

Emergency Department and Urgent Care Use in St. Louis 2013-2016



Summer 2017



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Introduction

Data from national and local sources has long found St. Louisans are more likely to use the emergency department (ED) than patients nationally. They also are more likely to use an ED or urgent care when a primary care visit could have treated their condition.

Physicians and representatives of area employers, hospitals, health plans and consumer groups recently began a collaborative dialogue with the Midwest Health Initiative (MHI) about ways they can work together to reduce potentially-avoidable ED visits. Goals include finding strategies to support better access to appropriate care, more effective chronic care management, lower spending and lower rates of potentially harmful overtreatment.

An ongoing, detailed review of data on ED use in St. Louis will inform this work. This report is an initial look at utilization, appropriateness of care and spending. Additional data will be shared in the coming months. MHI believes that by working together, the St. Louis community has an opportunity to **realize better health outcomes for patients and lower costs for all by supporting patients in avoiding the emergency department when a more appropriate place of service exists**. MHI has launched a community partnership to act on this opportunity. If you have insights to share, ideas for actions which would support this goal, or would like to participate, please contact Louise Probst at lprobst@stlbhc.org.

Much of the data in this report comes from the MHI data asset which represents services provided to commercially-insured patients across Missouri and its bordering metropolitan areas. This report focuses on emergency department and urgent care provided to St. Louis area residents with commercial insurance, while referencing trends for other payers and patients nationally as data was available.

KEY TAKEAWAYS

- 1. EMERGENCY DEPARTMENT (ED) USE IN ST. LOUIS HIGHER THAN NATION** - ED utilization rates were 13% higher for commercially-insured patients in the St. Louis region from 2014 to 2016 than national rates. St. Louis residents insured by Medicare had ED utilization rates 12% higher in 2013 than Medicare patients nationally, according to the most recent Centers for Medicare and Medicaid Services (CMS) data available.
- 2. ST. LOUISANS USING ED, URGENT CARE FOR CONDITIONS THAT COULD BE TREATED IN PHYSICIAN OFFICE** - Approximately 15% of visits to St. Louis emergency departments and health-system owned urgent care facilities were avoidable, using a conservative definition of an avoidable visit. Less conservative methodologies, such as the Centers for Disease Control and Prevention National Hospital Ambulatory Medical Care Survey, estimate one-third to one-half of all ED visits could be avoided.
- 3. TREMENDOUS VARIATION EXISTS IN ED UTILIZATION BY PRIMARY CARE PRACTICE SITE** - This variation was independent of the risk score or illness burden of the practices' patient populations.
- 4. CARE IN ED IS FAR MORE EXPENSIVE EVEN FOR THE SAME DIAGNOSIS** - Care in an emergency department can be three to five times more costly than care in an urgent care setting for the same diagnosis, data from MHI and national sources found.
- 5. PATIENTS WHO USE ED ARE MORE LIKELY TO BE EXPOSED TO AVOIDABLE CARE** - In the St. Louis area, 16% of patients who visited a hospital emergency room with an upper respiratory infection received a chest x-ray, exposing them to radiation, when more than likely the results added little value to the treatment decision. Comparatively, the rate was 4% at health-system owned urgent cares and below 2% at free-standing urgent care centers.

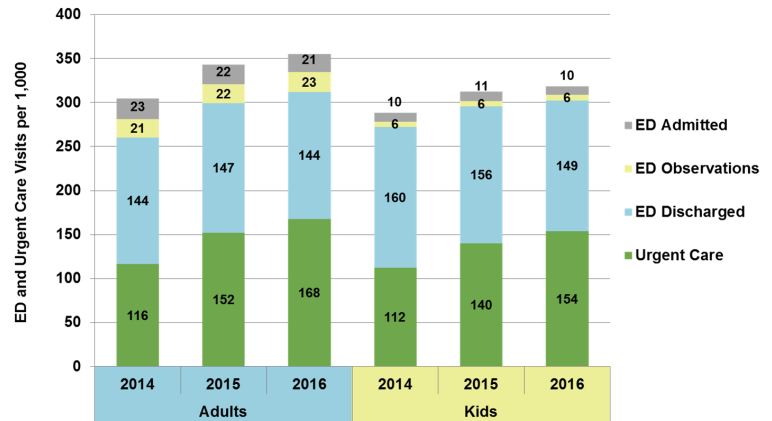
Higher ED Utilization in St. Louis Region than Nation

