

REPORT ON

**TOBACCO RATING ISSUES IN ARKANSAS
UNDER THE AFFORDABLE CARE ACT**

STATE OF ARKANSAS
Department of Insurance
Division of Health Benefits Exchange Partnership



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Chapter 1

Introduction

PURPOSE AND SCOPE

The Health Benefit Exchange Partnership Division (HBEPD) of the Arkansas Insurance Department (AID) is engaged in developing a Health Insurance Exchange (Exchange) for the state of Arkansas. Lewis & Ellis, Inc. (L&E), was engaged to perform actuarial analysis related to establishing a State Partnership Exchange in Arkansas.

The Affordable Care Act (ACA) was signed into law on March 23, 2010. While some of the changes enacted by the law have already taken effect as of the date of this report, most will take effect in 2014.

One of those reforms are the Advance Premium Tax Credits (APTC) that eligible lower income people will be able to receive if they purchase non-group coverage through the Exchange. Individuals and families with incomes up to 400 percent of the federal poverty level (FPL) will be eligible to receive the tax credits.

Another one of the ACA reforms is modified community rating. This reform will require health insurance issuers to only allow rating variations for benefit plan design, geographic location, age rating, family status, and tobacco usage. Health insurance issuers will be able to increase a person's premium by as much as 50% if they are a tobacco user.

A key component of the APTC is that any premium increase as a result of tobacco use is that the tobacco surcharge would be paid entirely by the individual. That is, the Federal premium subsidies will not cover the cost of tobacco use. As a result, tobacco users eligible for an APTC will have significantly higher premiums compared to non-tobacco users.

Under the ACA, states can impose stricter standards by choosing to disallow tobacco rating entirely or by limiting the magnitude of the tobacco use rating factor. The magnitude of the tobacco surcharge will impact the levels of premiums available to consumers and therefore will impact the number of Arkansans who are covered by insurance.

This report examines the positive and negative consequences of the potential premium and health insurance enrollment impacts of the ACA maximum allowed tobacco rating factor, as well as alternatives Arkansas should consider.

KEY ISSUES FOR ANALYSIS

The key issues L&E analyzed were:

- ❖ The demographics of the current Arkansas individual and small group insurance marketplace by region;
- ❖ The demographics of the uninsured population by region in the state;
- ❖ The projected premium impact of the tobacco use rating factor on low-income Arkansans;
- ❖ The projected impact on Exchange enrollment as a result of a tobacco use rating factor.

LIMITATIONS OF THIS STUDY

This report has been prepared for the use of the state of Arkansas with regard to the implementation and management of an Exchange in Arkansas. The HBEPD should use this report to understand the actuarial implications of the tobacco use rating factor allowed in the individual and small group insurance marketplaces after 1/1/2014.

The author of this report is aware that it may be distributed to third parties; however, any users of this report must possess a certain level of expertise in health insurance, healthcare, or actuarial science so as not to misinterpret the data presented. Any distribution of this report must be made in its entirety. In addition, any third party with access to this report acknowledges, as a condition of receipt, that L&E makes no representations or warranties as to the accuracy or completeness of the material. Any third party with access to these materials cannot bring suit, claim, or action against L&E, under any theory of law, related in any way to this material.

Reliances

In performing this study, L&E relied on data and information from many sources, including the Arkansas Insurance Department and multiple Arkansas health insurance issuers. L&E did not audit the data sources for accuracy, although they were reviewed for reasonableness. If the data or information provided to us was inaccurate or incomplete, then any resultant projections or guidance could also be inaccurate or incomplete.

Confidentiality

L&E recognizes that in the performance of the work, L&E acquired or had access to records and information considered confidential by the health insurance issuers

and the Arkansas Insurance Department. L&E took steps to comply with confidentiality and privacy issues.

Limitations

Much uncertainty surrounds many of the projections in this report, primarily due to undecided regulatory requirements and imperfect data. The actuarial guidance and projections in this report should not be considered predictions of what will occur if various tobacco use factor limitations are established. The guidance provided in this report is based on modeling a specific set of assumptions and should be used to evaluate a range of potential outcomes. Actual experience will deviate from these projections.

There are many available published estimates for much of the data used in this report. There is also much variability in the published estimates. Some of these estimates are lower than the assumptions used and some are higher. These estimates all vary in terms of the time frame of the estimate and the methodology used. L&E believes that all of the estimates and assumptions used in the analysis reasonably reflect the current Arkansas uninsured and health insurance marketplace.

The author of this report is a member of the American Academy of Actuaries and meets the qualification standards for performing this analysis. The guidance and analysis expressed in this report are those of the author only and do not necessarily represent the opinions of other L&E consultants.

The author of this report is not an attorney and is not qualified to give legal advice. Users of this report should consult legal counsel for interpreting legislation and administrative rules, specific Exchange features, and other issues related to implementing an Exchange.

Chapter 2

Executive Summary

Lewis & Ellis, Inc. was engaged by the Health Benefit Exchange Partnership Division of the Arkansas Insurance Department to perform actuarial analysis and prepare guidance related to establishing a State Partnership Exchange.

One of the reforms enacted in the Affordable Care Act is a change to insurance rating practices which include modified community rating. As part of this reform, health insurance issuers will be able to increase a person's premium by as much as 50% for tobacco use. A key component of the tobacco surcharge is that Federal premium subsidies for low income individuals will not cover the cost of tobacco use.

