

# Tobacco Surcharges on 2015 Health Insurance Plans Sold in Federally Facilitated Marketplaces: Variations by Age and Geography and Implications for Health Equity

In 2014, few health insurance plans sold in the Affordable Care Act's Federally Facilitated Marketplaces had age-dependent tobacco surcharges, possibly because of a system glitch. The 2015 tobacco surcharges show wide variation, with more plans implementing tobacco surcharges that increase with age. This underscores concerns that older tobacco users will find postsubsidy health insurance premiums difficult to afford. Future monitoring of enrollment will determine whether tobacco surcharges cause adverse selection by dissuading tobacco users, particularly older users, from buying health insurance. (*Am J Public Health*. 2015;105:S696–S698. doi:10.2105/AJPH.2015.302694)

Alex C. Liber, MSPH, Jeffrey M. Drope, PhD, Ilana Graetz, PhD, Teresa M. Waters, PhD, and Cameron M. Kaplan, PhD

## TOBACCO USE IS THE LEADING

cause of preventable death and disability in the United States. Policy responses to this public health concern have taken many forms, some with unintended consequences for health equity. For example, some argue that tobacco surcharges on health insurance premiums provide incentives to stop tobacco use,<sup>1</sup> but this policy may reduce access to health care for already vulnerable populations if it makes insurance unaffordable.

Health insurance exchanges set up by the Affordable Care Act (ACA; Pub L No. 111–148) allow Americans with incomes between 138% and 400% of the federal poverty line to purchase publicly subsidized, community-rated private health insurance plans in a competitive market. In 2014, more than 7 million people purchased plans from health insurance exchanges, and federal government agencies project that between 9 and 13 million people will sign up in 2015.<sup>2</sup> The price for health insurance exchange plans is determined by only 4 factors: (1) family size, (2) geography (usually a county or state), (3) age (a 64-year-old individual's premium may not exceed 3 times that of a 21-year-old individual), and (4) tobacco use (tobacco users may be charged up to 50% more than nonusers).

Health advocates are concerned that the tobacco rating factor (also known as a tobacco surcharge) makes health insurance

unaffordable to tobacco users.

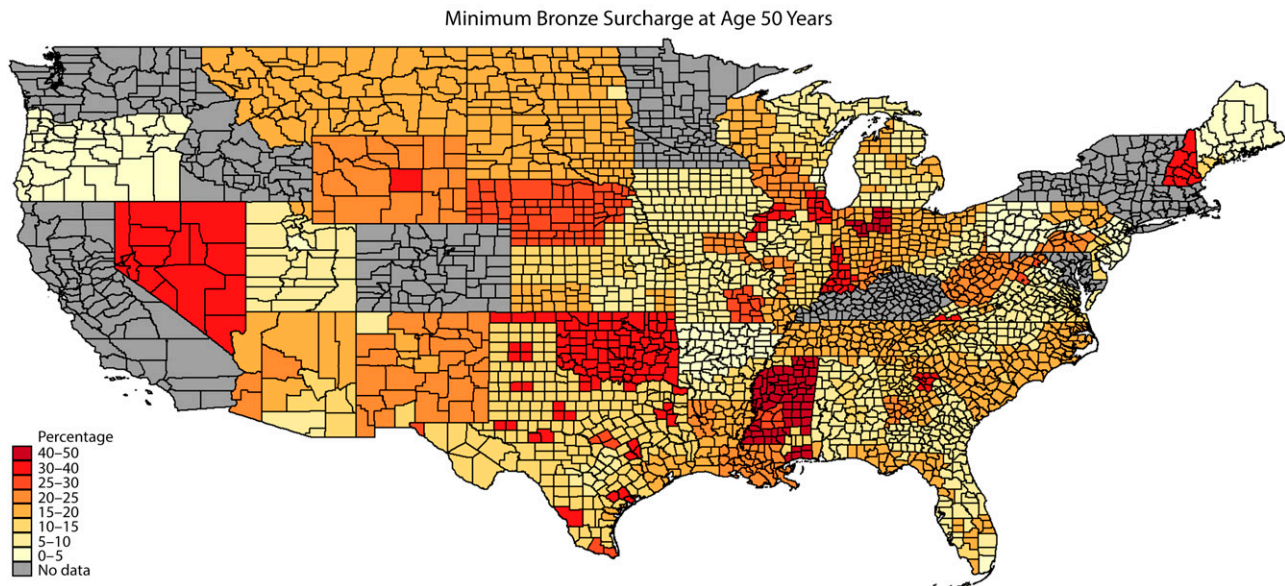
This may be exacerbated for those eligible for subsidies because ACA-provided plan subsidies do not cover the tobacco surcharge portion of plan premiums. The higher net premium facing tobacco users may lead them to forgo purchasing health insurance altogether<sup>3</sup> or to misrepresent their true tobacco use status when purchasing insurance on health insurance exchanges. In addition, because the mandate to purchase health insurance exempts individuals without access to affordable coverage (defined as the least expensive premium for an adequate health insurance plan costing less than 8% of gross income), many tobacco users will not be penalized for failing to purchase insurance.<sup>4</sup>

