level gaps, and opportunities, and using this data to inform recommendations for the region's response to adult BH needs, especially those which might be addressed by service providers and supported by funders
- 2. Building upon existing organizational relationships to strengthen and formalize processes for monitoring community needs in an ongoing way
- 3. Utilizing this process to lead planning and coordination in the region regarding the development of systemic means of addressing BH needs through a network of safety-net providers

Specifically, BHN aims to:

- Define the characteristics and demographics of adults in St. Louis City
- Identify the recipients of BH services in St. Louis City, determine their needs, and attend to consumer populations and needs that are unserved or underserved
- Explore adult BH services offered in St. Louis City to:
  - Examine the adult BH services currently provided as well as the perceptions of the quality of services provided to City residents (guided by the Donabedian model of quality of care as a framework)<sup>2</sup>
  - o Identify the needs and systemic gaps in meeting needs
  - o Define the challenges and/or barriers that limit consumer access to services
  - o Determine regional resources, assets, and opportunities

This Needs Assessment is intended to be leveraged collaboratively to align planning and coordination, minimize duplicative efforts, prioritize regional needs, and move toward shared efforts to implement and track improvement, and to better address the BH needs of adults in St. Louis City.

#### **DEFINITIONS**

This Needs Assessment uses the following definitions of terms:

- Adult: A term used in this report to include individuals ages 18 years of age and older
- **Behavioral Health (BH)**: A broadly applied term that encompasses the needs and services for mental health and/or substance use concerns, at all levels of severity and points on the service continuum
- Mental Health (MH) Services: The efforts delivered to treat and improve functioning of those experiencing crisis, and acute or long-term needs related to challenges in thinking, mood, and/or behavior
- Substance Use (SU) Services: The efforts delivered to treat and improve functioning of those experiencing crisis, acute or long-term needs related to the recurrent use of alcohol and/or drugs causing clinically and functionally significant impairment
- Safety-Net Providers: Those providers that organize and deliver a significant level of health care and other related services to uninsured, Medicaid, and other vulnerable populations.<sup>3</sup> They are distinguished by their commitment to provide services for people with limited or no access to health care due to financial circumstances, insurance status, or a health condition<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> NHS Improvement. "A Model for Measuring Quality of Care." 2017. www.improvement.nhs.uk/documents/2135/measuring-quality-care-model.ndf.

<sup>&</sup>lt;sup>3</sup> Institute of Medicine (IOM). "America's Health Care Safety Net: Intact but Endangered."

<sup>&</sup>lt;sup>4</sup> Gage, Larry. "What is a Safety Net Hospital?". National Association of Public Hospitals and Health Systems (NAPH). 2015. www.literacynet.org.

- Social Determinants of Health: The environmental conditions (social, economic, and physical) in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.<sup>5</sup>
- Missouri's Eastern Region: The seven counties of Franklin, Jefferson, Lincoln, St. Charles, Warren, St. Louis, and St. Louis City. This is the focus area of BHN. However, it should be noted that the focus of this Needs Assessment is St. Louis City.
- **Recovery:** In congruence with Substance Abuse and Mental Health Services Administration (SAMSHA),<sup>6</sup> this Report defines recovery as a process of change through which individuals improve their health and wellness, live self-directed lives, and strive to reach their full potential, with four major dimensions that support a life in recovery: Health, home, purpose, and community.

#### OVERVIEW OF APPROACH

The 2018 Adult BH Needs Assessment objectives have been addressed through the implementation of both quantitative and qualitative methods. In conjunction with MHB staff, BHN identified the focus of this work including core methodology and priority data elements to pursue. The Report's attention centers on clinical services and on safety-net providers and publicly available BH services. Throughout the Needs Assessment process, BHN engaged key leaders from BHN, MHB, and collaborative partners to inform the effort and ensure the objectives of the Needs Assessment were met.

This Needs Assessment combines findings from three methodologies:



<sup>&</sup>lt;sup>5</sup> Healthy People 2020. "Social Determinants of Health." 2018. www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

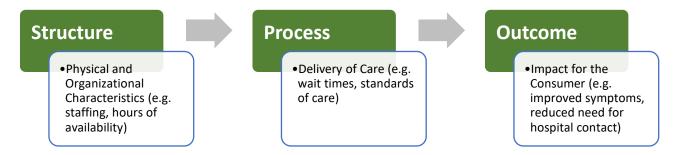
<sup>&</sup>lt;sup>6</sup> Substance Abuse and Mental Health Services Administration (SAMSHA). "Recovery and Recovery Support." 2017. www.samhsa.gov/recovery.

• **Key Regional Reports**: To build on the region's existing work, BHN conducted a review, summary, and an analysis of key recent community reports and identified common themes related to the Needs Assessment objectives. This review included 14 regional reports produced since 2013, and seven recent Hospital Community Health Needs Assessments. Most of these reports included both primary and secondary data analysis, as well as qualitative data solicited from key stakeholders and/or individuals representing the community of focus, with some synthesis of data gleaned from secondary sources.

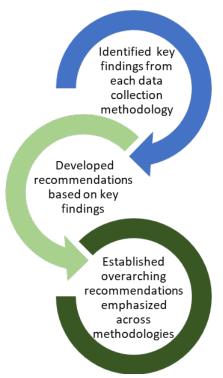
#### • Qualitative Data:

- o **Primary:** BHN collected qualitative data both early in our Needs Assessment process for exploratory discussions, and later in the process to seek clarifying feedback for data received. Our qualitative data collection included perspectives from community members and providers through:
  - <u>Facilitated Discussions</u> at BHN's various advisory board and key stakeholder meetings in 2018 to gather a range of perspectives on services and BH within the region.
  - <u>Participatory Group Sessions</u>: Five BHN staff-led groups of community members (adult, caregivers, general residents) and service providers (community-based BH providers and hospitals). BHN structured activities to elicit information related to the Needs Assessment Objectives. Sessions included 6-22 participants per group, with a culminating event of 52 people, to include, overall perspectives from over 105 unique individuals.
- o **Secondary:** BHN analyzed seven sets of notes or summaries from other organizations' recent focus groups and qualitative process sessions.
- Quantitative Data: Primary and secondary quantitative data enable a better understanding of St. Louis City and regional trends. BHN collaborated with MHB to identify a core list of BH and related indicators that reflect a more comprehensive and cohesive view of the life experiences, assets, needs, barriers, and gaps experienced by adults.
  - Primary: Since 2015, BHN has collaborated with the Regional Health Commission's annual Access
    to Care Report team to add additional data on access to BH services, collected annually from major
    publicly funded health providers in Missouri's Eastern Region. Data collected during calendar year
    2016 informed this Needs Assessment.
  - Secondary: BHN and MHB gathered and analyzed numerous sources of existing data trending over time and provided regional comparisons. Secondary data sets contained key quantitative indicators, including BH-specific and other secondary indicators. Sources included governmental data sets, private, and non-profit resources. Data was sourced from a variety of publicly available secondary data sets, with sources noted.

Additionally, to assess quality, a Donabedian model of quality of care<sup>7</sup> was used. This includes three major domains for review: Service delivery structure, processes, and outcomes, as described in the diagram below. This model served as the framework when considering strengths and assets, needs and gaps, and barriers and opportunities, and guided inquiry within participatory groups to ensure probing in each of these domains.



While the focus of this Needs Assessment is St. Louis City, St. Louis County and Missouri state data is periodically included to provide a broader perspective of regional adult BH and for comparison purposes. To ensure the application of an equity lens when conducting this Assessment, attention was given to the impact of internal and external processes, practices, and policies, as well as on marginalized and underserved individuals and communities. The sequencing of information in this report follows the order of the methodologies listed above. Each of the three sections summarizes key findings and recommendations derived from that method. The report concludes with a set of overall recommendations. The diagram below provides a quick overview of the methodology that was utilized to complete the Needs Assessment.



<sup>&</sup>lt;sup>7</sup> NHS Improvement. "A Model for Measuring Quality of Care." 2017. www.improvement.nhs.uk/documents/2135/measuring-quality-care-model.pdf.

<sup>&</sup>lt;sup>8</sup> Spark Policy Institute. "Tools for Integrating an Equity Lens." 2017. www.tools.sparkpolicy.com.

#### **LIMITATIONS**

The scope of this Needs Assessment sought to provide an aggregate understanding of community BH needs and services. This report was not intended to compare individual clients' needs with services received. Tailored to the needs of MHB, this report centers on adults (18 years of age and older) in St. Louis City, on a finite number of identified key indicators, with a heavy emphasis on community voice. BHN recognizes that the qualitative data collection group sample sizes are small, and that participants' contributions are based on perception and their or others' experiences, and may not fully be evidence-based or informed by broader perspectives. In an effort to achieve balance, diverse stakeholders were pursued to expose their varying perspectives.

Although a range of regional reports and Hospital Community Health Needs Assessments were reviewed based on systematic criteria, this review is not all-inclusive, and draws from the findings of those who produced the reports.

#### REVIEW OF KEY REGIONAL REPORTS

#### **OVERVIEW**

Leveraging the region's existing work, BHN reviewed and synthesized key recent reports to identify common themes related to the Needs Assessment objectives. This review included 14 reports produced by area organizations or initiatives between 2013-2018 and the seven most recent area Hospital Community Health Needs Assessments. Regional community reports studied were prioritized by those centered on addressing community health, BH, and social determinants of health.

#### **METHODOLOGY**

BHN systematically identified and analyzed the data, analyses, and recommendations provided by recently published regional reports to identify common themes and unique insights relating to adult BH, with specific interest in system resources and assets, barriers and gaps, opportunities, and recommendations. Most reports (Table 1) included both primary and secondary data analysis, as well as qualitative data solicited from key stakeholders. Two reports synthesized data from secondary sources (Table 2).

Table 1: Reports with Primary Data Capture and Analysis 9

Report	Geographic Scope	Primary Data and Methodology
1. Project LAUNCH Environmental Scan, 2013	City of St. Louis (63106 and 63107)	Qualitative: Individual interviews with stakeholders (N=10); Five focus groups with parents, including those engaged in BH/parenting/social services and those unconnected to services; Online survey of Regional Early Childhood Council members and community service providers (N=41) and of state-wide Young Child Wellness Council members (N=21)
2. RECAST Needs Assessment, 2017	St. Louis Promise Zone (areas in City of St. Louis & St. Louis Co.)	Quantitative: Resource needs categorized by RECAST team; Qualitative: Community member-drive prioritization (N=75) to focus Community Strategic Planning and Community-Based Participatory Budgeting
3. Adult Mental Health Needs Assessment, 2015	City of St. Louis	<b>Quantitative:</b> St. Louis Mental Health Board provider demographic and outcome data; <b>Qualitative:</b> St. Louis Provider Survey (N=86)

<sup>&</sup>lt;sup>9</sup> The full references of these reports are in Appendix A.

4. Department of Health Community Health Assessment (CHA) & Community Health Improvement Plan (CHIP), 2014-2017	City of St. Louis	Qualitative: Seven resident focus groups (N=89), Survey administered to Residents Advisory Group (N=17), Immigrant interviews (N=8); CHIP – Community shaped implementation plan and prioritization of objectives via Residents Advisory Group (N=22) and diverse organizational representatives including educational institutions, regional coalitions, service providers, government agencies and businesses (N=24)	
5. Coro Report of Behavioral Health Stakeholders, 2016	City of St. Louis and St. Louis County	Qualitative: Interviews with BH system stakeholder and providers (N=46); Quantitative: Core health indicators via Dept. of Health and Human Services	
6. Regional Health Commission Access to Care 2017	City of St. Louis and St. Louis County	<b>Quantitative:</b> Self-reported data from participating primary, specialty, and emergency care safety net healthcare provider institutions and major publicly funded BH providers	
7. United Way Community Needs Assessment	City of St. Louis, St. Louis County, and St. Charles County	Quantitative: United Way 2-1-1 call and follow-up data; Qualitative: Survey and listening Sessions with providers addressing BH, Interpersonal Violence, Utility Assistance, Housing/Homelessness Services, Food Insecurity, and Transportation (N=100 organizations)	
8. Department of Public Health CHNA & CHIP, 2014	St. Louis County	<b>Qualitative:</b> Community focus groups, key stakeholder interviews, telephone surveys (N=2,149); Local Public Health System Assessment involved additional 70 community leaders; <b>Quantitative:</b> Core health indicators via Dept. of Health and Human Services and examined by Stakeholder Advisory Committee (N=58 organizations)	
9. United Way 2020, 2014	7 MO Counties 9 IL Counties	<b>Qualitative:</b> Web-based survey of executive directors at local health and human service agencies (N=144); Phone survey of community members (N=275); <b>Quantitative:</b> Analysis of United Way programmatic and 2-1-1 call and follow-up data	
10. Forward through Ferguson, 2015	Ferguson and St. Louis Region	Qualitative: 17 open commission meetings, 38 public meetings (N= ~ 2,000) by subject matter experts, professionals, practitioners and citizens, including group focused on child well-being and education equity; Research support from the Institute of Public Policy at the University of Missouri	
11. For the Sake of All, 2014	City of St. Louis	Qualitative: Researchers at WUSTL and SLU engaged key stakeholder and community partners via a Community Partner Group; Public comments were invited using the project's website; Community Feedback Forum (N=90); Quantitative: Analysis and mapping of numerous secondary data sets with a health equity lens	
12. BHN BH Provider Inventory, 2017	7 Eastern Region MO Counties	Qualitative: Web-based survey of leadership at local BH agencies (N=50); Quantitative: Analysis and mapping of Missouri Department of Health and Senior Services data	

**Table 2: Reports Comprised of Exclusively of Secondary Data Analysis** 

Report	Geographic Scope	Primary Reports and Sources Included
13. Ready by 21 Landscape Report, 2015	City of St. Louis, St. Louis County, and St. Charles County	U.S. Census Bureau, Missouri Department of Elementary and Secondary Education, Missouri Children's Division, Missouri Department of Health and Senior Services, St. Louis City and County Public Health Department Data
14. Promise Zone Needs Assessment and Crosswalks	St. Louis Promise Zone	Youth Mental Health Needs Assessment, For the Sake of All, Forward through Ferguson, St. Louis Adult Behavioral Health Needs Assessment, Regional Health Commission Access to Care and Decade Review, St. Louis County Department of Health Strategic Plan, St. Louis City Department of Health Needs Assessment

Source reports and analyses are cited per the numbers assigned in the tables above and in **Appendix A**. For this section of the report, to facilitate comparison across reports and analyses, the term "behavioral health" (BH) may be used when a source identifies data relating to "mental health" and "substance use." If "mental health" (MH) or "substance use" (SU) are identified separately, they are reported specifically.

BHN additionally reviewed seven Community Health Needs Assessments (CHNA) conducted by hospitals that identify their Primary Service Area (PSA) in St. Louis City or St. Louis County. Due to the proximity of providers in St. Louis County, these were included despite the City focus of this report. In **Table 3** below, we summarize the service areas, stakeholder input, BH focus, and overall priorities established by hospitals serving the City of St. Louis and St. Louis County. Of note, St. Alexius Hospital, located in St. Louis City, did not have a CHNA publicly available.

Table 3: Hospital Community Health Needs Assessments (CHNA) and Priorities

Hospital CHNAs	Primary Service Area	Stakeholder Input	Substance Use		Mental Health		Violence & Harm	
	(PSA)		Need	Priority	Need	Priority	Need	Priority
Barnes- Jewish Hospital	City	Focus Group (N=10), Internal Group	Х	Х	Х		X	Х
SSM Health St. Mary's Hospital	City / County	Focus Group (N=15), Internal Executive Team	X	X	X		X	
SSM Health St. Louis University Hospital	City / County	Focus Group (N=35)	X	Х	X	X	X	Х
Mercy St. Anthony's Medical Center	City / County	Focus Group (N=19), Survey (N=500)	X	X	X	X	X	
Christian Hospital	County	Focus Group (N=17), Internal Group	X		X			
Mercy Hospital St. Louis	County	Survey (N=535), MAPP Process, Focus Groups	X	X	X	X		
SSM Health DePaul Hospital	County	Physician Survey, Focus Group (N=18)			X		X	

#### **KEY FINDINGS**

A review of regional reports denotes the challenges in both adult BH and the broader community context in which St. Louis City adults experience daily life.

Central themes in Adult BH needs and gaps included:

- A lack of access to behavioral health services and supports
- SU concerns and a need for supports and treatment
- Community-level violence and trauma
- Vulnerable populations (including perinatal women, African Americans, individuals with concurring disorders, and transition-age youth)

Barriers to accessing adult BH services included individual, provider and systemic challenges, such as:

- System complexity
- Stigma and mistrust of providers
- Cost of care/lack of insurance
- Provider capacity
- Social determinants of health

Of note, the interdependence of social determinants of health were acknowledged across all analyses and reports, including the BH aspects of health, interactions with law enforcement/criminal justice, education level, economic opportunity and housing stability. Moreover, the most prevalent barrier mentioned across reports was the lack of transportation access.

Several reports included a discussion of solutions and recommendations. Highlighted here are those that reflect specific strategies with the potential to be actualized by stakeholders.

The following themes emerged in multi-level **recommendations** across reports:

- Promote recovery-oriented services and supports
- Address critical recovery needs to reduce barriers and enhance stability
- Promote community awareness
- Expand system capacity
- Enhance BH and cross-sector provider integration and collaboration
- Improve data monitoring and alignment

#### **DETAILED FINDINGS**

The findings below represent intentionally brief, synthesized summaries pulled from full reports. Reports are cited via the parenthetical numbers referenced (#). These tie to the regional report from which the finding is drawn, as referenced in Tables 1 and 2 above. See Appendix A for information on how to find the full reports.

#### **NEEDS AND GAPS IDENTIFIED**

#### Lack of Access to Behavioral Health Services and Supports

Reports and analyses resoundingly highlighted the limited capacity and shortage of providers of BH services. Missouri ranks 12<sup>th</sup> in need for MH services among the states, but 31<sup>st</sup> in access to services (5). Public health department reports reflect the lack of adequate resources to address BH, and high ER utilization for certain BH related conditions may indicate access barriers to upstream community-based supports as well as acute and/or crisis services (8). Specific services identified as requiring additional capacity included crisis intervention and suicide prevention services (2). According to United Way 2-1-1 data, the top three unmet BH needs in St. Louis City are inpatient drug detoxification (8%), outpatient detoxification (7%), and a central intake and assessment for SU disorders (6%) (7). While practicing psychiatric provider shortages are well known, these constraints particularly impact the Medicaid population, due to the limited provider acceptance of Medicaid (12). Psychiatric diagnostic evaluation and Medication Assisted Treatment, while critical and common services, are the least available to those who are uninsured or cannot pay—available only 50% of the time per provider survey in 2016 (12). There was an identified need for specialized MH treatment options focused on life phase or immediate circumstances, such as crisis, teens/transition age adults, and new mothers (9).

Reports and analyses gave repeated references to funding limitations (5) wait times for appointments (5), and demand outpacing provider capacity, suggesting provider constraints inhibit access to services (2). Specifically, it was noted that safety-net providers of BH services, community mental health centers (CMHCs), are operating at capacity and subsequently limited in their ability to meet additional needs (5). Additionally, opportunities for early identification (in life and disease course) and subsequent interventions were identified as needing expansion. Expanded care coordination and settings were noted as ways to create such access, including primary physical health care (1).

#### SU Concerns and Need for Supports and Treatment

Several reports identified the need for expanded access to SU treatment. (2, 6, 9) The City Department of Health (DOH)'s Community Health Improvement Plan (CHIP) focuses on reducing SU among pregnant women, training DOH staff on screening and referrals, and supporting the regional heroin task force. (4) Reports identified a rise in ED visits for BH needs (6, 8), which were echoed in hospital needs assessments.

