ENSURING EFFECTIVE RISK ADJUSTMENT
An Essential Step for the Success of the Health Insurance Exchanges and
Market Reforms under the Affordable Care Act
by Edwin Park

Summary

Risk adjustment is a critical element of the Affordable Care Act (ACA) that can help assure the
long-term success of the law’s new health insurance exchanges and market reforms. Risk
adjustment compensates insurers offering plans in the individual and small-group markets inside and
outside the exchanges for the risks related to the individuals they enroll, so they have less incentive
to engage in activities that lead to adverse selection, including the exclusion of sicker, higher-cost enrollees.

Risk adjustment is one of a number of provisions in the ACA designed to encourage insurers to
compete on the basis of price and quality, not on attracting the healthiest enrollees and deterring
those in poorer health, as they typically do today. Risk adjustment is slated to begin in 2014 when
the health insurance exchanges and other major market reforms for the individual and small-group
markets (such as prohibiting insurers from charging higher premiums to people in poorer health or
denying them coverage entirely) take effect. The ACA, however, does not spell out the design of the
risk adjustment system. Instead, it gives the Secretary of Health and Human Services, in
consultation with the states, significant discretion on its design and implementation.

This analysis aims to inform the policymaking process as the Secretary considers how to best
structure the ACA’s risk adjustment system and includes the following components:1

• An overview of the ACA’s major provisions on limiting adverse selection in the individual and
  small-group markets both inside and outside the exchange.

• Background on the basics of risk adjustment, which attempts to compensate insurers that enroll
  higher-cost individuals with funds contributed by insurers that enroll lower-cost people.

• Discussion of the critical lessons from programs that already use risk adjustment, like Medicare
  Advantage, the Medicare Part D drug benefit, state Medicaid managed care arrangements, and

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1 See also Mark Hall, “Risk Adjustment under the Affordable Care Act: A Guide for Federal and State Regulators,”
Commonwealth Fund, May 2011.
programs related to the individual and small-group markets in a few states.

- Examination of the key issues to consider in designing and implementing the ACA’s risk adjustment system for the individual and small-group markets.

- Detailed policy recommendations for designing the system, including:
  
  ✓ The Secretary should determine a single uniform risk adjustment methodology based on the Medicare Advantage and Medicare Part D systems for the states to use, while giving them flexibility to adapt that methodology to their specific market conditions.

  ✓ The Secretary should set national standards on what data elements insurers must report; how states should apply the risk adjustment methodology, allocate funds among insurers, and finance their operations; and the duties of the entities administering risk adjustment in each state.

  ✓ The Secretary should establish procedures for making timely and periodic refinements to the risk adjustment system to improve its accuracy.

- Brief discussion of how risk adjustment can work in tandem with the ACA’s other mechanisms to limit adverse selection, like the temporary reinsurance and risk corridor programs that will help stabilize the individual and small-group markets as states begin to institute major market reforms.

- Summary of the major policy recommendations for successful design and implementation of an effective risk adjustment system.

I. Overview of the Affordable Care Act’s Chief Mechanisms to Limit Adverse Selection

Risk Adjustment

Section 1343 of the ACA requires the Secretary of HHS, in consultation with the states, to establish criteria and methods for a permanent ongoing risk adjustment system for non-grandfathered individual and small-group health insurance plans\(^2\) and the issuers of such plans. The Secretary may utilize criteria and methods similar to those utilized in the Medicare Advantage program and the Medicare Part D prescription drug benefit. These criteria and methods are also to be included in the standards and requirements that the Secretary prescribes for state implementation of the exchanges and the offering of qualified health plans.

Under risk adjustment, each state is required to: (1) assess a charge on health plans if the actuarial risk of their enrollees in a given year is less than the average actuarial risk of all enrollees in all such plans in the state; and (2) provide a payment to health plans if the actuarial risk of their enrollees is greater than the average actuarial risk of all enrollees in all such plans. (Self-insured group health

\(^2\) Under the ACA, beginning in 2016, a small group is defined as one to 100 employees, but states have the option of using 50 employees as the upper threshold for a small group in 2014 and 2015.
plans subject to ERISA, such as private sector employer- or union-sponsored group health plans, are excluded from risk adjustment.)

Section 1343 thus requires that nearly all non-grandfathered health plans sold in the state’s individual and small-group markets be subject to assessments or be eligible for payments as a result of risk adjustment. While the statutory language is not entirely clear, risk adjustment would likely be based on how a plan’s actuarial risk compares with all insured plans in the individual and small-group markets. In a state that has expanded the small-group market to include employers with more than 100 workers, any such larger plans would be included in the calculation.

Some may interpret section 1343 to mean that risk adjustment should be applied to the individual and small-group markets separately, treating them as distinct risk pools for purposes of collecting funds from some insurers and making distributions to others. The clearest reading of the language, however, is that risk adjustment should apply to individual and small-group coverage pooled together. An individual plan experiencing above-average risk, for example, would be compensated through pooled contributions from insurers selling in the state’s individual and small-group markets with lower-than-average risks.

Congress included risk adjustment in the ACA to help protect health insurance plans from adverse selection, which occurs when individuals with poorer average health and hence higher average costs disproportionately enroll in certain plans. For example, if the exchanges enroll sicker individuals while those who are healthier enroll in plans offered in the individual and small-group markets outside the exchanges, premiums in the exchanges would rise and become increasingly unaffordable. That, in turn, could threaten the exchanges’ long-term viability. Risk adjustment can correct for some of this adverse selection if it occurs and help make the exchanges sustainable over time.

As noted, self-insured ERISA plans are exempt from risk adjustment. If small businesses increasingly elect to self-insure rather than (as most do today) purchase insurance from an insurer, and they tend to have employees who are lower-risk, that could create a significant risk of adverse selection. By itself, the exemption from the risk adjustment system might not be sufficient motivation for small businesses to take on the risk of being self-insured. However, it is but one of a number of market reforms that the ACA does not apply to self-insured plans.3

Temporary Reinsurance

Section 1341 of the ACA also requires each state to establish a transitional reinsurance program that will operate for three years (2014-2016). Its purpose is to help stabilize the overall individual market inside and outside the exchanges when the ACA’s premium rating rules and other major market reforms are first implemented.

The Secretary, in consultation with the National Association of Insurance Commissioners (NAIC), is required to establish implementing regulations for the reinsurance program, with each

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3 Other requirements from which self-insured ERISA plans are exempt include the premium rating rules, the temporary reinsurance program (if the plan sponsor does not contract with a third party for purposes of plan administration or stop-loss coverage), and some of the benefit requirements (such as providing an essential benefits package that meets certain actuarial values and includes limits on out-of-pocket costs for covered benefits).
state responsible for establishing one or more non-profit entities to operate its reinsurance program. Health insurance issuers and third-party administrators on behalf of group health plans will be required to pay assessments to the reinsurance entity, which will make reinsurance payments to issuers that cover high-risk individuals in the individual market (excluding grandfathered health plans). Total assessments nationwide are capped at $25 billion over the three years reinsurance will be available.

The Secretary is required to specify the method by which individuals will be identified as high-risk on the basis of 50-100 medical conditions identified as high-risk conditions or another comparably objective method of identification recommended by the American Academy of Actuaries.

Temporary Risk Corridors

The ACA also establishes a temporary, federally administered risk corridor program for three years (2014-2016) for qualified health plans (QHPs) offered in the individual and small-group exchanges. This program will pay QHPs — i.e., plans certified to be offered through the exchanges — a portion of their non-administrative costs (reduced by any risk adjustment or reinsurance amounts) that exceed a target amount by a specified percentage. Conversely, if the plan’s actual costs of providing benefits come in below a specified target, the plan will be required to pay a portion of that amount into the risk corridor program.

Risk corridors are designed to limit adverse selection among plans offered in the exchanges, encourage insurers to participate in the exchanges, and help stabilize the exchanges during the initial years of their operation and the ACA’s major market reforms. Whereas risk adjustment and reinsurance mechanisms base payments on the characteristics of individual enrollees in a plan, the risk corridors will be based on an exchange plan’s overall costs relative to expected claims. How risk corridors and reinsurance work together with risk adjustment is discussed later in this analysis.

Funding Structures for the Three Mechanisms to Limit Adverse Selection

Under the risk adjustment system, funds will be redistributed among all plans in the individual and small-group markets (except for self-insured or grandfathered plans), with those enrolling healthier individuals transferring funds to those enrolling sicker-than-average enrollees. (In states that have expanded the small-group market to include larger employers, plans serving the larger group market would be included in the risk adjustment system.)

Funding for the temporary reinsurance mechanism for individual insurers will come from insurers selling in the individual and small-group markets, as well as insurers providing large-group coverage.

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4 Section 1301 of the ACA defines a “qualified health plan” as one that has been certified as meeting specified criteria, provides the essential health benefits package and is offered by a health insurance issuer that “(i) is licensed and in good standing to offer health insurance coverage in each State in which such issuer offers health insurance coverage under this title; (ii) agrees to offer at least one qualified health plan in the silver level and at least one plan in the gold level in each such Exchange; (iii) agrees to charge the same premium rate for each qualified health plan of the issuer without regard to whether the plan is offered through an Exchange or whether the plan is offered directly from the issuer or through an agent; and (iv) complies with the regulations developed by the Secretary under section 1311(d) and such other requirements as an applicable Exchange may establish.”
In addition, reinsurance assessments will be charged to third-party administrators that contract with self-insured group health plans.

