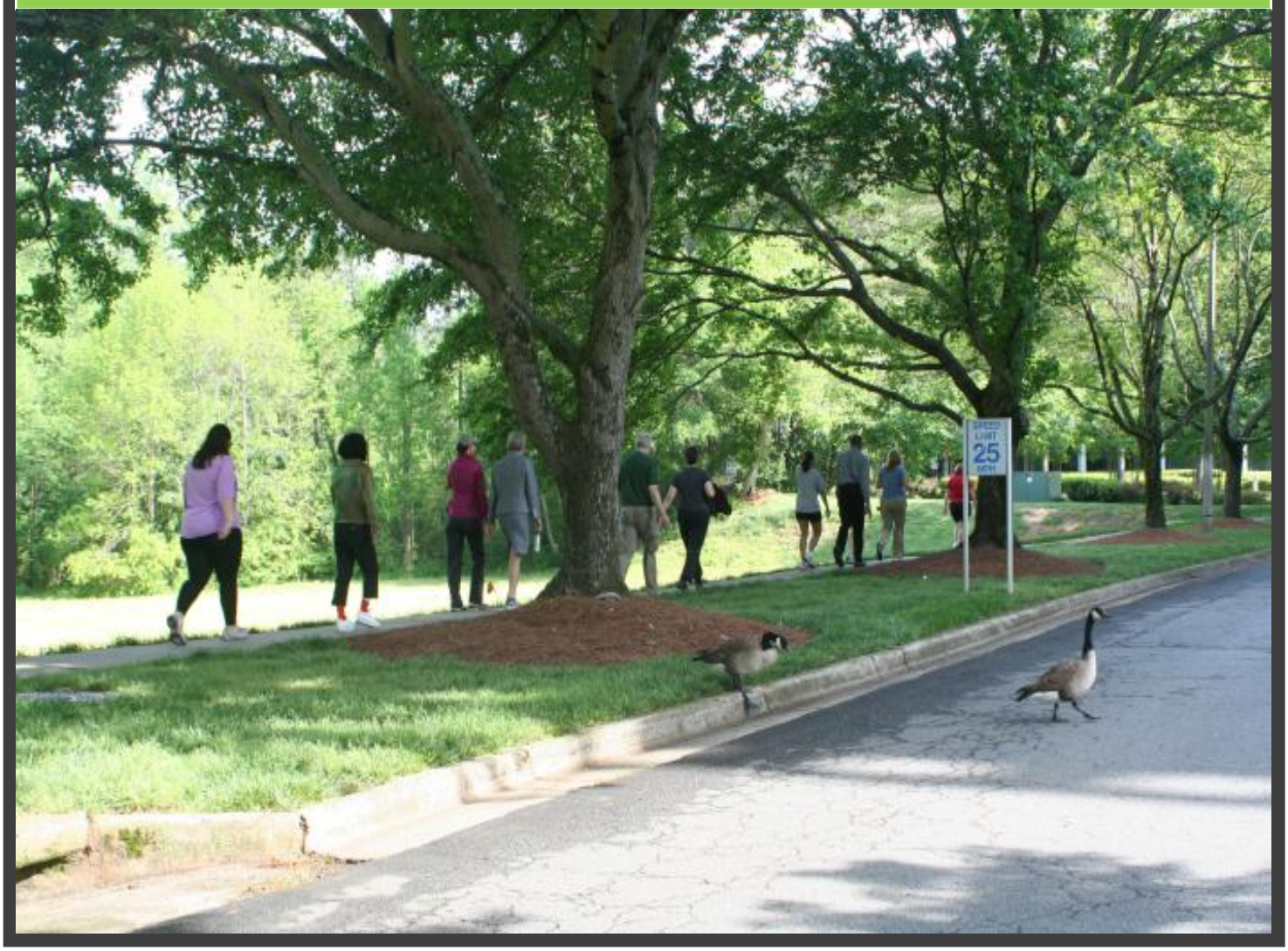
Arkansas Department of Health
Office of Rural Health and Primary Care
Primary Care Needs Assessment, 2015



Arkansas Department of Health

Report Date: August 2015

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OVERVIEW

About the Office of Rural Health and Primary Care

The Arkansas Department of Health (ADH) was awarded the first Primary Care Office of Cooperative Agreement in 1987. In 2000, the Arkansas Department of Health merged the Office of Primary Care and the Office of Rural Health to create a more efficient work unit currently called the Office of Rural Health & Primary Care (ORHPC). This office is housed within the Hometown Health Section of the ADH. The ORHPC promotes the development of community-based health care services and systems throughout Arkansas to ensure that well managed, quality health services are available to all citizens.

Efforts are directed in several areas such as community-based needs assessment, technical assistance for the development of primary care sites, recruitment and retention of primary care manpower and health professional shortage area (HPSA)/medically underserved area (MUA) designations.

Activities include:

- Providing consultation and technical assistance to rural communities for the purpose of developing viable health care services in their communities.
- Administering state grant programs designed to assist rural communities in maintaining local health care.
- Operating a health professional clearinghouse to assist rural and underserved areas to recruit and retain health professionals.
- Providing technical assistance and training opportunities to rural hospitals that have converted to Critical Access Hospital status.
- Coordinating federal, state and other efforts focusing on access to health care.

The ORHPC collaborates with and helps organizations and health care providers improve, increase and deliver comprehensive primary care. The ORHPC mission is to positively impact rural communities' quality of life through superior health service and as a part of its leadership structure.

This needs assessment describes the role of the ORHPC, the state's demographics, health status, and key barriers to the success of a comprehensive delivery of quality primary care. The report provides a description of the ORHPC's mission to improve the health of Arkansas residents living in rural areas by increasing the availability of health care services and concludes with recommendations for workforce development. The focus of this report is on the status of primary health care needs and resources in Arkansas.

Summary of Findings

- Current population estimates for Arkansas show that the rural population is declining and the urban population has increased since the U.S. 2010 Census.

- The Hispanic population has more than doubled since the 2000 U.S. Census, increasing from 86,000 to over 186,000 based on 2010 Census figures.

- The top ten of all 75 counties with the highest Rural Health Needs Index score are: Phillips, Chicot, Woodruff, Monroe, Desha, Izard, Lee, Lafayette, Dallas, and Sharp counties.

- The Rural Health Index scoring system ranked Medicaid Eligibility, Poverty, Rural Health Clinic Ratio per 10,000, Long Term Care Beds Ratio per 1,000, and Age-Adjusted Mortality as the top five most important needs in Arkansas.

- Arkansas had the seventh highest percentage of persons in poverty in the nation.

- People who are uninsured use the health system less frequently than the insured. Since the passage of the Affordable Care Act, the initial need for access to health care services may be high for those who have been uninsured.

- The largest problem for many Arkansans is where primary care physicians choose to practice. The shortage of access to local physicians is most severe for people living in Cleveland, Izard, Lincoln, Poinsett, Marion, Prairie, Newton, and Lonoke counties.

- There are significant gaps in health care quality and safety. Racial and ethnic health disparities as well as geographic barriers negatively impact health care in rural and underserved communities throughout the state.

- Counties located in the Delta have high rates of teen births, poverty, mortality, and Medicaid eligible persons.

- The Arkansas Trauma Systems' goal is to "get the right patient to the right place as quickly and as safely as possible". Currently, the system has 68 designated trauma centers across the state and this number is expected to grow.

Needs Assessment Methodology

The assessment team collected data in two stages. First, it reviewed published and unpublished scientific literature, and conducted a secondary analysis of available state and federal data from a variety of sources. Two primary reports were used in the assessment of the current health care workforce structure in Arkansas. *Arkansas Health Care Workforce: A Guide for Policy Action, 2013* and A*rkansas Health Workforce Strategic Plan: A Roadmap to Change, 2012*.

Second, the team interviewed key stakeholders identified with guidance by the Office of Rural Health and Primary Care (ORHPC) team. The ORHPC team members assisted the assessment team to understand the prevailing attitudes toward the current health professional workforce shortage in rural Arkansas. The needs assessment team was able to identify opportunities, challenges, resources, and potential solutions for building the rural health care system infrastructure in Arkansas.

The needs assessment will identify the communities with the greatest unmet health care needs, disparities, and health workforce shortages. The assessment will discuss key barriers to accessing Primary Care, Dental and Mental Health care services. The ORHPC played a key role in the over-sight of the development of the statewide primary care needs assessment.

The needs assessment approach uses secondary data sources such as small area income and poverty census data, hospital information, health professional and health behavior surveys, vital statistics, and health facility licensing data. Efforts were made to use the most recent data available. Data were combined and weighted to assess the needs based on selected risk factors associated with primary care workforce shortages. Analyses were performed using the principle component procedure in SAS 9.3 (SAS Institute, Cary NC).

<u>Assessment Timeline:</u>
Summer 2014 through Fall 2014

- Develop a needs assessment team
- Continue gathering secondary data from federal and state resources
- Continue interviewing primary stakeholders and ORHPC staff

July 2014 to November 2014

- Develop the Arkansas Primary Care Needs Assessment

December 2014

- Finalize the 2014 Arkansas Primary Care Needs Assessment

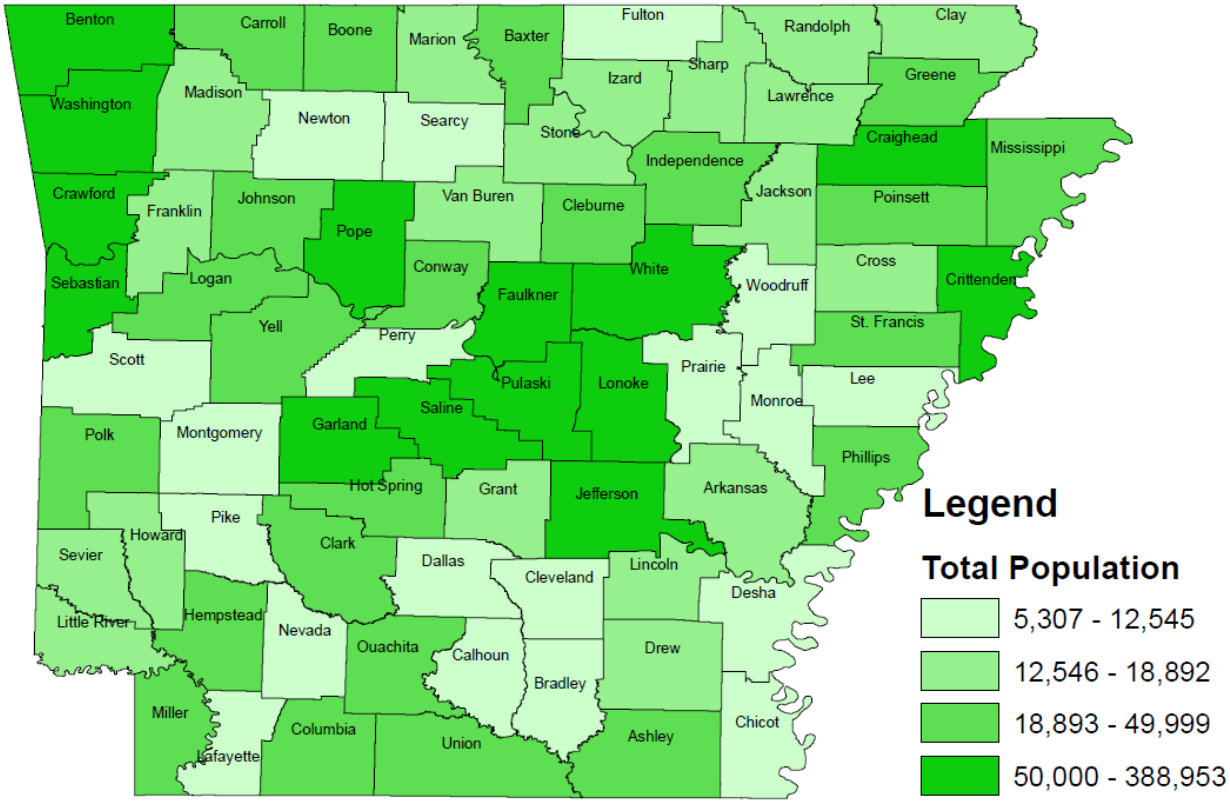
Fall 2014 to Spring 2015

- Develop and publish an Arkansas strategic implementation plan including measures of success in conjunction with initiatives selected by the ORHPC staff and stakeholders

NEEDS ASSESSMENT

Geography

Arkansas is a very rural state, which creates a particularly complex set of service delivery challenges. Nicknamed the "The Natural State," Arkansas is the 32nd largest state with an area of 53,182 square miles. It is a state of mountains, valleys, dense woodland and fertile plains, with a total population of 2,915,918. Arkansas is bounded on the north by Missouri; on the east by the Mississippi River, which separates it from Mississippi and Tennessee; on the south by Louisiana; and on the west by Oklahoma and Texas.[1]

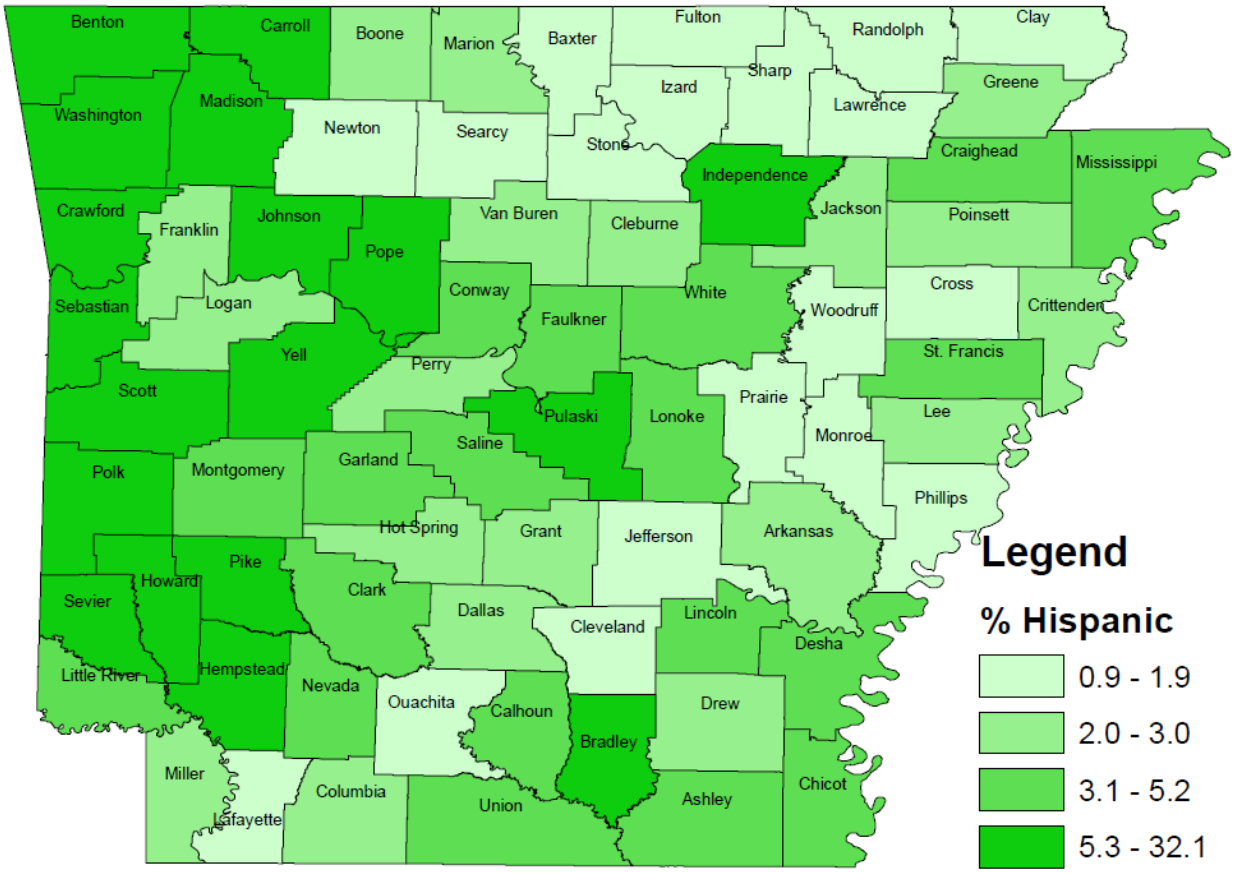


Since the 2010 Census, current population estimates (2013) show that the rural population is declining and the urban population is increasing. Sixty-two of the state's 75 counties meet the U.S. Census Bureau's 1999 definition of "rural". Forty-four percent of the population lives in non-metropolitan or "rural" counties.[2] Arkansas has had a greater percentage of rural people than the nation throughout the last century.[3] See Appendix A – Data Table IV on pages 35 - 36 for actual county level data and Appendix C on page 40 for data source and year.

