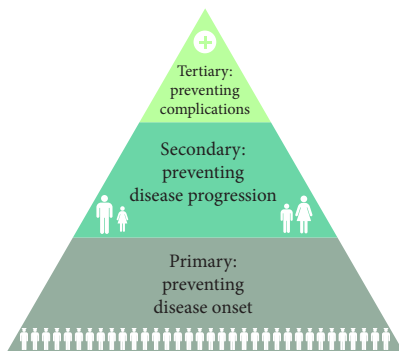




Trajectories

Aim Toward Outcomes

DECEMBER 2014 ■ IT TAKES A COMMUNITY – POPULATION HEALTH IN MISSOURI



Prevention is a key construct of population health – preventing onset or worsening of injury or illness for specific groups of people or an entire community.

Primary prevention includes broad-based strategies for preventing disease, injury or other conditions. Education and policies to promote exercise, and avoid texting while driving, are examples of primary prevention.

Secondary prevention strategies are intended to identify the early onset of risks or symptoms of disease. Health screenings are a classic secondary prevention strategy.

Tertiary prevention strategies are targeted interventions to avoid progression or complications for people already diagnosed with a disease or condition. Managing diabetes, including medications, nutrition and foot care, are examples of tertiary prevention.¹



Trajectories is a monthly publication highlighting Missouri hospital initiatives to improve the health of their communities, and the experience and quality of care provided to their patients, as well as the efficiency of care delivered.

The adoption of the Triple Aim framework has introduced a new health planning element to many hospitals — population health. Population health is defined as “health outcomes of a group of individuals, including the distribution of such outcomes within the group.”²

Population health connotes two main concepts — community health status and care coordination. Both are important goals for delivering care in this new health care environment. Improving community health status is an example of population-based primary prevention; that is, strategies to promote improved health status for an entire community. However, most health care providers are introduced to their community’s health status through the vast number of patients entering through the doors of the emergency department or physician clinics. This is where secondary and tertiary prevention begin — coordinating the care for newly diagnosed patients or those with multiple chronic conditions to prevent worsening of symptoms or progression of disease.

Population Health Management: Care Coordination

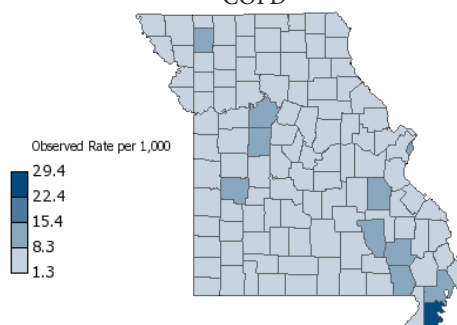
Care coordination broadly describes managing the intersection and transitions between multiple entries and points of care required for people living with one or more complex chronic diseases. Managing complex chronic diseases presents challenges for health care providers and the patient and family. Subtle changes in medication, therapy, symptoms or health status require careful and continual monitoring of every patient with complex chronic conditions.

A complete transfer of clinical information among providers across all settings, as well as access to patient education tools for individuals with differing levels of health literacy, are critical requirements of care coordination. However, access to information is only one component of secondary and tertiary prevention.

As noted in this month’s edition of *HIDI HealthStats*, several measures, including readmissions

Triple AIM Data

Management of Chronic Conditions
COPD



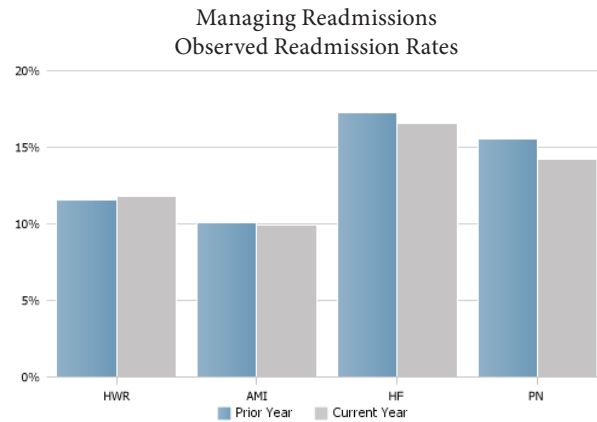
Hospital Industry Data Institute. June 2013 to May 2014.

