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Health Risk Assessment and Health Risk Adjustment— Crucial Elements in Effective Health Care Reform

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The American Academy of Actuaries (Academy) is a national organization that was formed in 1965 to bring together, into a single entity, actuaries of all specialties in the United States. In addition to setting qualification standards and standards for actuarial practice, a major purpose of the Academy is to act as the public information voice of the profession.

This paper was prepared for the Academy by a ten-member work group. The precise composition of this group was necessitated by the nature of this project and the importance of the work involved. The Risk Adjustment Work Group includes actuaries, health economists, and health policy professionals who work as consultants, who are employed by insurance carriers, and who are staff for national health associations, as well as a physician. In addition, the expertise of other senior health actuaries and professionals knowledgeable about state and federal reform efforts was vital to the final preparation of this paper.

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EXECUTIVE SUMMARY

Health risk assessment and health risk adjustment are key components of recent state and national health care reform proposals. In order to understand fully the implications of these proposals, legislators, policy makers and others are looking for answers to basic questions about health risk assessment and health risk adjustment. This paper, by the American Academy of Actuaries Risk Adjustment Work Group, describes some general approaches to risk assessment and risk adjustment, identifies the pros and cons of several approaches, and suggests some potential implications.

What Is Health Risk Assessment?

Health risk assessment is a method for determining objectively the relative risks of individuals or groups of individuals. A health risk assessment involves the use of a classification system: individuals are classified by objective criteria into one of several classifications. Each classification is assigned a numerical value, so that a weighted average value can be determined and used to compare the relative risk of one population versus another.

What Is Risk Adjustment?

Risk adjustment amounts are designed as a means of reducing the effect of risk selection from health insurance premiums or employee contributions to a health care plan. The risk adjustment process uses the results of risk assessment to determine carrier transfers.

It is important to distinguish between up front risk adjustments and prospective and/or retrospective risk adjustment methods. Up front risk adjustments are explicitly reflected in the actual premiums or contributions paid by the insured so that they reflect the particular risk characteristics of the insured. Prospective risk adjustment methods apply a carrier transfer amount to the premiums or contributions that adjust for the different relative risks of the various carriers in a given market. Retrospective risk adjustment methods develop carrier transfer amounts in a settlement process, such as at the end of a calendar year.

Goals of Risk Adjustment Processes

Risk adjustment processes can be designed to help accomplish several goals:

Help reduce the effects of either inadvertent or intentional risk selection so that carriers in a competitive market can compete on the basis of medical and administrative efficiency and quality of service and care, rather than on the ability to select risk;

- Compensate carriers fairly and equitably for the risks they assume;
- Aintain consumer choice from among multiple health plans based on rates or employee contributions that reflect relative medical and administrative efficiencies; and
- Protect the financial soundness of the system.

Scenarios Using Risk Adjustment Processes

This paper examines possible risk adjustment processes under three scenarios: a Managed Competition Model; a Standard Community Rating Model, similar to legislation enacted in the state of New York; and a State Reinsurance Model allowing wide rate bands and using reinsurance as a risk adjustment process, similar to the model legislation developed by the National Association of Insurance Commissioners (NAIC). This paper does not state a preference for any of the three models; they were selected merely to illustrate a range of possibilities and to provide assistance to states considering various reform options.

Summary and Recommendations

Actuaries possess a unique understanding of risk assessment and risk adjustment methods, different from that of other health professionals. Health actuaries have practical experience with insurance carriers and risk classifications. This work group has been able to combine technical expertise with the required theoretical expertise to provide a balanced view of risk adjustment methods.

Without risk adjustment methods, rating structures being considered in state and national reform proposals are likely to provide incentives to carriers to avoid high-risk individuals in order to maintain the most competitive premiums, and individuals will continue to face premium or contribution choices that reflect risk selection rather than medical and administrative efficiency. The Academy considers risk adjustment a necessity if rating restrictions do not allow up front matching of premiums or contributions with the relative risk factors of the purchasers.

In developing each recommendation, the following conditions were assumed:

1. A gradual phase-in, following reform, from community rating by class (rate varies by age/sex, geography, and family composition) to standard community rating (rate varies only by geography and family composition). The phase-in of a demographic risk adjustment mechanism would coincide with the rating changes;

2. A gradual phase-in, following reform, from a voluntary insurance system to a mandatory insurance system; and

3. Research, as suggested in this paper, on risk assessment and risk adjustment continues.

The Academy believes that no one risk assessment approach has been sufficiently tested in regard to accuracy, administrative efficiency, implementation issues, or expense to warrant its recommendation at this time as the best long-term approach.

The Academy recommends that if reform is enacted within the next 18 months, a non-voluntary reinsurance mechanism such as a high-cost medical condition system, with appropriate incentives for efficiently managing care be used as an interim measure during the first two to three years of the reformed system. This short-term step will provide time for more research on risk assessment methods and, in addition, for a reevaluation process. At the same time, this mechanism will permit immediate movement toward risk adjustment without the need to build up complicated systems and procedures that may have to be discarded once the best long-term approach to risk adjustment has ultimately been determined.

INTRODUCTION

Health risk assessment and health risk adjustment are key components of recent state and national health care reform proposals such as the managed competition approach being considered by the Clinton Administration and New York State's recently enacted legislation. In order to understand fully the implications of these proposals, legislators, policy makers and others are looking for answers to basic questions about health risk assessment and health risk adjustment. This paper, by the American Academy of Actuaries Risk Adjustment Work Group, describes some general approaches to risk assessment and risk adjustment, identifies the pros and cons of several approaches and suggests some potential implications.

What Is Health Risk Assessment?

Health risk assessment is a means of determining objectively whether an individual or group represents a risk that is reasonably close to the average and, if not, of quantifying the relative deviation from the average. Individuals who are expected to incur more costs for medical services are considered relatively worse (i.e., higher) risks than those who are expected to incur less costs. Much of the population is expected to be classified as average risk. Some individuals are classified as low risk, meaning that they are expected to incur costs (medical expenditures) that are much less than average. Even fewer individuals are expected to be high risk—their medical expenditures in a year are expected to be much higher than average. Some high-risk insureds may remain high risk for life, for example, people with diabetes or asthma. It is also true that individuals may be high risk one year but not the next, if the condition causing their higher medical expenditures is temporary or is corrected.

In a health risk assessment, individuals are assigned to a health risk category based on an objective standard, such as their age or a classification of an illness they had during the previous year. Each health risk category would be assigned to it. Any individual assigned to that health risk category would be assigned the same relative risk factor as any other individual assigned to that health risk category. Thus, relative risk factors are numerical values assigned to individuals based on the relative health risk of all individuals in the same risk category (i.e., the ratio of the average expected level of medical expenditures in a specified period for all individuals in the risk category to the average expected level of medical expenditures for all individuals in all risk categories). For example, if one of the risk categories were for everyone aged 18 to 24 and the relative risk factor of 0.67. In general, individuals who are average risks would be assigned relative risk factors less than 1.0, and those who are expected to be worse-than-average risks would be assigned relative risk factors greater than 1.0. Since about 50 percent of health care claim costs in a year are generated by only about 4 percent of the claimants, there will be many more insureds classified as low or average risks than classified as high risks.

What Risk Assessment Methods Are Available Now?

There are many different methods for assigning relative risk classifications; each is distinguished by the model used to determine the risk categories. For example, a risk assessment based on self-reported health status would assign a numerical score to people based on what items they included in a report on their own health. A demographic relative risk factor would segregate individuals into risk categories on the basis of demographic factors such as age/sex, or family status. A diagnostic or prior-history risk assessment method might segregate individuals into risk categories based on illness or number of hospitalizations in the previous year.

The types of health risk assessment methods can be as simple as a demographic method that includes only age/sex classifications or as complicated as a highly sophisticated medical case-mix system for classifying patients based on their medical diagnoses or treatment during the previous year. The demographic classifications of New York's Regulation 146 is a good example of the former, while Johns Hopkins' Ambulatory Care Groups (ACGs) is an example of the latter.

Examples of Risk Assessment Methods Generally Referenced Today

Ambulatory Care Groups (ACGs): This is a model that uses age/sex, and ICD-9 diagnoses assigned during ambulatory care to classify risks. It was developed by Jonathan Weiner and others at Johns Hopkins University.

Diagnostic Cost Groups (DCGs): This is a prior-history model that uses inpatient hospitalization data to classify risks. This model was developed by Arlene Ash and Randy Ellis of Boston University.

■ Payment Amounts for Capitated System (PACS): This model uses age/sex, disability status, chronicity, major diagnostic category, and level of ambulatory resource use to classify risks. It was developed by Gerard S. Anderson at Johns Hopkins University's Department of Health Policy and Management and Center for Health Statistics.

RAND 36—Item Health Survey 1.0: This is a self-reported health status measure consisting of a questionnaire of 36 questions.

Robinson-Luft: This model was developed to make use of information in an employer's database. It uses a series of conditional probability regression equations to assign relative risk factors. The method was developed by Harold S. Luft and James C. Robinson.

This preceding list is by no means all-inclusive. Income and education data have also been considered as possible variables for health risk assessment. However, in light of the lack of published data on how they might work in health risk assessment models, along with our lack of practical experience with such data, we have not included any commentary on these variables.

All of the methods noted here require further validation studies.

Health Risk Adjustment Process to Determine Carrier Transfers

In a market where multiple carriers are competing, a health risk adjustment process can be used to determine the amount of the monetary transfers between carriers needed to account for the differences in risk characteristics of the various carriers' risk pools, based on a risk assessment.

Goals of Risk Adjustment Processes

Risk adjustment methods can be designed to help accomplish several goals:

Help reduce the effects of either inadvertent or intentional risk selection, so that carriers in a competitive market can compete on the basis of medical and administrative efficiency and quality of service and care rather than on the ability to select risk;

Compensate carriers fairly and equitably for risks they assume;

Aintain consumer choice from among multiple health plans based on rates or employee contributions that reflect relative medical and administrative efficiencies; and

Protect the financial soundness of the system.