ED utilization rates were 13% higher for St. Louis commercially-insured patients from 2014 to 2016 compared to these patients nationally, according to MHI data and benchmarks provided by Milliman Inc., MHI's data vendor. For St. Louis area Medicare patients, ED utilization rates were 12% higher than Medicare patients nationally in 2013, the most recent CMS data available.

ED utilization among St. Louis commercially-insured adults remained virtually unchanged from 2014 to 2016. However, **urgent care utilization during the same period increased by 44%**, with most of this jump coming from increased use of free-standing urgent care centers such as Total Access Urgent Care. During the same period, **visits with primary care providers in a traditional office setting declined by 4%**, the MHI data set found.

For commercially-insured St. Louis children, ED utilization declined slightly during the three-year period but not enough to offset a **42% increase in urgent care visits**, again driven mostly by growth in use of free-standing urgent care centers. Children with commercial insurance also saw **primary care providers less often in a traditional office setting, with the number of visits declining 5%** from 2014 to 2016.

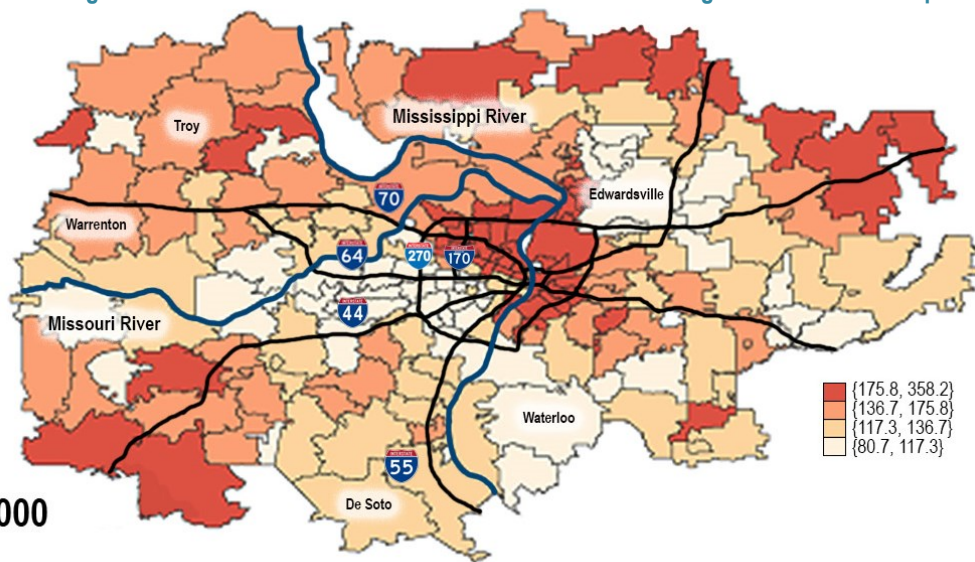
Chart 1 Urgent Care Use Grows 44% for Adults, 42% for Children