and preventable hospitalizations, can serve as indicators of care coordination. Readmissions within 30, 60 or 90 days of discharge from a facility may serve as an indication that care management is not adequate. There are several causes, including patients or caregivers having limited access to, or understanding of, medication regimens or at-home therapy. In addition, lack of coordination and communication between the patient, family and providers increases the likelihood a readmission will occur. Many hospital-based programs developed through the Hospital Engagement Network have demonstrated reduced readmission rates; however, that is only the first step. Strategies that are focused on engagement with the patient and family to coordinate between primary care, acute care and post-acute care providers are the foundation of care coordination and reducing readmissions.

Similarly, monitoring preventable hospitalizations provides information about conditions that, with increased primary care focus, may have been prevented. Three conditions — congestive heart failure (18,573), chronic obstructive pulmonary disease (20,671) and bacterial pneumonia (18,516) — accounted for a total of 57,760 preventable hospitalizations (more than 63 percent) in Missouri in fiscal year 2013.

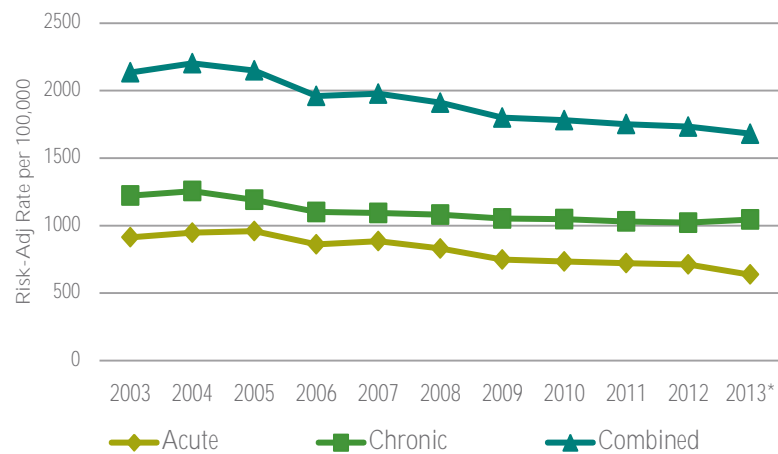
Historically, social workers and case managers have coordinated care between the acute care and post-acute care settings, while discharge nurses have recommended the necessary follow-up primary care visits for patients with complex health needs. Today, new models of care are being explored. In an effort to halt the progression of disease or illness, the health care workforce is adapting to care coordination and evaluating new models of care based on initiatives that prevent readmissions and unnecessary hospitalizations.

Triple AIM Data

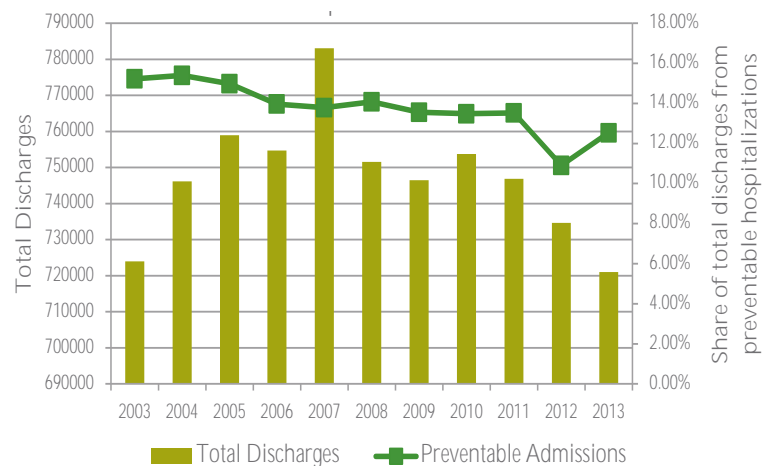


Hospital Industry Data Institute. June 2013 to May 2014.

