Methods for Analyzing Premium Changes Due to Age Compression

We estimated the impact of compressing premium variation based on age on the premiums for nonelderly adults (ages 21 to 64) enrolled in nongroup coverage using data from the 2008 Survey of Income and Program Participation (SIPP), Wave 10 (interviews August to November, 2011). Insurance and income information from SIPP was used to identify people with nongroup health insurance and to estimate their eligibility for premium tax credits. People with nongroup insurance were grouped into health insurance units based on their family characteristics (see below).

Two sets of premiums were developed for coverage for 2014 based on an assumed population of nongroup enrollees composed of people already enrolled in nongroup coverage and people who are uninsured. To be conservative, we assumed that all the uninsured over age 50 would enroll in nongroup coverage in 2014 but that only one-half of the uninsured ages 21 through 50 would enroll. One set of premiums assumed uncompressed age variation, which is a little over 5:1 within the 21-to-64-age group in our simulation. (These uncompressed premiums are the same for males and females, which is required under the ACA. Currently, young women often pay more than young men for nongroup coverage.) The second set of premiums was based on the standard age factors recently proposed by the Centers for Medicare and Medicaid Services, which produce a 3:1 compressed premium variation for age for the same population. We adjusted the base premium to produce the same total premium from the enrolled population under each set of premiums. Premiums were summed within health insurance units with more than one current nongroup enrollee. We also estimated premium tax credit eligibility for each current nongroup enrollee, based on the income of the enrollee’s health insurance unit.

For each current nongroup enrollee, we then compared the uncompressed premium to the compressed premium, adjusted for application of premium tax credit. We found that 80 percent of current nongroup enrollees are in health insurance units that would pay less under the constrained premiums,
adjusted for premium tax credits, than they would under the unconstrained premiums. This occurs because many younger people who would pay more due to the age compression are protected from higher costs by the premium tax credits. All older people would pay less due to the age compression, and many would have their premium costs further reduced by tax credits.

There are several caveats for this analysis. The first is that we assumed the same age and gender composition of enrollees in calculating the uncompressed and compressed premiums. It is likely that there would be a lower proportion of younger enrollees in a market with premiums that are not fully adjusted for age, but it is difficult to know how much enrollment would change, particularly with the availability of premium tax credits and the requirement that people have health insurance. As noted above, we assumed that uninsured over age 50 would enroll at twice the rate as younger uninsured, so our assumed population is weighted toward higher ages. This should produce conservative estimates. A second caveat is that we are looking only at the impact of limiting variation due to age rating. The ACA made many other changes that will change the premiums for nongroup coverage; this simulation focused on the impact of compressing age rating because some have suggested phasing in age compression to reduce rate changes.

We made other assumptions that affect the estimates. Individuals with nongroup coverage who would be eligible for Medicaid if states were to implement the ACA Medicaid expansions (i.e., people with incomes below 138% of poverty) were excluded from the premium change analysis (although they were included in health insurance units for purposes of determining health insurance unit size and income). If we included this group and assumed that all of them would be eligible for Medicaid, the percentage of current nongroup enrollees who would pay less would increase from 80% to about 87%. If we included this group and assumed that none of them would be eligible for Medicaid (although those with incomes above 100% of poverty would be eligible for tax credits), the percentage of people who would pay less would decrease from 80% to 75%. We also excluded people from the premium change analysis who reported
having both nongroup coverage and some other type of public or private coverage. For these people, we assumed that the nongroup coverage is not their primary insurance coverage.

To test our results, we also performed the analysis using different time periods to measure insurance status and using several other age and gender rate distributions for nongroup coverage taken from plans with information available on www.healthcare.gov. The different iterations did not materially affect the results.