Progress Toward Building A Healthier St. Louis

Access to Care Data Book 2017

SAINT LOUIS REGIONAL

RHC

HEALTH COMMISSION

Introduction

The St. Louis Regional Health Commission

The St. Louis Regional Health Commission (RHC) is a collaborative effort of St. Louis City, St. Louis County, the State of Missouri, health providers and community members to improve the health of uninsured and underinsured citizens in St. Louis City and County. As part of this effort, the RHC produces an annual "*Access to Care*" data book that reviews community-wide progress toward strengthening the primary care, specialty care, emergency care and behavioral health safety net system in the region. This report is a vital tool for many in our community to understand the local health care system.

Access to Care Data Book

Access to Care provides a survey of annual operating statistics from primary, specialty and emergency care safety net healthcare provider institutions in St. Louis City and County. This year's analysis focuses primarily on data reported over the past five years (2012 - 2016). Hours of operation and appointment availability for regional safety net provider institutions from the most recent calendar year are included. Also included are utilization volumes and outcomes from the 2016 calendar year of the Gateway to Better Health Pilot Program.

Beginning with the 2014 Access to Care Report, an analysis of access to behavioral health services has been included in the report, developed in partnership with the Behavioral Health Network of Greater St. Louis (BHN). Data for this section of the report was collected from major publicly funded behavioral health providers in the Eastern Region of Missouri. The RHC would like to thank the members and staff of the BHN for their partnership.

The RHC would also like to thank Dr. Eric Armbrecht, chair, and the entire "Access to Care Data Workgroup" (see page 107 for full roster) for their leadership on the creation of this report.

Gateway to Better Health Pilot Program

Launched on July 1, 2012, and administered by the RHC, the Gateway to Better Health Pilot Program (Gateway) is a Section 1115 Demonstration that provides primary, specialty and urgent care coverage to uninsured, non-Medicaid eligible adults in St. Louis City and County, aged 19-64, through a network of community providers. Funded by the Centers for Medicaid and Medicare Services (CMS), Gateway provides up to $30 million annually to safeguard safety net healthcare services in the region. The goal of the program is to provide a bridge for safety net providers and uninsured patients until future options become available through health care reform. While Gateway pays for outpatient health services, it is not an insurance product. For the purpose of this report, Gateway members are considered uninsured and reported as such throughout this report, unless otherwise noted.

Definition of Access*

Through collaboration with partnering community and health institutions, the St. Louis Regional Health Commission has defined _access_ as a patient's ability to get healthcare when and where they need it and at a price they can afford. People with access can easily get health services, medicines and supplies, care coordination and transition between providers and self-management support. Some barriers to access may include, but are not limited to: appointment availability; wait times and operational hours; provider capacity; transportation and distance to providers; disease severity; health insurance; affordability and paperwork/processes for financial assistance; interpretation services and materials for non-English speakers; cross-cultural differences; and health system navigation.

*Special thanks to Health Literacy Media for developing a plain language version of this definition.

The St. Louis Safety Net

Information below provides detailed statistics of the safety net population in St. Louis City and County from 2012-2016. For the purpose of this report, the "safety net" population is comprised of individuals who are uninsured or who have coverage under the state of Missouri's Medicaid program. Evidence strongly suggests that these groups face additional barriers to accessing healthcare in St. Louis, if not for the safety net providers included in this report.

	2012	2013	2014	2015	2016	Percent Change, 2012-2016	Percent Change, 2015-2016
Uninsured	156,600	153,600	150,400	140,000	126,500	-19%	-10%
Medicaid	157,500	150,000	153,000	170,800	197,300	+25%	+16%
Total Safety Net Population	314,100	303,600	303,400	310,800	323,800	+3%	+4%
Total St. Louis City and County Population	1,301,800	1,302,700	1,302,600	1,302,500	1,316,590	<1%	<1%
Uninsured as a % of Total Population	12.0%	11.8%	11.5%	10.7%	9.6%	-	-
Safety Net Population as a % of Total Population	24.1%	23.3%	23.3%	23.9%	24.6%	-	-

- The number of individuals without health insurance coverage in St. Louis City and County decreased by 10% over the past year and by 19% over the past five years.
- The number of individuals covered by Medicaid living in St. Louis City and County increased by 25% since 2012 and by 16% over the past year.
- The safety net population in St. Louis City and County increased by 4% over the past year and by 3% since 2012.
- In 2016, individuals who were either uninsured or covered by Medicaid accounted for nearly 25% of St. Louis City and County population.

Note: Uninsured estimates based upon county-level data are from the American Community Survey, released September 2017. Medicaid data was provided directly by MO HealthNet (Medicaid). Medicaid data reported excludes those individuals with both Medicaid and Medicare coverage, as well as children with Medicaid coverage. Adults across all Medicaid eligibility levels are included. Total population for St. Louis City and County was sourced from the US Census Bureau.

Broadening Eligibility for Medicaid Impacts Access to Care

The State of Missouri currently has more than 670,000 residents who are uninsured. Of that number, 126,500 (or roughly 19% of the total uninsured) reside in St. Louis City and County.[1]

199,000

$2.3 billion annually
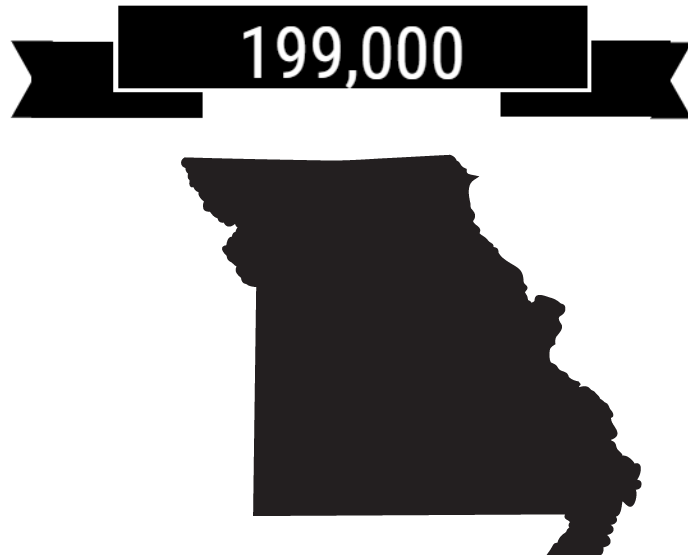
There are 199,000 uninsured adults in Missouri who would be eligible for Medicaid coverage under expansion based on current law,[2] with roughly 37,800 of those individuals being from the St. Louis region. Expanding eligibility would provide coverage for roughly 30% of the current uninsured population in the State and in the St. Louis region.

Healthcare providers in Missouri note that, with changes to Medicaid coverage, there would be a net flow of federal funds to the State in the amount of $2.3 billion annually to support increased access.[3] About $437 million of those federal funds would flow to providers in St. Louis City and County. From 2014 to 2018, Missouri lost a total of $11.3 billion in federal funds without changes in Medicaid coverage.[3]

[1]American Community Survey, released September 2017.
[2]Kaiser Family Foundation Issue Brief, "The Coverage Gap Uninsured Poor Adults in States that Do Not Expand Medicaid", published October 2017.
[3]Common Wealth Fund Issue Brief, "How States Stand to Gain or Lose Federal Funds by Opting In or Out of the Medicaid Expansion", published December 2013.

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Executive Summary

Executive Summary

Below are some common themes found in the data across the different care settings discussed in each section within this report:

1. ***The overall rate of uninsured individuals has steadily declined in St. Louis City and County over the past five years, with more people being covered through both commercial and public insurance.***

Based on 2016 data from the American Community Survey, the overall number of uninsured individuals in St. Louis City and County has decreased by 10% over the past year and by 19% since 2012. Using data sourced directly from MO HealthNet (Medicaid) Division, the number of Missouri Medicaid enrollees living in St. Louis City and County (excluding those with Medicaid/Medicare dual eligibility and children) has increased by 16% over the past year and by 25% since 2012. Also of note, the rate of unemployment in the region has decreased over the past year from 8.6% in 2015 to 7.6% in 2016, as measured through the American Community Survey.

These trends indicate a shift in uninsured individuals to commercial and public health coverage options, which has likely been impacted by health care reform. This shift is further supported by the more than 10,800 additional insured individuals living in St. Louis City and County over the past year, based on data from the 2016 American Community Survey.

Executive Summary

*2.   **There has been a shift in the payor mix of St. Louis safety net organizations.***

Safety net primary care organizations serve roughly 60% of all uninsured individuals in St. Louis City and County. This rate of service has remained relatively consistent since 2012. However, when looking at trends in utilization patterns for different patient populations based on payor, a shift in the overall payor mix of St. Louis safety net organizations across all care settings emerges.

Primary care visits among uninsured patients at safety net organizations have slightly declined over the past five years. This decline mirrors the downward trend seen in the overall uninsured rate in the St. Louis region for the same period. The number of visits among uninsured patients seen in the specialty care setting has remained relatively stable since 2012. Additionally, the number of visits among uninsured patients seen in the emergency care setting has decreased by 5% since 2012.

Utilization among privately insured patients in the safety net system has increased notably over the past five years. Safety net primary care organizations have provided 21% more encounters to privately insured patients since 2012. Additionally, specialty care organizations and St. Louis area emergency departments have both provided 15% and 17%, respectively, more visits to privately insured patients over the past five years.

These utilization trends are in line with the overall trends seen in the rate of uninsured and insured individuals in the region over time (as specified on page 9).

Executive Summary

3. *Wait times across both primary care and specialty care safety net sites have lengthened over the past year.*

Among primary care safety net organizations, wait times for both new and returning patients have lengthened since 2012. The longest primary care wait times are seen for new adult medical and new dental appointments, where patients can wait on average 37 and 31 days to see a safety net provider. Average wait times for new adult medical appointments are up from an average of 27 days in 2015. Based on a national study conducted by Merritt Hawkins of 15 large-sized metropolitan areas (143,000+ residents), there was an average wait time of 29 days for new patient primary care appointments.[1]

Wait times among specialty care providers have also lengthened, as compared to those reported in 2015. The longest specialty care wait times are seen for endocrinology, pulmonology, rheumatology and infectious disease at 107, 84, 67 and 57 days, respectively. Average wait times for endocrinology, infectious disease, neurosurgery, oncology, orthopedics, pulmonology and general surgery more than doubled in 2016.

Many providers have noted difficulty in recruiting and retaining providers to serve safety net patients. Specifically, providers have noted shortages in internal medicine and general practitioners that serve as primary care providers for safety net patients. According to the AAMC, overall the nation is facing a significant physician shortage of up to 104,900 physicians by 2030.[2] The St. Louis Integrated Health Network has started an initiative to focus on strengthening the workforce of safety net staff and providers. Early on, their work will focus on determining reliable methods to understand the size of the provider shortage issue in the region.

While wait times have lengthened at safety net primary care organizations, community health centers have same-day and urgent appointment availability. Most health centers also have evening and weekend hours available.

[1]Merritt Hawkins, "2017 Survey of Physician Appointment Wait Times and Medicare and Medicaid Acceptance Rates", published March 14, 2017.
[2]Association of American Medical Colleges, "GME Funding and Its Role Addressing the Physician Shortage", published February 16, 2018.

Executive Summary

4. *Safety net primary care providers have greatly expanded their capacity to service the behavioral health needs of their patient populations. Volumes served at community mental health centers remained stable over the past year, with variation seen in the rate of service across different parts of the "Eastern Region".*

Behavioral health encounters at safety net primary care sites have increased by 52% over the past year and by 74% since 2012. From partnerships with the Salvation Army to administer substance use counseling to hiring additional behavioral health staff (such as licensed clinical social workers), there are many efforts in the primary care setting to integrate and expand access to behavioral health services.

The overall number of behavioral health users served by community mental health providers in the Eastern Region of Missouri remained stable between 2015 and 2016. Variation exists in access trends at community mental health providers in different parts of the "Eastern Region", with lower rates of service by the population in poverty (under 150% FPL) seen in St. Louis City and County. However, newly admitted users served by community mental health providers increased by 9%, as compared to 2015.

Providers have noted difficulty in staffing, particularly the shortage of psychiatric and licensed clinical providers, as a challenge to serving safety net behavioral health consumers. The Behavioral Health Network of Greater St. Louis is undertaking efforts to strengthen community behavioral health workforce capacity through innovative models of care delivery. Included in this is the newly-funded Missouri Child Psychiatry Access Project (MO-CPAP), which expands availability of services through a psychiatric consultation to primary care physicians addressing youth behavioral health needs.

Substance use treatment users have declined by 7% over the past year at the three largest state-funded substance use treatment providers in the Eastern Region. This decline is largely a result of regional programmatic changes and a merger of the two largest area substance use treatment providers. Of note, only services delivered by the three largest state-funded substance use treatment providers with the widest array of services for the general population within the region were collected. Substance use treatment services are provided by several additional agencies in the region through state funding. A broader survey of these additional providers will be performed in the CY2017 data collection cycle.

Executive Summary

5. *Volumes of behavioral health encounters at area emergency departments decreased over the past year. While overall capacity for inpatient psychiatric services increased, total acute psychiatric encounters remained stable.*

Behavioral health encounters at St. Louis area emergency departments decreased by 16% over the past year. The top primary behavioral health diagnoses for emergency department encounters were mood disorders, delusional disorders (such as schizophrenia) and alcohol use disorders.

Between 2015 and 2016, inpatient behavioral health safety net hospital staffed bed capacity increased by 35 beds, or 5% (from 649 to 684 total staffed beds). Notably, this 57 staffed bed increase took place across adult and geriatric populations, while capacity decreased by 22 beds for child and adolescent populations, as compared to 2015. Despite an increase in overall capacity for inpatient psychiatric services, total acute psychiatric encounters remained stable in 2016 as compared to 2015.

Summary of Key Findings

Key Findings

Primary Care

- Primary care <u>users</u> at safety net organizations have remained stable over the past year. However, there have been notable shifts in the payor mix of these patients. Over the past year, uninsured and privately insured users increased by 5%, respectively, while Medicare users decreased by 6% (page 21).

- Since 2012, safety net primary care providers have served roughly the same percentage of uninsured patients in the region (page 24).

- Total primary care <u>encounters</u> at safety net organizations have remained relatively stable over the past five years (page 25).

    - Total uninsured <u>encounters</u> at safety net organizations remained stable over the past five years, while total Medicaid <u>encounters</u> decreased by 8% since 2012 (page 25). Volumes of Medicaid and uninsured <u>encounters</u> varied widely among safety net providers (page 27 and 28).
    - Total medical <u>encounters</u> have decreased by 6% over the past year, while decreasing by 14% over the past five years (page 30).
    - Dental <u>encounters</u> at safety net primary care providers increased by 7% over the past year, while remaining relatively stable over the past five years (page 32).
    - Behavioral health <u>encounters</u> at safety net primary care providers increased by 52% over the past year and by 74% since 2012 (page 34).

- Wait times for primary care appointments have lengthened, with the longest average wait times seen for new adult medical appointments and new dental appointments (page 38).

Emergency Care

- Total emergency department encounters have remained relatively stable over the past year. Uninsured emergency department encounters at St. Louis area hospitals have also remained relatively stable from 2015 to 2016 (page 45 and 48).

- Non-emergent encounters have remained relatively stable over the past year. Non-emergent encounters among Medicare and uninsured patients have declined by 13% and 11%, respectively, while there was an 11% increase in non-emergent encounters among privately insured patients (page 51).

- Approximately 18,600 patients visiting St. Louis area emergency departments had at least four emergency department visits at the same hospital, representing 3% of all emergency department patients in 2016 (page 56). Among these patients, there were more than 100,300 emergency department encounters in 2016 (page 57).

- Emergency department encounters with behavioral health diagnoses (primary and secondary) have decreased by 16% over the past year and account for 18% of all emergency department encounters in 2016, which is down from 32% in 2015 (page 58). The top primary behavioral health diagnoses are mood disorders, schizophrenia/delusional disorders and alcohol use disorders (page 59).

Key Findings

Specialty Care

- Total specialty care users and encounters at St. Louis area specialty care organizations have increased by 17% and 19%, respectively, since 2012. This increase represents more than 32,900 additional users and more than 226,500 additional encounters (page 65 and 67).

- Over the past year, uninsured specialty care users and encounters have remained stable (page 65 and 69).

- Medicaid specialty care encounters have increased by 6% over the past year and by 16% since 2012 (page 71).

- Wait times for specialty care appointments have lengthened, with the longest average wait times seen for both new and returning patients of endocrinology, pulmonology, rheumatology and infectious disease (page 73 and 74).

Behavioral Health

- The total number of behavioral health users served by behavioral health safety net providers in 2016 remained stable as compared to 2014 and 2015 (page 79). Newly admitted users served at behavioral health safety net providers increased by 9% in 2016 as compared to 2015 (page 80).

- Wide variation exists in the rate of serving the safety net population within the designated service areas of respective behavioral health safety net administrative agents in Missouri's Eastern Region (page 81).

- Substance use treatment user admissions declined by 7% in 2016, as compared to 2015, at the three largest state-funded substance use treatment providers with the widest array of services for the general population within the Eastern Region (page 85).

- Behavioral health encounters at safety net primary care providers increased by 52% over the past year and by 74% since 2012 (page 86).

- Emergency department encounters with behavioral health diagnoses (primary and secondary) have decreased by 16% over the past year and account for 18% of all emergency department encounters in 2016, which is down from 32% in 2015 (page 88). The top primary behavioral health diagnoses are mood disorders, schizophrenia/delusional disorders and alcohol use disorders (page 89).

- While acute psychiatric encounters remained stable overall in 2016 (page 93), inpatient psychiatric staffed bed capacity increased by 5% (35 beds) in 2016, as compared to 2015 (page 91). 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 (page 92).

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Primary Care Analysis

Primary Care: Introduction

This year's primary care section reviews changes in primary care over the past year and analyzes primary care metrics over a 5-year trend (2012 - 2016). Thirteen organizations comprise the primary care safety net in St. Louis City and County (see Appendix A for a list of 2017 reporting primary care organizations). These organizations include community health centers, hospital-based clinics and other free-standing primary care clinics. The safety net organizations self-report primary care operating statistics utilized in the annual Access to Care Data Book.

The total number of primary care encounters per reporting organization includes medical, dental, mental health, substance abuse and other clinical (i.e. podiatry and optometry) visits. Encounters for enabling services have been excluded from the data. Enabling services are services that are not provided by a licensed clinical provider (i.e. transportation). In 2016, there were approximately 67,500 enabling encounters provided at primary care organizations in the region.

Five of *Access to Care's* contributing primary care safety net organizations are members of the Gateway provider network. While Gateway pays for outpatient health services, it is not an insurance program. As such, encounters and individual user volumes occurring among Gateway enrollees in calendar year 2016 are captured in the "uninsured" payor category. A summary of Gateway's key primary care outcomes achieved during calendar year 2016 is provided on page 40. Gateway quarterly reports are available on the St. Louis Regional Health Commission's website (www.stlrhc.org).

Primary Care: Key Findings

- Primary care <u>users</u> at safety net organizations have remained stable over the past year. However, there have been notable shifts in the payor mix of these patients. Over the past year, uninsured and privately insured users increased by 5%, respectively, while Medicare users decreased by 6% (page 21).

- Since 2012, safety net primary care providers have served roughly the same percentage of uninsured patients in the region (page 24).

- Total primary care <u>encounters</u> at safety net organizations have remained relatively stable over the past five years (page 25).

    - Total uninsured <u>encounters</u> at safety net organizations remained stable over the past five years, while total Medicaid <u>encounters</u> decreased by 8% since 2012 (page 25). Volumes of Medicaid and uninsured <u>encounters</u> varied widely among safety net providers (page 27 and 28).

    - Total medical <u>encounters</u> have decreased by 6% over the past year, while decreasing by 14% over the past five years (page 30).

    - Dental <u>encounters</u> at safety net primary care providers increased by 7% over the past year, while remaining relatively stable over the past five years (page 32).

    - Behavioral health <u>encounters</u> at safety net primary care providers increased by 52% over the past year and by 74% since 2012 (page 34).

- Wait times for primary care appointments have lengthened, with the longest average wait times seen for new adult medical appointments and new dental appointments (page 38).

The number of individuals utilizing primary care services at safety net organizations in St. Louis remained relatively stable over the past year.

Primary Care Users by Payor Category, 2012 - 2016

	2012	2013	2014	2015	2016
Private	35,342	32,089	34,822	39,884	42,129
Medicare	17,919	17,692	17,683	18,861	17,700
Medicaid	100,070	96,720	95,186	96,848	92,510
Uninsured	92,811	91,012	89,075	70,715	74,580
Total	246,142	237,513	236,766	226,308	226,970
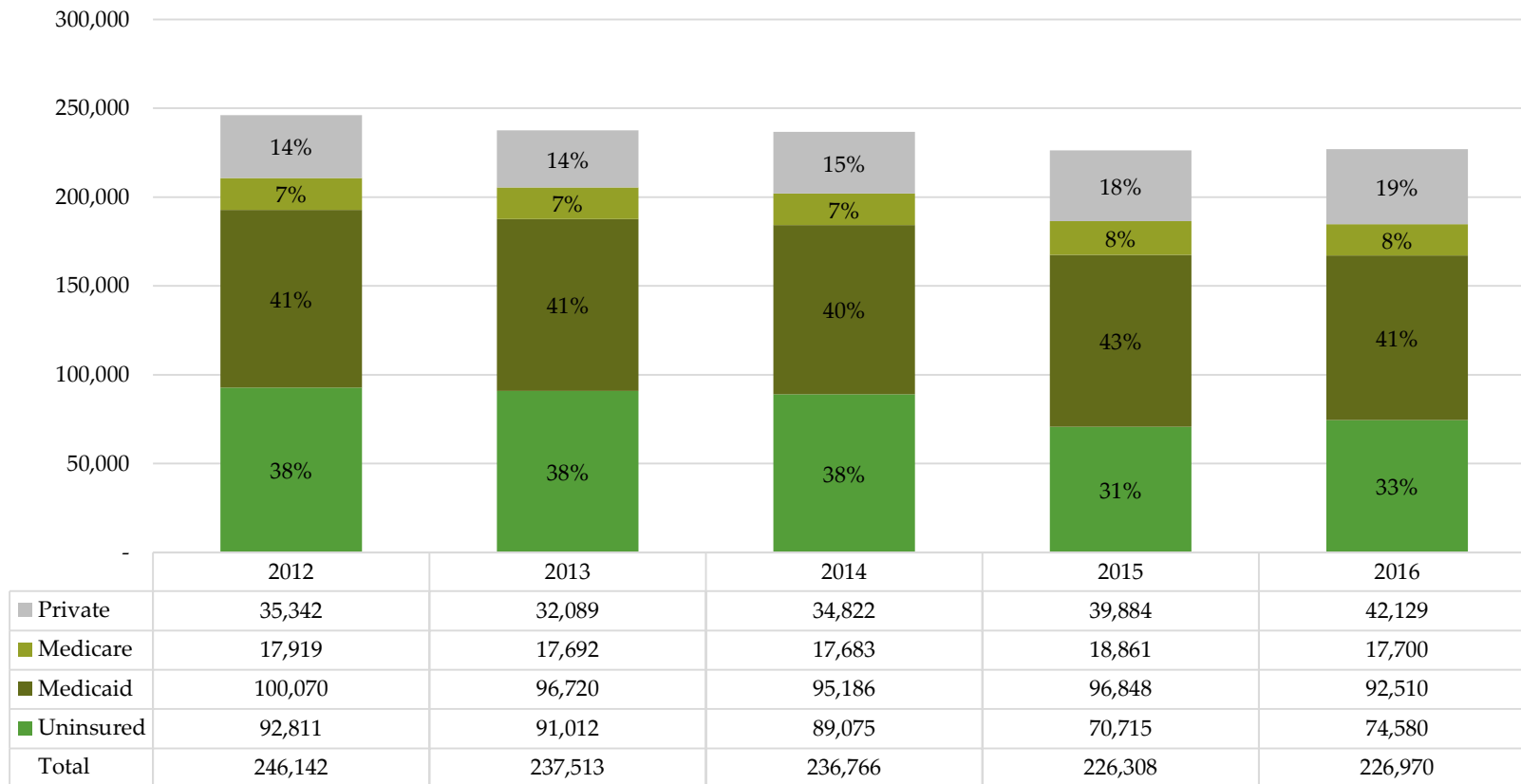
- Of the more than 226,900 primary care users reported in 2016, approximately 41% were insured through the Medicaid program, 33% were uninsured, 19% were privately insured and 8% were insured through the Medicare program.
- Over the past year, uninsured and privately insured users increased by 5%, while Medicare users decreased by 6%.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured. While users are unduplicated within each organization, there may be some duplication in total user counts across reporting organizations if a patient was seen at more than one organization in 2016.

Of the more than 212,900 primary care safety net users in 2016 <u>for which racial data is available</u>, approximately 65% were African American/Black, 23% were White and 12% were from the "Other" racial category.

Primary Care Users by Race and Payor, 2016

	White	African American/Black	Other
■ Private	15,317	16,726	3,531
■ Medicare	5,800	9,597	581
■ Medicaid	11,122	42,128	8,408
■ Uninsured	13,238	36,636	9,799
■ Unknown	2,480	33,464	4,148
All Payors	47,957	138,551	26,467
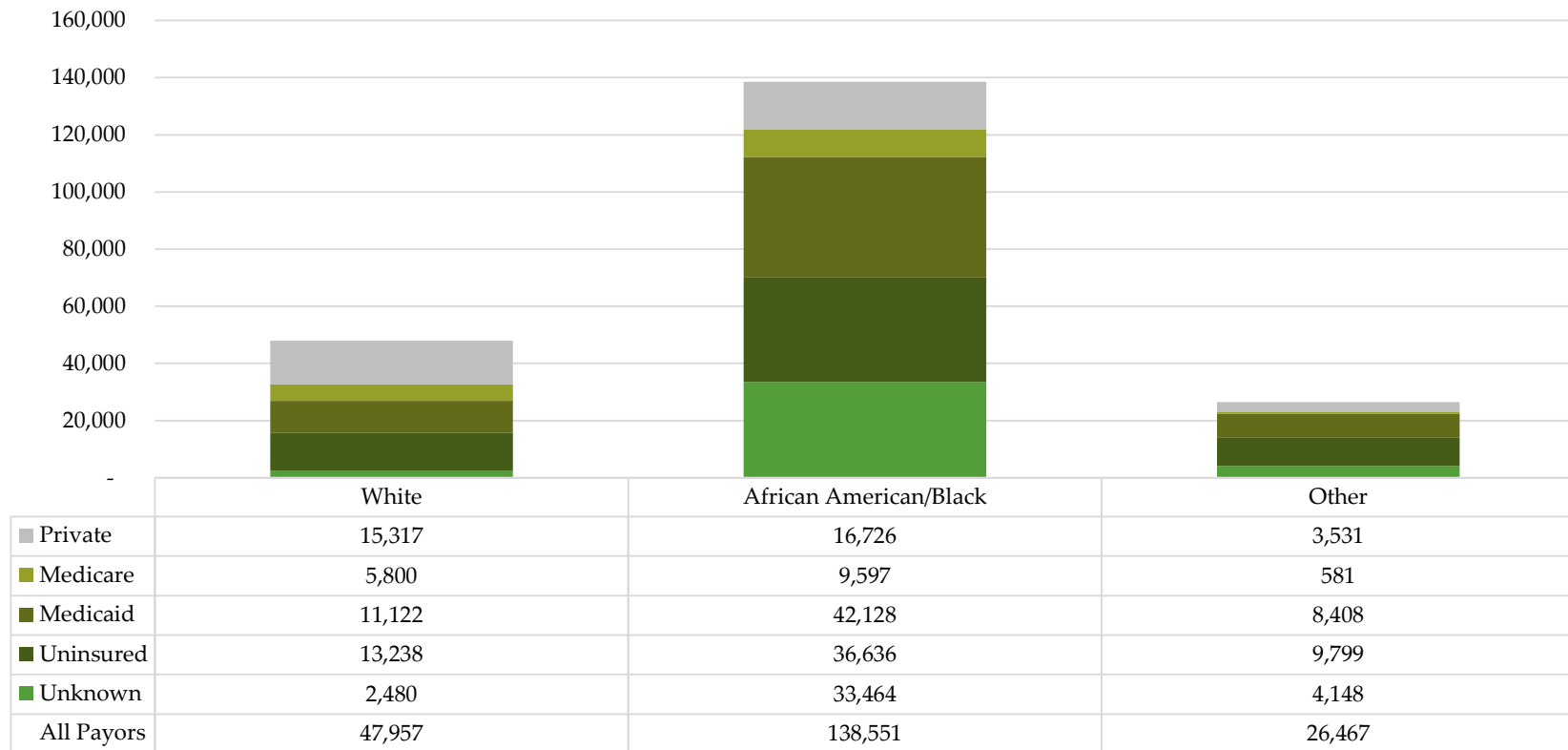
- Approximately 28% of all White primary care users, 26% of all African American/Black primary care users and 37% of all users included in the "Other" racial group are uninsured.
- Based on census data for the general population of St. Louis City and County, about 4% of all Whites, 5% of all African Americans and 1% of those included in the "Other" racial group are uninsured.

Note: There may be some duplication in the user count across safety net organizations in the region. The "other" racial/ethnic group includes: those of Asian, American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander descent, as well as those identifying with more than one racial/ethnic group, those identifying as Hispanic/Latino and those whose race/ethnicity is unknown. However, the American Community Survey includes Hispanic/Latinos throughout all racial groups, whereas all Hispanic/Latinos safety net users, regardless of race, are captured separately in the "other" category only. BJK People's did not provide payor data for their users by race. Therefore, all of their users have been included in the unknown payor grouping. The SPOT, St. Louis County Department of Public Health, Family Care and SSM Cardinal Glennon did not provide racial data for <u>all</u> of their users in 2016 included on page 21 of this report.

In 2016, there were more than 226,900 individuals who utilized safety net primary care services. Of that number, providers reported more than 17,500 new users.

Total Primary Care Users and New Users by Organization, 2016

	Affinia Healthcare	BJK People's Health Centers	St. Louis County Dept. of Public Health	Family Care Health Centers	SLUCare	Myrtle Hilliard Davis	BJH Clinics	The SPOT	SSM	Mercy JFK Clinic	St. Luke's Pediatric Care Center
Existing Users	36,652	31,459	32,370	29,008	25,339	22,685	12,132	4,341	4,379	4,118	2,262
New Users	6,349	8,633	1,741	2,316	-	1,571	2,144	1,461	1,057	730	205
Total	43,001	40,092	34,111	31,324	25,339	24,256	14,276	5,802	5,436	4,848	2,467
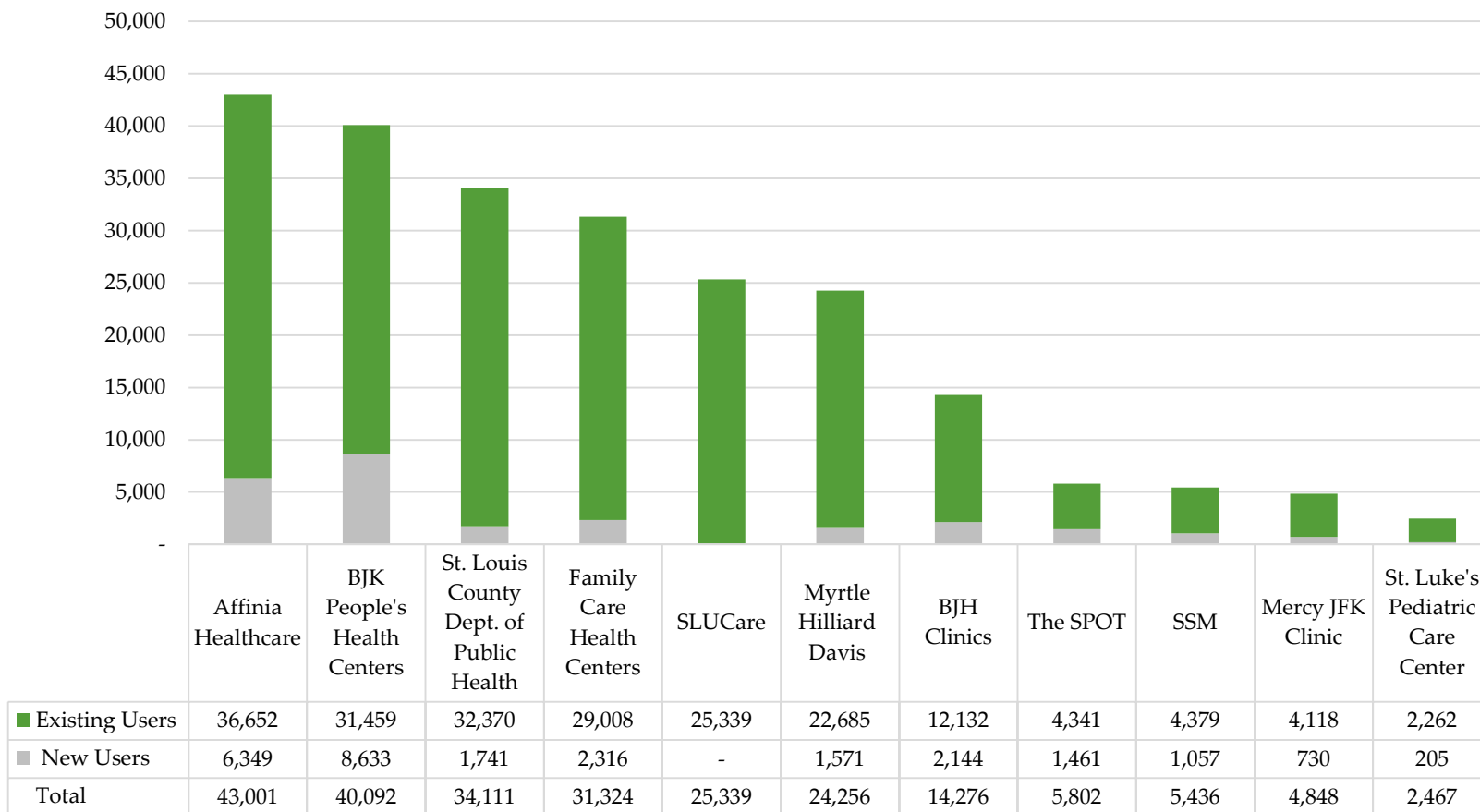
- Of the more than 226,900 primary care users reported in 2016, approximately 12% were new users as compared to 10% in 2015.
- The SPOT, BJK People's, SSM, Mercy JFK and BJH Clinics had the highest percentage of new users in 2016: 34%, 21%, 19%, 15% and 15%, respectively.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured. While users are unduplicated within each organization, there may be some duplication in total user counts across reporting organizations if a patient was seen at more than one organization in 2016. New users are defined as any user who had a new patient encounter in 2016, based on CPT codes 99201-99205, and who had never been seen or had not been seen by that organization in at least three years. SLUCare did not report new users in 2016. The "SSM" category includes St. Mary's Health Center and Glennon Care Pediatrics. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers.