A few key estimates in L&E's analysis include:

- ❖ Tobacco usage rates vary from 25.% in the Central region to 30.8% in the North East region;
- ❖ The uninsured rate for adults in Arkansas varies from 23.3% in the Central region to 28.2% in the North West region;
- ❖ Approximately 270,000 (~60%) of Arkansas's uninsured population is aged 18-39;
- ❖ Approximately 239,000 (~53%) of Arkansas's uninsured population will be eligible for participation in the State Partnership Exchange.

To make coverage more affordable for low income tobacco users while attempting to further decrease the uninsured rate in Arkansas, the Arkansas Insurance Department could adopt rating rules which constrain or eliminate the ACA tobacco surcharge.

L&E chose a total of seven alternatives to analyze in addition to the maximum ACA tobacco surcharge of 50%. These alternatives represented a subset of the various approaches the state of Arkansas could undertake. Six of these alternatives analyze the impact of limiting the rating factor to less than 50% while the seventh alternative measures the impact of prohibiting a tobacco use surcharge.

L&E's assessment of potential premium and coverage impacts took into account the potential behavior of Arkansans based on income levels, tobacco status, geographic residence, and age.

RESULTS

A few key results of L&E's analysis include:

- ❖ If the maximum allowable surcharge of 50% is applied to all tobacco users (see Section 4 for details):
 - The resultant premium as a percent of income will range from 13.7% to 25.0% for Arkansans eligible for tax credits;
 - There will be an increase of approximately 37,000 Arkansans with insurance coverage;
 - The uninsured rate for adults in Arkansas will be reduced by approximately 2.1%;
 - The coverage increase in the Individual market will increase from 36.4% in the Central region to 43.3% in the North West region;
 - Non-tobacco users will likely *not* face premium increases, assuming all other factors are equal.

- ❖ If the tobacco use surcharge is prohibited (see Section 5 for details):
 - The resultant premium as a percent of income will range from 6.9% to 10.1% for Arkansans eligible for tax credits;
 - There will be an increase of approximately 45,000 Arkansans with insurance coverage;
 - The uninsured rate for adults in Arkansas will be reduced by approximately 2.6%;
 - The coverage increase in the Individual market will increase from 40.5% in the Central region to 48.5% in the North West region.
 - Non-tobacco users will likely face premium increases of approximately 12.5 – 17.5% to cover the excess medical cost of tobacco users.

- ❖ If the magnitude of the tobacco use surcharge is constrained (see Section 5 for details on the alternatives analyzed):
 - The resultant premium as a percent of income will on average range from 7% to 13.6% for Arkansans eligible for tax credits. This is approximately a 7% reduction compared to using the maximum ACA surcharge;

- There will be an increase of 6.7% more individuals covered than if the maximum ACA surcharge is applied. This enrollment increase ranges from 5% in the Central region to 7.8% in the South West region;
- The uninsured rate for adults in Arkansas will be reduced by approximately 2.45% on average;
- Non-tobacco users will on average face premium increases of approximately 2.5 – 10% to cover the excess medical cost of tobacco users.

SUMMARY

Each state must determine if it will allow health insurance issuers to utilize a tobacco use surcharge equal to the maximum allowed under the ACA. To date, there has been no consensus nationwide on what approaches states will take as a result of many factors to consider including:

- ❖ Non-tobacco users potentially paying for the medical costs of other persons;
- ❖ Federal tax credits are not adjusted for the tobacco surcharge, thus creating affordability issues for low income persons;
- ❖ The maximum ACA surcharge of 50 percent may exceed the expected health care costs of tobacco users;
- ❖ Insurers could use a high tobacco-rating factor as an indirect underwriting factor for other conditions;
- ❖ The possibility that a large tobacco surcharge could encourage cessation;
- ❖ The voluntary nature of tobacco use.

L&E recommends that the Arkansas Insurance Department implement a tobacco surcharge that is less than the maximum allowable by the ACA to help alleviate significant impacts to both tobacco users and non-tobacco users. The reasons for the recommendation include:

- ❖ A limited surcharge would be better aligned with the expected excess cost of tobacco-related care;
- ❖ Coverage would be more affordable for lower income tobacco users while requiring them to bear a significant portion of financial responsibility;
- ❖ A tobacco surcharge alternative can be structured such that the expected average premium change for non-tobacco users would be less than 2.5%.

Chapter 3

Background

FEDERAL CONTEXT OF TOBACCO USE RATING REFORM

Beginning January 1, 2014, the ACA establishes minimum rules that govern the individual and small group health insurance coverage offered both through Exchanges and through traditional distribution networks outside an Exchange.

Once the reforms are implemented, no person can be denied health coverage due to their health status and there will be limitations on the criteria health insurance issuers can use in setting premium rates for a particular person. Tobacco use will be the only health-related factor that issuers can use in setting premiums.

The ACA also provides for Advance Premium Tax Credits (APTC) that eligible lower income people can receive if they purchase non-group coverage through an Exchange. The tax credits will be available to individuals and families with incomes up to 400 percent of the federal poverty level (FPL).

The tax credits will be based on a sliding scale based on income and the premium level of the second lowest silver level product offered in the Exchange. An individual's expected contribution will range from 3 percent of income for people at 133 percent of FPL to 9.5 percent of income for those between 300 and 400 percent of poverty.

An important tax credit issue for tobacco users is that the tax credits are based on the premiums before any tobacco surcharges are applied. That is, the federal tax credit is not increased for people facing higher premiums as a result of being a tobacco user.

Therefore, tobacco users will pay the entire additional tobacco surcharge on their own, regardless of income. As a result, lower income tobacco users could face health insurance premiums that are significantly more than the premiums faced by non-tobacco users.