Preventable Admission Rates



Total Hospitalizations



Preventable hospitalization graphs: HIDI AnalyticAdvantage® PLUS. 2003 – 2013. AHRQ Prevention Quality Indicators. *2013 Preventable Admissions were calculated using AHRQ version 4.6.

According to a September 2014 survey (Figure 1) among Missouri hospital chief financial officers, health and life/wellness coaches, as well as care coordinators, are being added to the multidisciplinary health care team. Workforce innovation and delivery model change are fundamental to preventing the progression of, or complications from, chronic diseases among patient populations suffering from complex medical conditions.

Care Coordination: Missouri Spotlight

In the Kansas City metro area, a unique community health worker program is demonstrating the benefits of collaboration. Led by the KC CARE Clinic, the Community Health Worker Program represents an extensive collaborative partnership between five safety-net clinics, two large hospital systems — Saint Luke’s Health System and University of Kansas Medical Center — and several community-based organizations. The Community Health Worker Program targets patients who have significant care access and participation barriers, and who are at high risk of falling out of care.

Dennis Dunmyer, KC CARE Clinic vice president of behavioral health

and community programs, and director of the Community Health Worker Program stated, “From our perspective, community health workers are the true embodiment of the Triple Aim framework. As part of the communities they serve, they are uniquely positioned to improve patient health by providing high-quality, individualized service. We’ve then seen this service translate into measurable cost savings for hospital systems.”

According to Liz Cessor, system vice president of mission and community

clinical integration, the collaboration between Saint Luke’s Health System and the KC Care Clinic provides a critical need in the emergency department by identifying patients who do not have a primary care provider. Cessor stated, “Every morning, the community care workers and care team identify patients from the previous day who do not have a primary care provider. The community health workers then go the extra mile in setting up an appointment in a safety-net clinic in the zip code where the patient lives, meet them at the clinic, and

Figure 1: Survey Results

Has your hospital developed new staff roles to support care coordination in the various primary, acute and post-acute care settings?

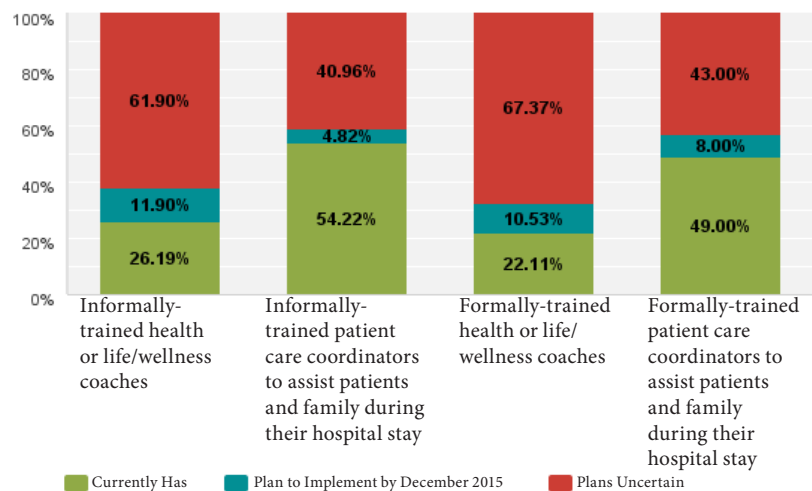
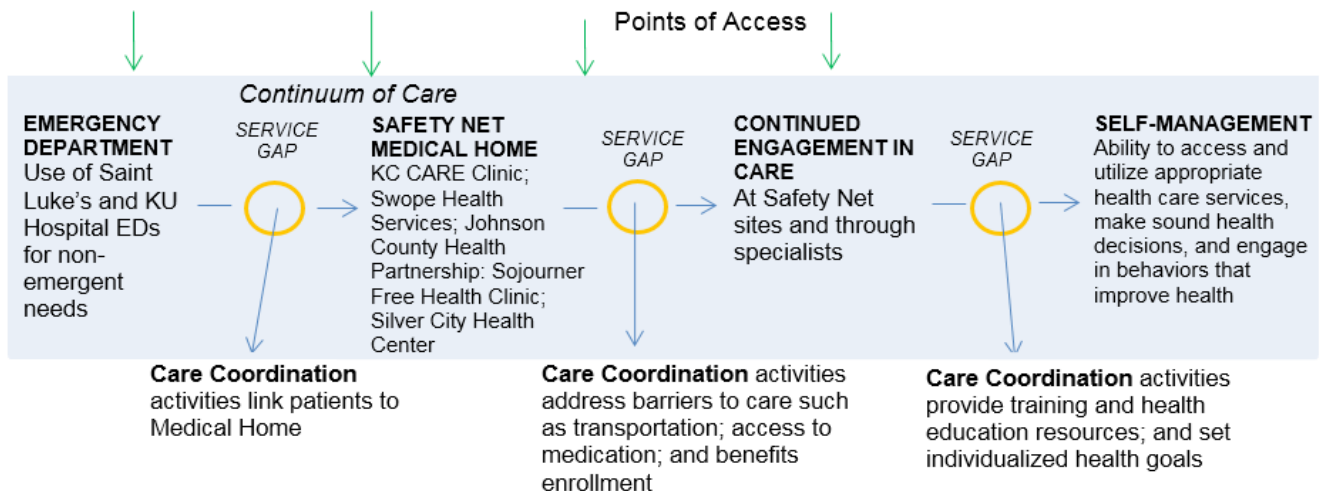