Safety net primary care providers served roughly 59% of the total uninsured population in St. Louis City and County in 2016.

Primary Care Uninsured Users Served by Total St. Louis Uninsured Population, 2012 - 2016
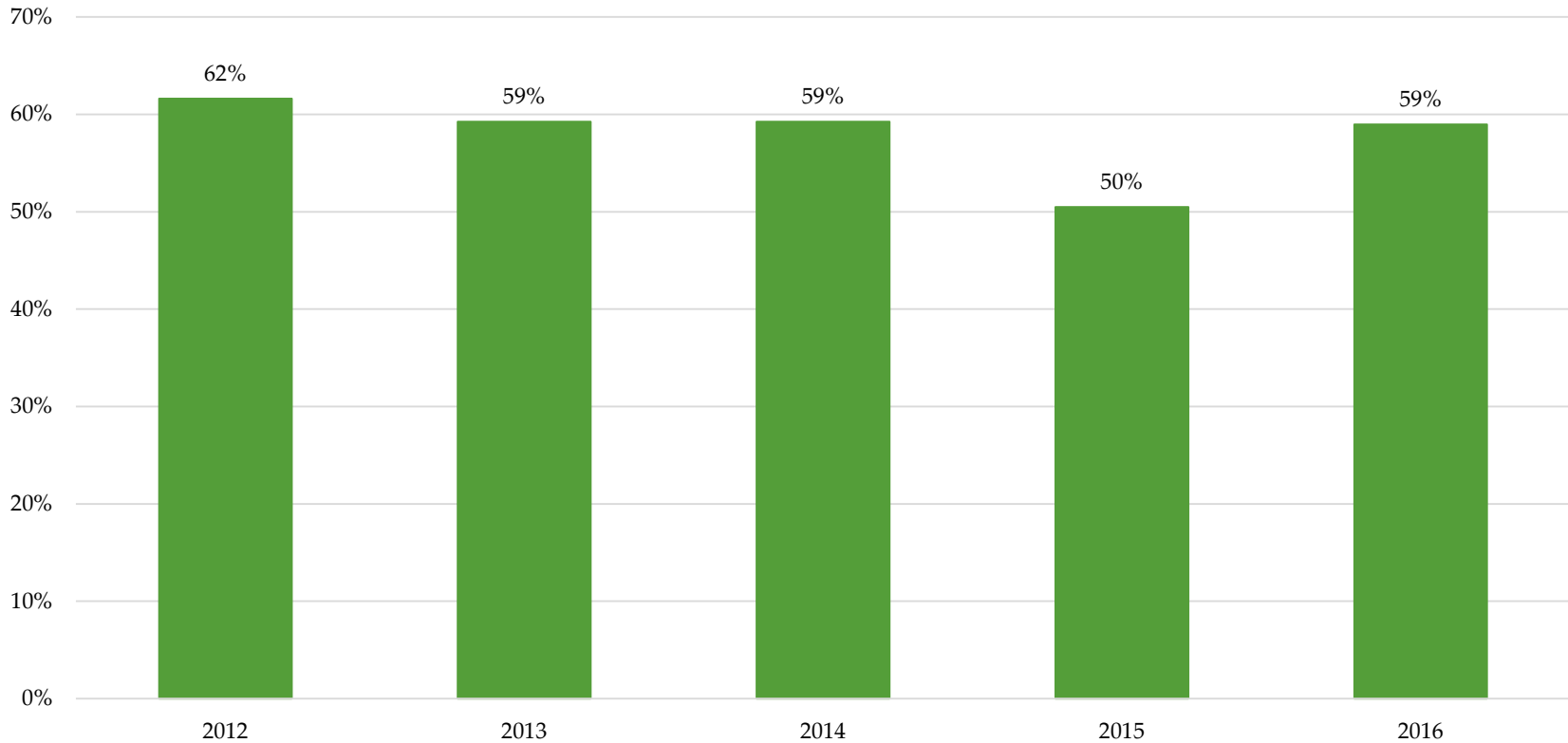
Year	Percentage
2012	62%
2013	59%
2014	59%
2015	50%
2016	59%

Since 2012, safety net primary care providers have served roughly the same percentage of uninsured patients in the region.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured. While users are unduplicated within each organization, there may be some duplication in total user counts across reporting organizations if a patient was seen at more than one organization in 2016. St. Louis area uninsured estimates used as the denominator for this rate are based on county level data from the American Community Survey, released September 2017.

Total primary care encounters at safety net organizations in St. Louis have remained relatively stable over the past five years.

Primary Care Encounters by Payor Category, 2012 - 2016

	2012	2013	2014	2015	2016
■ Private	93,179	92,483	90,098	110,155	112,285
■ Medicare	70,841	72,868	69,546	75,178	75,047
■ Medicaid	317,079	298,067	281,383	293,171	290,919
■ Uninsured	276,258	280,584	281,007	263,455	270,432
Total	757,356	744,002	722,034	741,959	748,683
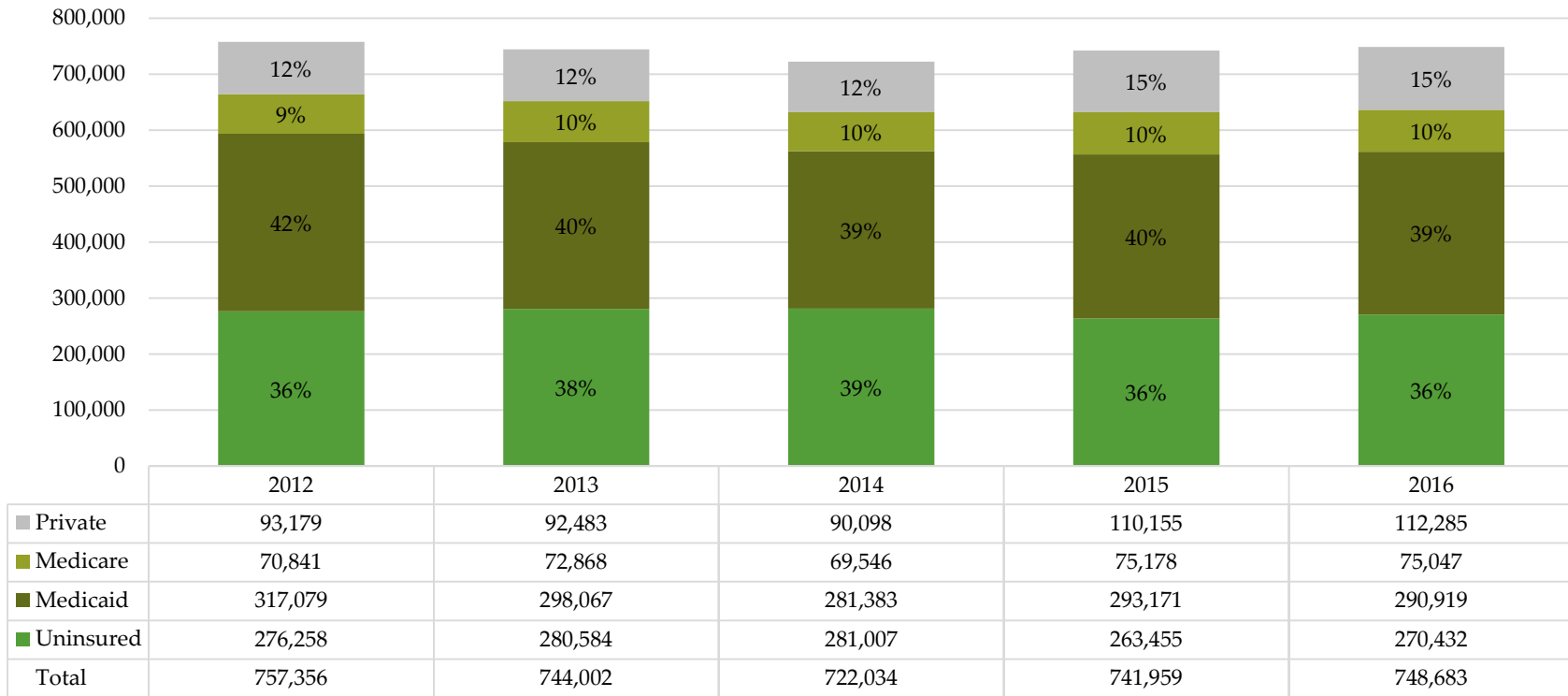
- Of the more than 748,600 total primary care encounters reported in 2016, approximately 39% were among the Medicaid population, 36% were among the uninsured, 15% were among those privately insured and 10% were among the Medicare population.
- Medicaid primary care encounters have decreased by 8% over the past five years, while Medicare and Private primary care encounters have increased by 6% and 21%, respectively, since 2012.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured. The number of individuals enrolled in MO HealthNet (Medicaid) from St. Louis City and County increased by 15% over the past year. Primary care encounters include all medical, dental, mental health, substance abuse and other encounters provided by a primary care organization.

Patient volumes at most major safety net organizations in St. Louis either increased or remained relatively stable in 2016.

Total Primary Care Encounters by Organization, 2012 - 2016

	Affinia Healthcare	BJK People's Health Centers	Myrtle Hilliard Davis	SLUCare	Family Care Health Centers	St. Louis County Dept. of Public Health	BJH Clinics	Mercy JFK Clinic	SSM	Health and Dental Care for Kids	All Other
2012	154,657	112,957	92,989	88,998	69,929	89,381	61,433	27,280	11,181	34,971	13,580
2013	146,670	105,328	97,593	84,748	72,564	89,553	65,177	26,080	7,520	34,971	13,798
2014	151,201	98,994	92,579	80,403	75,790	86,193	54,373	27,266	11,611	30,344	13,280
2015	157,570	118,954	106,096	85,473	76,916	86,829	50,236	29,325	13,519	-	17,041
2016	198,537	114,187	87,622	84,114	78,341	77,108	49,914	27,402	15,276	-	16,182

- Two organizations increased by more than 10% in the number of total primary care encounters over the past year: Affinia Healthcare (26%) and SSM (13%).
- Two organizations decreased by more than 10% in the number of total primary care encounters over the past year: Myrtle Hilliard Davis (17%) and St. Louis County Department of Public Health (11%).

Note: The "All Other" category includes The SPOT and St. Luke's Pediatric Center. Health and Dental Care for Kids did not report data for 2012 and 2013 and figures from 2011 were used to estimate data for those years. In 2015, BJK People's Health Centers acquired Health and Dental Care for Kids. As of 2015, all encounters and users at Health and Dental Care for Kids' site are included in BJK People's data. The "SSM" category includes St. Mary's Health Center and Glennon Care Pediatrics. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers. Primary care encounters include all medical, dental, mental health and substance abuse encounters provided by a primary care organization.

Uninsured primary care encounters have decreased at three safety net primary care organizations over the past year.

Uninsured Primary Care Encounters by Organization, 2012 - 2016

	Affinia Healthcare	BJK People's Health Centers	Myrtle Hilliard Davis	St. Louis County Dept. of Public Health	Family Care Health Centers	Mercy JFK Clinic	BJH Clinics	SLUCare	SSM	Health and Dental Care for Kids	All Other
2012	81,808	38,020	42,055	54,521	24,637	13,149	9,215	2,017	911	1,757	8,168
2013	75,764	40,513	40,406	52,767	35,027	12,032	10,793	1,938	735	1,757	8,852
2014	84,254	42,704	43,321	49,102	27,266	13,217	7,927	2,796	741	1,323	8,356
2015	79,240	36,677	49,107	44,069	21,821	12,630	5,691	2,089	674	-	11,457
2016	111,039	39,972	35,007	34,620	18,019	12,909	5,339	2,261	663	-	10,603

- The three safety net primary care organizations with a decrease in uninsured encounters over the past year include: Myrtle Hilliard Davis (29%), St. Louis County Department of Public Health (21%) and Family Care (17%).
- Uninsured encounters increased at Affinia Healthcare by 40% over the past year.

Note: The "All Other" category includes The SPOT and St. Luke's Pediatric Center. Health and Dental Care for Kids did not report data for 2012 and 2013 and figures from 2011 were used to estimate data for those years. In 2015, BJK People's Health Centers acquired Health and Dental Care for Kids. As of 2015, all encounters and users at Health and Dental Care for Kids' site are included in BJK People's data. The "SSM" category includes St. Mary's Health Center and Glennon Care Pediatrics. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers. Primary care encounters include all medical, dental, mental health and substance abuse encounters provided by a primary care organization.

Medicaid primary care encounters have decreased at five safety net primary care organizations over the past year.

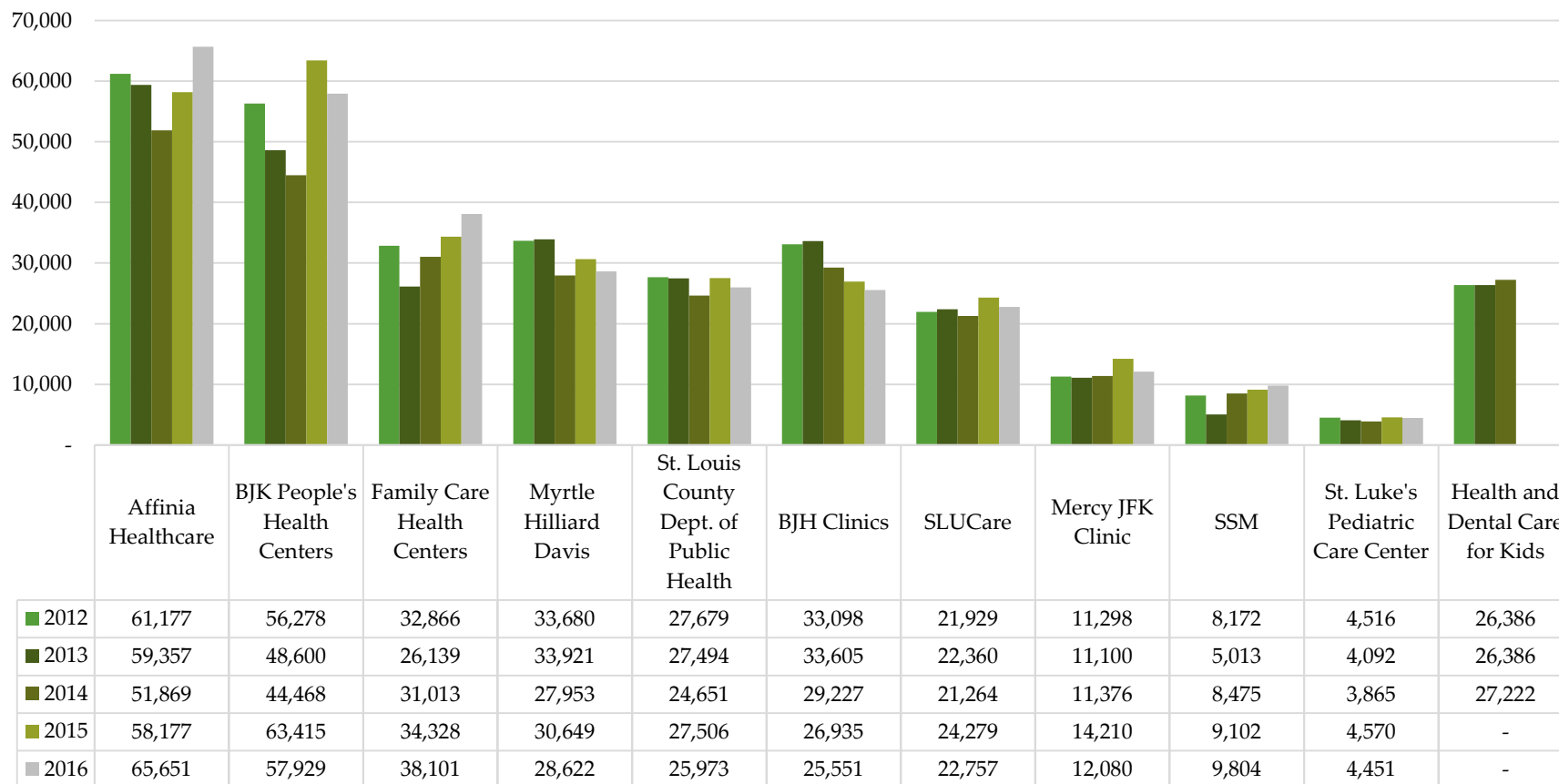## Medicaid Primary Care Encounters by Organization, 2012 - 2016

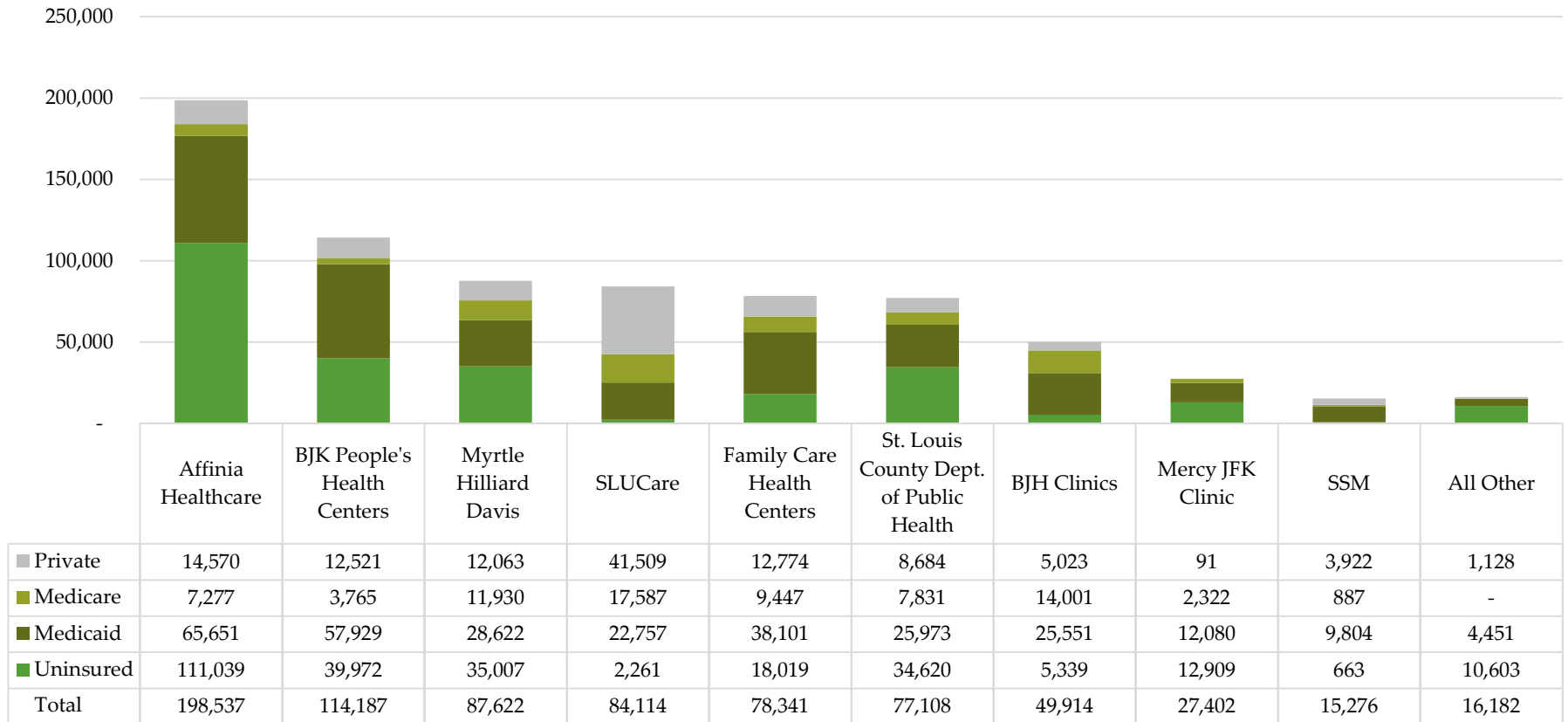|	Affinia Healthcare	BJK People's Health Centers	Family Care Health Centers	Myrtle Hilliard Davis	St. Louis County Dept. of Public Health	BJH Clinics	SLUCare	Mercy JFK Clinic	SSM	St. Luke's Pediatric Care Center	Health and Dental Care for Kids
2012	61,177	56,278	32,866	33,680	27,679	33,098	21,929	11,298	8,172	4,516	26,386
2013	59,357	48,600	26,139	33,921	27,494	33,605	22,360	11,100	5,013	4,092	26,386
2014	51,869	44,468	31,013	27,953	24,651	29,227	21,264	11,376	8,475	3,865	27,222
2015	58,177	63,415	34,328	30,649	27,506	26,935	24,279	14,210	9,102	4,570	-
2016	65,651	57,929	38,101	28,622	25,973	25,551	22,757	12,080	9,804	4,451	-

- The five primary care organizations with a decrease in Medicaid primary care encounters over the past year include: SSM (15%), BJK People's (8%), Myrtle Hilliard Davis (6%), St. Louis County Department of Public Health (6%) and SLUCare (6%).
- Medicaid primary care encounters increased by more than 10% over the past year at two safety net primary care organizations: Affinia (13%) and Family Care (11%).

Note: In 2015, BJK People's Health Centers acquired Health and Dental Care for Kids. As of 2015, all encounters and users at Health and Dental Care for Kids' site are included in BJK People's data. The "SSM" category includes St. Mary's Health Center and Glennon Care Pediatrics. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers. Primary care encounters include all medical, dental, mental health and substance abuse encounters provided by a primary care organization.

There are significant differences in the proportion of uninsured patients served among safety net primary care providers.

Primary Care Encounters by Organization and Payor Category, 2016

|	Affinia Healthcare	BJK People's Health Centers	Myrtle Hilliard Davis	SLUCare	Family Care Health Centers	St. Louis County Dept. of Public Health	BJH Clinics	Mercy JFK Clinic	SSM	All Other
■ Private	14,570	12,521	12,063	41,509	12,774	8,684	5,023	91	3,922	1,128
■ Medicare	7,277	3,765	11,930	17,587	9,447	7,831	14,001	2,322	887	-
■ Medicaid	65,651	57,929	28,622	22,757	38,101	25,973	25,551	12,080	9,804	4,451
■ Uninsured	111,039	39,972	35,007	2,261	18,019	34,620	5,339	12,909	663	10,603
Total	198,537	114,187	87,622	84,114	78,341	77,108	49,914	27,402	15,276	16,182

- Four primary care organizations (Affinia Healthcare, St. Louis County Department of Public Health, Myrtle Hilliard Davis and Mercy JFK Clinic) have payor mixes with at least 40% uninsured encounters.
- Three primary care organizations (SLUCare, BJH Clinics and SSM) have payor mixes with less than 20% uninsured encounters.

Note: The "All Other" category includes The SPOT and St. Luke's Pediatric Center. The "SSM" category includes St. Mary's Health Center and Glennon Care Pediatrics. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers. Primary care encounters include all medical, dental, mental health and substance abuse encounters provided by a primary care organization.

Total primary care medical encounters have decreased by 6% over the past year.

Primary Care Medical Encounters by Payor, 2012 - 2016

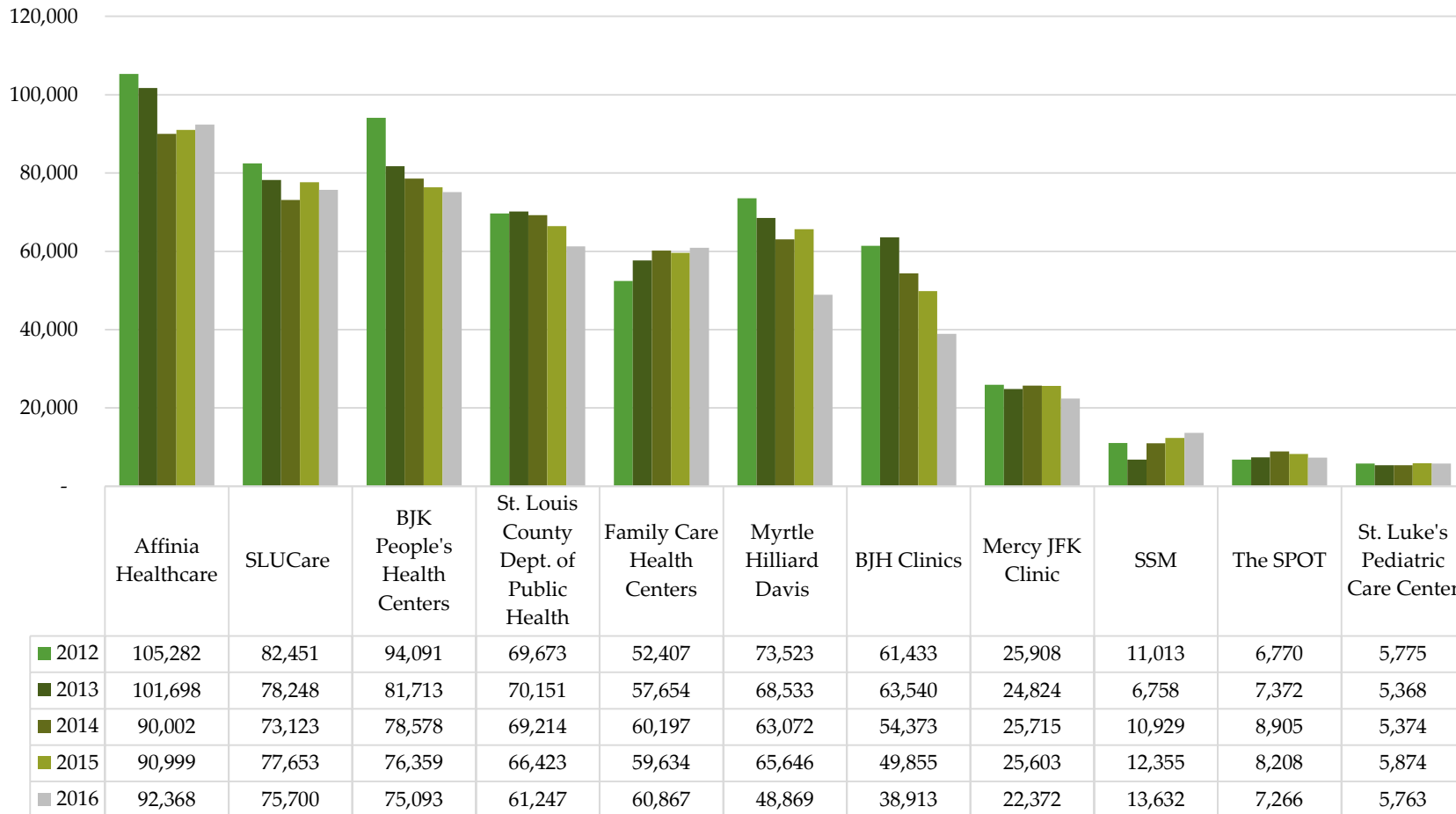| Year	Encounters
2012	588,326
2013	565,859
2014	577,659
2015	538,252
2016	505,139
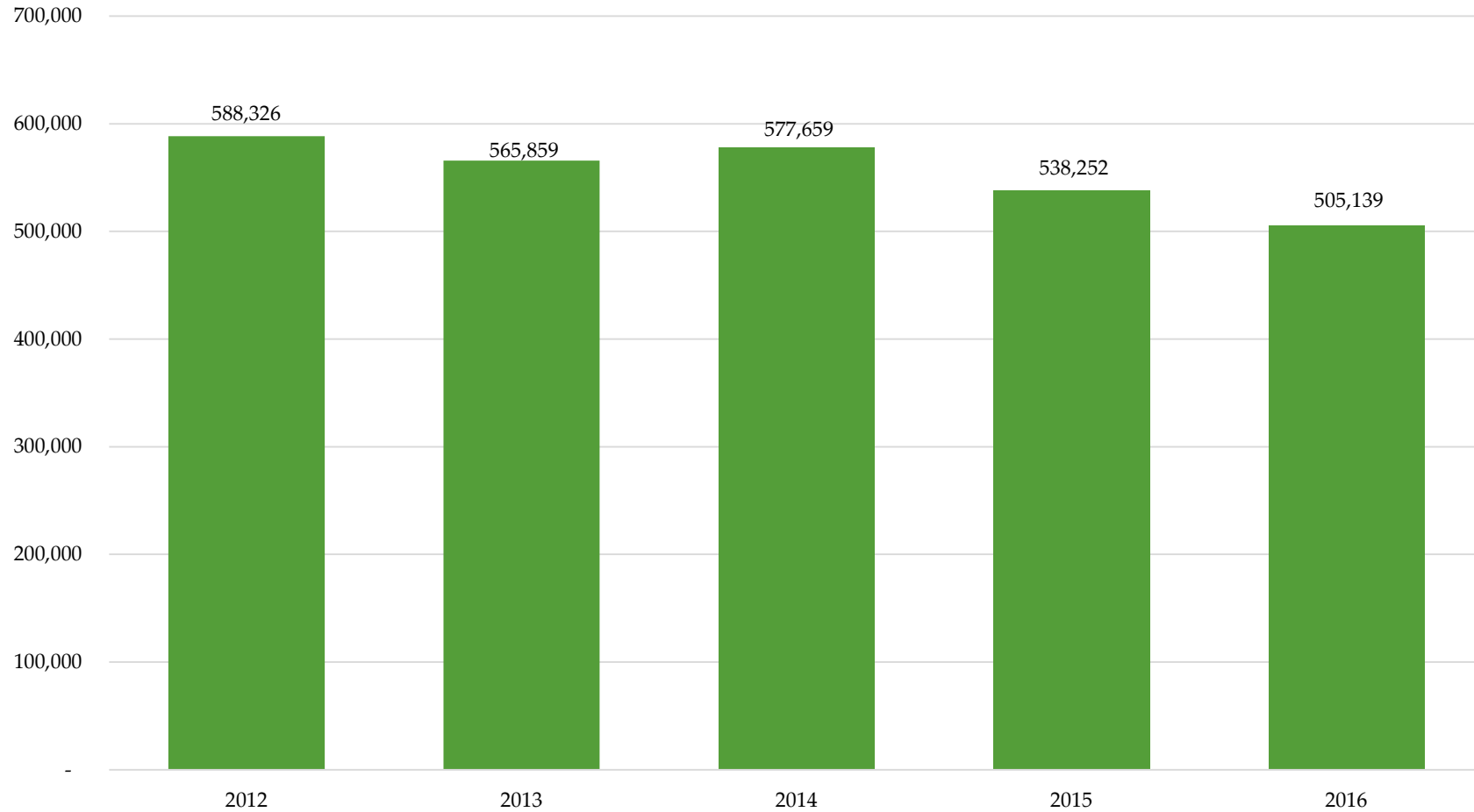
Total medical encounters at safety net organizations decreased by 14% since 2012.

Note: Medical encounters are considered those individual visits performed by a physician, nurse practitioner, physician assistant, certified nurse midwife or other nursing staff.

Patient volumes for medical encounters varied at major primary care safety net organizations.