TOBACCO USE SURCHARGE IN THE SMALL GROUP INSURANCE MARKET

On November 26, 2012, proposed regulations were published in the Federal Register implementing provisions of the ACA that would increase the maximum permissible reward under a "health-contingent wellness program" from 20% to 30% of the cost of coverage under the employer's group health plan associated with the wellness program. The term "reward" includes a discount on the employee's share

of the cost of coverage under the group health plan, a waiver of all or a part of a copayment or coinsurance or any other financial incentive, as well as the avoidance of a premium surcharge.

The maximum reward would be further increased to 50% for programs designed to prevent or reduce tobacco use. The regulations would apply to both grandfathered and non-grandfathered group health plans for plan years beginning on and after January 1, 2014.

As a result of the proposed regulations, the impact of the tobacco use surcharge is expected to be minimal in the Small Group market. Therefore, this study did not take this market into consideration.

MARKETPLACE CHARACTERISTICS

ARKANSAS INDIVIDUAL AND SMALL GROUP INSURANCE MARKETS

In 2012, the Center of Insurance Studies (CIS) at the University of Central Arkansas produced the report *Arkansas Marketplace Research (AMR)*¹. In this study, the CIS determined that three insurance carriers provide approximately 90% of the Individual and Small Group Coverage in the state of Arkansas.

Table 3-1 demonstrates the market share of health insurance issuers in the state of Arkansas based on the data reported in the AMR.

Table 3-1 2011 Health insurance market share by market

Arkansas Insurers	Individual Insurers		Small Group Insurers	
	Premium	Covered Lives	Premium	Covered Lives
USAbLe Mutual Ins. Co. (dba Arkansas Blue Cross and Blue Shield) (includes all affiliates)	77.5%	78.9%	52.9%	56.0%
UnitedHealthcare (includes all affiliates)	8.6%	8.0%	21.7%	20.9%
QCA Health Plan, Inc.	3.3%	5.3%	19.9%	19.7%
Time Ins. Co.	2.2%	1.1%	0.1%	0.1%
Humana Ins. Co.	1.5%	2.0%	0.5%	0.2%
United Security Life & Health Ins. Co.	0.8%	0.3%		
Coventry Health & Life Ins. Co.	0.6%	0.1%	2.3%	1.9%
World Ins. Co.	0.3%	0.1%		
Freedom Life Ins. Co. of America	0.3%	0.2%		
All Other	4.9%	4.0%	2.6%	1.2%
Total	100.0%	100.0%	100.0%	100.0%

HEALTH COVERAGE & UNINSURED DEMOGRAPHICS

According to *statehealthfacts.org*², approximately 26% of the Arkansas working age adult population is currently uninsured. The remaining 74% receive insurance coverage from a combination of employer-sponsored plans, the Individual market, and government run programs. Table 3-2 illustrates this distribution of coverage.

Table 3-2 Health Insurance Coverage by Type Of Coverage

Type of Coverage	%
Employer	54%
Individual	5%
Medicaid	8%
Other Public	6%
Uninsured	26%
Total	100%

Table 3-3 demonstrates Arkansas's uninsured rates for adults under age 65 by region within the state of Arkansas. These rates were developed by using the US. Census Bureau's Small Area Health Insurance Estimates (SAHIE) Interactive Data Tool³.

Table 3-3 2010 Arkansas uninsured rates for adults aged 18-64

Region	Uninsured %
Central	23.3%
North East	26.3%
North West	28.2%
South East	24.6%
South West	27.6%
Statewide	26.0%

Based on the SAHIE estimates, Table 3-4 shows the number of adults 18-64 that are uninsured by income level by region within the state.

Table 3-4 Number of Adults 18-64 Uninsured by Income Level

Region	Income Less Than 138% FPL	Income Between 138% & 200% FPL	Income Between 200% & 250% FPL	Income Between 250% & 400% FPL	Income Greater Than 400% FPL	All Incomes
Central	55,477	22,628	12,650	18,446	12,492	121,693
North East	44,087	16,411	9,245	12,751	6,790	89,284
North West	72,226	30,491	17,694	25,064	14,036	159,511
South East	16,454	5,870	3,347	4,660	2,631	32,962
South West	23,726	8,731	5,006	6,498	3,574	47,535
Total	211,970	84,131	47,942	67,419	39,523	450,985

Table 3-5 illustrates the number of uninsured adults by age range.

Table 3-5 Distribution of Uninsured Adults 18-64 by Age Range (with % of total uninsured)

Region	18-39	40-49	50-64	All Ages
Central	75,327 (16.7%)	23,713 (5.3%)	22,653 (5.0%)	121,693 (27.0%)
North East	52,627 (11.7%)	18,105 (4.0%)	18,552 (4.1%)	89,284 (19.8%)
North West	95,276 (21.1%)	31,906 (7.1%)	32,329 (7.2%)	159,511 (35.4%)
South East	19,032 (4.2%)	6,719 (1.5%)	7,211 (1.6%)	32,962 (7.3%)
South West	27,067 (6.0%)	10,025 (2.2%)	10,443 (2.3%)	47,535 (10.5%)
Total	269,329 (59.7%)	90,468 (20.1%)	91,188 (20.2%)	450,985 (100.0%)

TOBACCO USAGE IN ARKANSAS

Table 3-6 demonstrates Arkansas's tobacco usage rates by region within the state of Arkansas. The tobacco rates were based on the 2010 report *Arkansas County-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use*⁴ produced by the Arkansas Department of Health & Human Services and the Centers for Disease Control and Prevention (CDC) 2009 report *State-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use Among Adults*⁵.

