Actuarial Issues in the Expansion of Beneficiary Options Under Medicare+Choice
The American Academy of Actuaries is the public policy organization for actuaries of all specialties within the United States. In addition to setting qualification standards and standards of actuarial practice, a major purpose of the Academy is to act as the public information organization for the profession. The Academy is nonpartisan and assists the public policy process through the presentation of clear actuarial analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials, regulators and congressional staff, comments on proposed federal regulations, and works closely with state officials on issues related to insurance. The Academy also develops and upholds actuarial standards of conduct, qualification, and practice, and the Code of Professional Conduct for all actuaries practicing in the United States.

This monograph was prepared by the Academy’s Expanding Choice for Medicare Beneficiaries Task Force. The members of this task force are:

Michael J. Thompson, FSA, MAAA, Chairperson

P. Anthony Hammond, ASA, MAAA
Timothy F. Harris, FSA, MAAA
Thomas H. Lindquist, ASA, MAAA
Brian J. Moore, FSA, MAAA
Susan C. Morisato, FSA, MAAA
Donna C. Novak, ASA, MAAA

Kevin Rease, ASA, MAAA
Jill Stockard, FSA, MAAA
Sheree Swanson, ASA, MAAA
Michael D. Sydlaske, FSA, MAAA
Anthony J. Wittmann, FSA, MAAA
Executive Summary

The Balanced Budget Act of 1997 (BBA '97) introduced significant changes under Medicare. This monograph discusses the actuarial issues concerning the changes to Medicare under BBA '97 that will have major impact on the healthcare market.

The new program called Medicare+Choice significantly expands the number of health plan options available under the Medicare program. New options include:

- Health Maintenance Organizations (HMOs);
- Provider-Sponsored Organizations (PSOs);
- Point-Of-Service plans (POS);
- Preferred Provider Organization plans (PPOs);
- Medical Savings Accounts (MSAs); and
- Private Fee-For-Service (FFS) plans.

Market-Based Designs

Medicare+Choice introduces new opportunities for “non-standard” market-based designs. Information to help consumers choose between plans may need to reflect, on a standardized basis, differences in benefit designs, payment rules, and premium rates. It will also assist the consumer in assessing network access and quality.

Increased risk segmentation will occur due to greater differences among plans as well as increased freedom to move between plans. It is intended that risk adjustment will be utilized to mitigate the impact of risk segmentation on the market. However, since risk adjustment will not apply to the Medigap market or traditional Medicare, it is anticipated that the Medigap and traditional Medicare markets will be negatively impacted by risk segmentation.

Medicare Payments

The Balanced Budget Act of 1997 (BBA '97) also changed the method of reimbursing managed care organizations contracting with the Health Care Financing Administration (HCFA) on a risk basis. The prior Medicare payment methodology was required to approximate traditional Medicare fee-for-service costs. This resulted in a wide range of capitation rates among geographic regions and erratic annual payment updates. In addition, the methodology used for risk adjustment was criticized as being inadequate. Finally, the capitation included amounts for indirect medical education and direct graduate medical education (GME) that was determined to be inappropriate for some plans.

The BBA '97 payment methodology for Medicare+Choice plans attempted to address these and other issues while limiting the growth in Medicare expenditures. It phases in a blend of area-specific and input-price-adjusted national rates (rather than area-specific only). Medical education is not included in the payment rates. A budget neutrality factor is then applied. It also applies a minimum payment floor and a 2 percent minimum increase by area.

The net effect for 1998 and 1999 was that all counties received either the 2 percent minimum increase or the payment floor. Risk adjustment may further decrease payment to Medicare HMOs. If that occurs, beneficiaries enrolled in Medicare HMOs will experience decreased benefits and/or premiums, providers will experience reduced growth in payments, and the expansion of Medicare+Choice plans will be less than anticipated.

Risk Adjustment

Risk adjustment prior to BBA '97 was based primarily on demographic factors incorporated into the Adjusted Average Per Capita Cost (AAPCC) payment methodology. This approach was determined to be inadequate to protect the Medicare system, particularly in light of the new options available under Medicare+Choice.

