

CHAPTER 5 POLICY ISSUES FOR ARC

5.1 SUPPLY OF HEALTH CARE PROVIDERS

In the aggregate, supply of physicians and other healthcare providers in Appalachian counties resembles the national profile, skewing towards slightly fewer providers in Appalachian counties, but the skew is not statistically significant. Careful examination of the Health Care Resources Availability (HCRA) component maps in Figure 16 and Figure 17 show individual counties that are under-resourced in virtually every state. There are more central and southern Appalachian counties than northern Appalachian counties in the lower percentiles. Contributing factors are geographic and historical:

- Mountainous terrains impede physical access to existing health resources for routine care, and lack of year round passable roads in some areas make it difficult to sustain economic operations of healthcare facilities. Costs to maintain supplies are higher and patient use patterns vary significantly between seasons.⁴¹
- Dispersion of populations into numerous small isolated communities makes appropriate deployment of health personnel difficult. Some logical geographic service areas may be too small to sustain the presence of a practitioner.
- Historic location of hospitals and other facilities may not match current road networks, transportation patterns, and settlement patterns. Rural parts of the region and some urban communities are experiencing hospital closure and consolidation of healthcare providers as a result of this phenomenon and other delivery system nationwide changes. Change brings efficiency to the system, but often results in labor force reductions. Not infrequently, consolidations/closures are prompted when aging infrastructure requires more capital investment than the owners can afford.
- Healthcare providers increasingly rely on daily internet downloads; for example, pharmaceutical indicators and alerts, and evidence based medicine protocols for routine care delivery. Although the problem is gradually disappearing as the nation's wireless footprint expands, in rural and sparsely settled parts of the Appalachian Region, physical terrain or limited size of the market makes deployment of wireless technology and internet access difficult, spotty, and unreliable. Labor force will favor places with broadband access.

Healthcare professional and facility licensure is state regulated, and local barriers to entry still exist. License-related barriers are higher in dental than medical care, because national board certification makes physician, nurse, and mid-level and technologist licenses more portable. However, each state has different credentialing requirements. On top of that, individual facilities have entry limiting requirements. For example, more and more hospitals require board certification for membership on the medical staff.

Independent non-physician, non-dentist health practitioners can extend the reach of traditional professionals. Mid-level practitioners, like nurse midwives, nurse practitioners, physician assistants and dental hygienists are subject to state licensure jurisdiction and differ even between adjacent states. Scope of practice legislation defines what each practitioner can do. Restrictions apply to: capacity to work in a location where physicians are not present, extent to which they can work in a retail clinic, capacity to prescribe medications, ratio of

⁴¹ PDA unpublished data files.

practitioners to physicians or dentists, and other issues. Most of the independent practitioner clinics start out funded by grants and addressing care for underserved populations. An exception is the investor-funded retail clinic movement that is focused on a low-cost, limited scope service that is not covered by insurance. National pharmacy and food companies are encouraging growth of this model and working with states to remove barriers.

Generally, state-specific issues are not unique to the Appalachian Region. State-specific barriers include:

- Laws and/or traditional style of practice may unduly limit the scope of practice of physician extenders in primary care and specialty areas (e.g., physician assistants, nurse practitioners, certified nurse midwives, mental health practitioners, and dental hygienists). Some states limit these providers to working only in places where a licensed physician, psychiatrist or dentist is physically present.
- To control budgets, Medicaid and other insurance programs may discourage direct access to allied health professionals (e. g., physical therapy, occupational therapy), requiring physician visits for referral, thus lengthening treatment times, increasing cost of care and making it harder for patients to complete treatment regimens in the outpatient setting. Restricted access makes low population areas less attractive.

ARC led a national effort that produced Medicare and Medicaid and, eventually, private insurance payment for Rural Health Clinics. In 1977, the effort produced the Rural Health Clinics Act, PL 95-210. By 2011, there were 3,846 certified Rural Health Clinics.⁴² All are required to have a nurse practitioner, physician assistant, or certified nurse mid-wife at least 50 percent of the time the clinic is in operation. Moreover, new research is showing that primary care providers who follow the Rural Health Clinics model are reducing cost of healthcare while improving health of populations.

Unfortunately, other restrictions, like location in a “Health Professional Shortage Area “or “Medically Underserved Area,” as designated by HRSA regulations, has severely restricted development of new clinics. For example, a community that has a primary care provider may no longer qualify, even if the provider is located in a rural area with limited resources. This is contrary to ACA health reform directives that encourage an increase in primary care. In this context, with PL 95-210 in its fourth decade, ARC could serve the Appalachian Region and the country by encouraging HRSA to loosen geographic restraints on Rural Health Clinic designation.

5.2 HEALTH SYSTEM DESIGN

The HCRA component does not focus on design issues in the healthcare delivery system. The low correlation between the component and lost years of productive life suggests that system design flaws may exist. Some are national in scope, like the transaction-based payment system that rewards activity over outcomes. Some are regional, like the uneven distribution of vertically integrated, technologically connected healthcare delivery systems.

The latter is more opportunistic than geographic. For example, Geisinger Health System in rural Pennsylvania is nationally recognized for excellent, patient-focused integrated healthcare. Academic medical centers nationwide are struggling to make integration happen. Yet, Guthrie Clinic in Sayre, Pennsylvania, Appalachian Regional Hospital System in Kentucky and West Virginia, Cabin Creek Health Systems in West

⁴² Kaiser Family Foundation. www.statehealthfacts.org. Providers and Service Use. October 24, 2011.

Virginia, Carillion Health System in Virginia, Greenville Health System and Spartanburg Regional Medical Center in South Carolina, University of Alabama Birmingham and Baptist Medical Center, Birmingham, along with Northeast Mississippi Health System, Novant and Wake Forest Baptist University Health System in North Carolina and North Georgia Health District are some examples of highly developed excellent integrated healthcare delivery systems in the Appalachian Region.