Figure 2: Community Health Worker Program



follow them through their first visit. Because of this great collaboration, we have seen a large decrease in patients entering the emergency department multiple times for nonacute care.”

The data from calendar year 2013 suggest promising results. Among the patients fully enrolled in the community health worker program (n=68), 100 percent had a confirmed medical home follow-up visit. In addition to patients fully-enrolled in the program, additional patients were referred to the community health workers for a single instance of support (n=355). Among the 423 patients who accessed community health workers, an 83 percent reduction in ED utilization was reported between the three months preceding (607 ED visits) the intervention (use of the community health worker program) and the three months following (102 visits) the intervention. A 74 percent decrease in ED utilization was demonstrated when the timeframe was extended to six-months preceding (719 ED visits) and following the intervention (184 ED visits).

Population Health Improvement: Community Health

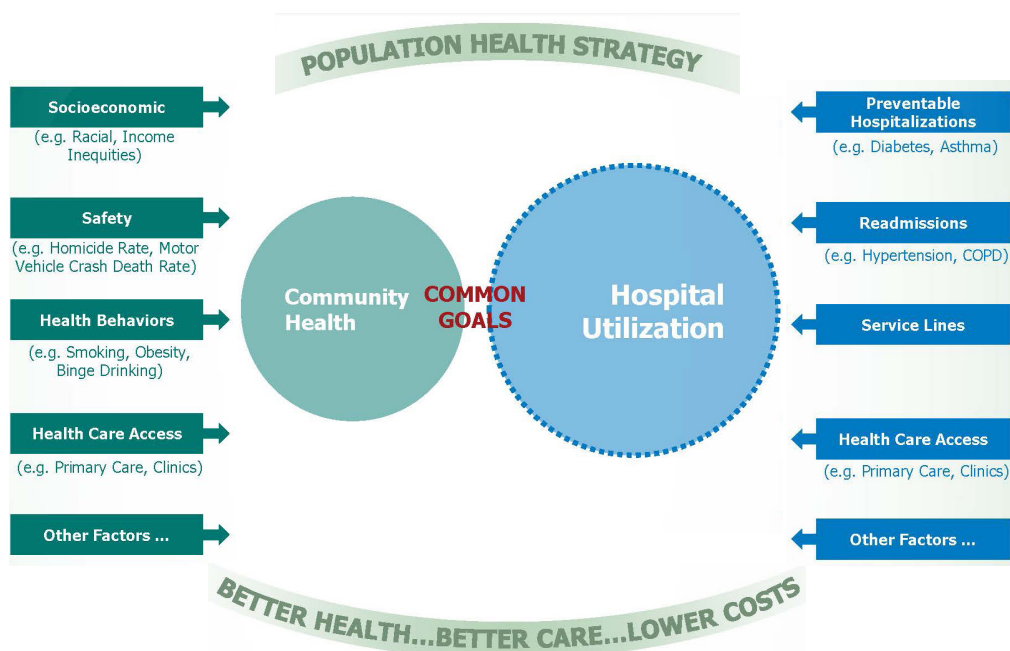
Reducing readmissions and preventing hospitalizations for chronic conditions is an appropriate, but narrow, population health management role for hospitals. The rich information collected through the community health needs assessment helps establish strategy, priorities and goals to improve community health status (see Pages 7-8). Aligning community health information with hospital utilization data provides the basis for primary, secondary and tertiary prevention strategy — the essence of population health.