#### Community Violence and Trauma Supports

Violence, traumatic experiences, and toxic stress can have a devastating impact on adult health, BH and well-being. (10) Individuals who have experienced trauma, who are at risk of abuse, and who are dealing with concurrent MH and SU disorders are populations with a high need for BH services. (3) Several assessments identified the need for trauma-informed services to address high rates of toxic stress, poverty, and violence in St. Louis City. (2, 14, 13) For example, 79% of homeless adults in St. Louis reported having at least one traumatic experience before the age of 19, and St. Louis City adults receiving MH services through the SAMHSA

Transformation project reported high rates of trauma. (3) A higher percentage of adults in the City report barriers to resilience, such as inadequate social support, than those in surrounding areas. (3)

#### HOSPITAL COMMUNITY HEALTH NEEDS ASSESSMENT NEEDS IDENTIFIED

Barnes Jewish Hospital (BJH) identified SU as third in its top priorities—particularly the challenge of opioid use, followed by public safety and violence. BJH reflected that more Emergency Room visits were due to fights than any other assault or injury, a rate that was 1.5 times higher than the state, and hospitalizations related to gun violence were more than five times the state's. Finally, BJH reported that opioid services delivered to admitted clients increased 17.1% from 2012 to 2014. Christian Hospital, while in St. Louis County, noted regionally high rates of drug trafficking for prescription drugs and heroin, and qualitative groups conducted emphasized SU, MH and community violence concerns. SSM Health DePaul Hospital did not identify BH in its priorities, in part, due to the hospital's role in engaging significant resources in North St. Louis County and because they work with law enforcement and rely on them to collaborate regarding community violence. Note: In the hospital needs assessments, data was not separated by residence of patients. Mercy Hospital St. Louis recognized BH as second of its top priorities. Survey results and hospital data reflect that SU, particularly opioid and heroin use, has reached an "epidemic level", as has excessive alcohol use. Mercy St. Anthony's Hospital recognized BH as second of its top priorities as well. Qualitative data highlighted MH and alcohol/SU as their highest concern. Moreover, nearly 60% of physicians responding via survey identified SU as a significant issue. SSM Health Saint Louis University (SLU) Hospital identified BH as its top priority, followed by violent crime as its number three priority. Qualitative work identified concerns regarding the rise of SU, particularly heroin and opioid overdose cases. SLU Hospital also recognized violence as a significant public health concern and are committed to violence prevention. Given its high level of obstetrical services, SSM Health St. Mary's Hospital identified high-risk pregnancies as its second top priority, including prenatal SU (particularly opioid use during pregnancy). Trauma and stress were also identified as community health concerns, though these were not determined a priority.

#### BARRIERS TO BEHAVIORAL HEALTH SERVICE ACCESS

The barriers and challenges identified by existing analyses can be categorized as those experienced individually by adults, and systemic barriers that are pervasive across the system of care or involve "upstream" determinants and systems. Often these barriers intersect and exacerbate one another, but the distinction is made for the purposes of facilitating strategy development.

Individual-level barriers to care include: Awareness of or ability to navigate the complex social service and health care system (1, 2, 3, 9); stigma associated with seeking MH services or being diagnosed with a MH condition (2, 3, 11); mistrust of providers (11); and cost of care, limitations of insurance coverage or lack of insurance (1, 9, 10).

Systemic barriers include: Indicators of system capacity limits such as the inability to get an appointment with a provider, long waits for an appointment, and stagnating volumes of users in inpatient care and community-based settings (3, 6, 9); the struggle faced by providers to scale up or expand services to meet system demands for BH services, including settings like primary physical health care (5); a systemic orientation towards providing crisis support, not for addressing long-term or pre-emptive solutions (present in both healthcare and social service sectors) which further presents barriers to early or community-based BH options (7).

Additional system challenges include: a lack of safe, reliable transportation (1, 2, 3, 5, 9); limited access to connecting services due to unemployment (13); area violence and safety concerns that create geographic barriers and difficulties in the recruitment of providers (14); and limited service hours (1).

Again, these barriers are deeply connected to social determinants of health. Transportation was the most commonly cited barrier to BH access (1, 2, 3, 5, 7, 9). According to social service agencies, clients' highest needs are housing and BH assistance; followed by healthcare and medication, and transportation assistance (7). Additionally, social service agencies (n=27) report that 59% of clients with housing needs also have BH needs (7).

Moreover, the United Way 2-1-1 reported referral rates to social service agencies for housing, interpersonal violence, food insecurity, utility support, and transportation are one and a half to three times higher across the board for St. Louis City residents compared with St. Louis County and most counties in the local service area (7).

BH access was also linked to the following interdependent factors that exacerbate trauma and toxic stress in the City of St. Louis and St. Louis County: Teen pregnancy (13); poor prenatal health (1, 11); abuse, neglect and violence (2, 3, 11, 13); involvement in the criminal-justice system (2, 10, 13); housing instability (3, 5); educational challenges (2, 9, 10, 11); plus unemployment and lack of economic opportunity (3, 10, 13).

Additional system challenges involve public regulations and reimbursement policies. For example, safety net CMHCs have increased their percentage of users who are Medicaid enrollees, uninsured, grant/tax levy and self-pay (6). Providers indicated that reimbursement rates do not justify the relatively high risk and cost for inpatient psychiatric facilities, and the lack of Medicaid expansion in Missouri and budget cuts for social welfare and safety net care have impacted the quality and capacity of the St. Louis area BH system (5). Also noted were restrictions on use of BH and primary care funding (5); insufficient funding for direct and ancillary services, including Medicaid coverage of BH services and social welfare services (e.g. housing and transportation) (5); and low reimbursement rate for psychiatric services (5).

#### **RECOMMENDATIONS**

#### Promote Recovery-Oriented Services and Support

Provide a combination of activities to assist individuals in improving their quality of life and recovery, including expanding upon their job-readiness, promoting career awareness, and developing social responsibility and independent-living skills (13). Promote employment opportunities for meaningful work (e.g. fair wages) (2, 3). Additional workforce and program investment recommendations include: An increase of free or low-cost options for BH services; an increase in the number of MH providers (1); an increase in adult awareness of BH issues and management to promote stability for both parents and their children (1, 2, 9).

Recovery is achieved in part through evidenced-based interventions. The St. Louis City Youth Mental Health Needs Assessment advocated for continued support through services that demonstrate that they are methodologically sound, evidence-based, and that they deliver measurable and effective outcomes (3). The improvement of data integrity and utility will help demonstrate the progress and impact of funded programs.

#### **Promote Community Awareness and Screenings**

Improve MH awareness through community-wide education and increase screenings in medical and other settings (11). Facilitate awareness and navigation of available services and resources and improve digital information about available services (2, 9). Develop a media campaign to minimize the stigma as a singular issue, as many

issues (hunger, MH/illness, homelessness, obesity, poverty, incarceration, etc.) are compounded by the presence of stigma. Peer support, shared stories, and conversations were credited in reducing shame and creating more compassionate, empathetic, understanding, and supportive relationships at a community-level (10).

#### Address Critical Recovery Needs and Enhance Stability by Reducing Barriers to Services

Specific recommendations for improving care access involve reducing barriers such as: improving transportation access by expanding mass transit (2) and developing plans for consumer and family transportation to and from services; (3) as well as increasing access to healthcare by supporting Medicaid expansion (3). Additionally, United Way 2-1-1 findings denote a substantial intersection of BH needs and social service resource needs (7). Addressing housing and BH needs in a dedicated and integrated manner are key to increasing clients' stability (7).

#### **Expand System Capacity**

All reports acknowledged the need for an increase in the system capacity to provide BH services, including increasing the number of BH providers and resources (e.g. trauma-informed, hospital and community-based) (1, 2); and investing in more outpatient community mental health centers, particularly in geographic areas of need, as well as coordinating screenings and referrals for high-risk populations (5).

Agency barriers include lack of access to funding, difficulty retaining clients in services, and staffing changes (3,5). Providers noted challenges with finding and hiring psychiatrists, as well as Advance Practice Nurses (APNs), and the high cost of certifying staff in evidence-based treatments (5). However, despite these challenges, workforce development is key to the expansion of regional resources.

#### Enhance BH and Cross-Sector Provider Integration and Collaboration

Improved coordination and integration among systems and services (e.g. primary care and BH care) was a universal recommendation system-wide (1, 2, 3, 5, 9, 10, 14). This could include training primary care providers to identify and respond to the BH needs of patients, strengthening referral networks and coordination among providers (1, 2), and improving data tracking related to existing BH needs in primary care (5).

Health care and social assistance organizations are more densely situated in the City, but not all are conveniently located to help consumers with multiple health and socio-emotional issues (3). Building an integrated system of care that includes a BH consultant in primary physical care settings will increase patient engagement and foster low-barrier service delivery (8).

For many clients, the range of needs they face and the systems that seek to address those needs are highly complex, making it extremely difficult to navigate the social service system. Cross-sector and cross-agency integration is necessary to mitigate these challenges (7). Listening sessions with social service agencies revealed a desire for better client follow-up after a referral to another agency, improved coordination and communication, and an expanded and ongoing collaboration among agencies (7). Social service and BH agencies would benefit from strategic funding and collaborations that promote partnerships, alignment around the top needs of the region, and a focus on racial equity (7).

#### Improve data monitoring and alignment

Data regarding BH requires stronger community monitoring to better track key indicators of BH integration and access, as well as shared instruments and data sharing among providers (14). Limitations of zip code level data,

data timeliness, and inability to verify authorship or ownership serve as barriers towards this recommendation (1). Public health entities identified the need for improving BH registries and population-level surveillance (8). BH stakeholders recommended developing a centralized system for client data and evaluating quality of care (e.g. clinically actionable electronic health record system that connects client data across CMHCs, CHCs and hospitals).

Facilitating the standardized collection of demographic information and a centralized case management system would help agencies' efficiency, allowing families to provide information once, case managers to make connections to services, and agencies to follow up with clients more consistently (7). For the Sake of All called for improving the quality and availability of MH data by establishing regional systems of tracking and reporting the prevalence of MH conditions and their treatment, and increasing data collection and sharing to improve MH awareness in racial and ethnic minority communities (11). Funders and backbone organizations were advised to capture data for smaller geographies and organize data with a focus on equity, as well as broaden the use of data to include predictive modeling, community education, capacity building, and learning forums (13).

#### QUALITATIVE DATA ANALYSIS

#### **OVERVIEW**

Qualitative approaches provide the opportunity to uniquely explore individuals' subjective perceptions and experiences that would otherwise be inaccessible. Group approaches allow individuals to interact, build on one another's comments, and allow facilitators to probe further for details and clarifications in real-time. For these purposes, qualitative data collection activities centered on understanding the current state and needs related to adult behavioral health (BH) in St. Louis by gaining a community voice through participatory groups. The following sections summarize the approach taken and analysis of findings from five participatory groups conducted mid-June through July 2018. Participatory groups explored observations and experiences in the community and/or with BH supports and services, including resources and assets, needs, gaps and barriers, and opportunities. Additional qualitative sessions conducted by collaborators were also leveraged, including those of Gateway Housing First on behalf of BHN, Missouri Institute of Mental Health, the Women's Foundation of Greater St. Louis, the St. Louis Area Violence Prevention Commission, and the St. Louis Regional Health Commission.

#### **METHODOLOGY**

BHN facilitated participatory groups mid-June through July 2018, recruiting individuals with a relationship to the St. Louis City community, and key parties in adult BH. Participatory groups consisted of interactive, semi-structured, and open-ended sessions designed to engage and empower group participants. Session design was informed by community member input whenever possible. A mix of techniques was used to engage participants: Nominal group technique (a structured approach to seeking input and developing consensus), as well as divergent (meant to elicit individual perspectives); and convergent (meant to gain group consensus or perspective) technique. Groups consisted of 90-minute sessions with questions and activities to facilitate broad inquiry around community resources and assets, needs, gaps and barriers, and opportunities. A sample participant question set can be found in **Appendix B**.

Sixty community stakeholders (consumers with lived experience, family supports/caregivers, and general community members/residents) and 22 providers of BH or related services engaged in BHN-led groups (Table 1). Participant demographics can be found in the tables that follow.

BHN also facilitated a two-hour full stakeholder meeting, and included invitations to all those who attended participatory groups and key BHN, MHB, and St. Louis RHC stakeholders. Forty-nine individuals, of which just less than half were unique participants, attended this event, which focused on an interactive review of preliminary findings and development of strategic recommendation responses. Feedback from this session is largely reflected in the opportunities section at the end of this section and the recommendations section at the end of this Report.

Stakeholder Group	Stakeholder Sub- Group	Primary Location	Number in Attendance	Group Demographics (per participant self-report via anonymous survey)
Community Adults with Lived  Members Experience of Receiving BH Services		North City	12	Race: 8 African American, 4 Caucasian Age Range: 25-65+ Gender: 3 Male (25%), 9 Female (75%)
		South City	22	Race: 2 African American, 16 Caucasian, 2 Multiracial, 2 Other/Unknown Age Range: 18-64 Gender: 8 Male (36%), 14 Female (64%)
	Support Persons/Family	St. Louis City	7	Race: 5 African American, 1 Caucasian, 1 Multiracial Age Range: 45-65+ Gender: 1 Male (14%), 6 Female (86%) Family history of Mental Health Services (self-report): 7/7 (100%) Family history of SU Services (self-report): 3/6 (50%)
	General Community Members	St. Louis City	17	Race: 13 African American, 2 Caucasian, 1 Multiracial, 1 Other/Unknown Age Range: 18-65+ Gender: 3 Male (18%), 14 Female (82%)
Providers	Direct Care Community Providers	St. Louis City and St. Louis County	22	Clinician and non-clinician frontline staff, and supervisors of community-based, acute care, and adjacent sector agencies providing supports or services to those with BH concerns

BHN leveraged notes including qualitative data generously provided by collaborating groups' recently conducted sessions. BHN worked closely with Gateway Housing First (GHF) to engage stakeholders working in and with histories of housing instability and homelessness. BHN drafted brief questions that address adult BH and related housing concerns that were included in each of GHF's two sessions. BHN also collaborated with St. Louis Regional Health Commission to include data from the St. Louis Assessment and Triage Center Feasibility Study. BHN systemically analyzed detailed participatory group notes taken in-session and physical products of participatory group activities using a combination of techniques to ensure a comprehensive review of qualitative products. Several phases of analysis and methods were involved in qualitative analysis for coding, including the use of pre-set codes (based on question set categories) and emergent codes developed using a grounded theory approach driven by responses (listing ideas or diagramming relationships, identifying word repetitions, keywords or quotes). This sought to illuminate common themes or patterns emerging, deviations from these patterns, role of environments or experiences related to their responses (e.g. health equity considerations or geography impact) and the need for additional data (including patterns that are similar to or different from other report findings in the

region). Findings across all qualitative stakeholder participant types were assessed individually and in relation to one another to determine where commonalties and intersections emerged into major themes. These reflect high levels of agreement and consistency within and among groups, however when the theme was discussed differently, these variations are emphasized and detailed.

#### **KEY FINDINGS**

Qualitative processes yielded rich findings, which are detailed further in the next section. Key findings noted here reflect consensus that emerged within and among stakeholder groups related to resources and assets, barriers and gaps, and opportunities in St. Louis adult BH.

#### Prominent resources and assets identified included:

- Strong existing services and supports
- Greater range of treatment services and settings
- Enhanced outreach and transitions of care
- Providers oriented toward and addressing BH and recovery needs
- Collaborative provider relationships

Stakeholders then identified challenges and unmet needs that informed the following barriers and gaps.

Specific **barriers** that pose hurdles to accessing adult BH assets included:

- Affordability of services
- Accessibility of services (physical access and communication)
- Availability of services
- Navigation
- Negative experiences and stigma

Gaps between needs and the system's services and supports included limited or lack of:

- Access and options for BH services
- Crisis prevention and response
- Intergenerational interventions and supports
- Services for specific populations
- Addressing broad recovery needs

#### Stakeholders also highlighted **opportunity areas** including:

- Enhanced access and navigation to BH services
- Focus on follow-up and transitions of care
- Expanded training and public awareness
- Reducing barriers and environmental stressors

#### **DETAILED FINDINGS**

#### **RESOURCES AND ASSETS**

#### STRONG EXISTING SERVICES AND SUPPORTS

Consumers noted that service delivery providers are numerous and varied in the services available. Providers concurred on the volume and concentration of providers within St. Louis City. Specific provider resources noted across all stakeholder groups included:

- Clubhouses and psychosocial rehabilitation/illness management and recovery support day programs
- Community mental health centers
- SU treatment providers
- Hospitals

A high level of awareness was noted across stakeholder groups regarding specific programs and agencies providing services. Consumers were particularly positive when describing providers with specialized services that work with particular needs or populations (such as SU treatment providers serving women). Day programming and clubhouse services and opioid use disorder services were noted to be particularly strong in St. Louis City. These settings provided services participants noted as essential, including:

- Case management
- Psychiatry and medication management
- Care coordination and referral and linkage
- Individual and group counseling

Sessions with consumers (specifically, frequent utilizers of emergency department care engaged in specialized diversion programming) indicated the above were among the most valuable services in addition to social and motivation support and barrier mitigation, such as transportation provided through in-community case management and flexible funding mechanisms. Consumers also noted positive experiences with provider guidance to housing and employment supports that were tremendously valuable to recovery.

Hospitals were flagged in all stakeholder groups as a primary resource for adult BH services. Individuals discussed the benefits and challenges of the hospital role, highlighting the safety, respite, and 24/7 nature of inpatient admissions as well as the frustrations of needs often being neglected in emergency departments, often escalating before greater support is available.

Consumers and general community members also noted the value of referral and crisis hotline supports, as well as a need for greater support for navigation and connection to care. Notably, limitations in access and quality of services were noted as a key challenge in St. Louis City. All groups discussed geographic differences in the availability or expansion of services, with areas in North City being identified as having fewer resources.

#### **EXPANDED TREATMENT SERVICES AND SETTINGS**

Across all stakeholders, individuals noted that treatment services and service options regularly grow to respond to community need. The greatest increases in services available include: SU services (including medication-assisted treatment and opioid use disorder services) and peer programming. Additionally, stakeholders noted the growing range of settings in which services are delivered or MH is addressed. These settings benefit adult BH in expanding access to services and supports and in reducing stigma. A key example was that of integrated BH services within other care provider facilities, such as BH consultant and team approaches and medication-assisted treatment, both within primary care settings.

This growth also occurred in non-care settings. Community members noted expanded mental health awareness in trusted institutions, particularly churches and faith-based settings, as well as in general community advocates through trainings like Mental Health First Aid and the Bridges to Care and Recovery program. Specialized training of law enforcement was described as beneficial, especially by consumers, when discussing crisis intervention. These expanded settings and domains in which BH interventions are being strengthened allow for more effective community-level responses to BH.

#### ENHANCED OUTREACH AND TRANSITIONS OF CARE

Among key community assets in the expansion of BH services within St. Louis was the strength of enhanced outreach and transitions of care (points when individuals move between care settings or service types) programming. Across all stakeholder groups, outreach and care coordination particularly "warm hand-offs" (a transfer of care between two providers, wherein the referring entity connects the client with the care providers directly and in real-time) were emphasized as critical assets benefiting client outcomes in a complex system and for individuals facing complex needs. Consumers and providers discussed stronger transitions of care between care settings and at critical intervention points (such as post-opioid crisis/overdose) via outreach and transition-focused regional efforts (e.g. the EPICC Opioid Overdose Response Project). Consumers discussed such programming as helpful when, "[They] didn't know what to do next." Current and growing outreach efforts for homeless populations and hospital settings through faith-based institutions and community health were highlighted.

#### PROVIDERS ORIENTED TOWARD RECOVERY OR SUPPORTING BROAD RECOVERY NEEDS

Strengths contributing to improved adult BH included BH and non-BH providers that address a range of social determinant and environmental stressors towards recovery, though these were noted to be limited in availability and accessibility. As previously mentioned, consumers with lived experience note that barrier mitigation, such as transportation and support for housing and employment, supports faster recovery. Consumers emphatically supported the concept that these needs are part of BH and treating the "whole person." Moreover, providers who are culturally competent, trauma-informed, and understand the community context were seen as stronger and higher in quality by consumers and community members. Stakeholders across the board underscored the imperative for adults to see opportunities for recovery through peer engagement and meaningful positive activities that give them a link to the broader community.

Organizations that offer barrier reduction increase service accessibility and enhance referral effectiveness. Transportation assistance, home-based/in-community services, and navigational support within the system were reported to increase the likelihood of access to BH services when and where consumers need it, preventing cycles of escalation. Consumers valued providers who deliver comprehensive treatment options and are able to address

client needs beyond BH needs, or accommodate these needs (e.g. after business hour services or childcare). Consumers highlighted the positive outcomes associated with psycho-social education and interpersonal and life skills programming. Family and general community members noted the value of informal supports (such as family and social networks) and providers who engage with these natural supports, though training and support for family members was seen as limited.