The Appalachian Region has benefited from development of new medical schools, such as Marshall in West Virginia and Pikeville Osteopathic in Kentucky. The schools are attracting faculty and training local residents in the healthcare professions. Area Health Education Centers are also extending metropolitan medical schools into Appalachian counties in some states. Neither the HCCA nor its components measured technology, which is increasingly critical for integrated healthcare delivery system. Challenges for the healthcare professional supply and system design remain:

- The skill mix of health professionals in some communities may not match the emerging needs of the communities (e.g., migrant populations, aging population).
- Aging populations require increased volume of services and careful attention to an appropriate style of service delivery, e.g., geriatric specialists, interdisciplinary teams, education of and attention to the needs of family caregivers, and a focus on risks and opportunities occurring during transitions in site of care.
- Dispersed extended families make it difficult for kin to provide long term care services and supports to elders at home, thus increasing the cost of care for older residents who, in turn, endure otherwise preventable institutionalization.
- Quality of long term care facilities like skilled and domiciliary care varies from state to state and community to community.
- Some states may be having difficulty meeting their Olmsted obligations to care for disabled in least restrictive settings because of lack of well-designed community alternatives.
- Mental health services are a challenge in every state, because payment for services is restricted by public and private payers.

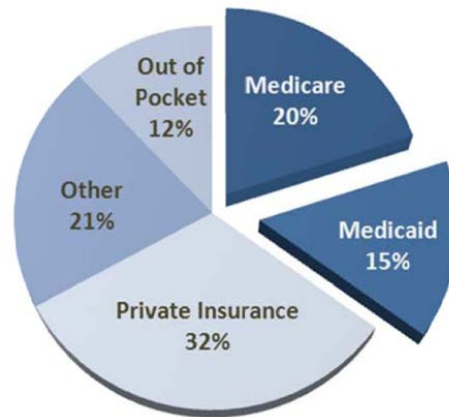
5.3 HEALTH CARE COST ISSUES

Cost to provide healthcare is often distantly related to what the consumer pays. The consumer cost, includes the cost of return on investment to providers and often an additional offset to cover unpaid mandates for free care and costs that are not reimbursed by insurers or government. Full charge can be significantly more than what an insurer “allows.” Third party purchasers, like insurance companies and government (Medicare, Medicaid, TriCare, VA, etc.) negotiate or set “allowable” payment rates for a unit of service. Uninsured consumers are often charged full price, unless they qualify for a discount, or live in a jurisdiction that limits charges to self-paid consumers to the maximum paid by insurers. Recent Congressional hearings, new IRS reporting requirements for tax-exempt providers and press coverage have resulted in more hospitals offering discount programs or matching self-paid with insurer rates. However, each provider can and does establish a unique charge structure and payment policy. The difference between full charge and paid charges was, at one time, reported on healthcare provider financial statements as “bad debt,” “charity,” or “contractual adjustment.” Increasingly they are appearing as “charity care.”

According to CMS 2009 National Health Care Expenditures report, consumers’ direct purchases represent only 12 percent of the amount spent on U.S. healthcare. Together, Medicare and Medicaid paid just slightly more than private insurance (35 versus 32 percent). Other sources, government and other grants for operations

and research made up the remaining 21 percent of expenditures. When these are reassembled, the CMS report highlights the role of the local economy in decisions about healthcare spending. Together, out-of-pocket and private insurance represented 44 percent of expenditures. In some states, the state part of Medicaid is shared between the state and local counties. In those states, with the Medicaid included, local economic capacity can affect up to 59 percent (44 plus 15) of health care expenditures.

FIGURE 41 – 2009 NATIONAL HEALTHCARE EXPENDITURES



Source: CMS.gov NHE Fact sheet 2009

In fact, when an out-of-pocket expenditure like a copayment or deductible is required first, tolerance for out-of-pocket payments can control expenditures by the Medicare and Private Insurance sectors. To limit expenditures, all third parties, including state Medicaid programs, are adding these consumer-driven controls. Hence, out-of-pocket cost will play an increasingly larger role in total healthcare expenditures.

Nationally, CMS reports that increases in expenditures for healthcare decelerated to 4.0 percent in 2009, but the amount still represented \$8,086 per person or 17.6 percent of the national Gross Domestic Product.⁴³ The recession was in full play at that time, but many unemployed were still covered by safety net programs, like COBRA and Unemployment Insurance. Data for 2010 and 2011, when available, may show further deceleration. COBRA is a provision in the 1985 Budget Reconciliation Act, that lets employees purchase health insurance benefits from prior employers at cost.

⁴³ National Health Expenditure Fact Sheet. CMS website https://www.cms.gov/NationalHealthExpendData/25_NHE_Fact_Sheet.asp#TopOfPage. Accessed October 13, 2011.

5.4. COST-ACCESS RELATIONSHIP

Health expenditures absorb approximately 20 percent of median personal income in the United States. Personal health expenditures were \$8,086 in 2009 and median personal income was \$40,584 in 2010⁴⁴. In the Appalachian states, the median income was closer to \$34,000, moving the health expenditures closer to one quarter of personal income. As costs escalate, consumers are forced to choose between healthcare and core needs for shelter and food; consequently, for those who choose healthcare, discretionary spending on education, culture and infrastructure fades.

The health policy journal, *Health Affairs*, dedicated its September 2011 issue to “The New Urgency to Lower Costs.” Writing in the issue, Auerbach and Kellerman note that, in the past decade, increases in healthcare costs have eliminated all of the gains in family income⁴⁵. They note that increased intensity of care during this time was associated with only a one-year increase in average life expectancy.

A recent Commonwealth Fund report on access to care for vulnerable populations⁴⁶, notes that insurance alone does not guarantee access to high-quality care. It further notes that healthcare delivery systems serving vulnerable populations are and will continue to be challenged to serve insured patients who cannot meet out-of-pocket costs. Presently, some hospitals can offset some of these costs with Medicare Disproportionate Share (DSH) payments. But these are not available to all hospitals and are restricted for rural hospitals. DSH payments are also scheduled to terminate under health reform. Health reform will use saved DSH funds to offset some of the federal share of reform cost increases. Some non-profit community health centers receive federal FQHC grants to cover charity care, but most clinics do not qualify for these funds.

The Commonwealth Fund report notes that low-income persons need more than the services traditionally covered by health insurance:

“Vulnerable patients may disproportionately benefit from greater clinical integration among providers and from a focus on team-based primary care and population-based strategies to improve health. The Affordable Care Act has several provisions to stimulate delivery system reform across the entire healthcare system, but further steps will likely be necessary.”