Kaplan et al.<sup>4</sup> found that the tobacco surcharges levied in health insurance exchanges during the 2014 coverage year varied greatly across the largest metropolitan areas in each state for 45-year-old tobacco users. We expand on this prior work by comparing 2015 premium data for all markets in available states participating in the Federally Facilitated Marketplaces. Furthermore, because of a documented glitch in the health insurance exchange pricing structure, few states employed age-dependent tobacco surcharges in 2014.<sup>4</sup> Specifically, the system that processed rates for federally run exchanges would not allow premiums for 64-year-old tobacco users to be more than 3

times those offered to 21-year-old tobacco users, although charging up to 4.5 times more to those persons than to 21-year-old persons was expressly allowed by law as a result of the multiplicative effects of age variation and the tobacco surcharge.<sup>5</sup> This glitch was fixed for 2015, and we offer an early look at the new tobacco surcharges and how those structures may affect health insurance purchasing decisions.

## METHODS

We used the Health Insurance Marketplace public use files published by the Centers for Medicare and Medicaid Services in our analysis.<sup>6</sup> We examined the unsubsidized monthly premiums that individuals would pay for health insurance plans offered in the individual marketplaces for the 37 states that were served by Federally Facilitated Marketplaces that either partnered with or exclusively relied on the federal government to operate their 2015 health insurance exchanges. Our main outcome, the minimum effective tobacco use surcharge, was calculated at the county level for each age between 21 and 65 years as the difference between the least expensive bronze plan available for tobacco users and the least expensive bronze plan for nonusers as follows: minimum effective tobacco use surcharge = (minimum bronze premium for a tobacco user) – (minimum



**FIGURE 1—Minimum effective tobacco use surcharge (%) in bronze health insurance exchange plans for a 50-year-old person by US county in Federally Facilitated Marketplaces in 2015.**

bronze premium)/minimum bronze premium.

The minimum effective tobacco use surcharge captures the difference in the shopping experience between tobacco users and nonusers. We used bronze plans in our calculations instead of

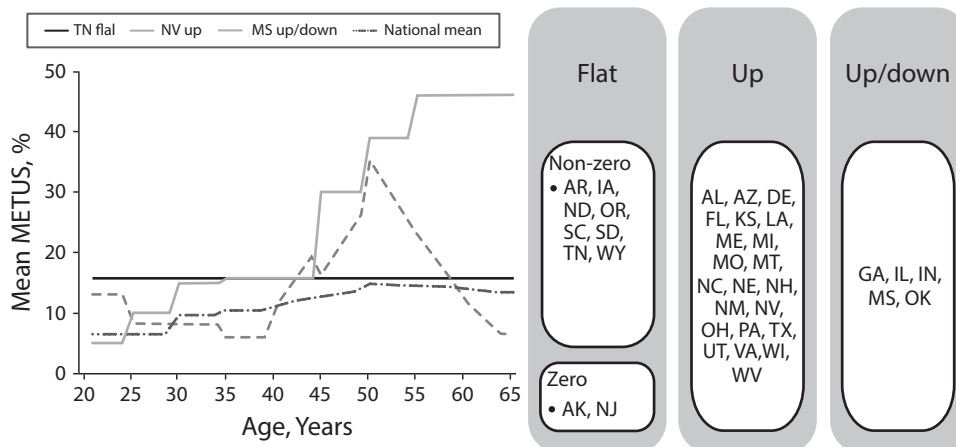
cheaper catastrophic plans because the bronze plans are used to calculate affordability benchmarks for the purposes of enforcing the ACA's individual mandate provision. We used the number of persons aged 18 to 64 years in each county from the 2009 to

2013 American Community Survey as analytical weights to calculate the average minimum effective tobacco use surcharge at the state and national levels.<sup>7</sup> We used Stata/MP 11.2 for all data management and analysis.<sup>8</sup>

## RESULTS

We found that tobacco surcharges for the least expensive bronze health insurance exchange plans varied greatly in magnitude and manner across age as well as within and between states. For example, Figure 1 (which plots the minimum effective tobacco use surcharge in each county) illustrates that a 50-year-old tobacco user in Oregon would pay about 2% more for the least expensive plan (before subsidies) than would a nonuser, whereas in neighboring Nevada, the same tobacco user would pay about 35% more for the least expensive plan than would a nonuser. Even within the same state, differences persist; a 50-year-old tobacco user in San Antonio, Texas, would pay 10% more, whereas that same person living in nearby College Station, Texas, would pay 32% more for the least expensive bronze plan.

In Figure 2, we identify and plot 3 representative minimum



Note. Weighted by number of persons aged 18–64 years in each county.