Table 3-6 Arkansas Tobacco Usage Rates

Region	Tobacco %
Central	25.5%
North East	30.8%
North West	27.5%
South East	27.3%
South West	30.3%
Statewide	27.8%

ALLOWED TOBACCO USE RATING PRACTICE IN ARKANSAS

Currently, there are no state limitations on how health insurance issuers utilize an individual's tobacco use in pricing Individual health coverage in Arkansas.

In the Individual market, health insurance issuers can generally deny coverage to someone seeking new individual coverage because of pre-existing health conditions or other potential health risks, such as the use of tobacco products. If the health plan offers coverage to a tobacco user, health plans can and typically increase premiums for the additional health risk caused by tobacco use.

In the Small Group insurance market, health insurance issuers are allowed to use tobacco usage as a rating factor; however, there are guarantee issue limitations which prevent issuers from denying coverage to small employers⁶.

MEDICAL COST OF TOBACCO USE

PUBLICLY AVAILABLE DATA

Centers for Disease Control and Prevention (CDC)

The CDC has an application called the Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) program⁷. One of the uses of the SAMMEC application is to estimate the health care costs of smoking. Smoking-attributable

health care expenditures (SAEs) are defined as the excess personal health care costs of smokers and former smokers compared with those of never smokers.

Using SAMMEC, L&E estimated an increase in per-capita medical costs for Arkansas smokers of approximately 30-35 percent.

It should be noted that these estimates include costs for those aged 65 and older who would not be covered through the Exchange. It should also be noted that SAMMEC does not include the costs of smokeless.

New England Journal of Medicine (NEJM)

A study published in 1997 by Barendregt, et al⁸, estimated the difference in per-capita medical costs between smokers and non-smokers by age.

In this study, the researchers determined that per capita medical costs for smokers rise sharply with age, increasing almost 10 times from persons aged 40 to 44 years to those aged 85 to 89 years.

Within each age group, smokers incurred higher costs than nonsmokers; however, the cost difference varied by age group. The maximum cost difference between smokers and non-smokers occurred among 65-to-74-year-olds. In this age group, smoker costs were approximately 40 percent higher for men and 25 percent higher for women.

It should be noted that smokeless tobacco-use was not considered.

Milliman, Inc.

The research report, *Impact of height, weight, and smoking on medical claim costs*, published in 2009 by Milliman⁹ included estimates for the difference in per-capita medical costs between smokers and non-smokers by age.

On average, Milliman estimated that male smokers cost 6% more than their non-smoking counterparts and female smokers cost 12% more than their non-smoking counterparts.

The relative cost of smoking varied significantly by age and by gender. In general, the relative costs for male smokers was approximately 15-20% higher at the youngest ages, while it was estimated that there were not significant different cost differences at the higher ages.

Conversely, for the female population, the relative costs for female smokers was approximately 12.5-17.5% for the oldest ages, while it was estimated that there were not significant different cost differences at the higher ages.

L&E DATA AND OTHER PRIVATE DATA

In addition to publicly available data, L&E utilized proprietary client data to estimate the medical cost of tobacco users relative to non-tobacco users.

This data was based on health insurance carriers that wrote nationwide health insurance coverage in the individual market. For these clients, the relative increase of smoking claims on a per-capita basis was approximately 10% at the youngest ages and approximately 60-70% at the highest ages. Based on typical age distributions, the average per-capita increase was approximately 20-30%.

Additionally, in performing this study, L&E interviewed health insurance carriers who issue business in Arkansas about their smoking rating practices. As a follow-up to those discussions, L&E made a data request to assist in the analysis.

Based on the information provided, there appears to be no consistent approach taken with regards to premium adjustments as a result of smoking. In general, three different approaches appear to be used:

- ❖ No distinct smoking surcharges are applied. That is, the cost of smoking is borne by the entire covered population;
- ❖ An average smoking surcharge of 5-20% is applied regardless of age;
- ❖ A increasing smoking surcharge is applied by age (e.g. 20% for young adults and 50% for older adults).

Due to confidentiality agreements, the specific results for each company interviewed cannot be disclosed in this report; however, these results were used in the analysis.

Chapter 4

Potential Impact of ACA Tobacco Use Surcharge

Across states, there is no consensus on the implementation approach with regards to the allowed ACA tobacco use rating factor.

Common reasons proponents support use of a tobacco use rating factor include:

- ❖ Tobacco use is a voluntary behavior that likely increases the use of medical services. Therefore, tobacco users should bear the financial responsibility for any excess risk costs;
- ❖ If health plans are not allowed to increase premiums for tobacco users, the excess medical costs would be spread across all persons with coverage. That is, non-tobacco users would see an increase in premium as a result of other's behavior;
- ❖ A large tobacco surcharge might encourage tobacco users to quit and might discourage non-users from starting.

Reasons for opposition to the tobacco use rating factor include:

- ❖ Since tax credits are not adjusted for the tobacco surcharge, premium costs would be greatly increased for lower income tobacco users and these individuals would likely face unaffordable premiums;
- ❖ It is likely that a significant amount of tobacco users would forego purchasing coverage in light of expensive premiums;
- ❖ The maximum ACA surcharge of 50 percent would likely exceed the expected health care costs of tobacco users for most consumers;
- ❖ Insurers could use a high tobacco-rating factor as an indirect way to charge more for expensive health conditions that are unrelated to the use of tobacco.

Table 4-1 illustrates the estimated premium impact of the maximum tobacco use factor allowed by the ACA by age and by income level on a statewide average basis. The initial premium estimates were based on the Congressional Budget Office's (CBO) estimate that, in 2016, the national average premium for the benchmark Silver plan would be \$5,200 for the average purchaser.