The health of low-income and minority populations is heavily dependent on resources outside the traditional healthcare system. These include not only services that enable them to fully access healthcare, such as transportation and language interpretation, but also environmental factors, such as access to healthy food, a safe home and workplace, and accessible places for exercise. In addition, traditional public health activities, such as infectious disease control and community vaccination programs, are often critical for the health of vulnerable populations.”

The wide differential in the CMS Geographic Wage Index, which is demonstrated by the HCC in Chapter 3, also makes certain geographies less attractive to healthcare providers. Without an incentive to compensate for the payment disparity, two graduates from the same health professional school with the same debt will rapidly separate with regard to lifetime earning potential, if one locates in a high HCC area and the other locates in an area with low HCC.

⁴⁴ US Census Bureau. The 2012 Statistical Abstract, Income, Expenditures, Poverty & Wealth, Table 681. Personal Income per Capita, http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth.html. Accessed October 14, 2011. Data were not estimated for 2009.

⁴⁵ Auerbach, David L. and Arthur L. Kellerman. “A Decade of Health Care Cost Growth has Wiped out Real Income Gains for an Average US Family”. *Health Affairs*, 30 (9) 2011, 1630-1636.

⁴⁶ Schorr, Edward L., M.D., Julia Berenson, M.Sc., Anthony Shih, M.D., M.P.H., Sara R. Collins, Ph.D., Cathy Schoen, M.S., Pamela Riley, M.D., M.P.H. and Cara Dermody. “Ensuring Equity: A Post-Reform Framework to Achieve High Performance Health Care for Vulnerable Populations” Commonwealth Fund Report, October 7, 2011.

Areas with high concentrations of poverty and low wage indices are particularly unattractive to providers for other reasons. In addition to being paid less by Medicare and Medicaid than their colleagues in more affluent areas, they will encounter patients who cannot afford private insurance copayments and deductibles. Moreover, providers in these areas will face bigger hurdles in achieving patient compliance with care regimens that depend on pharmaceuticals, nutrition, and even transportation, because these items are not covered fully by health insurance.

5.5 INDIRECT ECONOMIC IMPACT OF HEALTHCARE COST

5.5.1 LOSS OF DISPOSABLE INCOME

Healthcare expenditures are competing for an increasing share of personal and national income; and, as average per capita medical spending begins to reach \$10,000, it will be out of the reach of persons who are not insured, or whose insurance requires high deductibles and copayment. For them, the choice is to do without or incur debt. Recent care patterns indicate that most eventually do without⁴⁷.

Economists differ on whether healthcare spending is good or bad for the economic health of the country. Optimists like Uwe Reinhart and Lowell Catlett argue in favor of the service industry job creation and personal development associated with healthcare jobs. Pessimists argue that more spending on healthcare means less disposable income for consumption of value-added products on which the economy of the country was built. Both agree that middle income workers cannot afford to carry the burden without help and both agree that the best hopes for a more effective and broadly accessible system require changing the current transaction-based system of paying for healthcare services to a value/outcome system.

5.5.2 MEDICAL BANKRUPTCY

Medical bankruptcy is a critical issue in the debate on healthcare access, reflecting the results of multiple factors: health status, economics and insurance coverage. Consequently, we are treating it separately in this report. Data on medical bankruptcy are scarce and inconsistent. Two classic studies and one commentary^{48, 49 50} reviewed causes of bankruptcy as listed on U.S. Bankruptcy Court filings. Though one 2005 study by Himmelstein reported that as many as 62 percent of bankruptcies were medical related, the American Enterprise Institute challenged the study noting the relatively low level of medical debt reported in bankruptcy filings. The relationships are murky, because medical costs pile up over time, may be charged to credit cards and may be written off or forgiven by providers, as the individual's financial status declines.

A better measure of risk of medical bankruptcy may be the charity care and bad debt reported on the 990 Forms filed by tax-exempt hospitals with the IRS. Unfortunately, AHA reports that, in 2009, only 58 percent of U.S. community hospitals were non-profit. That means that charity reports for the other 42 percent of hospitals that are government and for profit will not be uniformly available.

⁴⁷ PDA Files.

⁴⁸ Himmelstein, David U., M.D., Deborah Thorne, Ph.D., Elizabeth Warren, J.D. and Steffie Woolandler, M.D., M.P.H. Medical Bankruptcy in the United States, 2007: Results of a National Study. *The American Journal of Medicine*. 2009.04.012.

⁴⁹ Skinner, Brett J. The Medical Bankruptcy Myth. *The American*. The Journal of the American Enterprise Institute. August 19, 2009.

⁵⁰ Jacoby, Melissa B. and Mira Holman. Managing Medical Bills on the Brink of Bankruptcy. *Yale Journal of Health Policy Law & Ethics*. Vol. 10. No. 2. p. 239 (2010).

A 2008 California study found that, in the prior year, 34 percent of adults ages 19 to 64 had medical bill problems, such as medical debt, inability to pay medical bills, or being contacted by a collection agency. Although the uninsured are most at risk of having medical bill problems and medical debt, the survey found that more than 25 percent of people continuously insured over the previous year had medical bill problems or medical debt.⁵¹

A 2007 nationwide sample survey found that 62 percent of all bankruptcies were medical; 92 percent of these medical debtors had medical debts over \$5,000, or 10 percent of pretax family income.⁵² The rest met criteria for medical bankruptcy because they had lost significant income due to illness, or mortgaged a home to pay medical bills. Most medical debtors were well educated, owned homes, and had middle-class occupations. Three-quarters had health insurance.

Using identical definitions in 2001 and 2007, the report suggests that share of bankruptcies attributable to medical problems rose by 49.6 percent. Regrettably, no one monitors this consistently. This report can only summarize one-time standards.

A recent careful study by Jacoby and Hollman⁵³ explored relationships of medical costs and bankruptcy. They note that court records of medical debt in bankruptcy cases do not reflect the history that preceded the bankruptcy. Yet the Himmelstein study⁵⁴ reported that 62 percent of bankruptcy was medical related. The Department of Justice challenged the Himmelstein report noting that data from bankruptcy courts did not support the claim. Jacoby and Holloman combined surveys with a review of court records and found that persons who reported medical bills as the cause of bankruptcy had mortgaged their homes to pay medical bills at a rate nearly four times that of other filers. They were also a third more likely to have used credit cards to pay medical bills. Jacoby also reported that many persons in bankruptcy did not identify their medical bills as debt, or may have been making payments in order to sustain care.