#### COLLABORATIVE PROVIDER RELATIONSHIPS

In discussing broader community strengths, providers also cited the benefits of collaborative relationships with other agencies. Providers noted that a willingness to work collaboratively, both formal and informal partnerships with other agencies, and opportunities for networking strengthened their practices and the system of care. Consumers, community members, and providers noted the value of referral networks and providers noted trusted relationships supported by consistent referral follow-through across BH providers and care settings. Additionally, providers noted the presence of transitions of care programs previously discussed and Department of Mental Health special programs, such as Health Homes or Liaison programs (community mental health liaisons-CMHLs/substance use disorder liaisons-SUDLs) as creating opportunities for collaboration and strengthening service delivery options.

#### BARRIERS AND GAPS

#### **BARRIERS**

While the aforementioned assets exist in the St. Louis City community, participatory group members noted significant difficulties in accessing these resources. Reasons discussed are reviewed below, in order of priority established by participants.

#### Affordability

For adults, insurance access and coverage were noted to be key barriers, particularly without state-wide expansion of Medicaid. Cost of services (even those on sliding scale fee schedules) and follow-up medications were reported by consumers, family members, and providers as fundamental challenges to engagement in care. Moreover, many discussed the cyclical nature this lack of access creates. For example, an individual may experience hospitalization, be discharged with referrals to community agencies, and given a prescription for medications, but then not fill those medications or attend follow-up services due to cost, regress, and return to a hospital setting. Program options for the insured and underinsured that do not qualify for subsidized services but have limited coverage or face costly care options were specifically noted in family and general community member groups. Consumers noted the struggle of many adults with BH concerns to meet basic needs and the stressors of choosing between items like food and housing and medications to maintain stability. Of note, consumers and providers discussed that funding for services is often unavailable without meeting specific criteria. For example, funds and treatment options are currently more available for those with opioid use disorders, but limited for other substances.

#### Accessibility

All stakeholder groups noted safe and affordable transportation as a significant barrier to accessing services. Even with public transportation present in St. Louis City, concerns such as cost, multiple transfers, length of travel, and safety concerns make utilization difficult. Transportation challenges are particularly present when multiple providers or service dates are needed to initiate or engage in services. Locations of services were emphasized as limited and perceived as not being located in areas of high need, particularly far North and South City. The traditional model of office-based service delivery was seen as exacerbating these challenges as they require physically getting to and from services.

Additionally, the inability to contact or follow-up with consumers was raised across consumer and provider groups. Homelessness and frequent incarceration were two notable challenges that posed barriers to consistent communication and access to providers, as well as limited consistent access to working phones.

#### Availability

Consumers, family members, providers, and community members noted an understanding of the limited capacity and long wait times experienced by individuals seeking BH services and supports. Similarly, many available services were reported to be limited because they were not available within the City or at offered during ideal hours. This was seen as preventing engagement in services and contributing to the high utilization of acute care (24/7) services.

#### Navigation

Stakeholders identified navigational challenges that included both the lack of knowledge about available services as well as how to access them, due to the complexity of the care system. Many providers indicated that eligibility requirements, turnover of staff internally and across agencies, and challenges like lengthy and difficult applications for services or benefits, inhibited their ability to effectively and efficiently help consumers navigate care systems. Consumers and families noted that administrative hurdles and eligibility requirements result in frustration, delays, not receiving services at all and mistrust of providers.

#### Negative Experiences and Stigma

Consumers raised significant concerns over provider perceptions of those with BH needs, particularly SU issues. Consumers, including high utilizers of acute care, discussed poor and disrespectful treatment in acute care settings. Providers equipped with cultural competence in hospital and community-based settings and a need for peer supports were raised as systemic needs. Particularly among consumers and families, it was noted that negative past experiences provide a significant barrier to seeking treatment and engaging in services. These experiences often accumulate over time and are worse for those who may have been engaged across multiple sectors, such as criminal justice or social services. Past experience and cultural competence barriers were noted as significantly contributing to consumer mistrust of providers and generate stigma even in perceived "safe spaces." Stigma concerns were worsened by fear of labeling, medication-centered interventions, and concerns of legal or workplace implications due to a BH diagnosis. The negative impact of stigma is particularly notable for vulnerable populations (noted below).

**GAPS** 

Qualitative data analysis of participatory sessions highlighted predominant themes related to unmet needs in St. Louis City adult BH.

#### Access and Options for Behavioral Health (BH) Services and Supports

Across all stakeholder groups, the accessibility of BH services was noted to be limited for St. Louis City adults. Both consumer and provider participants consistently noted barriers in multiple dimensions related to access including limited capacity, prohibitive cost, challenges with location and hours in which services were offered, and significant delays in treatment resulting in escalation of needs/symptoms.

Several specific BH services were cited as key gap areas. Lack of access to psychiatry and medication management was the universal top area highlighted across stakeholder groups. Balancing this, consumers and family members underscored the need to support non-medical interventions such as counseling, clubhouse, psychosocial, illness management and recovery support models. Additional gaps in services or service delivery methods were repeatedly named across stakeholder types included:

- Psychiatric access and medications
- Earlier identification and intervention
- Outreach and in-community services
- Services in critical geographic areas of need and for vulnerable populations (see population list and zip code references)
- 24/7 crisis access and response services (see below)
- Acute and inpatient care
- Longer-term care and after-care services, particularly following a crisis, or from hospitals to community-based services (such as Intensive Outpatient Programs)
- Co-located services in community to address multiple needs

While many of the above encompass evidence-based practices, there was an explicit need identified by consumers and family members to expand evidence-based practices (e.g. dialectical behavior therapy) to increase access to services that are proven effective and provide options to consumers. Additionally, this was seen as an opportunity to promote a higher quality of services delivered more consistently and more effectively to the consumer.

#### Crisis Prevention and Response

The related unmet needs of both crisis prevention and crisis intervention were presented as key challenges in St. Louis City adult BH. Discussions of crisis prevention identified a gap in early identification and early intervention in both the disease course and life course. General community and family members stressed a lack of early identification of needs. All stakeholders noted a concern that BH needs are often addressed only when they reach crisis levels, when hospitals or law enforcement are engaged. As one consumer noted, "I had to become suicidal before they would do anything." Crisis response gaps were emphasized in the few options that consumers, family, and community members saw for those in crisis. Consumers noted a knowledge of limited options, unless expressing a risk to themselves or others and indicated some claim to experiencing these symptoms in order to access services, despite lack of actual symptoms. The need for respite, detox, or other safe spaces surrounding crisis were detailed across all stakeholders. Providers emphasized components of shelter, noting that safer, 24/7 emergency shelter options were among the most dire needs in order to strengthen opportunities to guide individuals towards stability. All stakeholders noted limited inpatient resources. Consumers also highlighted

transitions of care support needs post-crisis, particularly from hospital inpatient to community, to foster connection to subsequent care. Consumers noted priority gaps for those who are most vulnerable; those newly diagnosed, who historically have not engaged in services and have limited financial or insurance support.

#### Intergenerational Interventions and Support

Consumers and family members noted that family-focused services are limited. Consumers and family noted the need for intergenerational approaches to address BH needs of multiple family members. Adult services were reported as rarely being geared toward recognizing the needs of consumers who are caregivers of children. This is particularly impactful because residential treatment and in-community needs (e.g. childcare) become barriers to service engagement for those with children. Family-focused approaches for adults are also insufficient because family and caregiver BH education and effective responses and engagement in adult services is not a regular practice. Consumers reported that this exacerbated stigma within families and did not serve to strengthen natural support.

#### **Services for Specific Populations**

Another core gap area identified across participants was the lack of tailored services to vulnerable populations. When discussing these needs, consumers noted a need for training in services for and working with specific populations. Provider groups noted a need to increase expertise and cultural competency to meet some of the specific needs and characteristics of consumers in the St. Louis area. Without this, feelings of mistrust or fear of the impact of seeking support are exacerbated. Adult populations with specific needs noted throughout qualitative data collection included:

- Vulnerable communities (Areas/zip codes experiencing high poverty and risk indicators; Far North St. Louis City and Far South St. Louis City)
- Individuals involved in the criminal justice system
- Transition-age youth and young adults
- Individuals with co-morbid BH and physical health needs
- Individuals with co-occurring MH and SU needs
- Adults who are homeless or with unstable housing
- Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ+) adults (Note: Gender-specific service needs were also flagged, with African-American males among the most vulnerable.)

#### Addressing Broad Recovery Needs

All stakeholders noted gaps in providers' current ability to meet the comprehensive recovery needs that also frequently serve as barriers to engagement. All stakeholders also noted that many adults struggle to meet basic needs. Transportation was noted as a top barrier, and insurance access and prohibitive service costs (especially for medication) was a key hurdle to care. Housing instability and homelessness were also identified as factors that influence ability to engage in BH services, by consumers, community members and providers. Simply put, these barriers themselves are unmet critical needs and intensify unmet BH needs. Additionally, consumers, family members and providers identified the issue of adults who do not have engaged family members and the need to make greater legal decisions posed challenges. Guardianship support was named as a gap with barriers of difficulty due to cost of guardianship, and little support for those with a legal guardian who is not a family member.

Community members and consumers noted limited opportunity for positive community involvement and a need for psycho-social education and skill building for recovery and independent living. Repeatedly, the role of

community environment and violence were noted as prevalent issues with community members and providers calling for expansion of trauma awareness and trauma-related services in BH settings.

#### **OPPORTUNITIES**

#### ENHANCED ACCESS AND NAVIGATION TO BH SERVICES

Resoundingly, stakeholders noted that while there are many services in the region, system complexity makes these difficult to access. Moreover, a pressing need exists to increase capacity, improve timeliness and reduce restrictions so more people are able to receive care when they need it. All stakeholder types noted a desire for additional programs and services for supporting existing and emerging adult BH concerns, as detailed in the gap areas above. Consumers and community members noted a need for easier access to and support for navigating the complex network of services and support to foster engagement (particularly when individuals are motivated to engage) and improve outcomes for adults with BH concerns. Investment in referral and linkage hotlines and physical locations or other "navigator" roles were suggested as opportunities to more fully leverage services. While technology poses an opportunity for information sharing, consumers, family members, and community members stressed the added value of one-on-one, personal support (particularly by peers). Providers used the language of establishing stronger "front doors" and "no wrong door" as ways to make it easier for clients to navigate the BH system.

#### FOCUS ON CRITICAL TRANSITIONS OF CARE

All stakeholders noted the possible impact of strengthened support at critical transitions of care. All discussed the importance in continuity of care and consistent follow-up as impacting consumer outcomes. These included creating or expanding:

- "Warm hand-offs" between provider staff and clients at the point of referral and linkage
- Longer-term supports through case management
- Intensive outpatient programs/partial hospitalization/other "step-down" services

Additionally, expanding existing successful transitions of care programming discussed in resources and assets were noted. Relatedly, educating ER staff and the community about these programs was suggested. Utilization of collaborative care models was suggested as a way to strengthen providers' capacity for care coordination within and across agencies, and to support consumer and family transitions and navigation of the service delivery system, particularly in primary care and BH care settings. Consumer and community stakeholders noted successes that build on integrated BH services in other care settings and community agencies (e.g. churches and primary care settings) and proposed that these models could be replicated and leveraged, particularly in St. Louis City.

#### EXPANDED TRAINING AND PUBLIC AWARENESS

All stakeholder types noted a need for greater education on BH topics in the community. Community members and consumers particularly noted the opportunity to increase public awareness of adult BH topics, responses, and greater awareness of resources on a global level through media campaigns and messaging in key community settings, such as churches and schools. These stakeholders noted the opportunity for subsequent stigma reduction to enhance treatment seeking. Opportunities to train both community members and providers of BH services in trauma, Mental Health First Aid, and general knowledge about MH and SU were discussed by consumer, family, and community member groups. Training opportunities that target BH providers and non-BH providers (e.g.

physicians and law enforcement) to utilize evidence-based models and cultural competence were similarly emphasized in consumer, family, and community member groups. Accentuating the need for provider training, high utilizers of acute care recommended education and training in MH and SU disorders for physicians and emergency room staff to help mitigate the stigma they feel and subsequently improve care for themselves and others. Additionally, training and certification of peers in recovery might provide an opportunity for expansion of peer support programming.

#### REDUCING BARRIERS AND ENVIRONMENTAL STRESSORS

As previously noted, all stakeholder types stressed the opportunity to address the social determinants of health that impact adult BH and service engagement. Opportunities included the possibility of transportation support and initiatives, partnering with and expanding community resources in addressing recovery needs, and funding provider ability to assist with basic recovery needs (e.g. housing, food). Consumers highlighted low-cost methods such as aiding consumers in apartment or job searches as beneficial to supporting the whole individual and achieving improved outcomes. Advocacy strategies focusing on governmental funding and insurance access were also proposed.

# QUANTITATIVE DATA ANALYSIS

#### **OVERVIEW**

Primary and secondary quantitative data provide measurable information on both the current state and changes over time that impact the community and BH of St. Louis City adults. The following reflects a core list of BH and related indicators that deepen input on the experiences, assets, needs, barriers, and gaps of adults in St. Louis City. Regional and statewide comparisons and trends over time are reflected where available. Data sources include a variety of BHN acquired and publicly available secondary data sets, with sources noted throughout.

#### **METHODOLOGY**

This section focuses on specific adult BH-focused indicators in order to assess trends in the St. Louis City community for areas that may need attention or have improved. Data elements were tailored in collaboration with MHB. Secondary data from various sources were accessed for this study, with most of the data representing 2004 through 2016, based on availability, relative to data release cycles. Relevant community indicators set the context in the St. Louis community, and BH service data follows. In many cases, a comparison to Missouri and/or St. Louis County is made and differences based on demographic and geographic data are examined.

In addition to secondary data sets, BHN engaged with area organizations to secure primary quantitative data published or recently publicly utilized for regional planning and coordination efforts and included BHN-collected data as well. This presentation of the community indicators data, when paired with the findings from the various qualitative methods of data collection used for this assessment, can lend support for a current program or demonstrate the need for additional services or attention.

#### **KEY FINDINGS**

Key findings from demographic information, community and BH indicators reflecting the City of St. Louis adult population, include:

- POPULATION: During the past 10 years, between 2006-2015, the general St. Louis City population decreased by 11%, from 353,821 to 316,030 individuals. Since 2006, the population decreased by 37,791 individuals. In 2016, the St. Louis City general population included 316,030 individuals—46% were White; 48% were African American.
- ECONOMIC WELL-BEING: While St. Louis City's median household income increased by 35% (nearly \$10,000) from 2004 to 2015, it remains approximately \$12,000 less than Missouri's median income and markedly lower than St. Louis County's median income. Adult unemployment peaked in 2010 with a 12.8% rate. As of 2015, it was at an all-time low of 6.1%, but remains higher than the St. Louis County and Missouri rates. While rates of those at or below 100% of Federal Poverty Level have remained stable, St. Louis City had the highest percentage of overall population in poverty, as compared to St. Louis County and the state average.

- HOUSING STABILITY AND HOMELESSNESS: As of 2016, comparisons with surrounding counties and state data show that St. Louis City has a higher percentage of individuals who spent 30% or more of their household income on their monthly housing or rent payment, increasing their risk for housing instability. Fiscal Years 2015-2017 Homelessness Point-in-Time counts reflect an increase in St. Louis City individuals utilizing emergency shelter and among the chronically homeless population. Individuals in transitional housing and transitional beds have consistently declined over time. This trend is impacted by a reduction in transitional housing due to US Department of Housing and Urban Development shifts to permanent housing as the focus of ending homelessness. Men and African Americans experience the highest rates of homelessness in St. Louis City.
- SAFETY AND MORTALITY: Violent crime, suicide and self-injury, and opioid overdose indicators reflect high risk to St. Louis City residents. While suicide rates are lower in St. Louis City than St. Louis County, the rate of ER visits due to suicide or self-injury is markedly higher. St. Louis City also maintains the highest rate of homicide and second highest rate of violent crime in the United States. From 2013 to 2017, St. Louis City ranked highest in the state for the rate of opioid overdose deaths at a rate of 41.80 per 100,000, a total of 658 deaths. African Americans experience the highest rates of these safety and mortality risks.
- BEHAVIORAL HEALTH PREVALENCE: Localized information on prevalence of BH needs is limited and requires strategies that incorporate analyses based on community context. General information reported about Eastern Missouri<sup>11</sup> shows that 18.3% of individuals 18 and older had a mental illness in the past year with 4.2% having a serious mental illness. As rates of mental illness, serious mental illness, and SU are significantly higher among those in poverty and poverty rates in St. Louis City exceed that of the surrounding area, the City population is notably more vulnerable to BH concerns.
- SERVICE DELIVERY AND UTILIZATION: Community-based BH services delivered by safety-net providers in St. Louis City have been stable during the past three years. However, trends for Department of Mental Health-funded services have declined for adults over the past decade. From 2010-2014, hospitalization rates for mental health, SU, and alcohol use, as well as ER visits for alcohol use have increased among City residents. Conversely, ER visits for mental health and SU among City residents have declined.
- ZIP CODE-LEVEL VARIATIONS: The aforementioned indicators for which zip code information is available depict congruent zip code areas experiencing a greater burden of risk factors or their outcomes. Among the most impacted are: 63101, 63102, 63103, 63106, 63107, 63111, 63113, and 63118. These zip codes were identified across variables in risk, such as poverty, and showing the highest levels of acute care utilization for various BH needs. In many cases, these zip codes were also explicitly named by participatory group members as vulnerable areas.

<sup>&</sup>lt;sup>10</sup> Bureau of Vital Statistics, Missouri Department of Health and Senior Services. "Opioid Death Toll." 2018. www.health.mo.gov/data/opioids/death-toll.php.

<sup>&</sup>lt;sup>11</sup> Missouri BH Epidemiology Workgroup, Missouri Department of Mental Health. "Alcohol & Drug Use." 2017. www.dmh.mo.gov.

#### **DETAILED FINDINGS**

#### ST. LOUIS CITY COMMUNITY INDICATORS

To better understand the needs of adults with BH concerns in St. Louis City, it is important to understand the community context.

# POPULATION, AGE, RACE AND GENDER

In 2016, St. Louis City had a total estimated population of 316,030 – with an estimated 52% females and 48% males. The median age was 34.6 years and an estimated 79% of the population were 18 years of age or older. St. Louis City has experienced a decline in population over the past 10 years (2006-2016) with the general population decreasing by 11%, from 353,821 to 316,030 (see **Appendix D**, Table D1). Youth experienced the highest decrease in population. From 2006-2016, the overall percentage of adults in the population has increased from 73% to 79%. In 2016, there were 251,755 adults living in St. Louis City.

Table 1 below shows the 2016 St. Louis City general population broken down by its four majority races and for residents who are of Hispanic ethnicity. For people reporting one race alone: 45.6% identified as White; 47.9% identified as Black or African American; 3.1% identified as Asian; 2.2% identified as two or more races; and 3.9% of the people in St. Louis City residents identified as Hispanic. People of Hispanic origin may be of any race.

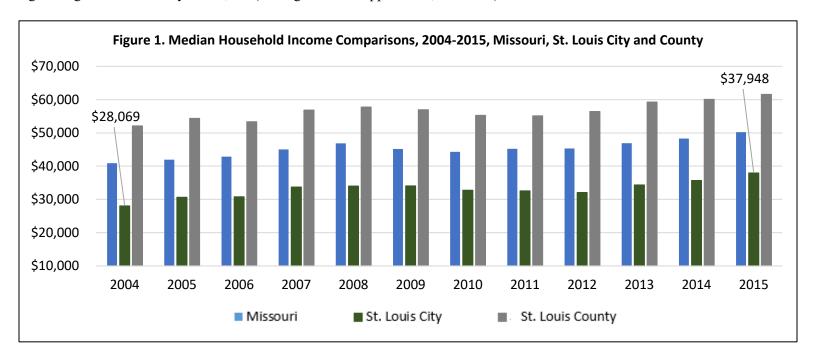
Table 1. Total Population by Most Prevalent Races and Hispanic Ethnicity, St. Louis City, 2016

	White		Black		Asian		2 or More Races		Hispanic		Total
All Ages	144,226	45.6%	151,372	47.9%	9,660	3.1%	7,051	2.2%	12,216	3.9%	316,030

Source: U.S. Dept. of Commerce, Bureau of the Census; prepared by the Missouri Department of Mental Health. Figures are mid-year (July 1) estimates released annually by the U.S. Department of Commerce, Bureau of the Census.

