NATIONAL PARTNERSHIP FOR ACTION
to End Health Disparities

# Heartland RHEC Blueprint

# Table of Contents

# Introduction

The United States is among the richest countries in the world, yet disparities in health and healthcare continue to exist for many of its vulnerable populations. These persistent and pervasive disparities carry a high societal burden in terms of the loss of valuable resources, such as financial capital, healthy children and families, and workforce capacity.

A **health disparity** ***(the issue)*** is a particular type of health difference that is closely linked with social or economic disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater social and economic obstacles to health and a clean environment based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health, cognitive, sensory, or physical disability; sexual orientation; geographic location; or other characteristics historically linked to discrimination or exclusion. [1]

According to the World Health Organization, a person's health is shaped by the conditions in which they are *"born, grow, live, work and age, including the health system,"* and *"distribution of resources at global, national and local levels."* *http://www.who.int/social_determinants/en/*

If the nation is alleviated of health or health care disparities, **health equity** ***(the vision)*** will be achieved. Health equity is attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and healthcare disparities.

Acknowledging that persistent health disparities are the manifestation of and interplay of complex factors is critical to solving these problems. It is only as we develop a fuller understanding of the scope and magnitude of factors affecting health outcomes and evidence for what works to reduce disparities that the most effective advancement of appropriate policy and intervention strategies can occur. This will require the combined efforts of governments, academia, institutions, businesses, humanitarian/faith-based organizations, and individuals working across the entire spectrum of public, private, community, and individual enterprise.

Understanding the determinants of health is critical for devising strong public policy and action that promotes health equity and the elimination of health disparities. There is a powerful link between social factors, health and health care. Social and economic policies

[1] U.S. Department of Health and Human Services. Offices of Minority Health. "National Stakeholder Strategy for Achieving Health Equity." 2011. Available online at: http://minorityhealth.hhs.gov/npa/templates/content.aspx?lvl=1&lvlid=33&ID=286

have a direct impact on the health and well-being of those who live, work, learn, and play under those policies. Gender, poverty, socio-economic status, employment, education, food security, housing, transportation, psychological stress, racism, historical trauma, the health system, and other social and economic policies also impact health. Achieving health equity will require addressing the health of all groups and the impacts of all relevant policies on health care. Access to health care, education, employment, the environment, food security and housing can influence health outcomes. These elements are referred to as the **social determinants of health**.

We measure the success of the NPA through:

- Implementation of stated goals and actions
- Increased public and leadership demand for addressing the determinants of health
- Improved policies, procedures, and practices that affect the determinants of health

## National Partnership for Action

In order to close the health gap for the nation's racial, ethnic, and underserved communities, the National Partnership for Action to End Health Disparities (NPA) has been established. The vision for the NPA has been shaped by the voices of over 5, 000 individuals who shared their experiences and expertise through a series of regional conversations and meetings held by the Office of Minority Health (OMH), U.S. Department of Health and Human Services.

The driving force of the NPA is the conviction that a nationally based strategy is needed – one that relies on multiple layers of partnerships across sectors in order to leverage resources and talent. The NPA is the first national, multi-sector, community-and partnership-driven effort on behalf of health equity. The mission of the NPA is to increase the effectiveness of programs that target the elimination of health disparities through the coordination of partners, leaders, and stakeholders committed to action.

## National Stakeholder Strategy

The NPA planning period culminated with the April 8, 2011 release of the National Stakeholder Strategy for Achieving Health Equity (National Stakeholder Strategy), which provides an overarching roadmap for eliminating health disparities through cooperative and strategic actions. The National Stakeholder Strategy was developed through a sequence of activities involving the collaboration of stakeholders from across the country. It was clear by the end of the sequence of activities used to develop the National Stakeholder Strategy that the following five goals were imperative:

| | |
|---|---|
| Goal 1: Awareness | • Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations. |
| Goal 2: Leadership | • Strengthen and broaden leadership for addressing health disparities at all levels. |
| Goal 3: Health System and Life Experience | • Improve health and healthcare outcomes for racial, ethnic, and underserved populations. |
| Goal 4: Cultural and Linguistic Competency | • Improve cultural and linguistic competency and the diversity of the health-related workforce. |
| Goal 5: Data, Research, and Evaluation | • Improve data availability and coordination, utilization, and diffusion of research and evaluation outcomes |

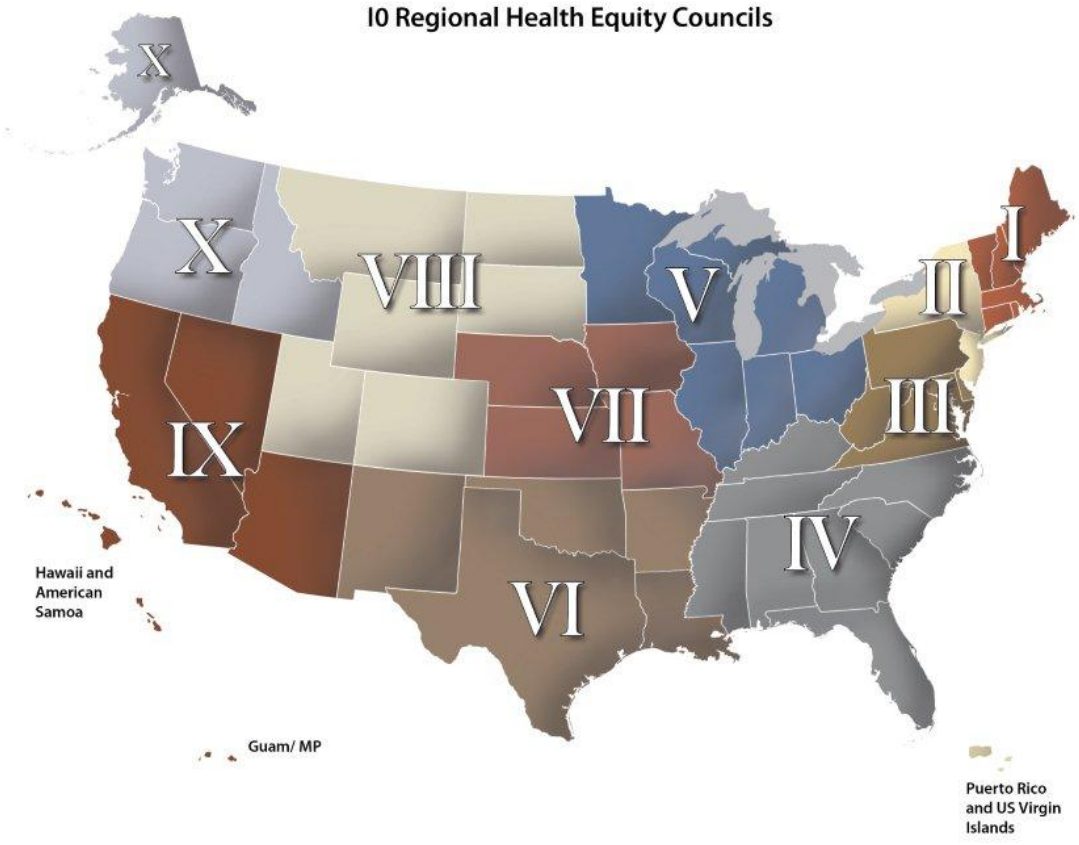
### Federal Commitment

Leadership of the NPA and the NSS has been provided on the federal level through the Federal Interagency Health Equity Team (FIHET). Members of the FIHET are representatives of Health and Human Services (HHS) and the federal departments of Agriculture, Commerce, Defense, Education, Housing and Urban Development, Justice, Labor, Transportation, and Veterans Affairs, as well as from the Environmental Protection Agency and the Consumer Product Safety Commission. The FIHET focuses on fostering communications and activities of the NPA within federal agencies and their partners; and increasing the efficiency and effectiveness of policies and programs at the national, date, tribal, and local levels that work to end health disparities.

The Federal Commitment to the NPA is also demonstrated in a second plan resulting from the NPA, the HHS Action Plan to Reduce Racial and Ethnic Health Disparities, which is tied closely with the National Stakeholder Strategy. Building on provisions of the Affordable Care Act, the HHS Action Plan outlines goals and actions HHS will take to reduce health disparities among racial and ethnic minorities. The HHS Action Plan is being used by HHS agencies to assess the impact of policies and programs on racial and ethnic health disparities, and to promote integrated approaches, evidence-based programs and best practices to reduce these disparities. Ultimately, the intent is for other FIHET member agencies to develop similar agency-specific plans.

### Regional Movements

The Heartland RHEC catchment area encompasses the following states: Iowa, Kansas, Missouri, and Nebraska.




The National Stakeholder Strategy lays the groundwork for RHECs to address improvement actions in their geographic areas and leverage resources, infuse NPA goals and strategies into policies and practices, and share stories and successes with broad constituencies. In order to guide implementation, section four of the NSS introduces the development of Blueprints for Action; an approach that is being realized first at the regional level but will later expand to the state, local, and community levels.