Primary Care Medical Encounters by Organization, 2012 - 2016

|	Affinia Healthcare	SLUCare	BJK People's Health Centers	St. Louis County Dept. of Public Health	Family Care Health Centers	Myrtle Hilliard Davis	BJH Clinics	Mercy JFK Clinic	SSM	The SPOT	St. Luke's Pediatric Care Center
■ 2012	105,282	82,451	94,091	69,673	52,407	73,523	61,433	25,908	11,013	6,770	5,775
■ 2013	101,698	78,248	81,713	70,151	57,654	68,533	63,540	24,824	6,758	7,372	5,368
■ 2014	90,002	73,123	78,578	69,214	60,197	63,072	54,373	25,715	10,929	8,905	5,374
■ 2015	90,999	77,653	76,359	66,423	59,634	65,646	49,855	25,603	12,355	8,208	5,874
■ 2016	92,368	75,700	75,093	61,247	60,867	48,869	38,913	22,372	13,632	7,266	5,763

- SSM increased by more than 10% in the number of total medical care encounters provided over the past year.
- Five organizations decreased by more than 5% in the number of total medical care encounters provided over the past year: Myrtle Hilliard Davis (26%), BJH Clinics (22%), Mercy JKF Clinics (13%), The SPOT (11%) and St. Louis County Department of Public Health (8%).

Note: The "SSM" category includes St. Mary's Health Center and Glennon Care Pediatrics. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers.

Dental encounters at safety net primary care organizations remained stable over the past five years.

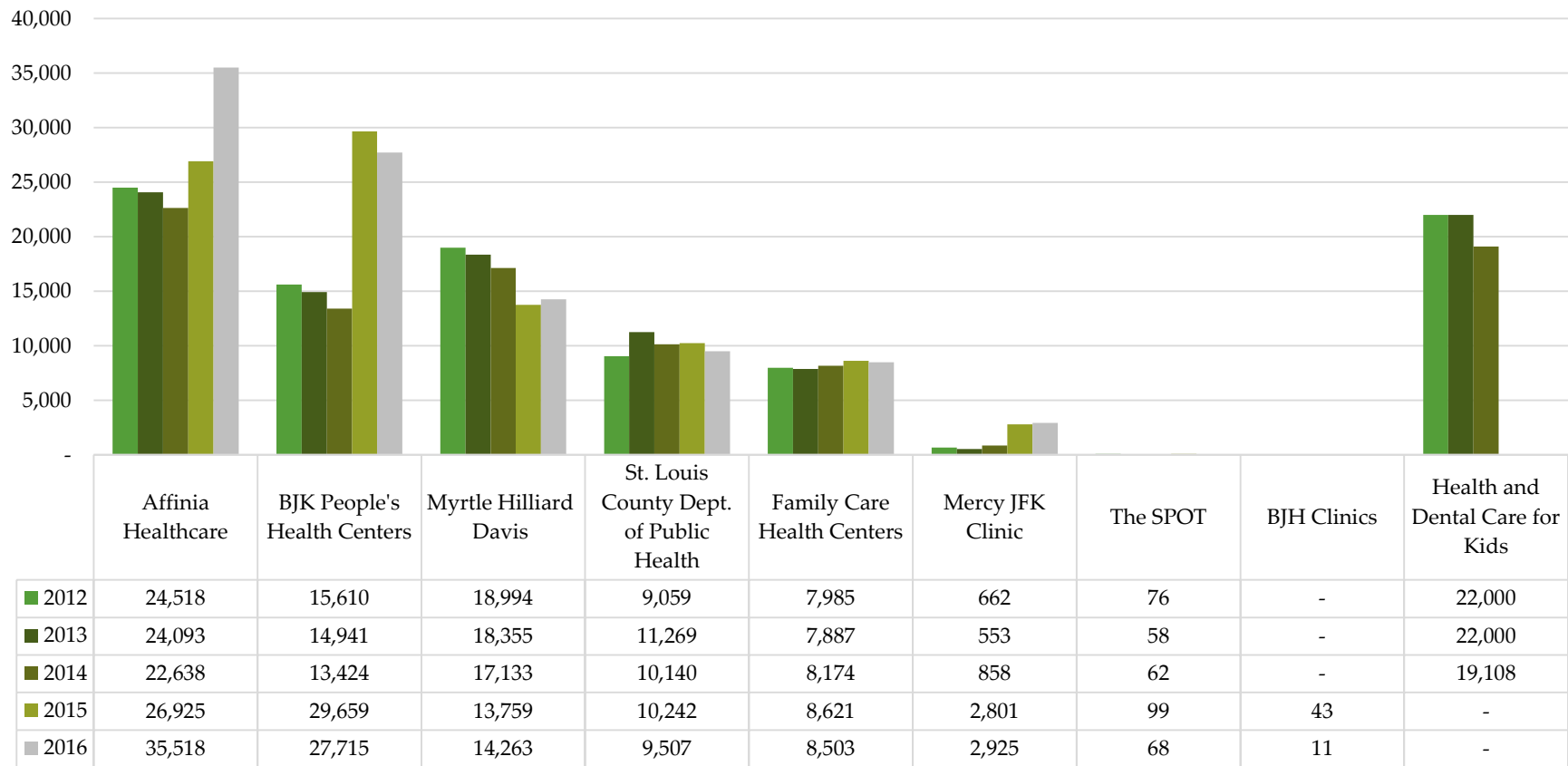## Primary Care Dental Encounters, 2012 - 2016
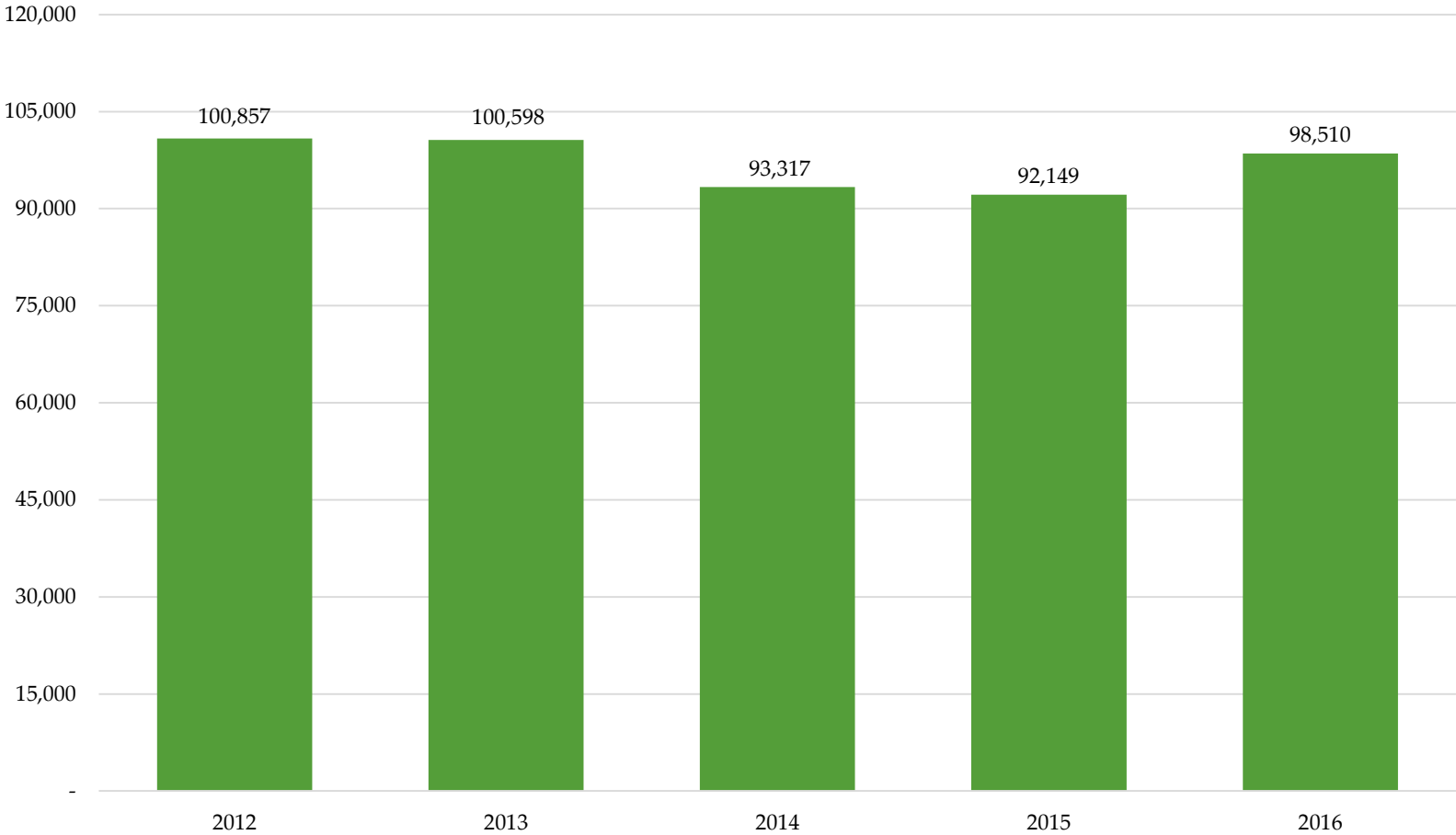
- Dental encounters provided at safety net primary care providers have increased by 7% over the past year.
- Pediatric dental encounters comprise 37% (over 36,600 encounters) of all dental encounters reported in 2016.

Note: Health and Dental Care for Kids did not report data for 2012 and 2013 and figures from 2011 were used to estimate data for those years. The Gateway to Better Health program reimburses for limited dental services for adults.

Dental encounters have decreased at four safety net primary care organizations over the past year, while significantly increasing at one organization.

Primary Care Dental Encounters by Organization, 2012 - 2016

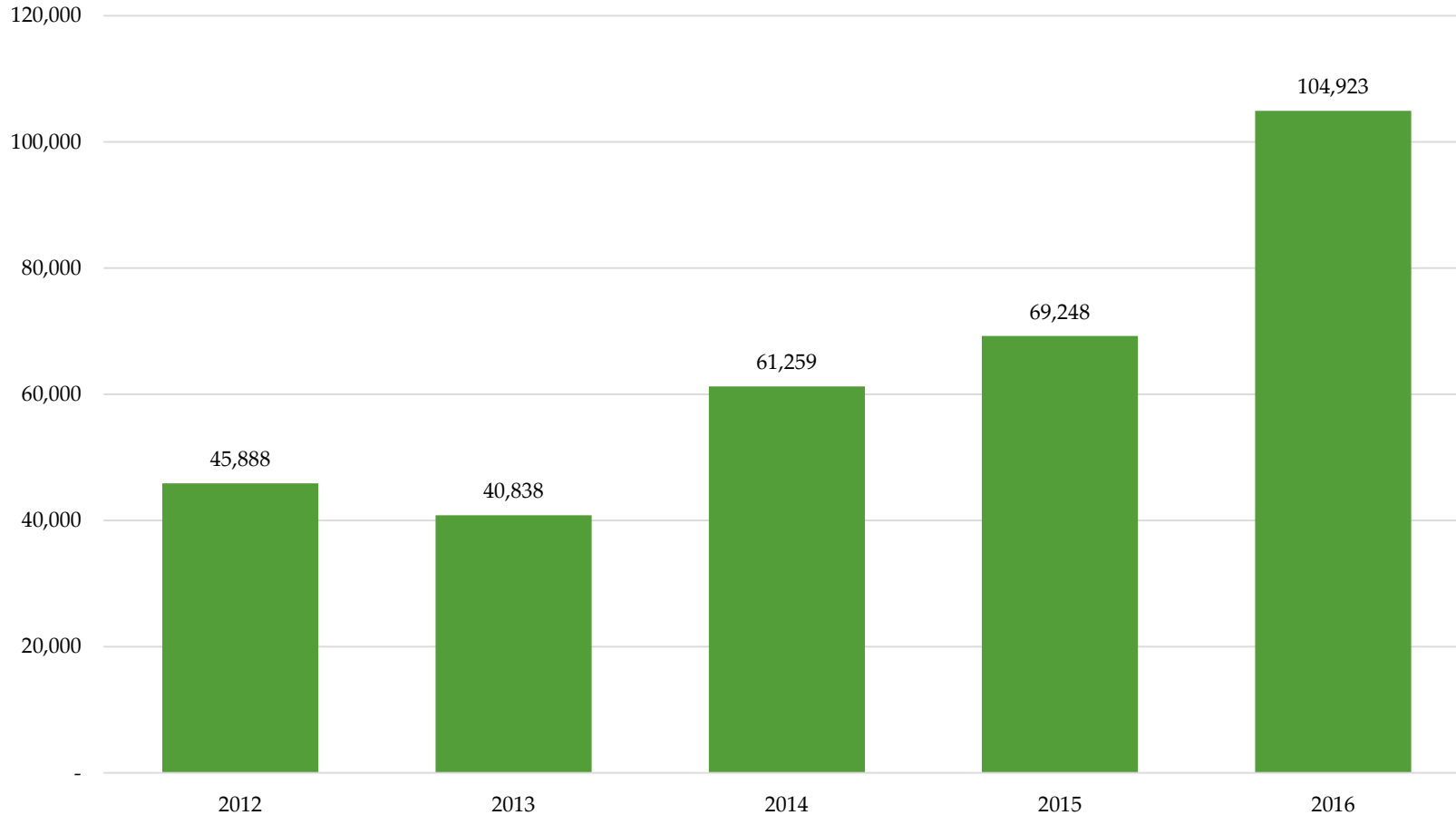|	Affinia Healthcare	BJK People's Health Centers	Myrtle Hilliard Davis	St. Louis County Dept. of Public Health	Family Care Health Centers	Mercy JFK Clinic	The SPOT	BJH Clinics	Health and Dental Care for Kids
2012	24,518	15,610	18,994	9,059	7,985	662	76	-	22,000
2013	24,093	14,941	18,355	11,269	7,887	553	58	-	22,000
2014	22,638	13,424	17,133	10,140	8,174	858	62	-	19,108
2015	26,925	29,659	13,759	10,242	8,621	2,801	99	43	-
2016	35,518	27,715	14,263	9,507	8,503	2,925	68	11	-

- The four primary care organizations with reported decreases in dental encounters over the past year include: BJH Clinic (74%), The SPOT (31%), BJK People's Health Centers (7%) and St. Louis County Department of Public Health (7%).
- Dental encounters at Affinia increased by 32% over the past year.

Note: Health and Dental Care for Kids did not report data for 2012 and 2013 and figures from 2011 were used to estimate data for those years. In 2015, BJK People's Health Centers acquired Health and Dental Care for Kids. As of 2015, all encounters and users at Health and Dental Care for Kids' site are included in BJK People's data. Affinia Healthcare expanded dental operations in June 2015 with the opening of a dental training clinic, in partnership with A.T. Still University.

Behavioral health encounters at safety net primary care providers have increased by 74% since 2012.

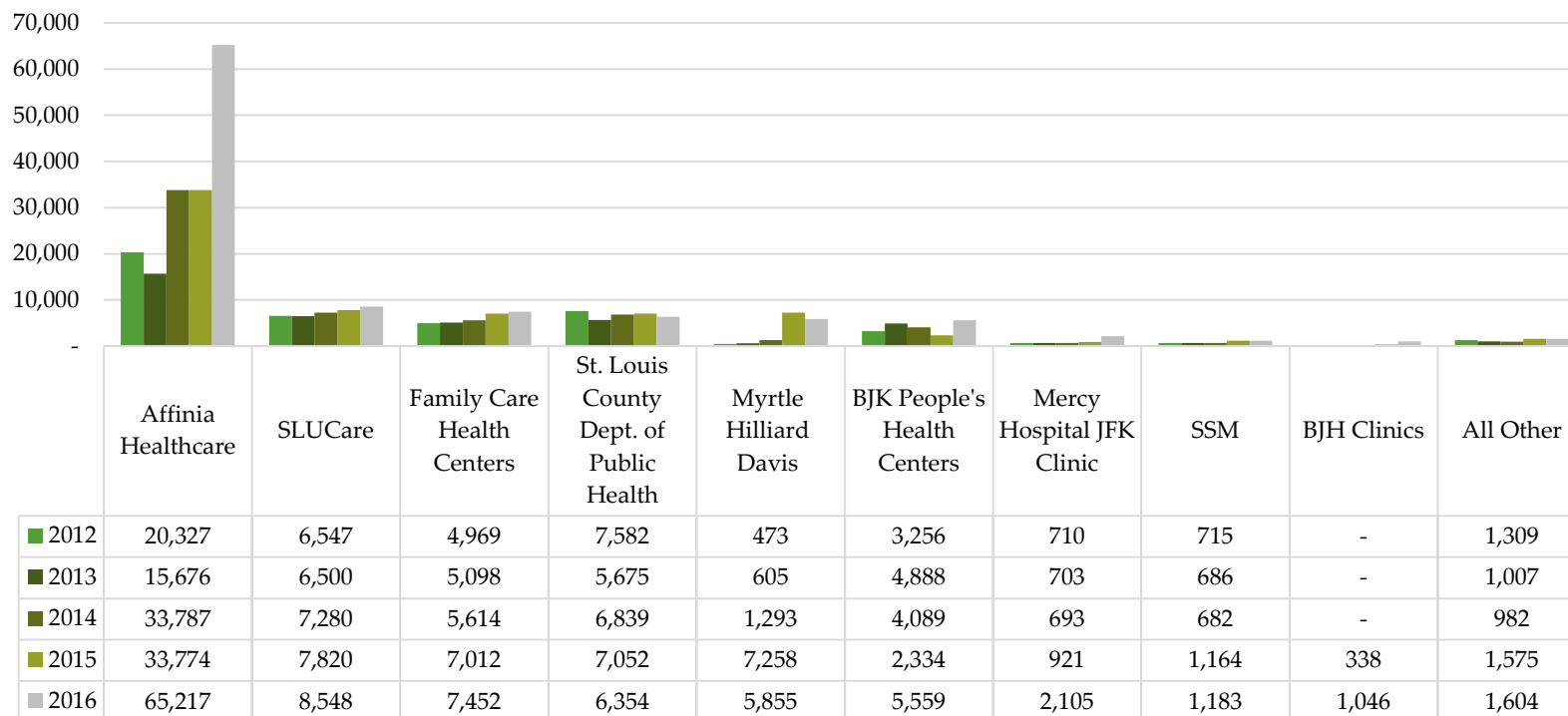## Primary Care Behavioral Health Encounters, 2012 - 2016

Behavioral health encounters at safety net primary care providers increased by 52% over the past year.

Note: Behavioral health services at primary care organizations may differ from those provided at traditional community mental health centers. These encounters may include, but are not limited to, psychiatry services, psychology services, individual counseling services with clinical social workers or other mental health providers, group counseling sessions, detox services, encounters with alcohol and substance abuse specialists and other outpatient behavioral health services.

Behavioral health encounters have increased at six safety net primary care organizations over the past year.

Primary Care Behavioral Health Encounters by Organization, 2012 - 2016

	Affinia Healthcare	SLUCare	Family Care Health Centers	St. Louis County Dept. of Public Health	Myrtle Hilliard Davis	BJK People's Health Centers	Mercy Hospital JFK Clinic	SSM	BJH Clinics	All Other
2012	20,327	6,547	4,969	7,582	473	3,256	710	715	-	1,309
2013	15,676	6,500	5,098	5,675	605	4,888	703	686	-	1,007
2014	33,787	7,280	5,614	6,839	1,293	4,089	693	682	-	982
2015	33,774	7,820	7,012	7,052	7,258	2,334	921	1,164	338	1,575
2016	65,217	8,548	7,452	6,354	5,855	5,559	2,105	1,183	1,046	1,604

- The six primary care organizations with increases in behavioral health encounters over the past year include: BJH (210%), BJK People's (138%), Mercy (129%), Affinia (93%), SLUCare (9%) and Family Care (6%).
- Behavioral health encounters decreased at Myrtle Hilliard Davis and St. Louis County Department of Public Health by 19% and 10%, respectively, over the past year.

Note: The "All Other" category includes The SPOT and St. Luke's Pediatric Care Center. Encounters above represent behavioral health services provided at St. Louis County Department of Public Health clinics, as well as services provided through their contracted provider, Family Mental Health Collaborative. St. Louis County Department of Public Health ended its partnership with Family Mental Health Collaborative in late 2017. Affinia contracts with the Salvation Army to provide substance abuse services. In 2016, the Salvation Army opened a new site, reaching full capacity. This significantly expanded access to substance abuse services through group counseling sessions and is the primary driver for the increase in uninsured encounters served through Affinia in 2016. Myrtle Hilliard Davis increased capacity for behavioral health services in 2014 and 2015 by hiring licensed clinical social workers. The "SSM" category includes St. Mary's Health Center and Glennon Care Pediatrics. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers. Mercy JFK Clinic expanded access to behavioral health services in 2016 by hiring additional counselors.
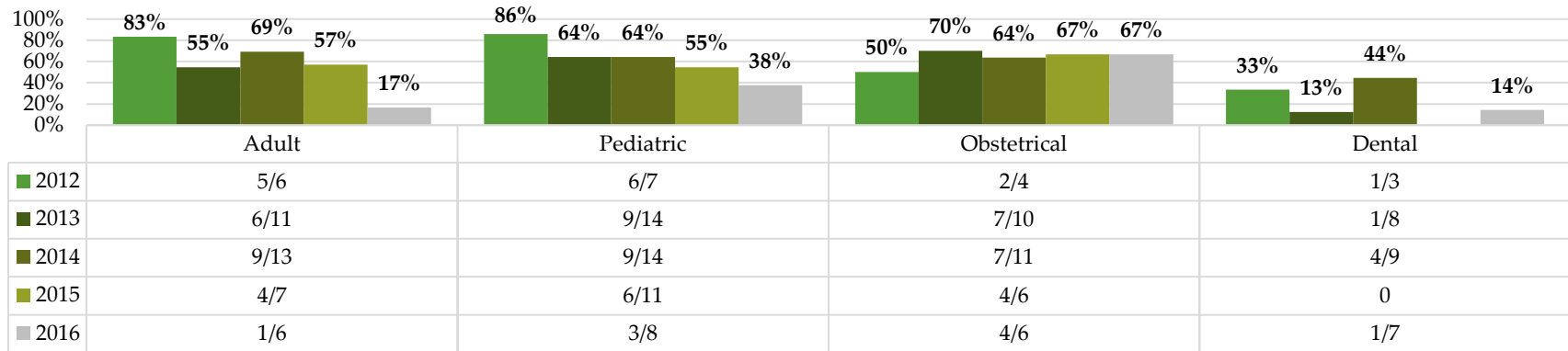
Evening and weekend hours remain available at St. Louis primary care safety net sites.

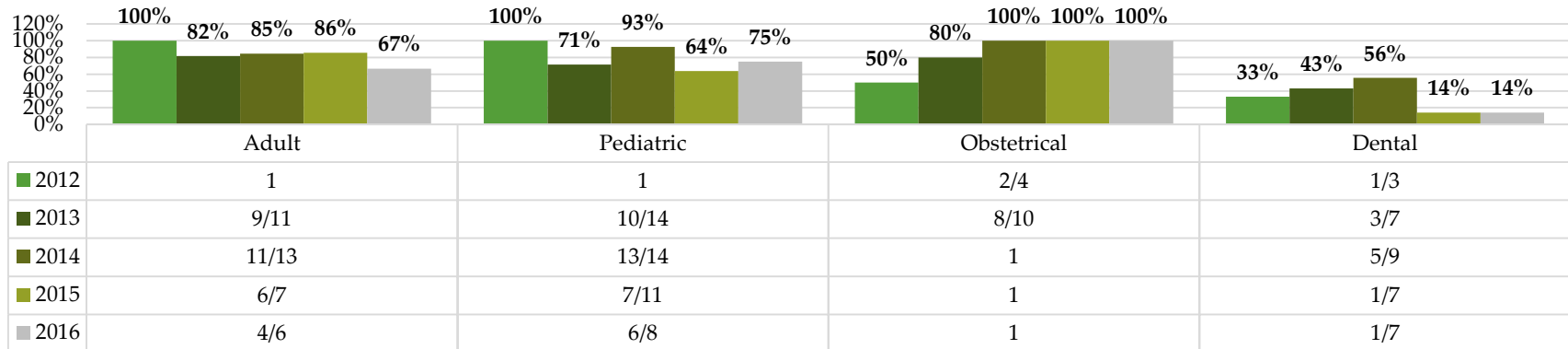| Organization	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Affinia Healthcare Sites*	8:30am-7:00pm	8:30am-7:00pm	8:30am-7:00pm	8:30am-7:00pm	8:30am-7:00pm	9:00am-5:00pm	Closed
BJH Clinics	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	Closed	Closed
BJK People's Health Center Sites*	8:00am-7:00pm	8:00am-8:30pm	8:00am-8:30pm	8:00am-7:30pm	8:00am-5:30pm	10:00am-4:00pm	Closed
Family Care Sites*	8:00am-5:00pm	8:00am-8:00pm	8:00am-5:00pm	8:00am-8:00pm	8:00am-5:00pm	8:00am-1:00pm	Closed
Mercy JFK Clinic	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	Closed	Closed
Myrtle Hilliard Davis Sites*	7:00am-5:00pm	7:00am-5:00pm	8:00am-6:00pm	7:00am-5:00pm	8:00am-5:00pm	Closed	Closed
SLUCare	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	Closed	Closed
SSM Cardinal Glennon Danis Pediatrics/Glennon Care at DePaul (Pediatric only)	7:30am-4:30pm	7:30am-4:30pm	7:30am-4:30pm	7:30am-4:30pm	7:30am-4:30pm	Closed	Closed
SSM St. Mary	9:00am-4:00pm	9:00am-4:00pm	9:00am-4:00pm	9:00am-4:00pm	9:00am-4:00pm	Closed	Closed
St. Louis County Department of Public Health Sites	8:00am-5:00pm	8:00am-5:00pm	8:00am-5:00pm	8:00am-5:00pm	8:00am-5:00pm	Closed	Closed
St. Luke's Pediatric Care Center (Pediatric only)	8:00am-5:30pm	8:00am-4:30pm	8:00am-5:30pm	8:00am-4:30pm	8:00am-4:30pm	Closed	Closed
The SPOT	1:00pm-5:00pm	1:00pm-5:00pm	1:00pm-5:00pm	1:00pm-5:00pm	1:00pm-5:00pm	Closed	Closed

* Denotes organizations providing evening and weekend hours. For organizations with multiple sites, hours reported reflect sites with the longest available hours of operation each day. Affinia Healthcare and Myrtle Hilliard Davis had walk-in urgent care facilities available seven days a week throughout 2015 and 2016. However, as of January 1, 2017, urgent care services at Affinia are no longer available on Sundays, and Myrtle Hilliard Davis' urgent care facility has been permanently closed.

Appointment availability for new and returning patients varies by service line. Appointment availability has significantly decreased for new patients since 2012.

Number of Reporting Providers with Primary Care Appointment Availability within 14 Days of Request for New Patients, 2012 - 2016

Adult: 83%, 55%, 69%, 57%, 17%
Pediatric: 86%, 64%, 64%, 55%, 38%
Obstetrical: 50%, 70%, 64%, 67%, 67%
Dental: 33%, 13%, 44%, 14%

	Adult	Pediatric	Obstetrical	Dental
2012	5/6	6/7	2/4	1/3
2013	6/11	9/14	7/10	1/8
2014	9/13	9/14	7/11	4/9
2015	4/7	6/11	4/6	0
2016	1/6	3/8	4/6	1/7

Number of Reporting Providers with Primary Care Appointment Availability within 14 Days of Request for Return Patients, 2012 - 2016

Adult: 100%, 82%, 85%, 86%, 67%
Pediatric: 100%, 71%, 93%, 64%, 75%
Obstetrical: 50%, 80%, 100%, 100%, 100%
Dental: 33%, 43%, 56%, 14%, 14%

	Adult	Pediatric	Obstetrical	Dental
2012	1	1	2/4	1/3
2013	9/11	10/14	8/10	3/7
2014	11/13	13/14	1	5/9
2015	6/7	7/11	1	1/7
2016	4/6	6/8	1	1/7

- For both new and returning patients, appointment availability has decreased over the past year for adult primary care services.
- Appointment availability for returning obstetrical patients, as well as returning dental patients, has remained stable over the past year.
- Appointment availability for new pediatric patients has declined over the past year, while appointment availability for returning pediatric patients and new dental patients has increased.

Note: Percentages reflect the number of organizations who had appointments available within 14 days of request, as compared to the total number of organizations who reported wait times. Primary care organizations were asked to provide wait times as of July 2017. Wait times for pediatric appointments may be higher than usual due to the back-to-school season. Reported wait times are based on scheduling templates; experience in the health center may vary as many health centers utilize nurse triaging to schedule same day or next day appointments. Wait times reported above do not include triaged nursing appointments. The number "1" denotes that all reporting facilities have primary care appointment availability within 14 days for new and returning patients.

Wait times for non-urgent appointments vary across organizations, with the longest average wait times seen for new adult medical appointments and new dental appointments.

Organization	Wait Time for Non-Urgent Appointment (in days), as of July 2017							
	Pediatric New	Pediatric Returning	Obstetrical New	Obstetrical Returning	Adult New	Adult Returning	Dental New	Dental Returning
Affinia Healthcare	15	10	13	7	21	3	20	20
Family Care	1	1	**24**	3	20	4	40	40
The SPOT	-	-	-	-	-	-	60	60
Myrtle Hilliard Davis	14	14	14	**14**	7	7	21	21
BJK People's*	17	**37**	3	2	**95**	**38**	51	36
Mercy JFK Clinic	1	1	3	2	36	2	2	2
St. Luke's	30	15	-	-	-	-	-	-
St. Louis County Department of Public Health	27	13	16	6	41	24	22	22
SSM Cardinal Glennon	**41**	10	**-**	-	-	-	-	-

- BJK People's has the longest wait time for both new and returning, *non-urgent* adult medical appointments.
- SSM Cardinal Glennon has the longest wait time for new, *non-urgent* pediatric medical appointments, while BJK People's has the longest wait time for returning, *non-urgent* pediatric medical appointments.
- Family Care has the longest wait time for new, *non-urgent* obstetrical medical appointments, while Myrtle Hilliard Davis has the longest wait time for returning, *non-urgent* obstetrical medical appointments.
- The SPOT has the longest wait time for both new and returning, *non-urgent* dental appointments.

Note: Primary care organizations were asked to provide wait times as of July 2017. Wait times for pediatric appointments may be higher than usual due to the back-to-school season. Reported wait times are based on scheduling templates; experience in the health center may vary as many health centers utilize nurse triaging to schedule same day or next day appointments. Wait times reported above do not include triaged nursing appointments. The SPOT operates on a "first come, first serve" basis, patients are allowed to come back the next day, if not seen.

Wait times for urgent appointments vary across organizations, with the longest average wait times seen for new and returning adult medical appointments.

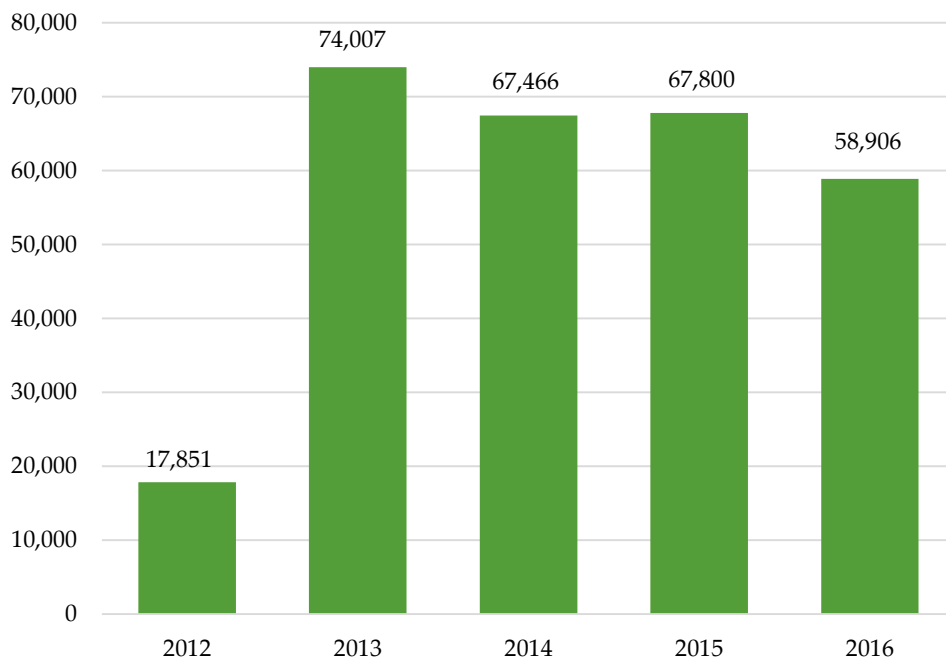| Organization	Wait Time for Urgent Appointment (in days), as of July 2017							
	Pediatric New	Pediatric Returning	Obstetrical New	Obstetrical Returning	Adult New	Adult Returning	Dental New	Dental Returning
Affinia Healthcare*	0	0	0	0	0	0	0	0
Family Care	0	0	1	0	14	0	0	0
The SPOT	-	-	-	-	-	-	-	-
Myrtle Hilliard Davis	6	6	6	6	6	6	6	6
BJK People's	17	1	3	1	36	1	1	1
Mercy JFK Clinic	1	1	1	1	1	1	1	1
St. Luke's	4	1	-	-	-	-	-	-
St. Louis County Department of Public Health	1	1	5	3	7	1	3	3
SSM Cardinal Glennon	2	2	-	-	-	-	-	-

- BJK People's has the longest wait time for new, *urgent* pediatric appointments, while Myrtle Hilliard Davis has the longest wait time for returning, *urgent* pediatric appointments.
- Myrtle Hilliard Davis has the longest wait time for both new and returning, *urgent* obstetrical appointments.
- BJK People's has the longest wait time for new, *urgent* adult medical appointments, while Myrtle Hilliard Davis has the longest wait time for returning, *urgent* adult medical appointments.
- Myrtle Hilliard Davis has the longest wait time for both new and returning, *urgent* dental appointments.