Health risk adjustment methods can also help in analyzing medical outcomes and other differences between providers, such as cost. If two hospitals, or doctors, show widely divergent costs, the differences could result from different provider practices or a different mix of illnesses (case-mix) among the patients treated. Health risk adjustment methods can be used to adjust the case-mix of patient populations, to allow comparisons between providers to be made more objectively.

Scope of This Paper

This paper addresses only risk assessment and risk adjustment methods as they apply to medical insurance. We have not accounted for workers' compensation benefits (24-hour coverage).

In addition, our definition of risk concerns only the health risk, not the other risks that have a financial impact on the health insurance system, such as the risk that a policyholder's business may fail or that a carrier may become insolvent.

Nor have we addressed the issue of how the necessary subsidies for low-income individuals might be funded. These subsidies should not come through risk adjustment methods; they should be funded by other mechanisms.

Relation Between Risk Adjustment and Premiums

Up front risk adjustments are used to adjust premiums to reflect the risk characteristics of the insured(s). For example, community rating by class, in which rates vary according to differences in age/sex classifications, is an up front

risk adjustment method. With this kind of method, less money needs to transfer among carriers. Prospective risk adjustment methods apply a "carrier transfer amount" to the insured premiums, which thus serves to adjust for the differences in relative risks among the various carriers in a given market. In contrast, retrospective risk adjustment methods develop carrier transfer amounts in a settlement process. Often, a prospective method is combined with a retrospective settlement, which can be used to "true-up" the amounts of the carrier transfers.

Relation Between Risk Adjustment and Employee Contributions

One of the major goals of the risk adjustment process, as stated above, is to "maintain consumer choice from among multiple health plans based on rates or employee contributions that reflect relative medical and administrative efficiencies." If the contribution amounts employees see are not risk-adjusted, this goal will not be met. (For an example, refer to the Technical Appendices.)

If the carriers' premiums include prospective risk adjustment amounts, then setting the employer contribution as a flat-dollar amount passes the greatest proportion of the price differential that results from medical and administrative efficiency on to the consumer.

If the carriers' premiums are not risk-adjusted, then setting the employer contribution as a percentage of the premiums is probably best, since, in this way at least a portion of the risk differential is paid by the employer and therefore not seen by the consumer. However, we do not recommend such an approach, since, when this approach is used, risk differentials will still influence consumer choice.

Why Are Risk Adjustment Processes Needed?

The Academy considers risk adjustment a necessity if rating restrictions prohibit up front matching of premiums or contributions with the relative risk factors of the purchasers. If no risk adjustment mechanism is used and carriers are required to switch to rating methods that are closer to standard community rating, carriers will continue to be motivated to avoid high risks to maintain the most competitive premiums, and individuals will continue to face premium or contribution choices that reflect risk selection rather than medical and administrative efficiency.

Scenarios

This paper presents three scenarios, or models, to illustrate how risk assessment and risk adjustment methods are currently being used in health reform in many states. Each model is described, and a list of pros, cons, and possible implications is provided. Note that the basic assumptions regarding the market in each of these scenarios can, and will, affect the conclusions of the analysis. If any of the basic assumptions in a scenario is changed, the analysis of pros, cons, and implications may no longer be valid.

This paper does not express a preference among any of the three models; they were selected merely to illustrate several possibilities for risk assessment and risk adjustment, and to provide assistance to states considering various reform options.

Modifications of each of the basic scenarios are provided as well and referred to as "iterations". They provide a broader perspective for subsequent analysis. The iterations are not necessarily better or worse than the basic scenario they modify; they are included to illustrate a greater range of possibilities.

1. Managed Competition Model. The major feature in this model is the Health Plan Purchasing Cooperative (HPPC), which allows individuals to select a carrier from among those participating in the HPPC. The model referenced here is not Enthoven's Managed Competition model: changes in federal tax law would be required to satisfy some of the requirements for Enthoven's model. To incorporate a risk adjustment method, our basic model assumes that (1) a self-reported health status or medical underwriting risk assessment mechanism is used to determine financial transfers between carriers and (2) the risk adjustment is applied on a prospective basis. Rates with up front adjustments are permitted to vary due to age/sex, geography, and family composition.

2. **Standard Community Rating Model.** This model is based on New York's Regulation 146, which uses a twocomponent approach to risk assessment and risk adjustment. The first component employs an age/sex factor to measure relative risk. Carriers with relative risk factors less than the average contribute money to regional pools; carriers with relative risk factors greater than the average receive money from the pools. The second component is based on

high-cost medical conditions. Each carrier makes a preset contribution to the pool for every person covered, and each carrier receives a preset payment from the pool for each covered occurrence of a listed medical condition. Standard community rating is required (i.e., up front rates can vary only by plan design, geography, and family composition).

3. **State Reinsurance Model.** This model is taken from the NAIC model regulations for small groups. It includes wider premium rate variations than the other two models and a reinsurance mechanism to accomplish the risk adjustment process. There is no other risk adjustment mechanism. Connecticut is one of several states that has enacted small group reform similar to what is described in the Basic Scenario.

Criteria for Risk Assessment and Risk Adjustment

The following criteria were used in analyzing the pros and cons of the risk assessment and risk adjustment methods in each scenario.

• Accuracy: Since financial transfers between health plans will be determined based on the risk adjustment mechanism, accuracy and avoidance of statistical bias is critical.

Practical and Understandable; Low Cost: The risk adjustment mechanism cannot be so complex that implementation is extremely cumbersome, thereby adding additional cost to the system.

Timeliness and Predictability: Carriers setting premium rates must be able to predict the value of the carrier transfer and how it will impact their premiums with a fair degree of accuracy, in order to avoid solvency concerns. Premium rates need to be set several months in advance of the effective date of coverage.

No Manipulation: The risk adjustment mechanism should aim to make it impossible for specific carriers to benefit financially by "gaming" the mechanism.

Pros and Cons

The list of pros and cons for each scenario provided in this paper focuses on the risk assessment and risk adjustment mechanism, not on the other characteristics of the scenario. For this reason, a table is included in the Technical Appendices portion of the paper showing the pros and cons of issues common to all scenarios. In addition, for ease of reference, the Technical Appendices include a table that compares scenarios, which outlines the major features of the three basic models.

Further Research Needed

Areas for additional research were identified. These should be pursued by the Society of Actuaries, the research and education organization of the health actuarial profession. Specifically:

Cost/benefit analyses comparing the various risk assessment tools such as ACGs, DCGs, self-reported health status tools, etc., particularly when used in conjunction with a reinsurance system;

Modeling the financial impact of using risk adjustment methods to create carrier transfers; and

Determining the implications, for the solvency of carriers, of various methods of applying carrier transfer amounts (such as prospective versus retrospective methods).

Summary and Recommendations

Actuaries possess a unique understanding of risk assessment and risk adjustment methods, different from that of other health professionals. Health actuaries have practical experience with insurance carriers and risk classifications. This work group has been able to combine technical expertise with the required theoretical expertise to provide a balanced view of risk adjustment methods.

Without risk adjustment methods, rating structures being considered in state and national reform proposals are likely to provide incentives to carriers to avoid high-risk individuals in order to maintain the most competitive premiums, and individuals will continue to face premium or contribution choices that reflect risk selection rather than

medical and administrative efficiency. The Academy considers risk adjustment a necessity if rating restrictions do not allow up front matching of premiums or contributions with the relative risk factors of the purchasers.

In developing each recommendation, the following conditions were assumed:

1. A gradual phase-in, following reform, from community rating by class (rate varies by age/sex, geography, and family composition) to standard community rating (rate varies only by geography and family composition). The phase-in of a demographic risk adjustment mechanism would coincide with the rating changes;

- 2. A gradual phase-in, following reform, from a voluntary insurance system to a mandatory insurance system; and
- 3. Research, as suggested in this paper, on risk assessment and risk adjustment continues.

The Academy believes that no one risk assessment approach has been sufficiently tested in regard to accuracy, administrative efficiency, implementation issues, or expense to warrant its recommendation at this time as the best longterm approach.

The Academy recommends that if reform is enacted within the next 18 months, a non-voluntary reinsurance mechanism such as a high-cost medical condition system, with appropriate incentives for efficiently managing care be used as an interim measure during the first two to three years of the reformed system. This short-term step will provide time for more research on risk assessment methods and, in addition, for a reevaluation process. At the same time, this mechanism will permit immediate movement toward risk adjustment without the need to build up complicated systems and procedures that may have to be discarded once the best long-term approach to risk adjustment has ultimately been determined.

MANAGED COMPETITION MODEL

Introduction

Managed Competition is one of the major options being proposed as a strategy for addressing the problems of our current health care system. In theory, costs are constrained by structuring the health insurance market in a region so as to encourage employees and employees to choose efficient health plans. As described by Alain Enthoven of Stanford University, Managed Competition requires several key elements:

- Standardized benefit plans;
- Employer contributions tied to the lowest-cost plan;
- Elimination of tax deductions for payments above a certain level, usually tied to the lowest-cost plan;
- Employer groups and individuals purchase coverage through the Managed Competition administrator (frequently known as a Health Plan Purchasing Cooperative or HPPC);
- Acceptance of all applicants (guaranteed issue);
- Certain requirements for a health plan to satisfy to be offered as an Accountable Health Plan (AHP); and
- The price that the consumer sees is free of the effects of risk selection.

Although risk selection will exist under any health care system that allows choice, many believe that components of the Managed Competition model will help reduce the overall extent of risk selection, thus allowing available risk adjustment methods to be used more effectively. As an example, standardized benefit plans eliminate the ability to influence plan choices by limiting or eliminating certain kinds of coverage that would tend to attract or discourage the low- or high-risk individual (e.g., coverage for prescription drug benefits, if not standardized, might attract high-risk individuals).

In the current environment, it is not possible to realize the Enthoven Managed Competition model on either a statewide or regional basis because of legal hurdles. For example, federal tax policy would have to change before several of Enthoven's conditions could be satisfied. Thus, for this analysis, a Managed Competition model is described that lacks several of Enthoven's key features.

Description of the Model

Here, in brief, are the attributes of the Managed Competition model:

1. Individual and small-group market only. — This scenario will include only individuals with coverage purchased individually or through small employers. The upper boundary of small-employer group size is set at 50 employees.