Geographic Patterns

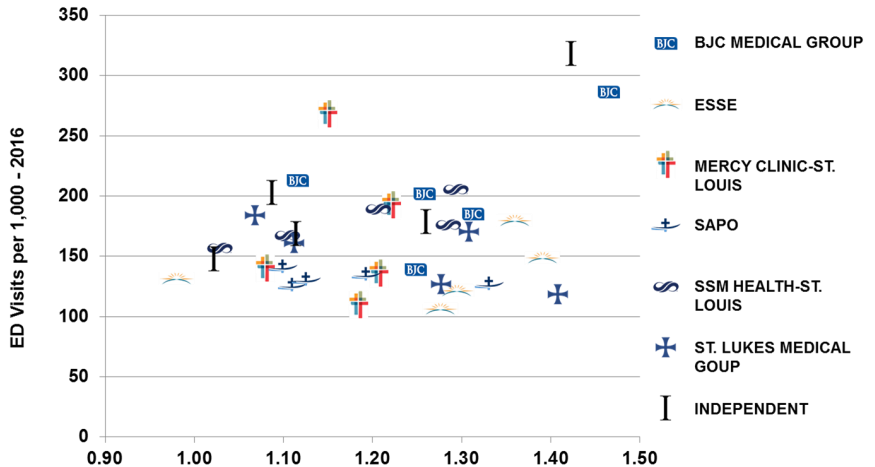
As shown in **Chart 2, adult ED utilization across the region suggests geographic patterns with patients in some pockets of the region more likely to use the ED than others.** All of the patients in the population had commercial health insurance so lack of health coverage should not have been a factor. However, after-hours and weekend care may be less accessible in communities with higher utilization. **A review of urgent care facilities finds a clustering of locations with a longer history of existence in the region's western communities.**

Chart 2 Emergency Department Use Higher in Eastern and Northern Communities where Fewer Urgent Care Facilities Operate



Variation in ED use among the region’s primary care practices exists even for locations with similar risk scores. A score of “1” is the average for all patients nationally, including children, who typically have lower risk scores. The risk score is based on diagnoses reported on claims for medical services provided to patients. *As shown in Chart 3, some practices had ED utilization rates nearly two times those of practice sites with similar risk scores.*

Chart 3 Primary Care Practice Sites with Similar Populations

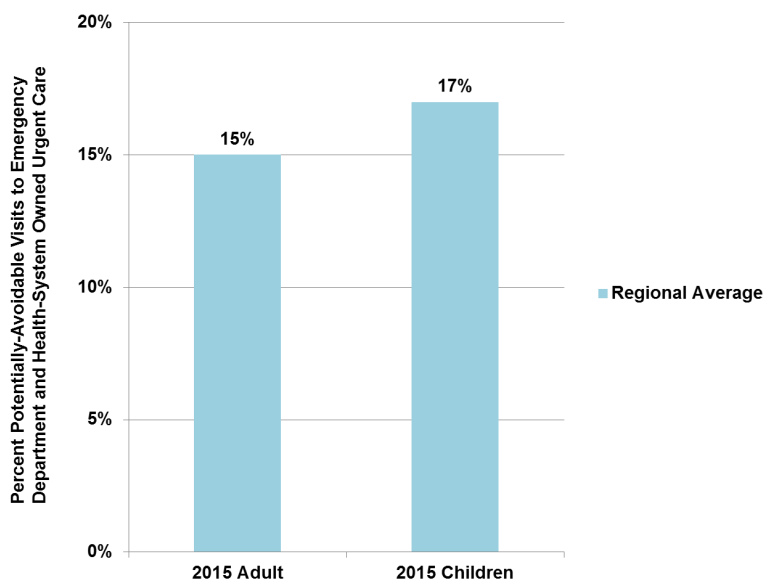


Narrowing the Focus to Potentially-Avoidable ED Use

Variation in rates of emergency department use begs the questions, “How much of this utilization could be avoided through better access to more appropriate sites of care or more informed patients?” and “What can St. Louis learn from communities achieving lower rates of ED use?”

Approximately 15% of all 2015 visits to St. Louis emergency departments and health-system owned urgent care facilities were potentially avoidable, using a conservative definition of which visits were avoidable. Less conservative methodologies, such as the CDC’s National Hospital Ambulatory Medical Care Survey, estimate one-third to one-half of all ED visits could have been provided at a lower level of care. A recent report by the St. Louis Regional Health Commission found that approximately 20% of ED visits across St. Louis patients of all payers were non-emergent in 2015. This was a 5% increase over the previous year. A future report by MHI will show differences in how local health plans and others define potentially-avoidable visits and highlight which diagnoses might benefit most from a community focus.