New risk adjustment methodologies, proposed under the BBA '97 regulations, incorporate diagnosis information into the payment methodology. The information utilized would be based on inpatient hospital encounter data to determine payments to Medicare+Choice organizations beginning in 2000 and would also utilize additional encounter data (outpatient hospital, physician services, etc.) at a later date.

As compared to other methods of risk adjustment, diagnosis-based risk adjustment has several advantages, including that it is more readily available, strongly correlated with future expenses, verifiable through audit, and does not perpetuate the incentives of a fee-for-service system. On the other hand, it could provide an incentive for providers to find additional diagnoses that will lead to higher payments. Also, this approach to risk adjustment is administratively complex.

Utilizing hospital-only data to determine diagnosis also penalizes plans that avoid hospitalizations, potentially creating inappropriate incentives. On the other hand, ambulatory diagnosis data are expensive to obtain, have less clinical reliability than inpatient diagnoses, and are difficult to audit. While available methods of risk adjustment are imperfect, risk adjustment is still an important additional step to use under Medicare+Choice.

Retiree Medical Benefits

Medicare+Choice potentially allows beneficiaries choices that more closely resemble the plan options available to them previously as active employees (e.g., PPO or POS plans) do. Additionally, BBA '97 was intended to expand the Medicare managed care marketplace through a variety of mechanisms (revised payment methodology, new rules for entrance, etc.) These features may encourage employers to offer additional Medicare managed care options to their retirees.

On the other hand, the number of Medicare HMOs that
offer low premium products and/or rich benefits (e.g., prescription drugs) may decrease in the future due to reductions in Medicare payment levels. The availability of Medicare HMOs may also decrease in some markets over time. To the extent employers had anticipated continued availability and growth of such options in their SFAS 106 accounting, reversals of prior anticipated savings may need to be reflected in the SFAS 106 expense going forward. In addition, if additional cost shifting and balanced billing by providers result in medical cost increases greater than previously anticipated, this also can increase SFAS 106 expense. These pressures may further reduce employer retiree medical commitments.

Provider Sponsored Organizations (PSOs)

BBA '97 establishes new rules for health care providers to contract directly with HCFA in order to assume financial risk for and provide Medicare+Choice plans. The new rules offer new alternative federal solvency requirements specifically promulgated for PSOs under BBA '97.

While it was intended that BBA '97 would substantially increase the availability of PSOs as Medicare contracting entities, PSO concerns and barriers are likely to continue to exist related to solvency, operational, and compliance requirements. While BBA '97 moved away from a “level playing field” between PSOs and other managed care organizations, specifically in the area of solvency requirements, the differences are not great.

Summary

Medicare+Choice under BBA '97 has the potential to radically change how medical care and coverage is provided to Medicare-eligible beneficiaries. However, significant issues will need to be addressed as “choice” is introduced. How these issues are ultimately addressed will have a major impact on consumers, insurers, HMOs, and providers.

The American Academy of Actuaries can help policy makers in confronting issues of an actuarial nature on a nonpartisan basis.
The Balanced Budget Act of 1997 (BBA ‘97) introduced significant changes under Medicare, including the introduction of new options, significant payment changes for these options, and new rules governing organizations providing those options. BBA ‘97 was further clarified by the regulations published by the Health Care Financing Administration (HCFA) on June 26, 1998. This monograph discusses the actuarial issues concerning the changes to Medicare under BBA ‘97 that will have major impact on the healthcare market.

The new program called Medicare+Choice significantly expands the number of health plan options available under the Medicare program. Options include: Health Maintenance Organizations (HMOs), provider-sponsored organizations (PSOs), point-of-service plans (POS), preferred provider organizations plans (PPOs), medical savings accounts (MSAs), and private fee-for-service (FFS) plans.

The expansion of Medicare options under Medicare+Choice creates many new issues that affect carriers, providers, employers, and beneficiaries. This expansion will provide more options to Medicare beneficiaries and employers, offer new opportunities to carriers and providers to effectively manage these plans, and challenge regulators to provide adequate protection to the beneficiaries.