[1] U.S. Census Guide to 2010 Census State and Local Geography – Arkansas, https://www.census.gov/geo/reference/guidestloc/st05_ar.html
[2] Health Resources and Services Administration – definition of rural, http://www.hrsa.gov/ruralhealth/policy/definition_of_rural.html
[3] 2013 Rural Profile of Arkansas, http://www.uaex.edu/publications/pdf/mp511.pdf

Demography

Demographic information provides data on the community and is necessary for the determination of whether individuals in certain areas have disparate needs. According to the U.S. Census Bureau, 79.9% of the state's population is white, 15.6% is Black/African-American, and 6.9% is of Hispanic/Latino origin (Census, 2013).[4] Arkansas's Hispanic population increased from 87,000 in year 2000 to over 186,000 in year 2010.

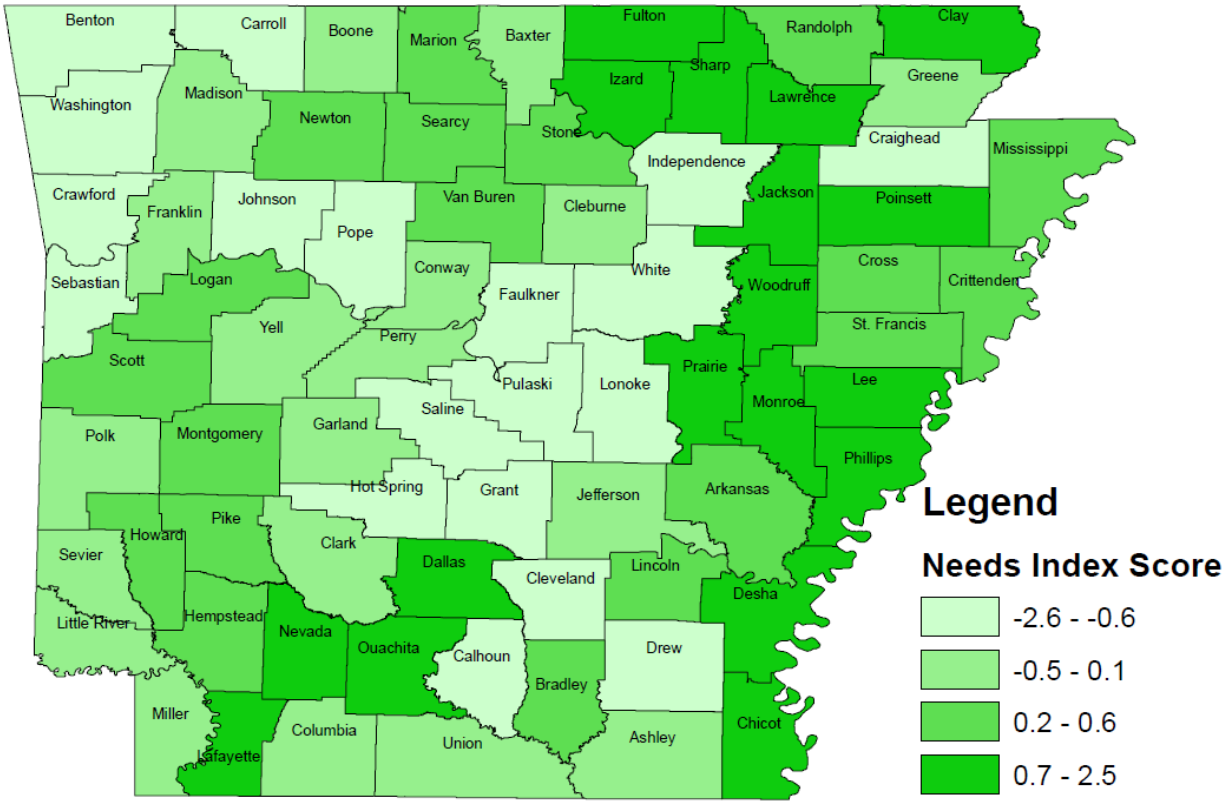


Nine counties had more than 10 percent of their population identifying as Hispanic. Three of the nine counties with at least 10 percent of their population identifying as Hispanic are located in urban areas (Benton, Sebastian, and Washington). Of these nine counties, six were rural counties. All but one county (Bradley) was in the western half of the state.[5] Nearly one-third of Sevier County's population is Hispanic (30.6 percent) compared to Fulton and Lawrence counties with slightly less than 1 percent. See Appendix A – Data Table IV on pages 35 - 36 for actual county level data and Appendix C on page 40 for data source and year.

[4] USDA Economic Research Service, http://www.ers.usda.gov
[5] Rural Profile of Arkansas 2013, http://www.uaex.edu/publications/pdf/mp511.pdf

Needs Index Score

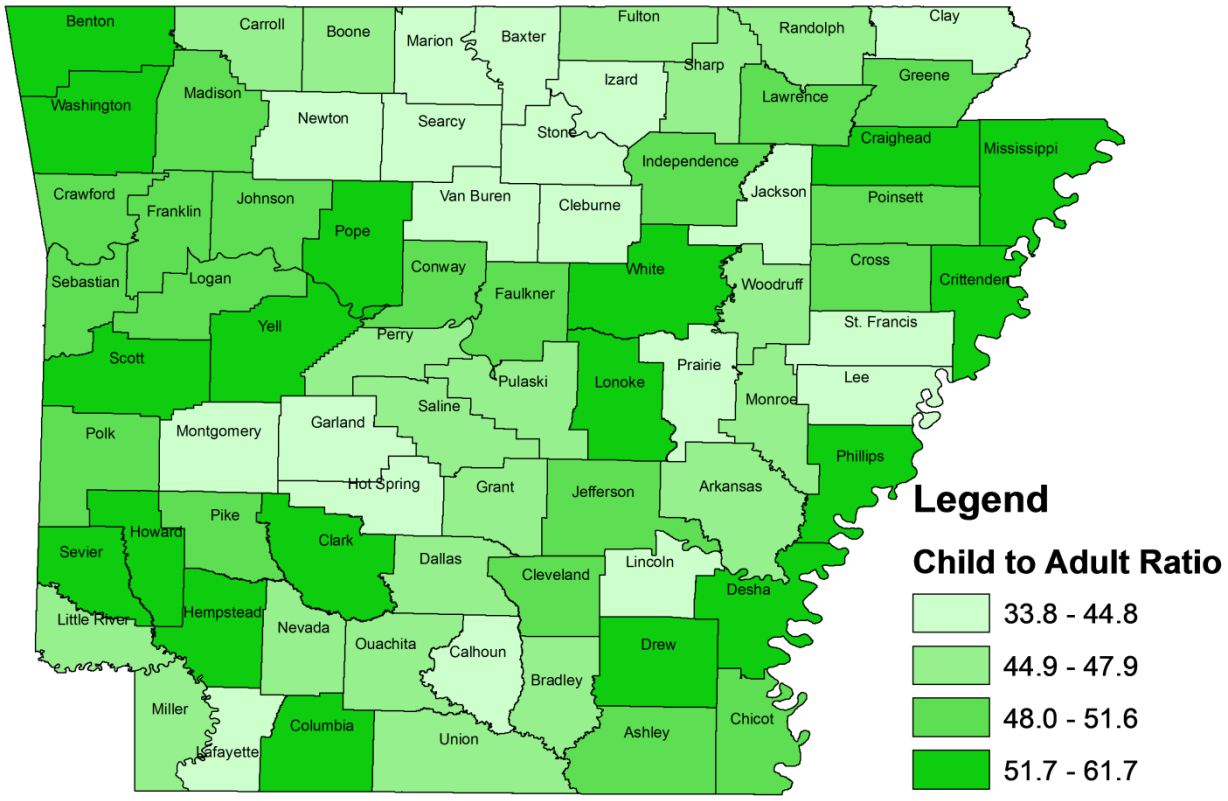
Identifying barriers to health care access is an important first step in addressing the challenges facing the health care system. The needs assessment scoring process attempts to address this issue by assigning either a low to high score based on several indicators listed in the Table of Contents, II. Needs Assessment Sections C through Q. A negative score indicates there is a little need and a positive score indicates high need. The index scores weigh heavily on the following indicators: Medicaid eligibility, poverty, rural health clinic ratio, long term care beds ratio, and age-adjusted mortality.



The needs index scores range from a low of -2.6 in Benton County to a high of 2.5 in Phillips County. The following counties rank among the top ten out of all 75 counties for having the highest needs index scores: Phillips, Chicot, Woodruff, Monroe, Desha, Izard, Lee, Lafayette, Dallas, and Sharp counties. See Appendix A – Data Table I on pages 29 - 30 for actual county level data and Appendix C on page 40 for data source and year.

Child Dependency

The child dependency ratio calculates how many dependent people are between ages 0 to 20 for every 100 working-age people who are between 21 to 64, expressed as a ratio. A high child dependency ratio implies that higher investments need to be made in childhood education and child care.

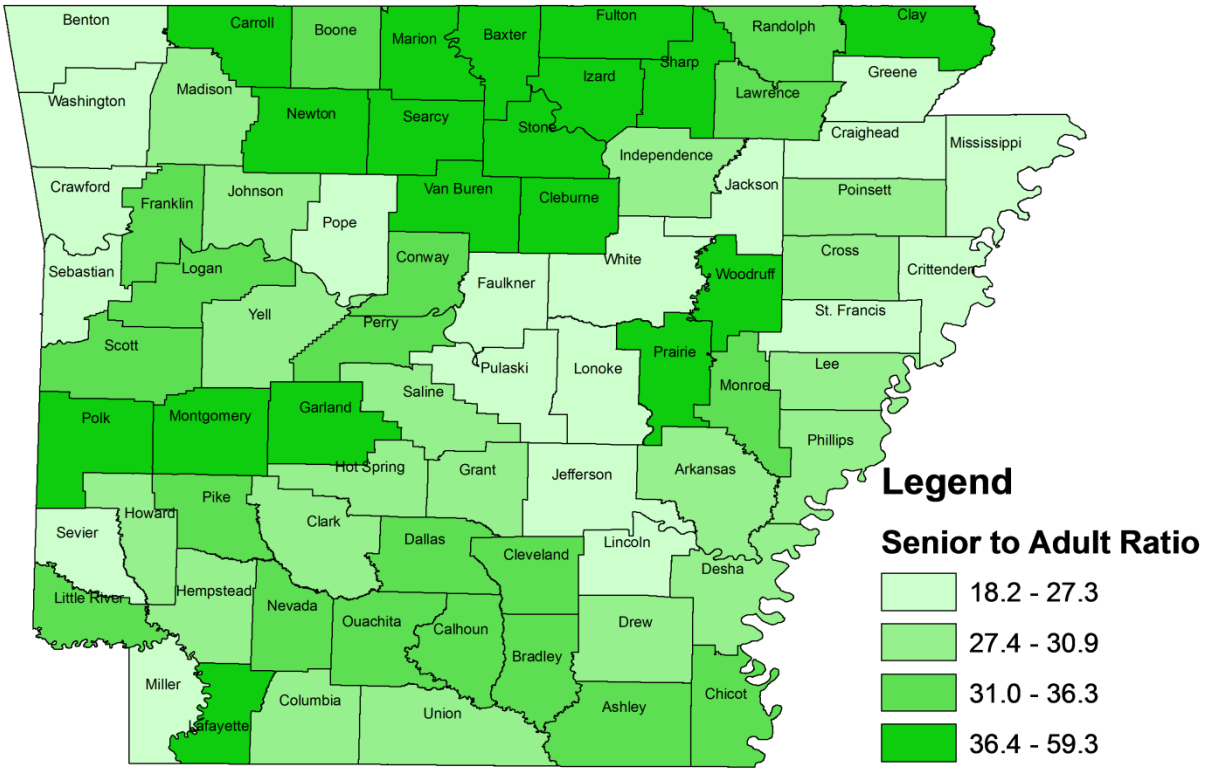


The U.S. child dependency ratios for years 2000 and 2010 range from 41.5 to 38.2 percent, respectively.[6] Arkansas had a 47.9 percentage of dependent-age people per 100 working-age people. The child to adult dependency ratios by county range from a low of 33.8 per 100 in Lincoln County to a high of 61.7 per 100 in Sevier County. See Appendix A – Data Table I on pages 29 - 30 for actual county level data and Appendix C on page 40 for data source and year.

[6] U.S. Census Bureau, https://www.census.gov/compendia/statab/2012/tables/12s0017.pdf

Senior Dependency

Arkansas currently has one of the oldest populations in the U.S.[7] The health needs change as the age of the population increases. More health care providers are needed as the health care workforce is faced with a growing number of retirees. This factor is significant. The age distribution within a county greatly influences the health status and health care needs of its population. A high senior dependency ratio indicates an increased need for potential social support requirements resulting from demographic changes within the aging population.



