

The Economic Impact of Low Health Literacy in Arkansas: Executive Summary

Healthy People 2010 (US Department of Health and Human Services) defined health literacy as “the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions.” According to the National Assessment of Adult Literacy survey of 2003 conducted by the US Department of Education, 36% of the adults in the US have low health literacy levels. A study by Rand Corporation that used the 2003 US Department of Education National Assessment of Adult Literacy Survey (NAALS) estimated that more than 37% of Arkansas adults have low health literacy. Adequate health literacy is critical for individuals to function effectively, navigate through the health system and to achieve optimal health.

Health literacy has been linked to health outcomes because it directly affects critical health behaviors necessary for accessing the healthcare system, chronic disease management, and health promotion. Low health literacy is likely to be a major source of inefficiency in use of healthcare services which may incur wasting of healthcare resources and thus additional healthcare spending that could be avoided otherwise. Low health literacy is associated with more hospitalizations, higher emergency care utilization, lower participation in immunizations and screenings, poorer medication adherence, and poorer overall health status and higher mortality rates. While education and income are associated with health literacy, even individuals with higher education and incomes struggle with health literacy. The Journal of the American Medical Association stated that “health literacy is a stronger predictor of an individual’s health status than income, employment status, education level, and racial or ethnic group”. Several studies have shown that those who are proficient in health literacy are not only more likely to have better health outcomes; they are also more likely to incur lower costs. A study conducted by Vernon et al and published by the George Washington University estimated the cost of low health literacy in the U.S. in 2006 to be in the range of \$106 billion to \$238 billion annually, which was between 7% and 17% of all personal healthcare expenditures.

The purpose of this study was to estimate the healthcare cost associated with low health literacy in the state of Arkansas. Improving upon the methodologies from previous studies, we calculated the healthcare costs attributable to low adult health literacy in the state of Arkansas, as well as in each county. The data for this report were derived from a study conducted by the Rand Corporation for the Arkansas Department of Health, Centers for Medicare and Medicaid Services, Kaiser Family Foundation Health State Facts data, and the County Health Rankings, published by the University of Wisconsin.

According to first approximations, the magnitude of the healthcare cost of low adult health literacy to the Arkansas economy is in the range of **\$1.3 billion to \$3.0 billion annually** (2013 estimates), which was between 6% and 14% of all personal healthcare expenditures in the state of Arkansas. These numbers translate into the per capita cost that is attributable to low health literacy in the range of \$400 (lower bound) to \$1000 (upper bound), approximately.

We found wide variations in the per capita costs (upper bound) attributable to low health literacy in Arkansas counties (Figures 1, 2). For example, the per capita cost attributable to low health literacy in Bradley County is estimated to be \$2,105, where 47.9% of adults have basic or below basic health literacy. In contrast, the per capita cost attributable to low health literacy in Faulkner County is estimated at \$635, where only 27.7% of adults have basic or below basic health literacy.

Efforts to improve health literacy in Arkansas will go a long way towards eliminating some of the inefficiencies in the use of healthcare resources in the state and empowering patients to better manage their own health. Public policy actions could result in significant cost savings to the state’s healthcare system through better health outcomes and lower healthcare spending. The recommended approach to addressing health literacy at state, county, and local levels is two sided. In order to move the needle on health literacy and reduce unnecessary health care costs, efforts should focus on both i) making information from providers and systems easier to understand and use, as well as to ii) improve the health literacy skills of patients and community members. The UAMS Center for Health Literacy has integrated this two-sided approach into its mission and strategies for the benefit of Arkansas and beyond.

Figure 1. Per Capita Healthcare Costs (\$) Attributable to Low Health Literacy within Counties

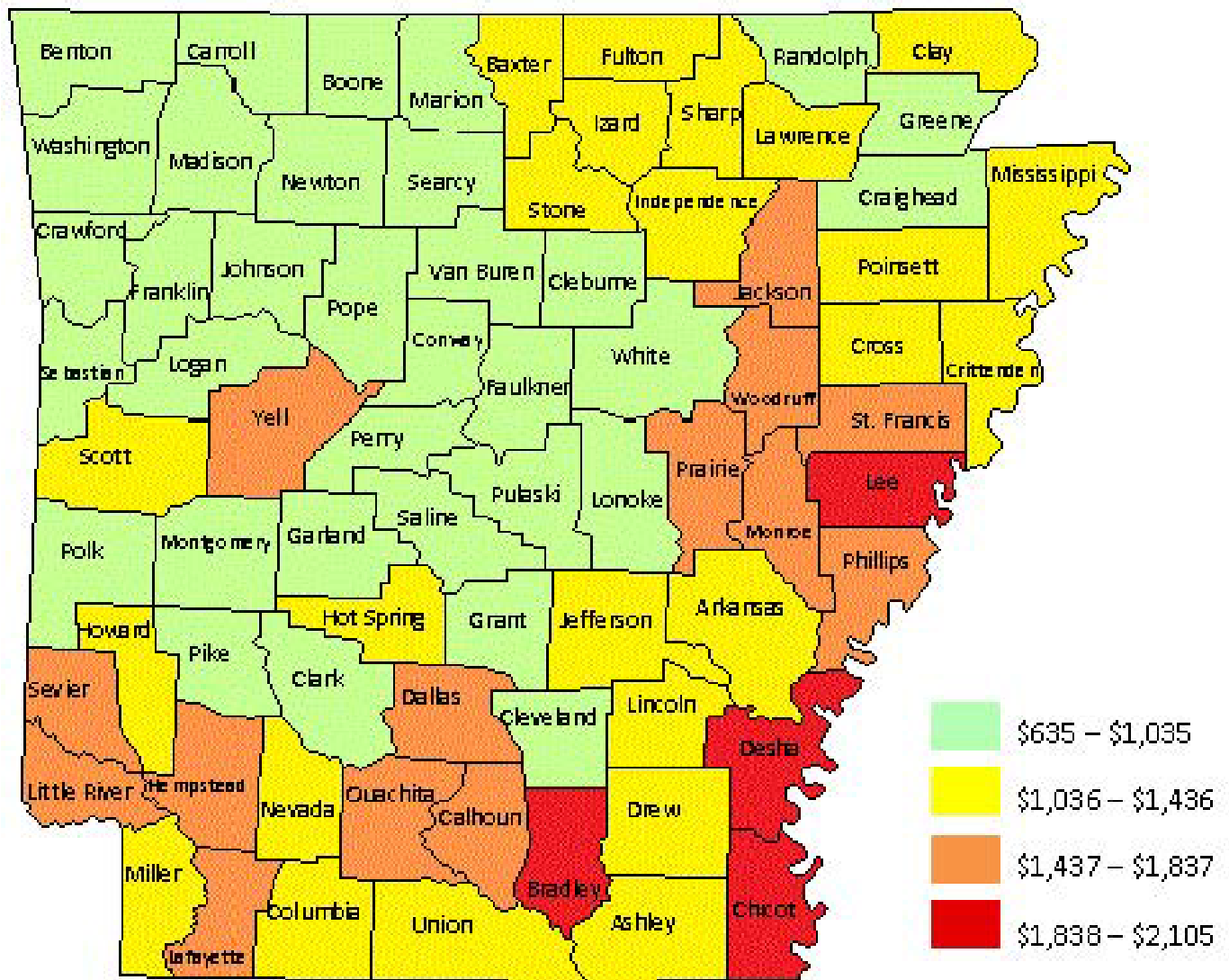


Figure 2. Distribution of Per Capita Healthcare Costs (\$) Attributable to Low Health Literacy across Counties