Finally, funding for risk corridors will come from assessments on plans operating in the exchanges that have lower-than-expected costs; the federal government will collect these assessments and then distribute them to plans operating in the exchanges that have higher costs.\(^5\) (See Table 1.)

<table>
<thead>
<tr>
<th>Insurance Markets to Which the Mechanism Applies</th>
<th>Time Period</th>
<th>Individual (inside and outside the exchange)</th>
<th>Small group (inside and outside the exchange)</th>
<th>Large group</th>
<th>Self-insured</th>
<th>Grandfathered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk adjustment assessments or payments (“distributions”)</td>
<td>2014 and thereafter</td>
<td>Yes</td>
<td>Yes</td>
<td>No (unless eligible for small-group exchange)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Reinsurance</td>
<td>2014-2016</td>
<td>Yes (and required to contribute)</td>
<td>No (but required to contribute)</td>
<td>No (but required to contribute)</td>
<td>No (but third-party administrator, if any, required to contribute)</td>
<td>No</td>
</tr>
<tr>
<td>Risk corridors</td>
<td>2014-2016</td>
<td>Yes for exchange plans but not for outside individual policies</td>
<td>Yes for exchange plans but not for outside small-group policies</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

II. How Does Risk Adjustment Work?

As noted, risk adjustment compensates insurers that enroll higher-risk, sicker enrollees with funds from insurers that enroll lower-risk, healthier enrollees within a defined market. The mechanism for transferring funds from one insurer to another can take a variety of forms. The tool used to measure an insurer’s relative risk is referred to as a risk assessment tool or methodology.\(^6\)

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5 Unlike its reinsurance provision, the ACA does not specify how the financing for its risk corridor provision will be structured. It appears to assume that the assessments on insurers with lower-than-expected costs will be sufficient to offset the cost of the payments to insurers with higher-than-expected costs (i.e., it will be budget neutral to the federal government).

Risk Assessment

The ideal risk assessment tool would use an “objective, easily detected and reliable measure that gives as accurate and unbiased a prediction as possible of the variation in health care costs among different subscribers [or enrollees].” Early risk adjustment systems used relatively crude predictors of an individual’s use of health care services, such as demographic characteristics like age, sex, and place of residence. More comprehensive systems have since been developed that also incorporate more complex and accurate predictors of risk, such as prior use of health care.

These more comprehensive risk assessment tools were developed by identifying diagnostic and/or prescription drug and other insurance claims information that can measure the variation in use of health care services by a population. The resulting data are then classified into clinically coherent and statistically significant groups. Next, regression techniques are used to predict from these data the total health care costs of a plan’s individual enrollees. The results are presented in the form of a “risk score” — an enrollee’s health status is represented as a numerical score relative to the health status of other enrollees. A score of 2.8 for John Doe, for example, means he is 2.8 times sicker and hence has higher costs than an average member of the relevant population (whose risk score is 1.0) based on his diagnoses, each of which carries a risk weight. (See Table 2, which also includes gender and age as predictive variables.)

Risk assessment tools vary in the data upon which they are based (e.g., demographic characteristics, medical diagnoses, use of medical procedures, use of prescription drugs, previous total health or drug spending, etc.), the nature of the health care services measured to determine enrollee risks (e.g., inpatient care, ambulatory care, and/or prescription drugs), and the extent to which the risk factors are updated. Some risk assessment tools are better than others in their predictive power. Yet even the most robust ones are relatively crude predictors of an individual’s health care costs due to the inherent unpredictability of changes from one

<table>
<thead>
<tr>
<th>TABLE 2: Hypothetical Risk Score Development for John Doe</th>
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</thead>
<tbody>
<tr>
<td><strong>Risk Marker</strong></td>
</tr>
<tr>
<td>Male Age 32</td>
</tr>
<tr>
<td>Diabetes with significant co-morbidities</td>
</tr>
<tr>
<td>Asthma/COPD</td>
</tr>
<tr>
<td>Low cost dermatology</td>
</tr>
<tr>
<td><strong>TOTAL RISK SCORE</strong></td>
</tr>
</tbody>
</table>


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9 The Society of Actuaries evaluated the predictive accuracy of 12 claims-based health risk assessment models and found that they explained between 15 percent and 28 percent of the variation in medical claims costs across individuals. These figures are much higher than the explanatory power of 5 percent using only demographic factors such as age and gender. See American Academy of Actuaries, op. cit. and Ross Winkleman and Syed Mehmud, “A Comparative Analysis of Claims-Based Tools for Health Risk Assessment,” Society of Actuaries, April 2007.
Risk assessment tools are better predictors of a plan’s overall health spending, across all of its enrollees. This distinction is important because the ACA’s risk adjustment system for insurers selling in the individual and small-group markets aims to correct for over- or under-payment of health plans due to their risk selection experience relative to that of other plans in the market as a whole. Nevertheless, since insurers will be competing for the enrollment of individuals (and, potentially, individual employees of small-employer groups), the better the predictive capacity of the risk assessment tool, the less incentive insurers will have to “cherry-pick” healthier enrollees. That is because insurers can be more confident that the risk adjustment system will adequately compensate them if they draw in the aggregate relatively more expensive enrollees. Insurers also will have less incentive to enroll healthier people because they will then be required to compensate insurers with sicker-than-average enrollees.

Risk Adjustment Assessments and Payments

To calculate the risk adjustment assessments or payments to insurers (“distributions”), an entity administering risk adjustment compiles the risk assessment data reported by the insurers and determines the average risk score for each plan. The resulting adjustment for risk typically takes the form of a reduction or increase in the plan’s payment because the entity doing the risk adjustment usually also makes payments to the plan on behalf of enrollees. For example, under Medicare Advantage, the Medicare Part D prescription drug benefit, and state Medicaid managed care programs, each enrollee’s risk score is used to help determine the risk-adjusted monthly capitation payment to the plan for that enrollee.

As risk adjustment is envisioned under the ACA for individual and small-group insurers, however, plan payments (for example, via individual premiums and federal premium subsidies for low- and moderate-income individuals in the exchange) will generally be paid separately from risk adjustment. Consequently, a separate authority and funding mechanism will be necessary to collect and distribute payments to adjust for the relative risk of insurers’ enrollees.

A particular challenge for risk adjustment in the context of the ACA’s market reforms is that information will be less readily available for the newly insured populations than for other populations. Insurers have very limited information on the uninsured population who will likely newly enroll in 2014. In addition, the risk assessment models that insurers have already developed for their own commercially insured, non-elderly populations in one part of the United States are not likely well-suited to other parts of the country, where utilization and market patterns can be very different. These limitations suggest why risk adjustment tools developed for Medicare should be the basis for the ACA risk adjustment system but will need to be modified, as discussed below.

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10 According to the Society of Actuaries, when risk assessment is done for groups larger than 500, its capacity to predict the variation in plan costs can exceed 90 percent. American Academy of Actuaries, op. cit., and Winkleman and Mehmud, op. cit.

11 Fontana and Yi, op. cit.
III. The Medicare Experience as a Model for the ACA’s Risk Adjustment System

As noted, the ACA suggests basing the risk adjustment system on the systems used by Medicare Advantage and Medicare Part D. These programs’ risk adjustment methodologies are relatively well-developed and reasonably effective and should therefore serve as the basis for the ACA’s system.

Medicare Advantage

In its initial stages, risk adjustment for Medicare’s private plans was based only on the beneficiary’s age and gender, Medicaid enrollment, and institutional status. These demographic characteristics proved poor predictors of a plan’s actual cost of providing covered Medicare services to a particular beneficiary. Although risk adjustment was designed to level the playing field so that health plans would compete — both among themselves and with traditional fee-for-service Medicare — on the basis of efficiency and not their ability to attract healthier enrollees, it accounted for only about 1 percent of the variation in expenditures among individuals, well below the predictive ability necessary to discourage plans from cherry-picking the best risks. That is a key reason why private plans received overpayments of as much as 16 percent per beneficiary (relative to the cost of covering the same enrollee in traditional Medicare), even though Medicare’s payments to the plans initially were fixed at 95 percent of the per beneficiary cost of traditional Medicare. Use of a better indicator of beneficiary health status was required.

Under the Balanced Budget Act of 1997, Congress required the Secretary to develop a health status-based risk adjustment system. The Health Care Financing Administration, the agency administering Medicare (which is now named the Centers for Medicare & Medicaid Services), began to phase in a new system in 2000. It measured health status first by inpatient diagnoses, which were readily collected from Medicare hospital data. Eventually this version was replaced by the CMS-hierarchical condition categories (CMS-HCC) model, which incorporates inpatient and outpatient encounters with demographic factors. Several thousand diagnosis codes are condensed into roughly 70 disease categories, plus some interactions. The resulting risk scores for each enrollee in a Medicare Advantage plan are then used to prospectively adjust plan capitation payments for that enrollee.