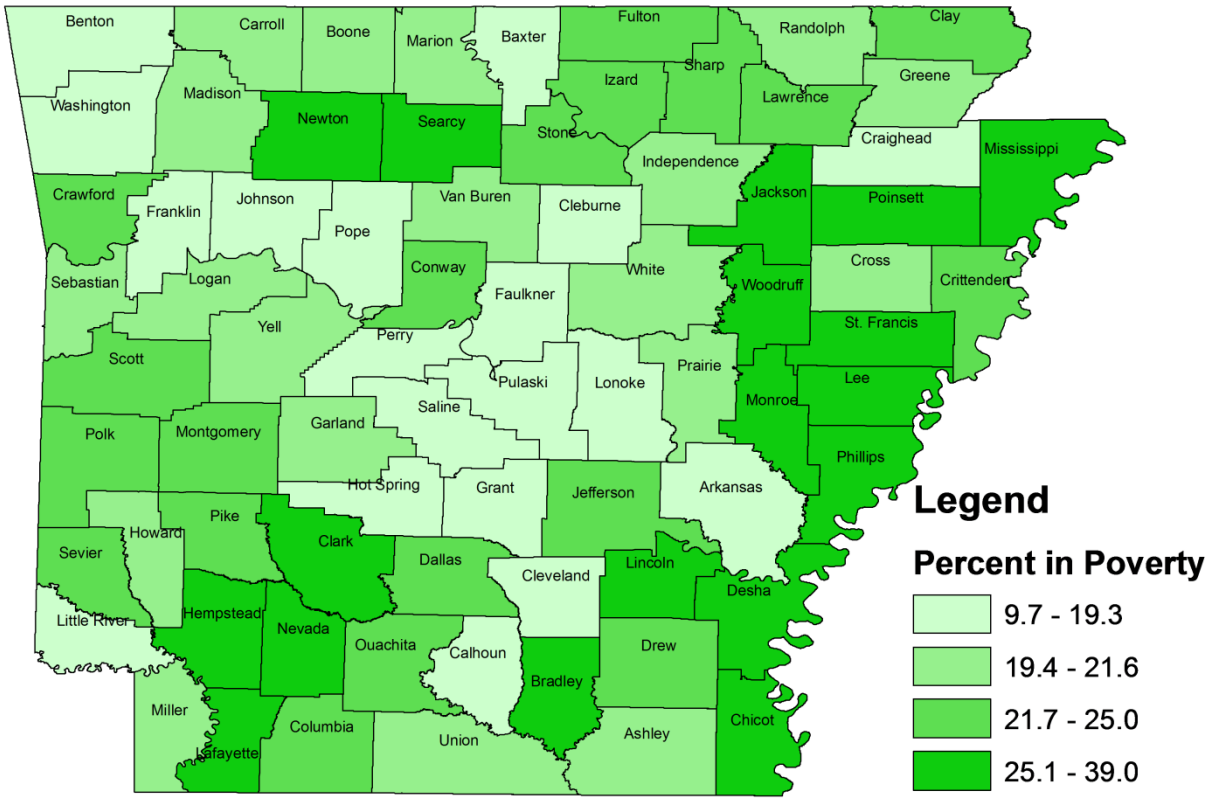
The senior dependency ratio calculates how many seniors who are over the age of 64 for every 100 working-age people between the ages of 21 to 64. The U.S. senior dependency ratios for years 2000 and 2010 range from 20.1 to 20.7 percent, respectively. [8] Arkansas had 32.6 senior dependent-age people per 100 working-age people ages 18 through 64. The county dependency ratios range from a low of 18.2 per 100 in Washington County to a high of 59.3 per 100 in Baxter County. As seen on the senior dependency map, senior dependency rations are substantially higher in the northern section of the state. See Appendix A – Data Table I on pages 29 - 30 for actual county level data and Appendix C on page 40 for data source and year.

[7] Arkansas Health Workforce Strategic Plan: A Roadmap to Change, 2012 http://www.healthy.arkansas.gov/aboutADH/Documents/ArkansasHealthSystem/WorkforceStrategicPlan.pdf

[8] U.S. Census Bureau, https://www.census.gov/compendia/statab/2012/tables/12s0017.pdf

Poverty

Individual or family income is strongly related to health status, health care access and use, and health-related behaviors. Low wages, unemployment, and poverty affect a household's ability to pay for needed health care and this is associated with poorer health outcomes.

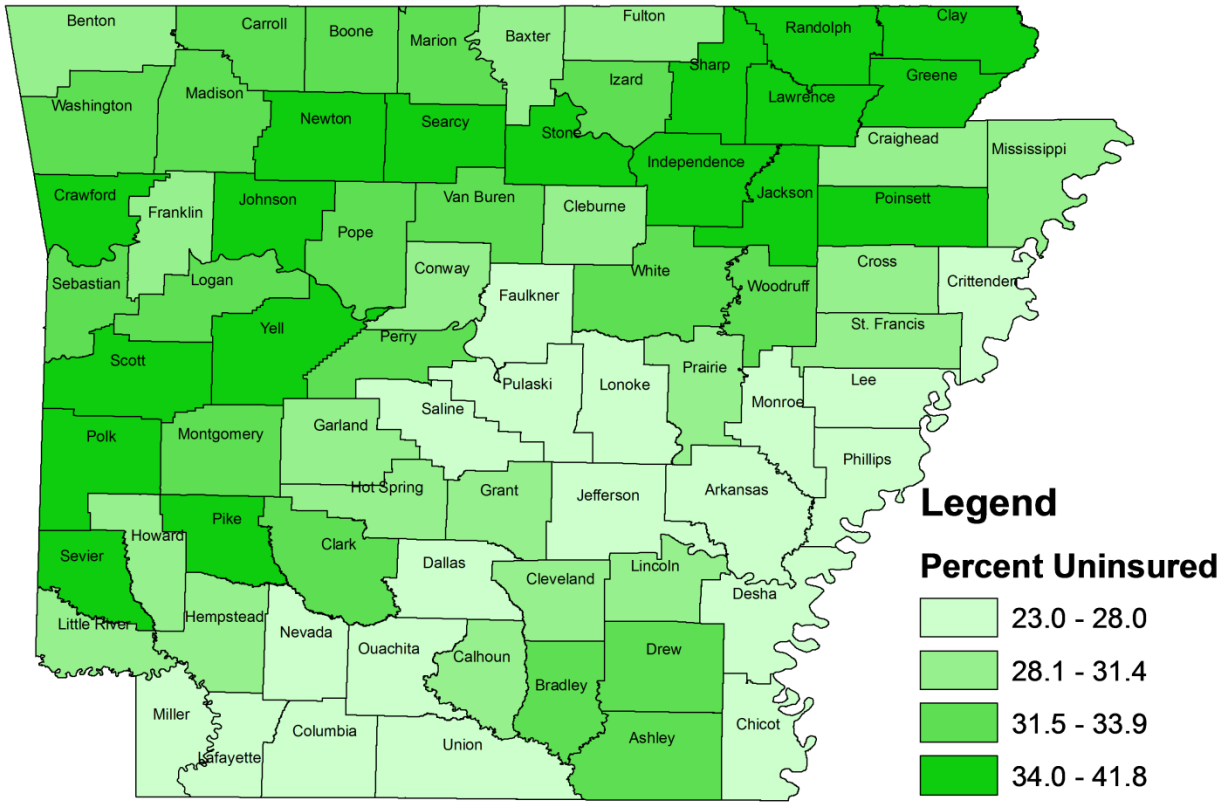


Arkansas had the seventh highest percentage of persons in poverty in the nation.[9] While this ranking for the state is high, many rural areas of Arkansas have higher poverty rates than the overall state level of 22.6 percent. Poverty rates range from a low of 9.7 in Saline County to a high of 39.0 in Phillips County. Counties located in what is known as the Delta area of the state tend to have higher rates of poverty. See Appendix A – Data Table I on pages 29 - 30 for actual county level data and Appendix C on page 40 for data source and year.

[9] 2013 Rural Profile of Arkansas, http://www.uaex.edu/publications/pdf/mp511.pdf

Health Insurance

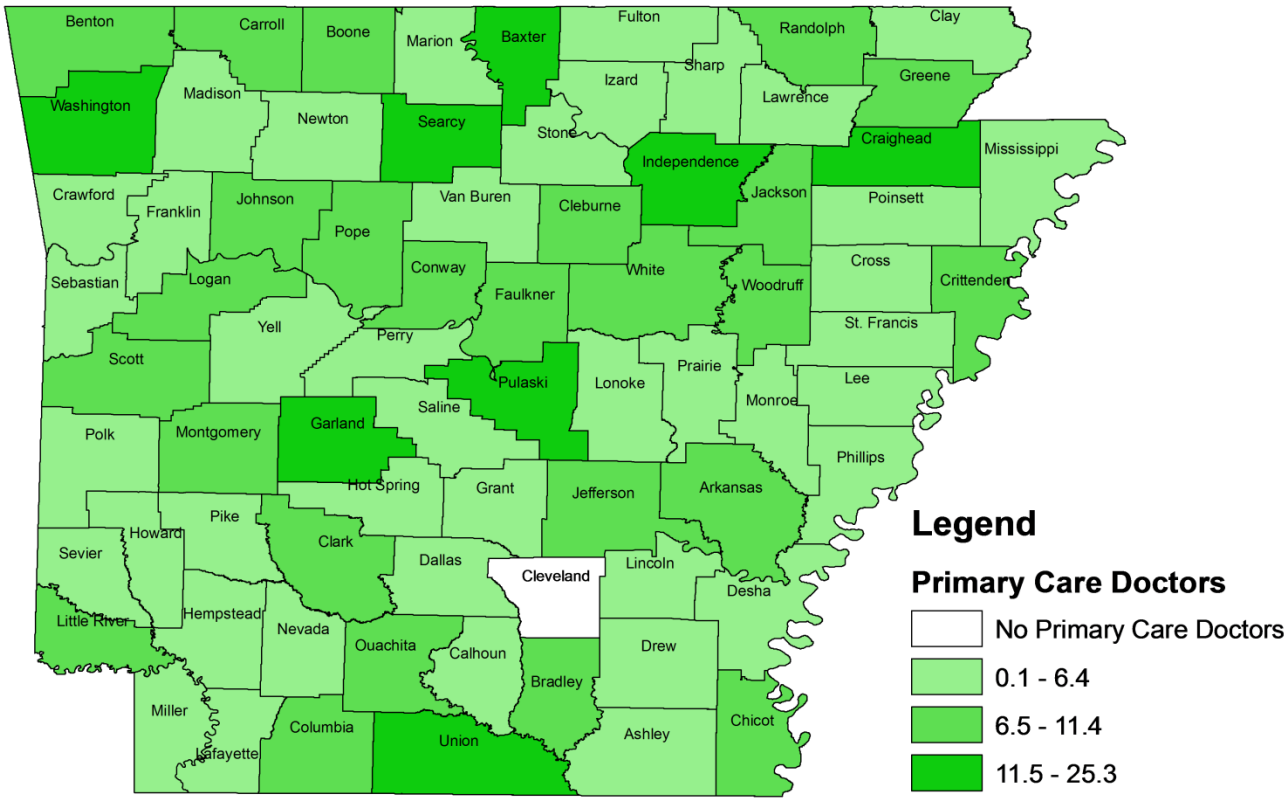
Health insurance provides better access to health care. Those without health insurance are less likely to have a primary care physician where they can receive appropriate preventative care. Rural residents face more challenges accessing health care services than urban residents. Health insurance coverage is an important determinant of access to health care. People who are uninsured use the health system more frequently than the uninsured. The initial need may be high due to the suppressed demand for health care services for those who have been uninsured.



The percent of uninsured in Arkansas is 31.2. The percent of uninsured by county in Arkansas ranges from a low of 23.0 in Jefferson County to a high of 41.8 in Sevier County. Counties located in the northern half of the state tend to have higher rates of uninsured. See Appendix A – Data Table I on pages 29 - 30 for actual county level data and Appendix C on page 40 for data source and year.

Primary Care Doctors

Availability of health care is measured by primary care physicians per 10,000 people. In addition to availability of care, two other factors related to poor health outcomes are considered: lack of health insurance coverage and lack of a primary care physician.[10] The Health Professional Shortage Area (HPSAs), a shortage area designation based on criteria and guidelines set forth by the U.S. Department of Health and Human Services, supplement the primary care needs of the state. [11]Appendix B Map I on page 37 includes the Arkansas HPSA Primary Care designation map.

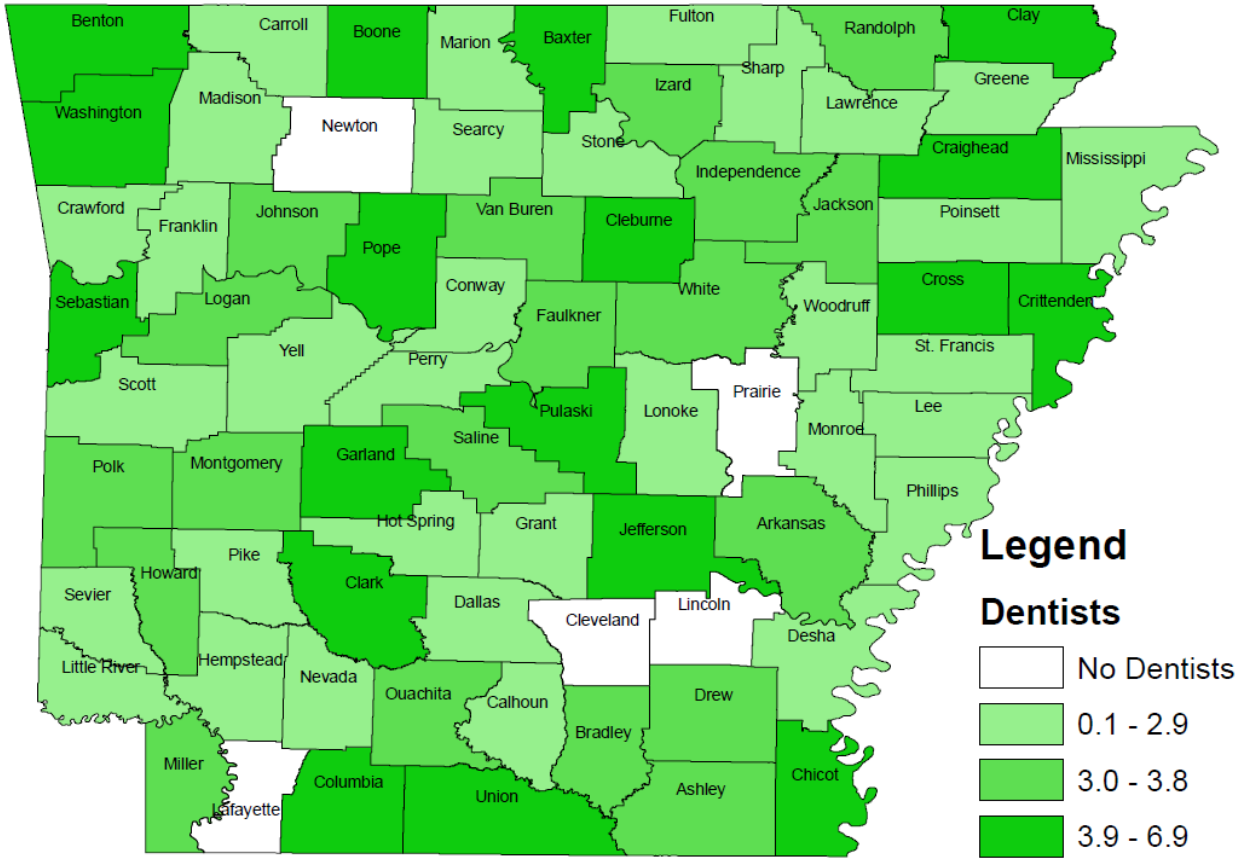


On average, Arkansas has 10.7 primary care doctors available per 10,000 people. On a county level, the primary care physician per 10,000 population range from a low of 0.7 per 10,000 population in Izard County to a high of 25.3 per 10,000 in Pulaski County. Cleveland County is the only county in the state that does not have a primary care physician. See Appendix A – Data Table II on pages 31 - 32 for actual county level data and Appendix C on page 40 for data source and year.