On the Jacoby and Holloman surveys, only three out of ten reported medical bills as a reason for bankruptcy. However, credit cards were a choice of bill management for medical as well as other bills among those filing for bankruptcy. In fact their study showed those most affected by medical debt are less likely to show up in a court records study.

Few medical providers require cash payment at the time of service, so patients can easily accumulate medical debt without being aware of the total amount until after the fact. Medical debt on credit cards is not formally reported, but providers increasingly accept that form of payment. Health Savings Account plans (HSA's) are now coupled with credit and debit cards that can increase debt beyond the amount in an individual's account. Together, these factors and high medical costs coupled with the capacity to strain employment in the face of a chronic or acute healthcare problem to sustain personal and family budgets.

Clearly, the consumer cost of medical care is a factor in some bankruptcy cases.

⁵¹ Carol Pryor, J. Prottas, B. Lottero and M. Rukavina. The Access Project. Issue Brief No 1. May 2008. www.accessproject.org/adobe/ca_brief_no_1.pdf.

⁵² Himmelstein, op. cit.

⁵³ Jacoby, Melissa B. and Mirya Holman. Managing Medical Bills on the Brink of Bankruptcy. *Yale Journal of Health Policy Law & Ethics*, p. 239 (2010).

⁵⁴ David Himmelstein, et al., *Illness and Injury as Contributors to Bankruptcy*, *Health Affairs*. W5-67 (Web Exclusive February 2, 2005).

5.5.3 PER CAPITA SPENDING

Recent geographic studies of healthcare expenditure patterns, including those done by the Dartmouth Atlas research team, show patterns of sustained high resource use by residents of certain areas of the country. The Dartmouth studies show high rates of age-adjusted hospital readmission rates among Medicare beneficiaries in parts of Appalachian Ohio, western Pennsylvania, eastern Kentucky, northern West Virginia and northeast Mississippi.⁵⁵ Data for these studies were age and sex adjusted, allocated to hospital service areas, and include only the 20 percent of 2008 Medicare claims sample that CMS made available to researchers.

Dartmouth researchers found the highest rates of Appalachian Medicare expenditures in three hospital market areas:

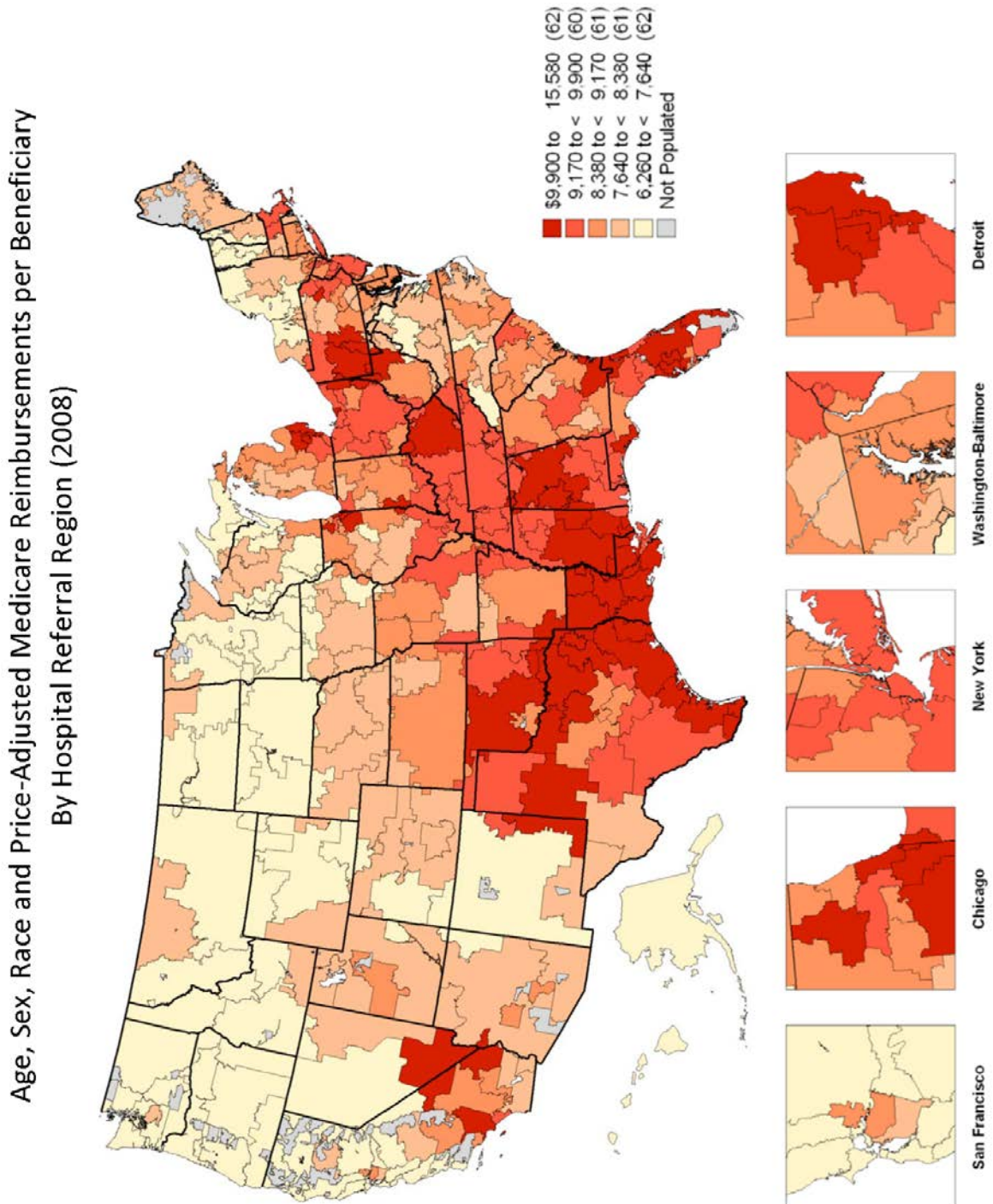
- Western Pennsylvania and adjacent counties in Ohio, West Virginia and Maryland;
- Eastern Kentucky; and
- North central Alabama.⁵⁶

In the Dartmouth Atlas study, few Appalachian market areas showed low total Medicare payments per beneficiary. In fact, as illustrated in Figure 42, outside Appalachian New York, most Appalachian markets had high per beneficiary expenditures.

