

## Common Threads

Throughout this assessment, common threads often emerged in discussion around data and findings. While not explicitly identified as priority health issues, these common threads remained consistent across the Ozarks Health Commission (OHC) Region.

In studying these common threads, the OHC used the Socioecological Model<sup>1</sup> as a framework to examine the impact on health issues. The Socioecological Model recognizes a wide range of factors working together to impact health and includes influences at the individual, interpersonal, organizational, community, and policy levels. Each of these common threads can impact health issues at levels throughout the model. Community partners hoping to impact the common threads should consider action throughout the spectrum of the model. Throughout the common threads section, the Socioecological Model will be referenced to suggest possible strategies and provide context.

### Socioecological Model<sup>2</sup>



<sup>1</sup> Centers for Disease Control and Prevention, <http://www.cdc.gov/violenceprevention/overview/socialecologicalmodel.html>

<sup>2</sup> Agency for Healthcare Research and Quality, <http://www.ahrq.gov/professionals/prevention-chroniccare/resources/clinical-community-relationships-measures-atlas/ccrm-atlas3.html>



## Access to Appropriate Care

**The understanding of and the ability to access appropriate care and treatment is critical to improve and maintain quality of life while reducing the burden of disease.**

Accessing healthcare has always been a struggle within our country, and has long been recognized as an issue, especially for vulnerable populations. Out of this need, safety net providers, such as Federally Qualified Health Centers and Rural Health Clinics, have arisen. Additionally, various federal and state programs have been implemented and changed to provide increased access to care: most notably Medicare, Medicaid and the Affordable Care Act. Despite numerous efforts, access to appropriate health care remains a concern for many. The OHC Region faces challenges to accessing care, with 16.84%—an estimated 576,000 people—without health insurance. Those without care face obvious health challenges since they are not as able to adequately treat acute issues or chronic diseases, resulting in further exacerbation of the condition, reduced quality of life, and early death.<sup>3</sup>

Accessing care can be a multi-faceted and complex challenge that spans all diseases and conditions and is closely connected with each of the six Assessed Health Issues. There is concerning data within the OHC Region. The rate of preventable hospital events considered to be ambulatory care sensitive in the OHC Region is 51.3 per 1,000 Medicare enrollees, compared with a national rate of 59.2. There are fewer primary care physicians in the OHC Region: 63.6 per 100,000, compared to the nation's rate of 74.5. Most alarming is the percent of people living in a designated Health Professional Shortage Area, which is 97.4%, compared to 34.1% of the national population.

The effect of a lack of access is significant cost to both the individuals and communities. A 2014 Kaiser Family Foundation Report sums up the impact: “In 2013, the cost of ‘uncompensated care’ provided to uninsured individuals was \$84.9 billion. Uncompensated care includes health care services without a direct source of payment. In addition, people who are uninsured paid an additional \$25.8 billion out-of-pocket for their care.”<sup>4</sup>

While having access to care is vital to improving treatment and health, accessing appropriate care is equally important. This certainly includes ensuring individuals have a plan to cover the cost of care and making sure that there is appropriate provider coverage in communities; however, another important component is changing the culture to understand how to access care appropriately. Too

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<sup>3</sup> U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, <https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services>

<sup>4</sup> Kaiser Family Foundation, <http://kff.org/uninsured/report/uncompensated-care-for-the-uninsured-in-a-detailed-examination/>

many times individuals are using the emergency department for non-emergent issues, as is shown in the primary hospital data. While everyone can use the emergency department for non-emergent issues, this makes the emergency department less efficient; the department, facility and staff are designed to treat emergent health needs.

Improving access to appropriate care will require changes at multiple levels of influence, including individual, community, organizational and policy levels, as indicated by the Socioecological Model. Efforts to address each assessed health issue should a) focus on improving the systems around the individual to improve health and access to appropriate care, and b) work to modify the way that individuals consume health services to ensure care is effective and efficient.



## Social Determinants of Health

**The interconnectedness of health, education, economic viability, housing and quality of life impact an individual, family, and community's ability to thrive.**

Throughout the world, our country, and in our own communities, there are factors existing that affect the ability of people to live a life that provides the best opportunity to be healthy. Health, as defined by the World Health Organization, can be considered a state of physical, mental, and social well-being and not merely the absence of disease or infirmity. In considering the interconnectedness of the multitude of factors that affect health for people, social determinants of health are often described. The Institute of Medicine suggests the following description:

Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as “place.”<sup>5</sup> In addition to the more material attributes of “place,” the patterns of social engagement and sense of security and well-being are also affected by where people live. Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable

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<sup>5</sup> Gornick, Marian E., “Disparities in Health Care: Methods for Studying the Effects of Race, Ethnicity, and SES on Access, Use, and Quality of health care”, <http://www.iom.edu/~media/Files/Activity%20Files/Quality/NHDRGuidance/DisparitiesGornick.pdf>

## Regional Health Assessment

housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins.