**FIGURE 2—Minimum effective tobacco use surcharge (METUS; %)-by-age in selected states for each representative METUS-by-age pattern and national mean METUS-by-age in 2015.**

effective tobacco use surcharge-by-age curves that describe common health insurance exchange pricing environments: flat, up, and up/down; and we categorize the 37 states in our data set by these 3 general patterns. The minimum effective tobacco use surcharge-by-age curves shown in Figure 2 aggregate the effect of the different age-dependent tobacco surcharge rating curves in each county of each state to present the average surcharge expected for each age of tobacco user. Nevada provides an example of an “up” curve, with a mean minimum effective tobacco use surcharge that was larger for older tobacco users than for younger tobacco users. In Tennessee, the mean minimum effective tobacco use surcharge remained nearly flat at nonzero values across all ages, whereas in New Jersey (which prohibited tobacco rating in the health insurance exchange) and Alaska, the mean minimum effective tobacco use surcharge was 0% across the age range (“flat”). In Mississippi, the mean minimum effective tobacco use surcharge increased until a peak at age 50 years before decreasing (“up/down”).

Figure 2 also plots the mean minimum effective tobacco use surcharge among the 37 states with Federally Facilitated Marketplaces (national mean). The national mean remained flat at approximately 6.5% from age 21 to 29 years, increased to 9.5% at age 30 years, and then increased steadily to 14.8% by age 50 years. The larger changes occurred in years that were multiples of 5. After age 50 years, the average minimum effective tobacco use surcharge declined steadily, reaching 13.1% at age 65 years and older.

## DISCUSSION

The observed variation in the minimum effective tobacco use

surcharge may alter health insurance exchange enrollment behavior in significant ways. Many older tobacco users will pay a higher tobacco surcharge on top of, and as a proportion of, an already larger premium for the same plans as young tobacco users. In most cases, older tobacco users will face high premiums even after subsidies are taken into account. Furthermore, the prevalence of tobacco use is much higher among Americans who previously did not have health insurance coverage than among those with health insurance (in 2008, 32.5% and 16.8%, respectively).<sup>9</sup> Furthermore, on average, tobacco users tend to have lower income and employment, and the current dynamic will ensure that these individuals will be further financially burdened by the tobacco surcharge, even to the point that insurance through the health insurance exchange remains unaffordable even after subsidization.<sup>10</sup>

Little systematic evidence has been collected on the effect of tobacco surcharges on consumer behavior or health outcomes. Liber et al.<sup>11</sup> found suggestive evidence that tobacco surcharges could influence privately insured persons to report quitting tobacco use. However, because tobacco surcharges were administered without the ability to verify tobacco use, reported and actual numbers of tobacco users could differ dramatically. This limitation is common for tobacco surcharges; the penalty for misrepresenting tobacco use status in health insurance exchange enrollment is retroactive payment of the tobacco surcharge. Thus, an economically rational enrollee might be likely to misrepresent tobacco use and risk paying the surcharge at a later date rather than honestly self-identify as a tobacco user.

The ability to vary tobacco surcharges by age raises concerns

that health insurers may try to use differential surcharges to entice younger, healthier tobacco users to sign up for their policies while discouraging older, unhealthy tobacco users from doing so. Privately insured younger tobacco users may actually cost less to insurers than nonusers,<sup>4</sup> whereas older tobacco users cost significantly more.<sup>12</sup> State rate review can identify the most egregious abuses of rate setting, but a goal of stopping all “cherry-picking” may prove difficult to achieve. Future research may determine whether enrollees facing higher effective minimum surcharges will be more likely to avoid purchasing health insurance altogether and endure the known harms of being uninsured to their mental and physical health.<sup>13</sup> ■

## About the Authors

Alex C. Liber and Jeffrey M. Drope are with *Economic and Health Policy Research, Intramural Research Department, American Cancer Society, Atlanta, GA*. Ilana Graetz, Teresa M. Waters, and Cameron M. Kaplan are with the *Department of Preventive Medicine, University of Tennessee Health Science Center, Memphis*.

Correspondence should be sent to Alex C. Liber, MSPH, 250 Williams St NW, Suite 6000, Atlanta, GA 30303 (e-mail: alex.liber@cancer.org). Reprints can be ordered at <http://www.ajph.org> by clicking the “Reprints” link. This brief was accepted March 18, 2015.

## Contributors

A. C. Liber conceptualized the study, collected and analyzed the data, and drafted the original brief. J. M. Drope, I. Graetz, and C. M. Kaplan assisted in designing the study. J. M. Drope, I. Graetz, T. M. Waters, and C. M. Kaplan edited the original brief and participated in the completion of the final brief.

## Acknowledgments

The authors wish to thank Michal Stoklosa (American Cancer Society) for helping them overcome methodological hurdles during the data preparation and analysis.

## Human Participant Protection

There were no human participants in this study, so institutional review board approval was not required or sought.

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