This monograph, developed by the American Academy of Actuaries Expanding Choice for Medicare Beneficiaries Task Force, discusses some of the key actuarial and related issues under BBA ‘97 related to Medicare+Choice. The following issues are addressed:

- Movement Toward Market-Based Designs;
- Changes in Medicare Payment;
- Role of Risk Adjustment;
- Impact on Retiree Medical Benefits; and
- Provider Sponsored Organization Availability.
**Movement Toward Market-Based Designs**

Medicare+Choice will significantly increase the numbers and types of managed care plans that can be marketed to Medicare beneficiaries. Formerly, individual plans offered to supplement or replace traditional fee-for-service Medicare were generally limited to standardized Medicare Supplement plans or HMOs. Medicare+Choice introduces new opportunities for “non-standard” market-based designs that will introduce increased opportunities and challenges for beneficiary plan disclosures and comparisons, as well as risk segmentation.

**Benefit Options Prior to BBA ’97**

Prior to BBA ’97, beneficiaries generally had the option of electing traditional fee-for-service Medicare or enrolling in an HMO. These options are still available. Traditional fee-for-service Medicare beneficiaries retained their Medicare benefits and often purchased a Medicare Supplement (Medigap) policy to cover the deductibles and copayments, as well as additional benefits not covered by Medicare such as skilled nursing facility benefits, foreign travel benefits, and prescription drugs. In 1991, the Omnibus Budget Reform Act (OBRA) established 10 standardized Medigap plans. All individual policies must conform to one of these plans. In addition, Medicare Select is a variation of these standardized plans, which provides the standardized benefits using a selected network of providers (generally only restricted to selected hospitals with open access to physicians), in exchange for lower premiums.

Beneficiaries could also elect an HMO (in a few instances with a point-of-service option) to replace their traditional fee-for-service Medicare coverage. These plans provided access to Medicare benefits and other supplemental benefits through a selected network of hospitals and physicians. Out-of-pocket expenses were generally small provided the beneficiary utilized the HMO network and followed the rules of the HMO. There were generally no benefits, however, if the beneficiary did not utilize the network or follow the HMO rules for non-emergency care.

The choices under this system were relatively simple for beneficiaries to comprehend. The Medigap plans that wrapped around Medicare were standardized to make those comparisons between carriers much easier. While benefits provided by HMOs could vary to some degree, most understood that the beneficiary out-of-pocket costs were lower, in exchange for some restricted access to providers.

**Benefit Options Under BBA ’97**

Under BBA ’97, the array of plans potentially available to beneficiaries changed dramatically. Beneficiaries may remain in traditional fee-for-service Medicare and continue to purchase one of the standardized Medicare Supplement and Medicare Select options available on the market. Alternatively, they can generally choose one of several Medicare+Choice plans. First are the coordinated care plans which include: 1) the health maintenance organizations (HMOs), with or without point-of-service options; 2) plans offered by provider-sponsored organizations (PSOs); 3) preferred provider organizations (PPOs); or 4) private fee-for-service plans (with or without the private opt out).

In recognition of the additional options, new rules have been established to govern beneficiary movement between plans, and to establish limitations on when pre-existing condition limitations can apply. In addition, the legislation required a significant information and education program to help beneficiaries understand these expanded Medicare options.

These options will provide both opportunities and challenges to beneficiaries, carriers, regulators, and providers. Beneficiaries may be to better match needs, affordability, and access. It is important to note, however, that BBA ’97 is "enabling legislation," allowing but not forcing carriers or providers to offer these new plans. The actual availability of this broad array of products in the market will depend on many factors. Barriers such as adequate payment rates, market size, risk selection, and provider acceptance may make entry difficult. Conversely, in those markets where these options do become available, strong education and disclosure will be necessary.

Under BBA ’97, regulators will be challenged to provide the appropriate level of oversight, balancing the availability of new innovative market-based options with adequate consumer protections and carrier and provider solvency concerns.

**Consumer Information and Disclosure**

Disclosure will necessarily be more complex under BBA ’97 due to the increased number and types of plan options available. The proposed regulations have dictated disclosure regarding:

- General enrollment restrictions;
- Types of services reimbursed and levels of payment;
- Premium rates;
- Participating providers; and
- Quality management.