Chart 4 Opportunity to Transition Care to More Appropriate Sites



A higher percentage of children’s emergency department visits were potentially-avoidable compared to adults’ visits. *St. Louis’ best performing primary care practices had rates of potentially-avoidable visits that were half of those of the region’s average performing practices. This suggests strong opportunities for improvement.* Interestingly, practices with low rates of emergency department utilization did not necessarily have low rates of avoidable utilization.

The Cost Opportunity

Cost savings from moving potentially-avoidable visits to a physician office, retail clinic, freestanding urgent care or telehealth environment could be dramatic. **Data from MHI and national sources suggest care in an ED can be three to five times more expensive than care provided in an urgent care setting, with freestanding urgent care centers offering more cost-effective care than at those owned by health systems.** Debt.org, an online resource helping consumers reduce personal debt, examined cost differences at urgent care centers and EDs for nine common diagnoses. For each diagnosis, care provided in the ED was a minimum of three times more expensive. For patients with a urinary tract infection, it was nearly six times as expensive.

MHI compared costs for visits and all related services for an upper respiratory infection at hospital EDs, health-system owned urgent cares and freestanding urgent cares. As shown in **Chart 6, the average cost for these visits was eight times higher if the patient went to an ED versus a primary care office and five times higher than if the patient visited a freestanding urgent care. The cost difference across the two types of urgent care centers was smaller, about 32%.** MHI estimates nearly \$2 million a year could be saved just by moving upper respiratory infection visits among commercially-insured St. Louis area residents from a traditional ED to an urgent care setting.

Benefit plan design can encourage this movement. In 2015, leading St. Louis employers with traditional plans required patients contribute via copay an average of about \$150 for an ED visit compared to \$50 for an urgent care visit and \$25 for an office visit, the St. Louis Area Business Health Coalition (BHC) found. The BHC found cost-sharing for an ED visit increased 25% from 2010 to 2015. Further, many St. Louis employers have moved to consumer-directed health plans in which cost-sharing is 100% until a deductible is met. These plans comprised nearly 40% of all plans offered in 2015 versus only 15% in 2010.

The Overtreatment Consequence

Many patient advocates, physicians, employers and health plans suggest the greatest benefit of directing patients to less intensive sites of service may be to reduce unnecessary and potentially dangerous overtreatment. For example, **16% of patients who visited a hospital emergency room with an upper respiratory infection received a chest x-ray. At health-system owned urgent cares the rate was 4% and it was less than 2% at freestanding urgent cares. urgent cares.** While the amount of radiation received during a chest x-ray is low, experts advise patients to avoid all unnecessary radiation out of concern for lifetime exposure.

Chart 6 Variation in Price by Site of Service for Visit for Upper Respiratory Infection

Primary Care Office	\$79
Freestanding or Independent Urgent Care	\$133
Health-System Owned Urgent Care	\$195
Traditional ED	\$681

MHI 2014, Debt.org 2014

Next Steps

As mentioned, MHI is continuing to work with those who use, provide and pay for health care to reduce unnecessary ED utilization and support patients in receiving the best possible care in the best possible setting. Additional data and specific opportunities for collaboration will be available in the coming months. To join the effort, contact Louise at lprobst@stlbhc.org.

Acknowledgements

MHI's work to reduce avoidable emergency department visits is made possible through the support of the John and Laura Arnold Foundation, the Purchaser Value Network and its Champions for Health Care Value and Friends.

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About the Midwest Health Initiative

Founded by the St. Louis Area Business Health Coalition and health plan leaders in 2010, the Midwest Health Initiative is St. Louis' regional health improvement collaborative. It brings together health care providers, purchasers, and patients who believe in the power of information and collaboration to improve health and the quality and affordability of health care.

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