## Regional Blueprint for Action

In alignment with the National Stakeholder Strategy, RHECs have utilized stakeholder input to develop Regional Blueprints. While the Blueprints embody the goals and priorities of the NSS, they are tailored to reflect regional priorities, build on existing strengths, and address existing gaps. Concrete and actionable, the Blueprints guide the Councils' work to implement and monitor collaborative strategies to address the NPA's goal to end health disparities in their region. The intention of the blueprints is to

Our Regional Blueprint guides Region VII efforts in:

- Strengthening health initiatives
- Leveraging resources
- Implementing and monitoring strategies to end health disparities

encourage stakeholders to identify and implement strategies and actions most important for their communities. The blueprints will be living documents that are updated periodically as the RHECs and their work evolve.

The Heartland RHEC has developed this Blueprint for Action to communicate council priorities and engage interested stakeholders at the federal, regional, state, and community levels. Guided by the NSS, this blueprint has been developed with input from various stakeholders within the region to include a common set of regional goals and strategies. The regional blueprints will guide our efforts to strengthen health initiatives, leverage resources, and encourage innovative strategies. This blueprint will advance our mission to increase the effectiveness of programs that target the elimination of health disparities and address the determinants of health through the coordination of partners, leaders, and stakeholders committed to action within the Heartland RHEC catchment area.

# Regional Context: Current Challenges and Strengths

While the Heartland RHEC Blueprint embodies the goals and priorities of the National Stakeholder Strategy, it is tailored to reflect the:

- **Challenges** that Heartland RHEC citizens faces in relation to demographics and geographic distribution, health and healthcare disparities, and the impact of specific determinants of health;
- **Existing strengths** within Heartland RHEC communities that can help us drive strong public policy and actions that promote health equity and the elimination of health disparities.

Everyone benefits when:

- Health and healthcare disparities are eliminated and health equity becomes a reality
- Financial costs are greatly diminished
- Healthy children grow into productive adults
- Healthy adults boost workforce capacity and capability

This initial assessment of regional challenges and strengths, combined with additional RHEC discussion and stakeholder feedback, feeds directly into the regional priorities outlined in the final section of the Blueprint. This process ensures the Blueprint is strategic, reflective of the current conditions, and responsive to the needs of the states, tribes, communities, and individuals represented by the Heartland RHEC.

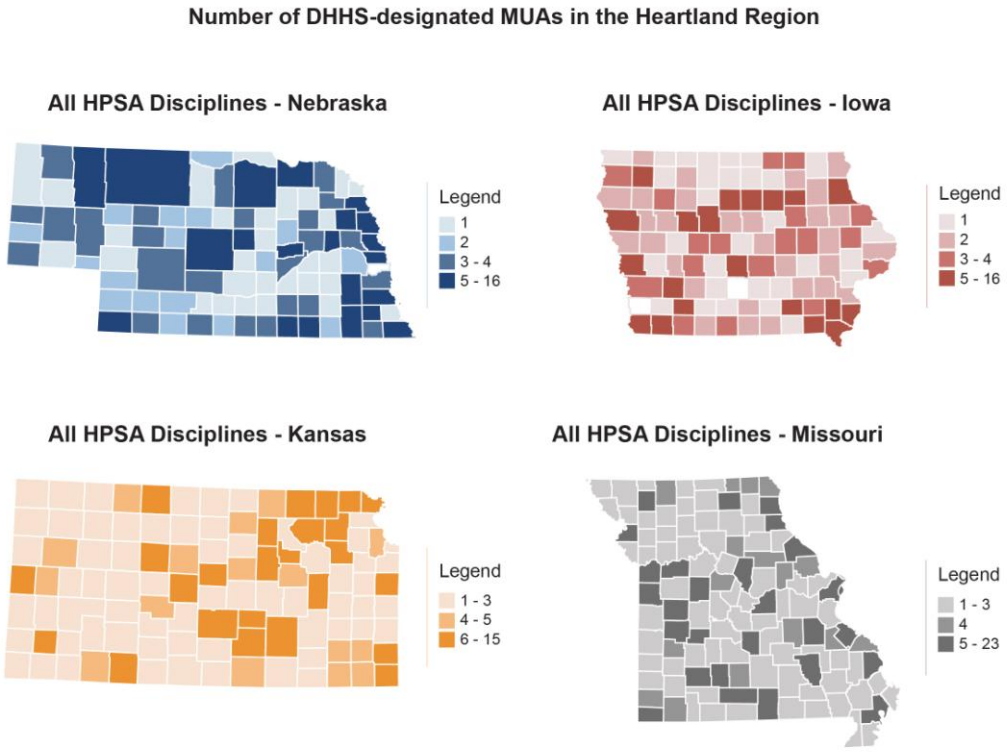
## Regional Challenges

Changing health outcomes for many of the racial and ethnic minorities, the poor, and other underserved populations within Heartland communities is a critical need. Health and healthcare disparities are persistent and pervasive; they are harmful not only to the individuals and communities that experience them, but to the region and the nation as a whole. Yet health is about more than health care; it's also about the social factors that contribute to achieving good health outcomes.

## Demographics and Geographic Distribution within the Region

Understanding the demographics and geographic distribution of population groups is important in planning for varying health needs in different parts of the region. The following demographic conditions uniquely impact the health and healthcare of individuals and communities encompassed in the Heartland:

- **Access to services**[2]: In the Heartland Region, numerous DHHS-designated medically underserved areas (MUAs) exist in mental health, dental, and medical primary care. This access limitation places great strain on our region's population. Of the 13,714,000 citizens living in the four-state area, 2,168,505 are underserved regarding primary care provider access, 5,298,172 are underserved regarding access to mental health practitioners, and 1,628,929 are underserved regarding dental care practitioner access. A great proportion of this access challenge is due to rural demographics in the region – less than ten major metropolitan areas exist in the Heartland Region's roughly 300,000 square miles.




- **Shifting demographics and language needs across all four states**[3]**:** In the last two decades, the Heartland Region has undergone dramatic fluctuation in demographics. The percentage of foreign-born population now living in the region has increased far ahead of the national average. For example, from 1990-2000, the percentage of foreign born immigrants in Nebraska increased by 164.7% - three times the national average of 57.4% for the same time period.

[2] DHHS – HRSA Medically Underserved Areas Datawarehouse: http://datawarehouse.hrsa.gov/hpsadetail.aspx
[3] Source: Table generated by Jeanne Batalova of the MPI Data Hub (Migration Policy Institute). Estimates for 1990 and 2000 are from the US Census Bureau, Summary File 3, 1990 and 2000 US Decennial Censuses; 2010 estimates are from the US Census Bureau's American Community Survey.

| Foreign-Born Population by State Trend Over Time, 1990-2009 | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1990 | 2000 | 2010 | Change: 1990 to 2000 | | Change: 2000 to 2010 | |
| State | Estimate | Estimate | Estimate | Percent Change | Rank | Percent Change | Rank |
| **United States** | **19,767,316** | **31,107,889** | **39,955,854** | **57.4%** | | **28.4%** | |
| Missouri | 83,633 | 151,196 | 232,537 | 80.8% | 26 | 53.8% | 16 |
| Iowa | 43,316 | 91,085 | 139,477 | 110.3% | 15 | 53.1% | 17 |
| Nebraska | 28,198 | 74,638 | 112,178 | 164.7% | 7 | 50.3% | 18 |
| Kansas | 62,840 | 134,735 | 186,942 | 114.4% | 14 | 38.7% | 26 |

- **Landlocked & Limited Geographic Safeguards:** The Heartland Region states are landlocked, whereas the public health and epidemiological profiles of coastal states and great-lakes states vary based on proximity to vast expanses of water. Disease vectors in the Heartland Region can enter from the North, South, East, or West, whereas coastal and mountainous regions have existing geographic safeguards to limit access by epidemiological threats.

## Health and Healthcare Disparities

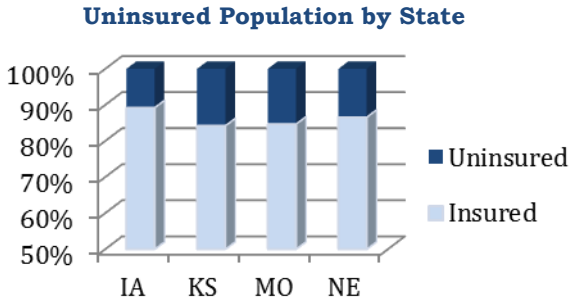
While health care in the United States is among the best in the world, access to quality, affordable health care and preventive care is not consistent across the country. Some individuals and families in the Heartland region may live in an area that has a shortage of doctors, they may not have health insurance or they may receive a lower quality of care because of stereotyping, language barriers or poor health literacy. Disparities in health care further exacerbate disparities in health—it's hard to manage a chronic disease like asthma or diabetes when there isn't a doctor nearby or when a patient is without health insurance.

A snapshot of some of the most critical health and healthcare disparities we face in the Heartland region include disparities in quality of care, disparities in access to care, and barriers in access to care. These include things like uninsured populations, quality gaps in the region, the region's struggle with obesity, and the cost versus outcome paradox.

- **Insurance[4]:** In the Heartland region states, citizens below age 65 suffered a 13.8% average uninsured rate. Detail in the numbers indicated elevated rates among the populations living at or below the poverty level and among immigrant populations in particular.