# INCOME

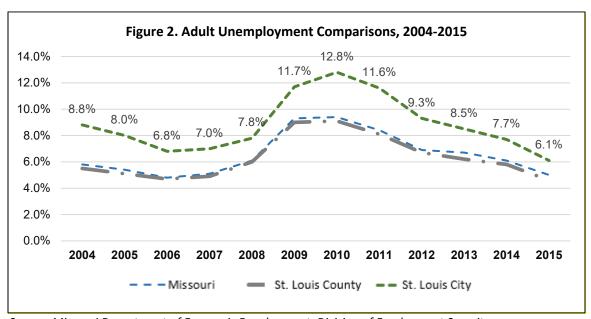
As discussed in qualitative data analysis, income can directly impact access to services and environmental stressors for adults. In 2015, St. Louis City's median household income was \$37,948 (as compared to \$35,681 in 2014, and \$28,069 in 2004). While this increase is substantial (35%), this median was approximately \$12,000 less than the State of Missouri's median income, and nearly \$24,000 lower than neighboring St. Louis County at \$61,569 (see Figure 1 and Appendix D, Table D2).



Source: US Census Bureau. Definitions: Median income of family households with children under 18. Based on ACS 5-year estimates.

#### UNEMPLOYMENT

Unemployment is defined as the percentage of the civilian labor force that is unemployed and actively looking for work. Adult unemployment within St. Louis City peaked in 2010 with a 12.8% rate, and has improved since that time. As of 2015, unemployment was at an all-time low of 6.1%. The same unemployment pattern could be seen across all comparable entities from 2004 to 2015 (see Figure 2); St. Louis County was at 4.6% and the state of Missouri rate was 5%. The city's unemployment percentage decreased by 2.7% from 8.8% in 2004 to 6.1% in 2015 (see Appendix D, Table D3). In 2015, 71.9% of the population ages 16+ were employed; 21.8% of the population was not currently in the labor force.



Source: Missouri Department of Economic Development, Division of Employment Security.

#### **POVERTY**

While the total population has decreased in St. Louis City, the portion of the population living at or below Federal Poverty Level has remained essentially stable (increasing by 1%). While Federal Poverty Level benchmarks vary over time, in 2015, an individual living on less than \$12,000 or a family of four living on less than \$25,000 met the federal definition of poverty. Figure 3 and Appendix D, Table D4 shows that as of 2015, 26% of the St. Louis City population were at or below this level (78,089 individuals).

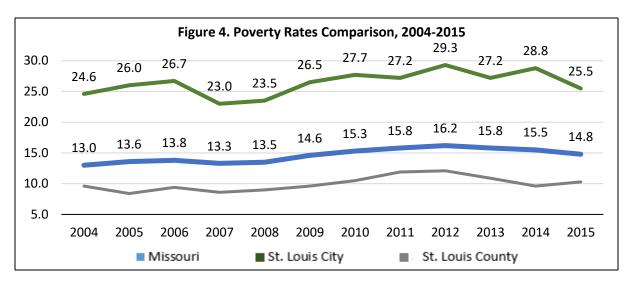


Source: U. S. Census Bureau; American Community Survey

From 2004-2014, the number of individuals in poverty (88,571) increased by 5% despite an approximate 7% decrease in the population. Data reported in 2015 reflects 78,089 individuals, a decrease of 6.1% since 2004 (83,140). However, despite a decrease in the overall volume of individuals living in poverty, the rate of those in poverty persisted. Additionally, while the federal poverty level offers one, well-defined measure of poverty, more broadly defined measures (e.g. underemployment) reflect far more individuals impacted.

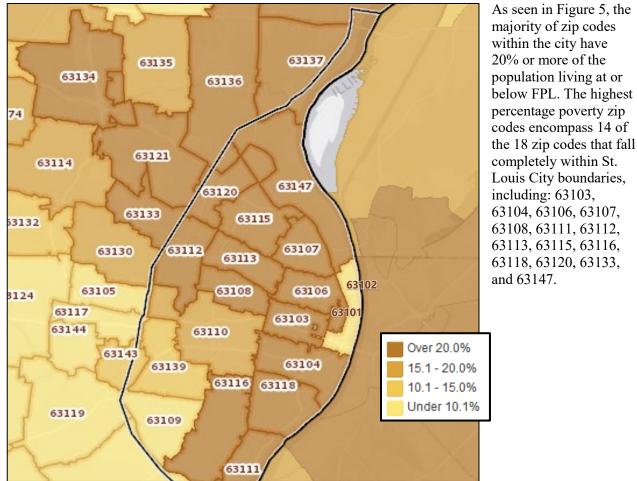
Figures 4 and 5 reflect state and local comparison data, which shows that St. Louis City had the highest percentage of overall population in poverty, as compared to St. Louis County and the state. Notably, poverty has increased across all geographic areas over time.

Variations in the percentage of the population at or below Federal Poverty Level (FPL) take place at the zip code level within St. Louis City.



Source: U. S. Census Bureau; American Community Survey

Figure 5. Percent of Population in Poverty, St. Louis City by Zip Code

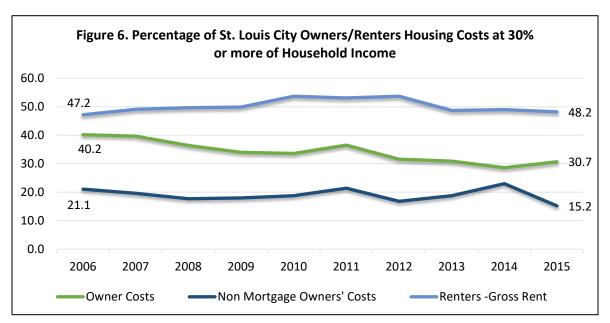


Source: U.S. Census Bureau, American Community Survey 5-Year Estimates accessed via www.exploremohealth.org

#### HOUSING STABILITY

The US Department of Housing and Urban Development (HUD) definition of households at risk of homelessness includes those who utilize more than 30% of their monthly household income for housing payments. These households may also have significant difficulty affording other basic needs such as food and clothing.

In 2015, there were an estimated 175,644 housing units in St. Louis City with an 80.5% occupancy rate—43% owner occupied, and 57% renter occupied. An estimated 54% of households had moved into these units since 2010. An estimated 67% of the owner-occupied units had a mortgage. Further, an estimated 3% of the households did not have telephone service, and an estimated 22% did not have vehicles available (in comparison to 7% in St. Louis County).



Source: U.S. Census Bureau, American Community Survey 1-Year Estimates

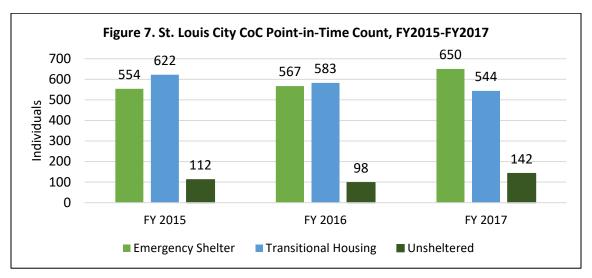
In 2015, 15% of owners without mortgages and 48% of renters in St. Louis City spent 30 percent or more of their household income on housing. As can be seen in Figure 6, from 2006 to 2015, the percentage of non-mortgage owners who spent 30% or more of their monthly income on housing decreased by 5.9% over time, while the percentage of owners with a mortgage who spent 30% or more decreased by 9.5% from 2006 to 2015.

Comparisons with figures for the state of Missouri show that there were 6.3% more renters in St. Louis City (48.2%) who had gross rent costs of 30% or more of their household income (MO rate = 41.9%). In all comparisons, St. Louis City had the higher percentage of individuals who spent 30% or more of their household income on their monthly housing/rent payment. In 2015 alone, 30.7% of St. Louis City homeowners spent 30% or more in comparison to only 23.6% of Missouri homeowners.

#### **HOMELESSNESS**

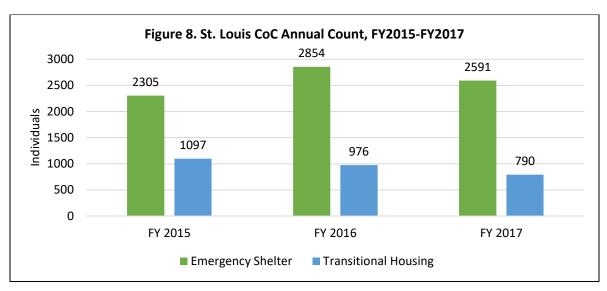
The City of St. Louis Continuum of Care (St. Louis CoC) has a much larger homeless population than surrounding counties, including the St. Louis County CoC with whom it partners. The City's volume and variety of services, particularly for specific populations (e.g. men) and transportation may contribute to this large homeless population. Although most of its participating agencies are located in the City, services provided often span both the City and surrounding counties.

While Point-in-time (PIT) Counts reflect an increase in individuals in emergency shelter over time, annual counts conflict with this pattern. <sup>12</sup> Individuals in transitional housing have consistently declined across PIT (13% decline) and annual counts (28%) during the past three fiscal years. A reduction in transitional housing beds is at the root of this trend, as part of a strategic shift by US Department of Housing and Urban Development. Conversely, PIT counts reflect an increase in unsheltered individuals (27% increase) over the past three fiscal years.



Source: Institute for Community Alliances. "System Performance Indictors." 2018.

<sup>&</sup>lt;sup>12</sup> Institute for Community Alliances. "System Performance Indictors." 2018. https://www.icalliances.org/system-performance-dash.



Source: Institute for Community Alliances. "System Performance Indictors." 2018.

Key Findings from PIT counts<sup>13</sup> also reflect the following for specific populations:

- *Chronically Homeless:* Chronically homeless individuals increased by 89% between 2014 and 2017.
- Racial Distribution: Although African-Americans comprise roughly half of the general population, they account for a significant portion of the homeless population, between 60-95% in different shelter types. African-Americans are more likely to experience homelessness than any other racial group in the CoC.
- *Age Distribution:* With respect to adults, the 31-to-50 age group is predominant across all shelter types. However, the population in permanent supportive housing appears to be aging, with those in the 51-to-60 group recently nearing 30% of the population. While the frequency of children in permanent supportive housing decreased, single adults accessed this programming in greater numbers, showing a 47% increase from 2010-11 to 2013-14.
- *Housing Instability:* Sixty to 70% of families resided with family or friends prior to entering emergency shelter, an indication that this type of accommodation could be a common pathway to homelessness.
- *Gender Distribution:* For households in emergency shelter and transitional housing, females outnumber males by 1.5 to 1.8 times. In 2016, females exceeded males 2 to 1.

<sup>&</sup>lt;sup>13</sup> Missouri Housing Development Commission. "Missouri Statewide Homelessness Study Report." 2017. www.mhdc.com/ci/documents/MSHS-2017.pdf.

#### **SAFETY**

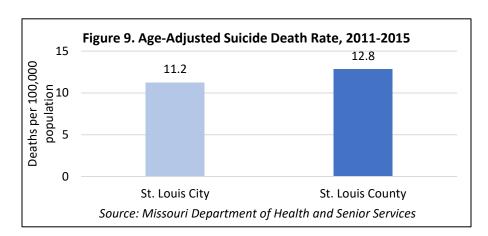
While a myriad of health and safety indicators may affect adults with BH concerns in St. Louis City, the following: violent crime, suicide and self-injury, and opioid overdose were identified as the most pressing to understand in the context of adult BH.

#### Violent Crime

Community-level violence, trauma, and toxic stress are experienced at markedly higher rates in St. Louis City than many areas of the region, state, and nation. This is evidenced in part by the violent crime <sup>14</sup> data reported through the St. Louis Metropolitan police department. According to the 2016 Uniform Crime Reporting statistics, St. Louis City had the highest per capita homicide rate in the United States and the second highest overall violent crime rate. In 2016, there were 5,762 violent crimes and 188 murders in the city of St. Louis—a rate of 59 murders and 1,817 violent crimes per 100,000 city residents. While this represents an increase from 2004 (6,957 violent crimes, 113 murders—a rate of 34 murders and 2,076 violent crimes per 100,000 city residents), it is a substantial decrease from 1994 (14,644 violent crimes, 248 murders —a rate of 64 murders and 3,751 violent crimes per 100,000 city residents). <sup>15</sup>

#### Suicide Rate and Self-Harm

From 2011-2015, the age-adjusted rate for death by suicide in St. Louis City was 11.2 deaths per 100,000 adults (Figure 9). This rate is 13% lower than St. Louis County (12.8 per 100,000).

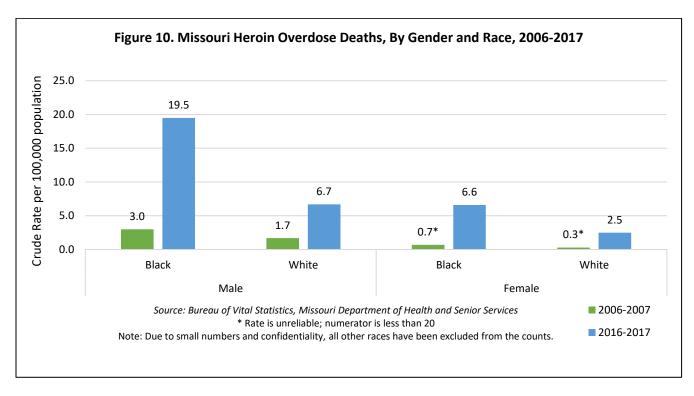


<sup>&</sup>lt;sup>14</sup>Violent crimes are defined in the Uniform Crime Reporting Program as those offenses which involve force or threat of force, including four offenses: murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault.

<sup>&</sup>lt;sup>15</sup> Uniform Crime Reporting. www.ucr.fbi.gov/ucr.

# **Opioid Overdose**

Opioid overdose has reached epidemic levels in the region during the past several years. From 2013-2017, St. Louis City ranked highest in the state for the rate of overdose deaths at a rate of 41.8 rate per 100,000 individuals, and a total of 658 deaths. Individuals aged 25-44 accounted for most deaths, with the highest rate among those ages 25-34. Black or African Americans are twice as likely to die from an opioid overdose, and statewide Black males are most vulnerable to overdose death.



Statewide, male rates for heroin-involved overdose deaths are considerably higher than female rates. The rate of heroin-involved overdose deaths for Black males is more than twice that of White males, almost four times that of Black females, and more than eight times higher than White females according to data collected during 2016-2017. While females experienced a larger percent change increase between 2006-2007 and 2016-2017, the male rates of heroin-involved overdoses are still much higher overall.

<sup>&</sup>lt;sup>16</sup> Bureau of Vital Statistics, Missouri Department of Health and Senior Services. "Opioid Death Toll." 2018. www.health.mo.gov/data/opioids/death-toll.php.

#### PREVALENCE OF BEHAVIORAL HEALTH NEEDS

Localized information on prevalence of BH needs is limited and requires strategies that incorporate analyses based on the unique community context. General information reported about Eastern Missouri<sup>17</sup> shows that 18.3% of those 18 and older had a mental illness in the past year with 4.2% having a serious mental illness (a mental, behavior, or emotional disorder that causes serious functional impairment that substantially interferes with or limits one or more major life activities<sup>18</sup>). Additionally, 7.8% of the adult population experience a SU disorder.

As discussed in the St. Louis City Community Indicators portion of this section, poverty has a significant impact on the environment and daily lives of adults in St. Louis City. Poverty also has an established impact on BH. Table 2 reflects the substantial increase in prevalence of any mental illness, serious mental illness, and SU disorders experienced by adults at or below 100% of the Federal Poverty level.

Table 2: Prevalence of Behavioral Health Needs, By Population and Concern, 2016

Population	Any Mental Illness	Serious Mental Illness	Substance Use Disorder
Adult Population	18.3%	4.2%	7.8% Overall (6% Alcohol Use Disorder; 2.7% Illicit Drug Use Disorder)
Adult population at or below 100% FPL	24.5%	6.7%	10.5% (7.2% Alcohol Use Disorder; 4.7% Illicit Drug Use Disorder)

Source: National Survey on Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration (SAMSHA), 2016.

Additionally, approximately 7.1% of Eastern Missouri residents ages 18 and older had at least one major depressive episode in the past year. A major depressive episode is characterized by an extended period of a depressed mood, loss of interest or pleasure, and impaired functioning.

<sup>&</sup>lt;sup>17</sup> Missouri Department of Mental Health. "Missouri BH Epidemiology Workgroup." 2017. https://dmh.mo.gov/ada/mobhew.

<sup>&</sup>lt;sup>18</sup> Substance Abuse and Mental Health Services Administration (SAMSHA). "Mental and Substance Use Disorders." 2018. www.samhsa.gov/disorders.

#### ACUTE ADULT BEHAVIORAL HEALTH SERVICES

BH data on hospital-based treatment was gathered by the Missouri Department of Health and Senior Services, accessed through the St. Louis Region's Think Health website. Data regarding emergency room (ER) visits and hospitalizations for adult mental health is reflected below.

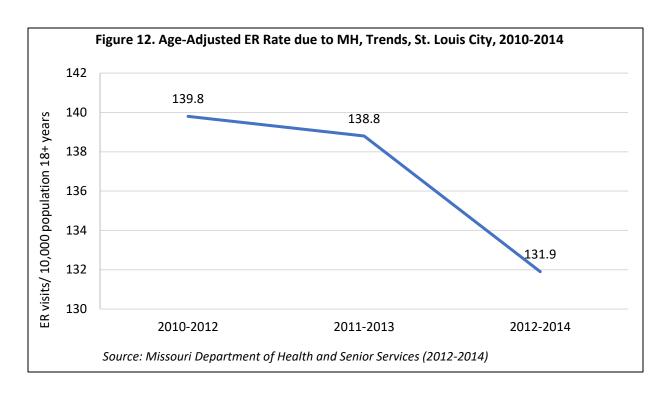
#### ADULT EMERGENCY ROOM VISITS FOR MENTAL HEALTH

Between 2012-2014, the age-adjusted rate of ER visits for adults with mental health needs ranged from 26.3 to 340.5 per 10,000 adults. The mean was a rate of 131.9 per 10,000 adults. By zip code, the mean ranged from 26.3 to 340.5 per 10,000 adults. The red zip codes in Figure 11 represent those significantly higher than the mean rate, while those in green are lower than the mean. Among those higher than the mean rates, the zip codes of 63103, 63113, and 63102 have the highest rates (340.5, 257.1, 249.6, respectively).

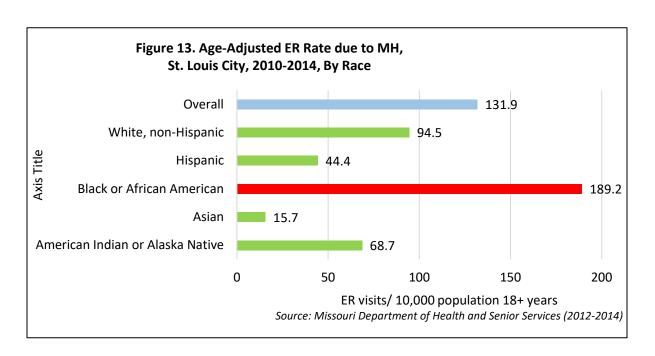
63114 and Granite 63120 63133 32 63130 63107 63112 63113 City Clayton 63101 63108 63105 63/1/1/June 63100 Louis 63110 East St Louis 53143 63104 63139 Webster Grove 53119 63116 Cahokia 63125 26 63123 Greater than 131.9 mean Less than 131.9 mean

Figure 11. Age-Adjusted ER Visit Rates for Mental Health (MH) Concerns, St. Louis City by Zip Code

The mean rate represents a decline of 6% since 2010 (from 139.8 per 10,000 adults to 131.9 per 10,000 adults) (Figure 12). However, this rate is 54% greater than that of St. Louis County (75.8 per 10,000 adults).