Medicare+Choice plans are not required to follow a specific plan of benefits; consequently, regulators will be challenged to develop a format that can be used to compare benefits, rates, provider networks, and outcomes.

**Benefit Descriptions, Rules and Rates**

Communicating multiple plan designs may require a standard format to compare the benefits. It should be noted that HCFA is already making efforts in this regard to support the
open enrollment for 1999. Ideally, wording and presentation should be standardized. Efforts must also be made to describe benefits both within and outside the networks. Availability of a simplified comparison of plans showing the areas of difference among a few key variables may be helpful. However, the need for simplification needs to be balanced with the need to disclose additional differences that may be relevant to beneficiary elections.

The Medicare+Choice plans may also require greater disclosure on the rules and requirements to obtain benefits. Managed care restrictions could take the form of primary care referrals, pre-certification of hospital stays, second surgical opinions, ambulatory care reviews, open and closed formulas, etc. Disclosure of the nature of such restrictions should be clearly discerned and reasonably understood.

Premium rates will be an important factor in choosing a plan. Geographic area differences and periods for which the rates are guaranteed should be part of the disclosure. If premiums for Medicare Supplement (Medigap) plans are also disclosed, then a statement describing the extent to which premiums are age adjusted may also be necessary.

**Benefit Access and Quality**

As the number of Medicare+Choice plans increases, it will become increasingly difficult for Medicare beneficiaries to assess differences in provider networks and easily ascertain whether their current providers participate in particular plans. It may be desirable to develop and maintain a coordinated provider directory or database that shows key data on providers (e.g., degrees, areas of specialty, board certification, etc.) in a given area as well as in which Medicare+Choice plans they participate. Aggregate statistics of providers by specialty can also provide some measure of the extent of choices within each health plan.

Some means to measure quality of care and service will assist beneficiaries in making a plan choice. While this area is one that is still developing, any statistics published should be relevant to and based on the Medicare+Choice eligible beneficiary population. To the extent possible, they should also be established on uniform methodologies and be independently audited to improve the validity of any comparisons.

Many plans offer variations on care management programs that would be particularly attractive to Medicare beneficiaries with specified chronic or acute conditions. The description of these programs and their success rates could provide valuable information to Medicare beneficiaries in selecting plans. However, in addition to the need for a common format, it will be critical to Medicare+Choice plans to be subject to adequate risk adjustment so as not to penalize plans that attract a disproportionate share of beneficiaries with chronic conditions. Similarly, risk adjustment may also be appropriate to apply to all quality or outcome statistics to avoid penalizing or rewarding plans due to the risk characteristics of the enrolled populations.

Outcomes, at their best, are another desirable feature on which to compare health plans. Again, this data will be most meaningful if common methodologies are maintained and would be further enhanced if national benchmarks could be established for comparison (similar to the Department of Health and Human Services Public Health Service initiative Healthy People 2000). However, outcomes do have their limitations. Outcomes may be indicative of the relative health of the enrolled population. They may also be best observed at a “provider level” rather than a “health plan level” unless specifically related to a health plan intervention. There is also currently a wide range of sophistication, methodologies, and capabilities to measure outcomes among health plans.

It may also be desirable to publish health plan service statistics for a given Medicare+Choice plan related to things such as claim service, telephone responsiveness, and general member satisfaction. It is important that the statistics be established with consistent methodologies and be independently audited to improve comparability by Medicare beneficiaries.

Finally, publishing external accreditation status (e.g., through such organizations as the National Commission on Quality Assurance) can assist Medicare beneficiaries in assessing relative quality among health plans to maintain these self-policing mechanisms.

**Risk Segmentation Under Medicare+Choice**

Medicare+Choice will allow more options with varying levels of benefits and provider network restrictions; the potential for risk segmentation will therefore be increased. Risk segmentation occurs when a health plan enrolls individuals who are significantly more or less healthy than average. Risk segmentation is more likely as more options are available.