2. State/region-based HPPC. — A HPPC would purchase coverage on a "wholesale" basis for individuals and groups in the size category.

3. Exclusivity for group size. — All employer groups of 50 or fewer employees, and individuals, are handled through the HPPC. The individual or employee chooses from among the qualified plans. Carriers are allowed to make direct sales only to groups larger than the designated HPPC market size. The same administrative fee for the HPPC is added to every carrier's premium.

4. Exclusive but not mandated coverage. — Any individual or employer in the size category specified (here, individual to employers with 50 or fewer employees) would be able to obtain coverage only through the HPPC. However, this model does not stipulate that employers must purchase health insurance coverage. Similarly, individuals would not be required to purchase insurance, either separately or in combination with their employer's contributions. No alternatives (e.g., MEWAs, ERISA self-insured plans, and separate individual insurance policies) would be available.

5. Standardized benefit plans. — A set of specified uniform benefits, including standard deductibles and/or copayments, would be used. This HPPC model would allow only one standard plan. (Another model may allow people to choose from among two — or more — sets of standard plans; but this choice would probably make the risk adjustment process more difficult.)

6. Annual open enrollment and guaranteed issue and renewability. — The HPPC would establish an annual open enrollment period at which time each individual insured through the HPPC could elect to change his or her choice of AHP. People would be guaranteed access to insurance provided by any AHP at times other than open enrollment if there was a change in status, for instance, in marital status or in current employer (from large employer to small employer) or a move from one HPPC region to another. No individual or employer group can be denied coverage by an AHP, except for reasons like fraud or nonpayment of premium.

7. Minimum exclusions for preexisting conditions with portability provisions. — A standard set of preexisting condition limitations would be specified for use by all health plans. If an individual was covered by a previous health plan, then the preexisting condition period would be shorter or eliminated completely, based on the length of prior coverage. In the absence of mandated coverage but with guaranteed issue and renewal, some preexisting condition limitation may be required. However, if mandated coverage is included, it may be feasible to reduce or eliminate these exclusions.

8. Restrictions on health plan rates. — Health plans may vary rates by: age/sex, geography, and family composition. Thus community rating by class or up front adjustments would allow AHPs to vary rates by recognized demographic characteristics.

9. No federal tax cap. — Current federal and state tax code regarding health insurance deductions is assumed to be unchanged.

10. Minimum required employer contribution. — The HPPC may establish minimum required employer contributions (e.g., at least 50 percent of the lowest-cost AHP).

11. Minimum required employee participation. — The HPPC may establish a minimum required participation by employees in the HPPC (e.g., 100 percent for groups with fewer than 10 employees, 80 percent for next tier, etc.).

12. Data submission and quality assurance. — The HPPC may establish a standardized format for submission of claims and other data to compare quality and medical outcomes.

Risk Adjustment Method

Risk adjustment methods may be either prospective or retrospective and may operate in a rating environment that requires transfers between plans in the range of 3 percent to 15 percent (e.g., in a standard community rating system) or more moderate transfers (e.g., in a model that permits specified demographic adjustments as part of the up front rating process). The risk adjustment model considered first in this discussion attempts to employ modest risk

adjustments: contracting health plans can use traditional demographic adjustments in offering premium rates. Note that, in this type of scenario, the HPPC would specify the family composition categories to be used by all of the AHPs (such as "single", "one dependent", "two or more dependents"). A risk adjustment amount is then determined separately for each of these categories.

Basic Scenario: Up front adjustments for age/sex, geography, family size, plus a prospective risk adjustment for self-reported health status.

Description: All health plans would offer rates that vary by age/sex, geography, and family composition. Before the first open enrollment period for the HPPC, the HPPC administrator would administer a short self-reported health status questionnaire to a random sample of each AHP's population, as of a date prior to the first open enrollment period. This provides a starting risk adjustment amount that can be used to modify premium and contribution rates for the first open enrollment. New AHPs without existing populations would be assigned relative risk factors of 1.0 and would not receive or transfer risk adjustment amounts for the prospective adjustment. A retrospective adjustment would be made on a quarterly basis, accounting for actual open enrollment results, and new additions (as new individuals enroll in the Managed Competition HPPC, the HPPC administrator would administer the health status questionnaire) and terminations to each plan on other than the open enrollment date. (See Technical Appendices for example of the RAND 36.)

Alternative Method: Medical underwriting information (actual exams or conventional medical statements) would be used as the basis for the risk assessment model. An attending physician's statement may be requested, and in some instances a physical exam (or blood and urine tests) may be required. The underwriting would be performed by the HPPC or its administrator. Based on the results of the underwriting, each member would be assigned a relative risk factor. Then each month or quarter, an overall weighted risk adjustment factor would be determined for each carrier. Based on the carrier risk adjustment factors, an overall weighted risk adjustment factor would be developed for the HPPC, and carrier transfers would be determined. As in the previous method, a prospective adjustment could be based on a random sample, with further retrospective adjustments made.

Pros:

A self-reported health status short questionnaire at enrollment in the HPPC could be a practical way to obtain relative risk information, especially from small employers. If expanded to larger employers, use of sampling may be more practical.

Using up front demographically based adjustments is likely to make the premiums for young groups lower and promote more coverage, or at least less reduction in coverage, as compared with a standard community rating method.

The methodology can be applied to individuals not previously insured.

Self-reported questionnaire or medical data collection would be handled consistently for all carriers.

Research is now available on self-reported health status questionnaires; hence, an "instrument" is readily available that has been tested, although it has not been fully calibrated for risk adjustment use.

The use of a health status questionnaire, with further research, could serve as a transition to the more complex risk adjustment methods available (such as diagnosis or claims groupings).

There is little incentive for an individual to misrepresent his or her actual health status on the questionnaire, since the responses do not directly impact his or her coverage or its cost.

A self-reported health questionnaire could also provide data for studies of medical outcome results.

Cons:

If a collection of medical data is used, the HPPC must either maintain or construct a mechanism to collect these data.

The current questionnaire has not been tested for health status of surrogate respondents (for children or institutionalized or mentally disabled persons) or for the impact of cultural factors and other potential sources of response bias.

Consumers may be reluctant to divulge any information that they believe will influence their premiums (primarily for very small employers or individuals). There may be some invasion-of-privacy issues (although current questionnaires do not ask intrusive questions).

■ If this approach were ever expanded to larger employers (more than 50 employees), it may be more difficult to collect health status. Employers may have to "force" reporting for delinquent employees.

A self-report of health status probably will not account for problems with poor prenatal care/low birth-weight babies and similar conditions.

During a transition to a new system, this method may not fully address the concern that some carriers will start out with a high-risk pool, and, as a result, consumers may not be able to make the best choice from among the more efficient plans.

Implications of Scenario:

1. If carriers are actually judged solely on the basis of efficiency or network coverage, there may be a significant consolidation of carriers within each region.

2. Limited choice of providers/carriers may provoke a (short-term) outcry.

3. Some hospitals will probably shut down, as the remaining carriers gain immense bargaining power. Similarly, physicians may protest carrier capitation/fee offerings and see decreasing incomes.

4. In most regions of the country, system-wide cost will decrease with employee choice in a Managed Competition model since employees can choose the cheapest plan while owners/older employees can choose the plan that includes the providers they prefer.

5. A mechanism for a medical underwriting system might easily become politicized and thus slow to enact, since public discussion may be required before any changes can take place.

6. Services and systems of the HPPC may duplicate carrier services, unless they are contracted out. Even then, carriers may be slow to shed underwriting expense.

7. The HPPC would have no financial risk and, possibly, no incentive to perform risk assessment accurately. However, it is likely that the AHPs would require an audit process.

Iteration 1: Use of standard community rating by the carrier, a mandatory system, and use of an outlier reinsurance system.

Description: The HPPC would require that all qualifying AHPs would use standard community rating for each standard benefit plan offered in the HPPC region. The risk adjustment mechanism would then need to provide for risk transfers based on: (1) demographic differences and (2) health status differences (as described in Basic Scenario).

In the first year, the HPPC would need to specify which risk adjustment factors would be used to calculate the transfers prospectively. After the end of the first year, retrospective true-ups could be made, based on actual experience; then, a revised set of risk adjustment factors would be announced. The outlier reinsurance system would cover both inpatient and outpatient costs on a coinsurance basis, following a large deductible.

Pros:

Health plans will be less able to game the system, as compared with the Basic Model with its up front adjustments. (Demographic factors can be designed in a way that weights older ages too heavily.)

The rating method makes regulation and auditing of health plan rates simpler.

If HPPCs are already collecting self-reported health status data, collection of demographic data will not be difficult.

Outlier reinsurance may provide some protection for small carriers.

Cons:

In the short term, cash transfers will be much larger and much more visible to plans (and possibly to the public) than the effects of the Basic Scenario.

Incentives to manage the most expensive cases will be reduced since plans may allow the costs of care to float up to the levels of the reinsurance deductible.

There is still a subsidy from the more efficiently managed plans to the less efficiently managed plans, if the reinsurance premium does not reflect a differential to account for the extent of medical management.

There are intergenerational transfers.

Implications:

1. The switch to standard community rating does not allow for a transition period from the present rating system(s); some employers could face major changes in their premiums.

2. This iteration may lead to standard community rating for larger employers and thereby diminish the effects of large-employer initiatives such as wellness or nonsmoking programs.

3. Carriers may have some problems during the transition, arising from concerns about the over- or under-adequacy of premium rates.

Iteration 2: Supplemental coverage becomes available from some carriers. Supplemental coverage could include vision, dental, and other health benefits not covered by the standard plan. In all cases, this paper assumes that supplemental coverage would be marketed separately from the HPPC by individual carriers; no direct connection would be allowed by carriers who are qualified as HPPC plans (i.e., supplemental coverage and standard plan cannot be bundled). Three specifically defined versions of this iteration follow as 2a, 2b and 2c.

Iteration 2a: Supplement to a comprehensive standard plan. The comprehensive standard plan has minimal copayments or deductibles (e.g., a plan with \$10 copays and \$100 per admission deductible). All other standard plan benefits are similar to current federally qualified HMO benefit levels.

