



AMERICAN ACADEMY of ACTUARIES

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April 22, 2016

Centers for Medicare & Medicaid Services (CMS)  
Department of Health and Human Services  
7500 Security Blvd  
Baltimore, MD 21244

Re: HHS-Operated Risk Adjustment Methodology Discussion Paper

To Whom It May Concern,

On behalf of the American Academy of Actuaries'<sup>1</sup> Risk Sharing Subcommittee, I would like to provide the following in response to the request for comments on the CMS risk adjustment methodology discussion paper as presented at the March 31, 2016, meeting.

### **Partial Year Enrollment**

The current risk adjustment methodology treats partial year enrollees as having costs distributed evenly throughout the year, and risk scores are prorated based on the portion of the year they were enrolled. Because many health costs are episodic in nature, however, enrollees may incur very high medical expenses over a short period of time. These short-term costs appear lower when they are averaged over a longer period of time (i.e., for a full-year enrollee) than when averaged over a shorter period (i.e., for a partial year enrollee). As a result, risk scores determined on a prorated basis can underestimate the costs associated with partial year enrollees.

Partial year enrollees have a shorter timeframe for diagnoses to be recorded, which also can understate risk scores. The small group market has an additional partial year issue because it typically has plan years that are different than calendar year. This mismatch can lead to situations in which diagnoses from early in the plan year cannot be used for risk adjustment because they occurred in the prior calendar year.

The CMS discussion paper identifies trade-offs between simplicity and improved predictive ability when modifying the risk adjustment algorithm to address effects of partial year enrollment. The hybrid approach put forward in the paper, which includes factors to reflect the interaction of enrollment duration and condition, would address the concern of the proration of risk scores for high-cost medical events occurring during a short period during the year. In addition, some of the other changes to risk adjustment included in the CMS discussion paper, most notably including selected pharmacy data in risk scores, also would serve to improve predictive accuracy by duration by imputing diagnoses that were not captured during partial year enrollment. It is possible that the relative costs of partial year members in reformed markets will change over time, if persistence

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<sup>1</sup> The American Academy of Actuaries is an 18,500+ member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

improves and eligibility verification is refined. Therefore, it will be important to continue to monitor the predictive accuracy of the risk adjustment model by duration.

Although the hybrid approach and/or including pharmacy data could be done using the current MarketScan commercial large group market data, it would be appropriate to consider using EDGE data to calibrate future hierarchical conditions category (HCC) weights. As is noted in the discussion paper, there is reason to question whether the market characteristics that underpin the MarketScan data accurately reflect the characteristics of enrollees in the reformed individual and small group markets. We note several individual market dynamics that are not present in commercial large group markets and could impact partial year enrollee costs:

- the conditions under which individuals can enroll, particularly the special enrollment period (SEP);
- the percentage of total premium that is paid by the enrollee, which could vary by eligibility for premium subsidies;
- significantly lower persistence observed during the year in the individual market in 2014, and
- a higher percentage of individual market enrollees switch health plans than switch employers.<sup>2</sup>

However, at this time, it may be more important to focus on revising the risk adjustment methodology to address partial year enrollment based on the data available. If EDGE data can be used at a later date to calibrate HCC weights, then further adjustments to the partial year enrollment approach could be considered.

### **Prescription Drugs**

Incorporating pharmacy data could improve the risk adjustment model's accuracy, and the CMS discussion paper identifies four potential models of doing so. Three of the models (Imputation Only, Rx Dominant, Flexible Hybrid) impute medical conditions based on the use of prescription drugs. As mentioned in the previous section, incorporating pharmacy data could improve the prediction of partial year enrollees because certain chronic conditions could be identified by prescription drug use without a provider encounter during the partial year of enrollment. Use of pharmacy data in cases of partial year enrollment could be particularly helpful for the small group market because plan years often do not coincide with calendar years and employers may switch issuers during the calendar year. Using an imputation model also would allow diagnoses to be identified sooner in the calendar year, which could increase the accuracy of any interim reports provided.

We see other potential benefits from imputing conditions using prescription drugs for risk adjustment. Currently, some issuers provide supplemental files with diagnoses documented by chart reviews when these diagnoses are not recorded on medical claim records with service dates in the benefit year. In an imputation model, drug claims are used to impute the condition for a diagnosis that may not have been recorded on a medical claim by a provider during that benefit year. Using drug claims to impute the condition could benefit issuers that are not currently providing supplemental files and could save some administrative expense for issuers that are providing supplemental files.

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<sup>2</sup>According to [Avalere](#), only one-third of individual market exchange enrollees in 2016 were in the same plan from 2015. In contrast, [Bureau of Labor Statistics data](#) indicate a median employee tenure of 4.6 years, suggesting that about four-fifths of employees remain with their employer in any given year. This longer tenure gives employers incentives to invest in the long-term health and wellness of their employees.