In general, the richer the benefits, and the fewer the provider network restrictions, the more the plan is likely to attract less healthy individuals. For example, individuals who elect traditional fee-for-service Medicare plus a comprehensive Medigap plan are likely to be more cost-intensive. Conversely, plans with either significant out-of-pocket costs (e.g., high deductible plans) or provider network restrictions (e.g., HMOs) tend to attract more healthy individuals.

It is intended that risk adjustment will mitigate the impact of risk segmentation on Medicare as well as the carriers and providers that attract a disproportionate share of the less healthy individuals. Risk adjustment will apply beginning in 2000. It will apply to all Medicare+Choice plans but will not apply to traditional Medicare and Medigap plans (since these plans supplement rather than replace traditional Medicare, there is no payment from HCFA). Risk adjustment is discussed in more detail below.

**Impact on the Traditional Medicare and Medigap Market**

The effect of increased risk segmentation will likely affect the traditional fee-for-service (FFS) Medicare and the Medigap market. There will be increasing opportunities for beneficiaries to enter managed care plans, coupled with the ability for those individuals to leave those plans and return to fee-for-service and Medigap if they are not happy. This will likely leave those in the traditional Medicare and the Medigap market to be the most cost-intensive. As there is no “risk adjustment” for
Medicare fee-for-service and Medigap, this may ultimately result in greater risks for traditional Medicare and insurers offering Medigap plans as well as higher premiums for and decreased availability of Medigap plans for beneficiaries.

Prior to BBA '97, Medigap insurers were not required to accept all beneficiaries without evidence of insurability beyond the six-month open enrollment period upon first eligibility for Part B. Insurance carriers could employ medical screens outside of open enrollment. This provided some protection for insurers to maintain a stable risk segment. Under BBA '97, beneficiaries who enter managed care plans will have opportunities to reenter the traditional fee-for-service Medigap market without evidence of insurability. Medigap insurers will be significantly challenged to be able to continue to offer affordable Medigap coverage. As the market matures, some insurers may elect to be more selective in the plans they offer or simply to exit the Medigap market. A separate Academy work group is currently developing a monograph that will examine the relationship between Medigap coverage and Medicare utilization and cost.
Changes in Medicare Payment Methodology

The Balanced Budget Act of 1997 (BBA ’97) has changed the method of reimbursing managed care organizations contracting with HCFA on a risk basis. The prior Medicare payment methodology was required to replicate traditional Medicare fee-for-service (FFS) costs. This resulted in a wide range of capitation rates among geographic regions and erratic annual payment updates. In addition, the risk adjustment methodology was also criticized as being inadequate. Finally, the capitation included amounts for indirect medical education and direct graduate medical education (GME) that was determined to be inappropriate for some plans. The BBA ’97 payment methodology for Medicare+Choice plans attempted to address these and other issues while limiting growth in Medicare expenditures.

Medicare Payment Methodology Prior to BBA ’97

Prior to BBA ’97, only HMOs were authorized as Medicare risk contractors. These HMOs were paid a per capita monthly rate based on average per capita costs in the FFS Medicare program. The capitated rate, called the Adjusted Average Per Capita Cost (AAPCC), was calculated based on the average per capita FFS costs in each county of the nation. Monthly per capita payment rates to HMOs were based on 95 percent of the AAPCC further adjusted by a demographic risk factor based on the age, gender, disability status, institutional status, Medicaid status, and employment status of each enrollee. In exchange for this payment, HMOs provided Medicare-covered services. Most HMOs offered significant additional benefits as well.

The level of capitation rates had a direct and varied impact on Medicare HMO availability by market as well as on the level of additional benefits the HMOs provided. Enrollment in Medicare managed care risk plans has grown to over 4.5 million enrollees and the number of plans has increased by over 30 percent each year from 1995 to 1997. This growth was concentrated in urban areas. The AAPCC-based methodology resulted in regional payment rates to HMOs varying due to regional practice patterns, input prices, and the average GME payments in an area. These factors resulted in higher average payment rates in urban areas. As a result, HMO benefits in high AAPCC areas were often extraordinarily comprehensive for little or no premium to the beneficiary while many low AAPCC areas had little or no access to HMOs.