Pros: Same as Basic Scenario

Cons: Same as Basic Scenario Implications:

1. Minimal benefits remain for the supplemental coverage; the impact on risk selection would be minimal.

2. If the prohibition on comarketing by HPPC plans is deemed or litigated to be illegal, carriers may use marketing of minimal supplemental benefit packages as a means of marketing to specific segments of the population.

3. Since the supplemental coverage would not be subject to risk adjustment, there could be abuses similar to those in the current system.

4. If some carriers are very efficient with a certain population (e.g., seniors) and "make money" on the premiums that have been adjusted for risk, then offering supplemental coverage is a means to gain large market share (e.g., through a prescription drug supplement plan or a special vision plan for the elderly). This could either (1) make the market more competitive, on the basis of efficiency, or (2) ultimately limit the number of truly competitive plans for a certain population segment.

Iteration 2b: Supplement to a comprehensive standard plan without prescription drug or mental health benefits. The comprehensive standard plan has minimal copayments or deductibles (e.g., a plan with \$10 copays and \$100 per admission deductible), but includes no prescription drug benefit and only minimal mental health and substance abuse benefits.

Pros: Same as Basic Scenario

Cons: Same as Basic Scenario

Implications:

1. High supplemental premiums for prescription drug and mental health benefits are likely to be used by some carriers to discourage enrollment of high-risk groups. This may cause remaining carriers to increase their supplemental premium rates to avoid adverse risk selection.

2. If supplemental prescription drug and mental health benefits are offered by only a few of the HPPC carriers, the remaining HPPC carriers may experience favorable selection. If no HPPC carriers are also supplemental carriers, then the problem will not exist for the HPPC.

Iteration 2c: Supplement to a comprehensive standard plan with substantial deductibles and copayments. The comprehensive standard plan has substantial copayments or deductibles (e.g., a plan with \$25 copays and \$500 per admission deductible or a preferred provider organization (PPO) type plan with a \$500 deductible). This iteration may be somewhat more likely to let the HPPC offer a program that is more affordable to small employers.

Pros: Same as Basic Scenario

Cons: Same as Basic Scenario

Implications:

1. Older individuals (who generally are higher utilizers of services) would have more out-of-pocket expense for deductibles and copays.

2. Premiums would be more affordable for small employers, younger employees, and lower-income individuals because benefits are reduced. Fewer people are likely to leave the health care system.

3. Higher deductibles or copays are likely to reduce unnecessary physician utilization.

4. f offered with a higher-benefit "superior" plan, there might be adverse selection. Younger and healthier small groups would choose the higher deductible plans. The cost of coverage for the "superior" plan would increase, which might make this low-deductible/copayment plan unaffordable.

5. Unless preventive care is considered separately, with lower copayments, effective care may be deferred because of its cost.

6. The high deductibles may create more bad debt problems for providers.

Iteration 3: Exclusive coverage by the HPPC is expanded to employer groups of up to 1,000 employees.

Description: Rather than use an upper limit of 50 employees (which would emphasize small-employer purchasing of health coverage), assume that the HPPC mandates coverage for employers with up to 1,000 employees (similar to the conditions included in the legislation introduced by Representative Cooper in the 102nd Congress). All other aspects would remain as described for the Basic Scenario; the self-reported health status questionnaire would be used.

Pros: Same as Basic Scenario

Cons: Same as Basic Scenario

Implications:

1. Larger employers may be pressed to offer the same plans as the HPPC; that could diminish the employer's capacity for aggressive purchasing.

- 2. A larger HPPC would mean more clout in any negotiation.
- 3. Economies of scale may ensure lower administrative cost and, possibly, lower health care costs for all employers.
- 4. More choices of health plans would be offered to more employees.
- 5. The potential size and sheer power of the HPPC render it the focus of immense pressure from interest groups.
- 6. Larger employers (with over 1,000 employees) may have less bargaining power.

7. Multi-state employers would encounter problems in trying to satisfy the disparate rules in the different states. [ERISA self-funding exemption currently eliminates much of this problem.]

Iteration 4: After several years of using health status questionnaires, the HPPC decides to switch to ACGs (or some other prior history method) for risk assessment.

Description: After two years of using self-reported health status (or collection of medical data), the HPPC decides, during its third year of operation, to implement an ACG methodology. (Other prior history methods could be substituted, such as DCGs.) At the beginning of the fourth year of operation, ACGs would be used to determine the risk adjustment payments among the participating AHPs.

Pros:

- Health plans would need to have better data collection systems.
- ACGs appear to be significant in their ability to explain individual level costs.
- The HPPC could require that plans provide ACG data to reduce the HPPC's administrative expense.
- Health plans could use ACGs for better management of resources and studies of physician practice patterns.

Cons:

The ACG data provided by health plans will have to be audited.

Data collection must be standardized and a consensus attained on how diseases will be classified; this could become a practical barrier to implementation in the short to immediate term.

- The method requires data that are not currently collected by many health plans.
- This approach may reward frequent contact with providers and upcoding by providers.
- This method includes no means of differentiating between discretionary versus nondiscretionary services.

This method requires complete recent-encounter history for the preceding 6 to 12 months. This does not work for someone with no recent history (the younger population, for example).

- It may be impractical to calculate risk adjustments on a timely basis if data collection and processing are difficult.
- ACGs currently do not reflect cost and severity of inpatient hospitalizations, (but are being worked on to do so).
- Some plans may need to invest in new information systems.
- Plans that can collect and analyze data more effectively may appear to have a higher-risk population.

Implications: Similar to Basic Scenario

Iteration 5: Standard community rating with maximum premium increase budget cap.

Description: This is similar to Iteration 1, except that all HPPCs are prohibited from allowing qualified carriers to raise rates in excess of some percentage (e.g., 7 percent) of the pre-implementation average community rate. The percentage limitation would be applied on a statewide basis to prevent health care spending in the private sector from increasing in excess of the specified percentage.

Pros: Same as Basic Scenario

Cons: Same as Basic Scenario

Implications:

1. Risk adjustment would be very complex, with several levels of adjustment. For example, the impact of the risk adjustment amount on a given AHP and changes in the plan's risk pool should not be used in determining the budget cap.

2. Percentage limitations are likely to become a very hot issue, with interest groups extremely concerned about maintaining revenue.

- 3. If carriers are not able to manage to the budget cap, solvency could be an issue.
- 4. This could cause considerable growth in low-cost plans.
- 5. Many carriers may exit the market.
- 6. The negative consequences of the approach may lead to the discrediting of the entire risk adjustment process.

7. There will be intense pressure from health plans to pass the burden of meeting the budget cap on to providers. That could lead to wage freezes for workers like nurses, orderlies, etc.

8. Predictable effects on price may be achieved in the short term; however, the effects of a price ceiling on quality of care would be unpredictable.

9. How a premium ceiling would be applied to large employers' self-funded plans is unclear.

10. This approach would promote the creation of many new bureaucracies to ensure compliance with regulations.

STANDARD COMMUNITY RATING MODEL

Introduction

Community rating models aggregate the population to be covered into a single pool. All members of the pool are charged the same premium rate, although some differences from the premium rate may be allowed in limited circumstances. For example, rates may vary by region or metropolitan area, and by family composition.

In this model, the "communities" are defined by statute. For example, one community may consist solely of residents aged 65 and over within a region. Another may be made up of all employees, and their dependents, of all the companies with 50 or fewer employees within a region. Thus, a carrier would assess the same premium rate to each company, regardless of that particular company's past or expected experience. The carrier would be allowed to charge different premiums for different benefits.

There are several variations of community rating. *Standard community rating* is the type of rating just described. *Community rating by class* establishes a rating system based on the relative resource use by different demographic categories. The demographic categories are constructed such that expected resource use is roughly the same for each individual within each category. For example, all adults aged 55–59 will have a relatively higher expected resource use than the class of all children under age 18. A carrier will look at the demographic profile of potential enrollees from each employer group and develop a composite premium rate based on the proportion of enrollees in each class. Thus, each group with the same demographic distribution will receive the same premium rate.

Adjusted community rating accounts for the historical resource use by a group's enrollees, as compared with the entire community; it is done on a prospective basis.

Experience rating accounts for the past experience of a group and may be used in a prospective or retrospective fashion.

One or more of these four types of rating are used by health carriers today; different methods are selected depending on the size of the employer group (number of employees). Most carriers will use adjusted community rating or experience rating for the larger employer groups, since the law of large numbers makes the experience of these groups more credible.

Role of Risk Adjustment in a Standard Community Rating Model

Risk adjustment is needed if the goal of an efficient health care system is to transfer payments between carriers to reduce or eliminate the effect of variations in the risk pools.

In a given market today, there may be some carriers using standard community rating with open enrollment underwriting, while other carriers are doing experience rating and using medical underwriting to exclude high-risk individuals. Since it is unlikely that, on the effective date of a new program, there would be massive shifts of insureds among carriers, a given carrier's population enrolled as of the effective date of a new legislated system would be the driver of that carrier's community rate. Thus, the carrier that has been doing standard community rating and open enrollment underwriting will be likely to have a higher rate on the effective date than the carrier that had previously been doing experience rating and medical underwriting, unless a risk adjustment mechanism is used.

In addition, certain carriers may attract the higher risks in response to the features included in their benefit design (e.g., coverage for benefits like prescription drugs) or their network design (e.g., inclusion of certain specialists in the network).

Description of the Model

1. Individual and small group market only. — This model will include only individuals with coverage purchased individually or through small employers of 50 or fewer employees.

2. No HPPC. — In this model, the state insurance department performs some of the roles that the HPPC performs in the Managed Competition scenario.

3. No mandated coverage. — The model does not include an employer mandate to require purchase of health insurance coverage. Similarly, individuals would not be required to purchase insurance. No alternatives to the legislated rating and underwriting provisions are possible (i.e., through MEWAs, ERISA self-insured plans, separate individual insurance policies, etc.)

4. No standard benefit plans. — As in the current system, a wide choice of benefit plans would be available. A given state might have provisions concerning certain mandated benefits that must be offered as part of any insurance plan.

5. Annual open enrollment and guaranteed issue and renewability. — There are no requirements for an annual open enrollment period. Guaranteed issue and renewability of coverage are required except in the instance of fraud, nonpayment of premium, etc.