The rate of ER visits also varies significantly by demographic groups. Within St. Louis City, African Americans have a 43% higher rate of ER utilization for mental health concerns than the rest of the population (with a rate of 189.2 per 10,000 adults). Male ER utilization is 28% higher than female utilization (150.8 and 113.9, respectively). The rate of ER utilization is highest among 35- to 44-year-olds.



## ADULT EMERGENCY ROOM VISITS FOR ALCOHOL USE

Between 2012-2014, the age-adjusted rate of ER visits for adults with alcohol use concerns across St. Louis City zip codes ranged from 7.9 to 260.2 per 10,000 adults. The mean was 67.9 per 10,000 adults. The red zip codes in Figure 14 represent those significantly higher than the mean rate, while those in green are lower than the mean. The zip codes of 63103, 63101, and 63106 have the very highest rates (260.2, 130.3, 125.3, respectively).

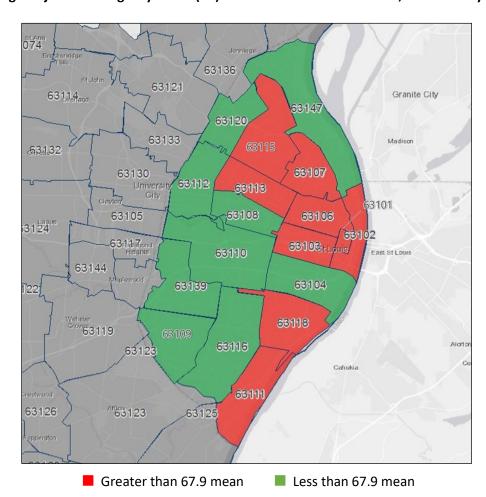
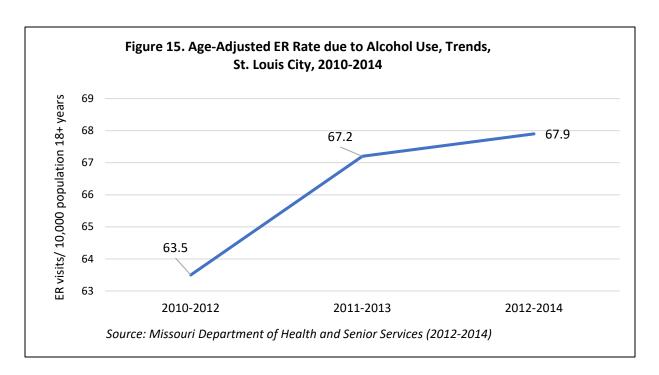
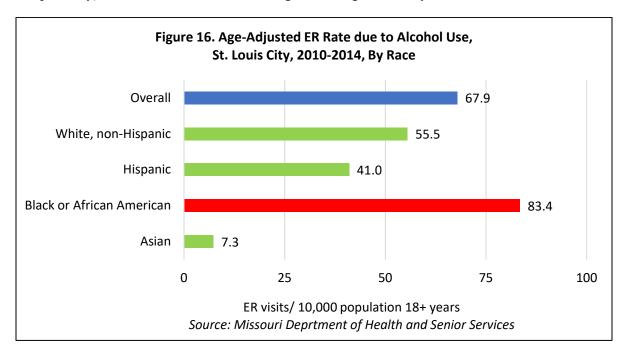


Figure 14. Age-Adjusted Emergency Room (ER) Visit Rates for Alcohol Abuse, St. Louis City by Zip Code

The mean rate represents an increase of 7% since 2010 (from 63.5 per 10,000 adults to 67.9 per 10,000 adults) (Figure 15). This rate is 102% greater than that of St. Louis County (22.0 per 10,000 adults).



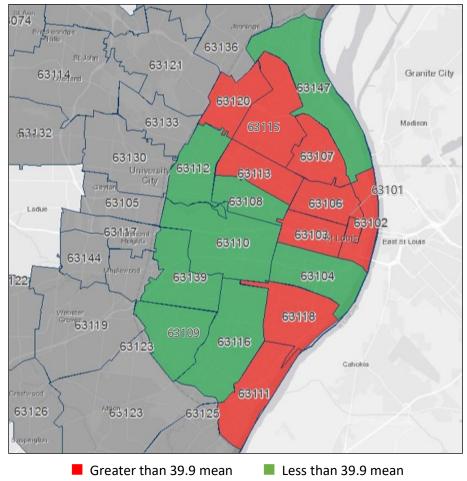
The rate of ER visits also varies significantly by demographic groups. Within St. Louis City, African Americans have a 40% higher rate of ER utilization for alcohol abuse concerns than the rest of the population (with a rate of 83.4 per 10,000 adults). Male ER utilization is 114% higher than female utilization (108.3 and 29.6, respectively). The rate of ER utilization is highest among 45- to 64-year-olds.



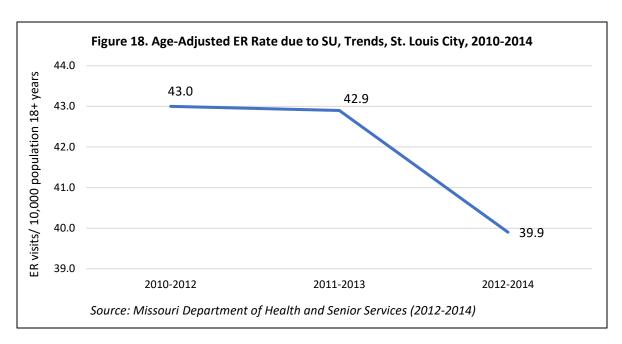
## ADULT EMERGENCY ROOM VISITS FOR SUBSTANCE USE

Between 2012-2014, the age-adjusted rate of ER visits for adults with SU concerns across St. Louis City zip codes ranged from 6 to 117.7 per 10,000 adults. The mean was 39.9 per 10,000 adults. The red zip codes in Figure 17 represent those significantly higher than the mean rate, while those in green are lower than the mean. The zip codes of 63102, 63111, and 63118 have the highest rates (117.7, 74.2, 70.4, respectively).

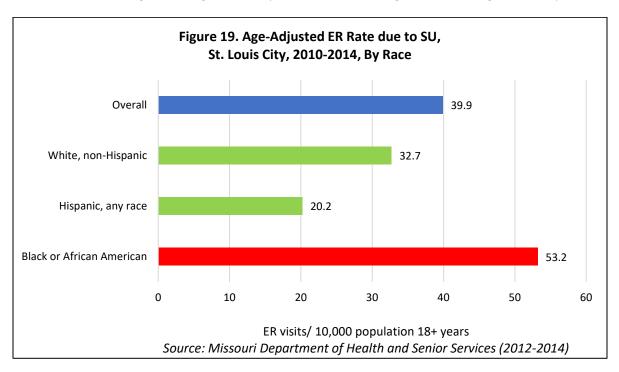
Figure 17. Age-Adjusted Emergency Room (ER) Visit Rates for Substance Use, St. Louis City by Zip Code



The mean rate represents a decrease of 7% since 2010 (from 43.0 per 10,000 adults to 39.9 per 10,000 adults) (Figure 18). However, this rate is 76% greater than that of St. Louis County (17.9 per 10,000 adults).



The rate of ER visits for SU varies by demographic groups. Within St. Louis City, African Americans have a 48% higher rate of ER utilization for substance abuse concerns than their white peers (with a rate of 53.2 per 10,000 adults). Male ER utilization is 55% higher than female utilization (51.1 and 29.1, respectively). The rate of ER utilization is higher among 25- to 44-year-olds, with the highest rate among 25- to 34-year-olds.



## ADULT EMERGENCY ROOM VISITS FOR SUICIDE AND INTENTIONAL INFLICTED INJURY

Between 2012-2014, the age-adjusted rate of ER visits due to adult suicide or intentional self-inflicted injury across St. Louis City zip codes ranged from 6.6 to 169.1 per 10,000 adults. The mean was 48.5 per 10,000 adults. The red zip codes in Figure 20 represent those significantly higher than the mean rate, while those in green are lower than the mean. The zip codes of 63103, 63102, and 63101 have the highest rates (169.1, 122.5, 112.6, respectively).

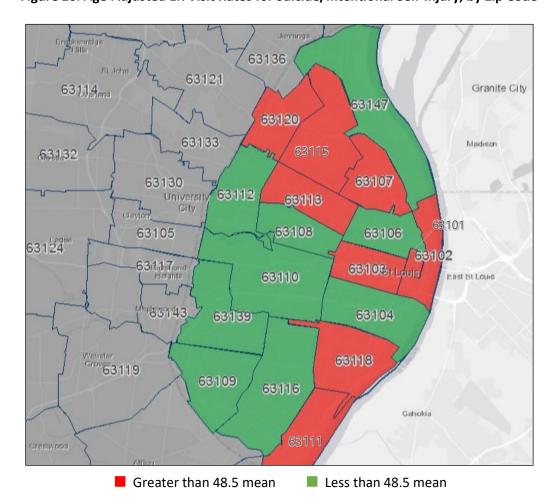
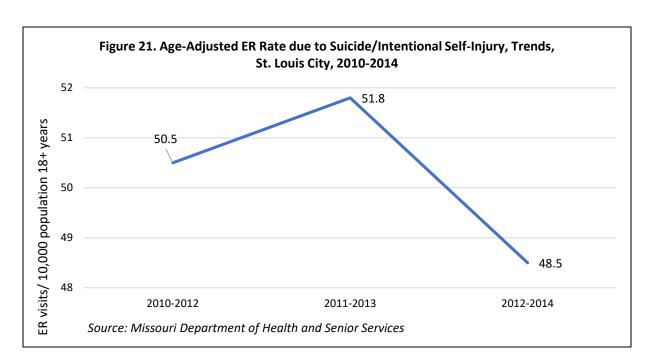
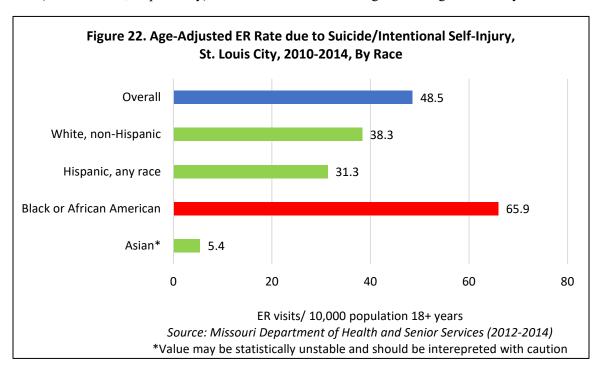


Figure 20. Age-Adjusted ER Visit Rates for Suicide/Intentional Self-Injury, by Zip Code

The mean rate represents a decrease of 4% since 2010 (from 50.5 per 10,000 adults to 48.5 per 10,000 adults) (Figure 21). However, this rate is 99% greater than that of St. Louis County (16.3 per 10,000 adults).



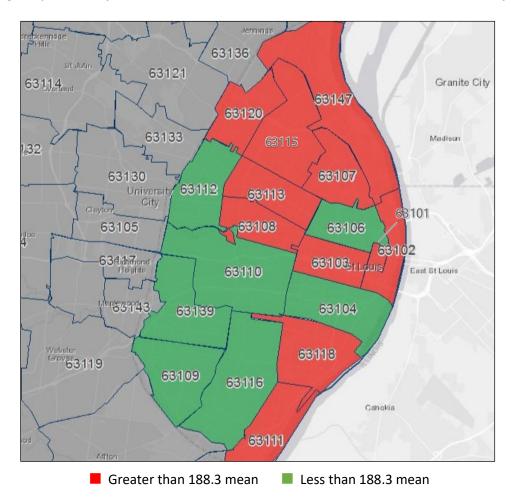
The rate of hospitalizations also varies significantly by demographic groups. Within St. Louis City, African Americans have a 36% higher rate of ER visits due to suicide or intentional self-inflicted injury than the rest of the population (with a rate of 65.9 per 10,000 adults). Male ER utilization is 60% higher than female utilization (63.4 and 34.0, respectively). The rate of utilization is highest among 35- to -44-year-olds.



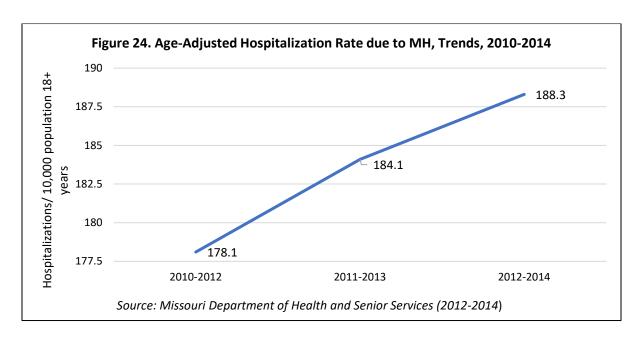
#### ADULT HOSPITALIZATIONS FOR MENTAL HEALTH

Between 2012-2014, the age-adjusted rate of hospitalizations for adults with mental health concerns across zip codes within St. Louis City ranged from 36.7 to 415.9 per 10,000 adults. The mean was 188.3 per 10,000 adults. The red zip codes in Figure 23 represent those significantly higher than the mean rate, while those in green are lower than the mean. The zip codes of 63103, 63101, and 63113 have the highest rates (415.9, 405.1, 374.7, respectively).

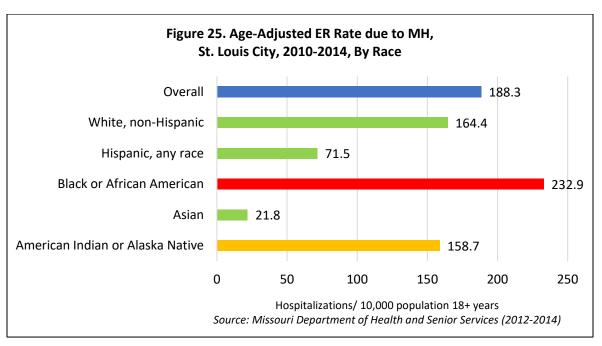
Figure 23. Age-Adjusted Hospitalizations Rates for Mental Health (MH) Concerns, St. Louis City by Zip Code



The mean rate represents an increase of 6% since 2010 (from 178.1 per 10,000 adults to 188.3 per 10,000 adults) (Figure 24). This rate is 52% greater than that of St. Louis County (110.4 per 10,000 adults).



The rate of hospitalizations also varies significantly by demographic groups. Within St. Louis City, African Americans have a 24% higher rate of hospitalizations for mental health concerns than the rest of the population (with a rate of 232.9 per 10,000 adults). Hospitalization rates also vary by gender. The male hospitalization rate is 42% higher than the female rate (229.0 and 149.7, respectively). The rate of hospitalizations is highest among 35- to -44-year-olds.



## ADULT HOSPITALIZATIONS FOR ALCOHOL USE

Between 2012-2014, the age-adjusted rate of hospitalizations for adults with alcohol abuse concerns across zip codes within St. Louis City ranged from 6.4 to 62.9 per 10,000 adults. The mean was 21.9 per 10,000 adults. Zip codes in red in Figure 26 represent those that are significantly higher than the mean rate, while those in green are lower than the mean. The zip codes of 63103, 63101, and 63111 have the highest rates (62.9, 35.4, 33.8, respectively). Note: No data was available for 63102.

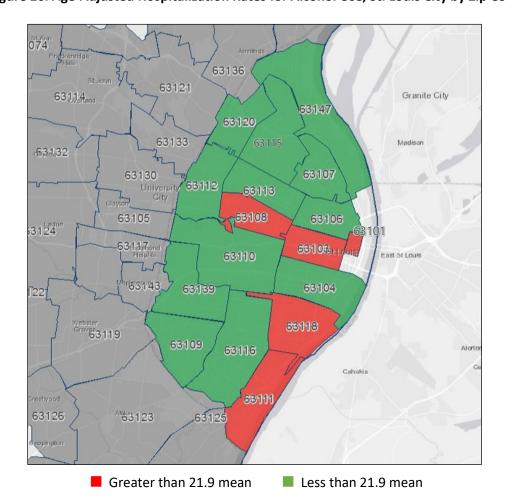
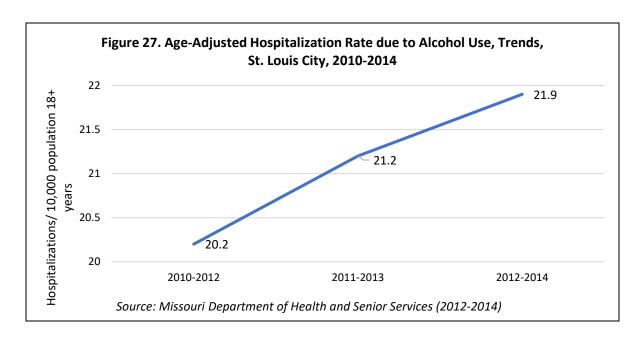
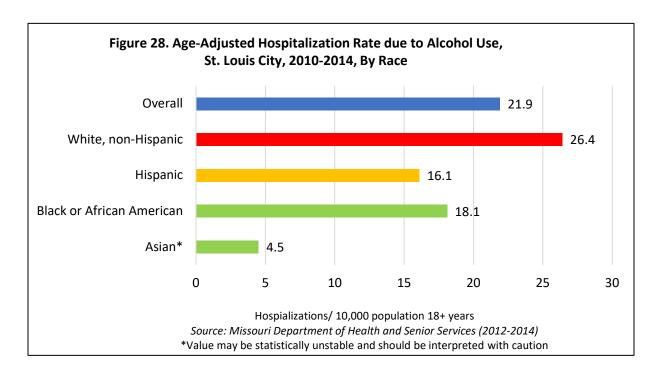


Figure 26. Age-Adjusted Hospitalization Rates for Alcohol Use, St. Louis City by Zip Code

The mean rate represents an increase of 8% since 2010 (from 20.2 per 10,000 adults to 21.9 per 10,000 adults) (Figure 27). This rate is 52% greater than that of St. Louis County (12.9 per 10,000 adults).



The rate of hospitalizations also varies significantly by demographic groups. Within St. Louis City, non-Hispanic Whites have a 21% higher rate of hospitalizations for alcohol abuse concerns than the rest of the population (with a rate of 26.4 per 10,000 adults). Hospitalization rates also vary by gender. The male hospitalization rate is 100% higher than the female rate (33.3 and 11.1, respectively). The rate of hospitalizations is highest among 45- to -64-year-olds.



#### ADULT HOSPITALIZATIONS FOR SUBSTANCE USE

Between 2012-2014, the age-adjusted rate of hospitalizations for adults with SU concerns across zip codes within St. Louis City ranged from 4.7 to 56.4 per 10,000 adults. The mean was 27.8 per 10,000 adults. The red zip codes in Figure 29 represent those significantly higher than the mean rate, while those in green are lower than the mean. The zip codes of 63107, 63111, and 63106 have the highest rates (56.4, 45.6, 45.4, respectively).

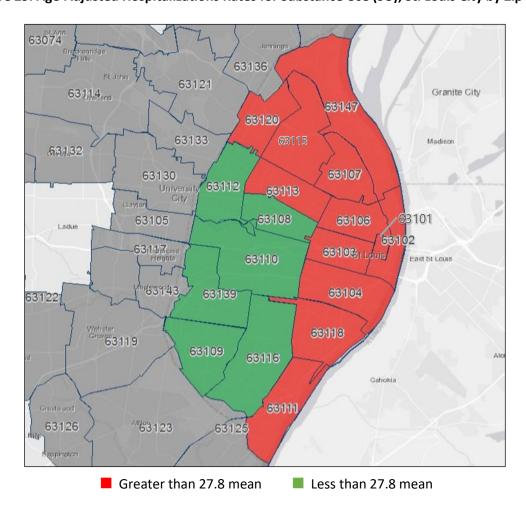
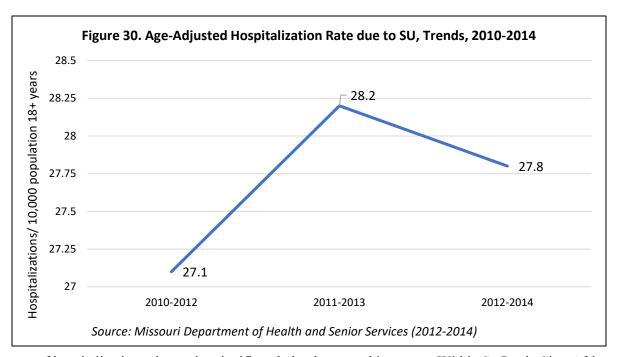
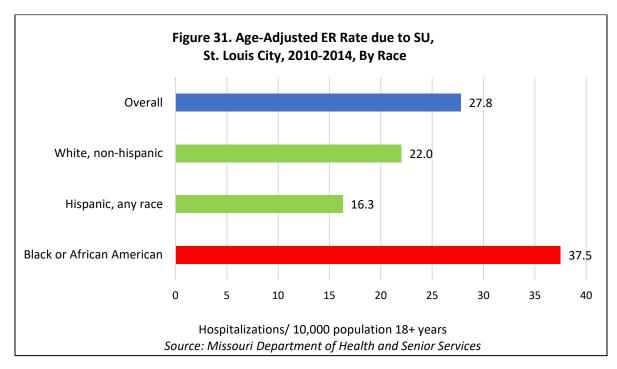


Figure 29. Age-Adjusted Hospitalizations Rates for Substance Use (SU), St. Louis City by Zip Code

The mean rate represents an increase of 3% since 2010 (from 27.1 per 10,000 adults to 27.8 per 10,000 adults) (Figure 30). This rate is 85% greater than that of St. Louis County (11.2 per 10,000 adults).