[10] Rural Profile of Arkansas 2013, http://www.uaex.edu/publications/pdf/mp511.pdf
[11] Health Resources and Services Administration – definition of HPSA, http://www.hrsa.gov/shortage/

Dentists

Oral health is often taken for granted, but it is an essential part of overall health and wellness. Good oral health enhances our ability to perform several daily functions which include the ability to speak, smile, smell, taste, touch, chew, swallow, and convey feelings and emotions through facial expressions. Oral diseases can range from cavities to oral cancer which can cause pain and disability.[12] Dental health professional shortage areas are designated geographic areas in which the population has an inadequate number of dentists to serve the populations dental needs. Appendix B Map II on page 38 includes the Arkansas HPSA Dental designation map.

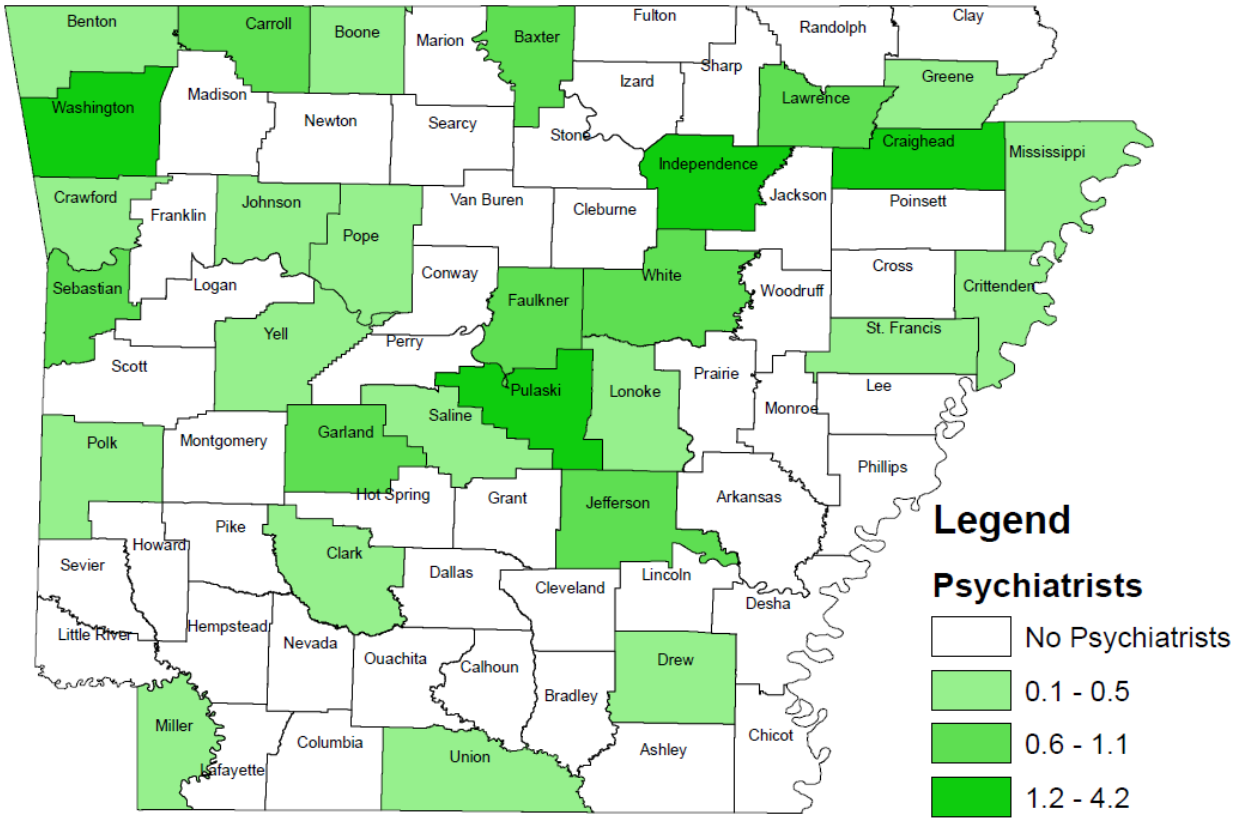


On average, Arkansas has 4.3 dentists per 10,000 people. There are five counties in Arkansas that do not have dentists: Newton, Prairie, Cleveland, Lincoln, and Lafayette. Excluding these five counties, the dentists per 10,000 population range from a low of 0.8 per 10,000 population in Poinsett County to a high of 6.9 per 10,000 in Pulaski County. See Appendix A – Data Table IV on pages 35 - 36 for actual county level data and Appendix C on page 40 for data source and year.

[12] Centers for Disease Control and Prevention, Oral Health http://www.cdc.gov/chronicdisease/resources/publications/aag/doh.htm

Psychiatrists

Mental health is "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."[13] Evidence has shown that mental disorders, especially depressive disorders, are strongly related to the occurrence, successful treatment, and course of many chronic diseases. Mental health professional shortage areas (HPSA) are designated geographic areas in which the population has an inadequate number of mental health providers. Appendix B Map III on page 39 includes the Arkansas HPSA Mental Health designation map.

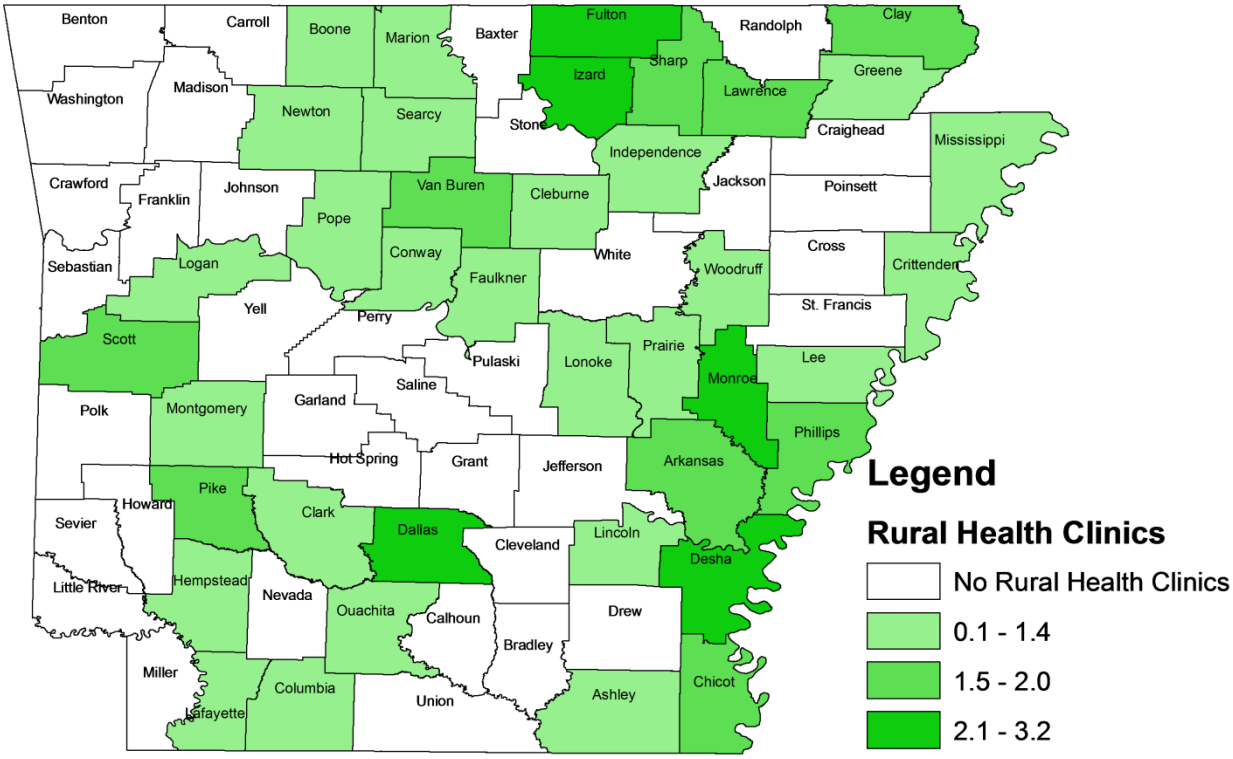


On average, Arkansas has 1.0 psychiatrists available per 10,000 people. There are 46 counties in Arkansas that do not have psychiatrists. Excluding these 46 counties, the psychiatrists per 10,000 population range from a low of 0.1 per 10,000 population in Lonoke County to a high of 4.2 per 10,000 in Pulaski County. See Appendix A – Data Table IV on pages 35 - 36 for actual county level data and Appendix C on page 40 for data source and year and Appendix C on page 40 for data source and year.

[13] Centers for Disease Control and Prevention, http://www.cdc.gov/mentalhealth/basics.htm

Rural Health Clinics

A Rural Health Clinic is a federally qualified health clinic certified to receive special Medicare and Medicaid reimbursement. [14] All rural health clinics that provide access to care regardless of ability to pay receive automatic facility HPSA designation.[15] These clinics increase access to primary care services for rural Medicare and Medicaid patients. Rural Health Clinic rates are expressed as the number of clinics per 10,000 population.

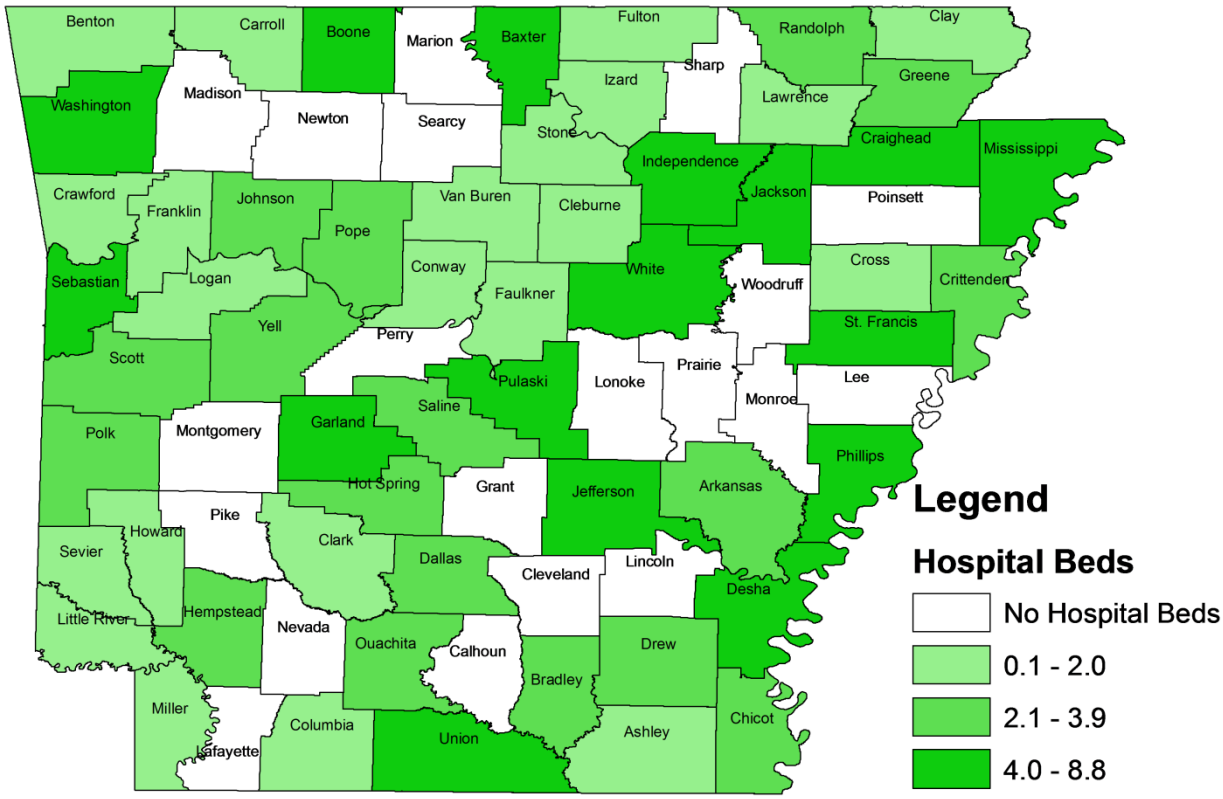


Arkansas has 0.6 rural health clinics per 10,000 population. Excluding counties which have no rural health clinics, the rural health clinics rates range from a low of 0.1 in Lonoke County per 10,000 population to a high of 3.2 per 10,000 population in Desha County. Twenty-three of the seventy-five counties in Arkansas have at least 1.0 rural health clinics per 10,000 population. See Appendix A – Data Table II on pages 31 - 32 for actual county level data and Appendix C on page 40 for data source and year.

[14] Health Resources and Services Administration, http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/ruralclinics.html
[15] Health Resources and Services Administration, http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/

Hospital Beds

Hospital beds for 1,000 population include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation centers.[16] This includes beds for both acute and chronic care. This measure serves as a general measure of inpatient service access and availability.

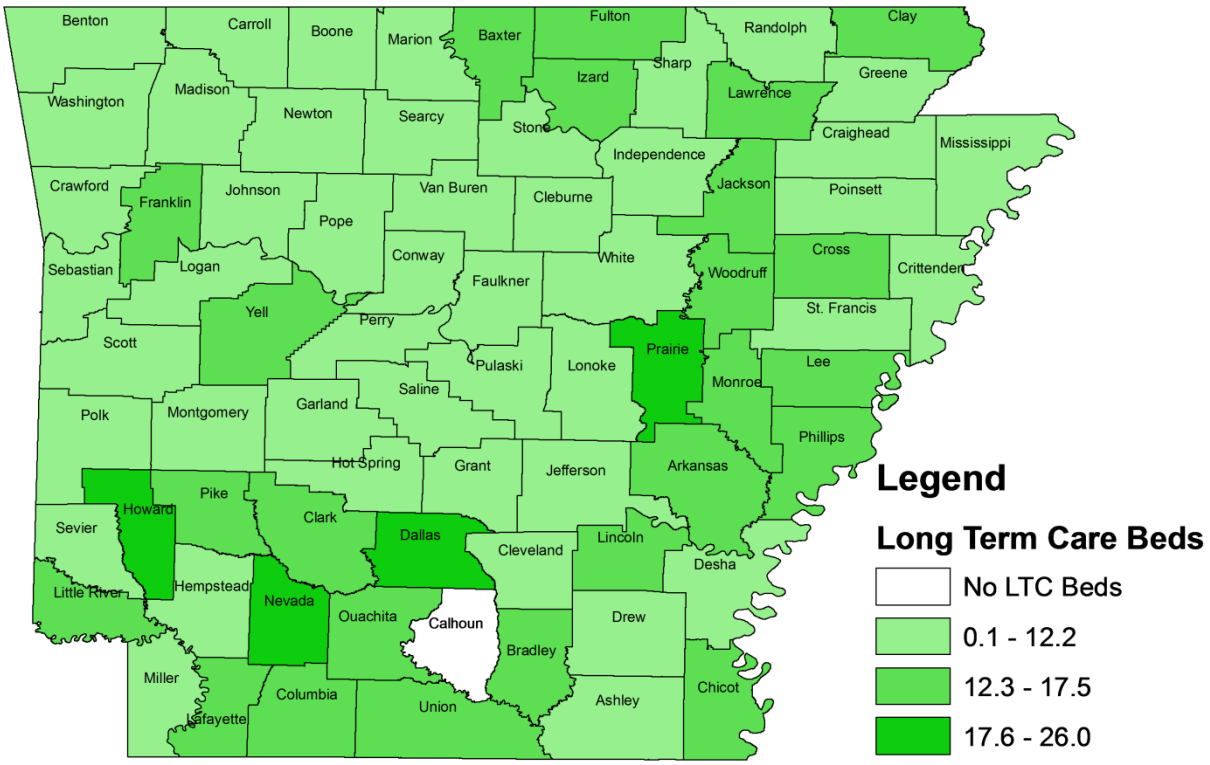


Arkansas has 2.4 hospital beds per 1,000 population available. Excluding twenty counties which have no hospital beds, the hospital bed rates per 1,000 population range from a low of 1.0 in Cleveland County per 1,000 population to a high of 8.8 per 1,000 population in Pulaski County. See Appendix A – Data Table II on pages 31 - 32 for actual county level data and Appendix C on page 40 for data source and year.