⁵⁵ Percent of patients readmitted within 30 days following discharge, on line map www.dartmouthatlas.org/ Accessed October 21, 2011.

⁵⁶ Skinner, JS, DJ Gottlieb, D Carmichael, KK Bronner. A New Series of Medicare Expenditure Measures by Hospital Referral Region: 2003-2008, Dartmouth Atlas on line. http://www.dartmouthatlas.org/downloads/reports/PA_Spending_Report_0611.pdf. Accessed October 24, 2011.

FIGURE 42 - PRICE-ADJUSTED MEDICARE EXPENDITURES PER BENEFICIARY BY HOSPITAL, 2008



Source: Dartmouth Atlas Project, The Dartmouth Institute for Health Policy & Clinical Practice, JS Skinner, et al, June 21, 2011

5.6 CMS GEOGRAPHIC WAGE INDEX

The Medicare Hospital Geographic Wage Index has traditionally been based on 441 areas (365 metropolitan statistical areas (MSAs) and 76 non-MSAs)⁵⁷. These are meant to reflect labor market areas on the assumption that healthcare employers within these areas are drawing upon a pool of potential workers from these communities. The structure disregards the fact that healthcare workers travel across MSA, county, and even state boundaries to go to work. Further, the Geographic Index generally applies distinct rates to each of a state's metro areas, but only one, same rate to all other non-metropolitan areas of a state. The non-metropolitan areas may be quite distant from one another and the single uniform non-metro rate may be applied to multiple labor markets.

Medicare uses a separate wage index for physician payment. Geographic areas for the physician payment wage index vary by state; some states have a single uniform statewide physician wage index and other states have multiple indices that apply to combinations of metropolitan and non-metropolitan areas.

As noted in Chapter 3, many parts of central and southern Appalachia have very low Medicare Hospital Geographic Wage Indices; and local providers have been unsuccessful in attempts to increase them. By contrast, rural hospitals in Frontier states (North Dakota, South Dakota, Montana, Wyoming and Nevada) argued that their wages are depressed because their Geographic Wage index is too low. As a result, the health reform statute, ACA, accords all facilities in Frontier states a minimum index of 1.0 or their actual index. Many areas of Appalachia face similar wage depression. However, they have not benefited from the consistent and sustained advocacy for change.

⁵⁷ See Appendix A for Hospital Wage Index by Wage Area, FY 2011, as presented by the Institute of Medicine in Report on Geographic Wage Index. June 1, 2011, pps. 1-10 uncorrected proofs.

FIGURE 43 – COUNTY CMS HOSPITAL GEOGRAPHIC WAGE INDEX ADJUSTED FOR GAF IN THE U.S., 2011

County Percentile Rank of County CMS Hospital Geographic Wage Index Adjusted For Geographic Adjustment Factor in the United States, 2011