Improvements in population health may be achieved by assessing, understanding, and addressing root causes of poor health, which can often be traced to include the social determinants of health. This assessment analyzed the following social determinants of health:

- Unemployment
- Income level
- Poverty rate
- Population receiving SNAP benefits
- Population on Medicaid
- Free and reduced lunch rate
- Education level

Although there are other factors that affect health, these are some of the most widely used and accepted indicators of determining the health of a person. Achieving a state of health and desired quality of life requires economic stability, social and community connection, safe living arrangements, access to quality and appropriate health care, and much more. Just like many aspects of life that deal with resource availability, a good state of health is often associated with more readily available resources. Poor health or a lack of health affects each and every one of us by way of personal associations and community health achievement, which ultimately affects the ability of an individual and our community to thrive

A good example of this is the employment sector. Employers struggle with recruiting and retaining individuals to work decent-waged jobs in some scenarios because potential employees struggle with unreliable transportation or health concerns caused by poor living conditions or lack of access to healthy foods. Communities can struggle to attract businesses that pay good wages and offer good jobs because employers do not want to reside in a place where the population is burdened by higher-than-average prevalence of poor health indicators such as high rates of tobacco use, obesity, heart disease and lung disease. Businesses are attracted to communities where neighborhoods thrive, educational attainment is high, and employees are healthy and thriving—and therefore not a threat to the bottom line due to high healthcare costs as a result of preventable illness. The unemployment rate across the OHC Region (5.4%) varies by county, from 4.2% in Washington County, AR to 8.7% in Taney County, MO. For the OHC Region, the social determinants of health have improved since the previous report was published in 2016. The rate of families earning over \$75,000 per year has increased from 25% to 29.29%. The rate of the population age 25 or older with an associate degree increased from 25% to 28.35%. The rate of the population age 25 or older with a high school diploma increased from 84% to 87.17%.

Social determinants of health tell us a story about the way that people live and, by extension, how their lives affect the community. Ultimately, where we live, where we work, and our educational



attainment level have huge impacts on the quality and length of our lives. Communities that consider the health impacts of policy decisions can make a positive impact on the social determinants of health.

In considering how to apply the Socioecological Model to address the social determinants of health, it is important to understand that many of these factors are related, often in a cyclical fashion. For example, low education levels can lead to challenges finding and maintaining steady employment, which can lead to poverty, which can lead to a lack of access to educational opportunities. Armed with this understanding, the Socioecological Model can be applied to a single social determinant, such as education. Interventions should target multiple levels of influence. Yet, the greatest population health impact will be made when policy level changes are made to target the social determinants of health.



## Tobacco Use

**High prevalence in tobacco use results in some of the biggest health concerns related to lung disease, cardiovascular disease and mental health. Interventions need to range from individual behavior change to policy change.**

Awareness regarding the ill-health effects of tobacco use has grown significantly since the Surgeon General's Report on Smoking and Health was published in 1964. The report laid the foundation for tobacco control efforts in the United States. However, as the leading cause of preventable death in the United States, there is still a great deal of work to be done.

According to the most recent Surgeon General's report published in 2014, smoking causes 87% of all lung cancer deaths, 32% of deaths due to coronary heart disease, and is responsible for 79% of all cases of chronic obstructive pulmonary disease. Nationally, 18% of adults are tobacco users. Within the OHC Region, 24% of residents use tobacco. Additionally, the prevalence in each of the six communities identified in this report is higher than the national average. In order to reduce the threat of death and poor quality of life among residents in the OHC region, it is imperative that efforts are taken to reduce tobacco use.

While the evidence reveals that tobacco use can lead to complex physiological health issues, it can also complicate existing health issues. Those dealing with mental illness may smoke to curtail the severity of their mental health symptoms. According to the most recently published Centers for Disease Control and Prevention (CDC) Vital Signs report on smoking among adults with mental illness, 36% of adults with mental illness were current smokers, which is much higher than those

without a mental illness (21%). Additionally, 48% of people with a mental illness living below the poverty level smoke cigarettes.<sup>6</sup>

Although data does not currently exist for the OHC Region regarding tobacco use among adults with mental illness, it is safe to assume that smoking in this population is significantly high considering the high rates of depression (18.9% compared to 15.5% nationally) and poverty (18.6% compared to 15% nationally) in the Region. People with mental illness may not have access to tobacco cessation services and may smoke more frequently than the general population. Therefore, it is important to monitor tobacco use across all subpopulations and use evidence-based interventions at multiple levels of influence.

According to the Socioecological Model, there are multiple levels of influence that affect a person's behavior. The levels of influence include individual, interpersonal, organizational, community, and public policy. Interventions targeting the individual level include raising awareness about the harms of first, second, and third-hand smoke, providing tobacco cessation classes and offering various modes of counseling to stay tobacco-free. Tobacco cessation classes may also serve as an interpersonal intervention because of the social support offered in a group setting. Organizational interventions may include tobacco-free workplace policies, as well as insurance companies increasing rates for tobacco users. At the community level, successful strategies include changing cultural norms through high-powered, cohesive, and consistent media campaigns. Finally, policy-level interventions have the greatest impact. Policy advocacy at the local, state and national levels may include increasing tobacco tax, improving warning labels on tobacco products, implementing indoor air ordinances, regulating smoking in schools and implementing comprehensive tobacco control programs.