The MA CMS-HCC Risk Adjustment Methodology

- The risk adjustment system classifies ICD diagnosis codes into disease groups called Hierarchical Condition Categories (HCCs).
- Each HCC includes diagnosis codes that are related clinically and have similar cost profiles.
- CMS uses models to compute risk scores for Medicare Advantage plans and to make payment adjustments.

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The CMS-HCC model made Medicare Advantage’s risk adjustment system a more robust tool for predicting variation in spending for groups of enrollees.\textsuperscript{14} Nevertheless, this model, which is periodically refined to better explain plan variation,\textsuperscript{15} has been found to over-predict the costs for beneficiaries who are in good health (and thus overpay for them) and under-predict (and thus underpay) for those who are in poor health.\textsuperscript{16} This is not just an academic concern, as overpayments to Medicare Advantage plans with better risks continue to inflate costs.\textsuperscript{17}

The process for risk adjusting payments involves data collection efforts by both CMS and Medicare Advantage plans. Each year, CMS publishes an “Advance Notice” that specifies any changes to the diagnoses that are used to assess enrollee risk and their weights in the risk assessment tool. Information on enrollee diagnoses originates from Medicare fee-for-service claims and/or information that Medicare Advantage plans submit to CMS.\textsuperscript{18} These plans then use the information in the Advance Notice to determine their own risk scores and set premiums for the coming plan year. To the extent that Medicare Advantage plans lack confidence that they will be paid for any high-risk individuals whom they enroll (or that they will not be penalized for enrolling lower-risk individuals), they are more likely to engage in selective marketing or use benefit design or other measures to try to attract the healthiest enrollees.

As part of the risk adjustment process, CMS also makes annual adjustments for “upcoding” by Medicare Advantage plans — that is, unexplained changes that plans make over time in the diagnosis codes they assign that make their enrollees appear less healthy than they actually are, thereby inflating the payments that Medicare makes to the plans. CMS corrects for upcoding by conducting “risk adjustment data validation (RADV) audits” and “coding intensity” adjustments to Medicare Advantage plan payments.\textsuperscript{19} Concerns about upcoding and the need to address it in the context of the ACA’s risk adjustment for the individual and small-group private insurance markets are addressed later in this analysis.

Additional changes to the Medicare Advantage risk adjustment system are scheduled to occur in 2012, when Medicare Advantage plans will be required to report “encounter data” to CMS. CMS will use these more detailed, comprehensive data to recalibrate plan enrollee risk scores, using Medicare Advantage patterns of diagnoses and expenditures (as opposed to Medicare fee-for-service data that make up the current CMS-HCC model). For a while at least, Medicare Advantage plans will be required to report both the existing Medicare Advantage risk adjustment data (the diagnoses and demographic data required by the CMS-HCC model) and encounter data. Eventually, the plan is for CMS just to use encounter data, which provide richer information on the health status of enrollees.

\textsuperscript{14} Greenwald, \textit{op. cit.} \\
\textsuperscript{15} Refinements are made by recalibrating weights to reflect more recent coding and expenditure patterns. \\
\textsuperscript{16} Congressional Budget Office, “Designing a Premium Support System for Medicare,” December 2006. \\
\textsuperscript{18} The reliance on fee-for-service data arises because Medicare Advantage plans do not submit cost data; they receive their capitation payment from Medicare but then coordinate and reimburse providers for their Medicare enrollees’ care at their discretion, subject to Medicare requirements. \\
\textsuperscript{19} Correcting for upcoding was required under the Deficit Reduction Act of 2005 and more recently extended and expanded by the ACA.
Medicare Advantage enrollees and the services and procedures they use, to produce a more accurate risk adjustment system.

**Medicare Part D**

The Medicare Modernization Act (MMA) of 2003, which established the Medicare prescription drug benefit or Part D, called for the establishment of a risk adjustment system similar to that of Medicare Advantage. The major difference was that the Part D system had to predict plan variation just for drug spending, as opposed to variation in spending for non-drug medical benefits covered by Medicare Parts A and B, as under Medicare Advantage. Although CMS considered other risk adjustment models, including some based solely on past prescription drug utilization, CMS determined that Medicare Advantage’s CMS-HCC model was sufficiently effective at predicting prescription drug spending to serve as the basis for the Part D model, now known as the prescription drug hierarchical condition category (RxHCC) model.

To improve its predictive capacity for prescription drug spending, CMS adjusted the Medicare Advantage system by using new data sources for prescription drug utilization by the Medicare population (drawn from the Federal Employees Health Benefit Program and Medicaid data). CMS made other adjustments to account for Part D’s low-income subsidy features and other issues.20

**Lessons from the Medicare Advantage and Part D Systems**

The evolution of Medicare’s risk adjustment systems provides useful lessons for the new ACA system. In its earliest stages, risk adjustment was based on enrollees’ basic demographic and program eligibility characteristics since this was the most widely available and reliable information available at the time. In time, the predictive capacity of the models was substantially enhanced using health status information, with continual refinements made to the nature of that information, the weighting of diagnoses, and so on. For example, because data on drug spending for the Part D population did not exist when the program was first implemented, CMS initially used proxy data.

In 2011, CMS will implement an updated version of the RxHCC risk adjustment model, incorporating the use of Part D program data to calculate Part D expenditures. It will also use updated data and revisions of the diagnoses included in each prescription drug hierarchical condition category.21 As noted above, CMS is planning to adopt a risk adjustment methodology for Medicare Advantage plans based on more comprehensive encounter data, as opposed to the current use of diagnosis data. Such modifications can improve the reliability and predictive power of the risk adjustment methodologies over time, producing more powerful and accurate risk mitigation. Risk adjustment under the ACA for the individual and small-group markets should be designed to follow

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21 “Changes to the condition categories — additions, deletions, and revisions — are based on each category’s ability to predict costs for Medicare Part D benefits. Condition categories that don’t predict costs well — because the coefficient is small, the t-value is low, the number of beneficiaries with a certain condition is small so the coefficient is unstable, or the condition doesn’t have well specified diagnostic coding — are not included in the model.” See Centers for Medicare and Medicaid Services, “45 Day Advance Notice, Advance Notice of Methodological Changes for Calendar Year (CY) 2011 for Medicare Advantage (MA) Capitation Rates, Part C and Part D Payment Policies and 2011 Call Letter,” February 17, 2010.
a similar evolution, as better data become available and modeling of relative plan risk becomes more accurate.

IV. Other Risk Adjustment Systems

New York and Its Private Insurance Markets

New York has used a form of risk adjustment (officially known as a market stabilization pool) since 1993, when it established community rating and guaranteed issue for the individual insurance market in order to discourage insurers from engaging in activities that lead to adverse selection. Initially based on demographics and high-cost medical conditions, the New York risk adjustment mechanism has evolved along with changes to the rules regulating individual insurance. The latest iteration dates to 2008, with changes transitioned into operation over a three-year period.

The pool currently includes both the individual and small-group markets and distributes funds to insurers that draw enrollees with high-cost medical conditions (see box). Health insurers are either contributors or recipients depending on their high-cost claim ratio in relation to the industry average, somewhat similar to what the ACA envisions.22

New York’s experience with risk adjustment suggests that its acceptance by insurers and its practical implementation rest heavily on the details. Since its initial implementation, the state’s risk adjustment mechanism has been overhauled several times but not abandoned, which suggests that all parties have seen a benefit from having such a system in place.

Massachusetts’ Health Reform Plan

Massachusetts’ health reform system, enacted in 2006, uses risk adjustment to mitigate adverse selection among the private health plans offering coverage for the subsidized population. The adjustment system is administered by the Massachusetts Connector, which also administers the low-income subsidy program, known as Commonwealth Care. Risk adjustment is done on a prospective

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basis and factors in the type of health plan, geographic area, and enrollees’ diagnoses. (The state’s unsubsidized program, Commonwealth Choice, does not use risk adjustment.) Massachusetts faced some of the same challenges in designing its system that the Secretary will likely face in designing the risk adjustment system for the individual and small-group markets, including the lack of health-status information on the uninsured population that newly enrolls.

**Medicaid Managed Care**

Many state Medicaid programs provide coverage to their non-aged and non-disabled beneficiaries (i.e., children and parents) through contracts with private managed care plans. To mitigate adverse selection among plans, states with managed care programs often risk-adjust plan payments. The actual risk adjustment approaches vary in how they assign enrollees into demographic and morbidity or disease categories. Similar to the Medicare risk adjustment systems, each of the categories is assigned a risk weight based on historical experience with members in these categories and their overall health care expenditures. Most Medicaid risk adjustment is done on an aggregate (rather than individual) and prospective basis.

Some state Medicaid programs have implemented risk adjustment gradually, such as by adjusting only a portion of the plan payment in the first year and then phasing up the adjustment to 100 percent of the plan payment over two or three years. For new programs or populations, a state may temporarily use retroactive risk adjustment, with capitation payments to plans based at first on the fee-for-service population and then retroactively adjusted once risk scores can be determined.

Some state Medicaid programs also account for the extra costs of pregnancies by enrollees in managed care plans. A large number of state Medicaid managed care programs make direct payments to plans for maternity expenses (prenatal, delivery, and postpartum costs) in addition to paying regular capitation rates. In the ACA context, this approach might suggest a separate, supplemental risk adjustment payment to individual and small-group insurers to cover the cost of pregnancies if experience shows that the risk adjustment system is not adequately accounting for such cases.