A study released earlier this year provided an analysis of potentially preventable diseases from the five leading causes of death in the United States from 2008 – 2010 (Figure 3).³

Figure 3: Potentially Preventable Deaths (prior to age 80 years) 2008-2010

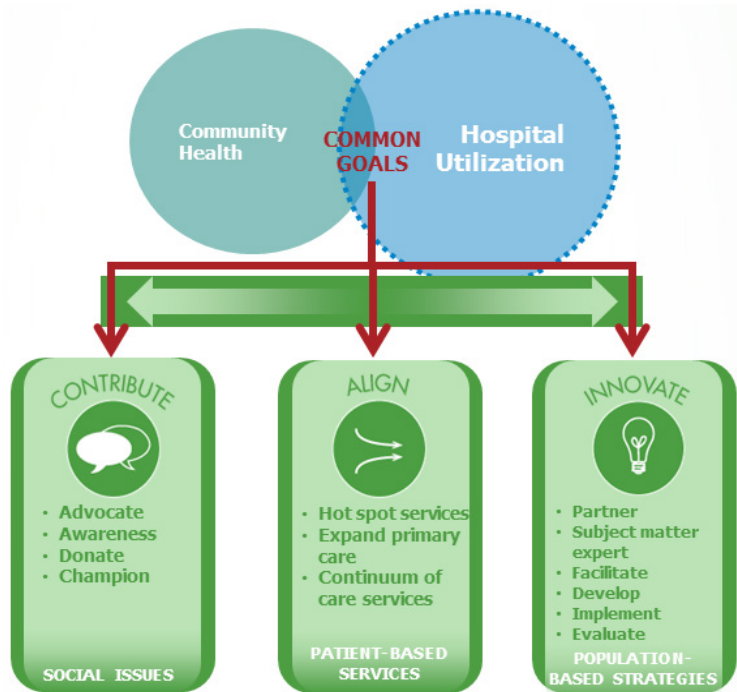
	Diseases of the heart	Cancer	Chronic lower respiratory diseases	Cerebro-vascular disease (stroke)	Un-intentional injuries	Total
U.S.	91,757	84,443	28,831	16,973	36,836	258,840
Missouri	2,862	2,581	1,149	440	1,195	8,227

Yoon, Bastian, Anderson, Collins, & Jaffe. May, 2, 2014. 2014.