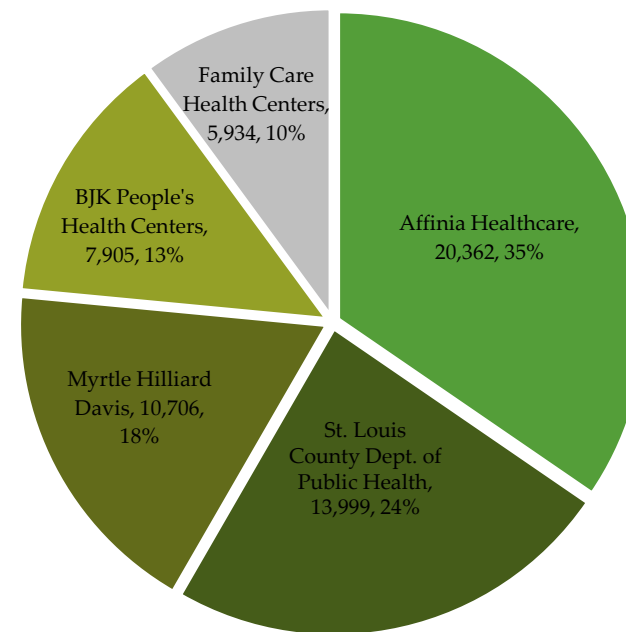* Indicates availability of walk-in urgent care services.

Note: Primary care organizations were asked to provide wait times as of July 2017. Wait times for pediatric appointments may be higher than usual due to the back-to-school season. Zero indicates same day appointments are available for that service line. Reported wait times are based on scheduling templates; experience in the health center may vary as many health centers utilize nurse triaging to schedule same day or next day appointments. Wait times reported above do not include triaged nursing appointments. The SPOT does not provide urgent appointment availability. Federally Qualified Health Centers (FQHCs) report having same day appointments available, as required by federal regulations.

More than 58,900 primary care encounters were provided to Gateway to Better Health patients in 2016, comprising 22% of all uninsured primary care encounters at St. Louis area safety net organizations.

Gateway to Better Health Encounters, 2012 - 2016

Bar chart values:
- 2012: 17,851
- 2013: 74,007
- 2014: 67,466
- 2015: 67,800
- 2016: 58,906

Gateway to Better Health Primary Care Encounters by Organization, 2016

Pie chart values:
- Affinia Healthcare, 20,362, 35%
- St. Louis County Dept. of Public Health, 13,999, 24%
- Myrtle Hilliard Davis, 10,706, 18%
- BJK People's Health Centers, 7,905, 13%
- Family Care Health Centers, 5,934, 10%

- Primary care encounters among Gateway to Better Health patients have decreased by more than 13% over the past year.
- Affinia Healthcare saw the highest volume of Gateway to Better Health primary care encounters (35%) in 2016.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured. The Gateway to Better Health program began in July 2012. As a result, reported encounters in 2012 only reflect encounters during a six-month period. Beginning January 1, 2014, income eligibility for the Gateway to Better Health program was reduced to 100% of the federal poverty line (FPL). This change in eligibility likely impacted the decline in Gateway encounters found in 2014, as compared to previous years. Consistent with the trend in reported encounters among Gateway patients, overall enrollment for the Gateway program has declined over time from an average of 18,647 in 2015 to an average of 15,756 in 2016.

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Emergency Care Analysis

Emergency Care: Introduction

This section reviews detailed operating statistics of reporting emergency care institutions in the St. Louis City and County area (see Appendix B for a list of 2017 reporting emergency care organizations).* All of the reporting organizations are hospital emergency departments. Organizations report total encounters and users, as well as inpatient admissions, non-emergent encounters, left without being seen rates, left against medical advice rates and behavioral health emergency care encounters.

Gateway to Better Health is a limited coverage model that does not include reimbursement for emergency care services. Therefore, emergency department encounters and user volumes occurring among Gateway enrollees in calendar year 2016 are captured in the "uninsured" payor category of the figures presented.
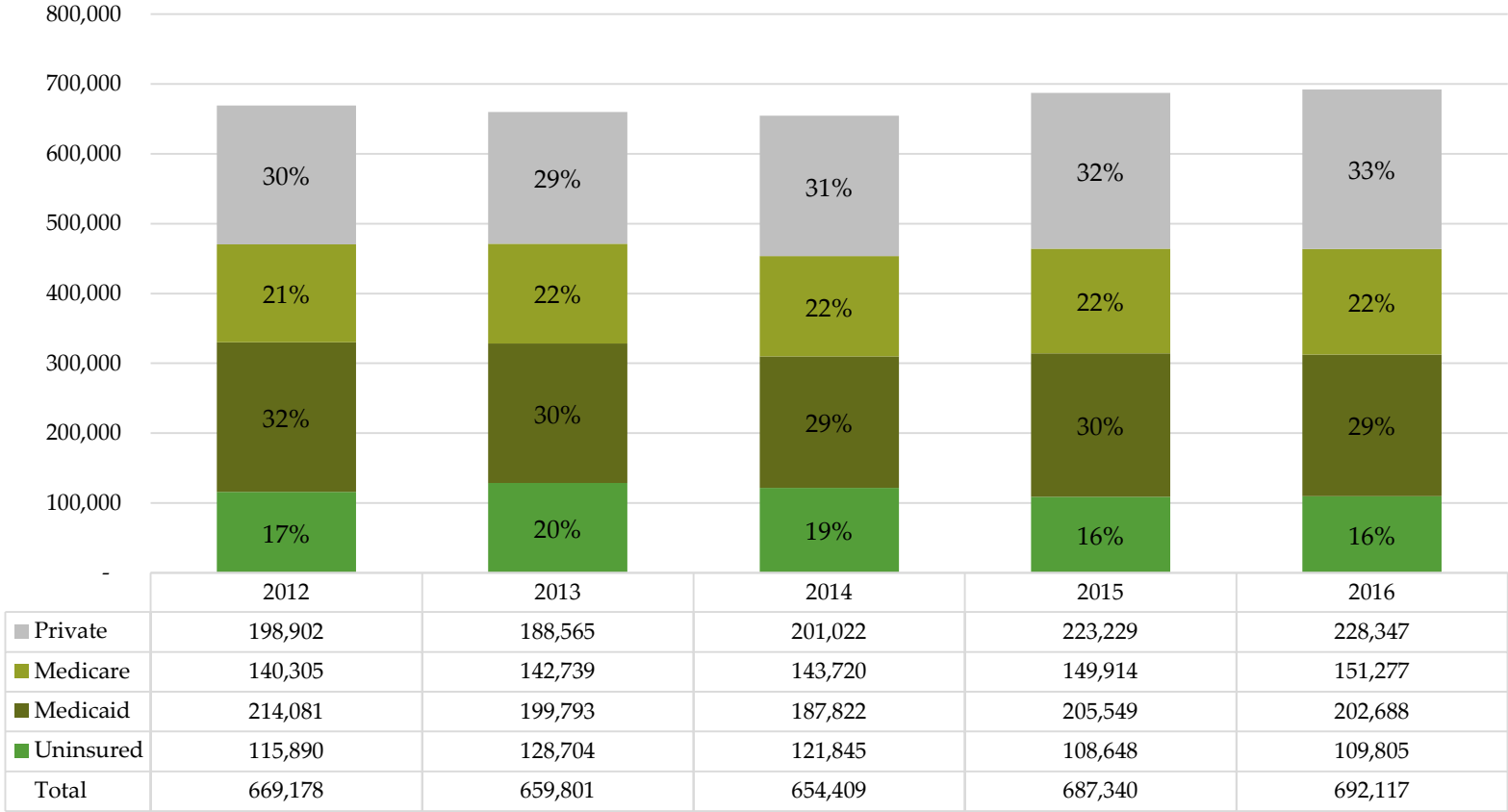
*St. Alexius was unable to report data during this period. Data from 2015 has been used as an estimate for 2016 figures.

Emergency Care: Key Findings

- Total emergency department encounters have remained relatively stable over the past year. Uninsured emergency department encounters at St. Louis area hospitals have also remained relatively stable from 2015 to 2016 (page 45 and 48).

- Non-emergent encounters have remained relatively stable over the past year. Non-emergent encounters among Medicare and uninsured patients have declined by 13% and 11%, respectively, while there was an 11% increase in non-emergent encounters among privately insured patients (page 51).

- Approximately 18,600 patients visiting St. Louis area emergency departments had at least four emergency department visits at the same hospital, representing 3% of all emergency department patients in 2016 (page 56). Among these patients, there were more than 100,300 emergency department encounters in 2016 (page 57).

- Emergency department encounters with behavioral health diagnoses (primary and secondary) have decreased by 16% over the past year and account for 18% of all emergency department encounters in 2016, which is down from 32% in 2015 (page 58). The top primary behavioral health diagnoses are mood disorders, schizophrenia/delusional disorders and alcohol use disorders (page 59).

Emergency care encounters have remained relatively stable over the past year.

Emergency Department Encounters by Payor Category, 2012 - 2015

	2012	2013	2014	2015	2016
■ Private	198,902	188,565	201,022	223,229	228,347
■ Medicare	140,305	142,739	143,720	149,914	151,277
■ Medicaid	214,081	199,793	187,822	205,549	202,688
■ Uninsured	115,890	128,704	121,845	108,648	109,805
Total	669,178	659,801	654,409	687,340	692,117

Chart percentages by year:
- Private: 2012 30%, 2013 29%, 2014 31%, 2015 32%, 2016 33%
- Medicare: 2012 21%, 2013 22%, 2014 22%, 2015 22%, 2016 22%
- Medicaid: 2012 32%, 2013 30%, 2014 29%, 2015 30%, 2016 29%
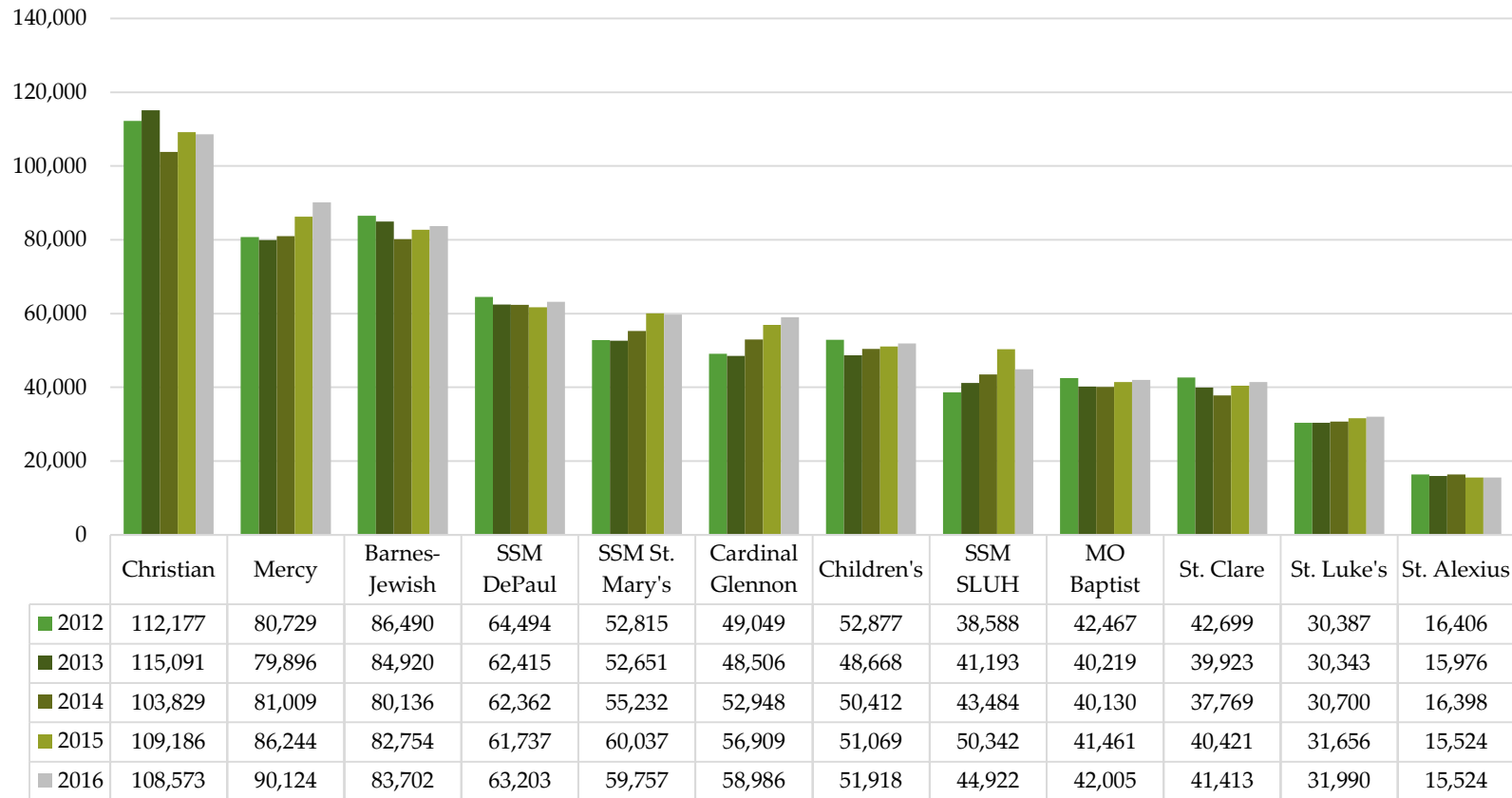- Uninsured: 2012 17%, 2013 20%, 2014 19%, 2015 16%, 2016 16%

- Of the more than 692,100 emergency care encounters reported in 2016, 33% were among those privately insured, 29% were among the Medicaid population, 22% were among the Medicare population and 16% were among the uninsured.
- Emergency care encounters at safety net hospitals have remained relatively stable (approximately 22,900 encounters) since 2012.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured.

Emergency department encounters have remained relatively stable at St. Louis area emergency departments.

Total Emergency Department Encounters by Organization, 2012 - 2016

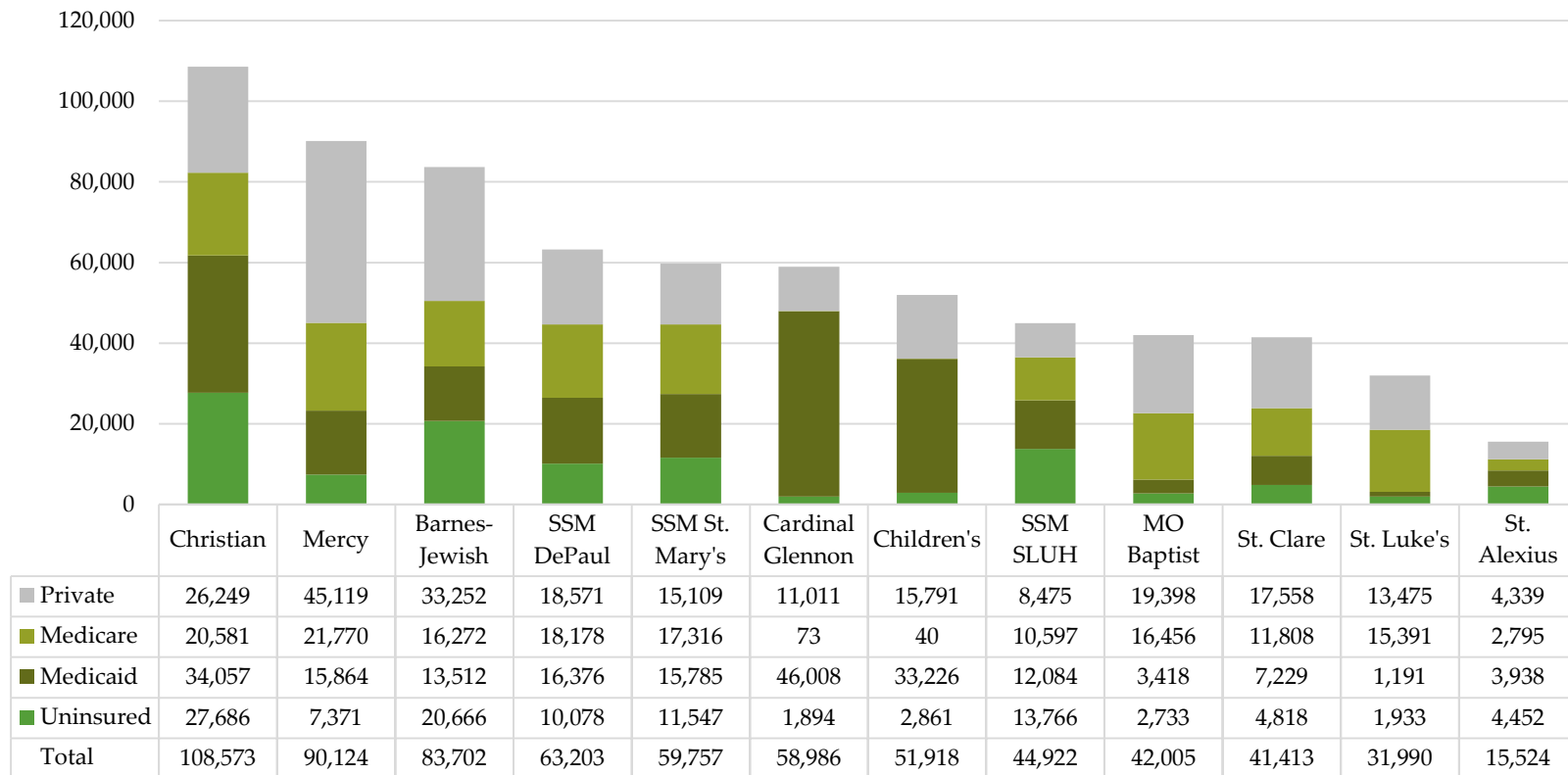|	Christian	Mercy	Barnes-Jewish	SSM DePaul	SSM St. Mary's	Cardinal Glennon	Children's	SSM SLUH	MO Baptist	St. Clare	St. Luke's	St. Alexius
2012	112,177	80,729	86,490	64,494	52,815	49,049	52,877	38,588	42,467	42,699	30,387	16,406
2013	115,091	79,896	84,920	62,415	52,651	48,506	48,668	41,193	40,219	39,923	30,343	15,976
2014	103,829	81,009	80,136	62,362	55,232	52,948	50,412	43,484	40,130	37,769	30,700	16,398
2015	109,186	86,244	82,754	61,737	60,037	56,909	51,069	50,342	41,461	40,421	31,656	15,524
2016	108,573	90,124	83,702	63,203	59,757	58,986	51,918	44,922	42,005	41,413	31,990	15,524

Emergency department encounters decreased by 11% at SSM St. Louis University Hospital (SLUH) over the past year.

Note: St. Alexius Hospital was unable to report data during this period. Data from 2015 has been used as an estimate for 2016 figures. Christian Hospital's figures include data for both sites, Christian Northeast and Christian Northwest.

Emergency department encounters among the uninsured and Medicaid populations varied greatly by hospital emergency department.

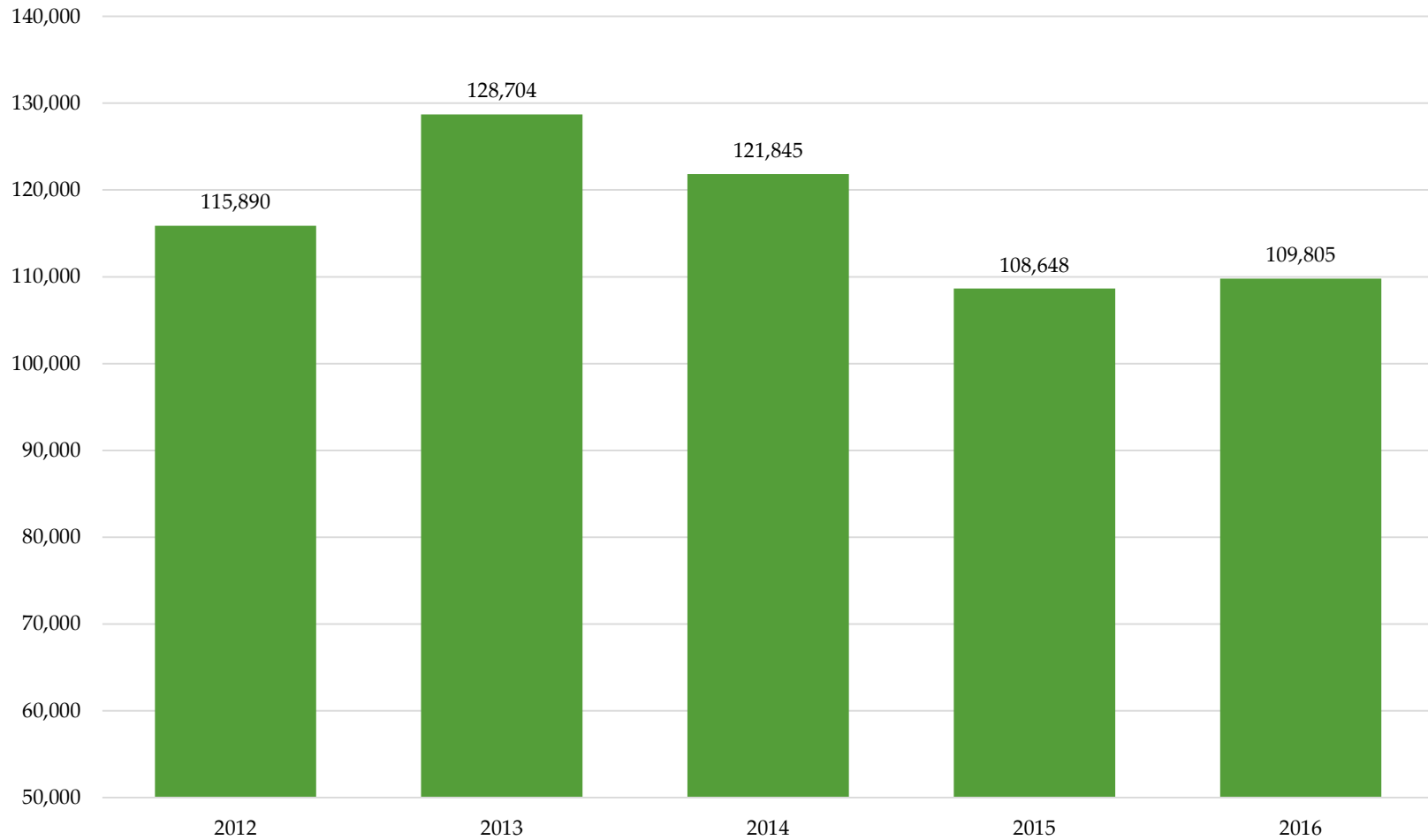## Emergency Department Encounters by Payor Cateogory and Organization, 2016

	Christian	Mercy	Barnes-Jewish	SSM DePaul	SSM St. Mary's	Cardinal Glennon	Children's	SSM SLUH	MO Baptist	St. Clare	St. Luke's	St. Alexius
Private	26,249	45,119	33,252	18,571	15,109	11,011	15,791	8,475	19,398	17,558	13,475	4,339
Medicare	20,581	21,770	16,272	18,178	17,316	73	40	10,597	16,456	11,808	15,391	2,795
Medicaid	34,057	15,864	13,512	16,376	15,785	46,008	33,226	12,084	3,418	7,229	1,191	3,938
Uninsured	27,686	7,371	20,666	10,078	11,547	1,894	2,861	13,766	2,733	4,818	1,933	4,452
Total	108,573	90,124	83,702	63,203	59,757	58,986	51,918	44,922	42,005	41,413	31,990	15,524

- Four hospitals (Christian, Barnes-Jewish, SSM St. Louis University (SLUH) and St. Alexius) have payor mixes with over 25% uninsured emergency department encounters.
- More than 56% of Medicaid encounters were provided by three hospitals (Christian, Cardinal Glennon and Children's). Children's and Cardinal Glennon primarily serve pediatric populations.

Note: St. Alexius Hospital was unable to report data during this period. Data from 2015 has been used as an estimate for 2016 figures. Christian Hospital's figures include data for both sites, Christian Northeast and Christian Northwest.

Uninsured emergency department encounters have remained relatively stable over the past year.
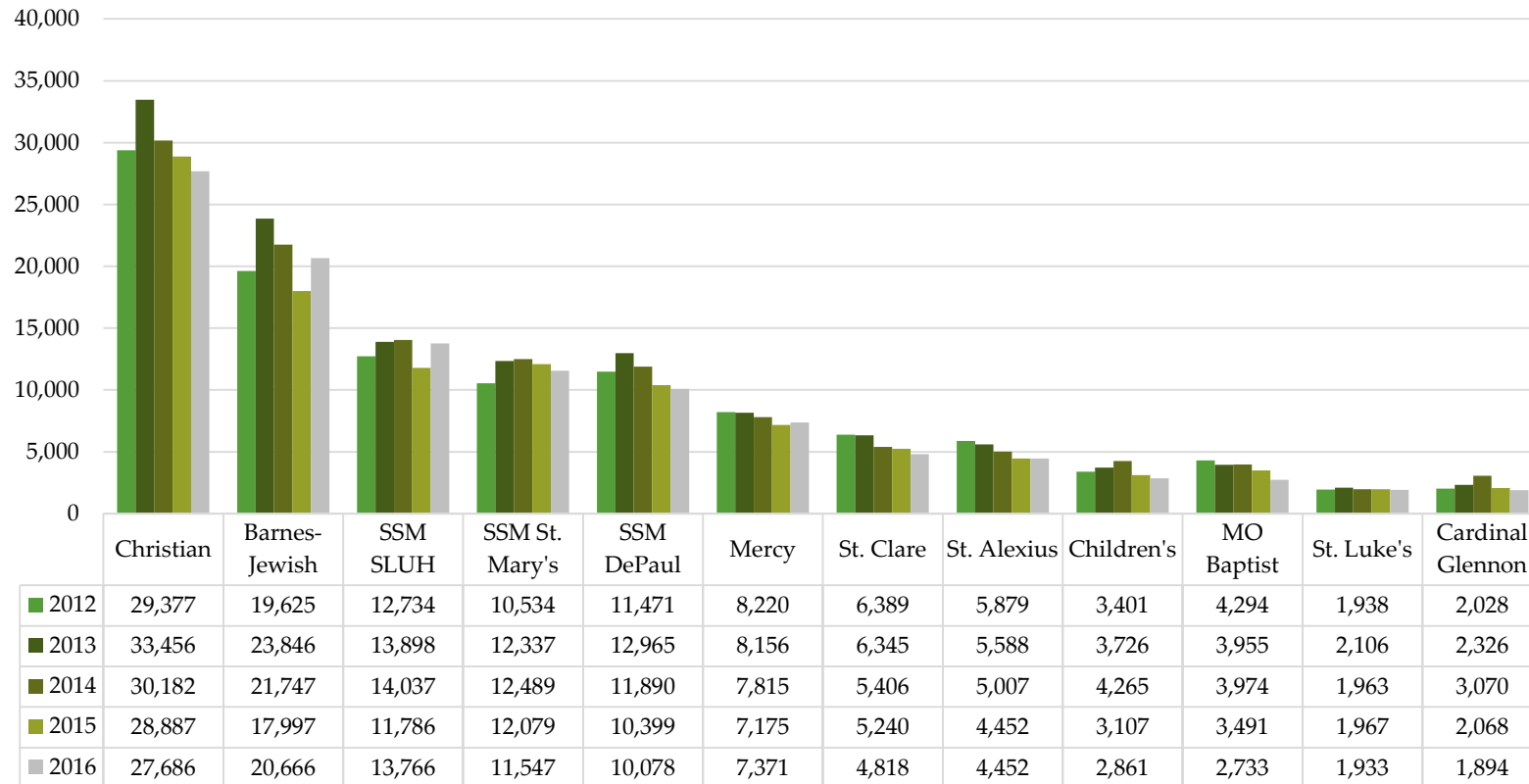
Uninsured Emergency Department Encounters, 2012 - 2016

Uninsured emergency department encounters have decreased by 5% since 2012.

Uninsured emergency department encounters increased over the past year at two St. Louis area hospitals.

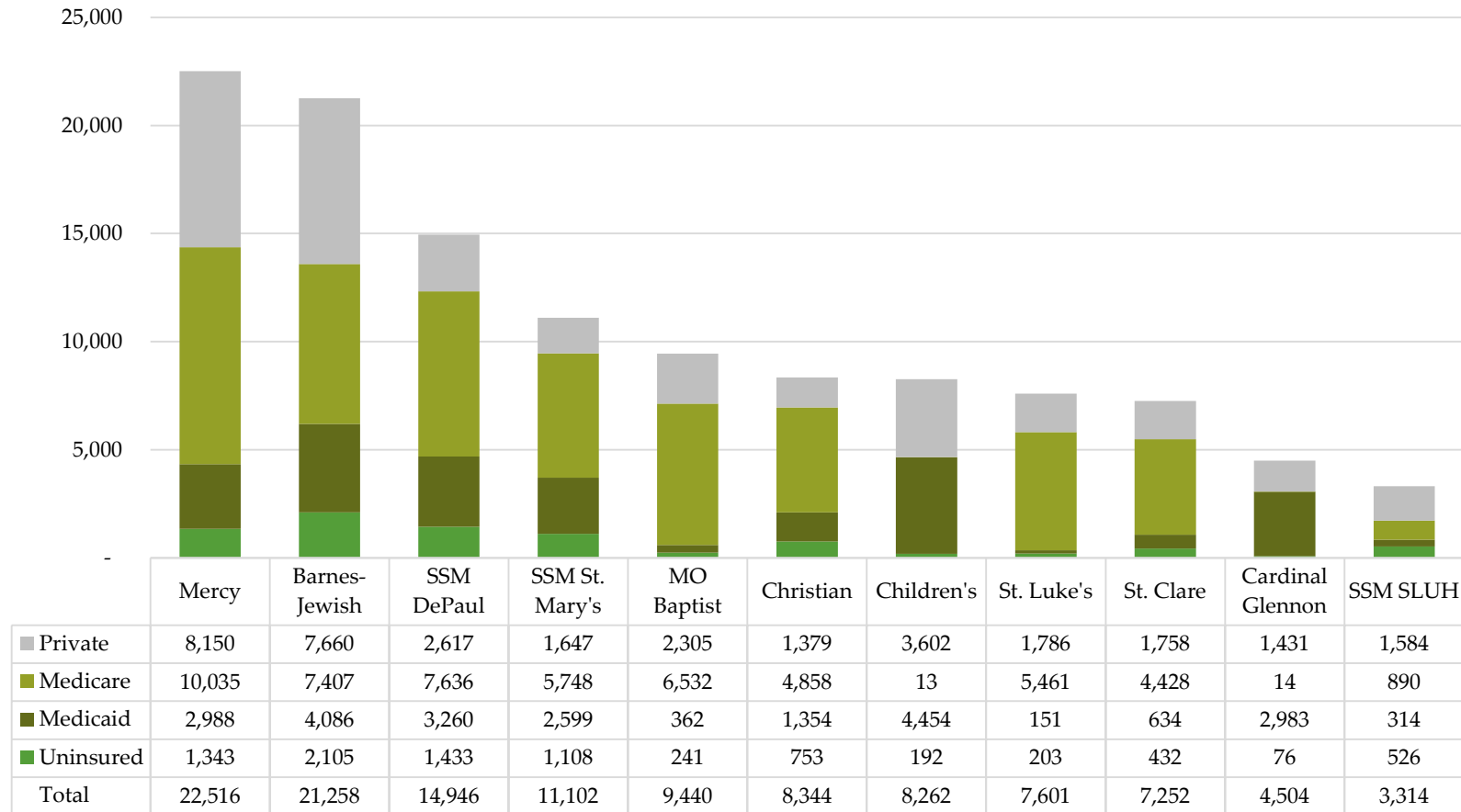### Uninsured Emergency Department Encounters by Organization, 2012 - 2016

	Christian	Barnes-Jewish	SSM SLUH	SSM St. Mary's	SSM DePaul	Mercy	St. Clare	St. Alexius	Children's	MO Baptist	St. Luke's	Cardinal Glennon
2012	29,377	19,625	12,734	10,534	11,471	8,220	6,389	5,879	3,401	4,294	1,938	2,028
2013	33,456	23,846	13,898	12,337	12,965	8,156	6,345	5,588	3,726	3,955	2,106	2,326
2014	30,182	21,747	14,037	12,489	11,890	7,815	5,406	5,007	4,265	3,974	1,963	3,070
2015	28,887	17,997	11,786	12,079	10,399	7,175	5,240	4,452	3,107	3,491	1,967	2,068
2016	27,686	20,666	13,766	11,547	10,078	7,371	4,818	4,452	2,861	2,733	1,933	1,894

- Two organizations had increases of more than 5% in uninsured emergency department encounters over the past year: SSM St. Louis University (SLUH)(17%) and Barnes-Jewish Hospital (15%).
- Four organizations had declines of more than 5% in uninsured emergency department encounters over the past year: Missouri Baptist (21%), Cardinal Glennon (8%), St. Clare (8%) and Children's (7%).
- Three hospitals (Christian, Barnes-Jewish Hospital and SSM St. Louis University (SLUH)) provided nearly 57% of all uninsured emergency department encounters in 2016.