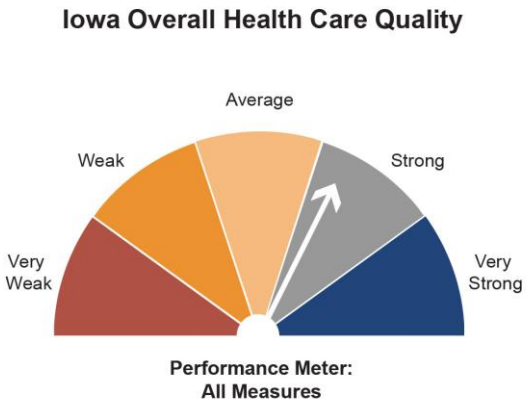
[4] American Community Survey on Small Area Health Insurance Estimates - 2010 data from www.census.gov/hhes/www/sahie

- **Quality of health care[5]:** The Agency for Healthcare Research and Quality's (AHRQ) National Healthcare Quality Report (NHQR) summarizes quality results by state as compared to national averages. The NHQR assesses quality performance across types of care (preventive, acute, chronic), care settings (hospitals, ambulatory care, nursing homes, home health), treatment and management of clinical conditions (cancer, diabetes, heart disease, maternal and child health, respiratory diseases), and specialty focuses (asthma, preventive services, disparities, payer quality, and variance with time). The Heartland Region overall quality by state is shown below, as compared to the national averages, along with discussion of unique strengths and weaknesses of each state.




  - **Nebraska:** Nebraska is on par with the national average for quality, yet the AHRQ reported several key Nebraska quality measures as having fallen from the baseline year. For example, quality measures related to preventive, chronic care, home health, cancer, maternal and child health, and respiratory disease have all fallen since the baseline measurement year. Nebraska did show improvement in nursing home health quality, and recently began reporting diabetes, hospital care, and heart disease.

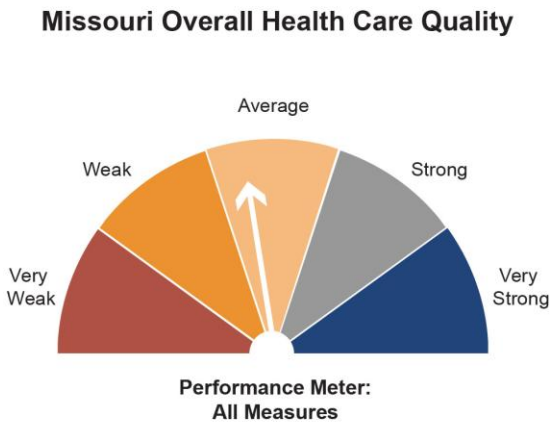

  - **Iowa:** Compared with the national average, Iowa quality scored above average. Individual measure results were mixed, with some improvement in quality related to home health, diabetes, and preventive measures, and some decline over baseline in acute care, hospital care, nursing home care, and cancer care.

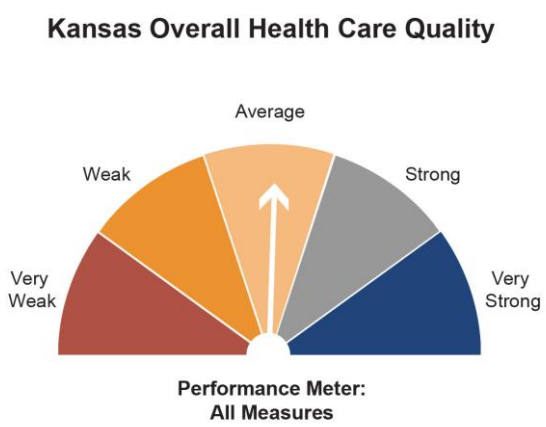



  - **Missouri**: Missouri results were more-or-less equal to national quality results. Missouri showed slight improvement over its baseline measurement set, though no measures really showed marked improvement. Missouri's average may be slightly inflated – the state scored very strong on home

[5] AHRQ NHQR State Snapshots data for 2011. http://statesnapshots.ahrq.gov/snaps11/index.jsp?menuId=1&state=, access date 10/22/2012.

health, which balanced many measures that were weak, like preventive care, cancer,



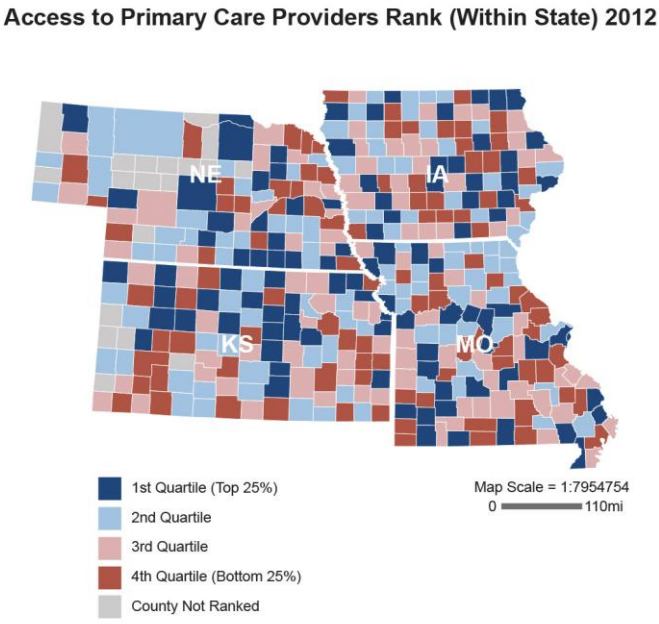




diabetes, and heart disease.

- **Kansas:** Kansas results were more-or-less equal to national results. The state took major steps forward in home health quality, though many clinical areas are still in need of improvement (example: respiratory diseases). The state also fell in quality related to hospital care and nursing home care.

- **Physician Workforce Availability[6]:** In the Heartland Region, Primary Care facilities are staggered throughout the states. Difficulties in attracting primary care providers to rural regions have been reported.

- **Cost vs. Outcomes[7]:** Qualitatively, the United States spends more than any other country per capita, and adjusted as a percentage of GDP on healthcare, yet life expectancy is lower and the average number of patient visits per year is higher than that of many countries[8]. Health outcomes associated with lower disease rates and longer life expectancies are shown to be lower in the United States than in many other countries. A 2009 report by The Dartmouth Institute for Health Policy and Clinical Practice further showed that higher spending, which usually

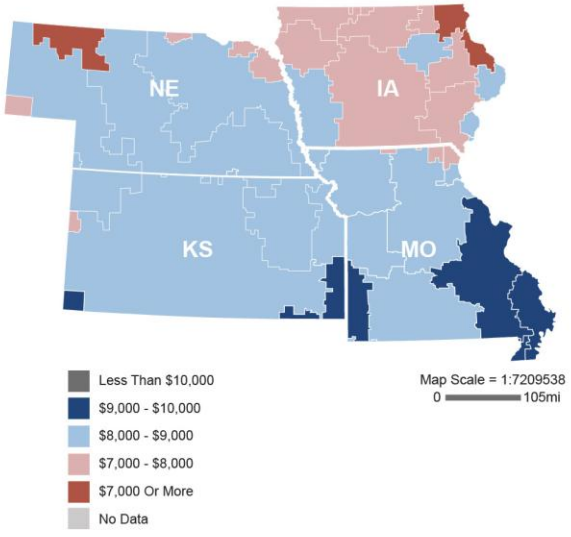



[6] US DHHS - HRSA Area Resource File, 2011-2012 file. http://arf.hrsa.gov/ Map created at www.communitycommons.org. Access date 10/24/12.
[7] Maps created at www.communitycommons.org using GIS data, County Health Rankings (outcomes - 2012) http://www.countyhealthrankings.org/, and Medicare Reimbursement from Medicare Reimbursements by Hospital Referral Region National Statistics from the Dartmouth Atlas of Healthcare, 2009 = most recent.
[8] World Health Organization Global Health Observatory, 2009 Data.

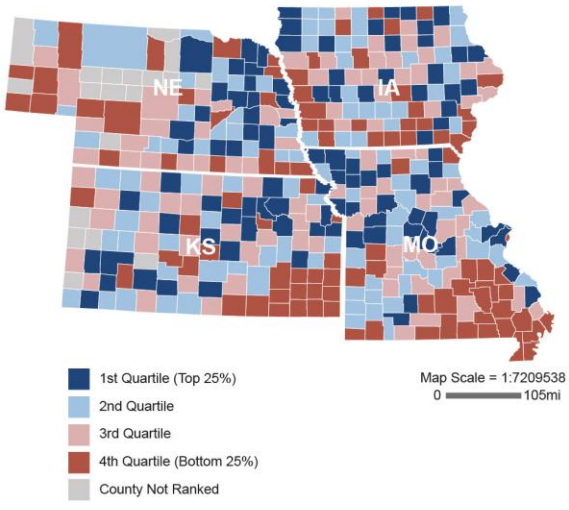
occurs in areas of greatest access to care, does not always equate to better outcomes. In fact, they showed, paradoxically, that the opposite is often true – areas of greater access can and do lead to worse care outcomes. They showed that in higher spending regions in the USA, adherence to evidence-based guidelines was worse, mortality following myocardial infarction, hip fractures, and colorectal cancer diagnoses was greater, poor communication between physicians and patients, and physicians and other physicians abounded, and patient-reported quality was lower[9]. In the Heartland Region, their report showed that the high cost and - by correlation - a low quality tradeoff was present. This was notable, especially in western NE and southeastern MO.