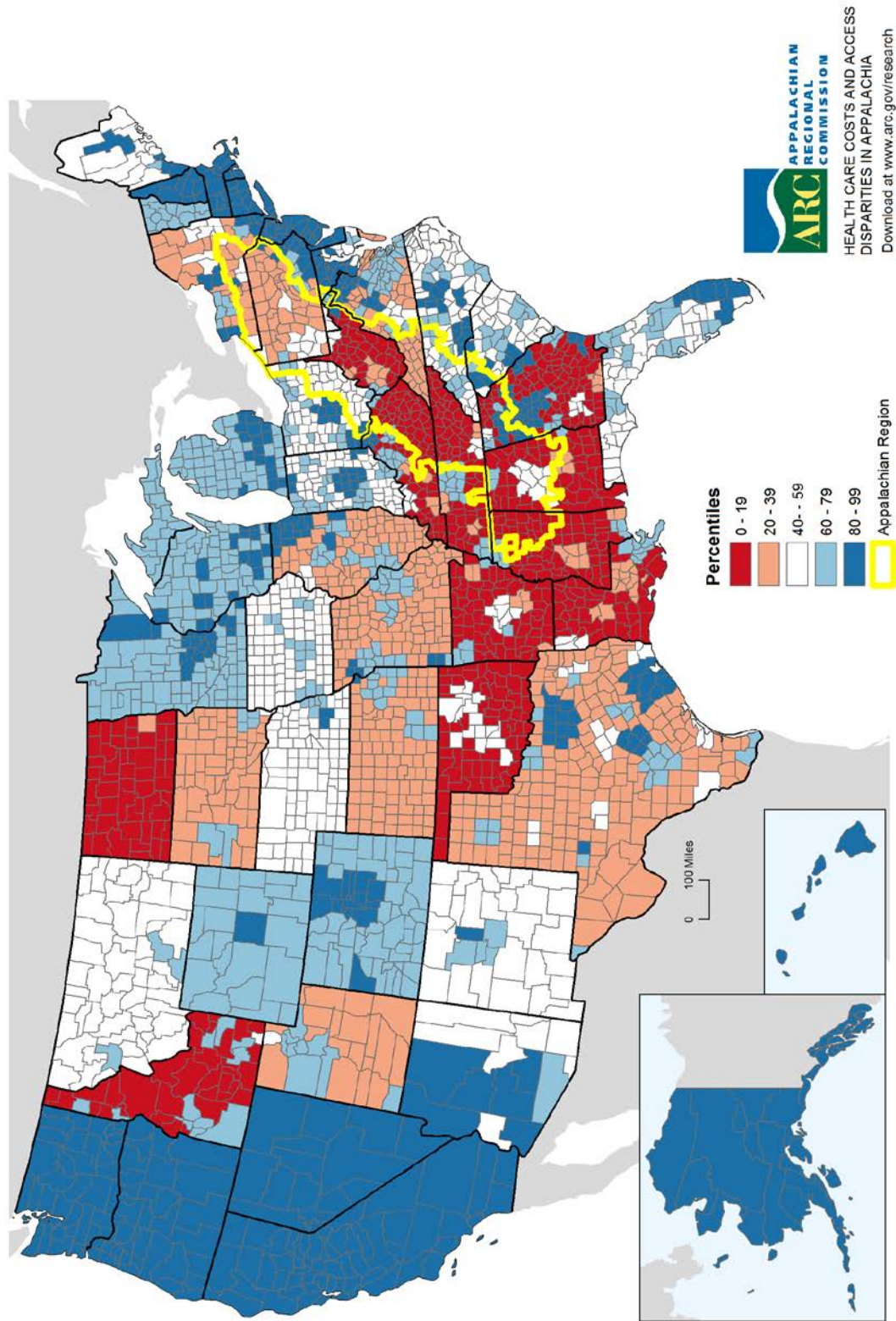
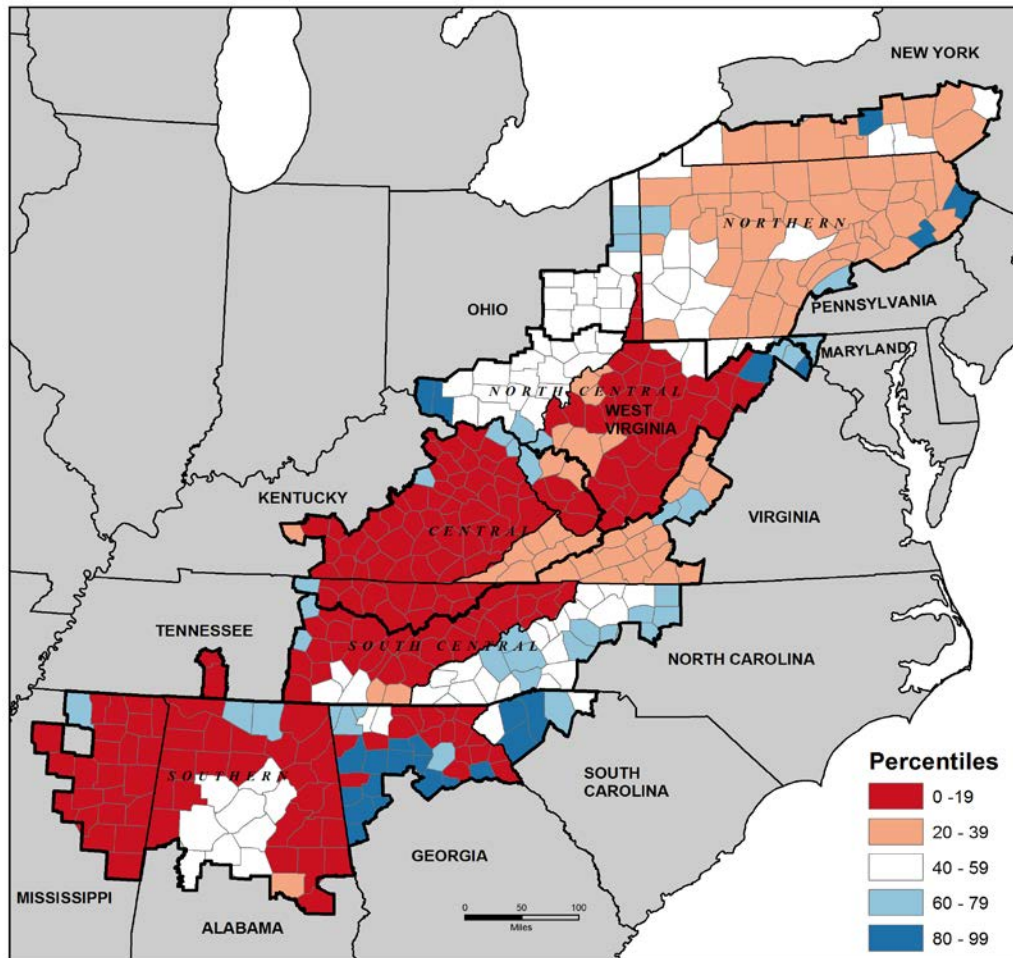


FIGURE 44 – COUNTY PERCENTILE RANK OF CMS HOSPITAL GEOGRAPHIC WAGE INDEX FOR GEOGRAPHIC ADJUSTMENT FACTOR (GAF) IN APPALACHIA, 2011



Source: Percentile of CMS Wage Index Modified by Geographic Adjustment Factor: 2009 CMS Hospital Wage Index and Geographic Adjustment Factor (calculated by CMS from year 2005 Wage Data). Department of Health and Human Services. Centers for Medicare & Medicaid Services 2010. Wage Index and Capital Geographic Adjustment Factor by CBSA 2009.

Prepared by Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill in cooperation with PDA, Inc, Raleigh, North Carolina, 2011



The CMS hospital Geographic Wage Index, the basis for cost component (HCC) in the HCCA Index, reflects the labor variation in care delivery cost. Medicare and others assume that the other 40 percent of care delivery costs, supplies, facilities, equipment, for example, are relatively uniform across the nation. This assumption alone overlooks extra transportation costs associated with supplying rural mountainous areas.

A Geographic Adjustment Factor (GAF), which CMS added to smooth variations in adjacent markets, does little to change regional disparities. Most of the Appalachian Region remains below the 40th percentile, even after the GAF is applied. As a result, payments for a comparable unit of healthcare in central and southern Appalachia, for the most part, are much lower than for the same service in the northeast and west. The spread between the highest and lowest is a 215 percent difference, 1.5766 to 0.7336. The median is 0.866.

Congress mandated a report on the Geographic Wage Index and the Institute of Medicine (IOM) convened a Task Force to review it. The IOM's June 2011 Draft Report presents several policy opportunities for ARC.

- ARC could consider advocating with the Institute of Medicine and CMS for applying the Frontier Index to facilities located more than one hour from a Metropolitan Statistical Area.
- ARC could advocate for adoption of the IOM recommendation to use BLS wage data. This would reflect the actual price of attracting labor to healthcare facilities in the region. However, presently, BLS does not collect a robust set of healthcare wage data.
- ARC should carefully watch changes in the physician wage index. Most of the Appalachian states, have maintained a single statewide physician index that prevents disparities in physicians' payments between rural and urban locations.
- ARC should watch carefully any border smoothing initiatives associated with the Geographic Wage Index. The formulas could continue the disparities in rural payments.

5.7 SOCIAL COST OF HEALTHCARE ACCESS BARRIERS

As healthcare costs, including the costs for health insurance increase, more persons are forced outside the care system. For those in need of services, incentives to seek publicly funded alternatives, like Medicare Disability and Medicaid Aid for Dependent Children (AFDC) or Old Age (OA) increase.