Note: St. Alexius Hospital was unable to report data during this period. Data from 2015 has been used as an estimate for 2016 figures. Christian Hospital's figures include data for both sites, Christian Northeast and Christian Northwest.

Approximately 17% of patients in emergency departments throughout the St. Louis region were admitted in 2016, as compared to 19% in 2015.

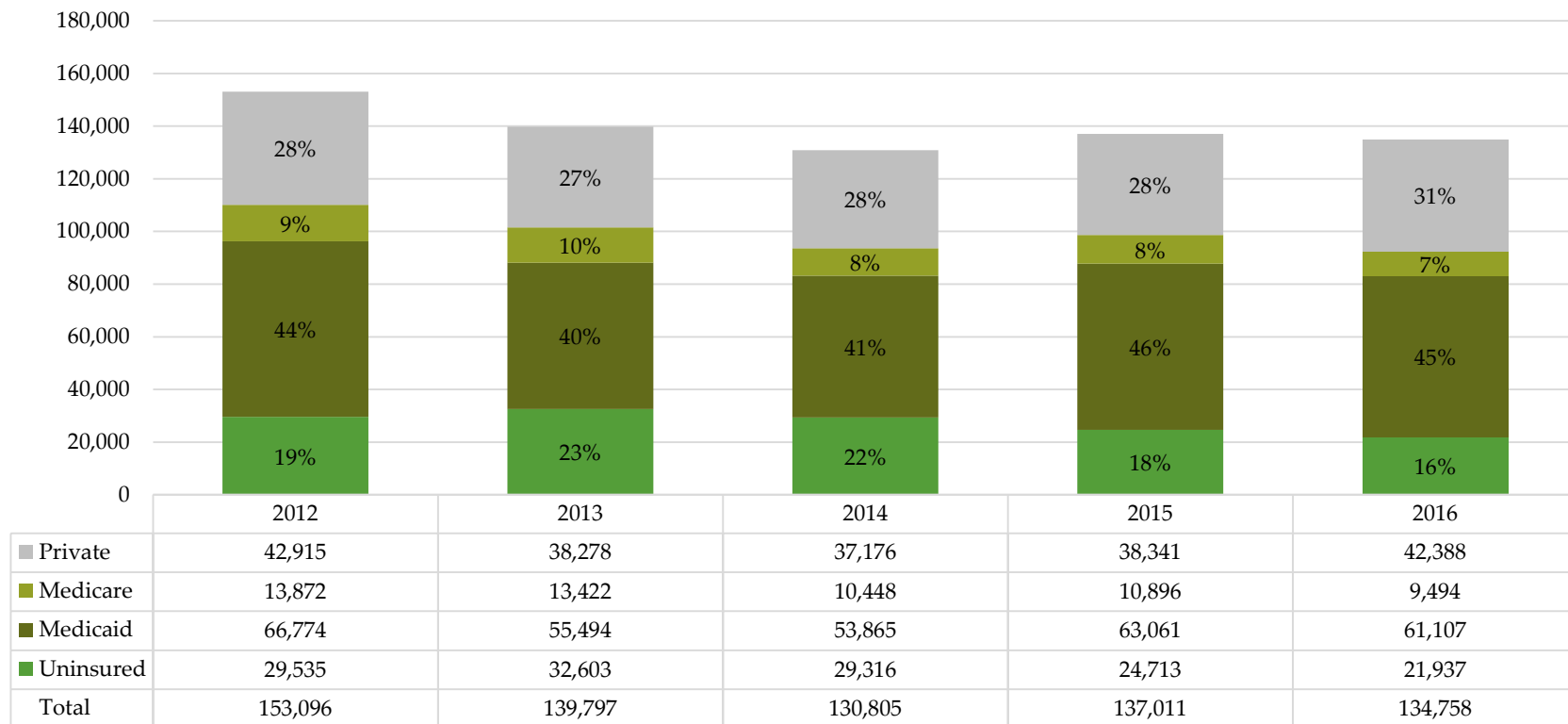## Inpatient Admisssions by Payor Category and Organization, 2016

	Mercy	Barnes-Jewish	SSM DePaul	SSM St. Mary's	MO Baptist	Christian	Children's	St. Luke's	St. Clare	Cardinal Glennon	SSM SLUH
■ Private	8,150	7,660	2,617	1,647	2,305	1,379	3,602	1,786	1,758	1,431	1,584
■ Medicare	10,035	7,407	7,636	5,748	6,532	4,858	13	5,461	4,428	14	890
■ Medicaid	2,988	4,086	3,260	2,599	362	1,354	4,454	151	634	2,983	314
■ Uninsured	1,343	2,105	1,433	1,108	241	753	192	203	432	76	526
Total	22,516	21,258	14,946	11,102	9,440	8,344	8,262	7,601	7,252	4,504	3,314

Emergency department encounters that were converted to inpatient admissions represent more than 20% of total emergency department encounters at three organizations: Mercy (25%), Barnes-Jewish (25%) and SSM DePaul (24%).

Note: Christian Hospital's figures include data for both sites, Christian Northeast and Christian Northwest.

Non-emergent emergency department encounters have remained relatively stable over the past year.

Non-Emergent Emergency Department Encounters by Payor Category, 2012 - 2016

	2012	2013	2014	2015	2016
Private	42,915	38,278	37,176	38,341	42,388
Medicare	13,872	13,422	10,448	10,896	9,494
Medicaid	66,774	55,494	53,865	63,061	61,107
Uninsured	29,535	32,603	29,316	24,713	21,937
Total	153,096	139,797	130,805	137,011	134,758

- Of the more than 134,700 non-emergent emergency encounters reported in 2016, 45% were among the Medicaid population, 31% among those privately insured, 16% were among the uninsured population and 7% were among the Medicare population.
- Over the past year, non-emergent emergency department encounters increased by 11% among the privately insured, while they decreased among Medicare and uninsured patients by 13% and 11%, respectively.
- Two organizations had increases in non-emergent emergency department encounters over the past year: Barnes-Jewish (17%) and Children's (7%).
- Non-emergent emergency department encounters at Missouri Baptist decreased by 66% over the past year.

Note: Many self-reporting organizations define non-emergent encounters using patient acuity ratings assigned during the encounter. Missouri Baptist had a change in their decision support system which may have had an impact on their non-emergent emergency department encounters reported in 2016.

Left without being seen volumes increased by 11% over the past year.

Left Without Being Seen, 2012 - 2016
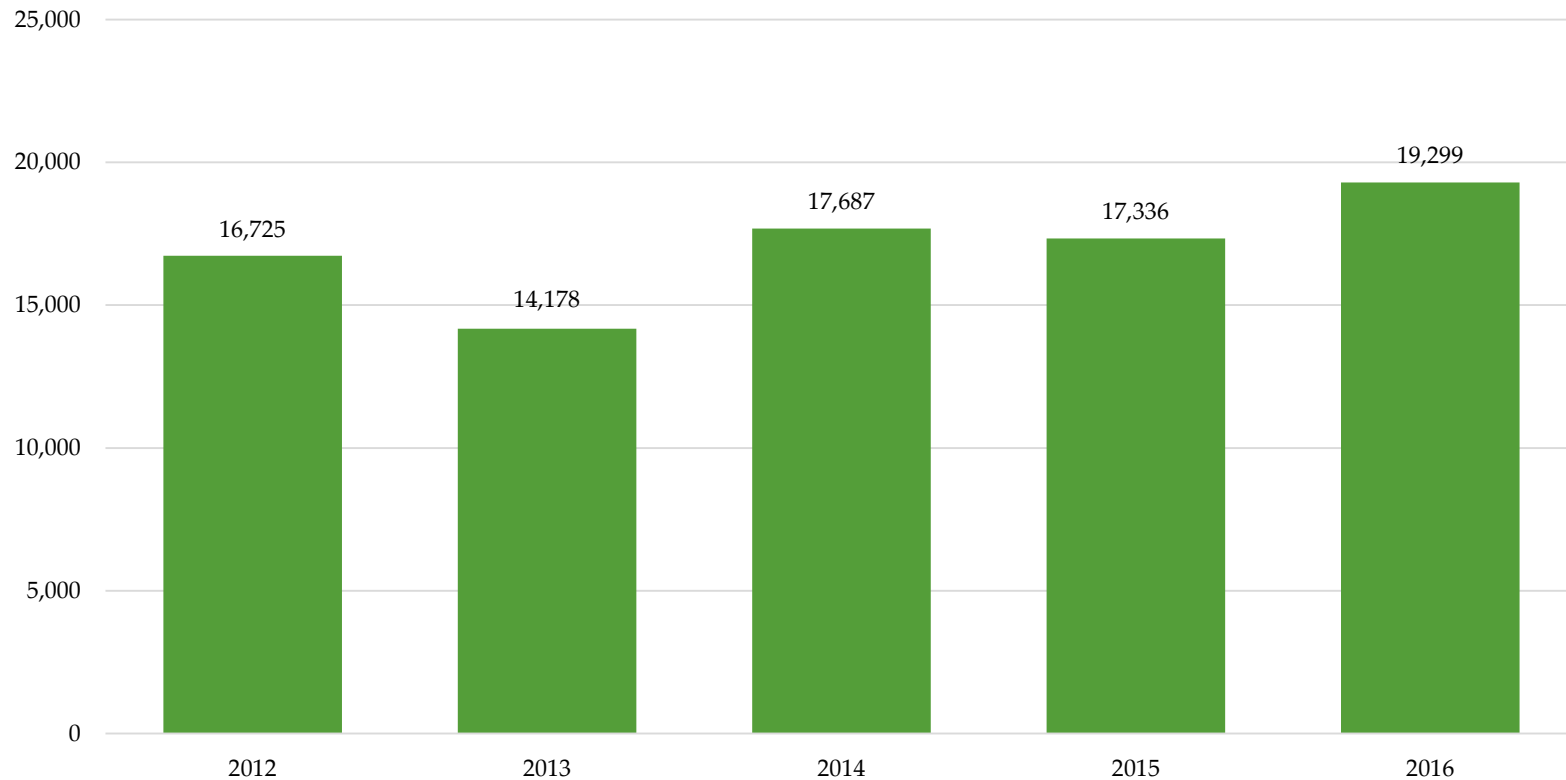
- Encounters where patients left hospital emergency departments without being seen have increased by 15% since 2012.
- The approximately 19,300 encounters where patients left hospital emergency departments without being seen represent nearly 3% of all emergency department encounters in the St. Louis region during 2016.

Note: For the purposes of analysis on this page, "all emergency department encounters" includes emergency department encounters with charges, encounters where patients left without being seen and encounters where patients left against medical advice.

Left without being seen volumes at hospital emergency departments varied greatly by payor, as information is available.

Left Without Being Seen by Payor Category and Organization, 2016

	Barnes-Jewish	Christian	SSM DePaul	SSM St. Mary's	Mercy	St. Clare	MO Baptist	Cardinal Glennon	Children's	St. Luke's	St. Alexius
■ Private	2,748	574	745	257	703	229	96	59	-	115	26
■ Medicare	159	452	389	200	339	134	82	-	-	79	8
■ Medicaid	1,318	1,214	810	455	247	177	50	446	-	20	19
■ Uninsured	2,282	1,526	1,070	794	115	301	43	89	-	-	42
■ Unknown Payor	-	23	-	-	-	-	400	-	340	124	-
Total	6,507	3,789	3,014	1,706	1,404	841	671	594	340	338	95
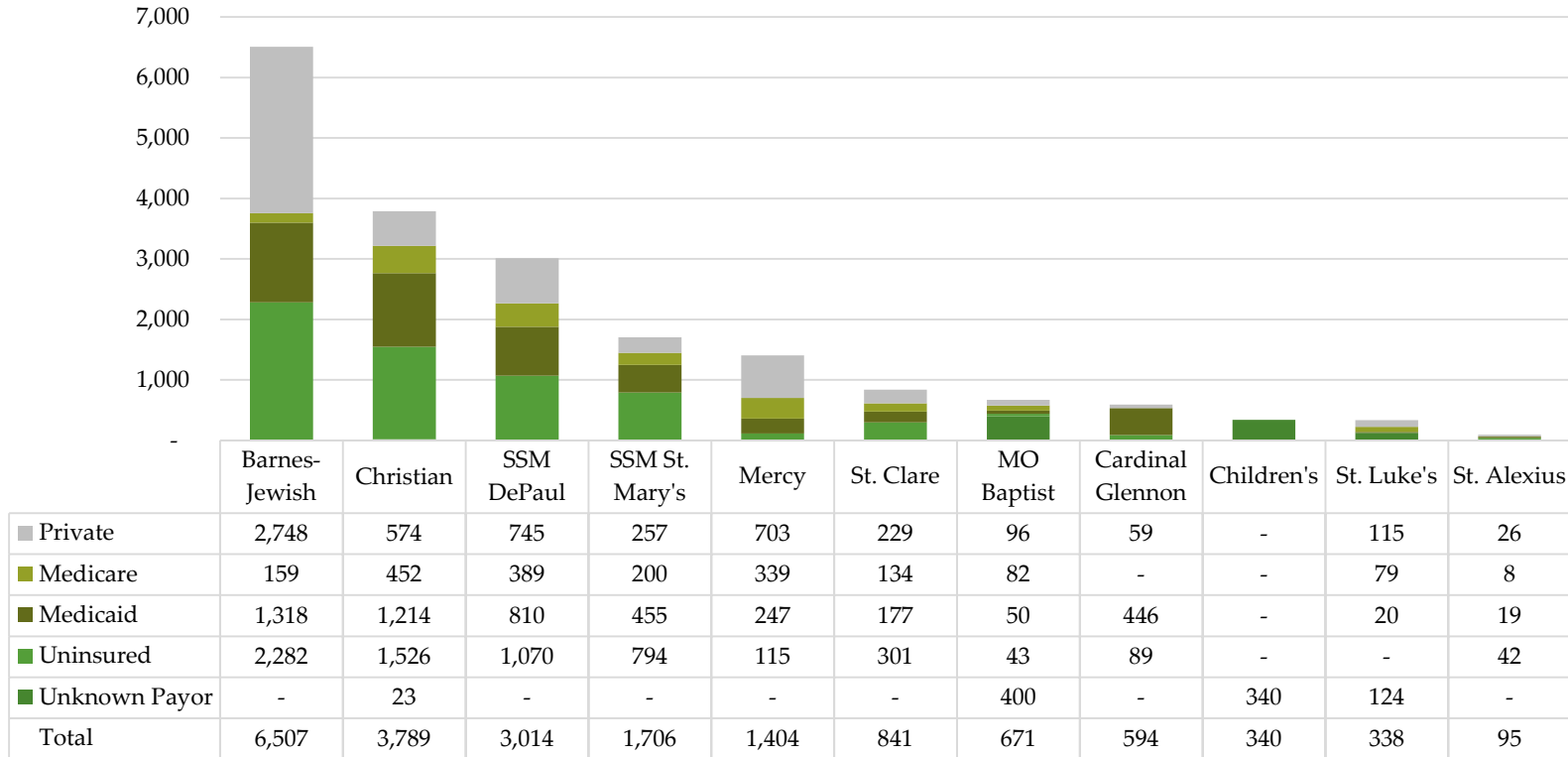
- All reporting emergency departments had left without being seen rates at or below 5% of their total emergency department encounters except for Barnes-Jewish Hospital and Christian Hospital, which had left without being seen rates of 8% and 3%, respectively.
- Left without being seen volumes among uninsured patients represent 32% of the total left without being seen volume for the St. Louis region in 2016.

Note: For the purposes of analysis on this page, "total emergency department encounters" includes emergency department encounters with charges, encounters where patients left without being seen and encounters where patients left against medical advice. St. Alexius was unable to report data during this period. Data from 2015 has been used as an estimate for 2016 figures. Christian Hospital's figures include data for both sites, Christian Northeast and Christian Northwest. SSM St. Louis University Hospital (SLUH) did not provide data for frequent users during 2016 and have been excluded from this analysis.

Left against medical advice volumes have increased by 78% over the past five years.
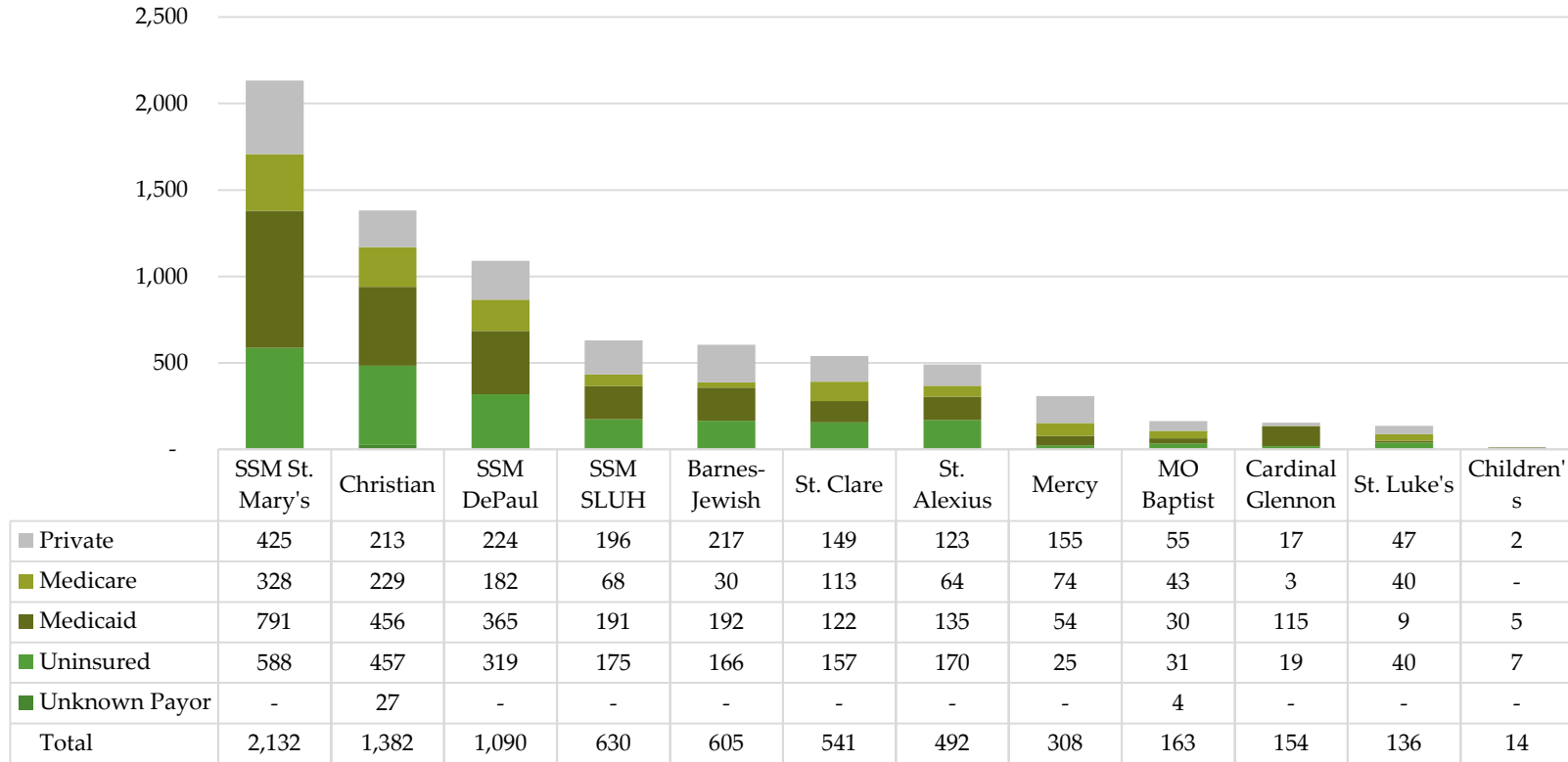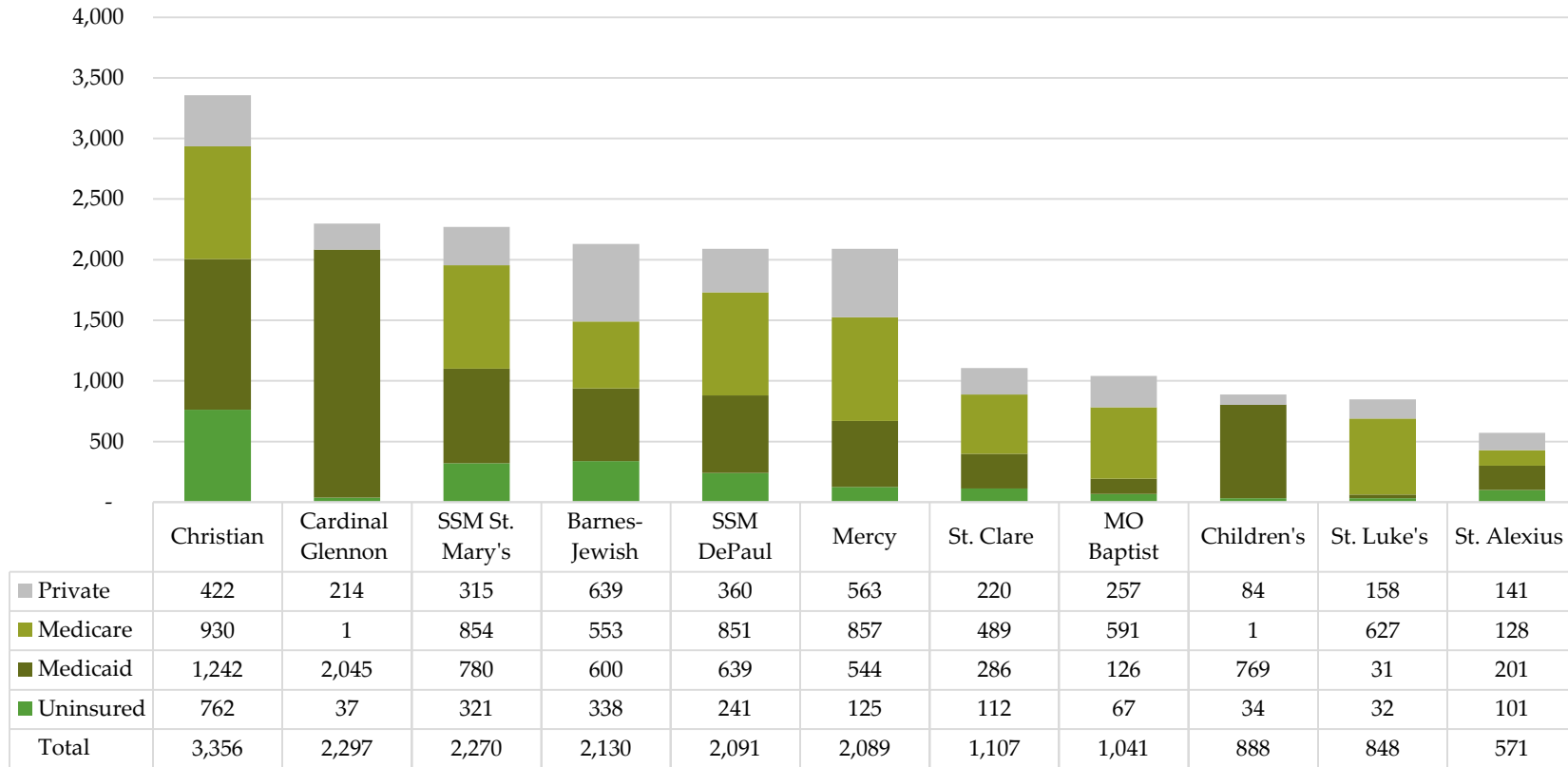
Left Against Medical Advice, 2012 - 2016
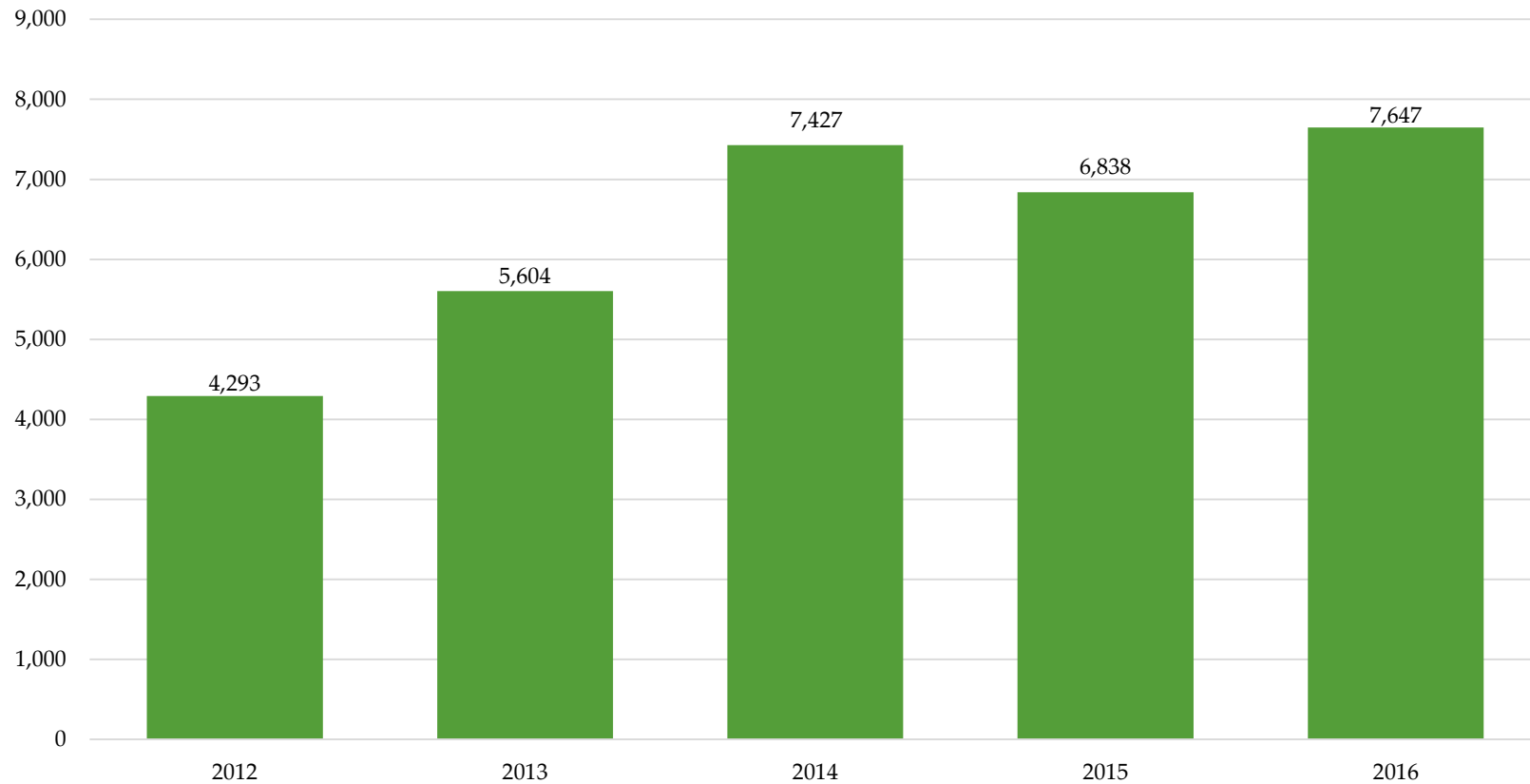
- In 2016, across the St. Louis region, there were approximately 7,600 encounters where patients left hospital emergency departments against medical advice, an increase of 12% as compared to the 2015 rate.
- Encounters where patients left hospital emergency departments against medical advice represent 1% of all emergency department encounters in the St. Louis region during 2016.

Note: For the purposes of analysis on this page, "all emergency department encounters " includes emergency department encounters with charges, encounters where patients left without being seen and encounters where patients left against medical advice.

Left against medical advice volumes at hospital emergency departments varied greatly by payor, as information is available.

Left Against Medical Advice by Payor Category and Organization, 2016

	SSM St. Mary's	Christian	SSM DePaul	SSM SLUH	Barnes-Jewish	St. Clare	St. Alexius	Mercy	MO Baptist	Cardinal Glennon	St. Luke's	Children's
Private	425	213	224	196	217	149	123	155	55	17	47	2
Medicare	328	229	182	68	30	113	64	74	43	3	40	-
Medicaid	791	456	365	191	192	122	135	54	30	115	9	5
Uninsured	588	457	319	175	166	157	170	25	31	19	40	7
Unknown Payor	-	27	-	-	-	-	-	-	4	-	-	-
Total	2,132	1,382	1,090	630	605	541	492	308	163	154	136	14

- All reporting emergency departments had left against medical advice rates that were below 5% of their total emergency department encounters.
- Left against medical advice volumes among uninsured patients represent 28% of the total left against medical advice volume for the St. Louis region in 2016.

Note: For the purposes of analysis on this page, "total emergency department encounters" includes emergency department encounters with charges, encounters where patients left without being seen and encounters where patients left against medical advice. St. Alexius was unable to report data during this period. Data from 2015 has been used as an estimate for 2016 figures. Christian Hospital's figures include data for both sites, Christian Northeast and Christian Northwest.

Approximately 18,600 patients visiting St. Louis area emergency departments in 2016 had four or more emergency department visits at the same hospital in the 2016 calendar year.

Returning Users by Payor and Organization, 2016

	Christian	Cardinal Glennon	SSM St. Mary's	Barnes-Jewish	SSM DePaul	Mercy	St. Clare	MO Baptist	Children's	St. Luke's	St. Alexius
▪ Private	422	214	315	639	360	563	220	257	84	158	141
▪ Medicare	930	1	854	553	851	857	489	591	1	627	128
▪ Medicaid	1,242	2,045	780	600	639	544	286	126	769	31	201
▪ Uninsured	762	37	321	338	241	125	112	67	34	32	101
Total	3,356	2,297	2,270	2,130	2,091	2,089	1,107	1,041	888	848	571

- Of the nearly 18,600 returning emergency department users reported in 2016, 39% were Medicaid patients, 31% were Medicare patients, 18% were privately insured patients, and 12% were uninsured patients.
- Frequent users represent 3% of all patients who visited a St. Louis area emergency department in 2016.

Note: SSM St. Louis University Hospital (SLUH) did not provide data for frequent users during 2016 and have been excluded from this analysis. St. Alexius was unable to report data during this period. Data from 2015 has been used as an estimate for 2016 figures. Christian Hospital's figures include data for both sites, Christian Northeast and Christian Northwest.

Patients identified as frequent users had nearly 100,300 emergency department encounters at St. Louis area hospitals in 2016.