The rate of hospitalizations also varies significantly by demographic groups. Within St. Louis City, African Americans have a 35% higher rate of hospitalizations for substance abuse concerns than the rest of the population (with a rate of 37.5 per 10,000 adults). The rate of hospitalizations is highest among 35- to -44-year-olds. There was no significant difference between male and female hospitalization rates.



# ADULT HOSPITALIZATION RATES FOR SUICIDE AND INTENTIONAL INFLICTED INJURY

Between 2012-2014, the age-adjusted rate of hospitalizations for adults due to suicide or intentional self-inflicted injury across St. Louis City zip codes ranged from 16.9 to 300.5 per 10,000 adults. The mean was 103.8 per 10,000 adults. The red zip codes in Figure 32 represent those significantly higher than the mean rate, while those in green are lower than the mean. The zip codes of 63103, 63101, and 63113 have the highest rates (300.5, 284.1, 178.1, respectively).

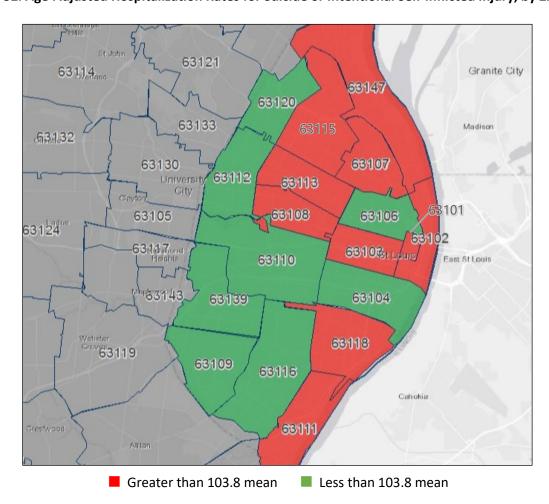
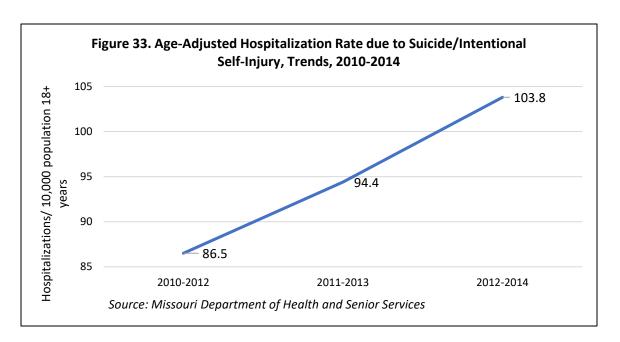
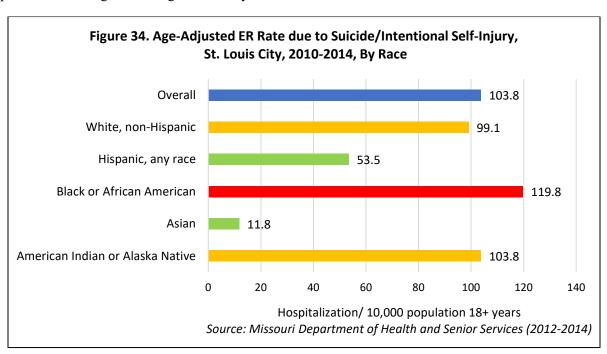


Figure 32. Age-Adjusted Hospitalization Rates for Suicide or Intentional Self-Inflicted Injury, by Zip Code

The mean rate represents an increase of 20% since 2010 (from 86.5 per 10,000 adults to 103.8 per 10,000 adults). (Figure 33). However, this rate is 56% greater than that of St. Louis County (58.6 per 10,000 adults).



The rate of hospitalizations also varies significantly by demographic groups. Within St. Louis City, African Americans have a 15% higher rate of hospitalizations due to suicide or intentional self-inflicted injury than the rest of the population (with a rate of 119.8 per 10,000 adults). Hospitalization rates also vary by gender. The male hospitalization rate is 46% higher than the female rate (128.2 and 80.5, respectively). The rate of hospitalizations is highest among 35- to -44-year-olds.



#### DEPARTMENT OF MENTAL HEALTH COMMUNITY-BASED MENTAL HEALTH SERVICES

The following BH data was gathered by the Missouri Department of Mental Health (DMH), Division of Behavioral Health reflecting consumers with data documented in the state CIMOR (Customer Information Management, Outcomes, and Reporting) system. Consumers in CIMOR data include those who receive treatment through DMH contracted providers and are potentially eligible for state-funded services, predominantly due to SU or serious mental illnesses and disorders. A summary of information from the status reports consistently provided by this source annually since 2009 as well as an analysis of trends since FY 2009 follows:

In fiscal year (FY) 2016, 6,852 Saint Louis City residents received comprehensive psychiatric services through treatment for serious mental illnesses and disorders at publicly-funded facilities. Adults made up 85% of those who received comprehensive psychiatric services. From FY2009 to FY2016, there was an overall 15.5% decrease in the number of individuals served, though these trends have been largely stable since FY2012, with a 17.2% decrease in adults (over age 18) served in that same period. Essentially, an equal number of men and women were served in 2016. Notably, in each fiscal year from to 2009-2016, consumers ages 45-54 have been the largest demographic of individuals served. While the number of individuals served in all other age groups have varied over time, since FY2015, individuals age 18-24 have been the smallest demographic of individuals served. Psychotic disorders and mood disorders were the predominant diagnoses of those served in 2016.

Table 3: Volume of St. Louis City residents who received Comprehensive Psychiatric Services via the Dept. of Mental Health providers, FY 2009-2016

Population	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	% of total (2016)	Diff.	% Ch.
Total Adults	7,038	6,419	5,535	5,845	5,706	5,827	5,972	5,827	85%	1,211	-17.2%
General Population Total	8,112	7,117	6,231	6,716	6,686	6,797	6,921	6,852		1,260	-15.5%

Source: Status Reports on Missouri's Substance Use and Mental Health; Division of Behavioral Health.

# DEPARTMENT OF MENTAL HEALTH COMMUNITY-BASED SUBSTANCE USE SERVICES

In fiscal year (FY) 2016, 3,472 Saint Louis City residents received comprehensive psychiatric services through treatment for substance-use disorders at publicly-funded facilities. Adults made up 97% of those who received these services. From FY2009 to FY2016, there was an overall 11.9% decrease, with an 8.6% decrease in adults (over age 18) served. In each fiscal year from to 2009-2016, consumers age 45 to 54 have made up the largest proportion of individuals served. While proportions of individuals served in all other age groups have varied over time, since FY2015 individuals age 18-24 and 55+ have been the smallest demographics served. Notably, males consistently have been the largest demographic served, with 56% more males than females served in SU treatment settings in 2016. Opioids were the predominant primary substance of use for those in services in 2016.

Table 4: Volume of St. Louis City residents who received Substance Use Services via the Dept. of Mental Health providers, FY 2009-2016

Population	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	% of total (2016)	Diff.	% Ch.
Total Adults	3,692	3,804	3,457	3,250	3,017	3,227	3,345	3,375	97.2%	-135	-8.6%
General Population Total	3,941	4,038	3,648	3,387	3,166	3,370	3,459	3,472		-482	-11.9%

Source: Status Reports on Missouri's Substance Use and Mental Health; Division of Behavioral Health.

#### EASTERN REGION BEHAVIORAL HEALTH ACCESS TO CARE SURVEY DATA

In partnership with the St. Louis Regional Health Commission (RHC), BHN collects and publishes annual data through RHC's Access to Care Data Book. BHN first developed the "Eastern Region Behavioral Health Access to Care Survey" in 2015, and has since collected calendar year 2014-2016 data from community-based BH safety net providers (Department of Mental Health Administrative Agents and Affiliates and state-funded SU treatment providers with the widest array of services for the general population), the Access Crisis Intervention hotline, and hospitals with inpatient psychiatric services in the Eastern Region of Missouri (St. Louis City and Counties of Franklin, Jefferson, Lincoln, St. Charles, St. Louis and Warren). Self-reported data for this section has been collected and verified by BHN, apart from primary care data provided by local community health centers (CHCs) which is collected and validated by RHC. This unique data set allows the opportunity to see those served beyond Department of Mental Health or other publicly available data sets, by organization. Key findings include:

- The total number of BH users (unduplicated individuals) served by BH safety net providers in 2016 remained stable as compared to 2014 and 2015. Newly admitted users served at BH safety net providers increased by 9% in 2016 as compared to 2015, and account for approximately one quarter of all users.
- Significant variation exists in the rate in which the safety net population was served within the designated service areas of respective BH safety net administrative agents in Missouri's Eastern Region.
- SU treatment admissions declined by 7% in 2016, as compared to 2015, at the three largest state-funded SU treatment providers with the widest array of services for the general population within the Eastern Region.
- BH encounters at safety net primary care providers increased by 55% from 2015 to 2016 and by 74% between 2012-2016.
- Emergency department encounters with BH diagnoses (primary and secondary) accounted for 19% of all emergency department encounters in 2016, with top BH diagnoses being: mood disorders, schizophrenia and delusional disorders, and alcohol use disorders.
- While acute psychiatric encounters remained stable overall in 2016, inpatient psychiatric staffed bed capacity increased by 5% (35 beds) in 2016, as compared to 2015. While total staffed beds increased by 57 beds across adult and geriatric populations in 2016, capacity decreased by 22 beds for child and adolescent populations.

Detailed data and visualizations can be found in **Appendix E**.

# **RECOMMENDATIONS**

The following recommendations were developed from findings across the three methods of data collection (Regional Reports, Qualitative Data, and Quantitative Data). These recommendations are meant to broadly address St. Louis City adult behavioral health (BH), mental health (MH), and/or substance use (SU) at many levels of severity and points on the service continuum. Based on the data identified on Resources/Assets, Barriers/Gaps, and Opportunities the following major recommendations for the community's response are offered, followed by a brief explanation with examples, meant to provide possible strategies. The recommendations are not listed in order of priority.

# RECOMMENDATION 1: EXPAND SERVICE CAPACITY TO MEET THE NEEDS OF MORE PEOPLE AND DEVELOP INNOVATIVE APPROACHES TO ADDRESS BEHAVIORAL HEALTH NEEDS

Unequivocally, participatory groups, regional reports, and quantitative indicators emphasized a strong need for and limited capacity of BH services and supports. These challenges require concerted efforts to align service providers in order to serve increasing volumes of people experiencing BH concerns, improve their ability to respond to community adult BH needs, and address gaps in services and emerging needs.

Opportunities to expand treatment capacity and to develop innovative approaches to meet BH needs include:

- Expand specialty services, specifically: Outreach; intensive outpatient programs and treatment; 24/7 crisis access and response services; inpatient supports; longer-term care, case management, and follow-up (especially post-crisis); and medication assisted treatment.
- Increase funding for services that add capacity through the expansion of successful existing services, or increase funding for innovative programs to effectively address needs.
- Expand capacity by supporting creative approaches that address the shortage of psychiatric care providers, including: Investing in supports to primary care providers that manage the care of patients with mild to moderate BH needs; advancing the utilization of and reducing practice barriers to Advance Practice Nursing; enacting consultation and telehealth models to augment BH care teams.
- Develop transition opportunities for those stable enough to be served by alternatives to traditional or lower levels of care.

# <u>RECOMMENDATION 2</u>: IMPROVE ACCESS TO EXISTING BEHAVIORAL HEALTH SERVICES BY REMOVING BARRIERS AND OFFERING MORE NAVIGATIONAL ASSISTANCE

Participatory groups and regional reports detailed a highly complex system as well as system fragmentation that pose challenges to accessing existing services. These challenges result in under-utilization of services and negatively impact consumer experience. Efforts should be made to support potential and existing consumers to access services by addressing barriers such as availability (e.g. hours/days of operation), physical access (e.g. location/transportation), communication and awareness, and affordability of services. Additional enhancements should include: Better transitions of care, increased service collaboration within and across providers, as well as care provider collaboration.

Opportunities to improve access to BH services by removing barriers and offering more navigational assistance:

- Strengthen public awareness and information, making it easier to learn about BH services and navigate to the appropriate care
- Strengthen referrals and service linkages, and support navigational assistance that enable consumers to experience "no wrong door"
- Enhance care coordination within and across agencies, including an improved infrastructure for standardized shared communication between agencies
- Improve transitions of care and follow-up activities for adults who transfer to different programs within the same agency, or to other providers or care settings
- Develop targeted partnerships that promote access to affordable psychiatric medications
- Support integration—including co-location—of BH in other settings, particularly primary care and trusted community institutions (e.g. faith community)

# <u>RECOMMENDATION 3</u>: IMPLEMENT MORE RECOVERY-ORIENTED, EVIDENCE-BASED APPROACHES TO ADULT BEHAVIORAL HEALTH

Regional reports and qualitative data analyzed for this report clearly demonstrate a need to expand services and supports that are evidence-based and that address critical aspects of recovery often overlooked in a narrow focus on traditional BH service delivery. Quantitative data points to the issue of community violence and trauma negatively impacting BH needs. Support of holistic approaches to recovery that also engage and recognize natural supports in adults' lives is needed. In addition, investment in evidence-based practices focused on recovery would improve the quality of services as well as individual and systemic results.

Opportunities to implement additional recovery-oriented, evidence-based BH approaches include:

- Improve quality of life for adults by strengthening independent living skills and offering programs that address multiple domains of recovery (e.g. clubhouse models, psychosocial and illness management, and recovery support as well as opportunities for meaningful community engagement)
- Foster hope by increasing existing capacity of peer support and peer-delivered evidence-based interventions
- Expand targeted prevention and early intervention programs that support adult resilience
- Increase the cultural and trauma-informed competencies of provider organizations and their staffs
- Reduce stigma by offering services in non-traditional BH care environments and through co-location with other services
- Invest in evidence-based interventions that are tailored to unique needs of specific vulnerable populations (See Recommendation 5)
- Fund services that allow for intergenerational approaches that both engage and reduce barriers to engagement for adults in the context of their families
- Invest in methods that improve family and caregivers' ability to recognize, understand, and support adults in managing BH challenges

# <u>RECOMMENDATION 4</u>: BUILD THE CAPACITY OF BEHAVIORAL HEALTH PROVIDERS TO INTERRUPT OR PREVENT CRISES AT EARLIER STAGES AND RESPOND TO CRISES IN MORE INNOVATIVE AND EFFECTIVE WAYS

To provide more proactive and effective crisis intervention in St. Louis City, both the prevention of and response to crises require transformation. Data sources reflect very little change in the volume of community-based care being provided. Emergency department utilization, as well as qualitative reports indicate that access to services is constrained until a crisis occurs. Qualitative groups especially emphasized the challenge that individuals face in waiting until symptoms and needs escalate to seek or receive services. Earlier intervention in the course of the condition may be successful at catching and breaking cycles of crisis before they escalate. Innovative and effective crisis intervention methods as well as a reorganization of service options are needed to change the effects of crisis in St. Louis City.

Opportunities to restructure the crisis response system to prioritize prevention and build the capacity of BH providers to interrupt crises at earlier stages and respond in more innovative and effective ways:

- Reorganize service options to build the capacity of service providers to prevent, interrupt, and intervene in crises
- Identify alternative options to emergency rooms in addressing crises
- Establish screenings and earlier BH intervention, via cross-sector referrals, including social services and primary care
- Increase diagnosis and evaluation availability and accessibility, especially in St. Louis City, to improve early identification and treatment of BH needs
- Collaborate with violence prevention, crime victim advocates, law enforcement and criminal justice systems to effectively respond to adult BH needs (such as Crisis Intervention Team officer expansion and collaborative discharge planning for services post-incarceration)
- Utilize motivational interviewing and peer models to encourage engagement in services at critical intervention points, particularly for hard-to-engage populations and those without guardianship or supports
- Explore barriers to access prior to crisis and address them through partnerships with acute and community-based providers

# <u>RECOMMENDATION 5</u>: PRIORITIZE SERVICES AND SUPPORTS FOR HIGH-NEED GEOGRAPHIC AREAS AND VULNERABLE POPULATIONS

The St. Louis region remains one of the most socially and economically segregated cities nationwide. Through systems, policies, and practices, the needs of specific populations and communities have been marginalized and inequities have been created. Across data sources, there were calls for an investment in systemic responsiveness to BH needs of particular populations. Populations with specific vulnerability and unique needs raised across data collection methods include the following:

- Vulnerable communities (Areas/zip codes experiencing high poverty and risk indicators Eastern North St. Louis City and Far South St. Louis City. Among the most impacted are: 63101, 63102, 63103, 63106, 63107, 63111, 63113, and 63118. These zip codes are highlighted due to being identified across variables in risk, such as poverty, and showing the highest levels of acute care utilization for various BH needs. In many cases, these zip codes were also explicitly named by participatory group members as vulnerable areas.)
- Individuals involved in the criminal justice system

- Transition-age youth and young adults
- Individuals with co-morbid BH and physical health needs (e.g. perinatal women, chronic illness)
- Individuals with co-occurring mental health and SU needs/SU populations
- Adults who are homeless or housing unstable
- Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ+) adults (Note: Gender-specific service needs were also flagged, with African-American males among the most vulnerable.)

Opportunities to prioritize services and supports for high-need geographic areas and vulnerable populations:

- Support interventions addressing, or proven effective for the specific populations listed above, including training professionals in evidence-based treatments and competencies when working with high need populations
- Identify and develop strategies to reduce the different barriers vulnerable populations may experience in accessing services and methods of expediting access
- Invest in services for specific areas and populations with documented BH need indicators, through targeted, coordinated outreach or expanded physical service locations

# <u>RECOMMENDATION 6</u>: FOSTER MORE SUCCESSFUL RECOVERY BY ADDRESSING SOCIAL DETERMINANTS OF HEALTH AS PART OF TREATMENT AND INTERVENTION

Regional reports, qualitative groups, and quantitative data illustrate the substantial burdens adults in St. Louis City face related to social determinants of health. These challenges contribute to BH concerns and barriers in accessing and maintaining engagement with BH programs. Significant individual and systemic BH improvements can be implemented by leveraging innovative approaches in addressing social determinants of health to foster more comprehensive recovery.