Three of the models (Rx Dominant, Flexible Hybrid, Severity Only) use prescription drug claims to predict the severity of the condition. Preliminary CMS analysis of these models indicates they would improve the risk adjustment methodology's predictive power, especially for conditions treated with high-cost prescription drugs. It is important for the risk adjustment methodology to adequately compensate issuers for high-cost conditions so that issuers do not engage in risk avoidance of high-cost enrollees. The use of a severity model could reduce the incentives to avoid high-cost enrollees.

The discussion paper appropriately notes several concerns with using prescription drug data in the risk adjustment methodology, including gaming/perverse incentives, variations in drug utilization, and multiple indications for most drugs.

We agree that consideration should be given to whether using pharmacy data in risk adjustment could create an incentive to prescribe or overprescribe certain drugs, and therefore, the drugs included in the model should be limited to minimize this concern. Pharmacy data are more susceptible to gaming than diagnosis-based data, because prescription drugs are more treatment-based than diagnosis-based, and more discretionary in nature than some medical procedures. However, because this risk adjustment methodology only applies to individual and small group plans, which are likely a small portion of a provider's patient base, gaming by providers may be less of a concern.

We note that drug utilization varies across metal levels due to differing cost sharing levels. Variation across metal levels also could apply to capturing diagnoses, as richer plans tend to have more medical utilization than leaner ones.

In incorporating pharmacy data, it is important to consider situations in which a given drug may be approved (or, in practice, used on an off-label basis) to treat multiple chronic conditions, thus raising the possibility of inaccurate HCC imputation.

The above concerns need to be balanced with the desire to enhance the risk adjustment methodology's predictive power.

### **High-Risk Enrollee Pooling**

The Academy appreciates this idea. Risk adjustment does not compensate for extremely high-cost enrollees for a number of reasons. The risk model compensates for the average cost by condition and therefore does not compensate insurers sufficiently if the insurer has an extremely high-cost outlier.

Using a pooling method protects insurers from extremely high cost enrollees. This is particularly important to small insurers that may not be able to support even a moderate number of extremely high cost enrollees. Consideration should be given to whether the pooling should be restricted to certain conditions or certain types of claims (continuing rather than acute for example). Insurers may already be able to purchase commercial reinsurance for random, acute high-cost risks that aren't incorporated into the risk adjustment model; however, it is unlikely reinsurance could be purchased for known high-cost enrollees. The purpose of risk adjustment is to compensate for risks that are known and subject to selection risk. However, insurers covering enrollees with continuing high costs or known conditions with an expectation of extremely high costs will not be adequately compensated by risk adjustment, a situation that could create an incentive for insurers to modify benefit plans and/or networks to avoid enrolling extremely high-cost enrollees.

A national pool would result in funds from one state subsidizing experience in another state. However, some state markets may be too small to support a number of extremely high-cost enrollees without adversely affecting premium levels. Broader spreading of risk may be needed to make these markets sustainable. A broader spreading of risk could be accomplished by national or regional pooling or by incorporating funding from other sources.

The threshold could be developed based on a percentile of the high-cost claims represented in the risk-sharing model. HHS has suggested a threshold of \$1 million dollars, which is a reasonable starting point that can be adjusted when more data and experience with the pool are available.

The percentage reimbursed would need to be sufficiently high to provide the intended protection from the pooling. On the other hand the insurer responsibility should be high enough to be an incentive to control costs. A reimbursement percentage of 75 percent to 85 percent would be a reasonable starting point that could be adjusted as HHS gains experience with the mechanism.

HHS could model the results on 2014 (and soon 2015) actual ACA data to ensure that the objective of more adequately compensating for extreme outliers is met.

### **Concurrent versus Prospective Model**

The discussion paper mentions that prospective models tend to be favored for payment purposes because they emphasize ongoing chronic conditions as opposed to random current year costs that can be pooled as insurance risks. The purpose of risk adjustment is to reduce the incentives for health insurers to avoid enrolling people known to be at risk of high health spending and to compensate insurers that enroll a disproportionate share of enrollees with high-cost conditions that are subject to selection behavior. Many acute conditions are not known in advance of enrollment and do not contribute to selection risk. However, with annual open enrollments and SEPs available for certain events, some acute conditions can contribute to selection risk. This is especially true for a younger population with lower incidence of chronic conditions.

An advantage of the prospective model is that once an insurer has knowledge of its enrollee population, it has a good indication of its risk level, thereby reducing some uncertainty. However, even if a prospective model were used, an insurer would need to set rates in advance of knowing its enrolled population.

Moving to a prospective model would have several disadvantages, however. Generally, concurrent models have a better fit than prospective models. A prospective model would not be expected to compensate for higher-risk enrollees as well as a concurrent model. In addition, a concurrent model can account for certain acute care spending, such as maternity and neo-natal care. These conditions are not necessarily random and can contribute to adverse selection.