Medicare Payment Methodology Under BBA ’97

The BBA ’97 methodology gradually reduces the amount of regional variation in payment rates by use of a formula blend and payment floors, as well as phasing out GME payments, which will be paid directly to providers. The changes are intended to encourage growth of Medicare+Choice plans in areas that historically had lower payment rates, (e.g. rural areas), as well as limit the growth in Medicare spending.

The payment methodology prescribed by BBA ’97 uses 1997 payment rates calculated under the prior methodology as a starting point, but phases in changes from 1998 through 2003 that incrementally separate payment rates to Medicare+Choice organizations from local FFS costs. As a result, the Medicare payment for Medicare+Choice plans is the greater of the following three amounts:

1. A blend of area-specific and input-price-adjusted national rates. The area-specific rate is based on the 1997 AAPCC-based payment rate, adjusted for national average growth rates in costs in the FFS Medicare program reduced by specified percentages in 1998 through 2002. This adjustment for growth in FFS costs is called the “national per capita Medicare+Choice growth percentage” (NGP). This amount is reduced incrementally by an increasing percentage of GME costs. The input-price-adjusted national rate is calculated by applying HCFA’s hospital wage index and physician geographical practice cost index (GPCI) to portions of the weighted average of the area-specific factors. The reductions to the national growth rate percentages, medical education carve-out percentages, and blending percentages are shown in the following table:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Medicare FFS increase less</th>
<th>Medical education carve out %</th>
<th>County/ national blending %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>0.8%</td>
<td>20%</td>
<td>90%/10%</td>
</tr>
<tr>
<td>1999</td>
<td>0.5%</td>
<td>40%</td>
<td>82%/18%</td>
</tr>
<tr>
<td>2000</td>
<td>0.5%</td>
<td>60%</td>
<td>74%/26%</td>
</tr>
<tr>
<td>2001</td>
<td>0.5%</td>
<td>80%</td>
<td>66%/34%</td>
</tr>
<tr>
<td>2002</td>
<td>0.5%</td>
<td>100%</td>
<td>58%/42%</td>
</tr>
<tr>
<td>2003 or later</td>
<td>0.0%</td>
<td>100%</td>
<td>50%/50%</td>
</tr>
</tbody>
</table>

A budget neutrality factor is then applied to the blended rates such that the aggregate amount paid to all Medicare+Choice organizations is equal to the amount that would have been paid if the payments were based entirely on the area-specific rates.

2. A minimum floor of $367 monthly for 1998, adjusted annually by the NGP used in the calculation of the area-specific rates.

3. 102 percent of the prior year’s payment rate.

Effective January 1, 2000, a risk adjustment methodology will be implemented that accounts for variation in per capita costs based on health status and demographic factors. Payment rates will be adjusted to include health status, in addition to the demographic factors currently reflected.

Beginning in 1998, BBA ’97 established the collection of a “user fee” from Medicare+Choice organizations used to fund the public education and enrollment programs based on each organization’s pro rata share of estimated costs for these pro-
grams. HCFA is implementing this fee as a percentage of capitation revenues paid to Medicare+Choice plans.

Finally, as an alternative to the Medicare+Choice capitation method outlined above, BBA '97 requires the Secretary of HHS to establish a demonstration project whereby payments to Medicare+Choice organizations are based on a competitive pricing methodology. A Competitive Pricing Advisory Committee will recommend rules, pricing guidelines, and benefit designs for up to seven Medicare payment areas selected for the project.

**Effects of the BBA '97 Methodology**

A primary objective of the Medicare+Choice program is to reduce the overall costs of the Medicare program. The Congressional Budget Office initially estimated $22.5 billion in savings from 1998 to 2002 due to the new Medicare+Choice payment methodology. HCFA's Office of the Actuary has more recently estimated savings of $30 billion from 1998 through 2003. In addition, the carve-out of GME payments from the Medicare+Choice capitation results in an additional reduction of an estimated $4 billion from capitation payments, with GME payments being paid directly to providers. Fees associated with the public education program further reduce payments to Medicare+Choice organizations.