Healthcare coverage for low-income and disabled persons provides an essential safety net. However, it has become expensive and unsustainable. In 2008, disability payments to working age people alone accounted for 12 percent of federal expenditures. The healthcare component represented 6.6 percent of combined state and federal expenditures; and inflation-adjusted health cost components of disability increased 35 percent between 2002 and 2008. Average spending per working age disabled person was \$22,561.⁵⁸

In June 2011, the IOM issued its Draft Report on improvements to the Medicare Geographic Wage Index, noting:

Because Medicare is a national program, policy makers and researchers working to develop and implement its payment systems have long recognized the need to adjust payment amounts to reflect input price differences across geographic areas of the United States. The geographic adjustments to Medicare fee-for-service payments are the hospital wage index (HWI) and the three geographic practice cost indexes (GPCIs)².

Although there is widespread agreement about the importance of providing accurate payments to providers, there is considerable and long-standing disagreement in the provider community and among policy makers about how best to adjust payments based on geographic location. In two public sessions, the committee heard testimony from critics of the existing geographic adjusters who identified a number of questions and concerns and who believe that the current adjusters are not treating them fairly. Among their stated concerns are problems and inconsistencies with the definitions of payment areas and labor markets, concerns about the relevance and accuracy of the source data for determining area wages and other input prices, questions about the occupational mix used to create the hospital wage and physician practice expense adjustments, and criticisms about the lack of transparency of index construction.

From Geographic Adjustment in Medicare Payment Phase I: Improving Accuracy, Institute of Medicine, Washington, DC, and Prepublication Copy June 2011

⁵⁸ Livermore, G.L., D.C. Stapleton, M. O'Toole. Health Care Costs are a Key Driver of Growth in Federal and State Assistance to Working-age People with Disabilities.

The Accountable Care Act will shift many who are currently supported by Medicare Disability to state-supported Medicaid, increasing the state burden. The social impact of healthcare coverage and cost also shows up in many areas; including the current national pregnancy statistics. In 2009, according to the CDC National Vital Statistics reports, 41 percent of births involved unmarried women, up from 40.6 the year before.⁵⁹ Until very recently, low income single women who were pregnant or with children could obtain Medicaid coverage for themselves and their children; no coverage was available for married women at the same income level. No coverage is available for fathers. ACA expanded Medicaid to cover all members of homes below 133 percent poverty, after 2014.

Among elderly persons facing need for nursing home care, the practice of spending down and transferring assets to others in order to qualify for Medicaid is common. Once the assets are transferred, individuals want to stay in the nursing homes, because they have no other alternatives.

Together, the safety net has become an entrapment, keeping many people who might be on the margin from gradually moving towards independence. There is no safety net program for low-middle income working adults and their families.

With these adverse incentives, people who become dependent on these safety nets because of their health conditions are discouraged from advancing their income to levels that would make them ineligible for Medicaid or Medicare Disability. The gap between temporary safety net and long term multi-generational dependence on safety nets is a small one.

Multiple studies have demonstrated an association between low income, poor health and low healthcare access.⁶⁰ As reported in Section 4.3.2, the high correlation between HCCA and ARC_EDDI and the significant relationship between HCRA and ARC_EDDI ($p < .01$), affirm such a relationship. However, studies reported here are insufficient to determine causative impact of one on the other. At best, the evidence shows contributory influence. Regardless of cause, the evidence illustrates some of the high hurdles faced by health professionals and organizations who choose to offer services in high poverty counties.

The studies also highlight the economic disincentives that persons and families whose incomes qualify them for disability or Medicaid coverage face when they consider seeking better incomes. They may lose more than they gain by earning more or diversifying their skill set to compensate for their disability. This may explain some of the low participation in the Appalachia labor force.

5.8 HEALTH REFORM AND STATE MEDICAID BURDENS

As part of healthcare reform, ACA expands the group of mandated persons eligible for Medicaid coverage beginning in 2014.⁶¹ Medicaid is state administered, though funded by both state and federal governments. Free to offer the basic minimum or the full possible range of services and to cover only the minimum required group or an expanded one, each state sets its own guidelines regarding eligibility and services. Because their programs are different, Appalachian states' experience with ACA will be very different.

Nonetheless, data from Kaiser Family Foundation show that by 2019, Medicaid enrollment and spending in Appalachian states will increase dramatically under ACA.

⁵⁹ Hamilton, B.E., J.A. Martin, S.J. Ventura. Births: Preliminary Data for 2009. National Vital Statistics Reports, (59)3, December 21, 2010.

⁶⁰ Halverson, et al, 2004 op. cit, and Halverson et al, 2008, op.cit.

⁶¹ Green, Cheri D. "Medicaid Expansion Under PPACA". Brunni Update. June 4, 2010. Accessed October 24, 2011. <http://www.brunini.com/newsletter-17.html>

The “newly eligible” Medicaid recipient is an individual 19 years or older, but under the age of 65, not entitled to, or enrolled for, benefits under Medicare Part A or Part B, and otherwise not eligible for Medicaid under any other category. The eligible income is raised from 100 to 133 percent of the Federal Poverty Level (FPL). Income will be measured using a modified adjusted gross income calculation and asset testing as a means of determining eligibility is prohibited. In 2011, 133 percent of FPL for a single person is \$14,403.90 and for a family of four is \$29,326.50.

TABLE 22 – ACA IMPACT ON APPALACHIAN STATE MEDICAID ENROLLMENT AND SPENDING

State	% Increase in Medicaid Enrollment by 2019	% Increase in Medicaid Spending by 2019
New York	6.0%	1.7%
Pennsylvania	21.7%	10.5%
Ohio	31.9%	12.8%
Maryland	32.4%	15.6%
West Virginia	29.5%	15.6%
Virginia	41.8%	18.4%
Kentucky	37.3%	24.0%
Tennessee	20.9%	14.3%
North Carolina	38.2%	19.7%
South Carolina	38.4%	26.3%
Georgia	40.4%	19.8%
Alabama	36.9%	25.7%
Mississippi	41.2%	28.9%
United States	27.4%	13.2%

Source: Kaiser Commission on Medicaid and the Uninsured

Ten Appalachian states could see Medicaid enrollment increase more than the United States average of 27.4 percent. They are: Ohio, Maryland, West Virginia, Virginia, Kentucky, North Carolina, South Carolina, Georgia, Alabama, and Mississippi.