6. Minimum exclusions for preexisting conditions. — Preexisting condition provisions cannot exclude coverage for a period in excess of 12 months after the effective date of coverage for the covered person and may relate only to conditions manifesting themselves in symptoms that would prompt a person to seek medical care, or for which care was recommended or received during the six months immediately preceding the effective date of coverage or a pregnancy existing on the effective date of coverage. Time must be credited for coverage under previous health plans, including both insured and self-insured plans, as long as (1) the break in coverage is 60 days or less and (2) the benefits of the previous plan are substantially similar to those in the new plan. If the benefits are not substantially similar, the credit applies to the extent of the prior coverage. For individual coverage, HMOs may delay the effective date of coverage for a waiting period of up to 60 days from the date the application for coverage is submitted.

7. Restrictions on health plan rates. — Health plan rates may vary only by geography (for prescribed areas) and family composition.

8. No federal tax cap. — Current federal and state tax code regarding health insurance deductions is assumed to be unchanged.

9. Minimum required employer contribution. — A carrier may establish minimum employer contributions as an underwriting restriction.

10. Minimum required employee participation. — As required in the New York State legislation, a non-HMO carrier may establish a minimum required participation by employees as an underwriting restriction, but must consider <u>all</u> plans. HMOs must accept a single individual.

11. Data submission and quality assurance. — There are no such requirements, but there are disclosure and rate filing requirements.

Basic Scenario: A combination of an age/sex risk adjustment process and specific-condition reinsurance.

Description: The composite demographic factor of each carrier's community(s) (such as the blocks of small group and individual insurance) serve as the basis for payment to or from regional pools. Factors are based on the demographic (age/sex) characteristics of the enrollees. (See example in Technical Appendices.)

Based on the composite demographic factor, interim payments are made quarterly, on a prospective basis, to assist carriers with their cash flow. There is an annual retrospective reconciliation. In the New York State program, a carrier with a relatively young population will have to make a payment to the pool and is allowed to pass this payment on to the members by adding it to the premium rate. Under the New York regulations, the carrier is not required to do this, however, so the carrier may choose to cover the payment from other sources.

In contrast, if a carrier has a relatively older population, it will receive a payment from the pool, and New York requires that these payments be passed on directly to the members in the form of reduced premium rates.

It is difficult to estimate the magnitude of the transfers, but they could be as much as 3 percent to 15 percent of premium. Over time, if the demographic characteristics of the enrolled population across carriers reached an equilibrium, the transfers could be minimal.

The use of reinsurance for high-cost episodes of care is another method of adjusting for differences among the differing risk populations of carriers. Reinsurance thresholds can be triggered in different ways—for example, by a specified level of hospital expenditures or by certain medical conditions, such as heart transplants.

The New York State regulations establish a reinsurance mechanism to spread the costs of the catastrophic cases over the entire population impacted by the legislation. New York's approach is to identify a short list of conditions that consume sizable amounts of health care resources.

Contributions to these reinsurance pools may be mandatory from all carriers, or voluntary. The contribution is added to the basic community-rated premium and may be either a flat-dollar amount or a percentage of the total premium, so that richer benefit packages require a larger sum. In New York, contributions are mandatory from all carriers and are flat per-single or per-family amounts that vary only according to the richness of the coverage.

Payments from the reinsurance pool are retrospective, based upon the actual occurrence of the reinsurable incident. New York's list includes most organ transplants and certain chronic conditions, including AIDS and conditions that lead to ventilator dependency for more than 30 days. Payments are either lump sums or monthly amounts, but no more than a carrier has paid in claims.

Pros:

This is a conceptually simple approach.

It is relatively practical to administer; it uses data that are available and verifiable.

- It is probably inexpensive to administer.
- It is based on well-established concepts within the insurance industry.

■ It is designed to discourage gaming. The reinsurance mechanism is designed to prevent "upcoding," since the conditions included within it were selected so as to avoid discretionary ones.

The retrospective element adjusts for inaccuracies in the prospective estimates of demographics.

Fixed payments encourage efficiency, if they were set at appropriate levels.

Cons:

The method does not adjust for adverse selection based on risk unrelated to age and sex except through the reinsurance pool.

It creates intergenerational subsidies.

The demographic factors do not vary with different benefit mixes; this may render risk adjustment amounts inaccurate.

Since enrollment after implementation is difficult to predict, premium rates, particularly in the first year, may be too high or too low. If they are too low, there may be high enrollment, thus increasing financial concerns about the carrier's solvency.

Since carriers are not required to modify the premium rate for the risk adjustment amounts (if they would increase the premium rate), and since the benefits are not standardized, the consumer cannot compare the relative efficiency of delivery systems, based on the premium rates required of each.

Implications:

1. Certain specified condition pool payments — those that require a threshold number of days of treatment for payment of a lump sum — will encourage carriers to extend care by a few days to reach those thresholds, even when more care is not medically necessary.

2. Carriers may still have incentives to select the best risks through benefit design (e.g., omit prescription drugs) or network design (e.g., create networks that exclude particular specialties).

3. Insurers may leave the impacted market, as several have already done in New York, particularly if they are able to operate under a different system in other states.

4. There will be reduced premium rate variations among insurers.

5. Carriers previously using community rating by class or experience rating may shadow price any current communityrated insurer. Actuarial certification of rates could help enforce statutory financial goals (such as minimum loss ratios).

Iteration 1: Community rating by class (demographic rating) and outlier reinsurance system

Description: Change the rating from standard community rating to community rating by class. Replace the specified condition pool with a voluntary outlier reinsurance mechanism. The outlier reinsurance system would cover both inpatient and outpatient costs on a coinsurance basis, following a deductible.

Pros:

The coinsurance provides an incentive to manage care over the reinsurance deductible.

By including outpatient costs, the outlier mechanism covers people treated in ambulatory settings.

Cons:

There is no rigorous adjustment to allow comparisons of plans according to their relative medical and administrative efficiency.

Incentives to manage the most expensive cases will be reduced since plans may allow the costs of care to float up to the levels of the reinsurance deductible.

There is still a subsidy from the more efficiently managed plans to the less efficiently managed plans, if the reinsurance premium does not reflect a differential for the degree of medical management.

STATE REINSURANCE MODEL

Introduction

This scenario is based on model legislation developed by the National Association of Insurance Commissioners (NAIC). Under this approach, reinsurance can be purchased for groups or for particular individuals within groups. Here, this scenario will be described as applying to small employer groups of fewer than 25 employees. The discussion will also be confined to the non-Medicare working population (i.e., individuals covered under Medicare Supplement programs, government programs such as Medicaid, etc. are excluded).

The applicability is further restricted to employer-provided health insurance. Thus, if individual policies were provided for all employees of an employer of the applicable size range, and the employer contributed in some way to the cost of these individual policies, the law would apply. In addition, this model provides reinsurance coverage for new enrollees only.

The NAIC model regulation provides for two models — a reinsurance model and an allocation model. Allocation models are used today for automobile insurance and workers' compensation; typically they employ random assignment to carriers. No state has yet enacted an allocation model for health insurance. But an allocation approach could still result in an uneven distribution of risks. However, such a method would involve less administrative burden than the reinsurance model. It also would provide greater incentives for managing care. However, inefficient carriers could be selected by high-risk cases.

The remainder of this scenario will deal with the reinsurance model, similar to the one adopted by about 20 states.

Description of the Model

1. Small group market only. — This model includes small groups of 25 or fewer employees.

2. No HPPC. — This scenario contains no provision for a HPPC and assumes that there are multiple carriers in a given market.

3. No mandated coverage. — It is assumed that there is no requirement for an employer to provide health insurance and no requirement for a given employee to purchase insurance. In addition, it is assumed that associations, MEWAs, ERISA, and Taft-Hartley plans including employers of the applicable size range are subject to the legislation. (If this were not so, a tremendous loophole to the system would exist.)

4. Reinsurance method and benchmark plans . — There would be one or more benchmark plan designs established. These plans serve two purposes: (1) carriers are required to provide guaranteed issue for the benchmark plan(s), and (2) the reinsurance payment mechanism adjudicates the claim on the basis of the benchmark plan, even though the actual plan in question may have greater benefits. (Generally, if the actual plan provides lesser benefits, the reinsurance would then adjudicate on the basis of the actual plan. This could occur, for instance, if a high-risk individual is added to an existing group that happened to have lesser coverage than the benchmark.) Note that, generally, separate benchmark plans are needed for indemnity plans and for HMO plans, because they have different characteristics. There would usually be a reinsurance committee, or board, at the state level established to operate the reinsurance plan, which includes designing the benchmark plan as well as determining the reinsurance premium rates.

Here are some examples of benchmark plans. For instance, there might be a minimum, as well as a richer, benefit design for both indemnity and HMO products. The minimum indemnity plan might have a \$500 deductible, 60/40 coinsurance benefit, and a calendar year maximum of \$50,000. The richer plan might have a \$500 deductible, 80/20 coinsurance, out-of-pocket maximum of \$1,500, and a lifetime maximum of \$1 million. For the HMO, the minimum plan might be the state-mandated minimum benefit package.

The benchmark plans are usually used for new business that is offered on a guaranteed-issue basis. Other plans may be offered and medically underwritten. So that all the existing business will not be forced to change benefit designs on the effective date of the legislation, a special provision is needed for new employees (new hires) and new additions to the insured group of a given employer. For example, these additions to the insured group may be new spouses or the birth of a child. They would be insured for the existing plan of benefits provided by the employer but reinsured for the benchmark plan. For example, if the employer provides a plan with a \$50 deductible and 80 percent coinsurance, the employee's claim is paid on this basis. But if the benchmark plan has a \$500 deductible and 50 percent coinsurance, the carrier retains the risk for the additional \$450 deductible and 30 percent coinsurance (as well as the carrier's reinsurance deductible, which applies to the reinsurance plan — usually set at \$5,000).

5. Annual open enrollment and guaranteed issue and renewability. — There is no required annual open enrollment period. As mentioned previously, guaranteed issue is required for the benchmark plans. Renewability must occur, except in the case of fraud or nonpayment of premium.