For this analysis, L&E adjusted the CBO estimate for the differences in average medical care costs between Arkansas and other states. Additionally, L&E adjusted the premium estimate to be age-specific. Both of these adjustments were based on L&E client data.

Table 4-1 Estimated Premium for Benchmark Coverage After Tax Credits

		No Tobacco Rating Factor		With Maximum ACA Tobacco Factor of 50%	
Age	Income Range as % of FPL	Premium	Premium as % of Income	Premium	Premium as % of Income
18-39	139 – 200%	1,007	5.2%	2,676	13.7%
	200 – 250%	1,803	7.2%	3,473	13.8%
	250 – 400%	3,339	9.2%	5,008	13.8%
	400% +	3,339	6.0%	5,008	9.0%
40-49	139 – 200%	1,007	5.2%	3,307	16.9%
	200 – 250%	1,803	7.2%	4,103	16.3%
	250 – 400%	3,449	9.5%	5,749	15.8%
	400% +	4,600	8.2%	6,900	12.4%
50-64	139 – 200%	1,007	5.2%	4,887	25.0%
	200 – 250%	1,803	7.2%	5,684	22.6%
	250 – 400%	3,449	9.5%	7,329	20.0%
	400% +	7,761	13.9%	11,642	20.8%

The ACA defines a premium that is more than 8 percent of income as not affordable¹⁰. Additionally, research by the Urban Institute has shown that participation in subsidized programs by low-income uninsureds falls below 2 percent of eligibles when premiums exceed 10 percent of income¹¹.

This result indicates that very few low income tobacco users would purchase coverage with a 50 percent premium surcharge which would potentially undermine a fundamental goal of the ACA to increase insurance coverage for the uninsured.

To measure the impact of the maximum ACA tobacco use rating factor on participation, L&E used a model based on price elasticity. Price elasticity is defined as the percentage change in the number of people obtaining or dropping insurance coverage as the price of insurance decreases or increases respectively. That is, price elasticity measures the supply and demand for health insurance as prices increase or decrease.

The elasticity formula includes variables for:

- ❖ The magnitude of the rate change;
- ❖ The relationship of the new premium rate versus the individual's income level; and
- ❖ An average level of expected anti-selection in an environment with an individual mandate.

The elasticity formula is:

% Change in Coverage =

$$\frac{[(1 - \text{New Premium as \% of Income})^2 \times 0.75] \times \text{times}}{[(1 - \text{New Premium/Old Premium}) \times 0.667]}$$

Using the values in Table 4-1, the following are two examples of the formula used in our participation model:

Currently Uninsured Non-Tobacco User Aged 18-39, FPL 139-200%

Assumptions

Gross Premium before tax credits	\$3,339
Estimated tax credit	\$2,332
Income	\$19,548

Results

Net Premium after tax credits	\$1,007
Premium as % of Income	5.15%

% persons obtaining coverage as result of premium reduction:

$$(1 - 5.15\%)^2 \times 0.75 \times (1 - 1007/3339) \times 0.667 = 31.4\%$$

Currently Insured Tobacco User Aged 18-39, FPL 200-250%

Assumptions

Gross Premium before tax credits	\$3,339
Estimated tax credit	\$1,535
Income	\$25,133

Results

Premium after tax credit	\$1,803
Tobacco Surcharge	\$1,669
Net Premium	\$3,473
Premium as % of Income	13.82%

% persons dropping coverage as result of premium increase:

$$(1 - 13.82\%)^2 \times 0.75 \times (1 - 3473/3339) \times 0.667 = -1.5\%$$

L&E applied this elasticity formula to the demographic information that was summarized in Chapter 3 and the expected claim cost levels of tobacco users relative to non-tobacco users. The expected excess cost of tobacco users was based on a consensus approach using the data collected specifically for this analysis as well as data previously collected. Table 4-2 illustrates the assumptions used.

Table 4-2 Excess Medical Costs due to Tobacco Use

Age	Tobacco-use Load %
18-39	10%
40-49	25%
50-64	55%

Based on applying the demographics and assumptions above, Table 4-3 highlights L&E’s estimated change in health insurance coverage by region if the maximum ACA tobacco use surcharge of 50% is used. Note that the uninsured Arkansans with an income of below 139% FPL were assumed to join Medicaid¹².

Table 4-3 Estimated Change in Health Insurance Coverage if ACA Maximum Tobacco Use Factor Applied in Individual Market, Adults 18-64, FPL >139%

Region	Current Population	Projected Population	Difference	% Change
Central				
Insured	17,572	27,618	10,046	36.4%
Uninsured	66,216	56,170	-10,046	-17.9%
North East				
Insured	10,073	16,985	6,912	40.7%
Uninsured	45,197	38,285	-6,912	-18.1%
North West				
Insured	17,449	30,757	13,308	43.3%
Uninsured	87,285	73,977	-13,308	-18.0%
South East				
Insured	4,031	6,628	2,597	39.2%
Uninsured	16,508	13,911	-2,597	-18.7%
South West				
Insured	5,098	8,824	3,726	42.2%
Uninsured	23,809	20,083	-3,726	-18.7%
Statewide				
Insured	54,223	90,812	36,589	40.3%
Uninsured	239,015	202,426	-36,589	-18.1%

Chapter 5

Potential Impact of Alternative Tobacco Use Surcharges

To make coverage more affordable for low income tobacco users while attempting to further decrease the uninsured rate in Arkansas, the Arkansas Insurance Department could adopt rating rules which constrain or eliminate the ACA tobacco surcharge.