| Mortality Rates by Cause by State Rate/100,000 | | | | | |
|---|---|---|---|---|---|
| | **National** | **IA** | **NE** | **MO** | **KS** |
| **All Causes** | **793.8** | **915.7** | **824.3** | **906.3** | **852.3** |
| Heart Disease | 195.2 | 230.7 | 182.4 | 232.4 | 187.8 |
| Malignant Neoplasms | 184.9 | 207.8 | 185.7 | 208.3 | 188.7 |
| Diabetes | 22.4 | 23.3 | 24.8 | 22.3 | 22.5 |
| Hypertension | 8.4 | 9.7 | 10.2 | 7.5 | <6.1 |

**Avg. Total Medicare Reimbursements, 2008**




**Overall Health Outcomes County Ranking (Within State) 2012**

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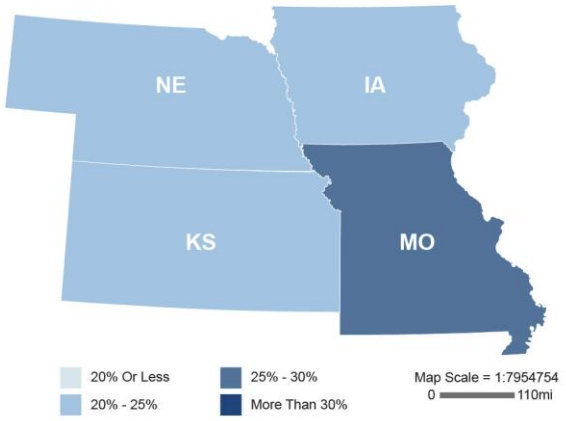
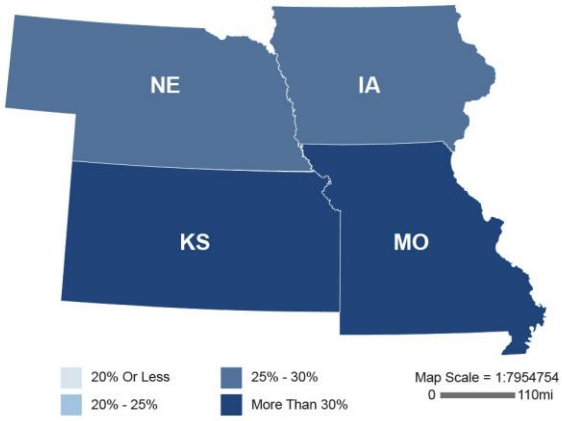
[9] Fisher, Goodman, et. Al, "Healthcare Spending, Quality, and Outcomes: More isn't always better." The Dartmouth Institute for Health Policy and Clinical Practice, February 27, 2009.

Pct. Of Population - No Physical Activity, Last 30 Days, 2010

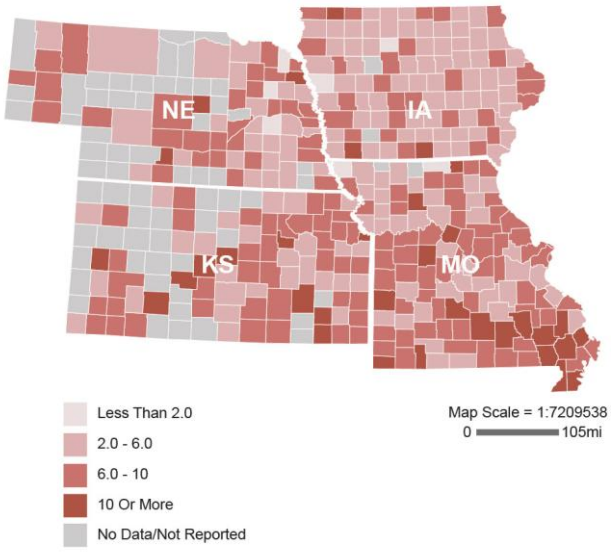



Pct. Of Population - Obese (BMI 30.0-99.8), 2010




- **Low cardiorespiratory fitness compared with other chronic disease indicators[10]:** The Heartland Region suffers from higher rates of heart disease than the nation as a whole. Furthermore, rates of diabetes and hypertension are comparable with or are only slightly lower than the national average. The region also has a higher-than-average percentage of obese patients (exceeding 31% in Missouri). Also, an average of 25% of the residents reported participating in no physical activity within the past month. As a whole, the region is more obese than the national average; compounded by overarching limited amounts of physical activity in the region.

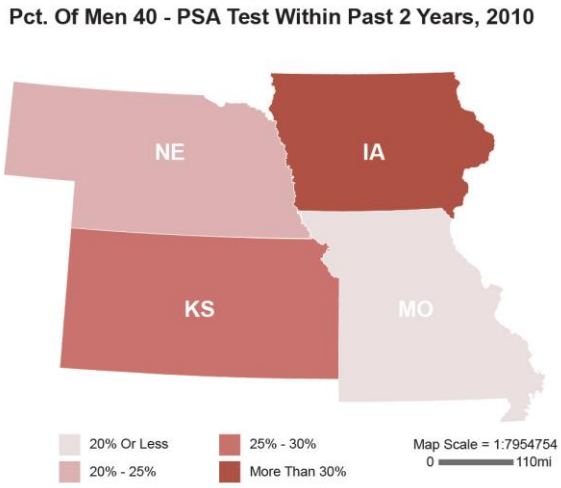
CHSI 2009: Infant Mortality Rate (Deaths per 1,000 Births)

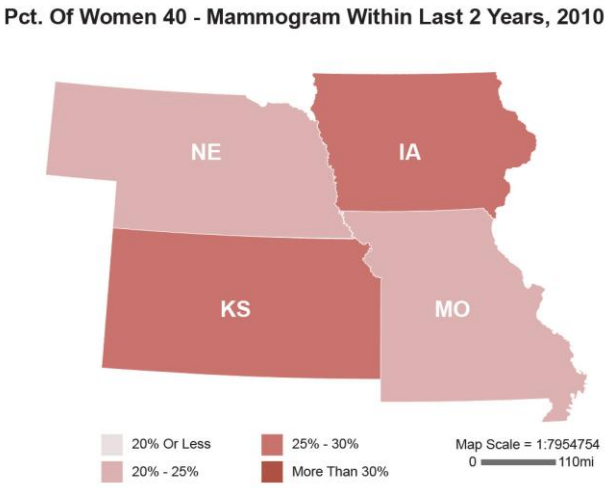



- **Infant Mortality[11]**: The Heartland Region continues to suffer from higher-than-average rates of infant mortality. Southern and southeastern Missouri hospital catchment areas reported the highest rates of infant mortality in the region, with more than 10 per 1,000 births. Iowa reported the lowest numbers as a whole, though many counties in Western Kansas and Nebraska did not report data.

[10] CDC National Vital Statistics System – LCWK9 table: Deaths, Percent of Total Deaths, Death Rates for the 15 leading causes of death by state, 2009 data. http://www.cdc.gov/nchs/nvss/mortality/lcwk9.htm Access Date 10/22/12.
[11] DHHS - Community Health Status Indicators, 2009 data. http://www.communityhealth.hhs.gov/homepage.aspx?j=1

- **Advance Screening for Breast, Colorectal, and Prostate Cancer[12]:** In the Heartland Region, Prostate Specific Antigen (PSA) test frequency among men over age 40 varied. Iowans actively obtained tests, with over 75% of men receiving it within the past two years. Men in Missouri, on the other hand, tested less frequently, with less than 65% reporting having had the test within the previous two years. Nebraskan and Kansan men obtained the test at roughly the average national rate; between 65%-75% of them reported receiving the test within the past two years. Women in the region received mammograms at roughly the national rate as well. Nebraska and Missouri reported 68-




72% of women as having received a screening within the last two years; Iowa and Kansas reported slightly higher results, with between 72%-80% of women having received the screening. Colorectal cancer screening (not shown on map) is conducted as a fecal occult blood test (FOBT), sigmoidoscopy, or full colonoscopy. All four states in the Heartland Region reported results as slightly lower than the national average, with approximately 59.3-63.5% of residents reporting being up-to-date with colorectal cancer screening

## Social Determinants of Health

Although medical care is essential for relieving suffering and curing illness, a person's health and likelihood of becoming sick and dying prematurely are greatly influenced by social factors (i.e., social determinants of health) such as education, income, and the quality of neighborhood environments. Key determinants of health in the Heartland Region include the following:

***Poverty:*** In the Heartland**,** poverty ranges from roughly 10% for certain demographic subsets, while it peaks at nearly 36% of other population demographics. Many citizens in the region lack the ability to afford healthcare, even those with insurance.