6. Minimum exclusion for preexisting conditions, with portability. — Portability of coverage is provided: i.e., an insured who was previously covered by a group or individual plan providing benefits at least at the level of the lowest benchmark plan, with less than a 30-day lapse in insurance coverage, must be insured without application of a preexisting condition clause. This provision is intended to prevent an individual from deferring the purchase of insurance until it is needed because of illness; it also helps to prevent "job lock-in." If an employer purchases a plan other than the benchmark plan(s), restrictions of benefits can be applied for preexisting conditions.

7. Restriction on health plan rates. — Rate variation is permitted to match certain risk characteristics with premium rates, subject to limits. The full actuarial value of differentials due to age/sex, family composition, case size, and geography is permitted. Generally, further risk classification by class is allowed (up to nine different classes). These classes account for different underwriting techniques used in the past, the takeover of a class of business by a carrier, etc. Within a given risk class, a variation of 1.67 to 1 is permitted to reflect experience and health status. There is a 2 to 1 limit on premium variation for experience and health status across classes. A further rate adjustment of up to 15 percent is permitted for industry classification. Premium differentials for benefit variations are based on actuarial adjustments. Of the three models presented in this paper, this model provides the greatest degree of matching between the risk characteristics of the insured group and the premium charged, since it allows the largest amount of variation in premium rates (i.e., up front risk adjustment).

8. No federal tax cap. — Current federal and state tax code regarding health insurance deductions is assumed to be unchanged.

9. Minimum required employer contribution. — Carriers may establish minimum required employer contributions.

10. Minimum required employee participation. — Carriers may attempt to reduce risk selection effects by requiring certain participation standards; e.g., 70 percent or 100 percent of the employees of a given employer must be participants in the particular health plan.

11. Data submission and quality assurance. — There are no data submission or quality assurance requirements. Generally, there are annual disclosure and actuarial certification requirements.

Basic Scenario: Reinsurance system for new business.

Description: Each carrier quoting on a new employer-group prospect would medically underwrite each individual and then cede individuals or groups to the reinsurance pool. The reinsurance generally includes its own deductible and coinsurance features. For example, payment might be based on 90 percent of the "claim," up to a limit, following a reinsurance deductible of \$5,000 (where the "claim" is based on the benchmark plan design). Thus, the carrier is responsible for the first \$5,000, plus 10 percent of the next \$50,000.

There are no uniform standards for medical underwriting; thus, each carrier sets its own standards for ceding individuals or groups to the reinsurance pool. Typically, the reinsurance rates are higher than the carrier's gross premium, so there is an incentive to avoid submitting marginal cases.

Most carriers use a short-form questionnaire for medical underwriting, which asks questions about recent medical history. An attending physician's statement may be requested by the underwriter, and in some instances a physical exam (or blood and urine tests) may be requested.

Pros:

Due to the rating variables permitted, there is limited inter-regional or intergenerational subsidy.

- Medical underwriting is an established mechanism currently used by many carriers.
- The methodology works for individuals not previously insured.
- There are fewer incentives for carriers to select risks than at present in the absence of such a reform model.

Use of the up front rating adjustments is likely to make premiums for young and healthy groups less costly and promote more coverage, or at least less coverage reduction, compared to rating methods with less variation.

Cons:

The risk adjustment method gives an advantage to carriers new to a particular market, without an existing risk pool of possibly poorer risks. The mechanism does not address the transition issue caused by the disparity in the nature of risk pools as of the effective date. Thus, premium rates will reflect the existing risk pools, since a carrier's in-force block of business will carry much greater weight than the incremental amount of new business it acquires each year. As a result, consumers will continue to see lower premium rates as a consequence of better risk pools as opposed to lower premium rates due to better medical and administrative efficiency.

The case size adjustment can be used to avoid the highest-risk part of the market. For example, if a carrier rates groups of less than 10 employees at a rate that is 50 percent higher than groups of 10 to 25 employees, that carrier can effectively avoid insuring the smallest size groups. (Presumably, insurance departments would disallow this.)

As a consequence of the medical underwriting process, employees may worry about possible disclosure of certain medical conditions to their employers.

Medical underwriting is not feasible if the mandated group size is too large.

The risk adjustment method does not provide incentives to the carrier to manage care, since the carrier that is most efficient at managing care collects the least from the reinsurance pool. (Some states attempt to correct for this by using a discount mechanism on reinsurance premium rates for managed care carriers.)

■ HMOs using capitation may be over- or under-compensated via reinsurance. For example, HMOs using capitation reimbursement methods can be over-compensated through the reinsurance mechanism if the reinsurance pool reimbursement is based on discounted charges. If the capitation payment is considered to be the "paid claim," then the HMO may end up with a provider reimbursement problem.

The individual or group may feel that some stigma attaches to needing reinsurance.

Carriers not currently performing medical underwriting need to start doing so for reinsurance purposes, thus adding to overall administrative costs.

The underwriting process extends the time frame required for a carrier to prepare a quotation for a prospect.

If the reinsurance mechanism is voluntary, carriers who participate in it have an incentive to direct poorer risks to the carriers that elect not to participate in the reinsurance pools and vice versa.

Implications:

1. Over time, there may be a shift away from standard community rating, as carriers that were previously using standard community rating will introduce rating variables like demographics to avoid adverse selection.

2. The method may encourage groups to shift from carrier to carrier, thus adding to administrative costs (offset somewhat by the inability of a carrier to "lowball" first-year rates).

Iteration 1: Reinsure existing business as well as "new business."

Description: The reinsurance program would be extended to existing business.

Pros:

■ This approach helps the transition problem described previously that would result from differences in carriers' different risk pools on the effective date of the reform. In many states, this is a consequence of the legislative environment. Blue Cross and Blue Shield plans, for example, were required to community-rate and provide open enrollment, while these requirements were not imposed on other carriers. With this modification, such carriers can cede their existing high risks to the pool.

Cons:

The number of individuals in the reinsurance pool will increase. Potentially, this could give rise to problems with premium adequacy, like those that now plague many of the "high risk" automobile insurance pools.

Entails a tremendous administrative burden and cost to classify the existing business for the reinsurance pool.

This strategy may, arbitrarily, mean windfall rewards for poorly managed plans.

Iteration 2: Coverage is expanded to employer groups of up to 1,000 employees.

Description: Coverage is expanded to employer groups of from 1 to 1,000 employees.

Pros:

Similar to Basic Scenario plus

Most likely the addition of the larger groups to a given carrier's risk pool will lead to less disparity among carriers.

Cons:

Similar to Basic Scenario plus

The employers that have been benefiting from experience-rating (i.e., employers with lower costs than "average") will not support efforts that combine their favorable experience with the often less-favorable experience of the smaller groups.

Experience-rating is used by almost all carriers today, for the larger groups, with varying degrees of "credibility" applied to the past experience, generally dependent on the size of the group. Typical credibility applied to experience might range from 25 percent for a 25-employee group with one year of experience to 100 percent for a 400-employee group with one year of experience.

TECHNICAL APPENDICES

Comparison of Basic Scenarios

Pros and Cons of Issues Common to All Scenarios

Estimated Rating Variations of the Scenarios

Example of Risk Adjustment

Example of Carrier Transfer Based on Demographic Data

RAND 36-Item Health Survey 1.0

State Reinsurance	Small groups of 25 or fewer employees	No	No	Yes (for benchmark plans)	 No requirement for open enrollment Standard set of preexisting condition limitations Portability 	Variables of age/sex, geography, family composition, industry, size, experience. Limited to actuarial value for age/sex, geography, family composition and size; 15% for industry: ±25% for experience within class; 20% for experience between classes (i.e., 2.0 to 1 for experience). Both administrative and claims cost differentials must be included within these limits.	None	Carrier may establish	Carrier may establish	Filing may be required	Reinsurance mechanism (new business versus existing)	Medical underwriting to determine individuals or groups in reinsurance pool	No
Standard Community Rating	Individual and small groups with 50 or fewer employees	Νο	No	No	 No requirement for open enrollment Standard set of preexisting condition limitations (HMOs may delay effective date) Portability 	Variables of geography (prescribed), and family composition. Limited to actuarial value	None	Carrier may establish	Non-HMO carrier may establish but must consider all plans. HMOs must accept single individual	Filing may be required	Avoid rate shock Estimate demographic factor	Demographic factors used to determine prospective carrier transfers and reinsurance for specific high cost conditions	Yes, if condition on specified condition list
Managed Competition	Individual and small employer groups with 50 or fewer employees	Yes, and exclusive for the market segment	No	Yes	 Annual open enrollment Standard set of preexisting condition limitations Portability 	Variables of age/sex, geography, and family composition. Limited to actuarial value	None	HPPC may establish	HPPC may establish	HPPC may establish	Avoid rate shock	For illustrative purposes, self-reported health status questionnaire or medical underwriting process used to determine prospective carrier transfers	No
	Market Segment	Use of HPPC (Health Plan Purchasing Coopcrative)	Mandated Coverage	Standardized Benefit Plans	Annual Open Enrollment and Guaranteed Issue and Renewability	Rate Variables and Limits	Federal Tax Cap	Minimum Required Employer Contribution	Minimum Required Employee Participation	Data Submission and Quality Assurance	Transition Issues	Risk Assessment and Risk Adjustment Methods	Risk Adjustment of High Cost Cases Due to Accidents or Where No Prior Symptoms