There are a myriad of alternatives that keep a tobacco surcharge approach in place that would help mitigate potential affordability issues while retaining cost responsibility and incentives for cessation of tobacco use.

L&E has chosen a total of seven alternatives to analyze in addition to the maximum ACA tobacco surcharge of 50%. This subset of alternatives is a representation of all the possible approaches the state of Arkansas could undertake. Six of these alternatives analyze the impact of limiting the rating factor to less than 50% while the seventh alternative measures the impact of prohibiting a tobacco use surcharge.

Alternative 1 – Apply the ACA 50% tobacco use surcharge to the subsidized premium amount

Alternative 1 would apply the ACA 50 percent tobacco use surcharge to the subsidized after-tax credit premium for each tobacco user.

L&E believes that this approach would be allowed under the ACA because it is more restrictive than the ACA tobacco use surcharge of 50 percent.

It should be noted that under this alternative, health insurers could potentially receive lower total premium payments for tobacco users who are tax credit recipients than from tobacco users in a non-Exchange market.

Alternative 2 – Apply a lower (e.g. 20%) tobacco use surcharge to the total premium amount

Alternative 2 would simply reduce the 50 percent ACA tobacco use surcharge to 20 percent. This magnitude was chosen as a reasonable approximation to the average levels currently in place in the Arkansas marketplace.

This alternative would align the premium surcharge to levels that are approximately equal to typical tobacco use loads currently in use in the Individual health insurance market.

Additionally, this alternative would align the surcharge with the approximate average increase in medical cost as a result of tobacco use across persons of all ages.

However, since not all tobacco users would pay the full additional costs associated with their tobacco use, non-tobacco users would likely have to cover a portion of the excess medical costs associated with tobacco use.

Alternative 3 – Apply the 20% tobacco use surcharge to the subsidized premium amount.

Alternative 3 would merge the approaches of Alternatives 1 and 2.

Alternative 3 would further address the affordability issues for tobacco users; however, since the majority of tobacco users would not pay the full additional costs associated with their tobacco use, non-tobacco users would have to cover the portion of the medical costs associated with tobacco use. This would increase premiums in the Individual market more than Alternative 2 due to the reduced tobacco user premiums.

Alternative 4 – Apply a 10% tobacco use surcharge to the total premium amount

Alternative 4 would reduce the 50 percent ACA tobacco surcharge to 10 percent for all tobacco users.

Alternative 4 would further address the affordability issues for tobacco users; however, the premiums for non-tobacco users would further increase to help cover the portion of the medical care costs associated with tobacco use.

Alternative 5 – Apply the 10% tobacco use surcharge to the subsidized premium amount.

Similar to Alternative 3, Alternative 5 would apply the tobacco surcharge after premium tax credits have been applied.

This alternative would further address the affordability issues for tobacco users; however, the premiums for non-tobacco users would further increase.

Alternative 6 – Apply a tobacco use surcharge that increases with age

This alternative would better align the tobacco surcharge to levels that better represent the increase in excess medical costs as a person ages.

In this alternative, L&E has assumed a tobacco surcharge of 10% for adults aged 18-39, 25% for persons aged 40-49, and 50% for persons aged 50-64. These levels were selected to produce premium levels that were comparable to the expected increase in excess tobacco-related medical costs as persons age. Please note that the assumed expected increase in claim costs of 55% was limited to 50% due to ACA requirements.

Alternative 7 – Prohibit the use of a tobacco surcharge

This alternative would address the issue of affordability and access as a result of tobacco-use; however, it would completely eliminate the medical-cost consequences of tobacco use and would increase the premiums of non-tobacco users to the greatest extent of all alternatives analyzed.

ENROLLMENT IMPACT OF ALTERNATIVE SCENARIOS

Table 5-1 demonstrates the estimated number of persons covered in the Individual market by region under each of the surcharge alternatives. This illustration is based on:

- ❖ The number of insured in the Individual market prior to 2014; minus
- ❖ An estimate of healthy persons who drop coverage due any increases in premium; minus
- ❖ An estimate of smokers who drop coverage due to affordability concerns after the application of the tobacco surcharge; plus
- ❖ The uninsured persons who purchase coverage as a result of lowered premiums.

Table 5-1 Estimate of Individually Insured Enrollment by Region by Alternative

	Base Case	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Region	Maximum ACA Tobacco Factor of 50%	50% Applied after tax credit	20% Factor	20% Applied after tax credit	10% Factor	10% Applied after tax credit	10,25,50% By Age	No Surcharge
Central	27,618	29,100	28,594	29,330	29,039	29,428	28,428	29,527
North East	16,985	18,313	17,950	18,609	18,384	18,731	17,758	18,852
North West	30,757	32,963	32,360	33,453	33,076	33,653	32,069	33,856
South East	6,628	7,056	6,929	7,140	7,063	7,177	6,860	7,215
South West	8,824	9,524	9,334	9,683	9,565	9,748	9,225	9,812
Statewide	90,812	96,956	95,167	98,215	97,127	98,737	94,340	99,262
Increase Over Current	36,589	42,733	40,944	43,992	42,904	44,514	40,117	45,039

Table 5-2 shows the estimated increase in persons covered with insurance enrollment as a percentage of the enrollment expected if the maximum ACA surcharge was implemented.