Another drawback of a prospective model is that diagnoses would need to follow individuals who change insurers from one year to the next. Under the current distributed data model, however, the data needed to calculate risk scores is held by the insurers and would not be available to the new insurer. In addition, newly insured enrollees or enrollees transitioning from other market segments (e.g., large employer group coverage) would not have any prior diagnosis data. For these individuals, risk scores would need to be based solely on demographic information, which is much less predictive than when diagnoses are included. Using only demographic data for enrollees new to the insurer could dramatically undermine the effectiveness of the risk adjustment program because there is a large amount of turnover in the individual market, with movement of enrollees between insurers and

between the individual, Medicaid and employer markets. A prospective model might be more practical if risk scores could be tracked by individual and could move between insurers, but it still would be missing diagnoses for enrollees moving between markets. Given these considerations, it would be appropriate to continue using a concurrent model.

### **Recalibration of Model for 2019 and Beyond**

The discussion paper discusses a method to recalibrate the risk adjustment model based on data stored on the insurer's EDGE server. Calibrating on this data could better reflect the experience in the individual and small group markets.

There are several areas in which access to this data potentially could improve the model. The individual market has different patterns of partial year enrollment due to higher lapse rates and movement between markets as discussed in the partial year section. The experience of cost-sharing reduction enrollees could be reviewed to determine whether a socioeconomic factor is indicated in conjunction with the current induced demand adjustment. The recalibration could take into account the metal level for each enrollee rather than using each enrollee to recalibrate all metal levels, but this may lead to inconsistencies in the results by metal level and there may not be enough enrollees at all metal levels, especially platinum, for a calibration. The calibration on individual and small group data could determine whether the treatment cost relativities between the risk-adjusted conditions and the age/gender coefficients for these populations differ from the large group data in the MarketScan database and whether there are differences between the individual and small group market.

In determining whether to use the EDGE data, CMS should consider the following potential challenges. The discussion paper suggests beginning with 2016 benefit year data for the 2019 calibration. Assuming that the calibration would need to begin immediately after 2016 data submission in order to be published prior to 2019 pricing, the calibration would be occurring before or during the risk adjustment data validation (RADV) audit process. The 2016 RADV is the first audit with payment adjustments determined based on results, but the results of this audit will not be known until after the calibration needs to be completed. Another consideration is data completeness. Some insurers may prioritize loading claims that have payment consequences for risk adjustment, especially when data submission deadlines approach and some small group insurers have not loaded drug claims in the past. While these claims do not impact the risk adjustment payment transfers, they are needed for a valid calibration.

### **Transfer Formula—Adjustment to Account for Administrative Costs**

We have previously suggested that CMS consider basing the payment transfer on a portion of state average premium—namely, the portion representing the sum of claims, claims adjustment expenses, and taxes that are calculated on premium after risk adjustment transfers. As noted in the discussion paper, such a practice would lower absolute value risk adjustment transfers for all issuers by an equal percentage. The discussion paper notes that an incorrect measurement of administrative costs could result in plans with high-risk enrollees being undercompensated. We also note that plans with high-risk enrollees could be undercompensated if the statewide average premium is not adequate to cover the average risk of the market, which has occurred in some markets in the initial years. However, CMS could continue to consider this modification when premiums stabilize at a self-sustaining level.

At that time, the adjustment could be accomplished by using a specified percentage of state average premiums. The specified percentage would be determined based on data submitted by issuers on the Unified Rate Review Template (URRT) for the portion of premium needed for claims and on data from financial reporting statements for claim adjustment expenses and relevant taxes as a percent of

premium. The specified percentages could be calculated so as to vary by state or market. Some taxes (e.g., premium taxes) may be calculated on premium after risk adjustment transfers, so it would be appropriate to include provision for these taxes in the risk adjustment transfers.

**Transfer Formula—Use of Plan’s Own Premium Instead of State Average Premium**

The Academy recognizes that the use of plan-specific premium could result in better reflection of cost management through network discounts, care management, and plan efficiency. However, challenges in constructing a budget-neutral program when using other than a market average figure seem to outweigh potential benefits. Furthermore, many variances from market average premium are likely the result of inaccurate rate setting. Using a plan’s own premium could introduce some unintended incentives to price low, target healthy people, and minimize the risk adjustment transfer.

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We commend your efforts to address concerns with the risk adjustment methodology and recognize the importance of all of the issues addressed in the discussion paper; however, we would recommend prioritizing the partial year enrollment and prescription drugs issues for the near term. We appreciate your consideration of these comments from the Academy’s Risk Sharing Subcommittee. If you have any questions or would like to discuss these comments in more detail, please contact Heather Jerbi, the Academy’s assistant director of public policy, at 202-785-7869 or [jerbi@actuary.org](mailto:jerbi@actuary.org).

Sincerely,

Barbara W. Klever, MAAA, FSA  
Chairperson, Risk Sharing Subcommittee  
American Academy of Actuaries