[16] Central Intelligence Agency, https://www.cia.gov/library/publications/the-world-factbook/fields/print_2227.html

Long Term Care Beds

Long-term care (LTC) refers to a variety of medical and support services for people with chronic illnesses or disabilities, particularly the elderly. LTC services may be provided nursing facilities, adult day cares and adult day health center programs, at assisted living facilities or in residential LTC facilities, post-acute head injury retraining residential facilities.[17]

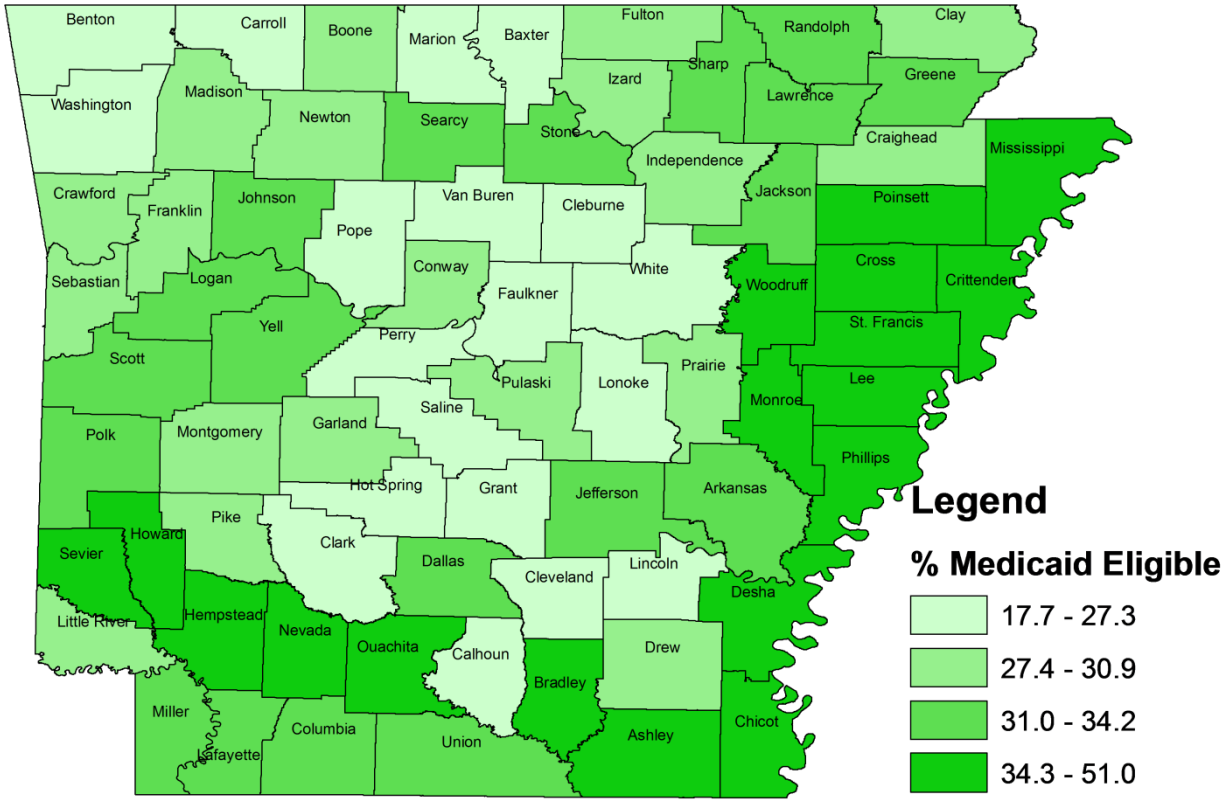


On average, Arkansas has 11.3 long term care beds per 1,000 population. Excluding Calhoun County which has no long term care beds, the long term care bed rates per 1,000 population range from a low of 4.6 in Faulkner County per 1,000 population to a high of 26.0 per 1,000 population in Dallas County. See Appendix A – Data Table II on pages 31 - 32 for actual county level data and Appendix C on page 40 for data source and year.

[17] Arkansas Department of Human Services, Division of Medical Services, http://humanservices.arkansas.gov/dms/Pages/oltcHome.aspx

Medicaid Eligible

Medicaid reimburses health care providers for covered medical services provided to eligible individuals who are in need that also fall within certain categories. Eligibility is determined based on income, resources, Arkansas residency, and other requirements. Eligibility and enrollment categories include two main categories "Aged, Blind and Disabled" and "Children and Family".[18] Approximately 251,000 Arkansans became eligible for Medicaid and approximately 323,000 Arkansans qualified for subsidies to pay health insurance premiums in 2014.[19]



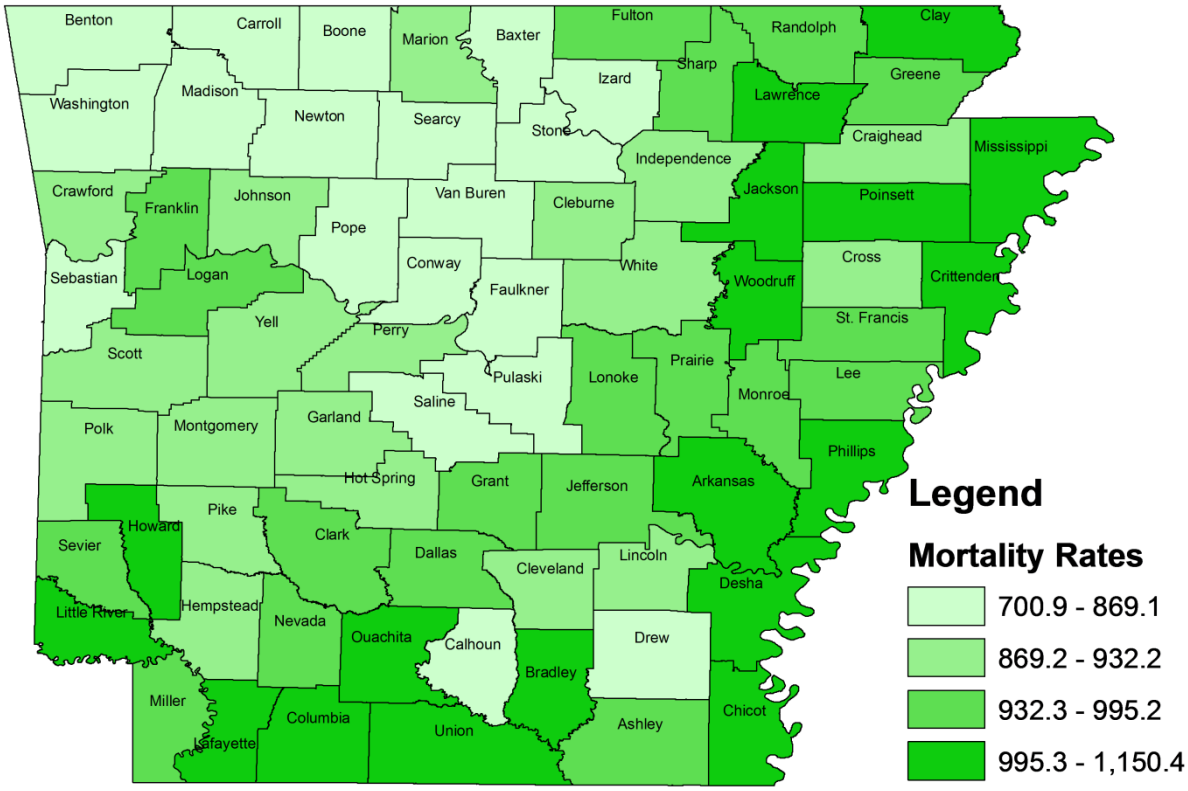
Arkansas has 31.3 percent of its population who are eligible for Medicaid services. Medicaid eligibility percentages range from a low of 17.7 in Saline County to a high of 51.0 in Phillips County. In Chicot, Crittenden, Desha, Monroe, Phillips, and Woodruff Counties, four out of every ten people who live in the county are eligible for Medicaid Services. Counties located in the Delta area of the state tend to have higher percentages of persons who are eligible for Medicaid. See Appendix A – Data Table III on pages 33 - 34 for actual county level data and Appendix C on page 40 for data source and year.

[18] Medicaid Program, Eligibility and Enrollment http://humanservices.arkansas.gov/dco/Pages/MedicaidEligibility.aspx

[19] Arkansas Health Care Workforce: A Guide for Policy Action, http://www.achi.net/Docs/30/

Age Adjusted Mortality

Mortality or death rates are often used as measures of health status for a population. Many factors affect the risk of death including age, race, gender, occupation, education, and income. It is important to standardize the data for age differences when making comparisons among death rates to thoroughly assess the risk of death. Therefore, age-adjusted death rates are valuable when comparing two different geographic areas.

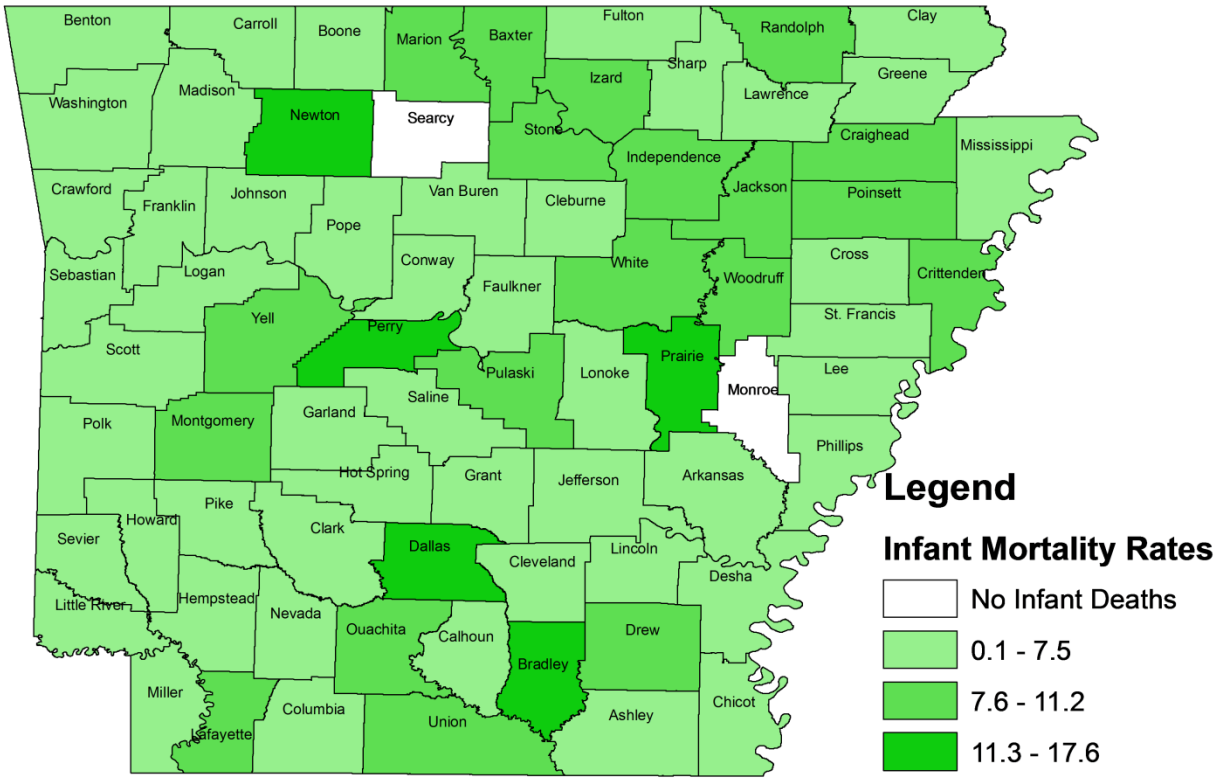


Heart disease is the leading cause of death in Arkansas, resulting in the death of 22,085 people from 2008 to 2010. Heart disease, cancer and stroke account for nearly seven out of every ten deaths in Arkansas. For every condition, the mortality rates are higher in Arkansas than they are nationally.[20] Age-adjusted mortality rates range from a low of 700.9 in Benton County to a high of 1,150.4 in Poinsett County. Counties located in the Delta area of the state tend to have higher age-adjusted mortality rates compared to the rest of the state. See Appendix A – Data Table III on pages 33 - 34 for actual county level data and Appendix C on page 40 for data source and year.

[20] 2012 Arkansas Heart Disease and Stroke Report, http://publichealth.uams.edu/files/2013/01/HeartDiseaseStroke2012.pdf

Infant Mortality

The death of a baby before his or her first birthday is called infant mortality. The infant mortality rate is an estimate of the number of infant deaths for every 1,000 live births. This rate is often used as an indicator to measure the health and well-being of a nation, because factors affecting the health of entire populations can also impact the mortality rate of infants. [21] In 2010, there were 282 infant deaths in Arkansas.