Table 5-2 Estimate of Percentage Enrollment Impact versus ACA Surcharge

	Base Case	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Region	Maximum ACA Tobacco Factor of 50%	50% Applied after tax credit	20% Factor	20% Applied after tax credit	10% Factor	10% Applied after tax credit	10,25,50% By Age	No Surcharge
Central		5.4%	3.5%	6.2%	5.1%	6.6%	2.9%	6.9%
North East		7.8%	5.7%	9.6%	8.2%	10.3%	4.4%	11.0%
North West		7.2%	5.2%	8.8%	7.5%	9.4%	4.3%	10.1%
South East		6.5%	4.5%	7.7%	6.6%	8.3%	3.5%	8.9%
South West		7.9%	5.8%	9.7%	8.4%	10.5%	4.5%	11.2%
Statewide		6.8%	4.8%	8.2%	7.0%	8.7%	3.9%	9.3%

PREMIUM IMPACT OF ALTERNATIVE SCENARIOS ON TOBACCO USERS

Table 5-3 demonstrates the estimated impact on premiums as a percentage of income for tobacco users for the seven alternatives as compared to the scenario where the maximum ACA tobacco use surcharge is used.

Table 5-3 Estimated Premium Impact of Alternative Tobacco-use Rating Factors as a Percentage of Income

		Base Case	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Age	Income Range as % of FPL	Maximum ACA Tobacco Factor of 50%	50% Applied after tax credit	20% Factor	20% Applied after tax credit	10% Factor	10% Applied after tax credit	10,25,50% By Age	No Surcharge
18-39	139 – 200%	13.7%	7.7%	8.6%	6.2%	6.9%	5.7%	6.9%	6.9%
	200 – 250%	13.8%	10.8%	9.8%	8.6%	8.5%	7.9%	8.5%	8.5%
	250 – 400%	13.8%	13.8%	11.0%	11.0%	10.1%	10.1%	10.1%	10.1%
	400% +	9.0%	9.0%	7.2%	7.2%	6.6%	6.6%	6.6%	6.6%
40-49	139 – 200%	16.9%	7.7%	9.9%	6.2%	7.5%	5.7%	12.2%	12.2%
	200 – 250%	16.3%	10.8%	10.8%	8.6%	9.0%	7.9%	12.7%	12.7%
	250 – 400%	15.8%	14.3%	12.0%	11.4%	10.8%	10.5%	13.3%	13.3%
	400% +	12.4%	12.4%	9.9%	9.9%	9.1%	9.1%	10.7%	10.7%
50-64	139 – 200%	25.0%	7.7%	13.1%	6.2%	9.1%	5.7%	25.0%	25.0%
	200 – 250%	22.6%	10.8%	13.4%	8.6%	10.3%	7.9%	22.6%	22.6%
	250 – 400%	20.0%	14.3%	13.8%	11.4%	11.6%	10.5%	20.2%	20.2%
	400% +	20.8%	20.8%	16.7%	16.7%	15.3%	15.3%	20.8%	20.8%

PREMIUM IMPACT OF ALTERNATIVE SCENARIOS ON NON-TOBACCO USERS

As previously discussed, if a tobacco use surcharge does not fully cover the additional costs associated with tobacco use, non-tobacco users would have to cover these additional costs by paying a larger premium than they would otherwise pay.

Table 5-4 demonstrates the estimated impact on premiums as a percentage of income for non-tobacco users for the seven alternatives as compared to scenario where the maximum ACA tobacco use surcharge is utilized

Table 5-4 Estimated Marketwide Premium Impact of Alternative Tobacco Use Surcharges on Non-Tobacco Users

	Scenario	Premium Change %
Base Case	Maximum ACA tobacco surcharge of 50%	Less Than or Equal to 0%
Alt 1	50% applied after tax credit	0% to +2.5%
Alt 2	20% surcharge	+2.5% to +5%
Alt 3	20% applied after tax credit	+5% to +10%
Alt 4	10% surcharge	+5% to +10%
Alt 5	10% applied after tax credit	+10% to +15%
Alt 6	10,25,50% surcharge by age	-2.5% to +2.5%
Alt 7	No surcharge	+12.5% to +17.5%