**V. Key Issues for the Design and Implementation of the ACA’s Risk Adjustment System**

As noted, the ACA’s risk adjustment provisions are intended to help ensure that insurers in the individual and small-group markets inside and outside the exchanges compete for enrollment on the basis of price and quality, not by selecting the best risks and deterring those in poorer health. The extent to which they achieve this goal will depend to a significant degree on whether insurers have

-- American Academy of Actuaries, *op. cit.*


confidence in the risk adjustment system’s predictive capacity and can readily comply with the associated data collection requirements.

If insurers lack confidence in the system’s accuracy and reliability, they may be reluctant to participate in the health insurance exchanges. They also will be more likely to continue to engage in activities that lead to adverse selection because they will still derive significant financial benefit from enrolling lower-cost, healthier individuals. Finally, since insurers raise their premiums to account for unpredictable risks, an effective risk adjustment system will be an important factor in moderating premium increases over time and stabilizing year-to-year fluctuations.

Gaining insurers’ confidence will be especially critical in the early years of the exchanges and implementation of the major market reforms, because insurers will not yet have the claims experience (including cost and utilization patterns) of the underinsured and uninsured population who will newly enroll, which is needed to accurately price their plans.

In establishing the ACA’s risk adjustment system, the Secretary should seek to maximize its predictive capacity while still producing a workable system, standards that reduce state-by-state variability, and low administrative burden on states and insurers. In addition, it will be especially important to specify the elements of the risk adjustment system, including the risk assessment tool and data requirements, as soon as possible to ensure smooth federal and state implementation by 2014. The sections that follow define the main ingredients needed to achieve this critical outcome.

Minimizing Adverse Selection

No matter how effective the risk adjustment system is, some adverse selection in the individual and small-group markets will still occur. Reducing the amount of adverse selection, however, makes it more likely that risk adjustment can function effectively and that the adverse selection will not threaten the long-term viability of the exchanges and the market reforms. As a result, this should be a top priority for the federal government and the states.

For example, there is a significant risk of adverse selection between plans offered in the exchanges and plans offered in the individual and small-group markets outside the exchanges. If significant adverse selection occurs, exchange coverage will cost more than plans offered in outside markets. This will drive up costs not only for consumers and small firms purchasing coverage through the exchanges but also for the federal government, which will be providing premium subsidies to enable low- and moderate-income people to afford coverage in the exchanges. Higher premiums would also depress participation in the exchanges by individuals and small businesses, particularly by people and firms that can obtain better deals in outside markets (or people who may consider paying a penalty and remaining uninsured). That, in turn, could raise premiums even higher in the exchanges and ultimately could result in their failure over time.

Therefore, the federal government should first encourage states to take steps to minimize the risk of adverse selection between the exchanges and the outside markets.27 Such steps include:

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• **Making the rules for any insurance markets outside the exchanges consistent with the rules that apply inside the exchange.** States can simply apply the same standards that HHS sets for qualified health plans offered in an exchange to plans offered in markets outside the exchange. This would eliminate any disparities that might discourage insurers from participating in the exchange or enable insurers operating outside the exchange to design benefit packages and marketing campaigns to attract healthier people away from the exchange.

• **Requiring insurers to offer the same products inside and outside the exchange.** If the rules outside the exchange are weaker than those inside the exchange, some insurers may decide not to offer coverage through the exchange or to offer products inside and outside the exchange that differ in ways that result in adverse selection against the exchange. To prevent this from happening, states could require all insurers that wish to offer products in outside markets to also offer coverage in the exchange and to offer the same products (at the same prices) both inside and out. States that seek to lower premiums and improve quality by adopting a more active purchaser model or competitive bidding process to determine which plans can be offered in an exchange can require insurers outside the exchange to offer products in the same coverage levels (at least the Silver and Gold levels) that insurers participating in the exchange must offer. States should also bar insurers from offering only the least comprehensive Bronze level plans or catastrophic plans outside the exchange.

• **Merging the individual and small-group markets over time.** This would increase the potential enrollment volume and make it more likely (though not certain) that the exchange would have a well-balanced risk pool. However, such a merger could take place several years after the ACA’s major market reforms, particularly those related to premium rating rules, are instituted in 2014 in order to limit the disruption that might occur when the markets are combined.

Even if states take these steps, exchanges would be at risk of adverse selection because the population that enrolls in the plans sold through the exchanges could still be sicker, on average, than enrollees in the outside markets.  

In addition, adverse selection is likely to occur among plans within the exchanges (and within the outside markets). Under the ACA, for example, insurers will be permitted to sell plans with different actuarial values (within four tiers: Bronze, Silver, Gold, and Platinum); the less comprehensive plans are more likely to attract the healthy, while the more comprehensive plans are most likely to attract those with greater health needs. Adverse selection could also result from differences in benefit design within the same actuarial value tier, such as variations in cost-sharing and the scope of specific benefits that might encourage healthier people to enroll in certain plans.  

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28 “Almost 40 percent of uninsured people eligible to receive subsidies through the exchanges have chronic conditions or report fair or poor health, and another 28 percent report recent problems with access to care or paying medical bills. . . . However, about one-third of uninsured people eligible for the subsidies have had no recent problems with their health, access to medical care or paying medical bills. Enrolling these apparently healthy uninsured people is likely to be challenging but essential to avoiding adverse selection, or enrolling sicker-than-average people, in the exchanges. . . . Otherwise health care costs in the exchanges could be higher than expected.” Peter Cunningham, “Who Are the Uninsured Eligible for Premium Subsidies in the Health Insurance Exchanges?,” Center for Studying Health System Change, December 2010.

29 Benefit variation will depend on how the essential benefits package is defined as well as the extent to which benefit standardization is employed to discourage the use of benefit design to cherry-pick the best risks. See Lueck, op. cit.
and plan provider networks. (For example, healthier individuals and small groups would tend toward narrower provider networks with fewer specialists and teaching hospitals.) Marketing campaigns, no matter how well regulated, also present opportunities for adverse selection, if insurers are able to design marketing strategies to encourage enrollment by healthier individuals while deterring those in poorer health.

The ACA states that the Secretary must require insurers offering health plans within the exchange “not [to] employ marketing practices or benefit designs that have the effect of discouraging the enrollment in such plan by individuals with significant health needs.” It is critical that the federal government and the states strongly enforce this rule.

**Establishing a Transparent Process for Designing a Risk Adjustment System**

To assist the Secretary in developing the risk adjustment methodology, HHS should establish a technical advisory committee made up of experts on risk adjustment from the public and private sectors. This entity should be formed as soon as possible and should be given access to contractor and other studies submitted to the Department in support of ACA implementation.

The Secretary should make the proposed risk adjustment methodology and related implementation rules available for public notice and comment, giving sufficient time for modifications to be made prior to 2014. For risk adjustment to begin in 2014, both the federal and state implementation rules will be needed well in advance of the date by which insurers are required to quote their premium rates for 2014.

Similarly, the federal government should require that states implement the risk adjustment system through a transparent rule-making process, where all decisions are made in the open and are subject to public notice and comment. Because of the technical nature of risk adjustment, state lawmakers and regulators may be predisposed to consult mainly with insurers and actuaries about how to implement it. However, consumer input is essential as part of a formal process to provide for a fair balance of interests. In addition, the Secretary should require that states clearly indicate to the federal government how they plan to implement risk adjustment and comply with federal requirements and standards.

**Specific Design Issues for the Federal Government**

As noted above, the ACA gives the Secretary the lead responsibility for establishing criteria and methods to carry out risk adjustment for the individual and small-group insurance markets, in consultation with the states.

1. **Risk adjustment methodology.** The first key decision is determining the risk adjustment methodology or methodologies to use in the individual and small-group markets. Vendors of commercial risk adjustment models are likely to urge that their particular products be adopted, but multiple risk adjustment methodologies will increase start-up costs for the federal government and the states and complicate administrative systems for insurers and states. They could also impede regional multi-state efforts to collaborate on setting up exchanges and administering risk adjustment.
As a result, the Secretary should establish a standard risk adjustment methodology that every state would use, thereby helping provide national uniformity. This would produce comparable results that do not vary based on a specific plan or where the plan’s enrollees reside. A uniform methodology also means that states would not have to dedicate scarce resources to what is effectively reinventing the wheel — they would not have to develop their own risk assessment tools or purchase a proprietary system, and data collection elements would be standardized. In addition, a uniform methodology would provide for economies of scale and reduce the administrative burden for insurers in planning for the new system and in collecting and transmitting the data needed to do risk adjustment across states. This would be particularly important since the models will likely need to be modified as more data become available; a single uniform methodology would be easier to refine over time.