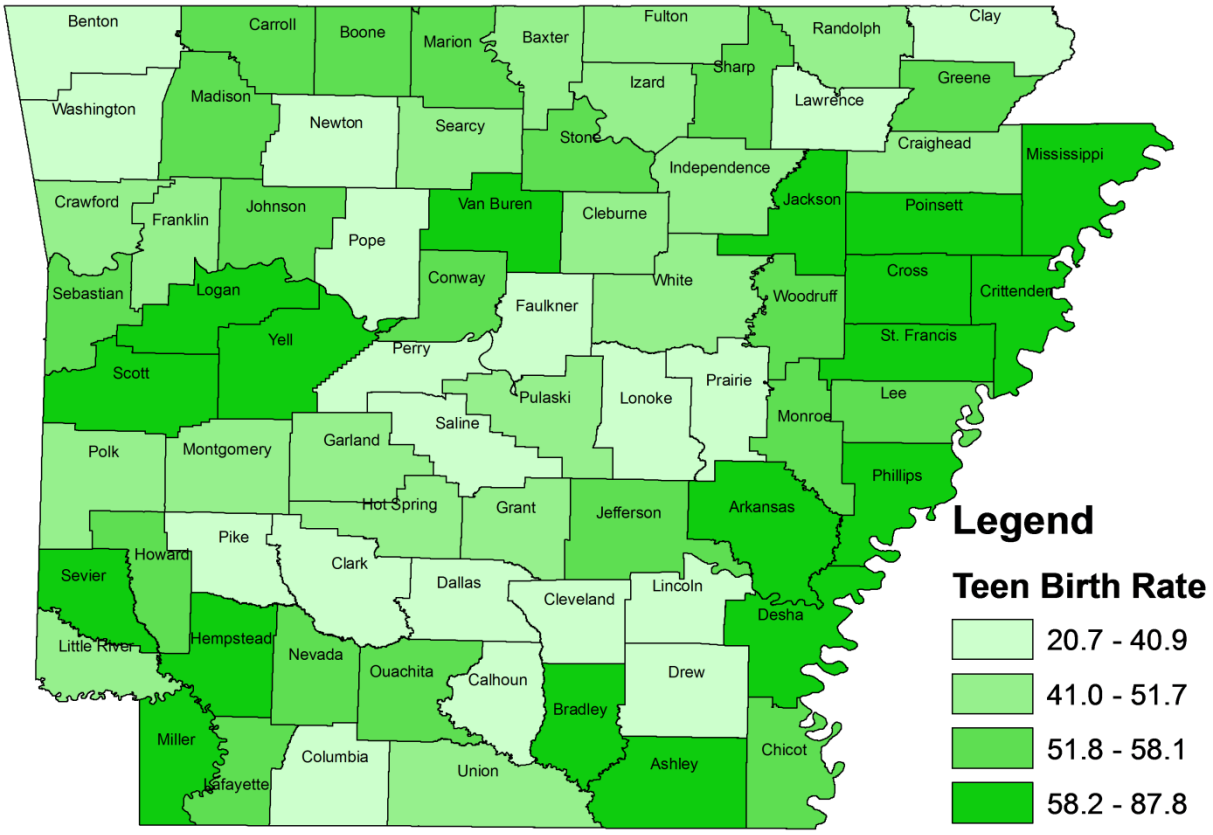


The state-wide infant mortality rate has remained higher than the U.S. rate for over a decade. By race, non-Hispanic Blacks in Arkansas have the highest infant mortality rate (9.7%) compared to all other race groups.[22] The infant mortality rates range from a low of 1.3 deaths per 1,000 live births in Little River to a high of 17.6 in Newton County. The northeastern section of the state has higher infant mortality rates compared to other areas of the state. See Appendix A – Data Table III on pages 33 - 34 for actual county level data and Appendix C on page 40 for data source and year.

[21] CDC Reproductive Health, http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/InfantMortality.htm
[22] CDC Risk Factors and Health Indicators, http://wwwn.cdc.gov/sortablestats/

Teen Births

Teen pregnancy and childbearing bring a substantial social and economic cost which has both immediate and long-term impacts on teen parents and their children. Teen pregnancy and childbirth contribute significantly to drop-out rates among high school girls. These effects remain for the teen mother and her child even after adjusting for those factors that increased the teenager's risk for pregnancy, such as growing up in poverty, having parents with low levels of education, growing up in a single-parent family, and having poor performance in school.[23]



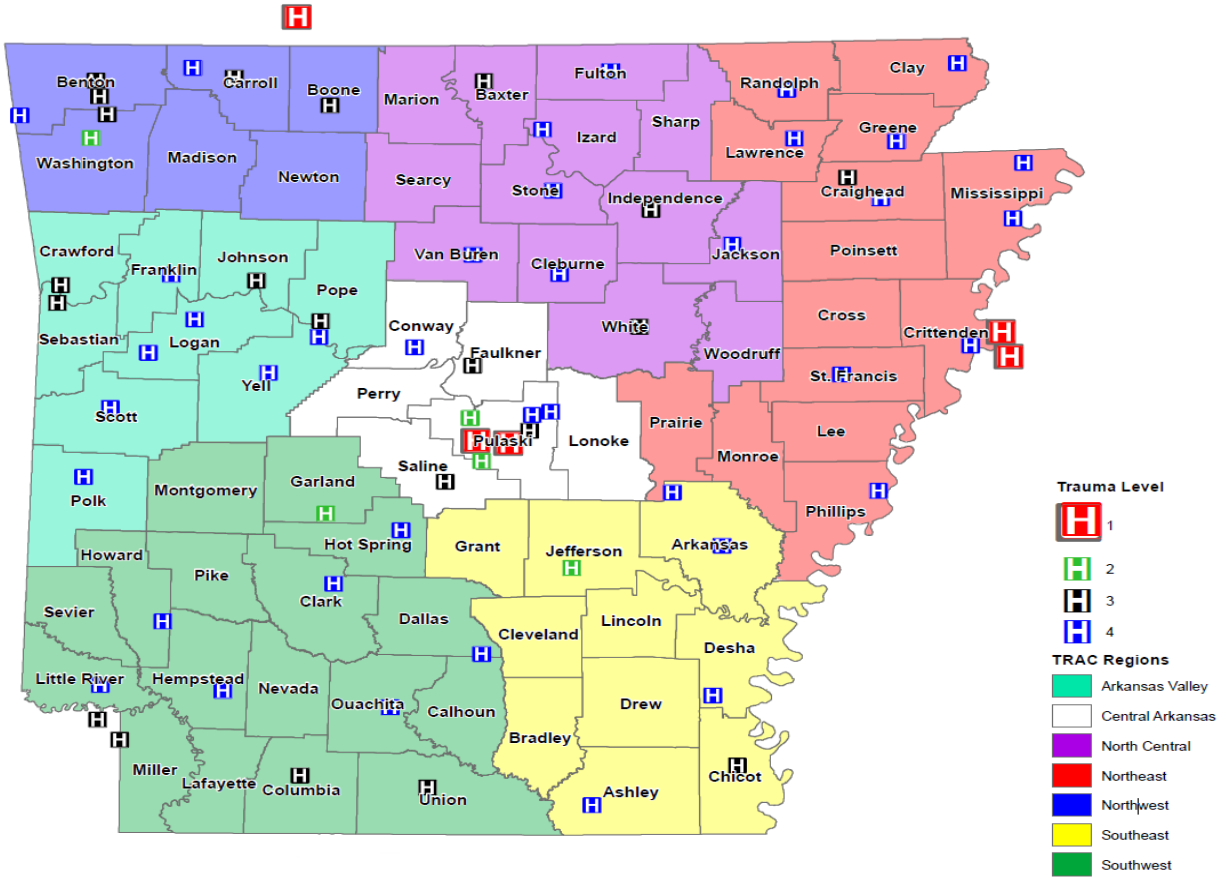
The state of Arkansas has a teen birth rate of 50.7 which is higher than the U.S. rate of 31.3. Teen birth rates are calculated as the number of births per 1,000 females aged 15 through 19. The teen birth rate per 1,000 for females aged 15 – 19 ranges from a low of 20.7 in Clark County to a high of 87.8 in Phillips County. The eastern half of the state tends to have higher teen birth rates compared to other parts of the state. See Appendix A – Data Table III on pages 33 - 34 for actual county level data and Appendix C on page 40 for data source and year.

[23] Centers for Disease Control and Prevention, About Teen Pregnancy http://www.cdc.gov/teenpregnancy/aboutteenpreg.htm

Emergency Medical Services

The mission of the Emergency Medical Services (EMS) Section of the Arkansas Department of Health is to promulgate and enforce rules and regulations which foster and encourage the development of quality pre-hospital EMS for the citizens of the state.[24]

One of the principal goals of the Arkansas Trauma System is to save lives and decrease preventable morbidity by getting the "right patient to the right place as quickly and safely" as possible.



In 2008, the American College of Emergency Physicians cited Arkansas as having the worst system of emergency care in the nation. Prior to 2009, Arkansas was one of three states without a trauma system and the only state without a designated trauma center. In 2009, the Arkansas legislature passed the Trauma System Act which provided funding appropriation for progress toward the implementation of the trauma system. As of January 2014, Arkansas had 68 designated trauma centers throughout the state and it is expected for this number to grow.[25]

[24] Emergency Medical Services, Arkansas Department of Health, http://www.healthy.arkansas.gov/programsServices/hsLicensingRegulation/EmsandTraumaSystems/Pages/default.aspx
[25] Arkansas Trauma System Brochure, http://www.healthy.arkansas.gov/programsServices/injuryPreventionControl/TraumaticSystems/Documents/trauma/ArkansasTraumaSystemBrochure.pdf

HEALTHCARE RESOURCES

More rural counties have fewer residents who often live further from health care resources than their more urban counterparts. Arkansas has a variety of safety net providers to compensate for the shortage of health care providers and improve access to care in those areas, especially for the low-income and uninsured population. This is done through a number of initiatives operating in concert with other agencies and organizations dedicated to providing access to health care. The following is a list of grant funding programs within the Office of Rural Health and Primary Care:

Charitable Clinics Grant Program: Serves to strengthen health care systems and services at the local level for Arkansas' Charitable Clinics, by increasing the number of Arkansans receiving health care services.

Community Health Centers Grant Program: Serves to increase delivery of direct services to patients of Community Health Centers, preserve and strengthen the twelve Community Health Centers and increase Arkansans' access to quality primary and preventative health care in Arkansas.

Delta Rural Hospital Performance Improvement Project: Assists in providing tools for hospital performance improvement and resource building at state and regional levels through technical assistance and consultation.

Health Professional Clearinghouse: Professionals are matched with communities/healthcare facilities that have been actively recruiting. These activities are coordinated through a variety of ORHPC partners and other organizations and communities.

Health Resources and Services Administration: The ORHPC compiles, analyzes and submits requests to Health Resources and Services Administration for designations of Medically Underserved Areas (MUAs) and primary care, dental, and mental Health Professional Shortage areas (HPSAs).

J-1 Visa Waiver Physicians: Foreign physicians who attend medical school and receive a medical degree in a foreign country are permitted to come to the United States for residency training on a J-1 Visa. After completion of the residency training, these physicians are required to return to their home country for two years before applying for a new U.S. Visa. The two-year home return requirement may be waived if the physician is willing to practice medicine, full-time for three years, in an underserved area of the United States.

Medicare Rural Hospital Flexibility Program: The federal program created the program to assist limited service hospitals become eligible as Critical Access Hospital (CAHs) for Medicare reimbursement. Currently, there are 29 CAH in Arkansas.

National Health Service Corps: Health care professionals are matched with requesting sites in Arkansas qualifying as Health Professional Shortage Areas (HPSAs). These professionals are able to repay their loans or scholarships (payback through service) through a commitment to work in a designated area of the state.

Primary Care Office Grant: Provides federal-level funding to states to improve access to care for underserved populations. The Office of Rural Health and Primary Care provides technical assistance to parties that may qualify for these programs.

Rural Health Services Revolving Fund: Serves to strengthen rural health care systems and services at the local level. Funds can be used to assist in efforts to upgrade and support the health care delivery system of the local community.

Small Rural Hospital Improvement Program: Provides funds to small rural hospitals to improve quality and enhance their ability to meet federal hospital guidelines.

State Office of Rural Health Grant: Focuses on maintaining and increasing quality health care services to rural and underserved areas of the state. By partnering with other agencies and organizations, the initiative improves access to health care services.

KEY BARRIERS TO PROGRESS

There are 3 main challenges identified by the needs assessment and discussed within the Arkansas Health Care Workforce: A Guide for Policy Action document. These challenges may hinder or limit current or future progress:

- ✓ The supply, capacity, and distribution of primary care clinicians in Arkansas is not sufficient to meet the health care needs of Arkansans and is not likely to change in the short term.

- ✓ There are gaps in health care access, quality of care, and geographic barriers that negatively impact care in rural and underserved communities and populations.

- ✓ The demand for health care services will be driven by a rapidly increasing population of elderly Arkansans and a general population that experiences differentially high rates of chronic disease.

RECOMMENDATIONS

The following are recommendations to address the needs outlined in the primary care needs assessment:

- ✓ **Recruit and Retain Primary Care Providers in Rural Areas**: Continue to recruit and retain primary care providers in rural areas by assessing the benefits and limitations of current provider incentive programs. This will assist with the current shortage of primary care providers in rural areas.
- ✓ **Expand Health Professional Shortage Area Designations**: Monitor and assess underserved areas of the state that are currently without a Health Professional Shortage Area (HPSA) designation to see if the changing primary care physician, mental health and dental providers and census data enables the areas to qualify as a HPSA.
- ✓ **Analyze Health Data**: Analyze and update the needs assessment tool on an annual basis. Continue to collect, analyze, and disseminate health related data to leaders and stakeholders serving rural areas of Arkansas. This allows partnering agencies to understand current needs, challenges, and obstacles facing the primary care workforce in these underserved areas.
- ✓ **Develop and Maintain Strategic Primary Care Partnerships**: Continue to foster collaborative relationships. This allows advocates to discuss and foster dialogue regarding new sources of revenue for the primary health care needs in rural areas of Arkansas.
- ✓ **Support Community-Based Efforts to Recruit and Retain Primary Care Providers**: Provide support, foster leadership and collaboration efforts to engage community-level leaders in underserved areas to have strategic discussions about drawing primary care providers and resources to shortage areas.

CONCLUSIONS

This primary care needs assessment for the Office of Rural Health and Primary Care identifies various needs that can be addressed through strategic planning, evaluation, and coordination with partnering agencies and stakeholders who have a similar interest. Some of the identified needs and current grant funded programs of the ORHPC need to be further reviewed to understand the implications found in this needs assessment. More detailed and rigorous planning efforts need to be determined to reduce the need in Arkansas.

There remain many challenges, obstacles, and limitations but through strategic planning and partnering the ORHPC may assist in managing prioritized issues. There is a critical need to manage multiple demands and to assure a balanced approach to the utilization of human and budgetary resources to complement the overall mission of ORHPC.

This needs assessment serves as a snapshot of current measurable indicators which have an impact on the health of those living in rural areas of Arkansas. The assessment serves as a tool for identifying some of the various issues that pose a problem for rural health in Arkansas. The data elements in the needs assessment will need to be continuously updated to stay abreast of demographic shifts as well as other challenges. The ORHPC and its partners continue to require financial resources to meet the need in the face of a changing health care system.