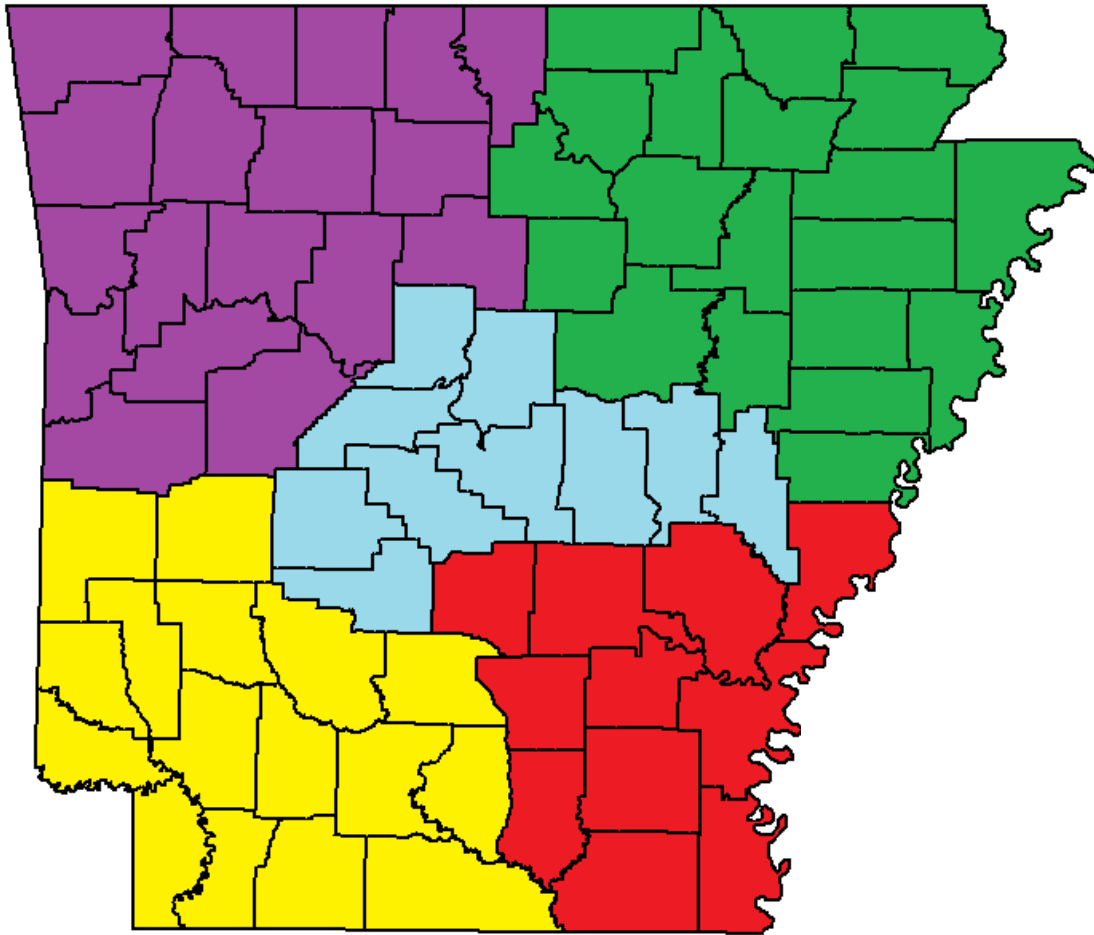
Appendix A

Arkansas Counties by Region

Table A-1 *Listing of Assumed Counties by Region*

Region				
Central	Conway	Faulkner	Garland	Hot Spring
	Lonoke	Monroe	Perry	Prairie
	Pulaski	Saline		
North East	Clay	Cleburne	Craighead	Crittenden
	Cross	Fulton	Greene	Independence
	Izard	Jackson	Lawrence	Lee
	Mississippi	Poinsett	Randolph	St. Francis
	Sharp	Stone	White	Woodruff
North West	Baxter	Benton	Boone	Carroll
	Crawford	Franklin	Johnson	Logan
	Madison	Marion	Newton	Pope
	Scott	Searcy	Sebastian	Van Buren
	Washington	Yell		
South East	Arkansas	Ashley	Bradley	Chicot
	Cleveland	Desha	Drew	Grant
	Jefferson	Lincoln	Phillips	
South West	Calhoun	Clark	Columbia	Dallas
	Hempstead	Howard	Lafayette	Little River
	Miller	Montgomery	Nevada	Ouachita
	Pike	Polk	Sevier	Union

Table A-2 *Map of Assumed Counties by Region*



Appendix B

Endnotes

¹ Victor A. Puleo, Jr. Ph.D., CFP, John C. Bratton, Ph.D., CIC, CPCU, ASLI, ARM, and David Mitchell, Ph.D., “Arkansas Marketplace Research”, September 14, 2012.
<http://hbe.arkansas.gov/MarketplaceResearch.pdf>

² Arkansas: Health Insurance Coverage of Adults 19-64, states (2010-2011), U.S. (2011)
<http://www.statehealthfacts.org/profileind.jsp?cmprgn=1&cat=3&rgn=5&ind=130&sub=39>

³ <http://www.census.gov/did/www/sahie/>

⁴ Arkansas Department of Health and Human Services Division of Health, Tobacco Prevention & Cessation Branch
<http://www.healthy.arkansas.gov/programsServices/epidemiology/ChronicDisease/Documents/publications/CountySpecificTobacco.pdf>

⁵ *State-Specific Prevalence of Cigarette Smoking and Smokeless Tobacco Use Among Adults*, Centers for Disease Control and Prevention (CDC), Morbidity and Mortality Weekly Report, November 5, 2010 / 59(43); 1400-1406
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5943a2.htm#tab3>

⁶ Arkansas Code, Title 23, Subtitle 3, Chapter 86, Subchapter 3, §23-86-312 – Guaranteed availability of coverage for employers in the group market
<http://www.insurance.arkansas.gov/PandC/Insurance%20Code%20&%20related%20chapters/PCCode.htm>

⁷ https://apps.nccd.cdc.gov/sammec/exp_comp.asp

⁸ Jan J. Barendregt, M.A., Luc Bonneux, M.D., and Paul J. van der Maas, Ph.D., “The Health Care Costs of Smoking,” *N Engl J Med* 1997; 337:1052-1057, October 9, 1997.
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⁹ Jonathon Shreve, FSA, MAAA and Mary van der Heijde, FSA, MAAA, “Impact of height, weight, and smoking on medical claim costs” April, 2009.
<http://publications.milliman.com/research/health-rr/pdfs/impact-height-weight-smoking-RR04-01-09.pdf>

¹⁰ Patient Protection and Affordable Care Act (ACA, P.L. 111-148), Section 1501, Section 5000 A(e)(1)(A)

¹¹ Leighton Ku and Teresa A. Coughlin, “The Use of Sliding Scale Premiums in Subsidized Insurance Programs,” The Urban Institute, March 1997.
<http://www.urban.org/publications/406892.html>

¹²
<http://www.arkleg.state.ar.us/healthcare/timeline/pages/HealthReformProvisions.aspx?name=Medicaid%20expansion>