COMPARISON OF BASIC SCENARIOS

PROS AND CONS OF ISSUES COMMON TO ALL SCENARIOS

	PROS	CONS
Guaranteed Issue	Provides access to all	Will increase premiums in situations where high risk cases are currently excluded
Mandatory Enrollment	 Reduces uncompensated care burden Eliminates adverse selection caused by a voluntary system where the best risks generally choose to avoid the insurance premium expense 	Forces insurance premium expense for individuals and businesses that are not currently in the insurance system
Preexisting Condition Clause	 Allows carriers to avoid immediately covering those who remain uninsured until illness strikes, within a voluntary system Provides an incentive for individuals to purchase insurance while healthy 	Does not allow federally qualified HMOs to avoid risks who remain uninsured until medical services are needed (75% of the HMO population is with federally qualified HMOs). Federal qualification does not allow application of a preexisting condition clause.
Intergenerational Transfers and Community Rating	Spreads costs over all equally	 Increases costs for young to subsidize the elderly. This often creates a subsidy from those with less income to those with more income, since earnings generally increase with age. Decreases incentives for employers and individuals to participate in programs, such as wellness programs which are designed to reduce costs
Coverage for Uninsured	Guaranteed issue will have a small positive impact on uninsured in states where high-risk individuals are currently excluded and there is no carrier doing open enrollment or a state high- risk pool	Since a low income subsidy mechanism was not addressed, none of these scenarios will have a major impact on the number of uninsured, who are uninsured due to affordability
Rate Impact	Narrowing of rate band variation will create more rate stability for most carriers in years two and later, following reform	 Risk charges by carriers may increase in the short term because of uncertainty of any new system Rates will increase due to impact of open enrollment and narrowing of rate variations
Risk Assessment and Risk Adjustment Method	Promotes competition on basis of medical and administrative efficiency, rather than risk selection	Any risk assessment and risk adjustment methods will add to the administrative costs of the system
State Flexibility	Recognizes the differences in the regional markets	State flexibility adds considerable complexity for multi-state employers

ESTIMATED RATING VARIATIONS OF THE SCENARIOS (WITHIN A GEOGRAPHIC REGION AND PLAN DESIGN)¹

Managed Commetition	6 16	5:1
monthing and monthing	C'7 - C'	
Standard Community Rating	1.0 2	131
State Reinsurance	.4 - 4.3 3	11.5:1
Notes:		
Assumes under age 65 population	on only. Variation shown is within a specific rate tie	r for family composition category.
² Does not include impact of: (a) separate rates for individuals vs.	allowing separate community rates for associations o small groups.	f at least 10,000 persons; and, (b) allowing
 Based on: .5 - 2.5 for age/sex; .75 - 1.25 for experience within 1.0 - 1.20 for experience betwee 1.0 - 1.15 for industry; excludes impact of size. 	a class; m classes;	

EXAMPLE OF RISK ADJUSTMENT¹

	CARRIER A	CARRIER B
a. Premium Rate Charged Today (No Risk Adjustments)	\$95.00	\$94.50
b. Relative Risk(Market Average = 1.00)	.95	1.05
c. Average Risk Rate (a/b)	100.00	90.00
d. Risk Adjustment Based on Lowest Average Risk Rate	-4.50	4.50
e. Premium Rate Accounting for Risk Adjustment	\$99.50	\$90.00

¹ Assumes that Carrier A and Carrier B each insure 50 percent of the market.

EXAMPLE OF RISK ADJUSTMENT

This is an example of how a risk adjustment mechanism might be used to determine a transfer between carriers in an environment of mandated standard community rating. The example assumes there are only two carriers in a certain market, each with a market share of 50 percent. The steps below refer to the numerical example on the previous page.

(a) Premium Rate Charged Today (No Risk Adjustments)

Carrier A and Carrier B each determine a standard community rate. To keep the example simple, we have used a single rate for each carrier. In reality, each carrier would have rates that reflect family composition, plan design, and geography. Most carriers will develop these rates using the risk characteristics on their in-force risk pools, assuming that most of their insureds will not migrate to another carrier.

In today's environment, the purchaser presumes that Carrier A and Carrier B are equally efficient managers of medical care.

(b) Relative Risks (Market Average = 1.00)

Through one of the various risk assessment models, such as age/sex factors, use of the Rand-36, or use of an ACG or DCG model, it is determined that Carrier A's risk pool is 5 percent better than the market average (relative risk factor .95), while Carrier B's risk pool is 5 percent worse than the market average (relative risk factor 1.05).

(c) Average Risk Rate (a/b)

The standard community rate of step (a) is adjusted so as to represent the rate that would be charged by each carrier if the entire market were insured with that carrier. This is done by adjusting each carrier's rate to the market average risk factor of 1.00.

(d) Risk Adjustment Based on Lowest Average Risk Rate

The risk adjustment is determined as the difference between each carrier's relative risk factor and the market average risk factor, applied to the lowest average risk rate. In this example, Carrier B has the lowest average risk rate: \$90.00. Carrier A is 5 percent below the market average relative risk factor, so the adjustment for Carrier A is determined like this:

$$(.95-1.00) \ge 90.00 = -4.50$$

Next, adjustment for Carrier B is developed as:

 $(1.05 - 1.00) \ge 90.00 = 4.50$

These adjustments mean that Carrier A, which has the better risk pool, must transfer money to Carrier B, which has the poorer risk pool.

(e) Premium Rate Accounting for Risk Adjustment

In this example, a requirement is assumed that the transfer amount developed in step (d) be factored into the original premium of step (a). Thus, Carrier A, which needs to fund a premium transfer, would need to increase the \$95.00 premium rate by \$4.50 to arrive at an adjusted premium rate of \$99.50. Similarly, Carrier B, which is receiving a transfer, needs to account for this transfer by lowering the original premium rate of \$94.50 to \$90.00. These adjusted premium rates do not exactly equal the average risk rates of step (c), since we used the lowest average risk rate as our base in determining the Risk Adjustment. One could as well have used a market average rate, but doing so would penalize the most efficient carrier with the best risks, who is required to make a transfer to other carriers.

The premium rates we see in step (e) now reflect the fact that Carrier B is more efficient than Carrier A, by roughly 10 percent, a fact that was previously masked to the consumer by the influence of the differing risk pools in the step (a) premium rates.

Note as well that if the adjustments of step (e) are not a requirement, the market price will be distorted. For example, if Carrier A is permitted to fund the transfer from surplus, then the premium rates would no longer reflect the relative efficiencies of the two carriers. In this case, Carrier A's premium rate would be \$95.00, and Carrier B's premium rate would be \$90.00. Thus, it would appear to the consumer that Carrier B is 5 percent more efficient than Carrier A, even though Carrier B is actually 10 percent more efficient than Carrier A.

EXAMPLE OF CARRIER TRANSFER BASED ON DEMOGRAPHIC DATA

The following example is based on the demographic factors contained in New York Regulation No. 146, for policies other than Medicare Supplement Insurance. The example is simplified, since it does not account for geography differentials or benefit plan differentials.

The demographic characteristics of the risk pools of Carriers A and B, each assumed to have 50 percent of the market, are shown below:

		CARRIER A				
Age of Family Unit	FamilyFamilyFamily Units withUnits withFamily Units WithCoverage of a SingleDependentsCoverage of a SingleIndividualCoverageIndividual			Family Units with Dependents Coverage		
	Male	Female		Male	Female	
Under 30 30-39 40-49 50-54 55-59 60-64 Over 64 (Medicare Primary) Over 64 (Medicare not Primary)	50 50 100 50 20 10 5 5	90 70 20 40 10 5 3	10 80 200 130 30 20 -	30 70 90 100 30 30 10	10 20 80 90 80 10 5	40 90 65 30 40 50 10
TOTAL	290	240	470	370	300	330
Annualized Premium	\$3,500,000			\$3,000,000		

The table of factors as provided by the New York regulations is:

TABLE OF AGE/SEX FACTORS

(For other than Medicare Supplement Insurance)

Age ¹ of Family Unit	Family Individual	Units with (Family Units with Dependents Coverage (e.g., Employee Plus Spouse and Children			
	Claim	Claim Factor	Premium Factor			
	Male	Female	Male	Female		
Under 30	0.54	1.06	1.14	1.14	2.10	2.80
30-39	0.70	1.21	1.14	1.14	2.60	2.80
40-49	1.15	1.35	1.14	1.14	2.70	2.80
50-54	1.50	1.60	1.14	1.14	2.80	2.80
55-59	1.80	1.90	1.14	1.14	3.70	2.80
60-64	2.36	2.17	1.14	1.14	4.20	2.80
Over 64	0.90	0.90	1.14	1.14	1.80	2.80
(Medicare Primary)						
Over 64	3.14	2.77	1 14	1.14	4.80	2.80
(Medicare	5.11	2.77				
Not						
Primary)			-			

¹ Age is determined like this: calendar year for which the calculation is being made, minus calendar year of birth.

Following the instructions in the New York law, we perform the following calculations:

(1) Determine claim factors and premium factors.

	CARRIER A	CARRIER B
Claim Factor	1968.99	1940.25
Premium Factor	1920.20	1687.80

(2) Divide the total claim factor by the total premium factor. This is the desired average demographic factor.

	CARRIER A	CARRIER B
Average Demographic Factor	1.025409	1.149573

(3) Weight the carriers by their total annualized premiums as of the calculation date.

Average Demographic Factor for Pool = 1.082715

(4) *Carrier A* pays to the demographic pool:

(-1)x(PLR)x(1- <u>Average Demographic Factor of Carrier A</u>) x Annualized Premium Average Demographic Factor for Pool

 $= (-1) \times (.80) \times (1 - (1.025/1.083)) \times \$3,500,000 = -\$148,200$

Where PLR is the Projected Loss Ratio for Carrier A; for purposes of this example it is assumed to be 0.80.

Carrier B collects from the demographic pool:

(-1)x(PLR)x(1- <u>Average Demographic Factor of Carrier B</u>) x Annualized Premium Average Demographic Factor for Pool

 $= (-1) \times (.80) \times (1 - (1.150/1.083)) \times 3,000,000 = 148,200$

Where PLR is the Projected Loss Ratio for Carrier B; for purposes of this example it is assumed to be 0.80.

The RAND 36-Item Health Survey 1.0

The RAND 36-Item Health Survey 1.0 is a short, self-administered questionnaire that provides a generic (non-disease-specific) measure of patient functioning and well-being. Easily completed by participants in a randomized, controlled clinical trial or by patients during an office visit or over the phone, it is designed to be a practical tool that physicians and researchers can use to monitor progress and assess outcomes in treatment.

Questions prompt the patient to describe his or her own physical functioning, bodily pain, limitations due to physical health problems and/or personal or emotional problems, general mental health, social functioning, energy/fatigue levels, and general health perceptions. The survey also includes an item that asks for the patient's perception of change in health status. The survey questions are the same as those identified as the MOS SF-36 in the June 1992 issue of Medical Care, but the scoring is slightly different.