## Physical Activity and Nutrition

**Good nutrition, regular physical activity, and a healthy body size are important in maintaining health and well-being and for preventing health conditions such as cardiovascular disease, diabetes, and cancer.**

Obesity continues to be a growing issue for the physical and economic health of our nation. Currently, 27.1% of adults are obese, nationally. Within the OHC region, 32.2% of adults are obese.

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<sup>6</sup> Centers for Disease Control and Prevention, [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6205a2.htm?s\\_cid=mm6205a2\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6205a2.htm?s_cid=mm6205a2_w)

The ramifications for this can be severe. Obesity contributes to the exacerbation of many chronic conditions including cardiovascular disease, diabetes, and cancer. According to the CDC, chronic diseases are responsible for 7 out of 10 deaths each year and account for 86% of our nation's health care costs. The trending increase can be attributed to the American lifestyle, with most Americans eating more and moving less.

Regular physical activity improves overall health and well-being and reduces the risk of chronic diseases and obesity. More than 80% of adults and adolescents do not meet the guidelines for physical activity. People who are physically active tend to live longer and have lower risk for cardiovascular disease, diabetes, depression, and cancer. Physical activity can also help with weight control, and inactive adults have a higher risk for premature death.

Poor diets are not only a risk factor for obesity, but for other chronic diseases as well. For example, diets high in added sugar lead to health issues such as obesity, diabetes, and cardiovascular disease. High dietary fat intake is a risk factor for the development of high blood lipid levels, and high dietary salt intake is a risk factor for the development of high blood pressure. In turn, high blood lipid levels and high blood pressure are significant risk factors for cardiovascular disease and other chronic diseases. Fewer than 1 in 3 adults, and an even lower proportion of adolescents, eat the recommended amount of vegetables each day.

As the Socioecological Model describes, there are multiple levels of influence that affect a person's behavior. Interventions targeting the individual level include raising awareness about the harms of obesity, proper nutrition and the importance of regular physical activity. Exercise and nutrition classes may also serve as an interpersonal intervention because of the social support offered in a group setting. Organizational interventions may include healthy food policies, such as vending machine policies. At the community level, successful strategies include changing cultural norms through a pedestrian-friendly community that encourages walking and biking to essential resources and addressing food access concerns. Finally, policy level interventions have the greatest impact. Policy advocacy at the local, state, and national levels may include increasing sugary beverage taxes, nutrition labeling, regulating food advertisement, regulating nutrition and physical activity policies in schools, and implementing complete streets ordinances or bicycle and pedestrian friendly policies.



## Mental Health

**Mental health is inextricably linked to physical health. Poor mental health can have an impact on behaviors that result in poor physical health.**

The linkages between mental health conditions and physical health are still not totally understood. It

is tempting to make clear distinctions between the body and the mind, but evidence continues to emerge that we should not ignore this interconnectedness and that we must acknowledge that the two cannot be thought of as separate. We must also acknowledge that there is not a simple model that explains this relationship. Metaphorically, we cannot answer which comes first, the chicken or the egg. Poor physical health can lead to poor mental health. Conversely, poor mental health can contribute to behaviors that increase one's risk for chronic health conditions.

Mental health is a common thread in many chronic health conditions. Depression has been linked to higher rates of cardiovascular disease and diabetes. Additionally, persons with depression tend to engage in more risk behaviors for these diseases—such as smoking, poor diet, or lack of exercise—than persons without depression.<sup>7</sup> A 2006 study suggests that 80% of those diagnosed with schizophrenia use tobacco products.<sup>8</sup> A growing body of evidence suggests that the lack of social connectedness, particularly in older adults, contributes to poor health outcomes.

While the relationship between mental health and physical health is becoming clearer, those connections remain murky and solutions to treating the mind and body together remain elusive. But what is becoming clear is that we can no longer largely rely on providing treatment for mental health issues through our emergency departments and our criminal justice system. Mental health issues need to be addressed before crisis is reached. Community leaders need to evaluate the causes of mental illness and take preventive measures to ensure that people live in an environment that contributes to stability of body and mind.

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<sup>7</sup> Katon WJ., "Clinical and health services relationships between major depression, depressive symptoms, and general medical illness", <http://www.ncbi.nlm.nih.gov/pubmed/12893098>

<sup>8</sup> Keltner, Norman L.; Grant, Joan S., Perspectives in Psychiatric Care - "Smoke, Smoke, Smoke That Cigarette", <http://onlinelibrary.wiley.com/doi/10.1111/j.1744-6163.2006.00085.x/abstract>