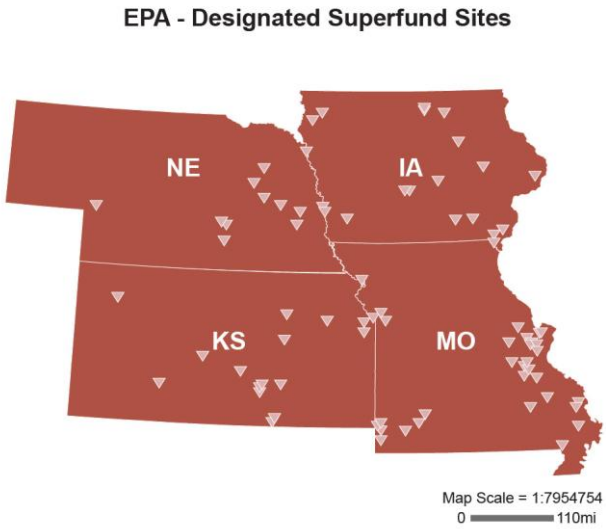
[12] Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data.* Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010.

| Poverty in the Heartland | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | IA | | KS | | MO | | NE | |
| Race/ Ethnicity | Total | %p | Total | %p | Total | %p | Total | %p |
| Non-Hispanic White | 2,612,294 | 9.9 | 2,161,312 | 9.7 | 4,687,935 | 11.3 | 1,452,207 | 9.2 |
| Non-Hispanic Black | 74,723 | 35.8 | 148,804 | 26.0 | 643,090 | 28.1 | 72,961 | 32.5 |
| Hispanic | 132,374 | 24.4 | 269,055 | 24.1 | 192,395 | 24.3 | 147,363 | 11.9 |
| Asian | 47,650 | 13.5 | 63,672 | 12.8 | 88,839 | 14.6 | 28,583 | 11.9 |
| Native American | 7,127 | 27.5 | 18,589 | 21.0 | 19,600 | 21.9 | 11,926 | 39.0 |
| Other | 42,084 | 28.2 | 63,743 | 20.8 | 112,731 | 23.3 | 31,664 | 24.4 |
| *POVERTY% (%p) (within each race/ethnicity)*<br>*Data source: 2006-2010 American Community Survey Selected Population Tables* | | | | | | | | |

***Education:*** Education has profound health effects. A higher percentage of individuals who did not complete high school report being in "fair or poor health" and/or report they lack healthcare coverage compared those who graduated from high school or college. Conversely, more education makes an individual more aware of healthy and unhealthy choices and makes it easier to make healthy choices.

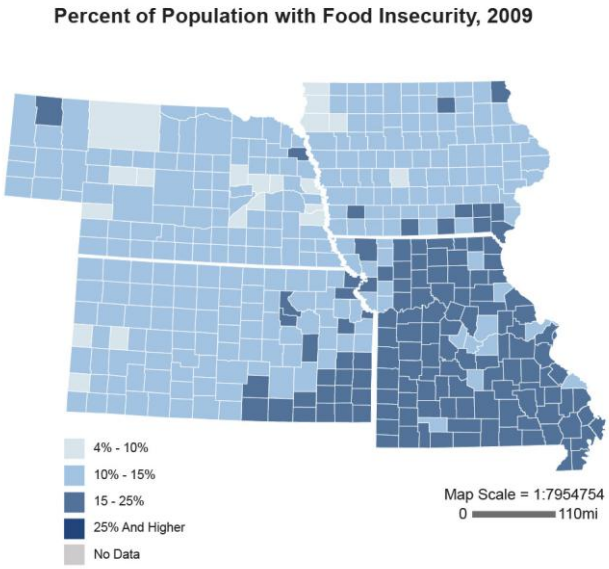
| Education in the Heartland | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | IA | | KS | | MO | | NE | |
| Race/ Ethnicity | Total | %HS | Total | %HS | Total | %HS | Total | %HS |
| Non-Hispanic White | 1,833,361 | 91.5 | 1,502,719 | 92.2 | 3,294,292 | 87.5 | 1,011,707 | 93.1 |
| Non-Hispanic Black | 41,546 | 80.7 | 91,592 | 85.3 | 393,032 | 80.6 | 43,290 | 84.1 |
| Hispanic | 62,242 | 55.5 | 129,808 | 58.8 | 96,945 | 66.3 | 70,065 | 51.8 |
| Asian | 29,121 | 81.4 | 41,247 | 84.1 | 58,218 | 86.3 | 17,681 | 84.6 |
| Native American | 4,624 | 83.7 | 11,615 | 87.2 | 14,269 | 82.9 | 6,564 | 80.3 |
| Other | 14,118 | 86.7 | 25,923 | 89.9 | 50,109 | 85.1 | 11,577 | 87.5 |
| *Education (%HS, 25 Years +) (within each race/ethnicity)*<br>*Data source: 2006-2010 American Community Survey Selected Population Tables* | | | | | | | | |

***Environment:*** The environment determines health through access (or not) to clean air and water, healthy working conditions, and safe housing, roads and communities. WHO argues that a quarter of all preventable illnesses can be avoided through proper environmental management. Racial minority and low-income populations experience higher than average exposures to selected air pollutants, hazardous waste facilities, contaminated fish, and agricultural pesticides in the workplace.




- **Environmental Issues[13]:** Radon levels rank among the highest in the country in the Heartland Region. Additionally, many EPA-designated superfund sites are found in this area – sites with a previous, confirmed history of contamination from chemicals, radioactivity, or substances otherwise harmful to life. Iowa contains 24 designated superfund sites, Kansas contains 17, Missouri contains 37, and Nebraska contains

***Food Security:*** Household food security is the assured access of all people to enough food for an active healthy life. Households are food insecure if they have uncertain or limited access to food through normal channels. Food security is linked to health outcomes. For example, children who live in food-insecure homes are susceptible to stunted growth, cognitive disabilities, and iodine and iron deficiencies.




- **Food Insecurity[14]** in the Heartland Region varies by state. Missouri struggles with food insecurity – nearly 25% or more of households in the state are considered food insecure.
- **Food Deserts[15]**: Many communities within the heartland region are known as food deserts – areas with only remote access to grocery stores, or areas with stores that provide limited or less-than-healthy food options. Nationally, communities are designated by area, and citizens within the communities are judged to feel the effects of the desert if, within their means, they are

[13] EPA Superfund Site and EPA Radon Resources. http://www.epa.gov/region7/cleanup/npl_files/index.htm#Iowa, http://www.epa.gov/radon/, Accessed 10/23/12

[14] Food Security Rates - County Level Data – 2009 Data www.FeedingAmerica.org; Map created at www.communitycommons.org

[15] USDA Food Desert Locator: http://www.ers.usda.gov/data-products/food-desert-locator.aspx. Data as of 12/16/2011, access date 10/15/12.

still unable to obtain healthy, affordable food. Three of the four states in the Heartland Region have citizens affected by food deserts at a level above the national average for communities that have known shortages.

| Food Deserts in the Heartland | | |
|---|---|---|
| | **Population within Food Deserts** | **Population % with Low Access** |
| **National Average** | **25,711,733** | **52.8** |
| IA | 191,079 | 54.9 |
| KS | 319,692 | 54.1 |
| MO | 751,667 | 45.1 |
| NE | 216,859 | 61.6 |

***Housing*:** Housing affordability, quality, and stability can contribute to poor health. Low-income individuals and families are often relegated to neighborhoods with substandard and unsafe housing, overcrowding and high poverty rates, and limited opportunities for healthy lifestyles. Low income and minority communities are often located in areas with high levels of air pollution, which is associated with triggers for asthma attacks, heart disease, and lung cancer.

- **Safety Issues[16]:** In the Heartland Region, crime incidences per 100,000 metropolitan citizens were higher than the national average overall. The highest deviation was 75% above in Missouri, with St. Louis at more-than-double the national average; the lowest was 8.3% above in Nebraska. As a social determinant of health, violent crime has a direct physical correlation with health & traumatic injury. Additionally, fear of crime may cause citizens to alter otherwise healthy behavior, like reducing outdoor jogging and exercise.
- **Residential Segregation[17]**: As a social determinant of health, segregation and, therefore, health access is still a very real concern for certain ethnic groups and in certain communities. Missouri ranks 7th highest in terms of black segregation in the United States. This brings up questions of whether the distribution of physician practices within segregated communities is adequate – the 'urban isolation' experienced by these communities can have detrimental effects on access to care. On the segregation scale, higher scores equate to greater degrees of segregation; in fact, segregation increased within Asian and Hispanic communities over the last decade, and fell only slightly in the Black community.

[16] FBI Uniform Crime Reports, Table 4, 2011 Data, "Offenses Reported to Law Enforcement." http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/preliminary-annual-ucr-jan-dec-2011
[17] Dissimilarity Index data; www.censusscope.org; access date: 10/15/12

| Residential Segregation in the Heartland | | | | | |
|---|---|---|---|---|---|
| | **National Rank** | **State** | **2005-09 Segregation Score** | **2000 Segregation Score** | **Change** |
| **Asian** | 12 | IA | 55 | 49 | 6 |
| | 19 | KS | 53 | 48 | 5 |
| | 21 | MO | 53 | 48 | 5 |
| | 28 | NE | 51 | 45 | 6 |
| **Black** | 7 | MO | 72 | 74 | -2 |
| | 10 | NE | 68 | 70 | -2 |
| | 23 | IA | 62 | 61 | 1 |
| | 28 | KS | 59 | 60 | -1 |
| **Hispanic** | 15 | NE | 52 | 50 | 2 |
| | 18 | KS | 51 | 51 | 0 |
| | 25 | IA | 50 | 47 | 3 |
| | 37 | MO | 44 | 39 | 5 |

| Physical Violence and Other Crimes/100000 Citizens | |
|---|---|
| **National** | **88,47** |
| IA | 10487 |
| KS | 9635 |
| MO | 15538 |
| NE | 9590 |

***Jobs:*** Work can influence health in many ways. Employee benefits such as access to health insurance, wellness programs, and paid time off can improve access to health care and health outcomes. Low-income populations are less likely to have employment-based benefits that support good health. Work-related injury and illness contribute to poor health and are experienced more often by low-income populations, racial and ethnic minorities and other underserved groups.