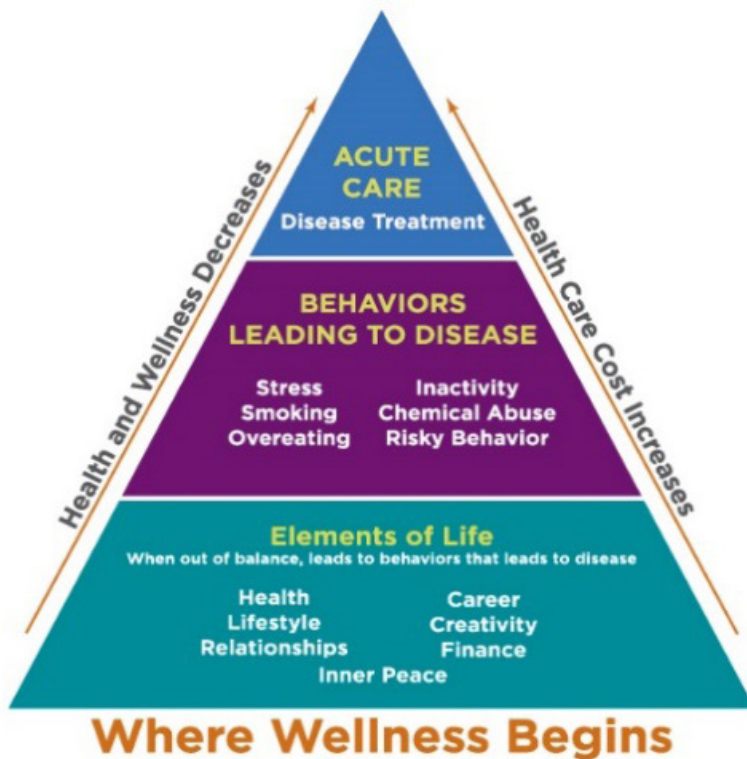
Missouri Hospital Association. 2014.

Population Health Strategy



Missouri Hospital Association. 2014.

Figure 4: Levels of Health and Wellness



Mosaic Life Care. 2014

Data about communities are available through a variety of national and state sources, expediting community health needs assessments and eliminating the need for significant additional research. A county-based compilation of health factors and health behaviors is available to hospitals with *HIDI Analytic Advantage® PLUS*. As noted in the December issue of *HIDI HealthStats*, hospital utilization data and national population-based county health data are highly correlated between health outcomes and health factors.

The challenge for clinicians and health care leaders is to develop effective methods of aligning health care services and community health initiatives into a singular population health strategy aimed at improving prevention. There is opportunity for innovation, efficiency and improved health outcomes. This is the essence of the Triple Aim framework. For example, a hospital with a higher-than-state average in smoking, obesity, preventable hospitalizations, readmissions and deaths due to heart failure should align the community-based wellness and quality improvement initiatives to identify specific populations, neighborhoods and interventions to improve health outcomes. A targeted secondary or tertiary prevention strategy using community health workers and primary care providers to manage congestive heart failure in a specific, high-risk neighborhood may result in a decrease in preventable hospitalizations, readmissions and, within that target population, improved health status.

Missouri Spotlight

Mosaic Life Care (formerly Heartland Health) pursues a comprehensive approach to community and population health with initiatives strategically targeted toward three distinct, yet intertwined, levels of health and wellness, viewed much like a pyramid (Figure 4).

At the top of the pyramid is acute care, where population health benefits from the organization's work as an accountable care organization. A focus on quality care, expanded care management efforts and robust technology has resulted in reduced per-beneficiary, per-month Medicare spending by nearly 6 percent. This improvement is significant. Mosaic became one of only 52 ACOs to receive shared savings from the Centers for Medicare & Medicaid Services, and one of only two in the country that did so while assuming risk for both investment and population health risk.

The mid-level of the care pyramid includes behaviors, such as obesity and sedentary lifestyle, which lead to diseases requiring acute care. January 2015 will mark the 10th year of Mosaic Life Care's Pound Plunge. The program has helped more than 16,000 individuals drop nearly 100,000 pounds, while helping them learn how to adopt a healthier lifestyle.

The base of the pyramid is where the elements of life reside — health, wellness, lifestyle, career, relationships, creativity and finance. Disruptions in these areas lead to the behaviors which result in disease. Mosaic Life Care has implemented a team-based care approach adding life coaches, wellness specialists and other professionals to the clinical team.

According to Curtis Kretzinger, chief operating officer for Mosaic Life Care, "It is precisely this comprehensive and expanded approach to population health and wellness, coupled with achievement within the Triple Aim, which led Mosaic Life Care to develop the life care model introducing a new kind of health care to the marketplace — a model connected to the hearts, minds and spirits of their consumers to engage them and develop a long-term relationship of helping them become the healthiest version of themselves."

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¹Leavell, H. & Clark, E. (1953). *Textbook of Preventive Medicine*.