Policymakers also intend that the BBA '97 changes will result in more Medicare+Choice organizations entering more markets resulting in increased competition. It is thought that, as the geographic variation in payment levels is reduced, profitability incentives will shift from payment rate arbitrage to increased quality of services to enrollees.

In 1998 and 1999, the minimum 2 percent increases and increases to the new payment floors consumed more than the maximum aggregate increase allowed by budget neutrality. The result was that all counties received either the 2 percent minimum increase or the floor rate and the policy objectives of establishing blended rates were not realized. HCFA's Office of the Actuary currently predicts that the blended rates will take effect in 2000 and that payment rates will gradually increase for counties that have area-specific rates below the input-price-adjusted national average rate, although overall increases will be limited by the budget neutrality provision.

The implementation of the risk adjustment methodology based on health status will also have a major financial impact for Medicare+Choice organizations that have attracted enrollees with a health status profile that differs from the average of the Medicare FFS population. Initial estimates by HCFA have indicated that overall payments to Medicare+Choice organizations are likely to decrease as a result of the implementation of risk adjusters. If materially lower payment rates result, Medicare+Choice organizations may need to reduce benefits, increase premiums, or exit unprofitable markets. Expansion plans may also be scaled down. In some cases, as shown in demonstration projects, payments could increase. Data collection and reporting may also involve significant operational challenges for HCFA as well as Medicare+Choice organizations.

The impact of changes in the Medicare payment methodology is likely to extend to beneficiaries and providers. Beneficiaries in some areas may experience decreased benefits and/or premium increases, especially areas receiving the minimum 2 percent increase. Providers in some areas may be negatively impacted as year-over-year increases in Medicare and health plan payment rates do not rise at the same rate as service costs. Also, the desired growth in the number of Medicare+Choice plans in rural areas may be hampered by general concerns about managed care, lack of competitive forces among providers, and an insufficient base of senior beneficiaries required to support startup and operating expenses. Variation from historical payment levels due to risk adjustment may further exacerbate potential ramifications of the changes in the payment rate methodology.
Risk assessment and risk adjustment are methods intended by policymakers to promote competition on the basis of medical and administrative efficiency, rather than risk selection. This is done in a two-step process: measuring the expected relative health care costs of the individuals enrolled by a plan (risk assessment) and adjusting payments to plans to reflect the relative risks (risk adjustment).

Health risk assessment measures the actual or expected deviation of each individual's cost from the average cost. The assessment objectively determines the relative risks of individuals or groups of individuals by using a classification system; individuals are classified by objective criteria into one of several categories. Risk classification is the process of grouping individuals or groups with similar risk characteristics, so that differences in expected costs can be appropriately recognized. 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.

Risk adjustment is a method used to compensate health plans for differences in enrolled risks. Risk adjustment methods can help accomplish several goals:

- Reduce the effects of either inadvertent or intentional risk selection, so that health plans 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 good risks;
- Compensate health plans fairly and equitably for risks they assume;
- Maintain consumer choice from among multiple health plans based on premiums and benefits that reflect relative medical and administrative efficiencies; and
- Protect the financial soundness of the system.

Risk adjustment prior to BBA '97 was based primarily on demographic factors incorporated into the AAPCC payment methodology. This approach was determined to be inadequate to protect the Medicare system, particularly in light of the new options available under Medicare+Choice. New risk adjustment methodologies are mandated under BBA '97 that incorporate additional beneficiary health status information into the payment methodology.

### Risk Adjustment Prior to BBA '97

Prior to BBA '97, the only risk adjustment elements applicable to Medicare payments were the demographic and institutional status factors included in AAPCC methodology. This approach was a relatively simplified form of risk adjustment based on age, sex, welfare status, institutional status, and Medicare eligibility basis (age, disability, or end-stage renal disease). The entire AAPCC methodology required little administrative cost since the individual classifications were easy to identify. The AAPCC methodology was also not susceptible to gaming and could be audited. On the other hand, formal academic studies of Medicare, as well as the study of commercial populations commissioned by the Society of Actuaries, have concluded that very little of the differences in resources used by individuals can be explained by age and sex variables.