Opportunities to address social determinants of health as part of treatment/intervention to achieve more complete recovery:

- Address adult social determinants of health, environmental stressors, and basic needs through strategic partnerships and shared goals among BH providers and social service agencies to promote equity, access, and comprehensive well-being
- Decrease barriers to access and engagement by increasing transportation and/or improving the accessibility and number of service locations to better meet adult needs and promote equity in vulnerable populations and geographic areas
- Address housing instability and homelessness through investments in affordable housing and supportive services as integrated approaches with BH
- Continue *Housing First* and *Rapid Re-Housing* efforts, bolstered by collaborations and information sharing
- Include and support basic needs as a standard part of BH treatment via increased flexible funding resources
- Support adults in accessing insurance supports and advocate for Medicaid expansion/coverage for BH services

#### APPENDIX A. REGIONAL REPORT REFERENCES

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# 10. Forward through Ferguson

The Ferguson Commission. (2015). Forward through Ferguson: A path toward racial equity: A printed companion to forwardthroughferguson.org (Rep.). St. Louis, MO: Author. Retrieved from <a href="http://documentingferguson.wustl.edu/omeka/archive/files/cb72ab633c265960e9e64316c6aa1b9f.pdf">http://documentingferguson.wustl.edu/omeka/archive/files/cb72ab633c265960e9e64316c6aa1b9f.pdf</a>

## 11. For the Sake of All

Purnell J., Camberos G., & R. Fields (Eds.). (May 2014). For the Sake of All: A Report on the Health and Well-Being of African Americans In St. Louis and Why It Matters for Everyone. St. Louis, MO: Washington University in St. Louis and Saint Louis University. Retrieved from <a href="https://forthesakeofall.files.wordpress.com/2014/05/for-the-sake-of-all-report.pdf">https://forthesakeofall.files.wordpress.com/2014/05/for-the-sake-of-all-report.pdf</a>

## 12. Promise Zone Needs Assessment and Crosswalks

N/A - Documents appear to be internal synthesis of Needs Assessments conducted in and around the Promise Zone.

# 13. Ready by 21 Landscape Report

Ready by 21 St. Louis Data Workgroup. (2015). 2015 Landscape Report (Rep.). St. Louis, MO: Ready by 21 St. Louis. Retrieved from <a href="http://readyby21stl.wpengine.com/wp-content/uploads/2016/11/2015-Ready-by-21-St.-Louis-Landscape-Report-FINAL.pdf">http://readyby21stl.wpengine.com/wp-content/uploads/2016/11/2015-Ready-by-21-St.-Louis-Landscape-Report-FINAL.pdf</a>

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Behavioral Health Network of Greater St. Louis. (2017). Behavioral Health Provider Inventory: A Landscape Overview and Provider Survey (Rep.). St. Louis, MO: Author. Retrieved from <a href="http://www.bhnstl.org/wp-content/uploads/2017/09/BHN-BH-Provider-Inventory-Report\_Final.pdf">http://www.bhnstl.org/wp-content/uploads/2017/09/BHN-BH-Provider-Inventory-Report\_Final.pdf</a>

# **Sample Community Participant Session Domains and Questions**

DOMAIN ADDRESSED	SAMPLE QUESTIONS
RESOURCES/ASSETS	Prompt: Thinking about adult mental health and wellbeing, where do adults currently go for help? What resources or programs are available for adults within the community?
	Follow-up Probe: Let's say someone realizes a friend was having trouble with depression. Where could that they go to seek help?
	Follow-up Probe: Let's say someone needed help with substance abuse. Where could he/she go for help?
	Prompt: What do we do well? What adult mental health and wellbeing needs are being met in the community?
	Follow-up Probe: How are these needs being met?
BARRIERS/WEAKNESSES	Prompt: We just talked about the strengths of the community. What makes it difficult for adults to get the supports and services they need? To access these community resources for substance use and mental health?
	Follow-up Probe: What would make it easier to access community resources for such needs?
	Prompt: What adult mental health and wellbeing needs are not being met in the community?
	Follow-up Probe: What happens because these needs are not being met?
	Prompt: Are there particular groups of people that are more vulnerable than others or have unique needs that are important to address?
	Follow-up Probe: If so, which populations or areas? For example, would this include specific ages of adults? Follow-up Probe: What specific issues are they affected by?
	Follow-up Probe: What specific issues are they affected by?
OPPORTUNITIES	Prompt: What additional resources or programs would be helpful to address mental health and substance use needs of youth in the community?
	Follow-up Probe: What could there be more of? What could there be less of?
	Prompt: If you could invest dollars in one thing to improve adults' mental health/well-being in St. Louis City, what would it be? What do you feel would make the biggest difference? Where would you invest?
	Prompt: Are there any additional recommendations or suggestions you would like to make regarding the adult mental health and wellbeing resources within the community?

# APPENDIX C. DETAILED QUALITATIVE GROUP CONTRIBUTIONS (BY STAKEHOLDER TYPE)

	Consumer	Family	Community	Provider
	C	Community Assets/Strengt	hs	
Increased treatment options	<ul> <li>Medication-Assisted Treatment (MAT)</li> <li>Detox facilities and programs</li> <li>Peer support programs</li> <li>Psychosocial Rehabilitation (PSR)</li> </ul>	<ul> <li>Mental health and substance use</li> <li>Programs for opioid users</li> <li>Group and peer support programs</li> </ul>	<ul> <li>Medication-Assisted Treatment (MAT)</li> <li>Counseling</li> <li>Peer support programs</li> </ul>	<ul> <li>Programs for opioid users</li> <li>Detox facilities and programs</li> <li>Medication-Assisted Treatment (MAT)</li> </ul>
Strong existing resources and support settings	<ul> <li>Day programs and clubhouses</li> <li>Inpatient/outpatient services</li> <li>Hospitals</li> <li>Churches</li> <li>Programs for opioid users</li> </ul>	<ul> <li>Intensive outpatient care</li> <li>Dialectical Behavior Therapy (DBT)</li> <li>Inpatient care for individuals with severe psychiatric issues and poor treatment compliance</li> <li>Case management</li> <li>Respite services</li> <li>In-home care and home visits</li> <li>In-home skill development and daily activity training</li> <li>Private practice clinicians</li> </ul>	<ul> <li>Caretaker training and support</li> <li>In-home care/services</li> <li>Senior centers</li> <li>Churches</li> <li>Crisis intervention services and personnel</li> <li>Trained community members (e.g. Mental Health First Aid)</li> <li>Referral centers (e.g., 2-1-1)</li> <li>Employee Assistance Programs</li> <li>Urgent Care Clinic</li> </ul>	<ul> <li>Wraparound services</li> <li>Holistic approach to recovery</li> <li>Schools</li> <li>Universities</li> <li>Housing First model</li> <li>Inpatient and outpatient services</li> <li>Community mental health centers</li> <li>Same day access</li> <li>Health clinics</li> <li>Psychosocial rehabilitation programs</li> <li>Clubhouses</li> </ul>

	Consumer	Family	Community	Provider
		<ul> <li>Community health centers</li> <li>Hospitals</li> <li>Churches</li> <li>Colleges/Universities</li> <li>Suicide hotline</li> <li>Agencies that accept uninsured clients</li> </ul>	<ul> <li>Emergency room (ER)</li> <li>Hospitals</li> <li>Inpatient and outpatient psychiatric care and facilities</li> <li>Skilled nursing care</li> <li>Rehabilitation facilities</li> <li>Schools</li> <li>Community Center</li> <li>Private practice clinicians</li> </ul>	
Enhanced outreach	<ul> <li>Emergency Room         Enhancement (ERE)         Liaison</li> <li>Engaging Patients in         Care Coordination         (EPICC)</li> </ul>	Hospital outreach	<ul> <li>Clinical and social service outreach</li> <li>Community health fairs</li> </ul>	<ul> <li>Multiple outreach programs</li> <li>Homeless outreach</li> <li>Substance Use Disorder Liaison (SUDL)</li> </ul>
Housing/Shelter and Homeless Services	<ul> <li>Recovery housing</li> <li>Temporary/transitional housing</li> <li>Wraparound services</li> <li>Housing for pregnant women</li> <li>Rent assistance</li> </ul>		<ul> <li>Wraparound services for individuals with housing instability</li> <li>Substance use treatment for women with children</li> </ul>	
Agencies addressing recovery needs	<ul><li>Primary care, mental health, and dental</li><li>Transportation</li></ul>			

	Consumer	Family	Community	Provider
	<ul> <li>Food pantry</li> <li>Employment skills and vocational rehabilitation</li> <li>Social and general life skills</li> <li>Personal growth, acceptance, and confidence building skills</li> <li>Mental health education</li> <li>General education (e.g., GED)</li> <li>Referrals</li> </ul>	·		
Increased support through criminal justice system	<ul><li>Probation and parole</li><li>Mental health court</li></ul>			
Provider Collaborations/Programs				<ul> <li>Numerous providers and service options in the region</li> <li>Collaboration among providers</li> <li>Referral network</li> <li>Referral follow-through</li> <li>Networking and partnerships among community providers</li> </ul>

	Consumer	Family	Community	Provider
				<ul> <li>Team approach to working with clients, and dedicated staff</li> <li>Highly educated and skilled workforce</li> <li>Health homes</li> </ul>
		Barriers		
Limited treatment options	<ul> <li>Lack of available DBT treatment</li> <li>Lack of funding for non-opiate substance users</li> <li>Limited medication options</li> <li>Lack of psychiatrists</li> </ul>	<ul> <li>Lack of psychiatrists</li> <li>Limited outpatient resources</li> <li>Limited detox availability</li> </ul>		<ul> <li>Lack of funding for non-opiate substance and alcohol users</li> <li>Physicians hesitant to prescribe mental health medications due to substance abuse concerns</li> <li>Lack of physician knowledge about mental health intervention</li> <li>Limited evidence-based peer support services</li> </ul>
Financial barriers	<ul> <li>Limited or no insurance coverage</li> <li>Having insurance is a barrier to some services</li> <li>Prescription medication and services cost too much</li> </ul>	<ul> <li>Limited or no insurance coverage</li> <li>Treatment/therapy is too expensive</li> <li>Psychiatrist does not accept insurance</li> </ul>	<ul> <li>Limited or no insurance coverage</li> <li>Treatment/therapy is too expensive</li> </ul>	<ul> <li>Limited or no insurance coverage</li> <li>Private insurance does not cover case management services</li> </ul>

	Consumer	Family	Community	Provider
Consumer hardship/barriers	<ul> <li>Limited knowledge of available services</li> <li>Lack of identification</li> <li>No transportation</li> <li>No phone</li> <li>Criminal record</li> <li>Motivation for change challenges</li> </ul>	<ul> <li>Limited knowledge of available services, including respite services for caretakers</li> <li>No transportation</li> <li>Denial and embarrassment due to mental health stigma</li> <li>Lack of knowledge about mental illness</li> <li>Not motivated to change</li> <li>Inability to stay compliant with treatment</li> <li>Feelings up hopelessness because of poverty environment</li> <li>Frequent incarceration</li> </ul>	<ul> <li>Limited knowledge of available services</li> <li>No transportation</li> <li>No Phone</li> <li>Homeless/housing instability</li> <li>Denial and embarrassment due to mental health stigma</li> <li>Fear and lack of knowledge about mental illness</li> <li>Do not trust medical establishment</li> <li>No time</li> </ul>	<ul> <li>Not aware of available services</li> <li>Lack of identification</li> <li>No transportation</li> <li>No phone</li> <li>Unstable health due to homelessness/housing instability and/or lack of ongoing support outside of hospital</li> <li>Mental health stigma</li> </ul>
Provider accessibility barriers	<ul> <li>Limited/inconvenient hours of operation</li> <li>Long wait lists</li> <li>Eligibility requirements</li> <li>Provider administrative hurdles</li> </ul>	<ul><li>Long wait lists</li><li>Many outpatient services are not in the city</li></ul>		<ul> <li>Limited/inconvenient hours of operation</li> <li>Long wait lists</li> <li>Lack of communication and care coordination between providers</li> </ul>

	Consumer	Family	Community	Provider
	<ul> <li>Lack of ongoing support outside of hospital (at transition)</li> </ul>			<ul> <li>Lack of health and food services in North St. Louis City and County</li> <li>Case manager turnover</li> <li>Eligibility requirements</li> <li>Lengthy and difficult applications</li> <li>Limited capacity</li> </ul>
Family barriers	<ul><li>No childcare</li><li>No support from family members</li></ul>	<ul> <li>Difficult to obtain guardianship</li> </ul>		
Housing/residential instability	<ul> <li>No rental assistance for alcoholics and non-opioid users</li> <li>Limited housing options</li> <li>Low affordable housing stock</li> <li>Lack of homeless shelters and transitional housing for women</li> </ul>			<ul> <li>Not enough emergency and overnight shelters</li> <li>Long wait lists</li> </ul>
		<b>Unmet Needs/Gaps</b>		
Treatment options	<ul> <li>Medication and support for co-occurring conditions</li> <li>Medication-Assisted Treatment (MAT)</li> <li>Dialectical Behavior Therapy (DBT)</li> <li>More individualized treatment plan options</li> </ul>	<ul> <li>Dialectical Behavior Therapy (DBT)</li> <li>Suicide prevention for young adults</li> </ul>	<ul> <li>Support groups for clients, family, and caretakers</li> <li>Trauma informed care</li> <li>Need more clinicians that can recognize and diagnose mental illness</li> </ul>	<ul> <li>Treatment for individuals with co-occurring diseases</li> <li>Intensive outpatient psychiatric care for individuals with severe mental illness</li> <li>Day programs</li> <li>Longer-term psychiatric inpatient care</li> </ul>

	Consumer	Family	Community	Provider
	<ul> <li>Non-opioid drug treatment (e.g., alcohol, methamphetamine)</li> <li>More medical detox programs and facilities</li> <li>More peer recovery counselors</li> </ul>		<ul> <li>Need more psychiatrists</li> <li>Suicide prevention for young adults</li> </ul>	<ul> <li>Greater focus on prevention</li> <li>Need more screening and early intervention</li> <li>Greater emphasis on continuity of care</li> <li>Need more home-bound services</li> </ul>
Social determinants of health		<ul> <li>Need to address community poverty and crime issues that lead to stress and trauma</li> </ul>	<ul> <li>Need to address community poverty and crime issues that lead to stress, trauma, and feelings of hopelessness</li> <li>Need better nutrition</li> </ul>	
Transportation	<ul> <li>Transportation to/from appointment and pharmacy</li> </ul>	<ul><li>Transportation</li></ul>	<ul><li>Transportation to/from services</li></ul>	
Financial			<ul> <li>Psychiatrists that accept Medicaid</li> <li>Long-term care/treatment (i.e., insurance coverage is not long enough)</li> <li>Insurance for medications</li> </ul>	<ul> <li>Need more affordable medications (e.g., partner with pharmaceutical company for reduced price)</li> </ul>

	Consumer	Family	Community	Provider
Housing/shelters	<ul><li>Need more shelters</li><li>Temporary housing for parents with children</li></ul>			<ul> <li>Need more emergency shelters</li> <li>Easy access to hygiene products/services</li> </ul>
Cultural competence and sensitivity	<ul> <li>More crisis intervention team (CIT) officers</li> <li>More respect from medical staff for those with substance use issues</li> </ul>		<ul> <li>Improved mental illness training for police and first responders</li> </ul>	<ul> <li>Need more culturally competent providers, especially for non-English speaking clients</li> </ul>
Family support	<ul> <li>Childcare</li> <li>Education and training for family members</li> </ul>		<ul> <li>Support for parents/guardians in poverty, especially single parents</li> <li>Support/services for entire family because stress, trauma, and mental illness runs in families</li> </ul>	<ul> <li>Need more services for clients' children because they are predisposed to mental health issues</li> <li>More guardianship education for providers and clients</li> </ul>
Legal assistance	<ul> <li>More disability lawyer assistance</li> </ul>			<ul> <li>Need more funding for legal representation/assistance</li> <li>More disability lawyer assistance</li> </ul>
Community resources and education/outreach	<ul> <li>Need more community centers</li> </ul>	<ul> <li>Public needs more education about mental health</li> </ul>		

	Consumer	Family	Community	Provider
	<ul> <li>More public education about mental health</li> </ul>	<ul> <li>More outreach to schools and neighborhood</li> </ul>		
Young adult services/ programs		<ul> <li>Need more programs for youth transitioning to adulthood</li> <li>More employment opportunities</li> </ul>		
Knowledge of available services		<ul> <li>Need assistance navigating the health care system</li> </ul>		
Follow-up			<ul> <li>Improved follow-up and ongoing care by providers and first responders</li> </ul>	
Advocacy			Need to advocate more for mental health needs/concerns	
Accessibility				<ul> <li>Need more timely access to services</li> </ul>

	Consumer	Family	Community	Provider
Other		<ul> <li>Need more resources for those with Alzheimer's</li> <li>Need more services, support programs, and education for parents and caretakers of individuals with severe mental illness</li> </ul>		
		<b>Vulnerable Populations</b>		
Criminal Justice- Involved Individuals	<ul> <li>Need post incarceration programs and services</li> <li>Need longer supply of medication post release from jail/prison</li> <li>Need better medical treatment and medication while in jail</li> <li>Need for housing for those with sex offense history</li> </ul>	<ul> <li>Need post incarceration programs and services</li> </ul>	<ul> <li>Need post incarceration programs and health services</li> </ul>	
Youth and young adults	<ul><li>Need psychosocial skill development</li><li>Prevention/Upstream</li></ul>	Youth and young adults	Particularly African     Americans	<ul> <li>Especially those who are homeless, victims of violence, and in North St. Louis City</li> </ul>

	Consumer	Family	Community	Provider
Men	<ul> <li>Lack of available services</li> </ul>			<ul> <li>Limited services, especially for single individuals with no kids and no insurance</li> </ul>
LGBTQ+	<ul> <li>Need safe place free from discrimination</li> <li>Sober living</li> <li>Detox treatment</li> </ul>			<ul><li>Clients need a safe place</li><li>Young adults are especially vulnerable</li></ul>
Other groups	<ul><li>Pregnant/Perinatal Women and Parents</li></ul>	Senior citizens	<ul><li>Individuals in violent/high crime geographic areas</li><li>Homeless</li></ul>	
		Opportunities		
Workforce expansion	<ul> <li>More psychiatrists</li> <li>More recovery counselors</li> <li>Certified MO Peer Specialists</li> <li>More male role models, peer support, and counselors</li> <li>Explore employment outreach options (e.g., VISTA volunteers, student loan forgiveness)</li> </ul>	<ul> <li>More health and social service navigators</li> </ul>		

	Consumer	Family	Community	Provider
Expand program and service options	<ul> <li>More medical/substance use detox, including in hospitals</li> <li>Long-term outpatient care</li> <li>More in/outpatient treatment centers, doctors, and counselors</li> <li>More in/outpatient groups and group options</li> <li>Increase length of treatment</li> </ul>	<ul> <li>More mental health and substance use services</li> <li>24-hour service availability</li> <li>Early life assessment and intervention</li> <li>Address social determinants of health</li> </ul>	<ul> <li>Community centers with extended hours, and all health, employment, and social services under one roof</li> <li>More support groups</li> <li>More Counseling</li> <li>Referral services</li> <li>Expand and improve ongoing treatment and follow-up</li> </ul>	<ul> <li>24-hour peer respite and drop-in centers</li> <li>1:1 case management with dedicated phone</li> <li>More services for young adults</li> <li>Increase behavioral health screenings and early intervention at hospitals and primary care providers</li> <li>Counseling</li> <li>Services for sickle cell/chronic illness population</li> <li>Care that is customized to fit individual's needs</li> <li>Youth prevention programs for clients' children</li> <li>More helplines and assistance (e.g., housing, utilities, etc.) for individuals with severe mental illness</li> <li>Holistic community-based programs focused on health, empowerment, employment, psychosocial skills, etc.</li> <li>Childcare</li> <li>Wraparound services</li> </ul>

	Consumer	Family	Community	Provider
Education and outreach	<ul> <li>Educate public about mental health</li> <li>Outreach to churches</li> <li>More education for families and individuals with mental health and substance use issues</li> </ul>	<ul> <li>Educate public about mental health</li> <li>Campaign to reduce stigma</li> </ul>	<ul> <li>More job training, and skill development programs</li> <li>Invest in schools</li> <li>Utilize mobile health units to raise awareness</li> </ul>	<ul> <li>Increase public awareness of mental health issues and services</li> </ul>
Housing/Shelter	<ul> <li>More housing and shelters for women, families, abused men, and disabled under 55 years old</li> <li>Sober living for families</li> <li>Housing with wraparound services</li> <li>More non-section 8 leasing options</li> <li>Felon friendly housing</li> <li>MAT housing</li> <li>More mental health support for those who are homeless</li> </ul>		<ul> <li>Homeownership instead of rent assistance</li> <li>More housing and apartments</li> </ul>	<ul> <li>Housing First</li> <li>Safe and supervised 24-hour shelters that provide health and child care</li> <li>More shelters and meals for men, women, families, and young adults</li> <li>Family recovery shelters that offer counseling, education, and parenting skills</li> <li>Support and assist churches wanting to become overnight shelters</li> <li>Sober living</li> </ul>
Financial	<ul><li>More funding/grants like STR</li><li>More insurance</li></ul>			<ul> <li>Partner with pharmaceutical company to reduce prescription costs</li> <li>More funding</li> </ul>

	Consumer	Family	Community	Provider
Legal Assistance  Other opportunities	Consumer  Increase the number of affordable legal representation  Cultural competence Better trained, and more culturally competent counselors  Services/programs for young adults Substance use treatment and psychosocial rehabilitation for young	Family	Access and Navigation  Simplify navigating the healthcare system Develop a resource guide for residents Educate public about available resources Need a resource center in every neighborhood	<ul> <li>Holistic legal services</li> <li>Treatment options</li> <li>More Medication-Assisted Treatment (MAT) centers</li> <li>Methadone clinics</li> <li>Medication subsidies</li> <li>Treatment for non-opiate drug and alcohol users</li> <li>Evidence-based practice</li> </ul>
	adults  Day program for young adults with mental illness  Programs for youth transitioning to young adulthood  Transportation Transportation  Bus fare  Community resources  More community resource centers and clinics		Social determinants of health  Address social determinants of health, particularly crime/violence Invest in neighborhood recovery programs  Advocacy  More mental health advocacy groups	<ul> <li>Require providers to take a competency course</li> </ul>

Consumer	Family	Community	Provider
Family  • More support for fathers and families			
Employment  • More employment opportunities			
Phone/Utilities  More phone and utility			
assistance			

# APPENDIX D. DETAILED DATA TABLES

Table D1. Population Total and Adult Population, St. Louis City, 2006-2016

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Diff.	% Ch.
Population Total	353,821	350,759	354,361	356,587	319,156	318,069	318,172	318,416	317,419	315,685	316,030	-37,791	-10.7%
Percentage of the Population aged 18 and older	73%	73%	73%	75%	78%	78%	79%	79%	79%	79%	79%		

Source: U. S. Census Bureau; American Community Survey 5-year estimates

Note: **Diff.** = the difference between the first and last time period presented in the table, which for this table would be the difference between 2006 and 2016. **% Ch.** = the percentage of change over this same period of time; did the number or rate increase or decrease by a certain percentage. This coding is used throughout the report.