Emergency Department Encounters among Returning Users by Payor and Organization, 2016

	Christian	SSM St. Mary's	SSM DePaul	Barnes-Jewish	Cardinal Glennon	Mercy	St. Clare	MO Baptist	St. Luke's	Children's
Private	2,151	1,645	1,928	3,423	1,081	2,840	1,128	1,374	803	382
Medicare	5,523	5,256	5,138	3,295	7	4,615	2,564	3,080	3,374	6
Medicaid	6,746	4,871	4,264	3,666	10,550	3,040	1,542	712	193	3,803
Uninsured	3,867	1,744	1,409	2,071	179	683	632	356	200	160
Total	18,287	13,516	12,739	12,455	11,817	11,178	5,866	5,522	4,570	4,351
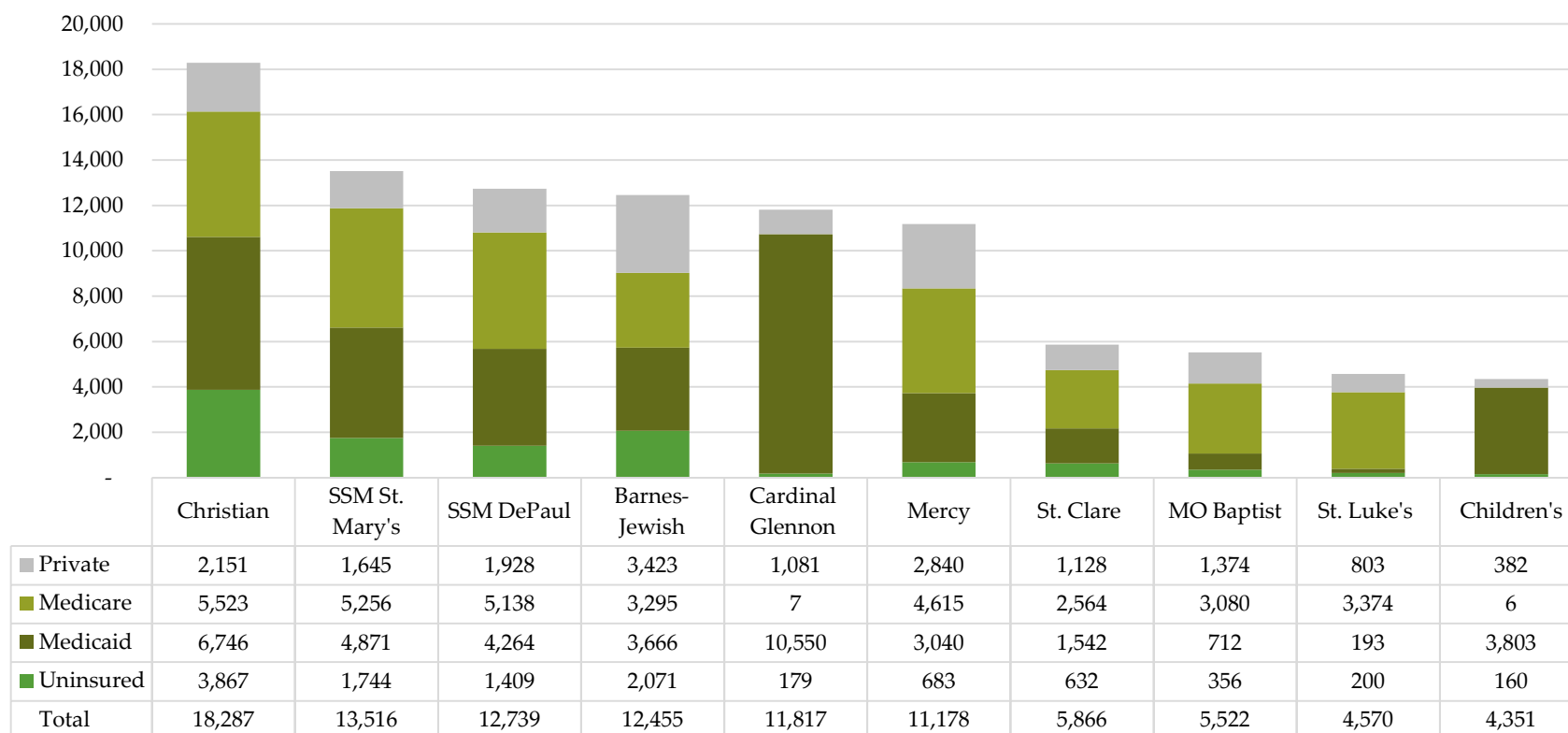
- Of the nearly 100,300 emergency department encounters among returning users reported in 2016, 39% were among Medicaid patients, 33% were among Medicare patients, 17% were among privately insured patients, and 11% were among uninsured patients.
- Emergency department encounters among returning users represents 14% of all emergency department encounters in the St. Louis region during 2016.

Note: SSM St. Louis University Hospital (SLUH) did not provide data for returning users during 2016 and have been excluded from this analysis. St. Alexius hospital was unable to report data during this period. Christian Hospital's figures include data for both sites, Christian Northeast and Christian Northwest.

Emergency department encounters with behavioral health diagnoses have decreased by 16% over the past year and account for 18% of total emergency department encounters in 2016.

Emergency Care Encounters with Behavioral Health* as Primary or Secondary Diagnosis, 2012 - 2016

Year	Encounters
2012	125,699
2013	129,590
2014	130,454
2015	150,940
2016	127,466

Behavioral health emergency department encounters have remained relatively stable over the past five years.

*Behavioral health encounters include mental health and substance abuse disorder emergency department encounters as a primary or secondary diagnosis.

Note: Encounters where tobacco use reflects the only behavioral health diagnoses are excluded. Changes in coding practices over time may impact trends seen in the prevalence of behavioral health encounters in emergency departments.

Behavioral health diagnoses account for more than 40,200 primary diagnoses for emergency department encounters in 2016.

Primary Behavioral Health Diagnoses for Emergency Department Encounters, 2016

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

Note: Encounters where tobacco use reflects the only behavioral health diagnoses are excluded. Distribution of behavioral health diagnosis codes within emergency departments are based on billing coding data and may not be reflective of diagnoses prevalence in the region.

Behavioral health diagnoses account for more than 331,100 primary and secondary diagnoses for emergency department encounters in 2016.

Primary and Secondary Behavioral Health Diagnoses for Emergency Department Encounters, 2016

Category	Value
Tobacco Use	110,463
Mood Disorders	64,777
Anxiety Disorders	51,183
Other Substance Use Disorders	20,161
Alcohol Use Disorder	18,427
Schizophrenia/Delusional Disorders	14,772
Organic Brain Disorders	14,562
Other Mental Health Disorders	9,514
Opioid Use Disorders	7,971
Conduct Disorders	6,881
Suicidal Ideation	5,563
Developmental Disorders	3,893
Opioid Overdose	2,833
Suicide Attempt	213

Tobacco use, mood and anxiety disorders make up 68% of all primary and secondary emergency department behavioral health diagnoses in 2016.

Note: Encounters where tobacco use reflects the only behavioral health diagnoses are excluded. Duplication across emergency department encounters does exist to account for both the primary and secondary diagnoses on each encounter. Distribution of behavioral health diagnosis codes within emergency departments are based on billing coding data and may not be reflective of diagnoses prevalence in the region.

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Specialty Care Analysis

Specialty Care: Introduction

This year's specialty care analysis reviews detailed operating statistics of reporting specialty care safety net institutions in the St. Louis City and County area (see Appendix C for a list of 2017 reporting specialty care organizations). These institutions include hospital-based clinics and university-sponsored physician groups, which provide the majority of specialty care services to safety net patients in St. Louis City and County.

Specialty care encounters and individual user volumes occurring among Gateway enrollees in calendar year 2016 are captured in the "uninsured" payor category of the figures presented. A summary of Gateway's key specialty care outcomes achieved during calendar year 2016 is provided on page 75. Gateway volumes are self-reported by Gateway member organizations.

Specialty Care: Key Findings

- Total specialty care users and encounters at St. Louis area specialty care organizations have increased by 17% and 19%, respectively, since 2012. This increase represents more than 32,900 additional users and more than 226,500 additional encounters (page 65 and 67).

- Over the past year, uninsured specialty care users and encounters have remained stable (page 65 and 69).

- Medicaid specialty care encounters have increased by 6% over the past year and by 16% since 2012 (page 71).

- Wait times for specialty care appointments have lengthened, with the longest average wait times seen for both new and returning patients of endocrinology, pulmonology, rheumatology and infectious disease (page 73 and 74).

Specialty care users at safety net organizations have increased by 17% since 2012.

Specialty Care Users by Payor, 2012 - 2016

	2012	2013	2014	2015	2016
Private	214,366	218,513	228,204	242,889	251,686
Medicare	101,381	112,301	121,710	128,063	132,945
Medicaid	72,531	71,635	70,605	74,346	76,293
Uninsured	26,783	31,009	27,545	25,400	25,097
Total	415,061	433,458	448,064	470,698	486,021
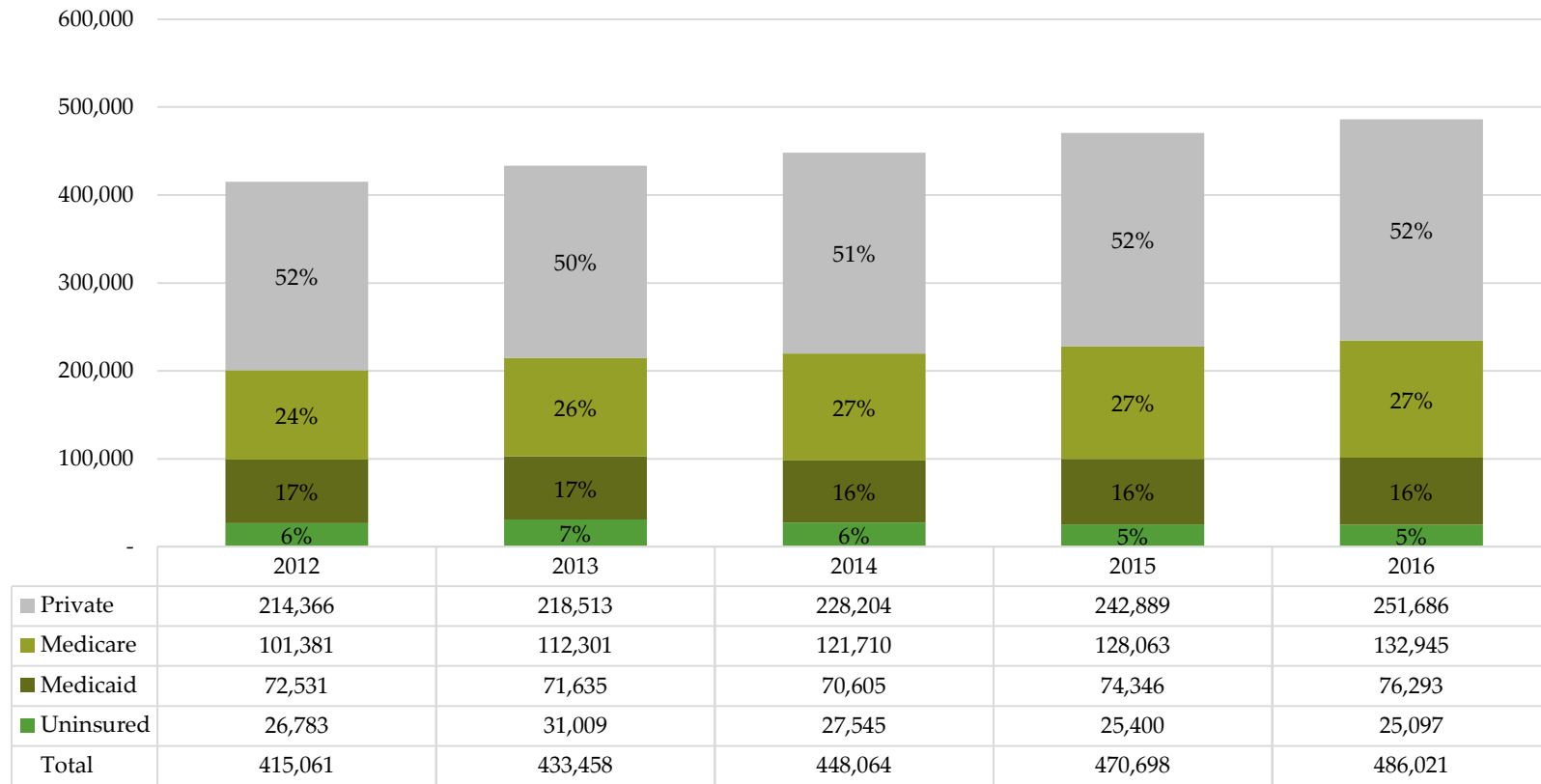
- Of the more than 486,000 specialty care users reported in 2016, approximately 52% were privately insured, 27% were insured through the Medicare program, 16% were insured through the Medicaid program and 5% were uninsured.
- Total specialty care users remained relatively stable in 2016, as compared to specialty care users in the prior year.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured. While users are unduplicated within each organization, there may be some duplication in total user counts across reporting organizations if a patient was seen at more than one organization in 2016.

Of the more than 486,000 specialty care users in 2016, approximately 73% were White, 19% were African American/Black and 8% were from the "Other" racial category.

Specialty Care Users by Race and Payor, 2016

	White	African American/Black	Other
Private	201,418	30,873	19,395
Medicare	101,880	23,530	7,535
Medicaid	39,740	28,254	8,299
Uninsured	12,607	7,474	5,016
All Payor	355,645	90,131	40,245
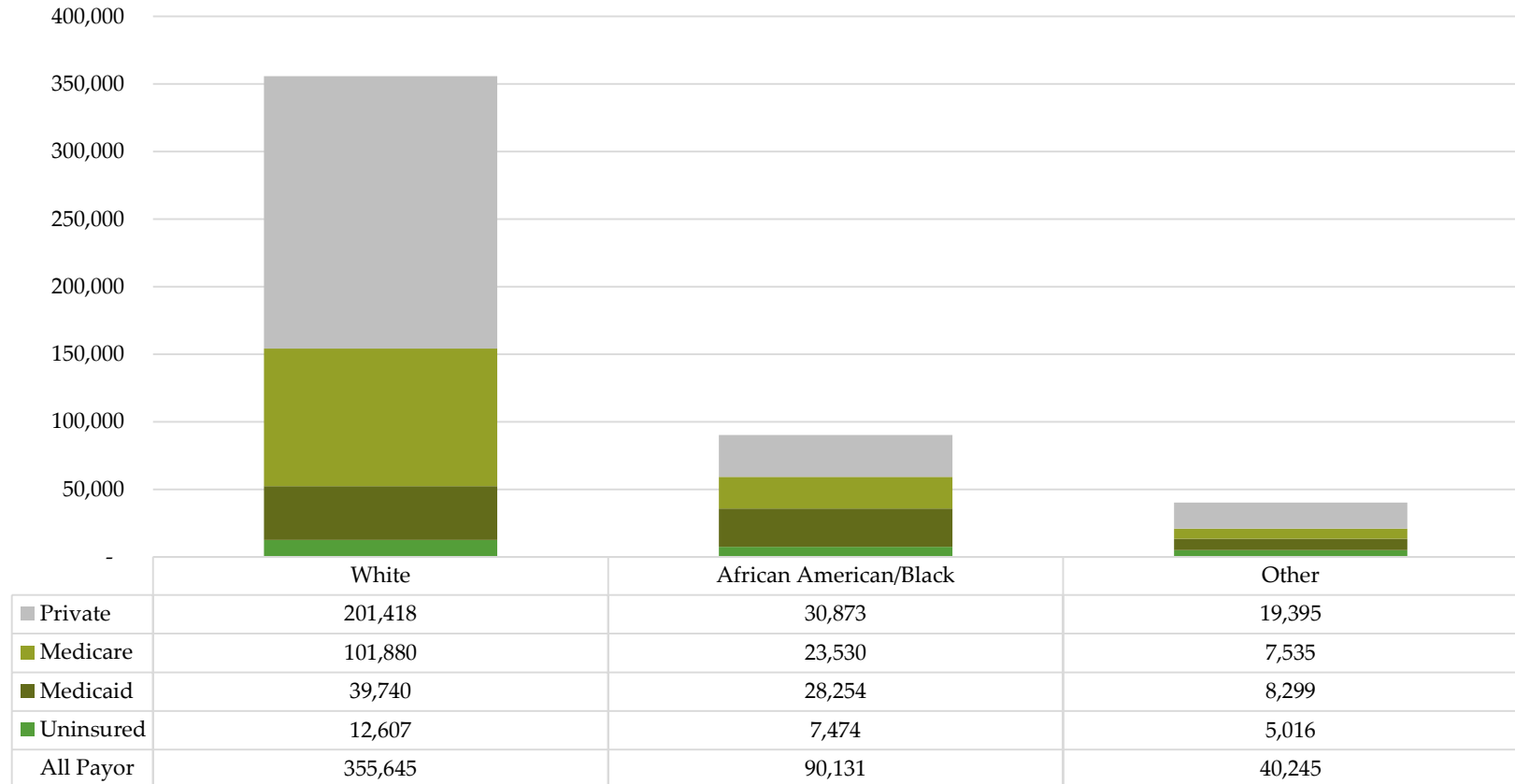
- About 4% of all White specialty care users, 8% of all African American/Black specialty care users and 13% of all specialty care users included in the "Other" racial group are uninsured.
- Based on census data for the general population of St. Louis City and County, about 4% of all Whites, 5% of all African Americans and 1% of those included in the "Other" racial group are uninsured.

Note: There may be some duplication in the count of users across safety net organizations in the region. The "other" racial/ethnic group includes: those of Asian, American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander descent, as well as those identifying with more than one racial/ethnic group, those identifying as Hispanic/Latino and those whose race/ethnicity is unknown. However, the American Community Survey includes Hispanics/Latinos throughout all racial groups, whereas all Hispanic/Latinos safety net users, regardless of race, are captured separately in the "other" category only.

Specialty care encounters at safety net organizations have increased by 5% over the past year and by 19% (over 226,500 encounters) since 2012.

Specialty Care Encounters by Payor Category, 2012 - 2016

	2012	2013	2014	2015	2016
■ Private	569,518	574,012	598,883	635,920	664,398
■ Medicare	351,737	381,925	411,517	425,451	451,319
■ Medicaid	198,710	199,097	201,570	217,548	230,144
■ Uninsured	56,727	65,037	61,193	56,246	57,378
Total	1,176,692	1,220,071	1,273,163	1,335,165	1,403,239
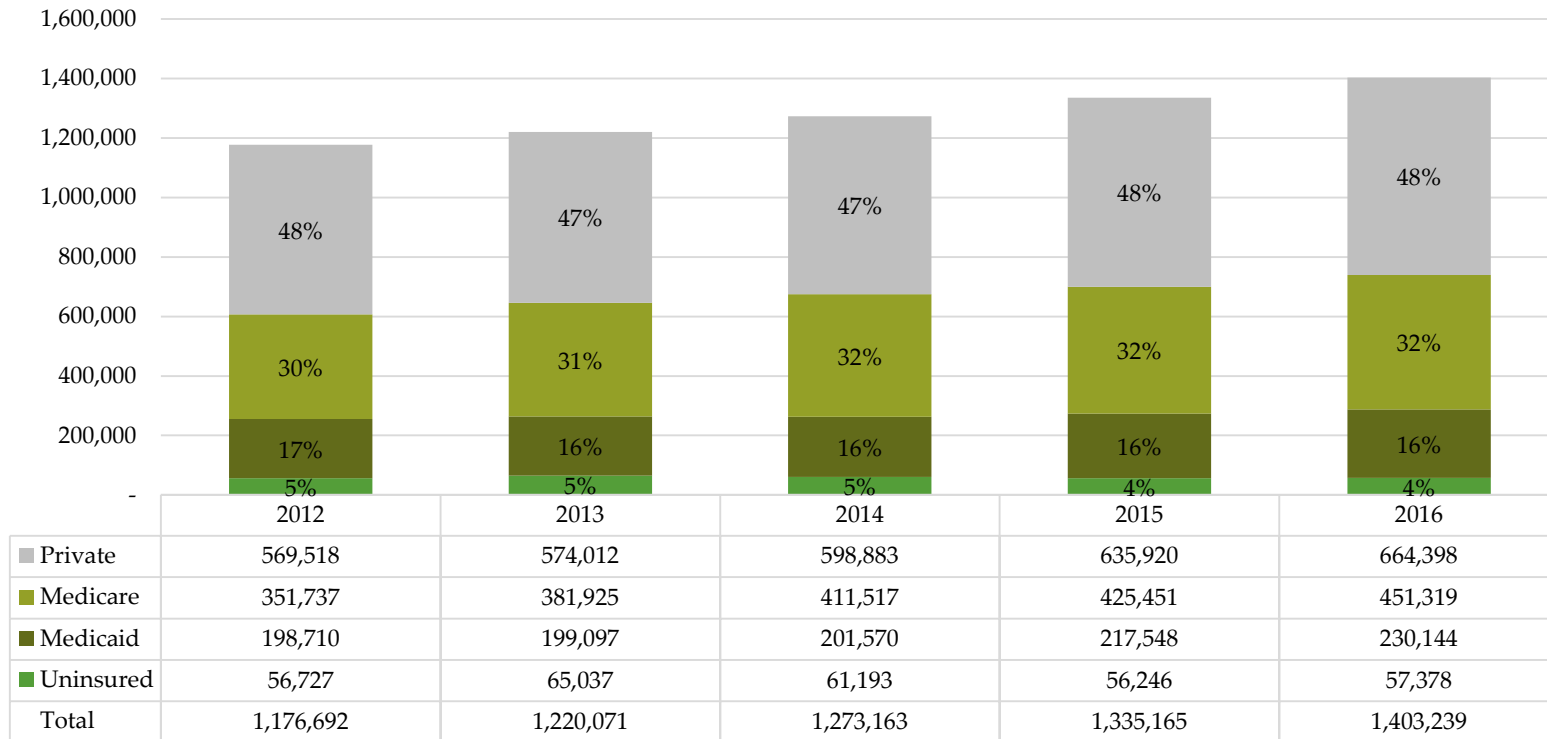
- Of the more than 1,400,000 total specialty care encounters reported in 2016, 48% occurred among those privately insured, 32% among the Medicare population, 16% among the Medicaid population and 4% among the uninsured.
- Over the past year, specialty care encounters among Medicare, Private and Medicaid patients increased by 6%, 4% and 6%, respectively. Specialty care encounters among uninsured patients remained relatively stable over the past year.

Note: Diagnostic services are not included in the specialty care analysis. For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured.

Specialty care encounters among the uninsured and Medicaid populations varied by safety net specialty care organization.

Specialty Care Encounters by Payor Category and Organization, 2016

	Washington University	SLUCare	BJH Specialty Clinics	Mercy JFK Clinic
Private	439,566	221,908	2,916	8
Medicare	295,202	150,515	5,016	586
Medicaid	92,707	126,078	10,661	698
Uninsured	18,781	30,556	5,245	2,796
Total	846,256	529,057	23,838	4,088
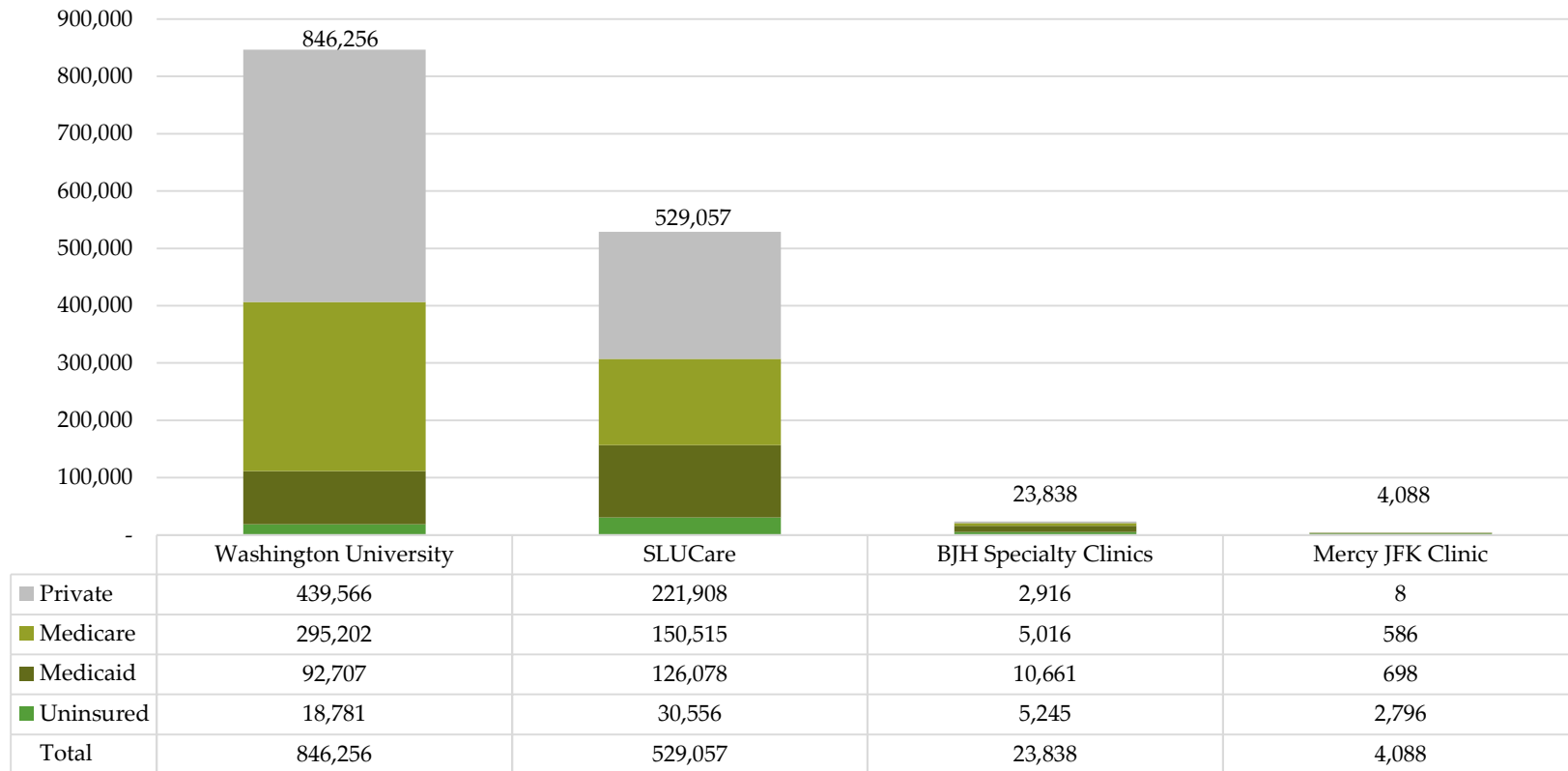
Medicaid and uninsured encounters at BJH Specialty Clinics and Mercy JFK Clinic account for at least 65% of their total specialty care encounters in 2016.

Note: SLUCare's reported data includes all sites in which their doctors practice, including the following hospital based clinics: SSM St. Mary's, SSM St. Clare, SSM St. Joseph, SSM DePaul, SSM Cardinal Glennon and SSM St. Louis University Hospital (SLUH). SLUCare's data also includes some smaller practices located outside of St. Louis City and County limits, which accounts for less than 2% of their total reported encounters. SLUCare's and Washington University's data includes information for both pediatric and adult patients.

Uninsured specialty care encounters remained relatively stable over the past year.

Uninsured Specialty Care Encounters, 2012 - 2016

Legend: ■ Gateway to Better Health ■ Uninsured

Data shown in chart:
- 2012: Uninsured 56,727
- 2013: Uninsured 50,759; Gateway to Better Health 14,278 (total 65,037)
- 2014: Uninsured 46,351; Gateway to Better Health 14,842 (total 61,193)
- 2015: Uninsured 41,904; Gateway to Better Health 14,342 (total 56,246)
- 2016: Uninsured 44,851; Gateway to Better Health 12,527 (total 57,378)
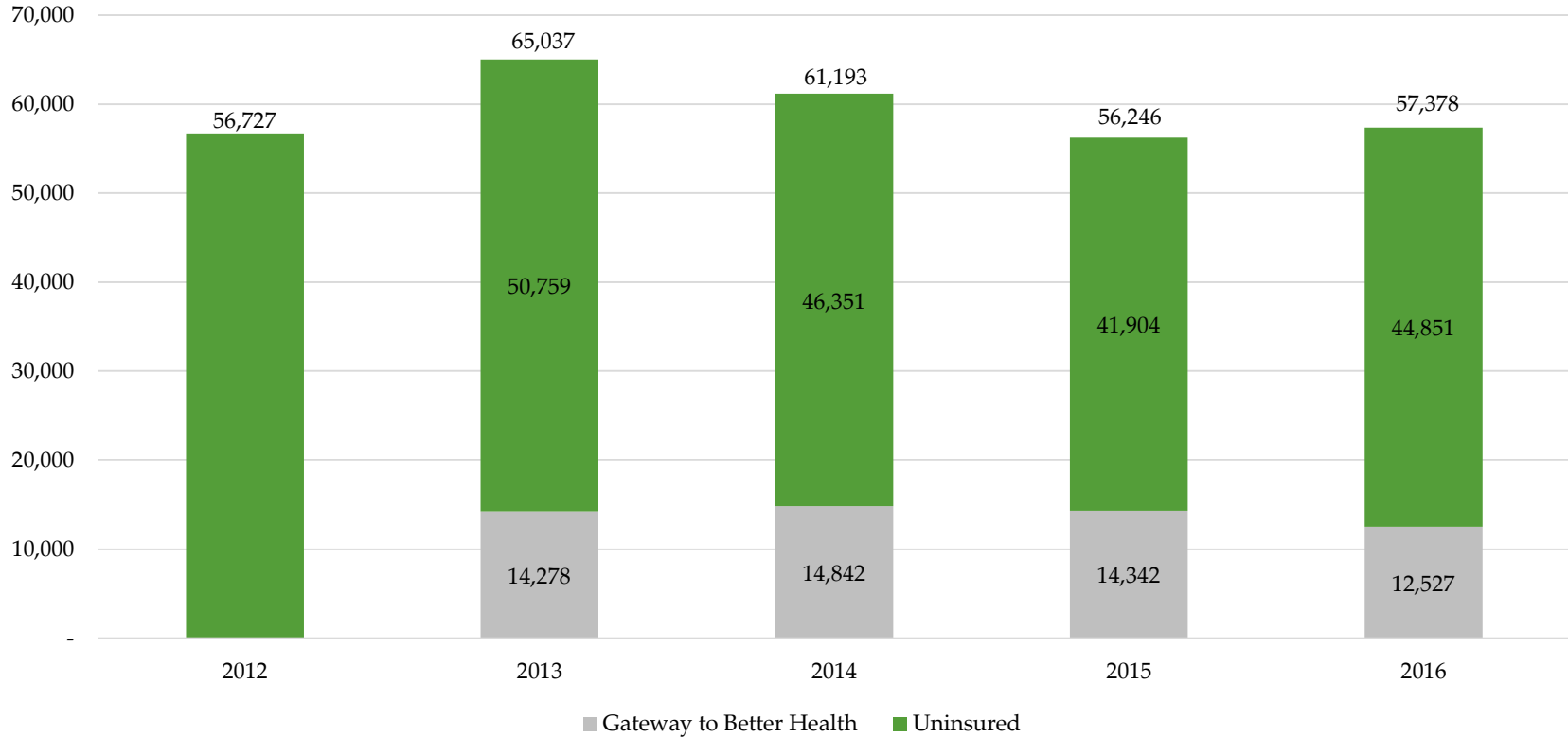
- Uninsured specialty care encounters have remained relatively stable since 2012.
- Gateway to Better Health specialty care encounters declined by 13% in 2016 as compared to 2015.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured. The Gateway to Better Health program began in July 2012. Beginning January 1, 2014, income eligibility for the Gateway to Better Health program was reduced to 100% of the federal poverty line (FPL). Consistent with the trend in reported encounters among Gateway patients, overall enrollment for the Gateway program has declined over time from an average of 18,647 in 2015 to an average of 15,756 in 2016.

Washington University and SLUCare account for more than 85% of all uninsured specialty care encounters at major safety net organizations.

Uninsured Specialty Care Encounters by Organization, 2012 - 2016

	SLUCare	Washington University	BJH Specialty Clinics	St. Louis ConnectCare	Mercy JFK Clinic
2012	20,430	17,463	5,635	11,419	1,780
2013	25,617	21,570	6,287	9,826	1,737
2014	31,103	22,336	6,511	-	1,243
2015	30,051	18,912	5,748	-	1,535
2016	30,556	18,781	5,245		2,796
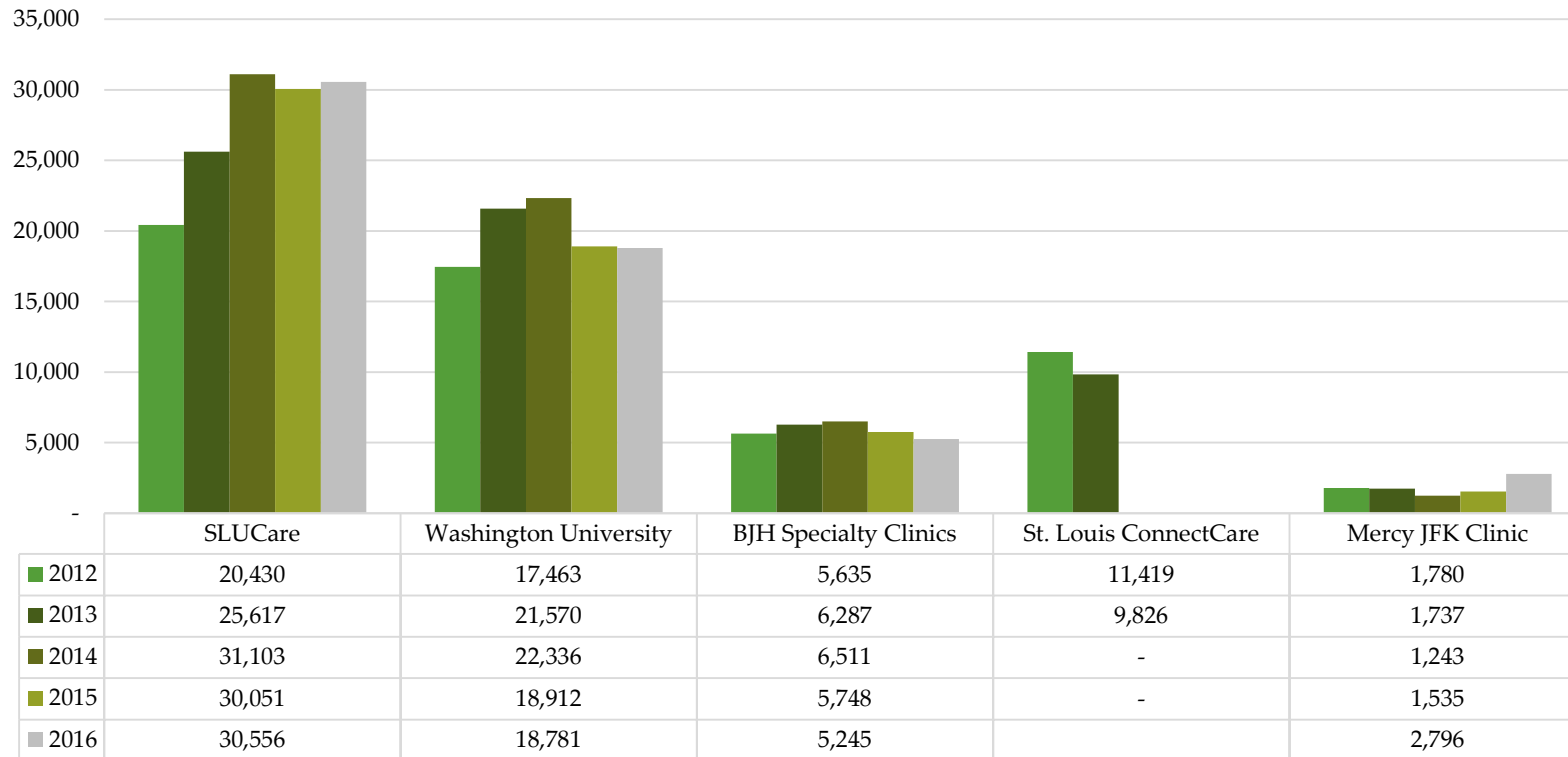
- Over the past year, uninsured specialty care encounters at BJH Specialty Clinics declined by 9%.
- Uninsured specialty care encounters have increased by 82% at Mercy JFK Clinic since 2015.