- **Unemployment**: While overall unemployment rates were near the national average in the region, the rates within ethnic groups varied dramatically. Blacks and Native Americans experienced the highest rates of unemployment in the Heartland region.

| Unemployment Rates in the Heartland | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | IA | | KS | | MO | | NE | |
| Race/ Ethnicity | Total | %uem | Total | %uem | Total | %uem | Total | %uem |
| Non-Hispanic White | 1,497,326 | 4.8 | 1,219,875 | 5.0 | 2,525,293 | 6.2 | 851,350 | 4.2 |
| Non-Hispanic Black | 36,153 | 14.7 | 76,476 | 15.4 | 319,932 | 16.1 | 38,354 | 14.7 |
| Hispanic | 62,790 | 9.7 | 128,024 | 8.3 | 94,795 | 8.7 | 70,840 | 7.9 |
| Asian | 28,031 | 4.6 | 35,817 | 6.2 | 48,891 | 4.3 | 15,795 | 5.0 |
| Native American | 3,457 | 18.0 | 9,522 | 7.2 | 10,417 | 10.5 | 5,153 | 20.3 |
| Other | 14,736 | 12.8 | 24,826 | 10.6 | 42,800 | 11.0 | 12,449 | 12.5 |
| *Unemployed % (%uem) (within each race/ethnicity, population 16 years and over, in labor force)* *Data source: 2006-2010 American Community Survey Selected Population Tables* | | | | | | | | |

***Transportation*:** Lack of affordable, reliable transportation in both urban and rural areas affects access to healthy foods, health care services, educational opportunities, physical activity levels, and employment. Transportation is also a public health issue in relation to public safety, air pollution, land use, equity, and accessibility.

- **Transportation[18]:** In the Heartland region, transportation to healthcare settings and to places of work takes a different form from that of major metropolitan areas like New York, San Francisco, or Los Angeles. Citizens living in farms or in rural areas may not have access to public transportation at all; they may simply have a long drive in front of them in order to get to a hospital or physician's office. Transportation choices are also correlated with income levels; the census results of the 2011 American Community Survey revealed that as earnings decrease, use of public transportation increases. Even in urban areas, transfers between bus lines or metro lines may be required, and the frequency of transportation may require lengthy time commitments to travel a relatively short distance, further compounding the access challenge.

[18] ACS Transportation Survey Data – 2011 Results. Census.gov. Table S0804 summary data.

| Earnings in the Past 12 Months | IA | KS | MO | NE |
|---|---|---|---|---|
| $1 to $9,999 or less | 39.2% | 41.2% | 29.1% | 19.4% |
| $10,000 to $14,999 | 10.0% | 11.7% | 11.7% | 23.0% |
| $15,000 to $24,999 | 18.3% | 29.5% | 21.0% | 32.0% |
| $25,000 to $34,999 | 9.0% | 5.6% | 14.9% | 10.1% |
| $35,000 to $49,999 | 8.6% | 2.1% | 12.6% | 9.1% |
| $50,000 to $64,999 | 7.1% | 4.2% | 4.3% | 3.0% |
| $65,000 to $74,999 | 0.7% | 3.3% | 1.2% | 1.2% |
| $75,000 or more | 7.2% | 2.4% | 5.1% | 2.2% |

## Regional Strengths

Despite the many challenges the Heartland region faces there are hidden and unrecognized assets, strengths, and resources in every individual, organization, and community involved. There is always something that is working well; we consistently find that solutions exist within communities and organizations that are waiting to be discovered.

Within this context, the Heartland Region has numerous existing strengths and resources that support efforts to eliminate health disparities and create health equity. While this is not an exhaustive list, key strengths in the Heartland Region include the following:

### Overarching Strengths

- We have so many opportunities because we have so many problems, which means that we come up with creative solutions
- We have numerous existing collaborative partners, who provide us with the opportunity to leverage networks, share information, and involve diverse resources

### Existing Planning and Programmatic Activities

- Various planning bodies addressing health equity, including an Advisory Council covering the HHS regions that addresses health equity through 6 regional coalitions and the Missouri Health Equity Collaboratives that bring together researchers
- Various initiatives addressing health disparities, including the Blue Ribbon Panel on Infant Mortality in Kansas, the Iowa's Healthiest State Initiative, Missouri Safe Routes to School Initiative, and a multi-state coalition to address health literacy
- Work with the Mexican consulates in Kansas City and Omaha to expand the *promotores* program and continue work with bi-national health week
- Omaha is the birthplace of Worksite Wellness
- Iowa work on integrating trauma-focused care

- St. Louis Resident Advisory Group that grew out of Community health assessments
- Accreditation processes in place for health departments (e.g., community health improvement plans) –need ideas to include in the plans
- Program in Columbia – health literacy and healthcare workers/*promotores* for 3 years; funded by Missouri Foundation for Health; next step is to export *promotores de salud* program to other counties; also want to expand to refugee populations
- Livable Streets/Complete Streets Initiative
- States are beginning to release local level data (e.g., web portal-Kansashealthmatters.org) – need to be able to have r/e data
- Iowa task force to ensure compliance with Olmstead to allow people with disabilities to live independently

**Existing and Potential Partners** (e.g., regional or national organizations funding health disparity/health equity efforts)

- Universities with activities focused on health disparities and community-based participatory research, including Washington University in St. Louis, Saint Louis University, University of Northern Iowa Center for Health Disparities, University of Missouri, and University of Nebraska, Creighton University
- National organizations focused on infant mortality and health disparities, including the March of Dimes, Healthy Start, and CityMatCH
- Foundations focused on/interested in funding cultural competency and reducing health disparities, including Missouri Health Foundation in St. Louis, Reach Healthcare Foundation, Greater Kansas City Healthcare Foundation, and Missouri Foundation for Health

## Regional Opportunities

The NPA comes during a time of great need but also great opportunity. The Affordable Care Act provides resources and support not just for expanding access but also for efforts to address health disparities. Plans such as Healthy People 2020, the National Prevention Strategy, the HHS Action Plan to Reduce Racial and Ethnic Disparities, and the NSS help prioritize these issues and provide focus and structure to our efforts to create health equity. And through the creation of 10 regional councils, the NPA helps harness the collective power of regions working together to support health disparities elimination. The ongoing sharing of promising strategies and lesson learned will help everyone to have a greater chance to succeed.

# Heartland RHEC: Structure, Priorities, and Next Steps

We know that one sector can't create the conditions for better health alone—a cohesive and inclusive strategy that leverages public and private sector investments and creates critical partnerships is needed. We also know that the comprehensive change needed to create health equity will take time, significant resources, and the efforts of many partners. The NPA offers a fresh perspective and innovative approach that it is:

- **Coordinated**—working with public, private and non-profit organizations at the local, state, tribal, and federal level.
- **Comprehensive**—moving beyond controlling disease and addresses the social factors that are the root causes of poor health.
- **Multi-sector**—mobilizing action and commitment from many sectors, including housing, employment, education, transportation, environment, as well as health.
- **Community-driven**—collaborating with those on the frontlines; builds on and expands effective programs.

Fortunately, the Heartland RHEC can build upon the good work of the many individuals, organizations, communities, and systems that are already addressing health disparities within our region. Desired outcomes can best be achieved when our attention is focused on discovering these strengths collectively and connecting them to a shared vision.

Moving forward, we will play a critical role in coordinating and enhancing state and local efforts to address health disparities and the social determinants of health. We will also play a critical role in driving collective actions at the regional level.

## Membership and Structure

Members of the Heartland RHEC are individuals from public and private sectors who serve in a volunteer capacity with the willingness to engage in actions to advance health equity and/or improve healthy living standards for the nation's most vulnerable populations. We work or reside within the geography or community we represent and have engaged in relevant work on policies or programs that seek to eliminate health disparities and/or promote healthy living standards.

Membership includes individuals from the public and private sectors and they represent communities experiencing health disparities; state and local government agencies; individuals representing regional Tribes, urban Indian programs, or other Indian organizations; healthcare providers and systems; health plans; businesses; academic and research institutions; foundations; and other organizations.

Co-Chairs whom guide our work also serve as liaisons to the Office for Minority Health and the Federal Interagency Health Equity Team (FIHET). The Co-Chairs collaborate with other

RHEC chairs to share best practices, lead the efforts to identify and acquire support and resources for the activities of the Council. The Co-Chairs for the Heartland RHEC are:

- Melba R. Moore, Commissioner of Health, City of St. Louis Department of Health
- Melody Goodman, Assistant Professor, Washington University in St. Louis School of Medicine

The Heartland RHEC has established a subcommittee structure to support the advancement of the mission and align to the NPA goals and are each charged with prioritizing the goal area strategies most relevant to the stakeholder communities represented by the members, ensuring that a focus on one or more of the social determinants of health is included in each committee's work, and developing and annual action plan. Our subcommittees include:

| Heartland RHEC Subcommittee Structure | |
|---|---|
| **Subcommittee** | **Description/Actions** |
| **Awareness** | • Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations |
| **Membership** | • Determine governance and policies, develop bylaws, charter and standard operating procedures, conduct officer elections, recruit new members, and terminate members (e.g., those that completed their term of service or inactive members) |
| **Data, Research and Evaluation** | • Improve data availability and coordination, utilization, and diffusion of research and evaluation outcomes |
| **Cultural and Linguistic Competency** | • Improve cultural and linguistic competency and the diversity of the health-related workforce |

## Initial Work

The initial work of the Heartland RHEC has focused on building a governance structure to ensure long-term sustainability. We held our inaugural meeting on October 10-11, 2011, in Coralville, Iowa. During this two-day meeting, we drafted a mission and vision, established an initial committee structure and developed member roles and responsibilities. We discussed the disparity issues and challenges specific to the region and heard from community and program representatives.