Ten Appalachian states could experience a larger percent increase in Medicaid spending than the United States average of 13.2 percent: Maryland, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, and Mississippi.

Factors driving these cost increases are not consistent. Although in 2009 Appalachian states had 33 percent of both the U.S. population and the Medicaid population, as demonstrated in Table 23 below, only Kentucky and South Carolina have an equal percentage of both United States population and Medicaid population. Five Appalachian states have a disproportionate share of the nation’s Medicaid population. These include New York, West Virginia, Tennessee, Alabama, and Mississippi.

Six Appalachian states have a smaller percentage of the national Medicaid population than of the total United States population. These include Pennsylvania, Ohio, Maryland, Virginia, North Carolina, and Georgia.

TABLE 23 – APPALACHIAN STATES SHARE OF U.S. POPULATION AND U.S. MEDICAID ENROLLMENT

State	2010 Population	% of U.S. Population	2009 Medicaid Enrollment	% of U.S. Medicaid Enrollment
New York	19,378,102	6.3%	4,954,600	8.5%
Pennsylvania	12,702,379	4.1%	2,090,200	3.6%
Ohio	11,536,504	3.7%	2,067,300	3.6%
Maryland	5,773,552	1.9%	753,100	1.3%
West Virginia	1,852,994	0.6%	392,300	0.7%
Virginia	8,001,024	2.6%	863,300	1.5%
Kentucky	4,339,367	1.4%	833,900	1.4%
Tennessee	6,346,105	2.1%	1,447,100	2.5%
North Carolina	9,535,483	3.1%	1,645,900	2.8%
South Carolina	4,625,364	1.5%	891,600	1.5%
Georgia	9,687,653	3.1%	1,685,000	2.9%
Alabama	4,779,736	1.5%	918,800	1.6%
Mississippi	2,967,297	1.0%	750,400	1.3%
United States	308,745,538		58,106,000	

Source: U.S. Census-Population, Kaiser-Medicaid Enrollment

The Federal Medical Assistance Percentage (FMAP) is the percentage of total Medicaid spending in each state that is funded by the federal government. FMAP's in Appalachian states range from some of the highest to some of the lowest in the United States. A low FMAP and a high share of the nation's Medicaid population, places a higher burden on the individual taxpayers in a state. The 2009 federal Stimulus Act, ARRA, boosted the FMAP for every state temporarily.

TABLE 24 – FEDERAL MATCHING PERCENTAGE (FMAP) FOR MEDICAID IN APPALACHIAN STATES

State	2011 Standard FMAP	2011 Enhanced FMAP
New York	50.00	61.6%
Pennsylvania	55.64	66.6%
Ohio	63.69	73.7%
Maryland	50.00	61.6%
West Virginia	73.24	83.1%
Virginia	50.00	61.6%
Kentucky	71.49	80.6%
Tennessee	65.85	75.6%
North Carolina	64.71	75.0%
South Carolina	70.04	79.6%
Georgia	65.33	75.2%
Alabama	68.54	78.0%
Mississippi	74.73	84.9%
United States Average	59.03	70.9%

Source: Federal Register: November 27, 2009 (Volume 74, Number 227) [Page 62315-62317]
From the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID: E9-28438]

As shown in Table 24, nine Appalachian states are benefiting from 2011 Enhanced FMAP's above the national average of 70.9 percent: Ohio, West Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, and Mississippi. At 84.9 percent, Mississippi has the highest FMAP in the United States.

The remaining four Appalachian states have FMAP's below the national average. These include New York, Pennsylvania, Maryland, and Virginia. At 61.6, New York, Maryland, and Virginia are tied with seven other non-Appalachian states for the lowest Enhanced FMAP in the United States. Enhanced rates may expire when ARRA stimulus funds end in 2012, then states will face program restrictions or increased budget demands to sustain their Medicaid programs. In 2009, New York spent the most per Medicaid enrollee and Georgia spent the least.

TABLE 25 – MEDICAID ENROLLMENT AND SPENDING IN APPALACHIAN STATES, 2009

State	2009 Medicaid Enrollment	% of U.S. Population of Medicaid Enrolled	2009 Total Medicaid Spending	% of U.S. Medicaid Spending	Medicaid Spending per Enrollee
West Virginia	392,300	0.70%	\$2,434,058,051	0.70%	\$6,205
Mississippi	750,400	1.30%	\$3,947,805,053	1.10%	\$5,261
Alabama	918,800	1.60%	\$4,415,810,844	1.20%	\$4,806
South Carolina	891,600	1.50%	\$5,098,527,910	1.40%	\$5,718
Kentucky	833,900	1.40%	\$5,400,899,512	1.50%	\$6,477
Virginia	863,300	1.50%	\$5,774,994,043	1.60%	\$6,689
Maryland	753,100	1.30%	\$6,523,939,093	1.80%	\$8,663
Tennessee	1,447,100	2.50%	\$7,290,231,215	2.00%	\$5,038
Georgia	1,685,000	2.90%	\$7,693,345,212	2.10%	\$4,566
North Carolina	1,645,900	2.80%	\$11,506,119,180	3.10%	\$6,991
Ohio	2,067,300	3.60%	\$14,056,788,223	3.80%	\$6,800
Pennsylvania	2,090,200	3.60%	\$17,231,560,151	4.70%	\$8,244
New York	4,954,600	8.50%	\$49,368,510,253	13.50%	\$9,964
United States	58,106,000		\$366,471,017,061		\$6,307

Source: Kaiser Commission on Medicaid and the Uninsured

Table 25 shows that seven Appalachian states absorb a larger percentage of the U.S. Medicaid spending budget than their share of the total U.S. Medicaid population: New York, Pennsylvania, Ohio, Maryland, Virginia, Kentucky, and North Carolina. These states spend more than the U.S. average on each Medicaid beneficiary, and offer more services, have higher unit costs, or use more services per beneficiary than the other states.

Six Appalachian states have a smaller percentage of the total Medicaid spending budget than the total Medicaid population: West Virginia, Tennessee, South Carolina, Georgia, Alabama, and Mississippi; and they spend less than the U.S. average on each beneficiary

Such differences will limit ARC's Medicaid policy response. The only clear policy that will benefit all states is advocating for an extension of the expiration date for Enhanced FMAP.