²Kindig, D. & Stoddart, D. (2003). *Models for population health*. American Journal of Public Health 93(3), p. 380-383. Retrieved September 25, 2014 from <http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.93.3.380>

³Yoon, Bastian, Anderson, Collins, & Jaffe. (May, 2, 2014). *Potentially preventable deaths from the five leading causes of death – United States, 2008-2010*. Morbidity and Mortality Weekly Report, 63(17). U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

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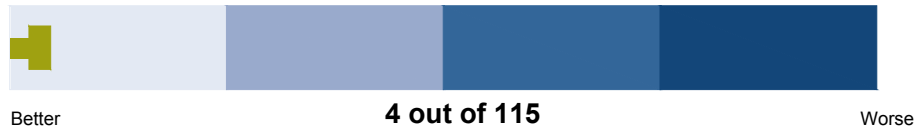
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Health Behaviors

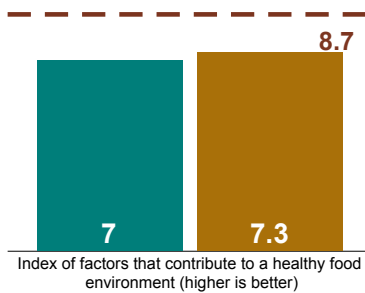
Boone County



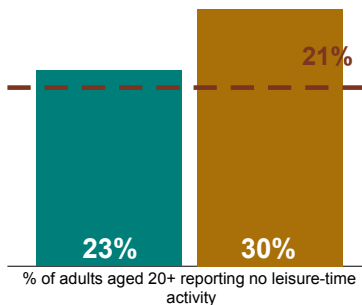
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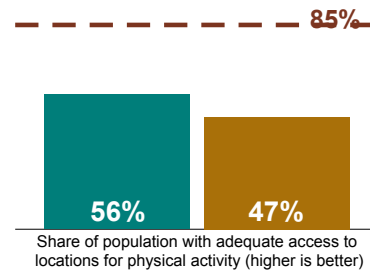
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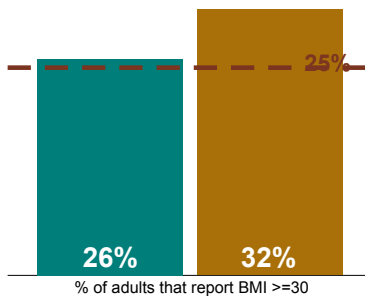
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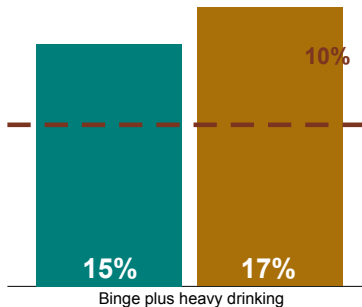
Access to Exercise Opportunities