To identify and better understand the region's priority issues, RHEC members discussed health disparities and the efforts to address them within the region during the inaugural meeting. This processes, combined with subsequent RHEC discussions, fed directly into the selection of regional priorities highlighted below.

## Role in Creating Health Equity

Critical time was spent during the inaugural meeting defining our purpose, role, and potential in addressing health disparities and creating health equity. The role of the Heartland RHEC is to:

- Serve as leaders and catalysts for strengthening health equity actions within a region, state, or community in response to the NPA's National Stakeholder Strategy;
- Enhance and support collaboration between health equity stakeholders in the region, state, or specific community;
- Align related initiatives and programs and leverage assets to more effectively accomplish health disparity reduction goals;
- Outreach to the general public to educate about disparities, share RHEC activities, and involve the community in RHEC efforts;
- Serve as information and resource brokers to help support the sustainability, effectiveness and growth of efforts to reduce health disparities.

The responsibilities of the Heartland RHEC members, collectively, are to:

- Serve as a body of experts driving a collaborative health equity agenda;
- Use inclusive stakeholder input to refine priority strategies to address our needs;
- Support and collaborate on projects with mutual goals;
- Provide multi-sectoral and interdisciplinary leadership and partnerships;
- Monitor and assess progress of Heartland RHEC activities;
- Be accountable to the stakeholders; and
- Ensure sustainability of Heartland RHEC activities.

## Vision, Mission, and Priorities

**Heartland RHEC's vision:** A nation free of inequities in health and health care.

**Heartland RHEC's mission statement**: To increase the effectiveness of programs that target the elimination of health disparities and address the determinants of health through the coordination of partners, leaders, and stakeholders committed to action within the Heartland Region.

| Heartland RHEC Priorities | |
|---|---|
| **NPA Goals** | **Priorities** |
| **Awareness** | • **Assist OMH Regional Consultant with the development of a health equity resource directory**<br>○ Expand and possibly house the directory<br>○ Ensure the directory includes infrastructure (e.g., initiatives, coalitions, groups) in addition to activities<br>• **Create a list of foundations that fund health equity activities** |

| | |
|---|---|
| | • **Identify and engage key partners**<br>  o Academia – e.g., Universities of Missouri, Nebraska, Iowa, Northern Iowa<br>  o Foundations – e.g., Missouri Health Foundation in St. Louis, Reach Healthcare Foundation, Greater Kansas City Healthcare Foundation, Missouri Foundation for Health<br>  o Collaboratives – e.g., Missouri Health Equity Collaborative, the Multi-State Coalition to Address Health Literacy, 6 regional coalitions to address health equity<br>• **Educate people about opportunities of the Affordable Care Act**<br>• **Increase awareness about racism and how it impacts health within own organizations and communities**<br>  o Potential partnership with Omaha Table Talk<br>  o Conduct Undoing Racism trainings by including request for funds in grant applications<br>  o Showing Unnatural Causes |
| **Leadership** | • **Act as a liaison between community organizations and funding sources to help align funding provided to community and local needs**<br>• **Actively engage and include young people in the planning and execution of health, wellness, and safety initiatives.** |
| **Health System and Life Experience** | • **Coordinate efforts to address disparities in infant mortality** – e.g., work with March of Dimes, Healthy Start, Head Start, and CityMatCH<br>• Other potential issues to address<br>  o Smoking – might be difficult to address during election year; can look at how much other states have been able to collect $ and to pass bans; can monitor what's going on<br>  o Homelessness – particularly among youth<br>  o Food security<br>  o Medical-legal issues<br>• Work with Federally Qualified Health Centers (FQHCs) and safety net providers<br>• Conduct a health equity impact assessment (e.g., look at Urban League model) |
| **Cultural and Linguistic Competency** | • **Increase diversity and cultural competence of the workforce**<br>  o Be driving force in making sure people know what it is and require some core knowledge/skill base<br>  o Address "isms" on part of providers about who they will see<br>  o Develop registry of providers that are open to different patients<br>  o Collaborate with the University of Nebraska Public Health |

| | |
|---|---|
| | Training Center to address C&LC<br>○ Work with *promotores*<br>○ Build on efforts in various states to work with American Indians (e.g., IOWA cultural competency 101 curriculum; March of Dimes efforts) |
| **Data, Research, and Evaluation** | • **Improve data quality and availability**<br>○ Educate providers about what they need to required in information technology and work with people creating the medical databases<br>○ Impact date being collected in electronic health records to impact health disparities as we move forward (e.g., collecting race/ethnicity data)<br>○ Improve collection of data at the local level<br>• **Engage communities in data collection and use**<br>○ Participate in data capacity building technical assistance with Community Science<br>○ Community based participatory research and practice based research<br>▪ Explore CTSAs with established community-focused core<br>▪ Explore how people are defining it and how doing it and create guidelines<br>▪ Develop community advisory boards with the communities with whom we work to identify priorities and guide efforts<br>• **Conduct an environmental scan** to identify what is happening, who's doing what, where we can form partnerships, who has received grants in the region, and low hanging fruit (e.g., infant mortality, access to care)<br>• **Hold grantees accountable for addressing health equity**<br>○ Create a suggested policy or procedure or guide for 1) potential grantee organizations to use to apply for funding in a way that integrates SDH and 2) for grantor organizations to include in RFP language<br>○ Make this health equity and cultural competency mandatory in grants and track – and possibly develop a punitive measure |

## Recent Wins/Successes

To date, the Heartland RHEC has achieved many process and outcome milestones, such as:

- Developed charter
- Develop standard operating procedures
- Developed blueprint
- Met regularly as a council and in subcommittees

- Name our RHEC - Heartland RHEC
- Formed subcommittees (e.g., Awareness, Cultural and Linguistic Competency, Membership, Data, Research & Evaluation)
- Developed website

The Heartland RHEC has also taken a novel and ground-breaking approach to involving students in the work of the committee – it made sense to involve them up front since they will become the future leaders of the public health community. We have worked with St. Louis University and its College for Public Health and Social Justice Faculty to recruit students to assist in researching health disparities and determinants of health in the region. Students, guided by RHEC DREC Committee members, have been assigned to collect and analyze data on everything from racial composition of the region to levels of health insurance and cardiovascular fitness indicators.

## Role in Supporting State, Tribal, and Local Activities

One of the RHEC's primary roles is to develop a shared understanding of the National Stakeholder Strategy for Achieving Health Equity; the impact of health disparities and social determinants that affect the health in the region; and existing projects and initiatives at the community, state, tribal, and regional level. We will continue to identify leaders and innovators and leverage work being done at the state and local levels by identifying and highlighting successful models and initiatives.

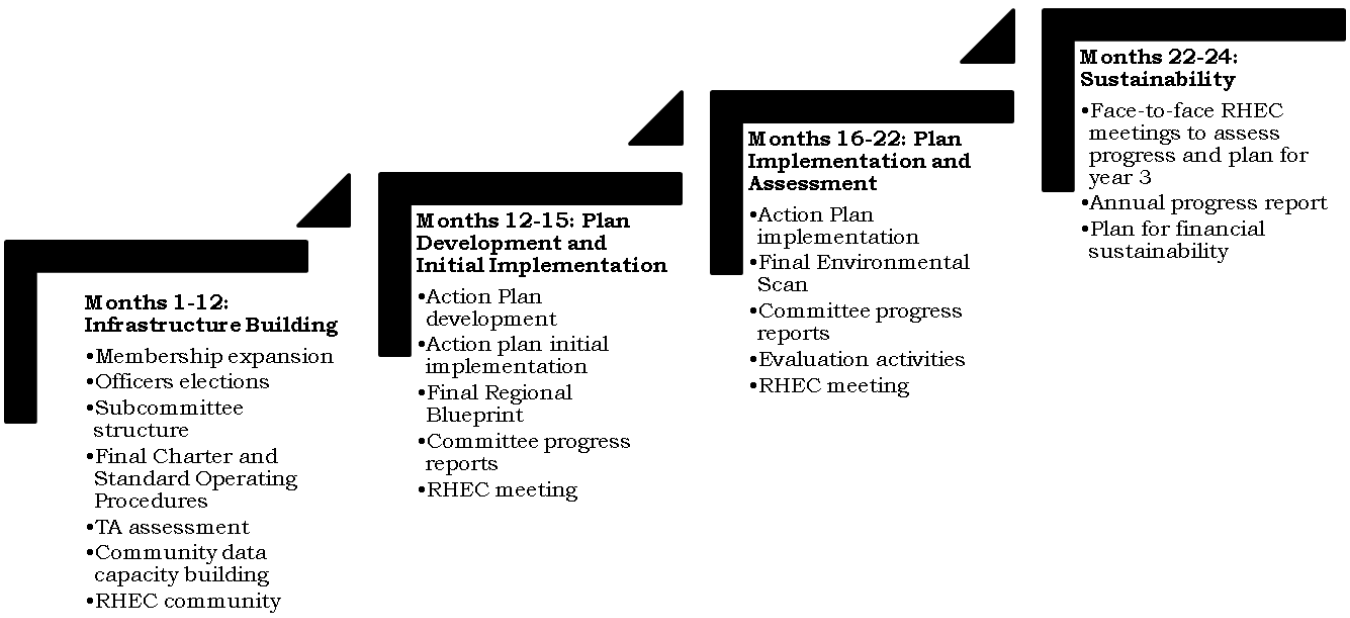
The RHEC role in supporting tribal activities will align with the unique government-to-government relationship between Tribes and the Federal Government. A focused collaboration with tribal and Indian urban organizations will be established to ensure American Indian and Alaska Native participation.