APPENDIX A

DATA TABLE I

Rank	County	Needs Index	Child to Adult Ratio	Senior to Adult Ratio	Percent in Poverty	Percent Uninsured
22	Arkansas	0.532	46.8	30.0	18.4	27.9
38	Ashley	0.101	49.1	32.1	20.3	32.1
45	Baxter	-0.211	40.9	59.3	17.7	29.1
75	Benton	-2.626	54.1	22.6	13.5	28.6
54	Boone	-0.533	47.2	35.2	21.2	32.8
28	Bradley	0.383	47.7	32.6	25.7	32.6
67	Calhoun	-1.160	36.5	32.9	19.2	29.5
63	Carroll	-0.864	46.8	37.3	20.0	33.0
2	Chicot	1.826	48.2	34.3	37.0	25.1
53	Clark	-0.495	56.6	29.0	26.6	32.7
15	Clay	0.859	44.8	38.6	22.4	39.5
43	Cleburne	-0.076	42.3	47.1	16.9	28.4
59	Cleveland	-0.686	49.1	33.6	17.2	28.1
40	Columbia	0.002	56.1	30.5	24.5	27.3
44	Conway	-0.202	48.0	32.5	22.9	31.4
70	Craighead	-1.479	51.6	22.2	17.6	30.1
61	Crawford	-0.799	50.6	26.2	21.7	34.0
31	Crittenden	0.284	57.0	21.0	24.0	27.4
37	Cross	0.102	51.6	30.9	19.9	29.2
9	Dallas	1.271	47.1	36.1	23.0	26.5
5	Desha	1.416	53.8	30.3	27.4	27.1
57	Drew	-0.603	52.8	28.6	24.7	33.0
73	Faulkner	-2.058	51.0	18.5	14.4	28.0
49	Franklin	-0.351	50.8	32.4	18.6	31.0
12	Fulton	1.064	45.1	47.2	23.5	31.4
52	Garland	-0.491	43.9	38.9	19.8	29.3
66	Grant	-1.048	47.0	27.6	12.5	28.4
50	Greene	-0.351	49.8	26.0	19.4	35.9
30	Hempstead	0.293	54.1	29.0	29.0	29.9
58	Hot Spring	-0.605	43.8	28.9	18.6	28.5
24	Howard	0.477	54.9	30.2	19.9	30.9
60	Independence	-0.783	50.1	29.9	19.5	35.6
6	Izard	1.337	39.2	46.2	24.6	33.9
18	Jackson	0.590	38.7	27.3	26.7	35.3
47	Jefferson	-0.322	48.8	25.6	23.9	23.0
62	Johnson	-0.837	51.6	27.5	18.0	36.2

APPENDIX A

DATA TABLE I

Rank	County	Needs Index	Child to Adult Ratio	Senior to Adult Ratio	Percent in Poverty	Percent Uninsured
8	Lafayette	1.283	43.8	38.0	28.5	27.7
13	Lawrence	1.012	49.9	35.8	25.0	37.7
7	Lee	1.301	38.9	27.3	38.6	27.8
34	Lincoln	0.178	33.8	20.3	32.9	30.5
42	Little River	-0.033	47.5	33.6	18.8	28.6
21	Logan	0.565	48.7	34.3	20.9	33.9
68	Lonoke	-1.275	52.3	21.0	12.4	27.0
55	Madison	-0.580	48.1	30.1	21.2	33.2
19	Marion	0.574	36.5	49.1	21.4	33.0
46	Miller	-0.229	47.5	25.4	20.9	27.8
20	Mississippi	0.570	55.2	23.4	25.6	31.2
4	Monroe	1.546	45.9	36.3	27.3	25.7
23	Montgomery	0.529	42.8	47.1	24.0	32.6
14	Nevada	0.974	47.7	34.4	25.7	26.6
26	Newton	0.409	42.0	42.6	27.1	34.4
17	Ouachita	0.633	46.9	31.7	21.9	26.6
56	Perry	-0.583	45.0	32.7	16.8	32.3
1	Phillips	2.546	58.8	29.8	39.0	24.6
33	Pike	0.233	50.3	32.7	22.7	36.2
11	Poinsett	1.152	48.5	29.8	27.9	34.8
41	Polk	-0.026	50.8	40.0	23.0	34.6
69	Pope	-1.392	51.8	24.7	17.9	33.8
16	Prairie	0.733	43.7	40.0	21.6	28.6
71	Pulaski	-1.822	45.6	21.8	18.6	24.1
36	Randolph	0.147	46.5	35.7	21.6	36.7
72	Saline	-1.912	47.7	29.7	9.7	23.2
27	Scott	0.398	51.9	33.6	24.4	34.8
29	Searcy	0.367	42.3	42.6	28.4	35.6
65	Sebastian	-1.005	49.5	24.5	20.0	33.9
51	Sevier	-0.450	61.7	24.5	24.8	41.8
10	Sharp	1.174	47.1	49.6	24.4	35.3
25	St. Francis	0.474	43.0	22.0	32.3	28.4
35	Stone	0.173	44.8	47.6	24.3	36.6
39	Union	0.075	47.9	28.9	19.9	26.0
32	Van Buren	0.279	42.8	45.6	19.8	32.7
74	Washington	-2.270	55.1	18.2	19.3	33.6
64	White	-0.994	52.4	26.6	19.4	33.3
3	Woodruff	1.616	46.9	37.0	28.1	31.6
48	Yell	-0.325	52.3	29.5	21.6	34.5

APPENDIX A

DATA TABLE II

Rank	County	Primary Care MDs per 10,000	Rural Health Clinics per 10,000	Hospital Beds per 1,000	Long Term Care Beds per 1,000
22	Arkansas	7.4	1.6	3.9	14.7
38	Ashley	5.6	0.9	1.5	7.5
45	Baxter	11.9	0.0	6.5	14.0
75	Benton	8.7	0.0	1.8	4.7
54	Boone	9.1	0.3	4.7	9.8
28	Bradley	8.8	0.0	2.9	12.4
67	Calhoun	5.6	0.0	0.0	0.0
63	Carroll	6.5	0.0	1.4	7.7
2	Chicot	7.0	1.8	3.5	15.2
53	Clark	6.6	0.4	1.1	12.8
15	Clay	4.5	1.9	1.6	16.8
43	Cleburne	7.0	1.2	1.0	10.2
59	Cleveland	0.0	0.0	0.0	8.7
40	Columbia	7.8	0.4	2.0	13.4
44	Conway	7.1	0.5	1.2	9.7
70	Craighead	17.7	0.0	7.0	7.7
61	Crawford	5.7	0.0	1.7	6.6
31	Crittenden	6.6	0.2	3.0	7.5
37	Cross	5.1	0.0	1.4	13.5
9	Dallas	5.0	2.5	3.1	26.0
5	Desha	4.8	3.2	4.0	11.2
57	Drew	5.3	0.0	2.6	10.8
73	Faulkner	7.7	0.3	1.5	4.6
49	Franklin	3.9	0.0	1.4	12.9
12	Fulton	5.7	2.4	2.0	15.0
52	Garland	13.7	0.0	5.0	10.5
66	Grant	3.3	0.0	0.0	6.7
50	Greene	6.7	0.2	3.0	7.2
30	Hempstead	3.1	0.4	3.5	10.1
58	Hot Spring	3.6	0.0	3.0	8.0
24	Howard	5.8	0.0	1.5	21.6
60	Independence	13.2	0.3	6.0	10.8
6	Izard	0.7	3.0	1.9	17.5
18	Jackson	9.6	0.0	7.6	14.2
47	Jefferson	11.4	0.0	6.0	9.4
62	Johnson	7.3	0.0	3.1	7.7

APPENDIX A
DATA TABLE II

Rank	County	Primary Care MDs per 10,000	Rural Health Clinics per 10,000	Hospital Beds per 1,000	Long Term Care Beds per 1,000
8	Lafayette	2.7	1.4	0.0	13.0
13	Lawrence	5.9	1.8	1.5	17.5
7	Lee	4.9	1.0	0.0	13.0
34	Lincoln	0.7	0.7	0.0	13.7
42	Little River	8.5	0.0	1.9	12.8
21	Logan	6.8	1.4	1.9	11.8
68	Lonoke	2.6	0.1	0.0	9.2
55	Madison	3.8	0.0	0.0	6.7
19	Marion	2.4	0.6	0.0	10.7
46	Miller	4.6	0.0	1.4	9.2
20	Mississippi	4.8	0.4	4.2	7.6
4	Monroe	5.1	2.6	0.0	15.1
23	Montgomery	7.5	1.1	0.0	12.1
14	Nevada	3.4	0.0	0.0	22.8
26	Newton	2.5	1.2	0.0	8.7
17	Ouachita	7.5	0.4	3.9	16.8
56	Perry	2.9	0.0	0.0	9.2
1	Phillips	6.3	2.0	8.3	14.1
33	Pike	4.4	1.8	0.0	13.1
11	Poinsett	1.6	0.0	0.0	11.1
41	Polk	6.4	0.0	3.2	9.0
69	Pope	8.5	0.3	2.7	7.1
16	Prairie	2.4	1.2	0.0	20.1
71	Pulaski	25.3	0.0	8.8	6.8
36	Randolph	6.7	0.0	2.8	12.2
72	Saline	2.7	0.0	2.3	8.2
27	Scott	7.5	1.8	2.2	9.6
29	Searcy	17.1	1.2	0.0	9.7
65	Sebastian	4.7	0.0	7.7	8.6
51	Sevier	4.7	0.0	2.0	10.4
10	Sharp	4.7	1.8	0.0	11.4
25	St. Francis	5.7	0.0	4.2	5.1
35	Stone	6.3	0.0	2.0	7.7
39	Union	12.7	0.0	4.1	15.6
32	Van Buren	4.7	1.8	1.5	10.2
74	Washington	13.5	0.0	4.4	6.4
64	White	7.8	0.0	5.6	8.5
3	Woodruff	7.1	1.4	0.0	17.0
48	Yell	5.9	0.0	3.5	13.2

APPENDIX A

DATA TABLE III

Rank	County	Percent Medicaid Eligible	Three Year Age Adjusted Mortality	Five Year Infant Mortality	Teen Birth Rate
22	Arkansas	31.8	1036.7	5.6	61.6
38	Ashley	35.3	956.6	5.4	59.2
45	Baxter	23.2	865.1	8.1	41.5
75	Benton	18.5	700.9	5.9	33.1
54	Boone	27.4	840.6	6.9	52.7
28	Bradley	37.4	997.6	12.3	60.6
67	Calhoun	24.8	852.0	4.3	40.9
63	Carroll	25.4	787.7	6.2	54.9
2	Chicot	44.2	1005.4	6.6	57.9
53	Clark	27.0	957.0	5.3	20.7
15	Clay	30.2	1024.9	5.8	30.7
43	Cleburne	24.4	874.3	6.0	47.9
59	Cleveland	26.4	883.6	6.0	36.7
40	Columbia	31.4	1014.3	4.4	38.8
44	Conway	30.6	846.3	7.0	57.7
70	Craighead	28.5	911.3	7.8	42.9
61	Crawford	27.8	914.8	6.5	45.7
31	Crittenden	41.2	1056.7	11.2	70.1
37	Cross	34.5	929.9	6.9	61.7
9	Dallas	32.7	961.9	11.8	33.4
5	Desha	41.3	1023.1	6.2	62.6
57	Drew	30.9	845.4	8.4	35.6
73	Faulkner	19.8	842.5	7.1	32.1
49	Franklin	27.4	947.7	2.7	43.6
12	Fulton	30.5	942.4	5.2	41.2
52	Garland	28.0	923.9	5.8	47.1
66	Grant	22.2	961.8	6.1	47.6
50	Greene	31.1	995.2	6.4	58.1
30	Hempstead	36.1	931.9	3.6	64.9
58	Hot Spring	27.3	932.2	2.6	49.4
24	Howard	35.0	1024.9	6.8	57.3
60	Independence	30.2	894.2	8.6	43.0
6	Izard	28.7	861.5	9.8	45.6
18	Jackson	32.3	1062.9	8.0	73.7
47	Jefferson	34.2	975.6	5.9	54.5
62	Johnson	33.1	878.7	7.3	54.2

APPENDIX A

DATA TABLE III

Rank	County	Percent Medicaid Eligible	Three Year Age Adjusted Mortality	Five Year Infant Mortality	Teen Birth Rate
8	Lafayette	34.2	1013.2	9.6	57.3
13	Lawrence	33.4	1030.1	3.2	40.0
7	Lee	38.9	950.0	3.6	57.8
34	Lincoln	25.6	929.3	1.5	36.5
42	Little River	29.6	1063.2	1.3	48.4
21	Logan	33.7	980.2	5.1	61.2
68	Lonoke	21.5	956.4	6.8	40.6
55	Madison	27.8	853.4	6.1	57.1
19	Marion	27.3	907.1	9.6	54.5
46	Miller	32.4	934.3	6.2	63.5
20	Mississippi	39.8	1127.4	7.0	66.6
4	Monroe	40.5	962.4	0.0	52.5
23	Montgomery	27.5	918.3	8.7	48.1
14	Nevada	36.0	940.9	3.4	55.3
26	Newton	30.2	858.3	17.6	29.8
17	Ouachita	34.3	1045.9	9.3	56.9
56	Perry	26.4	913.5	13.4	37.7
1	Phillips	51.0	1141.9	7.5	87.8
33	Pike	30.9	912.8	6.5	35.4
11	Poinsett	38.9	1150.4	9.4	58.5
41	Polk	32.6	931.4	5.7	50.2
69	Pope	25.9	847.7	6.3	37.0
16	Prairie	28.8	947.4	14.9	29.2
71	Pulaski	27.4	856.8	7.8	45.6
36	Randolph	33.6	964.3	8.6	46.7
72	Saline	17.7	776.1	7.0	31.8
27	Scott	33.6	906.8	2.8	62.3
29	Searcy	33.5	848.2	0.0	48.6
65	Sebastian	28.8	869.1	5.6	53.2
51	Sevier	35.2	947.1	5.3	66.1
10	Sharp	34.1	942.4	5.6	56.2
25	St. Francis	38.1	994.3	6.9	85.9
35	Stone	31.5	858.5	10.9	53.1
39	Union	33.6	1052.4	9.6	51.7
32	Van Buren	26.8	807.6	3.4	63.8
74	Washington	23.1	780.1	5.5	34.7
64	White	26.4	930.8	7.7	43.8
3	Woodruff	40.6	1044.9	9.2	56.2
48	Yell	32.4	888.3	7.8	64.8

APPENDIX A

DATA TABLE IV

Rank	County	Total Population	Hispanic	Dentists per 10,000	Psychiatrists per 10,000
22	Arkansas	18,892	3.0	3.2	0.0
38	Ashley	21,524	5.2	3.8	0.0
45	Baxter	41,048	1.9	5.1	0.7
75	Benton	232,268	15.9	4.6	0.4
54	Boone	37,327	2.2	5.9	0.3
28	Bradley	11,397	13.9	3.6	0.0
67	Calhoun	5,307	3.1	1.9	0.0
63	Carroll	27,610	14.1	1.8	1.1
2	Chicot	11,433	5.0	4.4	0.0
53	Clark	22,936	4.3	4.8	0.4
15	Clay	15,684	1.6	4.5	0.0
43	Cleburne	25,808	2.3	4.7	0.0
59	Cleveland	8,627	1.8	0.0	0.0
40	Columbia	24,473	2.4	4.1	0.0
44	Conway	21,287	3.8	2.4	0.0
70	Craighead	99,735	4.6	6.5	1.7
61	Crawford	61,946	6.5	2.1	0.5
31	Crittenden	50,021	2.3	5.8	0.2
37	Cross	17,683	1.6	5.7	0.0
9	Dallas	7,987	2.6	2.5	0.0
5	Desha	12,545	4.6	2.4	0.0
57	Drew	18,743	2.7	3.2	0.5
73	Faulkner	118,704	4.0	3.8	0.6
49	Franklin	18,045	2.6	1.7	0.0
12	Fulton	12,318	1.1	1.6	0.0
52	Garland	96,903	5.1	6.5	0.8
66	Grant	17,986	2.4	2.2	0.0
50	Greene	43,163	2.5	2.8	0.2
30	Hempstead	22,373	12.3	1.8	0.0
58	Hot Spring	33,394	3.0	1.8	0.0
24	Howard	13,735	10.2	2.9	0.0
60	Independence	37,025	6.1	3.8	1.6
6	Izard	13,474	1.6	3.0	0.0
18	Jackson	17,600	2.7	3.4	0.0
47	Jefferson	74,723	1.8	4.0	0.7
62	Johnson	25,901	13.0	3.5	0.4