The RAND short-form survey was adapted from longer questionnaires completed by patients participating in the Medical Outcomes Study. Begun at RAND in 1986, the MOS is a large-scale, publicly funded examination of how patients fare in the U.S. health care system. An overview of the study and a comprehensive account of the various outcome measures developed by the researchers are contained in a RAND book, *Measuring Functioning and Well-Being: The Medical Outcomes Study Approach*, available through Duke University Press.

1. In general, would you say your health is:

(Circle One Number)

Excellent	1
Very good	2
Good	Ŝ
Fair	4
Poor	5

2. Compared to one year ago, how would you rate your health in general now?

(Circle One Number)

Much better now than one year ago	1
Somewhat better now than one year ago	2
About the same	3
Somewhat worse now than one year ago	4
Much worse now than one year ago	5

The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

(Circle One Number on Each Line)

		Yes, Limited <u>a Lot</u>	Yes, Limited <u>a Little</u>	No, Not Limited <u>at All</u>
3.	Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports	1	2	3
4.	Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	1	2	3
5.	Lifting or carrying groceries	1	2	3
6.	Climbing several flights of stairs	1	2	3
7.	Climbing one flight of stairs	1	2	3
8.	Bending, kneeling, or stooping	1	2	3
9.	Walking more than a mile	1	2	3
10.	Walking several blocks	1	2	3
11.	Walking one block	1	2	3
12.	Bathing or dressing yourself	1	2	3

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During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? (Circle One Number on Each Line)

		Yes	No
13.	Cut down the amount of time you spent on work or other activities	1	2
14.	Accomplished less than you would like	1	2
15.	Were limited in the kind of work or other activities	1	2
16.	Had difficulty performing the work or other activities (for example, it took extra effort)	1	2

. . .

During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

(Circle One Number on Each Line)

17	Cut down the amount of time you spent on	<u>Yes</u>	No
17.	work or other activities	1	2
18.	Accomplished less than you would like	1	2
19.	Didn't do work or other activities as carefully as usual	1	2

20. During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

(Circle One Number)

Not at all	1
Slightly	2
Moderately	З
Quite a bit	4
Extremely	5

21. How much bodily pain have you had during the past 4 weeks?

(Circle One Number)

None	1
Very mild	2
Mild	З
Moderate	4
Severe	5
Very severe	6

22. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?

(Circle One Number)

Not at all	1
A little bit	2
Moderately	3
Quite a bit	4
Extremely	5

These questions are about how you feel and how things have been with you **during the past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the past 4 weeks . . .

(Circle One Number on Each Line)

		All of the <u>Time</u>	Most of the <u>Time</u>	A Good Bit of <u>the Time</u>	Some of the <u>Time</u>	A Little of the <u>Time</u>	None of the <u>Time</u>
23.	Did you feel full of pep?	1	2	3	4	5	6
24.	Have you been a very nervous person?	1	2	3	4	5	6
25.	Have you felt so down in the dumps that nothing could cheer you up?	1	2	3	4	5	6
26.	Have you felt calm and peaceful?	1	2	3	4	5	6
27.	Did you have a lot of energy?	1	2	3	4	5	6
28.	Have you felt downhearted and blue?	1	2	3	4	5	6
29.	Did you feel worn out?	. 1	2	3	4	5	6
30.	Have you been a happy person?	1	2	3	4	5	6
31.	Did you feel tired?	1	2	3	4	5	6

32. During the **past 4 weeks**, how much of the time has your **physical health or emotional problems** interfered with your social activities (like visiting with friends, relatives, etc.)?

(Circle One Number)

All of the time	1
Most of the time	2
Some of the time	3
A little of the time	4
None of the time	5

How TRUE or FALSE is each of the following statements for you?

		(Circle One Number on Each Line)					
		Definitely <u>True</u>	Mostly <u>True</u>	Don't <u>Know</u>	Mostly <u>False</u>	Definitely <u>False</u>	
33.	I seem to get sick a little easier than other people	1	2	3	4	5	
34.	I am as healthy as anybody I know	1	2	3	4	5	
35.	I expect my health to get worse	1	2	3	4	5	
36.	My health is excellent	1	2	3	4	5	

GLOSSARY

Ambulatory Care Groups (ACGs)

This is a model that uses age/sex, and ICD-9 diagnoses assigned during ambulatory care to classify risks. It was developed by Jonathan Weiner and others at Johns Hopkins University.

Accountable Health Plan (AHP)

In a managed competition model, a plan certified by a Health Plan Purchasing Cooperative (see definition of HPPC) satisfying certain requirements such as financial, quality, etc.

Assigned Risk Pool (Reinsurance)

A market device that provides insurance for entities that cannot obtain coverage from an insurer on a voluntary basis, by sharing premiums and losses for such entities among insurers participating in the pool.

Basic Plan

A standard benefits package that provides basic medical care with limited coverage. Additional medical benefits may be superimposed.

Bias

Non-random errors in a statistical process; i.e., errors that tend to go in one direction.

Carrier

This includes insurers, HMOs, service plans, and PPOs.

Churning

Tendency of insureds to lapse their current policies or switch carriers very frequently (as often as every year, generally at renewal) to purchase new policies, usually at a lower premium rate.

Classifying Risks

See "Risk Classification."

Community Rating

A method of rating that produces identical rates for all members of an identified pool or class, based on the expected costs for these members as a group. Standard community rating allows rates to vary for family status, geography, and plan design. Community rating by class adds new factors, age and sex to the standard community rating factors. Adjusted community rating refers to the addition of several more

factors — past experience, duration of coverage, and/or health status — and is used to set rates prospectively.

Diagnostic Cost Groups (DCGs)

This is a prior history model that uses inpatient hospitalization data to classify individuals into risk categories. This model was developed by Arlene Ash and Randy Ellis of Boston University.

Employee Retirement Income Security Act (ERISA) of 1974

ERISA has several major provisions concerning health and welfare plans, including the preemption of state insurance laws otherwise applicable to self-insured employee welfare benefit plans. This also excludes MEWAs from state legislation applying to individual and small group health insurance.

Experience

The prior claim statistics of a given group or individual.

Experience Rating

A method of calculating insurance rates based on a group's actual claims experience, which can be both prospective and retrospective.

Gaming

Methods used by carriers and insureds, to gain benefit for themselves, by using creative techniques to circumvent the intent of a law or insurance guideline. An example, for a carrier, is strategic manipulation of a payment system that results in consistent overstatement of the actual premiums paid to the company. An example, for an insured, is misstatement of employment that results in non-employees being covered by an employer plan.

Guaranteed Issue

Carriers are required to offer coverage to all eligible individuals without regard to health status. Coverage must be renewable, and the use of preexisting condition exclusions would be limited.

Health Plan Purchasing Cooperative (HPPC)

A Health Plan Purchasing Cooperative would purchase coverage on a "wholesale" basis for individuals and groups within a specified size category and geographic area. Also referred to as "Health Alliances."

Health Risk Adjustment

The financial transfer between carriers, based on the model and weights produced by the particular risk assessment method used.

Health Risk Assessment

A health risk assessment establishes relative risk weights for each category of health risk.

Insured

The word "insured", as used in this paper, includes subscribers, members, consumers, enrollees, and covered lives.

Intergenerational Transfers

A subsidy wherein younger insureds have higher premiums in order to subsidize older insureds' premiums. This occurs in standard community rating, where age is not a rating factor.

Manual Premium Rate

The premium charge developed for a group's coverage from the carrier's standard rate tables which usually is contained in its rate or underwriting manual.

Medical Underwriting

See "Underwriting."

Multiple Employer Welfare Association (MEWA)

Usually an association of unrelated employers, especially small firms, brought together by an administrator to provide self-funded health care coverage for the firms' employees.

New Addition

An addition to an existing employer group. Examples: new employee, new spouse, newborn.

Open Enrollment

See "Guaranteed Issue."

Outliers

A claimant whose claims cost falls outside the normal amount for an average claim.

Payment Amounts for Capitated System (PACS)

This is a risk assessment model that uses age/sex, disability status, chronicity, major diagnostic category, and level of ambulatory resource use to classify risks. It was developed by Gerard S. Anderson at Johns Hopkins University's Department of Health Policy and Management and Center for Health Statistics.

Preexisting Condition Provision

A contract provision that excludes coverage for charges or expenses incurred during a specified period after the employee's effective date of coverage, as to a condition for which medical advice, diagnosis, care, or treatment was recommended or received during a specified period immediately preceding the effective date of coverage.

Premium

As used in this paper, this includes contributions under Administration Services Only (ASO), minimum premium, ERISA, and MEWA plans.

Prospective Rating

Method of renewal rating that adjusts the rates for the coming policy year in accordance with such factors as known credible past experience, insurance industry and insurance company trends, general business trends (inflation, deflation), current manual rates, etc.

RAND 36 - Item Health Survey 1.0

This is a self-reported health status measure consisting of 36 questions.

Reinsurance

Acceptance by one insurer (the reinsurer) of all or part of the risk of loss underwritten by another insurer (the ceding insurer). In the context of small group reform, the reinsurer is usually a pool of carriers.

Retrospective Rating

Retrospective adjustment of premium rates based on the actual experience during the period, resulting in a retrospective rate credit or deficit.

Retrospective True-up

First, an estimate is made on a prospective basis, of a risk adjustment amount. Subsequently, the actual data for the period are used to correct or "true-up" the original estimate.

Risks

As used in this paper, this refers to the expected amount of health care resources that will be consumed.

Risk Classification

The process of grouping individuals or groups with similar risk characteristics, so that differences in expected costs can be appropriately recognized.

Selection

The actions of individuals, acting for themselves or for others, who are motivated directly or indirectly to take advantage of a risk classification (see definition) system. Selection may be either positive or negative. Negative selection is usually referred to as adverse or antiselection.

Underwriting

The process of identifying and classifying the potential degree of risk represented by a proposed insured or group of insureds. For health insurance plans, medical underwriting is sometimes used to identify substandard risks (risks expected to incur high medical costs). This process includes a questionnaire about health status and prior treatments which is sometimes supplemented with attending physicians' statements and/or blood and urine tests.

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