## Next Steps

Over the next nine months, the Heartland RHEC will create a set of key products that will guide our path forward, including an environmental scan, finalized list of regional priorities, an operational plan, success measures, and ultimately implementation.

- Environmental scan of health issues and disparities in the region
- Start committees focused on the remaining NSS goals (leadership, health system and life experience)
- Begin sharing the Blueprint within the Region, "get the word out" into communities
- Recruit new community members to participate in Heartland RHEC activities and join the Heartland RHEC.
- Foster additional partnerships and funding opportunities to reach our goals

## Heartland RHEC Process and Progress



# Appendix A: Summary of NPA Goals and Strategies

| Goal | | Strategies |
|---|---|---|
| # | Description | |
| 1 | **AWARENESS** - Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations | **1. Healthcare Agenda.** Ensure that ending health disparities is a priority on local, state, tribal, regional, and federal healthcare agendas. |
| | | **2. Partnerships.** Develop and support partnerships among public, nonprofit, and private entities to provide a comprehensive infrastructure to increase awareness, drive action, and ensure accountability in efforts to end health disparities and achieve health equity across the lifespan**.** |
| | | **3. Media.** Leverage local, regional, and national media outlets using traditional and new media approaches as well as information technology to reach a multi-tier audience—including racial and ethnic minority communities, youth, young adults, older persons, persons with disabilities, LGBT groups, and geographically-isolated individuals—to encourage action and accountability**.** |
| | | **4. Communication.** Create messages and use communication mechanisms tailored for specific audiences across their lifespan, and present varied views of the consequences of health disparities that will encourage individuals and organizations to act and to reinvest in public health**.** |
| 2 | **LEADERSHIP -** Strengthen and broaden leadership for addressing health disparities at all levels | **5. Capacity Building**. Build capacity at all levels of decision-making to promote community solutions for ending health disparities**.** |
| | | **6. Funding Priorities**. Improve coordination, collaboration, and opportunities for soliciting community input on funding priorities and involvement in research and services**.** |
| | | **7. Youth**. Invest in young people to prepare them to be future leaders and practitioners by actively engaging and including them in the planning and execution of health, wellness, and safety initiatives**.** |
| 3 | **HEALTH SYSTEM AND LIFE EXPERIENCE** - Improve health and healthcare outcomes for racial, ethnic, and underserved populations | **8. Access to Care**. Ensure access to quality health care for all. |
| | | **9. Children**. Ensure the provision of needed services (e.g., mental, oral, vision, hearing, and physical health; nutrition; and those related to the social and physical environments) for at-risk children, including children in out-of-home care**.** |
| | | **10. Older Adults**. Enable the provision of needed services and programs to foster healthy aging**.** |

| | | |
|---|---|---|
| | | **11. Health Communication**. Enhance and improve health service experience through improved health literacy, communications, and interactions**.** |
| | | **12. Education**. Substantially increase high school graduation rates by working with schools, early childhood programs, community organizations, public health agencies, health plan providers, and businesses to promote the connection between educational attainment and long-term health benefits. |
| | | **13. Social and Economic Conditions**. Support and implement policies that create the social, environmental, and economic conditions required to realize healthy outcomes**.** |
| **4** | **CULTURAL AND LINGUISTIC COMPETENCY** - Improve cultural and linguistic competency and the diversity of the health-related workforce | **14. Workforce.** Develop and support the health workforce and related industry workforces to promote the availability of cultural and linguistic competency training that is sensitive to the cultural and language variations of diverse communities**.** |
| | | **15. Diversity**. Increase diversity and competency of the health workforce and related industry workforces through recruitment, retention, and training of racially, ethnically, and culturally diverse individuals and through leadership action by healthcare organizations and systems**.** |
| | | **16. Ethics and Standards for Interpreting and Translation Services**. Encourage interpreters, translators, and bilingual staff providing services in languages other than English to follow codes of ethics and standards of practice for interpreting and translation. |
| **5** | **DATA, RESEARCH, AND EVALUATION** - Improve data availability, and coordination, utilization, and diffusion of research and evaluation outcomes | **17**. **Data**. Ensure the availability of health data on all racial, ethnic, and underserved populations**.** |
| | | **18. Community-Based Research and Action, and Community-Originated Intervention Strategies**. Invest in community-based participatory research and evaluation of community-originated intervention strategies in order to build capacity at the local level for ending health disparities**.** |
| | | **19. Coordination of Research**. Support and improve coordination of research that enhances understanding about, and proposes methodology for, ending health and healthcare disparities**.** |
| | | **20. Knowledge Transfer**. Expand and enhance transfer of knowledge generated by research and evaluation for decision-making about policies, programs, and grant-making related to health disparities and health equity. |

# References


1: U.S. Department of Health and Human Services. Offices of Minority Health. "National Stakeholder Strategy for Achieving Health Equity." 2011. Retrieved from http://minorityhealth.hhs.gov/npa/templates/content.aspx?lvl=1&lvlid=33&ID=286

2: U.S. Department of Health and Human Services, Health Resources and Services Administration, Health Professional Shortage Areas and Medically Underserved Areas/Populations. (10/2012). *HRSA Datawarehouse* [Online Data Repository]. Retrieved from http://datawarehouse.hrsa.gov/hpsadetail.aspx

3: Batalova, J. Migration Policy Institute, MPI Data Hub: *Estimates for 1990 and 2000 are from the US Census Bureau, Summary File 3, 1990 and 2000 US Decennial Censuses; 2010 estimates are from the US Census Bureau's American Community Survey.* [Online Data Table] Retrieved from http://www.migrationinformation.org/datahub/acscensus.cfm

4: American Community Survey on Small Area Health Insurance Estimates. (2010). *2010 County and State Health Insurance Estimates by Demographic and Income Characteristics* [Interactive Data Tool]. Retrieved from http://www.census.gov/did/www/sahie/data/interactive/

5: Agency for Healthcare Research and Quality. (2011). *National Healthcare Quality Report*. [State Snapshots data repository]. Retrieved from http://statesnapshots.ahrq.gov/snaps11/map.jsp?menuId=2&state=

6: Department of Health and Human Services, Health Resources and Services Administration. (2011-2012). *Area Resource File*. [Downloaded Data File]. Retrieved from http://arf.hrsa.gov/

7: County Health Rankings & Roadmaps. (2012). *2012 County Health Rankings National Data* [Online Data Repository]. Retrieved from http://www.countyhealthrankings.org/,

8: Fisher, E., Goodman, D., Skinner, J., Bronner, K., "Healthcare Spending, Quality, and Outcomes: More isn't always better." Dartmouth Institute for Health Policy and Clinical Practice: Dartmouth Atlas of Healthcare, Dartmouth Atlas Project Brief. 27022009.dap1.1.

9: World Health Organization. (2009). *Global Health Observatory Data Repository* [Online Data Repository]. Retrieved from http://apps.who.int/gho/data/

10: Centers for Disease Control and Prevention - National Vital Statistics System (NVSS). (2009). *LCWK9 table: Deaths, Percent of Total Deaths, Death Rates for the 15 leading causes of death by state.* [Online Data Repository] Retrieved from http://www.cdc.gov/nchs/nvss/mortality/lcwk9.htm

11: U.S. DHHS. (2009). *Community Health Status Indicators* [Online Data Repository]. Retrieved from http://www.communityhealth.hhs.gov/homepage.aspx?j=1

12: Centers for Disease Control and Prevention. (2010). *Behavioral Risk Factor Surveillance System Survey Data.* [Online Survey Data]. Retrieved from http://www.cdc.gov/Brfss/.

13: U.S. Environmental Protection Agency. EPA Superfund Site. (2012). *National Priority List Sites.* [Online Data Repository]. Retrieved from http://www.epa.gov/region7/cleanup/npl_files/index.htm#Iowa,

14: U.S. Environmental Protection Agency. EPA Radon Resources. (2012). *EPA Map of Radon Zones.* [Online Data Map]. Retrieved from http://www.epa.gov/radon/zonemap.html

15: Feeding America. (2009). *Food Security Rates – County Level Data* [Online Data Repository]. Retrieved from http://initiatives.communitycommons.org/tool/maps/Default.aspx

16: United States Department of Agriculture. (2011). *Food Desert Locator* [Online Data Repository]. Retrieved from http://www.ers.usda.gov/data-products/food-desert-locator.aspx.