Note: For the purpose of this report, all Gateway to Better Health encounters and users are reported as uninsured. SLUCare's reported data includes all sites in which their doctors practice, including the following hospital based clinics: SSM St. Mary's, SSM St. Clare, SSM St. Joseph, SSM DePaul, SSM Cardinal Glennon and SSM St. Louis University Hospital (SLUH). SLUCare's data also includes some smaller practices located outside of St. Louis City and County limits, which accounts for less than 2% of their total reported encounters. SLUCare's and Washington University's data includes information for both pediatric and adult patients. Mercy JFK expanded access in 2016 by increasing the number of specialists rotating within the clinic.

Medicaid specialty care encounters have increased by 6% over the past year.

Medicaid Specialty Care Enounters, 2012 - 2016
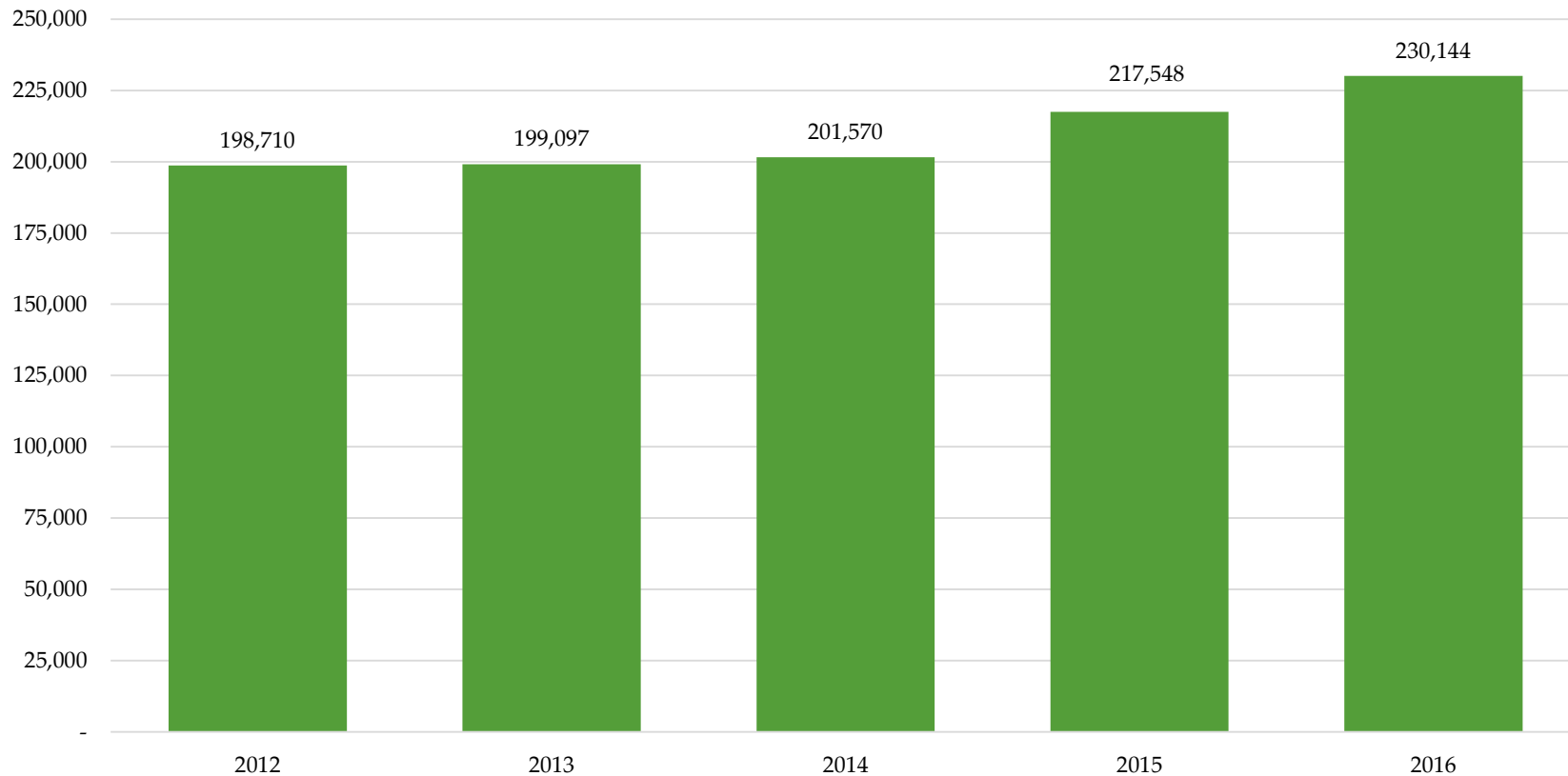
- Medicaid specialty care encounters remained relatively stable from 2012 - 2014, but increased by 8% in 2015 and by 6% in 2016.
- Over the past five years, Medicaid specialty care encounters have increased by 16%.

Note: The number of individuals enrolled in MO HealthNet (Medicaid) from St. Louis City and County increased by 15% in 2016.

Washington University and SLUCare account for 95% of all Medicaid specialty care encounters at major safety net organizations.

Medicaid Specialty Care Encounters by Organization, 2012 - 2016

	SLUCare	Washington University	BJH Specialty Clinics	St. Louis ConnectCare	Mercy JFK Clinic
2012	102,265	80,860	11,615	3,528	442
2013	106,499	78,710	11,147	2,258	483
2014	107,243	81,705	12,087	-	535
2015	120,927	83,469	12,518	-	634
2016	126,078	92,707	10,661		698
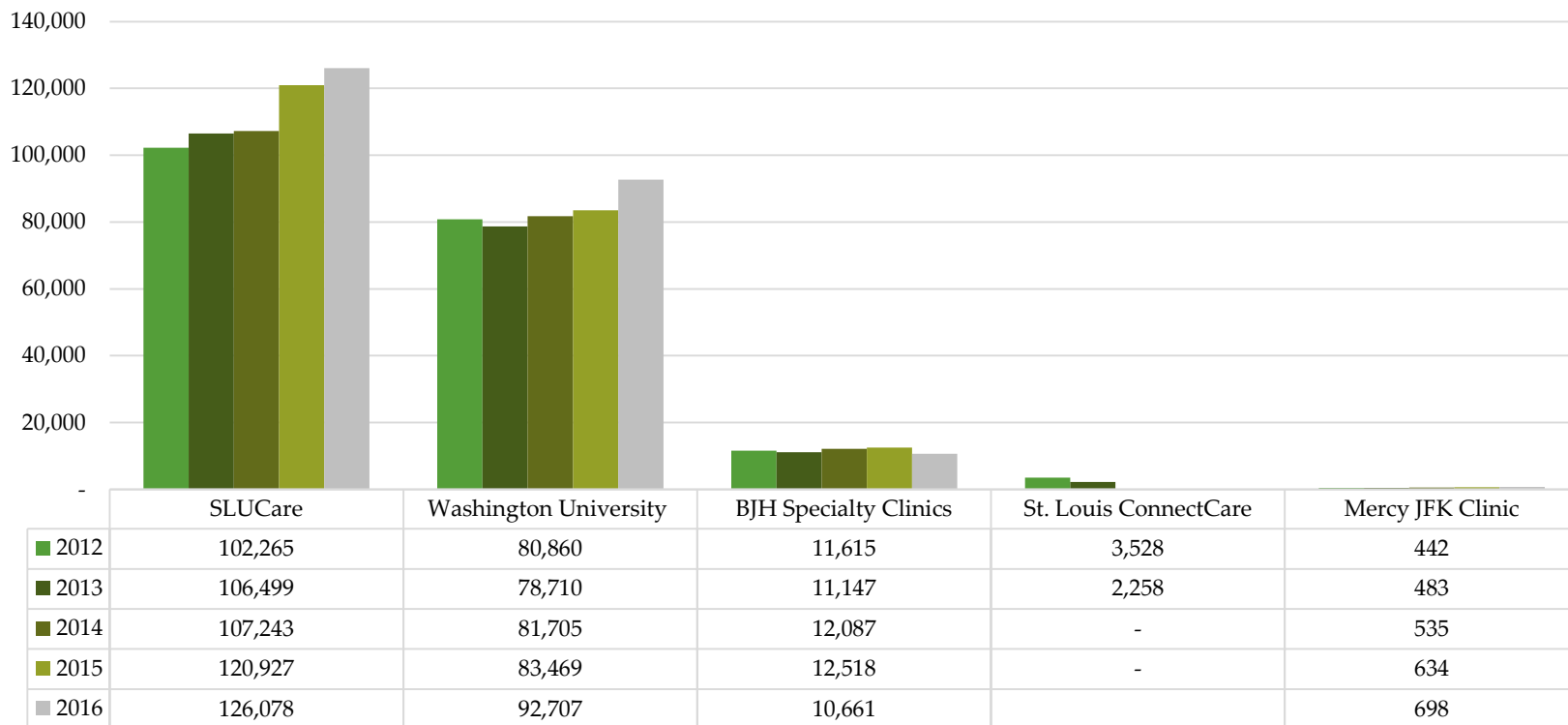
- Specialty care encounters among the Medicaid population decreased by 15% at BJH Specialty Clinics over the past year.
- Specialty care encounters among the Medicaid population increased at Washington University and Mercy JFK by 11% and 10%, respectively, since 2015.

Note: SLUCare services a large number of Medicaid patients from Illinois. Those patients are reflected in the data above. SLUCare's reported data includes all sites in which their doctors practice, including the following hospital based clinics: SSM St. Mary's, SSM St. Clare, SSM St. Joseph, SSM DePaul, SSM Cardinal Glennon and SSM St. Louis University Hospital (SLUH). SLUCare's data also includes some smaller practices located outside of St. Louis City and County limits, which accounts for less than 2% of their total reported encounters. SLUCare's and Washington University's data includes information for both pediatric and adult patients. Washington University expanded access to pediatric specialty care services through their new site, St. Louis Children's Specialty Care Center. This additional access point contributed to their increase in Medicaid encounters in 2016.

Average wait times (in days until next available appointment) for <u>new</u> patients at specialty care organizations varied by specialty department.

Specialty	2015 New Patient Average	2016 New Patient Average	2016 New Patient Range
Cardiology	22	12	2-21
Dermatology	35	46	7-90
*Endocrinology	51	107	55-159
Ear, Nose, Throat (ENT)	17	31	16-43
Gastroenterology	36	30	8-52
Gynecology Only	16	7	3-13
Gynecology/Obstetrics	19	4	3-5
Obstetrics Only	10	19	5-13
Hematology	13	14	3-24
Hepatology	71	-	-
*Infectious Disease	22	57	49-65
Mental Health	20	18	16-19
Nephrology	30	41	26-55
Neurology	28	41	14-78
*Neurosurgery	13	39	13-90
*Oncology	8	26	24-28
Ophthalmology	31	38	8-62
*Orthopedics	13	28	15-48
Pain Management	24	22	14-30
Physical Therapy	16	5	5
Podiatry	20	31	31
*Pulmonology	30	84	62-106
Rheumatology	61	67	19-111
*General Surgery	12	26	4-55
Urology	35	23	7-40

- For new patients, the top four specialties with the longest wait times are endocrinology, pulmonology, rheumatology and infectious disease.
- Average wait times for new patients more than doubled for specialties such as endocrinology, infectious disease, neurosurgery, oncology, orthopedics, pulmonology and general surgery (represented with an asterisk in the table).

Note: The number of organizations who provided responses is different for each specialty based on availability. Averages were calculated using only the provided wait times for each specialty, individually. This data was collected from BJH Specialty Clinics, Mercy JFK Clinic, SLUCare and Washington University.

Average wait times (in days until next available appointment) for <u>returning</u> patients at specialty care organizations varied by specialty department.

Specialty	2015 Returning Patient Average	2016 Returning Patient Average	2016 Returning Patient Range
Cardiology	26	12	2-21
Dermatology	18	24	7-42
*Endocrinology	27	98	97-99
Ear, Nose, Throat (ENT)	10	28	16-36
Gastroenterology	50	34	8-59
Gynecology Only	13	5	3-6
Gynecology/Obstetrics	13	5	3-6
Obstetrics Only	3	9	5-13
Hematology	8	10	3-16
Hepatology	50	-	-
*Infectious Disease	43	59	52-65
Mental Health	10	18	16-19
Nephrology	32	50	46-54
Neurology	20	38	7-78
*Neurosurgery	10	23	5-50
*Oncology	8	24	16-32
Ophthalmology	14	39	8-62
*Orthopedics	22	24	15-34
Pain Management	-	23	16-30
Physical Therapy	-	5	5
Podiatry	10	24	24
*Pulmonology	30	80	62-112
Rheumatology	73	59	13-93
*General Surgery	6	12	4-31
Urology	74	25	21-28

- For returning patients, the top four specialties with the longest wait times are endocrinology, pulmonology, rheumatology and infectious disease, as consistent with the trends seen in new patients.
- Also as consistent with wait times for new patients, average wait times for returning patients more than doubled for specialties such as endocrinology, infectious disease, neurosurgery, oncology, orthopedics, pulmonology and general surgery (represented with an asterisk in the table).

Note: The number of organizations who provided responses is different for each specialty based on availability. Averages were calculated using only the provided wait times for each specialty, individually. This data was collected from BJH Specialty Clinics, Mercy JFK Clinic, SLUCare and Washington University.

Approximately 12,500 specialty care encounters were provided to Gateway to Better Health patients in 2016, comprising 22% of all uninsured specialty care safety net encounters.

Specialty Care Safety Net Encounters, 2016

Legend: ■ Gateway to Better Health ■ Uninsured

Chart values:
- 57.378 (total)
- 44,851 (Uninsured)
- 12,527 (Gateway to Better Health)
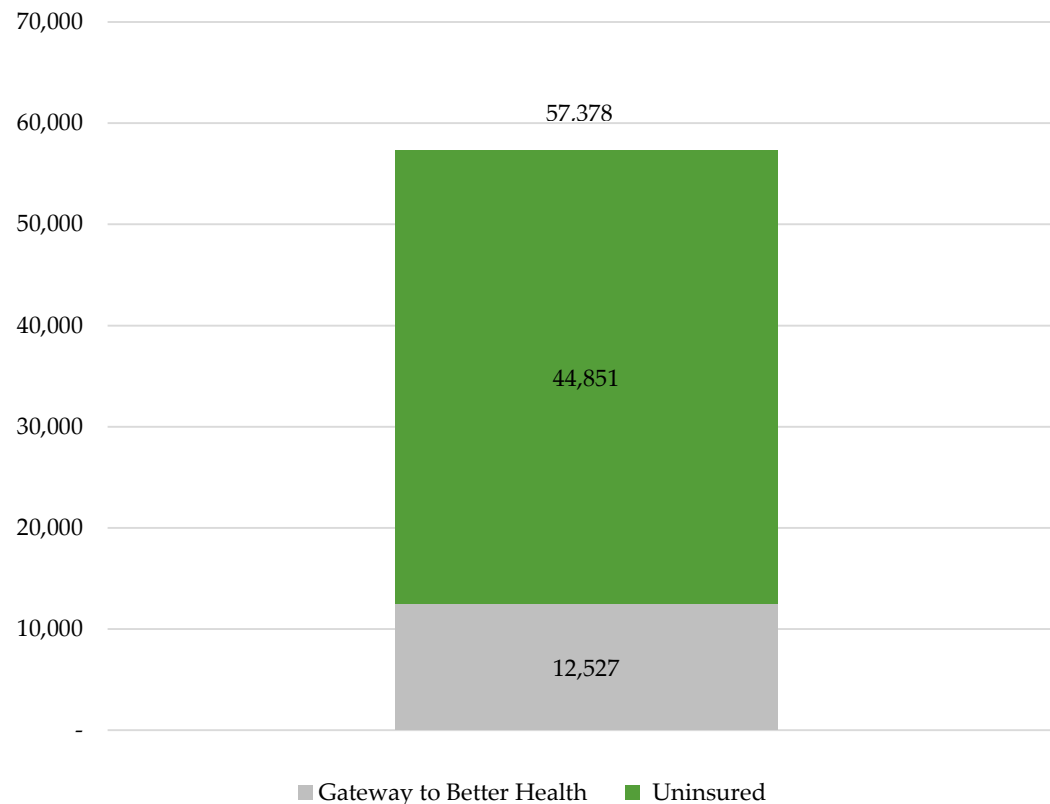
Based on Gateway claims data, Washington University and SLUCare are the main specialty care providers for Gateway to Better Health patients. Volumes of service to Gateway to Better Health patients are roughly equivalent between the two major specialty care providers.

Note: An additional 12,500+ diagnostic and other outpatient services were provided to Gateway to Better Health patients in 2016, which are not included in the chart above.

Behavioral Health Analysis

Behavioral Health: Introduction

This section reviews detailed operating statistics of reporting community-based behavioral health safety net providers (community mental health and substance use treatment) and safety net 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). Behavioral health includes mental health and substance use care. Substance use treatment providers with the widest array of services for the general population in the Eastern Region are included. St. Louis City and County providers are denoted throughout (see Appendix D for a list of 2016 reporting institutions). Behavioral health services provided by local health centers are reflected in this section and in the primary care section of this report.

Self-reported data for this section of the report has been collected and verified by the Behavioral Health Network of Greater St. Louis (BHN). The RHC would like to acknowledge and thank the BHN for their contribution to the annual Access to Care Report.

Historical data from 2005 is sourced from the Regional Health Commission's "Eastern Region Public Behavioral Health System: Utilization of Services" report. Historical data covering 2007-2010 stems from the RHC's "MPC Regional Psychiatric Capacity Analysis and Recommendations" report.

Behavioral Health: Key Findings

- The total number of behavioral health users served by behavioral health safety net providers in 2016 remained stable as compared to 2014 and 2015 (page 79). Newly admitted users served at behavioral health safety net providers increased by 9% in 2016 as compared to 2015 (page 80).

- Wide variation exists in the rate of serving the safety-net population within the designated service areas of respective behavioral health safety net administrative agents in Missouri's Eastern Region (page 81).

- Substance use treatment user admissions declined by 7% in 2016, as compared to 2015, at the three largest state-funded substance use treatment providers with the widest array of services for the general population within the Eastern Region (page 85).

- Behavioral health encounters at safety net primary care providers increased by 52% over the past year and by 74% since 2012 (page 86).

- Emergency department encounters with behavioral health diagnoses (primary and secondary) have decreased by 16% over the past year and account for 18% of all emergency department encounters in 2016, which is down from 32% in 2015 (page 88). The top primary behavioral health diagnoses are mood disorders, schizophrenia/delusional disorders and alcohol use disorders (page 89).

- While acute psychiatric encounters remained stable overall in 2016 (page 93), inpatient psychiatric staffed bed capacity increased by 5% (35 beds) in 2016, as compared to 2015 (page 91). 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 (page 92).

Behavioral health safety net community mental health providers[+] served 30,531 users in 2016.

Behavioral Health Users (Unduplicated Clients) Served, 2014 - 2016

	Adapt of Missouri*	BJC Behavioral Health*	Comtrea Comprehensive Health	Crider Health Center	ALM Hopewell Center*	Independence Center*	Places for People*
■ Total Users Served, 2014	648	9,334	5,477	6,832	3,960	1,530	2,370
■ Total Users Served, 2015	684	8,138	5,705	7,323	4,639	1,442	2,437
■ Total Users Served, 2016	720	8,038	5,659	8,183	3,958	1,387	2,586
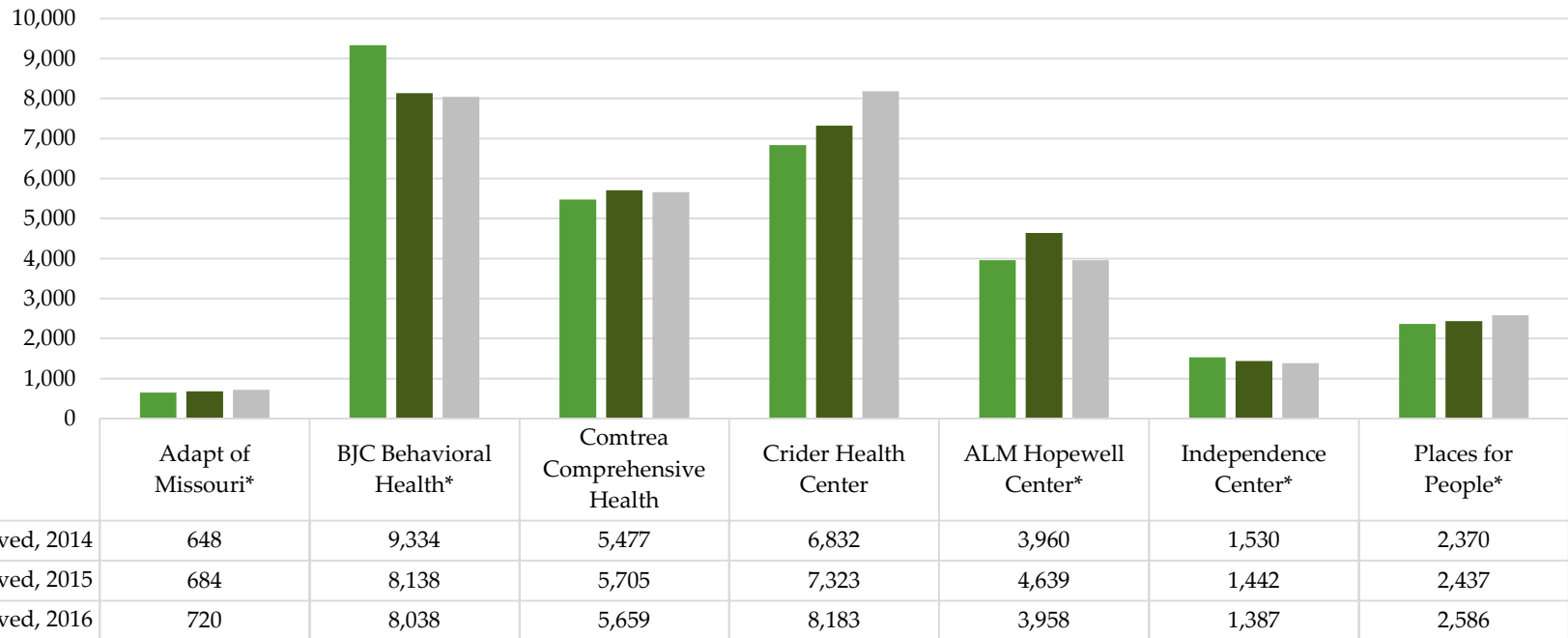
- Behavioral health users served remained stable in 2016, as compared to the 30,151 and 30,368 users served in 2014 and 2015, respectively.
- Three organizations saw an increase in the number of users served, including Crider Health Center (12%), Places for People (6%), and Adapt of Missouri (5%). ALM 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.

[+] Note: Behavioral health safety net community mental health providers include Department of Mental Health designated administrative agents and affiliate organizations providing comprehensive psychiatric services. Users served reflects children, youth and adult services. Users are unduplicated within the agency, though they may be duplicated if served by more than one agency within the calendar year. Data does not include substance use treatment-only providers within the region. BJC Behavioral Health has expanded service access since 2016—the impact of these changes are not yet reflected in provider data.

*Denotes St. Louis City or St. Louis County provider

Behavioral health safety net community mental health providers newly admitted 8,896 users to programs in 2016.

Behavioral Health Users Newly Admitted to Programs, 2014 - 2016
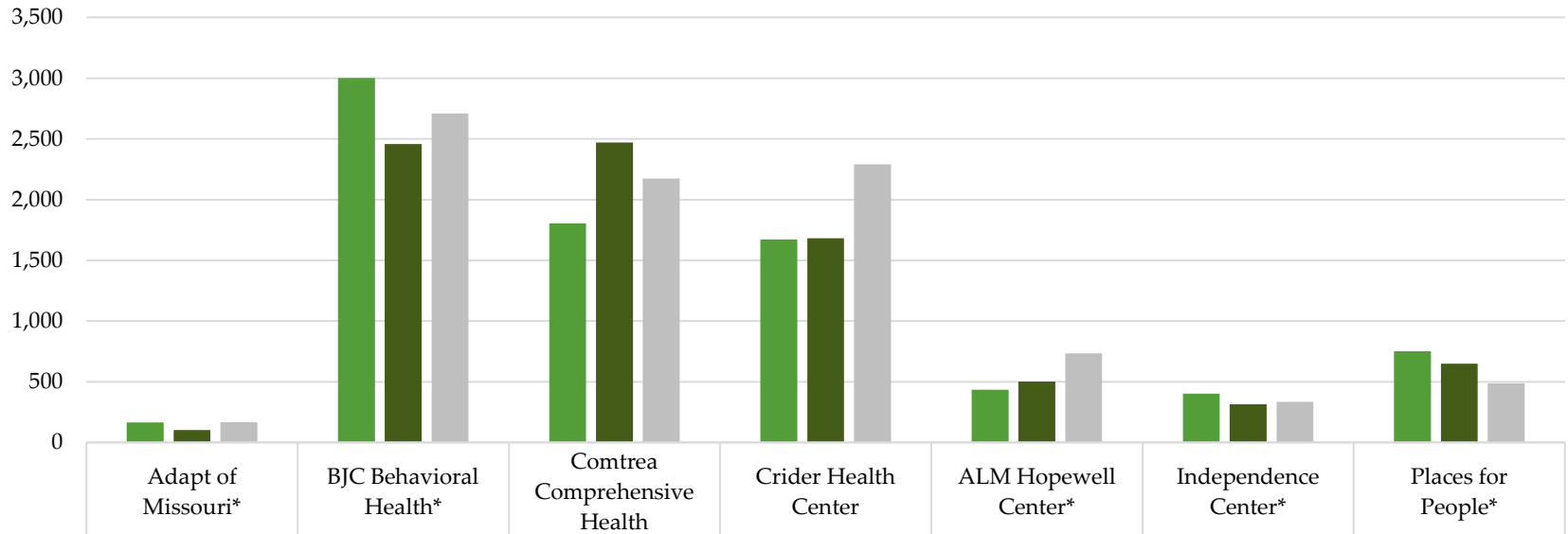
	Adapt of Missouri*	BJC Behavioral Health*	Comtrea Comprehensive Health	Crider Health Center	ALM Hopewell Center*	Independence Center*	Places for People*
■ Newly Admitted Users, 2014	164	3,003	1,804	1,673	435	403	751
■ Newly Admitted Users, 2015	102	2,458	2,470	1,683	502	314	650
■ Newly Admitted Users, 2016	167	2,709	2,174	2,291	734	335	486

- Newly admitted users served at behavioral health 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.
- Newly admitted users increased at ALM Hopewell Center (46%), Crider Health Center (36%), BJC Behavioral Health (10%), Independence Center (7%), and Adapt of Missouri (6%). Newly admitted users decreased at Comtrea Comprehensive Health Center (12%) and Places for People (25%).

Note: Behavioral health safety net community mental health providers include Department of Mental Health designated administrative agents and affiliate organizations providing comprehensive psychiatric services. Data does not include substance use treatment-only providers within the region. Newly admitted users may have previously received services prior to 2015 at a provider or may have been served by another provider during 2015, but they must have a new episode of care in 2015 at a provider. BJC Behavioral Health has expanded service access since 2016—the impact of these changes are not yet reflected in provider data.

*Denotes St. Louis City or St. Louis County provider

Missouri Department of Mental Health's administrative agents have service catchment 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.

Behavioral Health Users Served, 2015 - 2016, per 1,000 service area residents below 150% of the Federal Poverty Line (FPL)
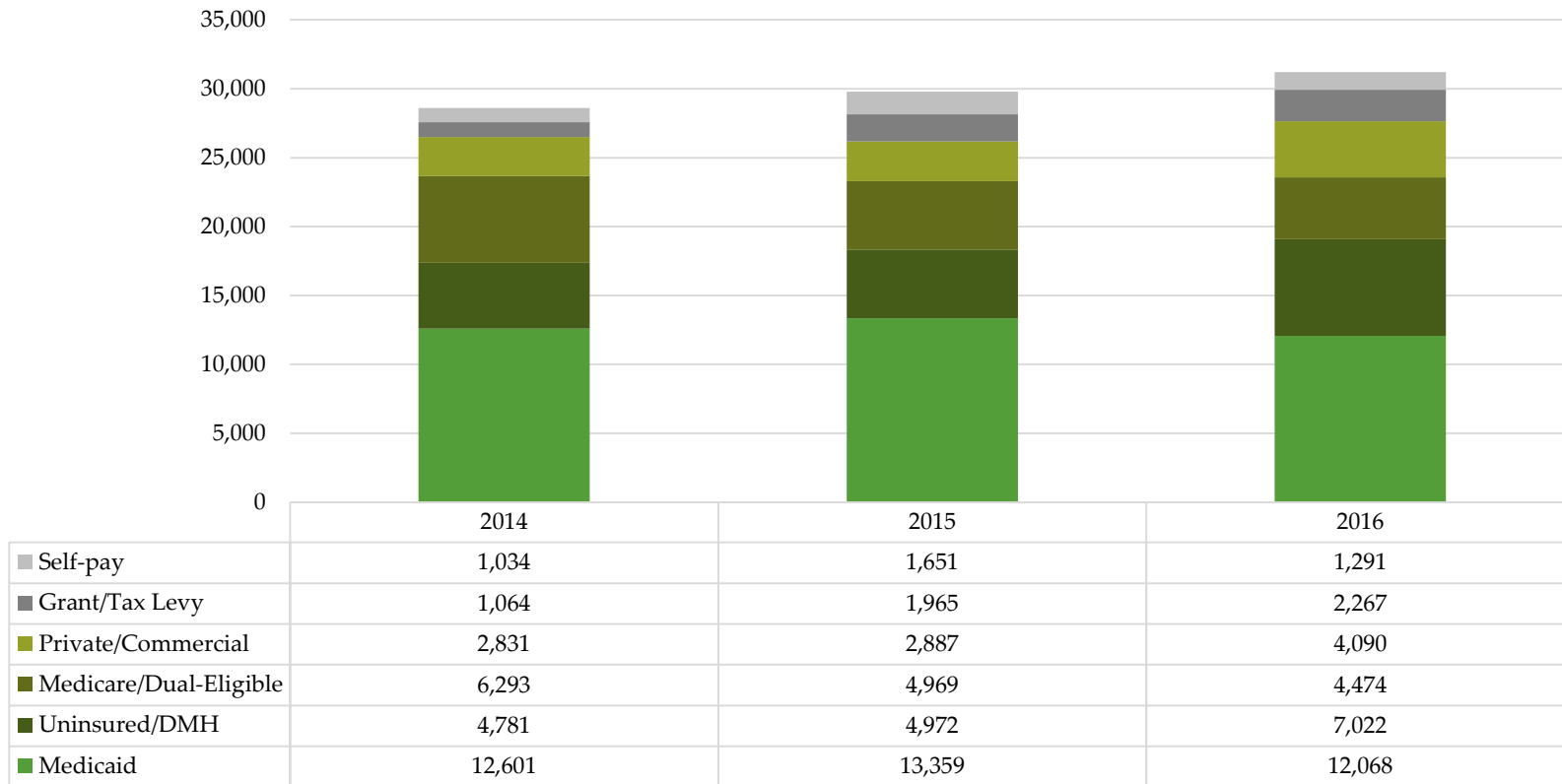

Jefferson County (population 41,500) Comtrea Comprehensive Health
- 135 / 1,000
- 136 / 1,000

St. Charles, Lincoln, Warren, and Franklin Counties (population 79,000) Crider Health Center
- 91 / 1,000
- 104 / 1,000

St. Louis City/County (population 284,900) All Providers
- 59 / 1,000
- 59 / 1,000

■ 2015 ■ 2016
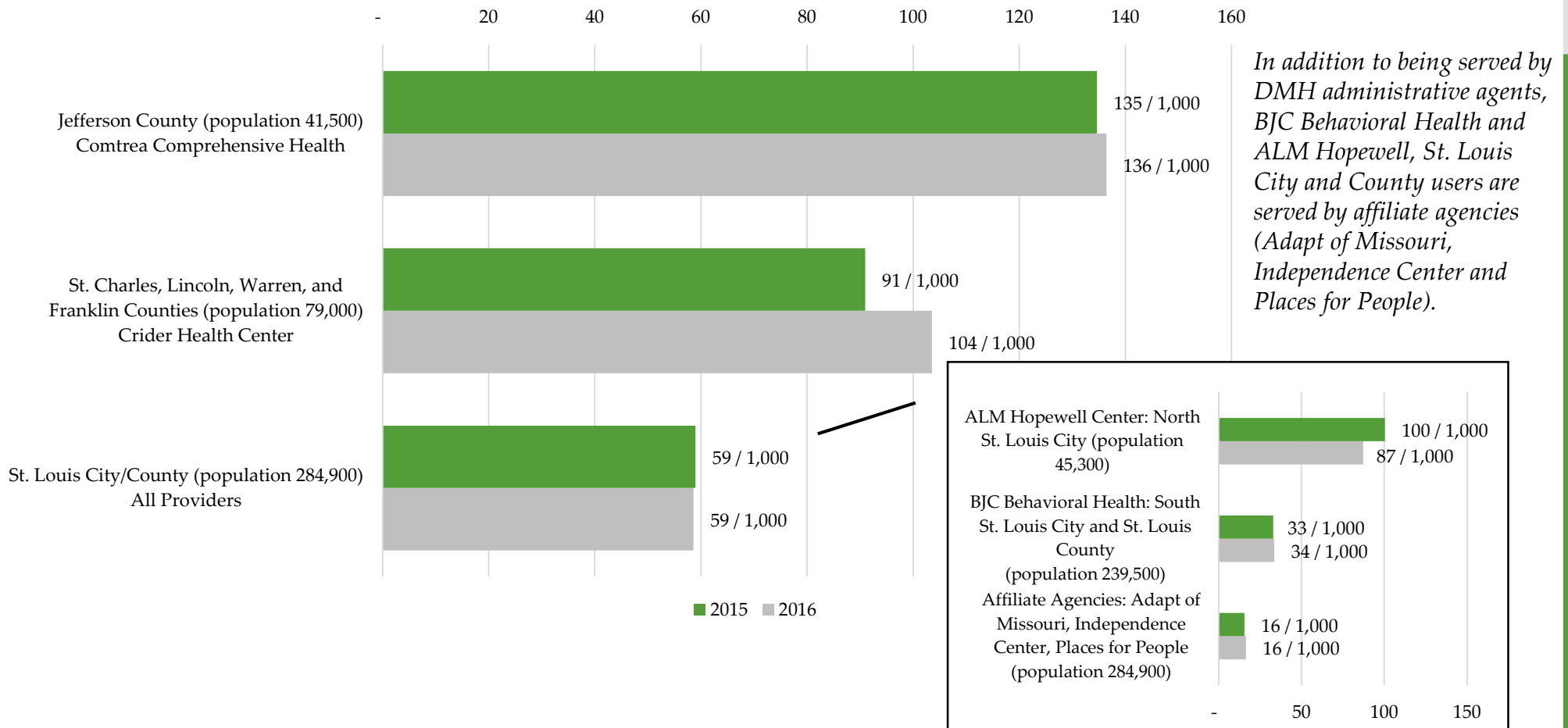
In addition to being served by DMH administrative agents, BJC Behavioral Health and ALM Hopewell, St. Louis City and County users are served by affiliate agencies (Adapt of Missouri, Independence Center and Places for People).