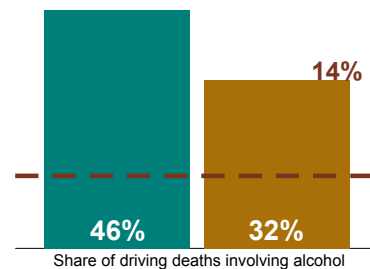
Adult Obesity



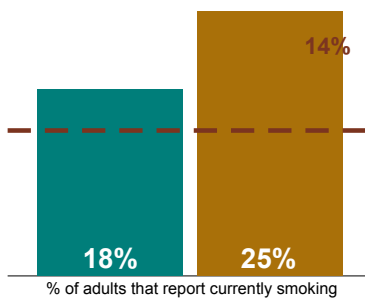
Excessive Drinking



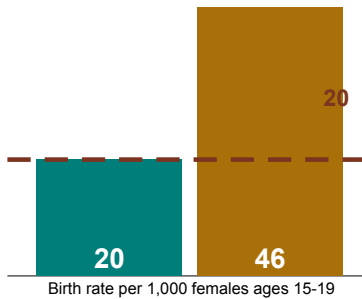
Alcohol-Impaired Driving Deaths



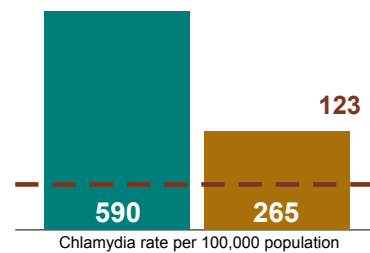
Adult Smoking



Teen Births

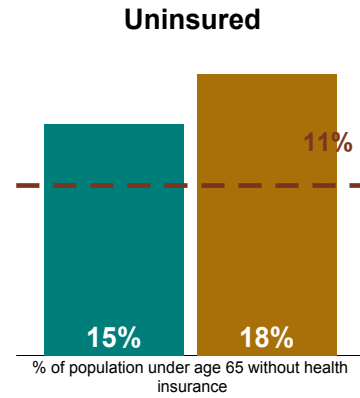
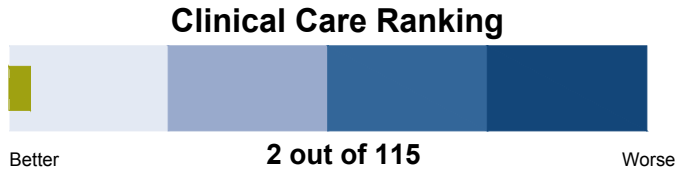


Sexually Transmitted Infections

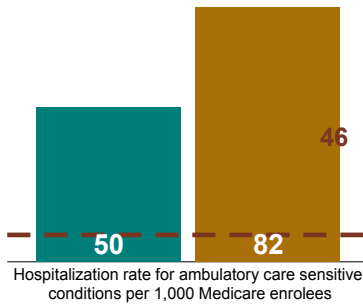


Boone County Missouri National Benchmark (90th Percentile)

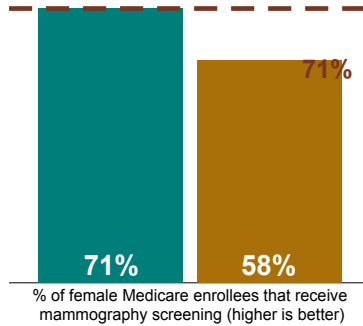
Clinical Care
Boone County



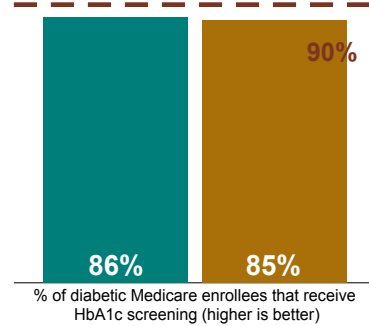
Preventable Hospital Stays



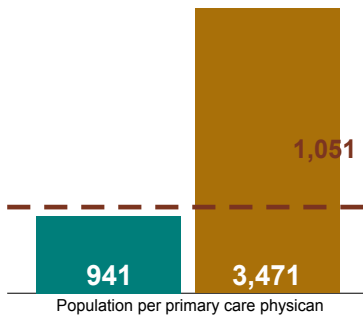
Mammography Screening



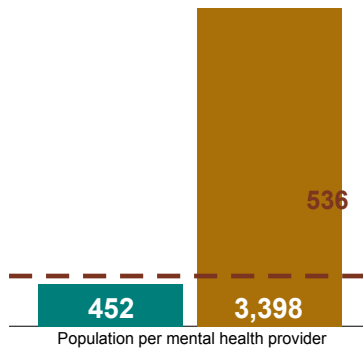
Diabetic Screening



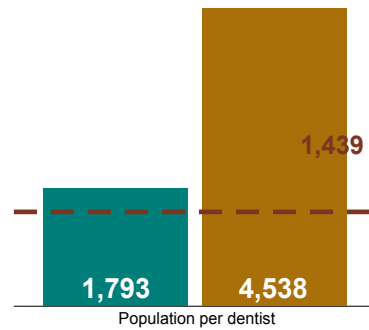
Primary Care Physicians



Mental Health Providers



Dentists



■ Boone County
 ■ Missouri
 - - - National Benchmark (90th Percentile)