In designating this standard methodology, the Secretary should build on the Medicare Advantage and Part D risk assessment tools and risk adjustment systems because they are some of the most sophisticated and experienced models available. Doing so, however, will require significant adjustments to reflect the differences in the data and populations.\textsuperscript{30} The turnover of enrollees from one plan to another (and from one plan to no insurance or vice versa) is likely to be greater in the individual and small-group markets than in Medicare Advantage and Part D, where enrollee inertia is common.\textsuperscript{31} Also unlike Medicare, a significant portion of costs in the individual and small-group markets is associated with maternity, newborn care, and injuries, which actuaries believe are especially difficult costs to predict.\textsuperscript{32}

Still another potential challenge is that benefit values and age-related premiums will be more variable in the individual and small-group markets than in Medicare. (Medicare Advantage and Part D premiums are not varied by age, for example.) Insurers will also offer plans of varying actuarial value, complicating modeling of relative plan risk. Moreover, the pool of enrollees in the individual and small-group markets, by definition, will be both younger and more diverse in terms of age, potentially representing a significantly different range of risks.\textsuperscript{33} And whereas fee-for-service Medicare claims offer a rich data source on beneficiary health and health spending for Medicare’s risk adjustment model, data sources for the commercial market are widely variable and potentially less comprehensive.\textsuperscript{34}

\textsuperscript{30} In its initial guidance to the states on the establishment of the exchanges, HHS indicated that it will require “all health plans to report demographic, diagnostic, and prescription drug data.”

\textsuperscript{31} Turnover is also greater in the individual and small-group markets than in large employer groups, a factor that will need to be considered if and when states expand the participation of larger groups in the exchanges.

\textsuperscript{32} See, for example, Alliance for Community Health Plans, Letter to Secretary Sebelius in response to the HHS August 3, 2010 Request for Comment on the Planning and Establishment of State Level Exchanges (see regulations.gov, file code OCCIO-9989-NC), October 4, 2010.

\textsuperscript{33} Medicare Advantage provides for separate risk adjustment for the ESRD population (those who need dialysis) to account for the significant differences between this population and the general Medicare population. The ESRD Risk Adjustment Model uses the same HCCs that are incorporated in the CMS-HCC model used for risk scores of aged/disabled beneficiaries but then calibrates them using the appropriate ESRD population. The resulting coefficients thus reflect cost and diagnosis coding for this subgroup of beneficiaries. Centers for Medicare and Medicaid Services, \textit{op. cit.}

\textsuperscript{34} Brown, \textit{op. cit.}
As noted, another issue is that unlike in Medicare Advantage and Part D, risk adjustment would need to be calculated as an adjustment to premium amounts rather than to Medicare payments to insurers. The Secretary will need to specify how those calculations would be made; the distributions should be determined as an adjustment to the actual plan premium charged by a particular insurer in any given benefit tier inside or outside the exchanges. This would maximize accuracy and make it easier to ensure that risk adjustment is actually reducing premiums for specific plans that enroll sicker-than-average individuals. Basing the adjustments on something other than actual plan premiums (such as average premiums in the tier or average overall premiums) would substantially reduce accuracy, since premiums are based on a number of factors (e.g., provider networks and utilization review) other than the relative risk of enrollees.

Like the Medicare Advantage risk adjustment system, the one that the Secretary develops for the individual and small-group markets should be prospective, meaning that the adjustment will be based on recent data (demographic, diagnosis, and perhaps prescription drug data) to estimate health status for the coming plan year. Prospective adjustment has the advantage of placing insurers on a level playing field to the extent that they are all setting premiums based on past data. In addition, it reduces the barriers to market entry for a new plan because it could be assured in advance of higher payments of specified amounts if it attracts a higher-risk population.35

Because of the lack of information about the newly insured population and the more generalized uncertainty about how risks will be initially distributed, it may be appropriate for the Secretary to provide for retrospective risk adjustment in 2014 as a temporary supplement to the prospective risk adjustment system. Retrospective adjustment could help reduce insurers’ concerns about adverse selection and thus discourage them from cherry-picking.36 Design decisions here will largely depend on the speed with which data for risk adjustment can realistically be collected and reported by the insurers and analyzed by the risk adjustment entity. For example, sufficient data for 2014 risk adjustment may not be available until June or July of that year. Alternatively, quarterly or annual reconciliation assessments or collections could be made. As discussed below, the ACA’s risk corridor and reinsurance programs should help to offset concerns about temporary risk shocks that may not be adequately addressed by the initial risk adjustment process.

The Department of Health and Human Services has already signaled its intent to call for a standardized risk adjustment methodology. While the latest HHS announcement for exchange grants available to the states indicated that states “may” use the federal methodology, the Secretary should further clarify that states are generally required to use the risk adjustment system that the HHS develops and not adopt varying systems, though states will be given the flexibility to tailor that methodology (and related standards) for their state markets. In addition, the Secretary should set uniform standards on how contributions will be collected from insurers with lower actuarial risk and distributions made to insurers with higher actuarial risk in the individual and small-group markets.


The Secretary should make available technical assistance to the states to help them adapt the federal risk adjustment methodology to their particular insurance market and establish data collection systems. Financial support could be provided through the grants to the states for implementing the exchanges provided under section 1311(a) of the ACA; HHS has already signaled it will allow states to use the exchange grants to finance some activities needed to support risk adjustment (and transitional reinsurance).37

States seeking modifications to the federal methodology and other related federal risk adjustment standards such as data collection should be required to follow a process to be specified in regulations published by the Secretary (subject to public notice and comment) through which the state describes any proposed modifications and explains why they are needed. The federal rules should provide for clear guidance on criteria to be used by the Secretary in evaluating the proposed modifications and a timeline for the approval process. State applications for modifications should be made available to the public on a website administered by HHS, such as www.healthcare.gov. The Secretary’s determinations related to such applications should also be made available to the public on such a website.

2. Data collection and risk score calculations. As with the risk adjustment methodology, the Secretary should establish national standards for the data that insurers will be required to report for purposes of calculating plan risk scores using the standard risk assessment tool, on which risk adjustment will be based. These data should be readily available, timely, and verifiable.

Several types of data will need to be collected and be incorporated into the risk assessment tool. The first set is demographic data. It will be important to test whether to include the enrollee’s eligibility for premium subsidies among such data, which may help to capture variation that other variables in the model cannot explain. Whether this requires more than a simple yes-no variable or a more nuanced measure to account for the wide income range captured by the premium subsidy will need to be determined.

To more accurately predict variations in expenditures resulting from the enrollee’s health status, the assessment tool should also incorporate diagnosis-related data.38 Such data can include inpatient admissions, outpatient services, and use of prescription drugs. These data generally come from insurance claims, but for managed care plans that do not pay providers on a fee-for-service basis, the source of the diagnoses and pharmacy information is likely to be encounter data. (Data collection problems for such plans have to be taken into account; it may take time for the plans to educate contracting providers on the importance of recording diagnoses accurately.)

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37 According to the most recent HHS announcement on exchange planning grants, these grants will be available to states for “necessary data collection to support risk adjustment, including demographic, diagnostic and prescription drug data. Qualified health plans may be required to submit encounter data and, therefore, States need to develop data and other systems to support risk adjustment. HHS is working with insurance plans and experts so that each State does not have to develop a risk adjustment model independently. . . .” U.S. Department of Health and Human Services, Office of Consumer Information and Insurance Oversight, Cooperative Agreement to Support State-Operated Health Insurance Exchanges, January 20, 2011, www.grantsolutions.gov(gs/preaward/previewPublicAnnouncement.do?id=12241.

38 Although some risk assessment models are based on treatment data, most experts believe that basing them on diagnosis data is better because diagnoses are less subject to “gaming” than treatment data, which can encourage greater numbers of procedures in order to drive up risk scores.
Inpatient diagnoses are generally collected from hospital claims submissions, but because the majority of enrollees are not hospitalized in any given year, these submissions provide only a partial measure of health expenditures. Outpatient services provide a more complete picture of a plan’s pool of enrollees, but a health plan may have difficulty collecting the needed data because such data typically do not directly relate to provider reimbursement. (Physicians and other providers typically report procedural and not diagnosis codes for purposes of reimbursement.) Finally, pharmacy data are good predictors of spending and can be collected more quickly than medical data, but drug claims do not discriminate on the basis of patient severity and could encourage a plan to limit coverage of generic substitutes so that more costly brand-name drugs are used, which would increase spending and thereby raise its risk scores.39

These data, which should be built on the basis of HIPAA claims transactions requirements, will be important to ensure that the information needed for the risk adjustment model is complete and the underlying risk assessment tools can be readily refined and updated. Under HIPAA, insurers must use uniform claims forms for both electronic and paper transactions with health care providers, which require reporting of patients’ ICD-9 diagnoses. (Beginning in 2012, ICD-10 diagnoses and ICD-10 procedures will be captured by the HIPAA form.40) Insurers vary, however, in the number of diagnoses that they ask physicians and other providers to include on their claims forms for a specific patient encounter; providers also vary in what they report for their patients. For example, while the uniform claims forms have room for multiple diagnoses, one insurer may only ask for one secondary diagnosis while another insurer may ask for multiple secondary diagnoses. Once insurers know which diagnoses (and other information) the uniform risk adjustment system will use to determine their plan risk scores, they will likely require reporting of these same diagnoses. But in the first year especially, some problems are likely to arise if the diagnosis and other required data are incomplete and inconsistently reported from one insurer to the next.

In addition to defining the data to be used to assess the risk of enrollees in plans within a state, the Secretary should establish the methodology for calculating risk scores from these data. Again, Medicare Advantage is the appropriate starting place. However, because the utilization of services and associated costs of the target population are likely to vary from the experience of the Medicare population for the reasons cited above, HHS will likely need to modify the model, incorporating, for example, diagnoses to account for maternity, newborn, and pediatric care.41 Another significant difference will be capturing within the risk assessment models the variation in utilization that would result from differences in actuarial values (i.e., among Bronze, Silver, Gold, and Platinum plans) and differences in levels of cost-sharing faced by subsidy-eligible individuals.