ALM Hopewell Center: North St. Louis City (population 45,300)
- 100 / 1,000
- 87 / 1,000

BJC Behavioral Health: South St. Louis City and St. Louis County (population 239,500)
- 33 / 1,000
- 34 / 1,000

Affiliate Agencies: Adapt of Missouri, Independence Center, Places for People (population 284,900)
- 16 / 1,000
- 16 / 1,000

Note: Behavioral health users served are reported per 1,000 residents below 150% FPL, based on Department of Mental Health (DMH) designated service areas for each community mental health provider. Population counts are sourced from the 2016 American Community Survey. While agency catchment areas are prescribed to serve the geographic populations, a portion of users may receive services from organizations outside of the catchment area agency in their area of residence. BJC Behavioral Health has expanded service access since 2016—the impact of these changes may not yet be reflected fully in provider data. Of note, client eligibility requirements of DMH, such as limitations on diagnoses eligible to receive services, impact Administrative Agent provision of service.

Community-based behavioral health users in the Eastern Region predominately had primary coverage through Medicaid or were uninsured, with care largely funded through the MO Department of Mental Health (DMH).

Behavioral Health Users by Primary Payor Category, 2014 - 2016

	2014	2015	2016
Self-pay	1,034	1,651	1,291
Grant/Tax Levy	1,064	1,965	2,267
Private/Commercial	2,831	2,887	4,090
Medicare/Dual-Eligible	6,293	4,969	4,474
Uninsured/DMH	4,781	4,972	7,022
Medicaid	12,601	13,359	12,068

In 2016, the percentage of users served by community mental health centers increased in the Uninsured/DMH, Grant/Tax Levy and Private/Commercial payor source categories, while the percentage being served through Medicare/Dual-Eligibility, Medicaid and Self-Pay payor sources declined.

Note: Data reflects behavioral health safety net community mental health providers. Data does not include substance use treatment-only providers within the region.

Behavioral health services are primarily available Monday through Friday, with some providers serving users on weekends at day program or clubhouse sites.

Organization	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Adapt of Missouri*	8:30am-5:00pm	8:30am-5:00pm	8:30am-5:00pm	8:30am-5:00pm	8:30am-5:00pm	Closed	Closed
BJC Behavioral Health*+	8:00am-5:00pm	8:00am-7:00pm	8:00am-7:00pm	8:00am-7:00pm	8:00am-5:00pm	Closed	Closed
Comtrea Comprehensive Health Center+	8:30am-7:30pm	8:30am-7:30pm	8:30am-7:30pm	8:30am-7:30pm	8:30am-5:00pm	Closed	Closed
Crider Health Center+	8:30am-5:00pm	8:30am-5:30pm	8:30am-6:30pm	8:30am-5:00pm	8:30am-5:00pm	9:00am-1:00pm once per month	Closed
ALM Hopewell Center*+	8:30am-5:00pm	8:30am-7:00pm	8:30am-5:00pm	8:30am-5:00pm	8:30am-5:00pm	8:00am-3:00pm	Closed
Independence Center*+	8:00am-6:00pm	8:00am-6:00pm	8:00am-6:00pm	8:00am-6:00pm	8:00am-6:00pm	10:00am-2:00pm	Closed
Places For People*+	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm	8:00am-4:30pm

- In addition to standard hours of operation, many providers have specialty services such as group programming on evenings or weekends, evidence-based treatments (e.g. Assertive Community Treatment) or supported housing models that provide support after hours or 24/7.
- In 2016, 6 of 7 providers surveyed offered open access appointments for services, a method of scheduling in which users can receive a same-day/next-day appointment. This is an expansion from the 5 providers who employed this method in 2015.
- In 2016, BJC Behavioral Health and Comtrea Comprehensive Health Center extended hours at one or more sites on weeknights. Additionally, Crider Health Center added some psychiatric services on one Saturday per month.

*Denotes St. Louis City or County providers
+Denotes organizations providing evening and weekend hours

Behavioral Health Response (BHR) 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. Resolution outcomes vary by service type.

Crisis Call Outcomes
(N=70,246)

- Referred to other community agency
- Referred to follow-up with existing provider
- Referred to mobile crisis
- Problem Resolved
- Referred to 911/Law enforcement
- Referred/Admitted to inpatient psychiatric care
- Other

46%, 32%, 11%, 6%, 3%, 1%, 1%

Mobile Outreach Outcomes
(N=1,473)

- Referred for urgent appointment for comprehensive psychiatric services (CPS)
- Referred to another community agency
- Referred to existing provider for follow-up
- Referred to inpatient psychiatric care
- Other/Not applicable
- Problem resolved
- Referred and admitted to inpatient psychiatric care
- Referred to 911/Law enforcement

38%, 24%, 19%, 8%, 6%, 4%, 1%, <1%

- While regional behavioral health services are available predominantly during traditional business hours, providers surveyed collaborate with BHR's 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, the majority 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.
- In 2016, BHR connected 38% of mobile outreaches with urgent appointments (within two business days) with 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.

State-funded substance use treatment providers in the Eastern Region admitted 9,724 treatment users in 2016.

Substance Use Treatment Users, 2014 - 2016
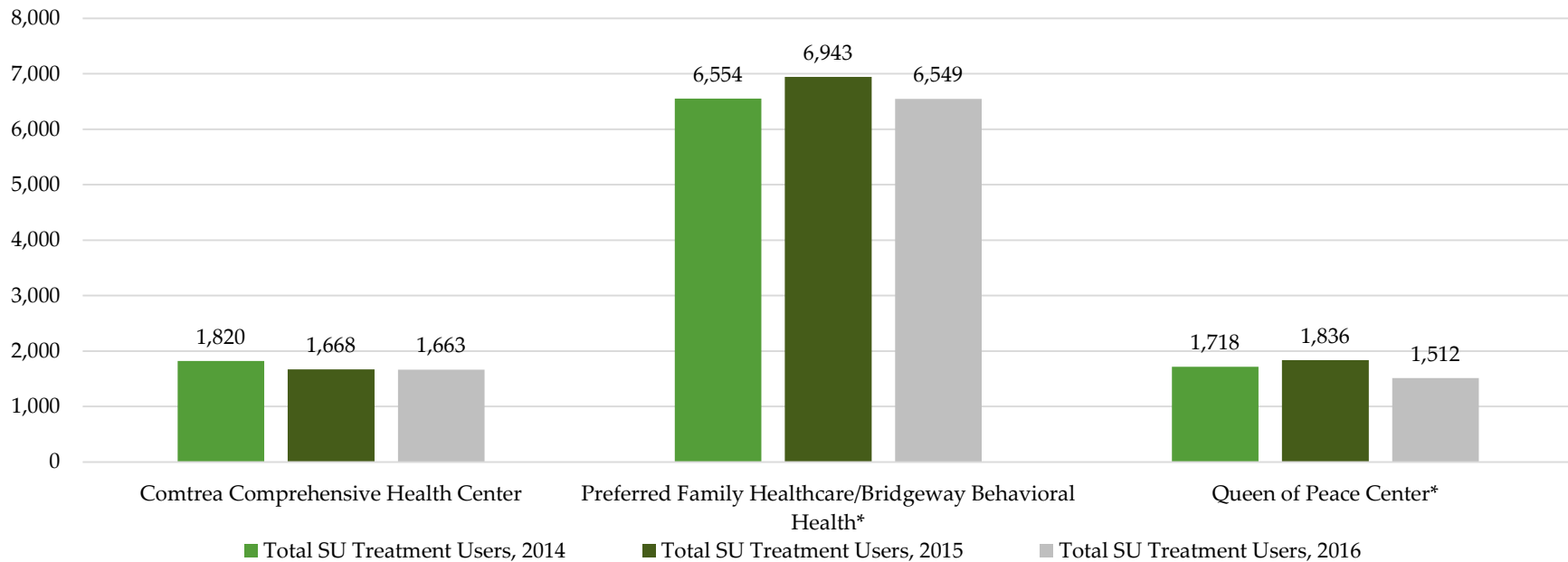
- Substance use treatment user admissions declined by 7% in 2016, as compared to 10,447 users in 2015 and 10,092 users in 2014.
- Service mix varies by substance use treatment provider. Preferred Family Healthcare/Bridgeway Behavioral Health provides detox, residential and outpatient services. Comtrea Comprehensive Health, Preferred Family Healthcare and Queen of Peace Center provide outpatient and residential services.
- Preferred Family Healthcare/Bridgeway Behavioral Health is the only state-funded modified medical detox provider in the Eastern Region of Missouri, serving over 719 admissions with 16 dedicated detox beds—an increase of 16% from 618 modified medical detox admissions served in 2015.

Note: Only services delivered by the three largest state-funded substance use treatment providers with the widest array of services for the general population within the Eastern Region are listed. Substance use treatment services are provided by several additional agencies in the region through state-funding. A broader survey of these additional providers will be performed in the CY2017 data collection cycle. Bridgeway Behavioral Health and Preferred Family Healthcare are reflected as a combined total for 2014-2016 for consistency in reporting, as they merged on January 1, 2016. Opioid State Targeted Response funds were received in 2017 to enhance access to substance use services—the impact of these funds are not yet reflected in provider data.

*Denotes St. Louis City or St. Louis County provider

Behavioral health encounters at safety net primary care providers have increased by 74% since 2012.

Primary Care Behavioral Health Encounters, 2012 - 2016

Behavioral health encounters at safety net primary care providers increased by 52% over the past year.

Note: Behavioral health services at primary care organizations may differ from those provided at traditional community mental health centers. These encounters may include, but are not limited to, psychiatry services, psychology services, individual counseling services with clinical social workers or other mental health providers, group counseling sessions, detox services, encounters with alcohol and substance abuse specialists and other outpatient behavioral health services.

Behavioral health encounters have increased at six safety net primary care organizations over the past year.

Primary Care Behavioral Health Encounters by Organization, 2012 - 2016

	Affinia Healthcare	SLUCare	Family Care Health Centers	St. Louis County Dept. of Public Health	Myrtle Hilliard Davis	BJK People's Health Centers	Mercy Hospital JFK Clinic	SSM	BJH Clinics	All Other
2012	20,327	6,547	4,969	7,582	473	3,256	710	715	-	1,309
2013	15,676	6,500	5,098	5,675	605	4,888	703	686	-	1,007
2014	33,787	7,280	5,614	6,839	1,293	4,089	693	682	-	982
2015	33,774	7,820	7,012	7,052	7,258	2,334	921	1,164	338	1,575
2016	65,217	8,548	7,452	6,354	5,855	5,559	2,105	1,183	1,046	1,604

- The six primary care organizations with increases in behavioral health encounters over the past year include: BJH (210%), BJK People's (138%), Mercy (129%), Affinia (93%), SLUCare (9%) and Family Care (6%).
- Behavioral health encounters decreased at Myrtle Hilliard Davis and St. Louis County Department of Public Health by 19% and 10%, respectively, over the past year.

Note: The "All Other" category includes The SPOT and St. Luke's Pediatric Care Center. Encounters above represent behavioral health services provided at St. Louis County Department of Public Health clinics, as well as services provided through their contracted provider, Family Mental Health Collaborative. St. Louis County Department of Public Health ended its partnership with Family Mental Health Collaborative in late 2017. Affinia contracts with the Salvation Army to provide substance abuse services. In 2016, the Salvation Army opened a new site, reaching full capacity. This significantly expanded access to substance abuse services through group counseling sessions and is the primary driver for the increase in uninsured encounters served through Affinia in 2016. Myrtle Hilliard Davis increased capacity for behavioral health services in 2014 and 2015 by hiring licensed clinical social workers. The "SSM" category includes St. Mary's Health Center and Glennon Care Pediatrics. Data for SSM's Danis Pediatrics is included in SLUCare's data, as this clinic is serviced by SLUCare providers. Mercy JFK Clinic expanded access to behavioral health services in 2016 by hiring additional counselors.

Emergency department encounters with behavioral health diagnoses have decreased by 16% over the past year and account for 18% of total emergency department encounters in 2016.

Emergency Care Encounters with Behavioral Health* as Primary or Secondary Diagnosis, 2012 - 2016
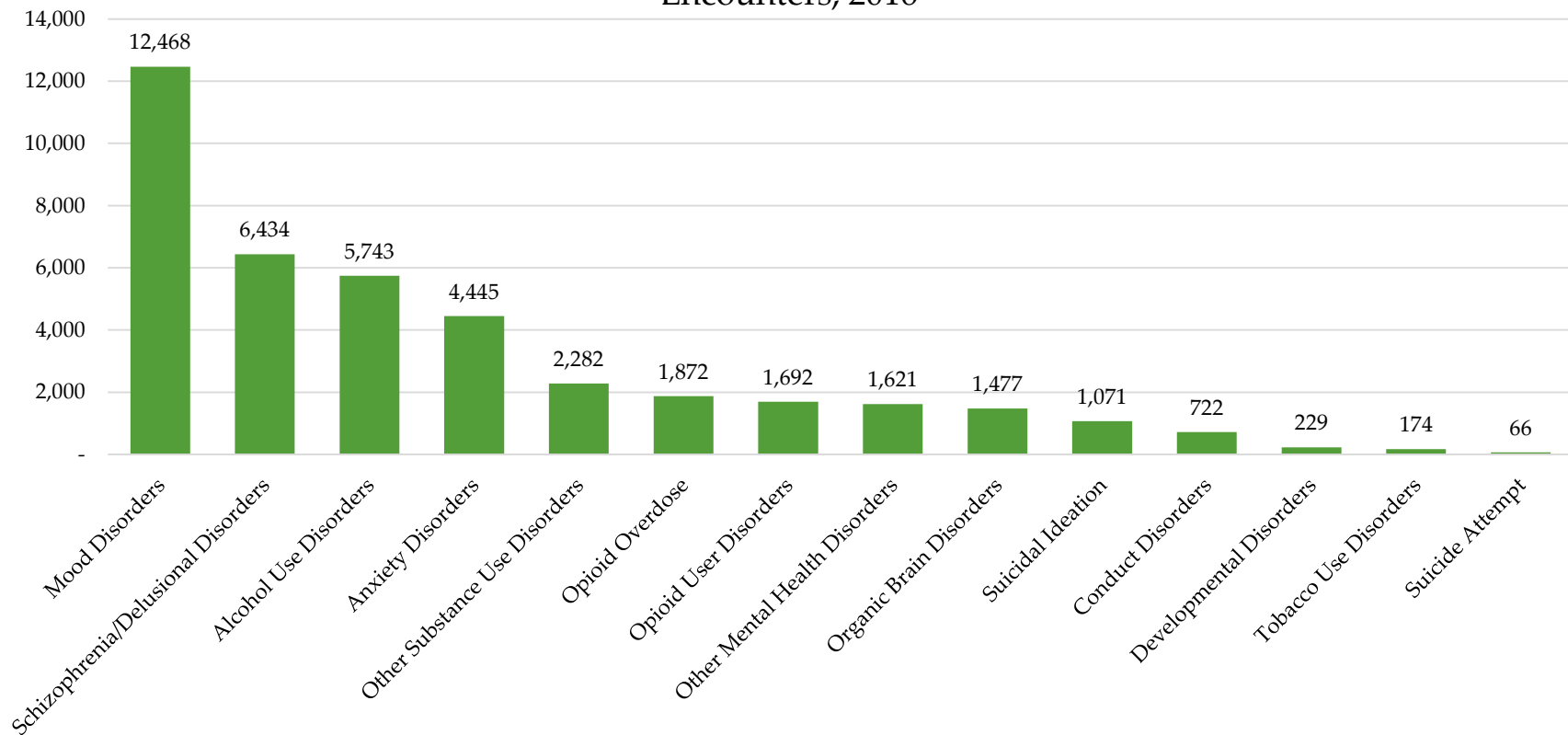

Behavioral health emergency department encounters have remained relatively stable over the past five years.

*Behavioral health encounters include mental health and substance abuse disorder emergency department encounters as a primary or secondary diagnosis.

Note: Encounters where tobacco use reflects the only behavioral health diagnoses are excluded. Changes in coding practices over time may impact trends seen in the prevalence of behavioral health encounters in emergency departments.

Behavioral health diagnoses account for more than 40,200 primary diagnoses for emergency department encounters in 2016.

Primary Behavioral Health Diagnoses for Emergency Department Encounters, 2016

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

Note: Distribution of behavioral health diagnosis codes within emergency departments are based on billing coding data and may not be reflective of diagnoses prevalence in the region.

Behavioral health diagnoses account for more than 331,100 primary and secondary diagnoses for emergency department encounters in 2016.

Primary and Secondary Behavioral Health Diagnoses for Emergency Department Encounters, 2016

Tobacco use, mood and anxiety disorders make up 68% of all primary and secondary emergency department behavioral health diagnoses in 2016.

Note: Duplication across emergency department encounters does exist to account for both the primary and secondary diagnoses on each encounter. Distribution of behavioral health diagnosis codes within emergency departments are based on billing coding data and may not be reflective of diagnoses prevalence in the region.

Between 2015 and 2016 inpatient behavioral health safety net hospital staffed bed capacity increased by 35 beds, or 5% (from 649 to 684 total staffed beds).

Staffed Inpatient Behavioral Health Beds, 2007 - 2016

	Barnes-Jewish Hospital (BJH)*	BJH Psych. Support Center (PSC)*	Christian Hospital*	Mercy Hospital Jefferson	Mercy Hospital St. Louis *	Metro. Psych. Center (MPC)*	SSM Health DePaul Hospital *	SSM Health St. Joseph Hospital-St. Charles/ Wentz.	SSM Health St. Louis Univ. Hospital*	SSM Health St. Mary's Hospital*	St. Alexius Hospital*	St. Ant.'s Medical Center*	Total
2007 Staffed Bed Capacity	59	0	40	42	72	75	98	92	40	34	91	74	717
2009 Staffed Bed Capacity	46	0	40	42	72	50	99	90	40	35	91	74	679
2010 Staffed Bed Capacity	46	0	40	42	72	50	99	92	40	44	87	74	686
2014 Staffed Bed Capacity	46	25	40	40	85	0	102	99	40	46	85	74	682
2015 Staffed Bed Capacity	46	36	0	36	85	0	102	99	40	46	85	74	649
2016 Staffed Bed Capacity	46	50	0	36	85	0	122	99	40	46	86	74	684

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 behavioral health 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
2007-2010 data source: Regional Health Commission "MPC Regional Psychiatric Capacity Analysis and Recommendations"

Inpatient behavioral health staffed safety net hospital bed capacity varied by hospital and population.

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 combined		85
SSM Health DePaul Health Center *	102	0	20 combined		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

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.

Note: Data reflects community hospitals which provide acute psychiatric services. 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. State-run facilities are also not included.

*Denotes St. Louis City or St. Louis County provider

Total acute psychiatric encounters at inpatient behavioral health safety net hospitals remained stable in 2016, with 27,070 total encounters.

Total Inpatient Psychiatric Encounters, 2014 - 2016
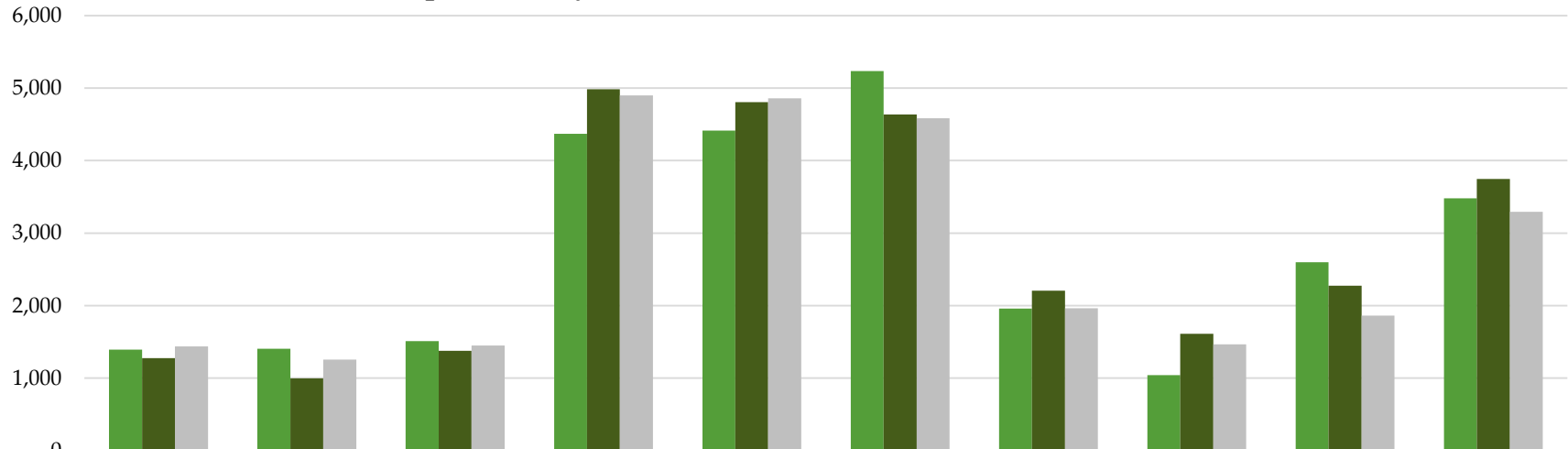
	Barnes-Jewish Hospital (BJH)*	BJH Psychiatric Support Center*	Mercy Hospital Jefferson	Mercy Hospital St. Louis*	SSM Health DePaul Hospital*	SSM Health St. Joseph Hospital-St. Charles & Wentzville	SSM Health St. Mary's Hospital-St. Louis*	SSM Health St. Louis University Hospital*	St. Alexius Hospital*	St. Anthony's Medical Center*
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	1,277	999	1,377	4,985	4,804	4,635	2,206	1,611	2,274	3,745
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

While acute psychiatric encounters remained stable overall in 2016, inpatient psychiatric staffed bed capacity increased by 5% since 2015 (see page 91).

Note: Data reflects community hospitals which provide acute psychiatric services. Encounter numbers reflect total admissions, including duplicate users. Encounters on medical service floors are not included. Barnes-Jewish Hospital Psychiatric Support Center data reflects encounters delivered post-BJC transition (initiated in April 2015). 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. State-run facilities are also not included.

*Denotes St. Louis City or St. Louis County provider

Acute psychiatric encounters were predominately covered by Medicaid (39%), Private insurance (25%) or Medicare (22%), varying by hospital provider.

Inpatient Psychiatric Encounter, by Payor Category and Organization, 2016

	Barnes-Jewish Hospital*	BJH Psychiatric Support Center*	Mercy Hospital Jefferson	Mercy Hospital St. Louis*	SSM Health DePaul Health Center*	SSM Health St. Joseph Health Center-St. Charles & Wentzville	SSM Health St. Mary's Hospital-St. Louis*	SSM Health St. Louis University Hospital*	St. Alexius Hospital*	St. Anthony's Medical Center*
▉ Private	349	225	311	2,141	903	1,170	206	161	116	1,111
▉ Medicare (incl. Dual Eligibles)	401	205	382	956	789	1,025	795	531	387	599
▉ Medicaid	484	559	470	1,231	2,524	1,734	733	523	1,245	1,111
▉ Uninsured	205	266	289	571	641	656	228	253	113	471
Total	1,439	1,255	1,452	4,899	4,857	4,585	1,962	1,468	1,861	3,292

As compared to 2015, the percentage of acute psychiatric encounters covered by Medicaid has increased, while the percentage of encounters covered through Medicare, Private insurance and uninsured payor sources have remained stable.

Note: Data reflects community hospitals which provide acute psychiatric services. Encounter numbers reflect total admissions, including duplicate users. Encounters on medical service floors are not included. 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. State-run facilities are also not included.

*Denotes St. Louis City or St. Louis County provider

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Appendix

Report Limitations

The primary source of the information presented is self-reported data from participating organizations. Great care has been taken to ensure the accuracy of the data in this report. All institutions were given the opportunity to verify their data for accuracy. In addition, the RHC and the BHN have taken steps to independently validate all data elements to the fullest extent possible. While the RHC and the BHN cannot attest to the complete accuracy of all presented data, these efforts significantly reduce the potential for data collection and reporting errors.

The data contained in this report replace and update all previously reported data of the same content. Readers are encouraged to contact the RHC with questions concerning methodology or data validity. The geographic scope for the primary, specialty and emergency care analyses are limited to major institutions in St. Louis City and St. Louis County. The geographic scope of the behavioral health analysis includes the entire Eastern Region of Missouri (St. Louis City and Counties of Franklin, Jefferson, Lincoln, St. Charles, St. Louis and Warren).

Key Definitions

- **Safety net site**: health provider institutions whose mission is to service all regardless of ability to pay; in the St. Louis region, safety net institutions include community health centers, hospital/university-based clinics, physician groups and other free-standing clinics.

- **Encounter**: documented face-to-face contact between a patient and a provider who exercises independent professional judgment in the provision of services to the patient.

- **User**: a unique individual who had at least one encounter or service at a participating health care site during the calendar year. For behavioral health, users must have been enrolled in agency services, such that they had a clinical encounter and a unique patient identifier.

- **Adult**: users aged 18 years and above.

- **Pediatric**: users aged 17 and below.

- **Primary care encounter**: adult medical, pediatric, obstetrical, behavioral, dental and "other" medical-related encounters that occur at a participating primary care organization.

- **Specialty care encounter**: specialized medical services provided by a physician specialist in a non-primary and non-emergency department setting.

- **Emergency care encounter**: encounters that occur at hospital emergency departments.

- **Behavioral health care encounter**: encounters that occur at primary care organizations and hospital emergency departments that are coded as a mental health or substance abuse diagnosis (primary or secondary diagnosis) OR encounters that occur at an organization specializing in providing behavioral health services, such as a community mental health center or a substance use treatment center.

- **Non-emergent care encounter**: low-acuity, non-emergency visits that occur at hospital emergency departments that could have been treated in another provider setting, such as a primary care office, urgent care center or other non-emergency department setting.

Appendix A: Primary Care Providers

Information below provides a listing of reporting primary care safety net institutions in the St. Louis City and County area. These institutions include community health centers, hospital-based clinics and other free-standing primary care clinics.

- Affinia Healthcare*
- Barnes-Jewish Hospital OB/GYN Clinic
- Barnes-Jewish Hospital Medicine Clinic
- Betty Jean Kerr People's Health Centers*
- Family Care Health Centers*
- Mercy JFK Clinic
- Myrtle Hilliard Davis Comprehensive Health Centers*
- SLUCare
- St. Louis County Department of Public Health*
- St. Luke's Pediatric Care Center
- SSM Health Cardinal Glennon/Glennon Care at DePaul
- SSM Health St. Mary's Hospital Internal Medicine Clinic
- The SPOT (Supporting Positive Opportunities with Teens)

*Denotes organizations included in the Gateway to Better Health primary care network as of March 2018

Appendix B: Emergency Care Providers

Information below provides a listing of reporting emergency care safety net institutions in the St. Louis City and County area.

- Barnes-Jewish Hospital
- Christian Hospital and Northwest Healthcare
- Mercy Hospital St. Louis
- Missouri Baptist Medical Center
- SSM Health Cardinal Glennon Children's Medical Center
- SSM Health DePaul Health Center
- SSM Health St. Clare Health Center
- SSM Health St. Louis University Hospital
- SSM Health St. Mary's Health Center
- St. Louis Children's Hospital
- St. Luke's Hospital

Note: St. Alexius Hospital was unable to report data during this period. Data from 2015 has been used as an estimate for 2016 figures.

Appendix C: Specialty Care Providers

Information below provides a listing of reporting specialty care safety net institutions in the St. Louis City and County area. These institutions include hospital-based clinics and physician groups.

- Barnes-Jewish Hospital Clinics*

- Mercy JFK Clinic

- SLUCare*

- SSM Health Cardinal Glennon Children's Medical Center

- Washington University School of Medicine*

*Denotes organizations included in the Gateway to Better Health specialty care network as of March 2018

Appendix D: Behavioral Health Providers

Eastern Region Community-based Comprehensive Psychiatric Service Providers surveyed:

❑ Department of Mental Health Administrative Agents include:

- Amanda Luckett Murphy Hopewell Center*
- BJC Behavioral Health*
- Comtrea Comprehensive Health Center
- Crider Health Center (dba Compass Health Network)

❑ Department of Mental Health Affiliate Agencies providing comprehensive psychiatric services (CPS) include:

- Adapt of Missouri*
- Independence Center*
- Places for People*

❑ State-funded agencies providing substance use treatment services include:

- Comtrea Comprehensive Health Center
- Preferred Family Healthcare*/Bridgeway Behavioral Health*/
- Queen of Peace Center*

❑ Access Crisis Hotline includes:

- Behavioral Health Response

Eastern Region Inpatient Psychiatric Service Hospital Providers surveyed:

- Barnes-Jewish Hospital*
- Barnes-Jewish Hospital Psychiatric Support Center*
- Mercy Hospital Jefferson
- Mercy Hospital St. Louis*
- St. Alexius Hospital*
- St. Anthony's Medical Center*
- SSM Health DePaul Hospital*
- SSM Health St. Joseph Health Center-St. Charles
- SSM Health St. Joseph Health Center-Wentzville
- SSM Health St. Mary's Hospital- St. Louis*
- SSM Health St. Louis University Hospital*

*Denotes St. Louis City/St. Louis County based provider

Acknowledgements

The St. Louis Regional Health Commission would like to graciously thank all reporting primary, specialty, emergency care and behavioral health sites that provided the data displayed in this report.

In addition, many thanks to our Commissioners, BHN board members, advisory board members of both the RHC and BHN, as well as members of the RHC's Access to Care Workgroup for their thoughtful review of the report and content.

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