Table D2. Median Household Income County Comparisons, 2004-2015

Regions	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Diff.	% Ch.
Missouri	40,885	41,946	42,838	45,012	46,847	45,149	44,306	45,231	45,320	46,905	48,288	50,200	9,315	23%
Wilssouth	40,003	41,540	42,030	43,012	40,047	43,143	44,300	43,231	43,320	40,303	40,200	30,200	3,313	2370
St. Louis City	28,069	30,629	30,780	33,698	33,993	34,065	32,767	32,576	32,084	34,346	35,681	37,948	9,879	35%
St. Louis County	52,097	54,342	53,349	56,864	57,782	56,939	55,290	55,131	56,409	59,284	60,093	61,569	9,472	18%

Source: US Census Bureau. Definitions: Median income of family households with children under 18. Based on ACS 5-year estimates.

Table D3. Adult Unemployment Comparisons, 2004-2015

Regions	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Diff.
Missouri	5.8%	5.4%	4.8%	5.1%	6.1%	9.3%	9.4%	8.4%	6.9%	6.7%	6.1%	5.0%	-0.8%
St. Louis City	8.8%	8.0%	6.8%	7.0%	7.8%	11.7%	12.8%	11.6%	9.3%	8.5%	7.7%	6.1%	-2.7%
St. Louis County	5.5%	5.1%	4.7%	4.9%	6.0%	9.0%	9.1%	8.1%	6.7%	6.2%	5.8%	4.6%	-0.9%

Source: Missouri Department of Economic Development, Division of Employment Security.

Table D4: Population and Poverty Data for City of St. Louis, Missouri from 2004 to 2015

Populations	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Diff.	% Ch.
# of Individuals in Poverty	83,140	86,361	90,068	78,451	81,148	92,243	85,618	83,819	90,199	83,767	88,571	78,089	-5,051	-6.1%
Pop. Est. Total	343,314	352,588	353,821	350,759	354,361	356,587	319,156	318,069	318,172	318,416	317,419	315,685	-27,629	-8.0%
% of Pop. in Poverty	24.6%	26.0%	26.7%	23.0%	23.5%	26.5%	27.7%	27.2%	29.3%	27.2%	28.8%	25.5%		

Source: U. S. Census Bureau; American Community Survey

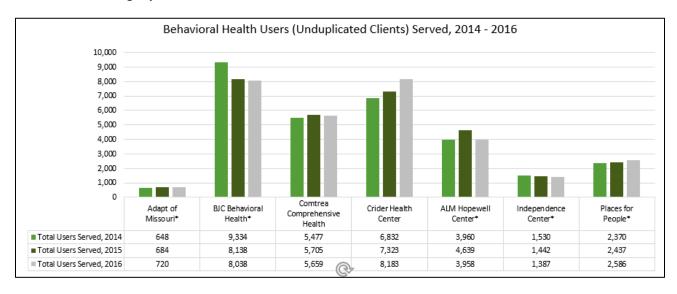
### APPENDIX E. EASTERN REGION BEHAVIORAL HEALTH ACCESS TO CARE SURVEY DATA

In partnership with the St. Louis Regional Health Commission (RHC), BHN collects and publishes annual data through RHC's Access to Care Data Book. BHN first developed the "Eastern Region Behavioral Health Access to Care Survey" in 2015 and has since collected calendar year 2014-2016 data from major Eastern Region MH and SU safety net providers. Self-reported data for this section has been collected and verified by BHN, apart from primary care data provided by local community health centers (CHCs) which is collected and validated by RHC. This unique data set allows the opportunity to see those served beyond Department of Mental Health or other publicly available data sets, by organization.

Operating statistics of respondents are reflected here, including community-based BH safety-net providers (Department of Mental Health Administrative Agents and Affiliates and state-funded SU treatment providers with the widest array of services for the general population) and hospitals with inpatient psychiatric services in the Eastern Region of Missouri (St. Louis City and Counties of Franklin, Jefferson, Lincoln, St. Charles, St. Louis and Warren). Historical data referenced is sourced from the Regional Health Commission's "Eastern Region Public Behavioral Health System: Utilization of Services" and "MPC Regional Psychiatric Capacity Analysis and Recommendations" reports.

## COMMUNITY-BASED BEHAVIORAL HEALTH: COMMUNITY MENTAL HEALTH CENTERS

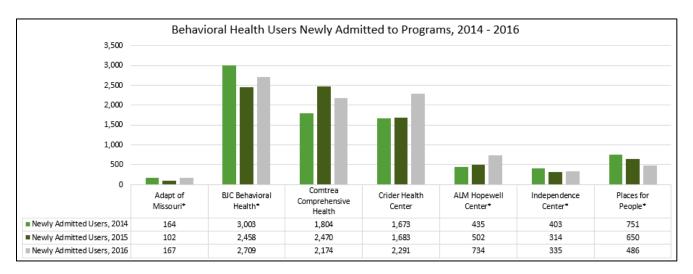
BH safety-net community mental health providers served 30,531 users (unduplicated individuals) in 2016. Three-year trends show that service delivery remained stable in 2016, as compared to the 30,151 and 30,368 users served in 2014 and 2015, respectively. Two St. Louis City-serving organizations saw an increase in the number of users served, including Places for People (6%) and Adapt of Missouri (5%). ALM Hopewell Center saw a 15% decrease in users served, while users served at all other community mental health centers either decreased slightly or remained stable.



The Missouri Department of Mental Health's (DMH) administrative agents have designated service areas. Administrative agents' rate of serving the population below 150% of the Federal Poverty Line (FPL) within their designated service areas varies significantly by agency. St. Louis City is served by DMH administrative

agents BJC BH (largely South City) and ALM Hopewell (largely North City). Additionally, a portion of St. Louis City users are served by affiliate agencies (Adapt of Missouri, Independence Center, and Places for People). When combining services both at administrative and affiliate agencies, the rate of St. Louis City and County residents served in 2015 was 59 clients per 1,000 residents below 150% of the FPL.

BH safety-net community mental health providers admitted 8,896 users to programs in 2016. Newly admitted users served at BH safety-net agencies increased by 9% in 2016 as compared to the 8,179 newly admitted users served in 2015. Newly admitted users served accounted for 29% of overall users served in 2016, an increase from 25% in 2015.



Newly admitted users increased at ALM Hopewell Center (46%), BJC Behavioral Health (10%), Independence Center (7%), and Adapt of Missouri (6%). Newly admitted users decreased at Places for People (25%).

### COMMUNITY-BASED BEHAVIORAL HEALTH: CRISIS INTERVENTION SERVICES

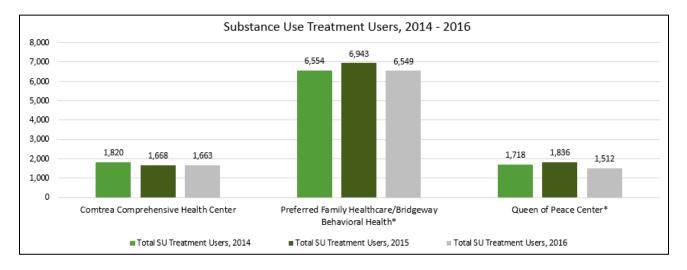
While regional behavioral health (BH) services are available predominantly during traditional business hours, providers surveyed collaborate with Behavioral Health Response (BHR) regional Access Crisis Intervention hotline to provide 24/7 telephonic crisis intervention and mobile outreach services. These services are available to the entire region, regardless of an individual's income, insurance coverage, or engagement in services. In 2016, most of these calls resulted in referral to community-based services. BHR partners with community mental health safety-net providers to give consumers access to next-day, urgent appointments and provides follow-up services to consumers to ensure ongoing safety and linkage to needed support.

BHR's Access Crisis Intervention hotline received 70,246 crisis calls in 2016—an increase of 6% from the 66,226 calls in 2015 and comparable to the 69,797 calls in 2014. BHR provided in-person crisis intervention through 1,473 mobile outreaches—a decrease of 9% from the 1,620 provided in 2015 and a decrease of 6% from the 1,573 provided in 2014. These volumes do not include any Youth Connection Helpline calls.

In 2016, BHR connected 38% of mobile outreaches with urgent appointments (within two business days) to providers of community-based comprehensive psychiatric services, as compared to 43% in 2015. During the same period, the percentage of mobile outreaches referred to other community agencies increased from 19% in 2015 to 24% in 2016.

### COMMUNITY-BASED BEHAVIORAL HEALTH: SUBSTANCE USE TREATMENT

State-funded SU treatment providers in the Eastern Region admitted 9,724 treatment users in 2016. While stable from 2014 to 2015, SU treatment user admissions declined by 7% in 2016, as compared to 10,447 users in 2015 and 10,092 users in 2014.



Services vary by SU treatment provider. Bridgeway Behavioral Health provides detox, residential and outpatient services. Comtrea Comprehensive Health, Preferred Family Healthcare and Queen of Peace Center provide outpatient and residential services.

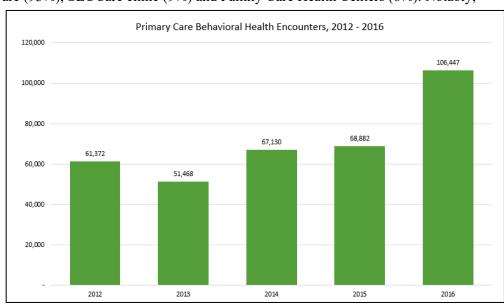
Detox and residential user volumes illustrate that state-funded SU treatment capacity is limited. Preferred Family Healthcare/Bridgeway Behavioral Health is the only state-funded modified medical detox provider in the Eastern Region of Missouri, serving more than 719 admissions with 16 dedicated detox beds—an increase of 16% from 618 modified medical detox admissions served in 2015. Additionally, medical detox is privately available at only three hospitals in the region: BJC's Christian Hospital, SSM Health's DePaul Hospital, and St. Clare Hospital (all of which are located outside of St. Louis City boundaries).

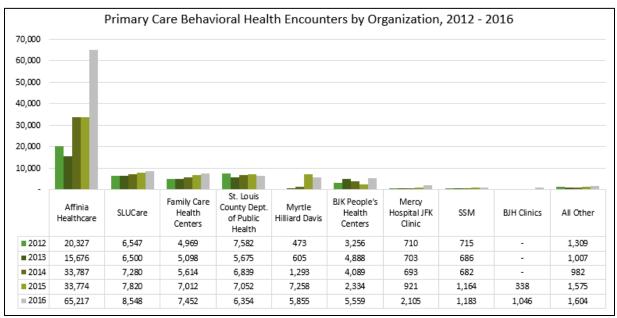
Note: Only services delivered by the four largest state-funded substance use treatment providers with the widest array of services for the general population within the Eastern Region are listed.

#### PRIMARY CARE

BH encounters at safety-net primary care providers have increased by 74% since 2012 and increased by 55% between 2015-2016. BH encounters have increased at six safety-net primary care organizations providing BH, including Barnes-Jewish Hospital clinics (210%), People's Health Center (138%), Mercy Hospital JFK Clinic (129%), Affinia Health Care (93%), SLUCare clinic (9%) and Family Care Health Centers (6%). Notably,

those that experienced significant increases expanded services between 2015-2106. Affinia contracts with the Salvation Army to provide SU services. In 2016, the Salvation Army opened a new site, increasing capacity for services through group counseling sessions. Mercy JFK Clinic expanded access to BH services in 2016 by hiring additional counselors.

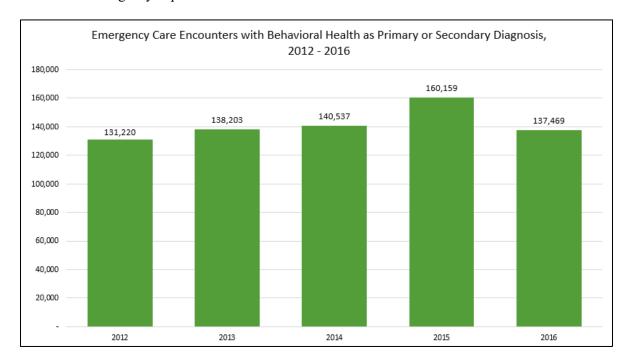




Note: The "All Other" category includes The SPOT and St. Luke's Pediatric Care Center. Encounters above represent BH services provided at St. Louis County Dept. of Public Health clinics, as well as through their contracted provider, Family Mental Health Collaborative, which ended in late 2017. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers.

#### **EMERGENCY CARE**

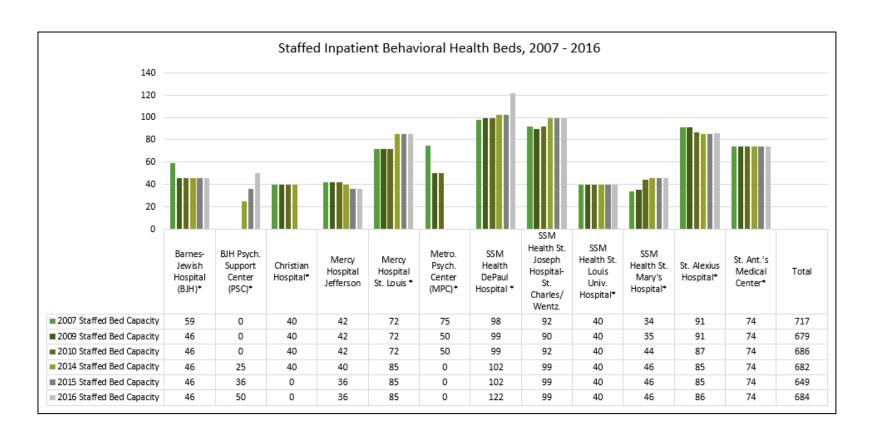
Emergency department encounters with BH diagnoses decreased by 14% between 2015-2016. Conversely, they have increased by 5% during the past five years, with a spike from 2015-2016. BH diagnoses accounted for 19% of total emergency department encounters in 2016.



Among primary diagnoses only, mood disorders (representing 31% of all BH primary diagnoses), schizophrenia and delusional disorders, (representing 16% of all BH primary diagnoses) and alcohol use disorders (representing 14% of all BH primary diagnoses) are the main BH diagnoses presenting to St. Louis area emergency departments.

#### INPATIENT CARE

Between 2014 and 2015, inpatient BH safety net hospital staffed bed capacity decreased by 33 beds (5%; from 682 to 649 total staffed beds). Subsequently, Inpatient BH safety net hospital staffed bed capacity increased by 35 beds, or 5% (from 649 to 684 total staffed beds) in 2015 and 2016. Thus, overall number of staffed beds has remained largely constant.



Note: Data reflects community hospitals that provide acute psychiatric services, as well as Metropolitan Psychiatric Center (MPC), a former state-run hospital. MPC ceased services in July 2010. Psychiatric Stabilization Center, later renamed Psychiatric Support Center (PSC), opened at MPC's former site in January 2012. As of April 2015, Christian Hospital's 40 psychiatric beds were closed. As part of this 2015 transition, BJC HealthCare took over operations of PSC and expanded PSC's capacity to 50 licensed beds, opening April 2015. Of note, Christian Hospital has since expanded outpatient resources to include extensive BH services and intensive outpatient programming. St. Louis Children's Hospital and SSM Health Cardinal Glennon Children's Hospital are not represented above, as they did not have dedicated psychiatric units for children and adolescents in 2015/2016. \*Denotes St. Louis City or St. Louis County provider location.

Inpatient BH staffed safety-net hospital bed capacity varied by hospital and population. In 2015, total staffed beds declined by 33 beds across adult and geriatric populations. In 2016, total staffed beds increased by 57 beds across adult and geriatric populations, while capacity decreased by 22 beds for child and adolescent populations, as compared to 2015. In total, 598 beds are available for those 18 and older at safety net community hospitals in the St. Louis region. *Note: Those with asterisks are located in St. Louis City or County.* 

Table E1: Staff Inpatient Bed Capacity by Consumer Type, 2016

Hospitals with Inpatient Psychiatric Services	Staffed Bed Capacity ADULT	Staffed Bed Capacity GERIATRIC	Staffed Bed Capacity ADOLESCENT	Staffed Bed Capacity CHILD	Total Staffed Bed Capacity
Barnes-Jewish Hospital* (BJH)	36	10	0	0	46
BJH Psychiatric Support Center*	50	0	0	0	50
Mercy Hospital Jefferson	24	12	0	0	36
Mercy Hospital St. Louis *	56	16	13 cor	85	
SSM Health DePaul Health Center *	102	0	20 cor	122	
SSM Health St. Joseph Health Center- St. Charles	0	22	0 0		22
SSM Health St. Joseph Health Center- Wentzville	46	0	31	0	77
SSM Health St. Louis University Hospital*	24	16	0	0	40
SSM Health St. Mary's Hospital-St. Louis*	36	10	0	0	46
St. Alexius Hospital*	64	22	0	0	86
St. Anthony's Medical Center*	52	0	22	0	74
TOTAL	490	108	86		684

Inpatient psychiatric encounters have remained stable between 2014-2016. Total Inpatient Psychiatric Encounters, 2014 - 2016 6,000 5,000 4,000 3,000 2.000 1,000 0 SSM Health ВЈН SSM Health SSM Health St. Barnes-Mercy Mercy SSM Health St. Joseph Jewish Psychiatric St. Louis Anthony's Hospital Hospital St. DePaul Hospital-St Hospital Support Center\* Hospital-St. University Hospital\* Medical Charles & Louis\* Center\* (BJH)\* Hospital\* Wentzville ■ Total Inpt Psych. Encounters, 2014 1,394 1,404 1,509 4,370 4,415 5,236 1,960 1,043 2,598 3,481 ■ Total Inpt Psych. Encounters, 2015 4.985 2.274 3.745 1.277 999 1.377 4.804 4.635 2.206 1.611 ■ Total Inpt Psych. Encounters, 2016 1,439 1,255 1,452 4,899 4,857 4,585 1,962 1,468 1,861 3,292