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39 Two individuals taking the same prescription to treat a condition may not have the same health status. Off-label use also complicates reliance on pharmacy data.

40 HIPAA of 1996 mandated the industry to use standard formats for electronic claims and claims-related transactions. The final rule, published in 2009, established that by January 2012 all covered entities shall use a specific format (HIPAA 5010). The new claims transaction standard enables reporting of ICD-10-CM diagnosis codes and ICD-10-PCS procedure codes and distinguishes among the codes for principal diagnosis, admitting diagnosis, external cause of injury and patient reasons for visit. Extensive administrative data may also be captured.

41 Because insurers will have to contribute or pay based on their risk scores relative to the insured market’s average risk score, the risk adjustment system may not be budget neutral. Presumably the Secretary could make an adjustment for this (or authorize or require the states to do so), similar to the way in which Medicare Advantage risk scores are normalized to ensure budget neutrality.
For example, individuals with diabetes and congestive heart failure who are enrolled in a Bronze benefit package, for whom the insurer will pay 60 percent of the cost of covered benefits for a standard population, will likely vary in the volume and intensity of services they use compared with similar individuals enrolled in a Gold benefit package, where the insurer pays 80 percent of the costs of covered benefits, on average. The risk assessment weights for each of the diagnoses or other predictive variables (e.g., demographics, prescription drug use, eligibility for a subsidy) may differ for each level of essential benefits packages. Adding to the complexity is the variation in actuarial value and cost-sharing that subsidy-eligible individuals will experience in the exchanges, based on their incomes.

To calculate plan risk scores, the Secretary should designate standard computer software. Ideally, it should be public and not proprietary and should be made available through an HHS website so that it is readily accessible to insurers and state entities administering risk adjustment. (While the collection from and distribution to insurers based on risk adjustment will be made by a designated entity, as discussed below, insurers need to be able to calculate their own plan scores for purposes of developing premiums for their plan offerings, as they do with Medicare Advantage today.) Again, HHS has offered states funding to support such efforts as part of the grants for establishing state-based exchanges.

As noted earlier, risk assessment tools calculate risk scores for each individual plan enrollee. Once that score is calculated, though, the methodology would have to lay out how to calculate a composite health plan score across all of a plan’s enrollees. The risk adjustment assessment or distribution may then be based on that composite score for some subsequent period of time, such as a quarter or a year. Alternatively, the methodology can base the assessment or distribution on the actual risk scores of the members enrolled on a periodic (e.g., monthly) basis. Given the potential for high turnover of enrollees in the individual and small-group markets, this latter approach would likely be more effective and therefore what the Secretary should require.

Another question is whether and how to incorporate mid-year enrollees in the risk adjustment system. The risk score for such new enrollees could be based on: (a) the plan’s average risk score; (b) the risk score for the average population for the pool as a whole (i.e., the entire individual market in a state); (c) the enrollee’s demographic characteristics only; or (d) some combination of the above or another readily administered approach. This will be important because people are likely to move in and out of plans mid-year due to changes in personal circumstances. Another option, which would be easier to administer and avoid inaccurate results due to this churning, is to only include enrollees who are in the plan for a certain minimum period of time (e.g., six months) in the calculation of risk adjustment.

3. Transition issues. Perhaps the most challenging aspect of implementing a risk adjustment system for the individual and small-group markets inside and outside the exchanges is making it work well enough in 2014 and the next few years, when insurers will be dealing with high levels of uncertainty. While the ACA’s risk corridor and reinsurance provisions are intended to minimize the impact of this uncertainty, they are unlikely to entirely eliminate insurers’ concerns about how they will fare under the new market reforms. In most states, for example, insurers selling non-grandfathered policies in the individual market will for the first time have to sell to all applicants, eliminate rating on the basis of health status, occupation, and other risk factors besides age and tobacco use, and standardize their benefit packages (i.e. offer the Bronze, Silver, Gold, Platinum, or catastrophic levels).
The changes for the small-group market will not be as substantial but will nonetheless create uncertainties, especially in states that currently permit wide premium variations based on health status, duration of contract, and other factors. Insurers selling through the exchanges may also have to meet a variety of additional requirements, such as network adequacy standards, that some states do not currently require. In states with only one or two dominant insurers, these new rules will require some adjustment in their pricing and marketing strategies. In more competitive markets, insurers may need to make even more significant adjustments and will be especially concerned about the potential adverse selection effects of these new requirements.

Added to the uncertainty created by the changes in rules for the individual and small-group markets is the lack of good information on the health status of the population newly entering the insurance market, as discussed above. The data are likely to be especially limited when disaggregated at the local level. Proxy measures of health status for the uninsured may thus be needed for the standard risk assessment tool designated by the Secretary, perhaps adjusted for state variations based on known demographic information on the particular state’s uninsured population (age, gender, living in the community or an institutional setting, and family income).

As discussed above, differences in health status between the Medicare and non-elderly populations will also need to be addressed. One major known distinction, for example, may be the lower incidence of chronic conditions in the uninsured non-elderly population. (The Medicare Advantage CMS-HCC risk adjustment model is heavily influenced by the cost of chronic diseases.) Potential data sources for such information include the Medical Expenditure Panel Survey (MEPS), the National Health Interview Survey, and the Healthcare Cost and Utilization Project, all federally administered survey instruments. Self-reported health status may also be a temporary possible data source. Experts, including those appointed to the federal advisory panel on risk adjustment recommended above, could guide the Secretary on the nature of the survey instrument based on the research literature as well as on insurers’ experience using health status questionnaires for medical underwriting purposes. (However, insurers must be prohibited from administering such questionnaires until individuals are actually enrolled in the insurer’s plan. Otherwise, insurers could use them as a back-door means to identify individuals in poorer health and discourage their enrollment.)

Another issue will be determining the amount of funds needed in the first year or two to provide sufficient funding for redistribution to plans with risk scores above the market average. The entity administering the risk adjustment system in a state could establish before the first year a base contributory amount (i.e., a percentage of each insurer’s premiums for its individual and small-group lines of business), after which the risk assessment would determine which plans are paid based on their higher risk and which are not. Then, after January 1, 2014, a determination would be made of which plans contribute or receive distributions; plans in the latter group would no longer have to continue paying the base contributory amount. To ensure standardization across states and predictability for insurers, the Secretary should provide federal rules or guidance on how these initial (and later, ongoing) contributions to the risk adjustment pool are to be made.

4. Refinements over time. As with the Medicare Advantage and Part D risk adjustment systems, the Secretary should establish clear procedures for making timely, periodic refinements to the uniform risk adjustment methodology, for updating its constituent parts, and for correcting for likely upcoding of diagnoses (discussed further below). Such modifications would improve risk
adjustment’s accuracy and its ability to limit adverse selection in the individual and small-group markets inside and outside the exchanges. These modifications will be especially important in the first few years, as new information becomes available for incorporation into the models and weights need to be recalibrated.

For example, over time, new information about health status and spending will allow the model to give less weight to less predictive demographic factors like age and sex. Similarly, the Secretary should develop standards for the eventual reporting of encounter data by insurers, which can then be incorporated into the risk adjustment system. By 2014, many insurers will already have experience with collecting and reporting such data; some state Medicaid programs already collect it, and as noted above, private health plans that serve Medicare beneficiaries through Medicare Advantage will soon be reporting encounter data.

The Secretary also should monitor how risk adjustment may influence insurers’ incentives to better coordinate care, provide for effective case management of enrollees with chronic conditions, and otherwise work towards higher quality health care. Some insurers raise a concern, for example, that the risk adjustment methodology could redistribute some funds from plans that provide for more effective case management of their diabetic enrollees — whose risk scores may decline as their condition becomes less severe and easier to manage — to plans whose diabetic enrollees receive less or no effective case management. The eventual use of more comprehensive encounter data, rather than just diagnosis data from claims, should help the Secretary to assess whether any modifications to the risk adjustment system are in fact required.

**Designating an Entity to Administer Risk Adjustment System in a State**

The ACA does not specify what entity will administer the risk adjustment system, though it seems to leave the decision up to the states, subject to federal requirements and standards. For example, the recent HHS announcement of the latest round of grants to the states for establishing the exchanges indicated that the exchanges could administer risk adjustment. Several options are possible, however:

- **Federal entity.** Federal administration of risk adjustment across the states would provide uniformity in the application of the standard risk adjustment system. But because of concern about whether a federal entity will be familiar with a state’s specific market conditions, this option may not be feasible in all states. It also may not make sense mechanically, since the ACA does not place the federal government in the position of collecting plan premiums. Instead, insurers will generally collect premiums directly from their customers, whether individuals or small employers. But in cases where the federal government has to step in and operate an exchange directly because the state has opted not to operate its own exchange, there is a compelling case for the federal government to directly carry out risk adjustment, given its importance to the viability of the federally operated exchange.