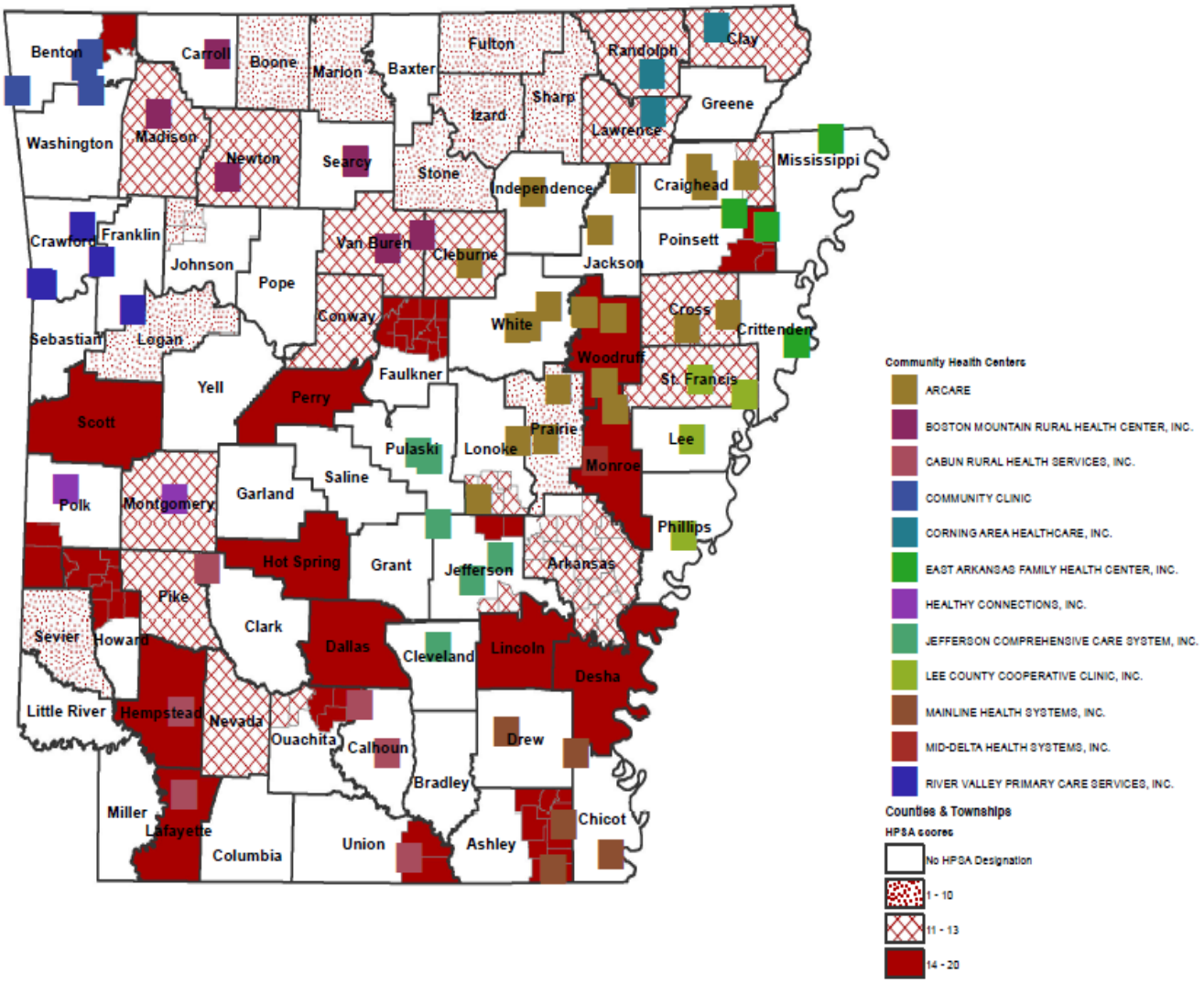
APPENDIX A

DATA TABLE IV

Rank	County	Total Population	Hispanic	Dentists per 10,000	Psychiatrists per 10,000
8	Lafayette	7,447	1.9	0.0	0.0
13	Lawrence	17,012	1.0	1.8	0.6
7	Lee	10,216	2.2	1.0	0.0
34	Lincoln	14,101	3.5	0.0	0.0
42	Little River	12,919	3.1	2.4	0.0
21	Logan	21,983	2.5	3.2	0.0
68	Lonoke	69,839	3.6	2.7	0.1
55	Madison	15,645	5.3	1.9	0.0
19	Marion	16,568	2.2	1.8	0.0
46	Miller	43,634	2.9	3.7	0.2
20	Mississippi	45,562	3.8	2.0	0.2
4	Monroe	7,828	1.9	2.6	0.0
23	Montgomery	9,340	3.8	3.3	0.0
14	Nevada	8,925	3.2	1.1	0.0
26	Newton	8,086	1.5	0.0	0.0
17	Ouachita	25,396	1.7	3.2	0.0
56	Perry	10,339	2.6	1.0	0.0
1	Phillips	20,784	1.5	2.0	0.0
33	Pike	11,247	6.7	1.8	0.0
11	Poinsett	24,307	2.6	0.8	0.0
41	Polk	20,471	6.2	2.9	0.5
69	Pope	62,765	7.4	4.2	0.5
16	Prairie	8,458	0.9	0.0	0.0
71	Pulaski	388,953	6.0	6.9	4.2
36	Randolph	17,930	1.7	3.4	0.0
72	Saline	111,845	4.1	3.2	0.2
27	Scott	11,010	7.0	1.8	0.0
29	Searcy	8,007	1.9	1.2	0.0
65	Sebastian	127,304	12.7	6.4	0.6
51	Sevier	17,177	32.1	2.9	0.0
10	Sharp	17,054	1.8	2.9	0.0
25	St. Francis	27,858	4.3	2.6	0.4
35	Stone	12,663	1.5	2.4	0.0
39	Union	40,867	3.6	5.9	0.2
32	Van Buren	17,030	2.8	3.5	0.0
74	Washington	211,411	16.1	5.2	1.8
64	White	78,493	3.9	3.1	0.8
3	Woodruff	7,100	1.4	1.4	0.0
48	Yell	21,932	19.4	1.8	0.5

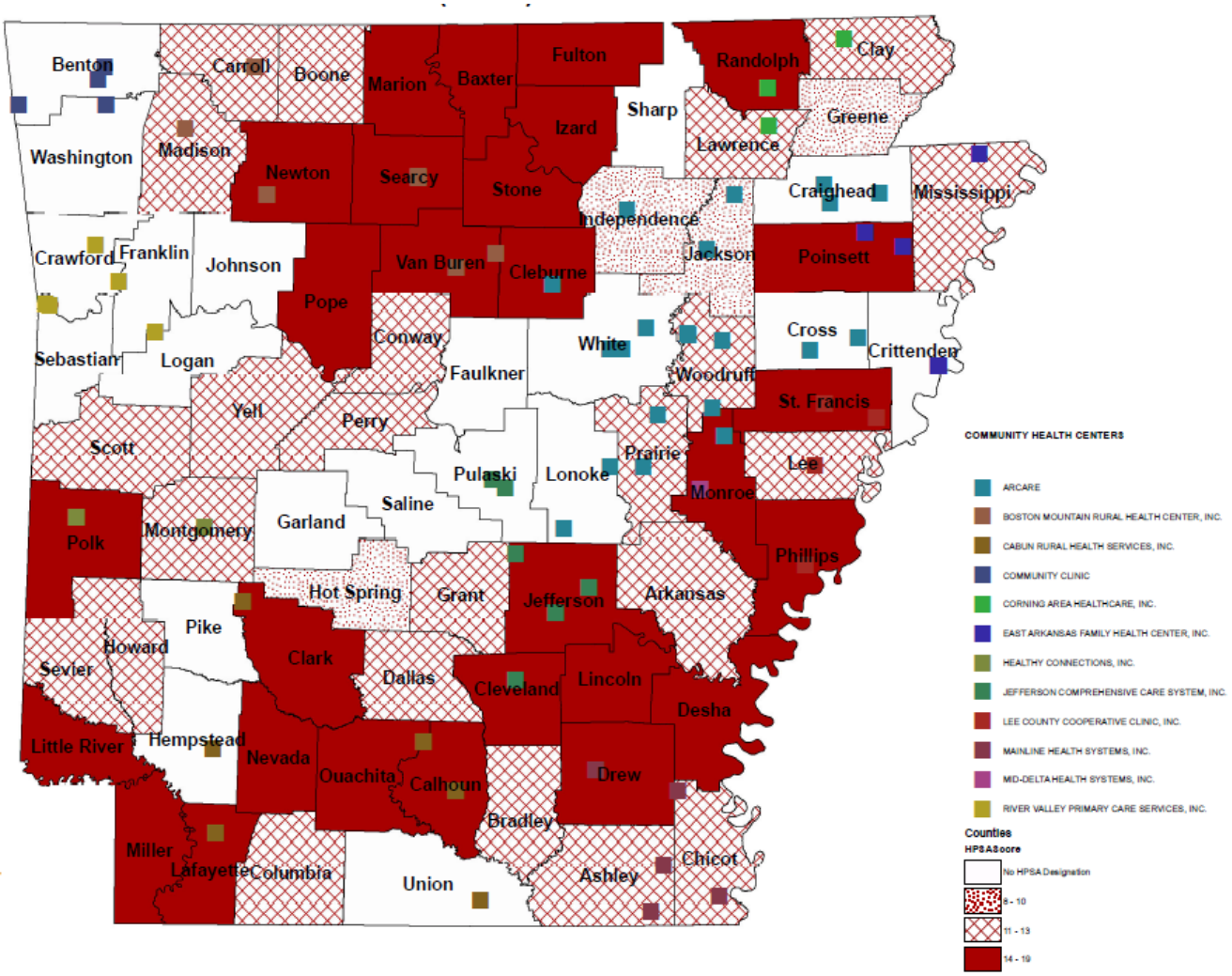
APPENDIX B

MAP I: PRIMARY CARE HPSA



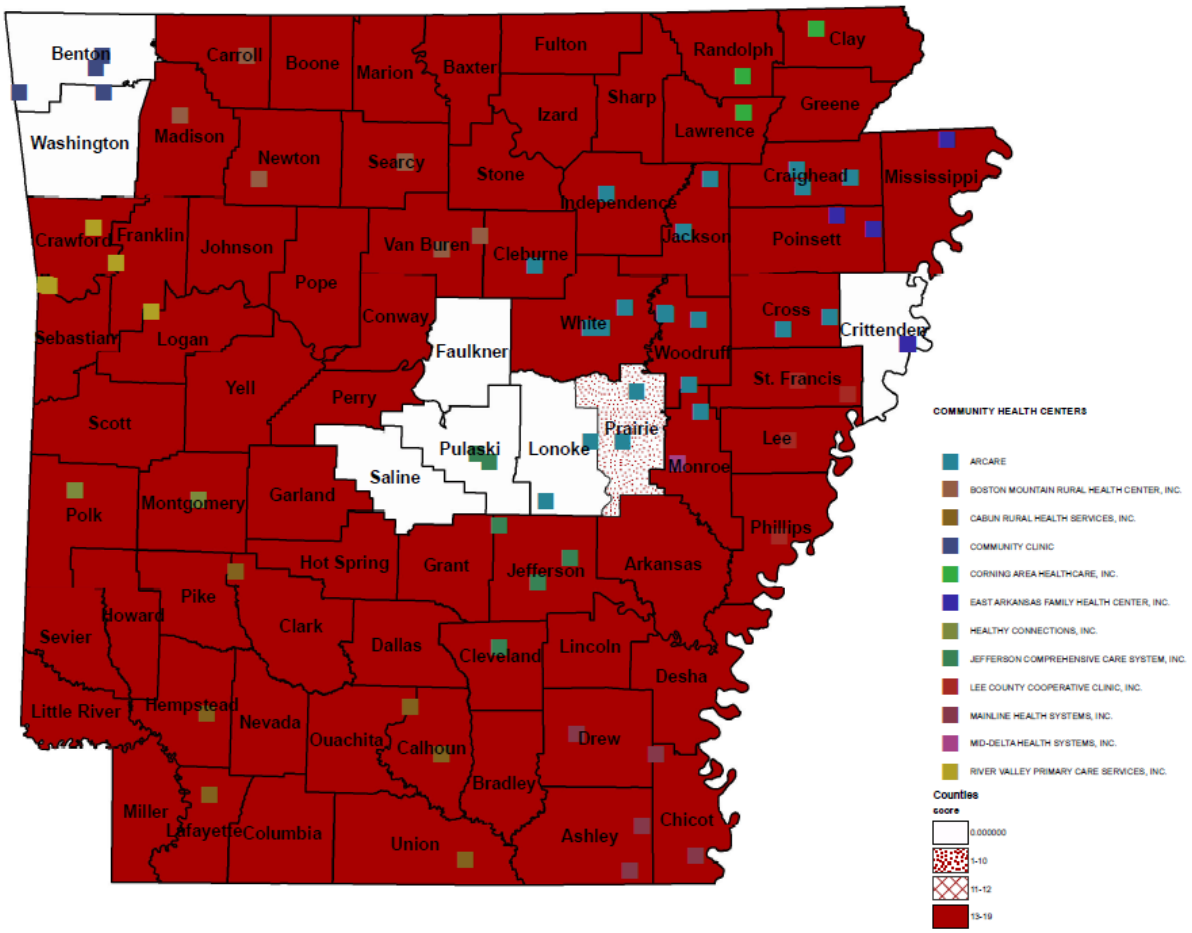
APPENDIX B

MAP II: DENTAL HPSA MAP



APPENDIX B

MAP III: MENTAL HEALTH HPSA MAP



APPENDIX C: DATA SOURCES

Indicator	Data Source	Year(s)
Child to Adult Ratio	National Center for Health Statistics Bridged Race File	2013
Senior to Adult Ratio	National Center for Health Statistics Bridged Race File	2013
Percent in Poverty	Small Area Income and Poverty Estimates Branch of the US Census	2012
Percent Uninsured	Behavioral Risk Factor Surveillance System	2010-2012
Rural Health Clinics per 10,000	Arkansas Department of Health, Health Facilities Licensing	2014
Hospital Beds per 1,000	Arkansas Department of Health, Health Facilities Licensing	2014
Long Term Care Beds per 1,000	Arkansas Department of Human Services, Division of Medical Services	2014
Three Year Age Adjusted Mortality	Arkansas Department of Health, Health Statistics Branch	2009-2011*
Five Year Infant Mortality	Arkansas Department of Health, Health Statistics Branch	2007, 2008-2011*
Percent Medicaid Eligible	Arkansas Department of Human Services, Division of County Operations	2013
Primary Care MDs per 10,000	Arkansas Department of Health, Health Statistics Branch	2012
Teen Birth Rates	Arkansas Department of Health, Health Statistics Branch	2011-2013*
Emergency Medical Services	Arkansas Department of Health, Emergency Medical Services	2014
Primary Care HPSA Map	Arkansas Department of Health, Office of Rural Health and Primary Care	2014
Dental Care HPSA Map	Arkansas Department of Health, Office of Rural Health and Primary Care	2014
Mental Health HPSA Map	Arkansas Department of Health, Office of Rural Health and Primary Care	2014
Hispanic Population	U.S. Census Bureau	2012
Total Population	U.S. Census Bureau	2012
Psychiatrists per 10,000	Arkansas Department of Health, Health Statistics Branch	2012
Dentists per 10,000	Arkansas Department of Health, Health Statistics Branch	2012
Key:		
* : Data are provisional		