- **State or regional exchange.** State-based exchanges could administer the risk adjustment system. Exchanges would then have to be authorized by their state to collect the requisite data

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42 Wisconsin Office of Health Care Reform, *op. cit.*

43 U.S. Department of Health and Human Services, *op. cit.*
from the insurers and to administer the other aspects of the risk adjustment system, including collecting assessments and making distributions to the insurers.

Giving this responsibility to the exchange makes the most sense if the exchange is also given the responsibility of collecting premiums from individuals and small businesses on behalf of insurers (which is an option for states), because the exchange will then be in a position to adjust premiums to account for plans’ risk scores. However, while the ACA does not prohibit exchanges from becoming a “premium aggregator” (and such a role would lower transaction costs for individuals and small employers and thus make the exchanges more attractive), risk adjustment funds would need to be collected from and distributed to insurers selling outside the exchange as well as among plans inside the exchanges. Concerns may therefore arise as to whether the exchange can be expected to be a neutral risk adjustment administrator, especially in any states where exchanges are also given the authority to selectively contract for qualified health plans offered in the exchange.

- **State insurance commissioner.** Another option would be to give the role of administration of risk adjustment to the state’s insurance commissioner or insurance department. This would avoid the need to create a new, separate agency and would place the risk adjustment process in the hands of a staff that may already have the technical knowledge to fulfill the major functions needed to collect data from insurers, analyze and update the risk adjustment models, and so on. But the risk adjustment function, which is basically one of collecting funds and distributing them, may not mesh well with traditional regulatory functions, may engender conflict-of-interest charges from insurers, and could drain scarce resources from staffs that will already have increased responsibilities under the ACA to implement the various insurance market reforms, many of which will take effect at the same time in 2014. (With the exception of a very few state insurance departments, such as New York’s, risk adjustment is not part of their current responsibilities.)

- **New state entity.** A fourth option would be to vest the risk adjustment responsibilities in a newly created independent state entity whose sole function would be to administer risk adjustment for the individual and small-group markets. Giving this agency independence from the exchange and state insurance department could give it the necessary neutrality expected from stakeholders. Importantly, however, this new agency would also need the ongoing authority and budget necessary to fulfill its responsibilities. Such an entity could be governed by a board comprised of stakeholder representatives including consumers, with equal say in the determination of policies related to agency operations (as some state exchange boards may be structured). It is important to avoid conflicts of interest that could interfere with effective risk adjustment; for example, insurers should be prohibited from such a governing board.

Whether appointments to the board are made by the governor alone or in combination with the state legislature would also have to be determined, as would the terms of the appointment. Public transparency of the risk adjustment authority’s decision-making process should also be required by the federal government, with an opportunity for public hearings and comment.
Specific Duties of a State’s Risk Adjustment Authority

Many of the specific responsibilities of the risk adjustment authority in a state have been discussed above, but it may be useful to revisit them, since the Secretary will have to clearly define them:

- **Make any appropriate modifications to the standard risk adjustment model to reflect the state’s insurance market.** As noted, variations may be required, for example, to account for differing market conditions and definition rules, rating rules, benefit package rules, etc. (As noted, any such modifications would be subject to federal approval.) Premiums will already reflect some amount of adjustment for risk, including family size and age (premiums for the latter can vary by as much as a 3:1 ratio), so it will be important to avoid double counting factors already reflected in the plan’s premium.

- **Collect the required demographic and other data (e.g., diagnosis and eventually encounter data) from the state’s insurers.** Required data will need to be collected from all licensed insurers in the state that are required to participate in the risk adjustment system. The data elements should be consistent with federal rules, modified to reflect state market variations.

- **Collect risk adjustment assessments from insurers offering policies in the individual and small-group markets in the state, complying with federal standards.** As noted above, these payments may be based initially on the percentage of each insurer’s premiums for its individual and small-group lines of business. This responsibility will involve determining how to ensure — particularly in the first year — that sufficient funds are available to make the first round of distributions to the insurers with above-average risk scores. Also, periodic reconciliations may be necessary to ensure that the amount of funds collected and the amount distributed are the same. In subsequent years, the authority could collect only from those with lower average risk rather than requiring a base contribution from all insurers. Risk adjustment assessments on insurers will have important policy implications since such amounts are likely to be reflected in plan premiums.

- **Determine the risk scores for each insurer’s plan in the individual, small-group, or merged markets using the standard risk assessment methodology, with any state modifications subject to federal requirements and approval.** The risk adjustment entity will need to determine the average risk scores for plans in the individual and small-group markets inside and outside the exchanges. It will then need to provide distributions to insurers with risk scores above the average while collecting the appropriate assessments from insurers with risk scores below the average. As noted, distributions would be calculated as an adjustment to the actual plan premium being charged by an insurer in any given benefit tier (rather than average tier premiums or average plan premiums) to maximize accuracy.

- **Ensure that risk adjustment assessments or distributions are excluded from plans’ Medical Loss Ratios (MLRs), which the ACA requires insurers to report.** Insurers that do not meet federal minimum medical loss ratio standards have to rebate “excess” premiums to policyholders. Risk adjustment assessments and distributions are excluded from the MLR.
• **Finance administrative costs for the risk adjustment authority.** This could be accomplished by incorporating operating costs in the assessments charged to those insurers with lower-than-average risk, which would also encourage participating insurers to report data on a timely basis and otherwise cooperate so that the process works as efficiently as possible. An alternative would be to fund the risk adjustment authority out of assessments on insurers — operating inside and outside the exchanges — on top of those that could be levied by states to finance exchange operations. Such an approach would help to spread the costs for the risk adjustment authority more widely across all insurers that operate in the state.

• **Conduct periodic audits of the risk assessment data (including analyses of diagnosis data and more comprehensive information about utilization of services that plan encounter data will make possible).** As discussed further below, the risk adjustment entity must ensure that insurers comply with the data reporting requirements and provide accurate information on a timely basis.

• **Transmit data to HHS for purposes of federal audits and risk adjustment refinements.** This would help HHS conduct its own compliance work as well as modify the standard risk adjustment methodology and risk assessment tool to improve the accuracy of the risk adjustment system.

To carry out these responsibilities, the risk adjustment authority will require technically trained staff and the resources to cover professional and other overhead costs. Such costs may be particularly high in the first couple of years, since they will include the start-up costs associated with the data collection and reporting systems, recalibration of nationally established models for the state’s specific market, and so on. (The exchange grants could fund the costs of the first year in 2014; the federal government should make that clear.) Participating insurers could assume these various operational costs as part of their annual contribution, or alternative state sources could finance them, as discussed above.45

### Other State Responsibilities

Each state will need to carefully monitor how risk adjustment will interact with other aspects of its regulation of health insurance as well as with the ACA’s reinsurance and risk corridor provisions. At the most basic level, states may vary in the way in which they define the small-group insurance market (e.g., 50 or fewer vs. 100 or fewer employees), how they apply the rating requirements (e.g., with or without a tobacco adjustment and if so, how much up to the 1.5 to 1 federal limit), the definition of their premium rating areas (within federal guidelines), and so forth. Also, some states

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44 Under section 2718 of the ACA, insurers are required to report the percentage of total premium revenue (after accounting for collections or receipts for risk adjustment and risk corridors and payments of reinsurance) that they expend on reimbursement for clinical services provided under the coverage, activities that improve health care quality, and all other non-claims costs (including an explanation of the nature of such costs), excluding Federal and State taxes and licensing or regulatory fees. Under the implementing rules, HHS is treating such risk adjustment “payments and assessments” as adjustments to premium revenue.

may elect to merge their individual and small-group markets rather than operate them distinctly with separate risk pooling.

The Secretary should also require states to establish an all-claims database, meeting federal and state patient privacy protection standards. The database would be the source of information for both risk adjustment and other purposes, such as initiatives to improve patient safety and the quality of health care insured in the private market. Provisions may be needed for the transfer of data from the risk adjustment authority to this repository. States could also use this data repository to test modifications to the risk adjustment system that could be shared with other states and the federal government.

Other Shared Federal and State Responsibilities

The federal and state governments will share some risk adjustment responsibilities that require strong intergovernmental coordination and communication. The most important include data auditing and compliance enforcement.

1. Addressing upcoding. A significant concern that arises with risk adjustment systems is the phenomenon known as upcoding (also known as increased coding intensity or code creep). As noted above, upcoding refers to an observed increase in a plan’s average risk score over time that does not reflect actual changes in enrollees’ risk. While the phenomenon may be due, in part, to one-time improvements to data collection systems that allow insurers to more accurately report enrollee diagnoses, it is a significant problem if a plan’s diagnosis data consistently make their enrollees appear less healthy than they actually are. Addressing this concern requires audits and validation of the data that plans submit to ensure that the documentation accurately supports the risk scores.

Under Medicare Advantage, upcoding has been a persistent issue. Risk scores have increased over time even though Medicare Advantage enrollees continue to be healthier than those in traditional Medicare, on average, and there appears to be no corresponding change in their health status. Congress first tried to address the issue by including, in the Deficit Reduction Act (DRA) of 2006, a requirement that CMS take upcoding into account in setting Medicare payments to private plans for the 2008-2010 period. The Bush Administration failed to implement this provision, despite CMS and Congressional Budget Office (CBO) findings of growing evidence of upcoding. However, the Obama Administration used its administrative authority to provide for coding intensity adjustments beginning for the 2010 plan year. The ACA then extended and expanded the adjustment for coding intensity.

Upcoding has been especially problematic for Medicare because it results in overpayments to plans at the expense of the Medicare program. In the individual and small-group insurance markets, in which risk adjustment affects the redistribution of funds among private plans, upcoding will undermine the effectiveness of the risk adjustment system if it skews payments so some plans are overcompensated for their risks while others are significantly undercompensated.

As in Medicare Advantage, the effects of upcoding can be addressed by auditing the diagnosis data that insurers report and correcting risk adjustment payments accordingly. This responsibility should be given to the state’s risk adjustment authority. It also would be helpful, especially in the first few years, for HHS to audit a sample of plans in each state or conduct random audits on a periodic basis. Such a “look behind” audit function would help refine the risk adjustment system.

2. More general compliance requirements. As noted above, both HHS and the risk adjustment authorities should conduct audits of insurer data for compliance purposes and for enforcement of related federal and state risk adjustment regulations. Financial and other penalties may need to be assessed on an insurer based on whether the insurer’s compliance failure is a single egregious instance or a pattern of reporting inaccuracies, fraud, and so on. In conducting these audits, HHS and the states will need to protect the proprietary nature of the data that insurers submit.

States should also be encouraged to pass specific legislation requiring insurers participating in the exchange and those otherwise licensed in the outside markets to provide the necessary data for risk adjustment. States may impose financial penalties for failure to submit complete or accurate data. Similarly, the federal government should require insurers (and their providers) to submit a sample of medical records or encounter data for the validation of risk adjustment data provided to states. Finally, both HHS and the states should be required to honor federal HIPAA (and state) privacy laws to protect confidential personal health information.

VI. Interactions with Risk Corridors and Reinsurance

As noted above, the ACA calls for two mechanisms to help limit the risk of adverse selection for the years 2014 through 2016: a state-based reinsurance program applicable to the individual market only and a risk corridor program that will apply to individual and small-group insurance sold through the exchanges. Implementation of both programs will raise significant policy and technical issues that are beyond the scope of this paper, including how these programs interact with the risk adjustment system.

Congress intended the reinsurance and risk corridor programs to help stabilize the individual and small-group markets during the years in which insurers will be facing the greatest unpredictability as the exchanges and ACA’s major insurance reforms take effect. Such stabilization will be necessary to protect insurers from the potential higher costs of a newly insured population that may differ significantly from the currently insured population and also to help keep premiums affordable.

More specifically, the reinsurance program is aimed at assuring insurers that they will be compensated in the short run if they have an exceptionally bad experience due to enrollees with very unpredictable and very high-cost conditions. As the Academy of Actuaries observes in its recommendations to HHS,47 reinsurance will help to protect health plans from the “unpredictable swings in costs” that are likely to occur despite risk adjustment. The Academy explains that while risk assessment works reasonably well in predicting relative health care costs of large groups, it may

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47 American Academy of Actuaries, Letter to Melinda Buntin, Director, Office of Economic Analysis and Modeling, Office of the National Coordinator for Health Information Technology, Department of Health and Human Services, September 22, 2010.
do less well in predicting costs in the case of extremely expensive treatment for relatively rare conditions or accidents for which there will be limited data upon which to model their costs in a risk assessment model that relies on prior claims or diagnoses.48

The risk corridor provision is aimed at mitigating large losses or profits for insurers participating within the exchanges. Although risk corridors appear to have met their intended objectives for the Medicare prescription drug program, they may not be as well suited in the context of the other strategies to limit adverse selection under the ACA. Separating what is an appropriate risk corridor payment for a plan (if any) from other risk adjustment and reinsurance payments (in the case of the individual market) may also be challenging. It will be important, for example, to safeguard against compensating insurers twice for adverse risk selection, via both risk adjustment and risk corridor payments. Some stakeholders have recommended that risk corridors be undertaken only after risk adjustment and reinsurance have been implemented.49

VII. Summary and Recommendations for Federal and State Policy

This paper identifies key issues that will need to be resolved to effectively implement risk adjustment in the individual and small-group insurance markets. Risk adjustment will be critical to protecting insurance plans, particularly those participating in the exchanges, from adverse selection and to ensuring that insurers compete based on price and quality, not on risk selection.

No matter how good the risk adjustment system is, however, some adverse selection in the individual and small-group markets will occur. How much will largely depend on how states implement the ACA’s requirements relating to the exchanges and the regulations for insurance plans operating outside the exchanges. To reduce the severity of adverse selection that risk adjustment needs to address, states should be strongly encouraged to implement their insurance reforms so as to minimize risk selection at the point where insurers are designing their products and making decisions about how they will position themselves in the market. (For example, states should apply the same rules inside and outside the exchanges.)

Implementation of risk adjustment will require a uniform federal risk adjustment methodology, a standard risk assessment tool that provides a reliable measure of the variation in health care costs incurred by insurers selling in the target insurance markets, the collection of relevant data from those insurers, analysis of those data, and administration of risk adjustment in the form of assessments on insurers whose enrollees have below-average risk and distributions to insurers whose enrollees have above-average risk.

Major recommendations for the ACA’s risk adjustment system include:

- The HHS Secretary should establish a transparent process for designing the risk adjustment system. The Secretary should set up a technical advisory committee, make the proposed system and rules available for public notice and comment, and ensure that state implementation is

48 Academy of Actuaries, op. cit.
49 See, for example, Kaiser Permanente, Letter to HHS responding to the August 3, 2010 Request for Comments on Planning and Establishment of State-Level Exchanges, October 4, 2010.
similarly transparent, with consumer input required.

- The Secretary should establish a standard risk adjustment methodology to be used by all states. The Secretary should build upon the risk adjustment systems used in the Medicare Advantage and Part D prescription drug programs, making the necessary adjustments to account for the differences between Medicare and the individual and small-group health insurance markets. The software should be public and not proprietary.

- The Secretary should also set uniform rules for the data elements (demographic, diagnosis, and pharmacy claims) that are to be reported by insurers and for how they will be used by a standard risk assessment tool to determine plan risk scores. These standards should also provide for the collection of encounter data from insurers with the expectation that such data will later be used to improve the predictive power of the risk assessment tool.

- The calculation of a plan’s health score should be based on the risk scores of the members enrolled on a periodic (e.g., monthly) basis, given the potential for high turnover of enrollees in the individual and small-group markets. The Secretary should also determine how to incorporate the risk scores for mid-year enrollees or departures within the risk adjustment methodology. Distributions should be calculated as an adjustment to the actual plan premium that an insurer is charging in any given benefit tier (rather than average tier premiums or average plan premiums) to maximize accuracy and ensure that risk adjustment is working to lower premiums for plans with higher-risk enrollees.

- Like the Medicare Advantage risk adjustment program, risk adjustment for the private insurance market should be done on a prospective basis. It may be appropriate for the Secretary to provide for retrospective-based risk adjustment in 2014 as a temporary supplement to the prospective risk adjustment system because adequate information on the target population (many of whom are currently uninsured) is unlikely to be available in advance. Together with the ACA’s temporary risk corridor and reinsurance programs, such short-term measures should help reduce insurers’ concerns about adverse selection and thereby discourage risk-selection behaviors designed to cherry-pick healthier individuals.

- The Secretary should set uniform standards for collecting contributions from insurers and making distributions. Of particular importance are rules setting out how insurers will make initial contributions in the first few years of the program to ensure sufficient cash flow.

- States would be permitted to tailor this standard risk adjustment system to their specific market conditions, subject to federal approval. To help states implement risk adjustment and make any state-specific modifications to the standard risk adjustment system, the Secretary should make available technical assistance and all needed funds through federal grants to the states for setting up the health insurance exchanges.

- The Secretary should establish procedures for making timely, periodic refinements to the risk adjustment methodology to update its constituent parts and correct for likely upcoding of diagnoses as insurers seek to maximize their relative risk scores. Such updating and refinements will be especially important in the first few years as new information is added to the models and variables used to predict risk scores are recalibrated.
• The Secretary should establish uniform basic standards for how states shall determine the entity that will administer risk adjustment. Possibilities include state exchanges, insurance departments, a new state entity, or the federal government.

• The designated entity administering risk adjustment will need to perform a number of duties, as specified by the Secretary. Such duties include: making any appropriate modifications to the federal risk adjustment methodology, collecting the required data from insurers, receiving contributions from insurers and making distributions to insurers as appropriate, determining risk scores, ensuring that plans adjust their medical loss ratios to take into account risk adjustment, financing the operational costs of the risk adjustment system, and supporting federal efforts to improve the risk adjustment system and ensure insurer compliance. The entity will also need to address a number of start-up issues, such as determining the amount of money they need to collect from insurers in the first couple of years to redistribute to plans with above-average risk scores.

• States should be required to establish an all-claims database (meeting federal and state patient privacy protection standards) to provide information for risk adjustment and other purposes, such as initiatives to improve patient safety and the quality of privately insured health care.

• Both HHS and the states should conduct audits of insurer data for compliance purposes and enforce related federal and state risk adjustment regulations. States should be encouraged to pass legislation requiring insurers participating in the exchange or otherwise licensed in the outside markets to comply and provide the necessary data for risk adjustment.