However, policymakers considered the following limitations in the methodology:

- The county variations caused by fee-for-service (FFS) payment linkage cause HMOs to compete heavily in the high-payment areas, with few HMOs offering coverage in low-payment areas; and
- If healthier segments of the population join the HMOs, then the FFS payments will escalate due to adverse selection. (Adverse selection is when individuals are motivated, either directly or indirectly, to take advantage of a risk classification system. For example, individuals may enroll in the traditional FFS plan when they know they need specific care for an illness.) What this means is that the average risk profile of those remaining in the traditional FFS plan would be expected to deteriorate over time.

### Risk Adjustment Under BBA '97

BBA '97 requires that a risk adjustment methodology based upon health status be developed, evaluated, and submitted to Congress no later than March 1, 1999. A separate American Academy of Actuaries work group is conducting an independent actuarial evaluation of this risk adjustment methodology on behalf of HCFA. BBA '97 also requires Medicare+Choice organizations to submit encounter data that will be the source of the health risk adjusted payments.

The risk adjustment methodologies proposed by HCFA would incorporate diagnosis information into risk adjustment. The information utilized would be inpatient hospital encounter data, to determine payments to Medicare+Choice organizations beginning in 2000. The methodology would also utilize additional encounter data (outpatient hospital, physician services, etc.) at a later date. Specifically, the two proposed models for adjusting Medicare+Choice payments are:

- Year 2000–Principal Inpatient Diagnostic Cost Group model (PIPDCG); and
- Years Beyond 2000–Hierarchical Coexisting Conditions Diagnosis Cost Grouping model (HCCDCG).

Diagnosis-based risk adjustment has a number of advantages:

- Unlike functional status data, diagnostic information is
more readily available;

• Unlike demographic variables, diagnostic information is strongly correlated with future expenses;

• Unlike self-reported health status, diagnostic information can be verified through an audit; and

• Unlike prior utilization, diagnosis based risk adjusted payments do not perpetuate the incentives of the FFS system (i.e., higher payment for higher prior utilization).

The primary disadvantage of a diagnosis-based risk adjustment system is that providers may have the incentive to find additional diagnoses that will lead to increased payment but not to improved outcomes. Training of coders and audits of medical records will be needed to avoid improper coding and to allow the plans to compete fairly.

**Principal Inpatient Diagnostic Cost Grouping (PIPDCG)**

The PIPDCG model relies on single highest cost, principal inpatient hospital diagnoses only. Medicare Current Beneficiary Survey research indicates that PIPDCG improves significantly with survey information. It offers less predictive power than HCCDCG, but is still a significant improvement over demographic model only (AAPCC). Some considerations in implementing the PIPDCG model are that it is:

• Less expensive to obtain data than models that rely on the collection of outpatient data as well;

• Less sensitive to incomplete coding than outpatient-based systems;

• Sensitive to which diagnoses are labeled primary versus secondary;

• Providers can reorder diagnoses to maximize payment (subject to gaming); and

• A penalty to plans that avoid hospitalizations, since the beneficiary must be hospitalized for the diagnosis to be included in the model. This may lead to inappropriate incentives.

**Hierarchical Coexisting Condition Diagnostic Cost Grouping (HCCDCG)**

HCCs were designed for a Medicare 65+ population. The HCCs were developed initially using inpatient ICD-9 procedure codes grouped according to similarity of predicted costs for subsequent year (as opposed to clinical similarity). Newer versions of the HCCs take into account ambulatory diagnoses. Hierarchies improve clinical validity, limit incentives for coding proliferation, and improve the precision of estimated payment weights. Also, the HCCDCGs could be assigned to multiple categories.

Some considerations in implementing the HCCDCG model include:

• Improved reliability over age and gender adjustments in the PIPDCG model;

• Time-consuming and expensive data requirements;

• Ambulatory diagnoses are expensive to obtain, have less clinical validity than inpatient diagnoses, and are difficult to audit (unlike inpatient diagnoses);

• Specific software associated with the HCCDCG model may add to the administrative costs of Medicare+Choice plans; and

• Gaming is possible with the HCCDCGs; there is potential for average treatment of high cost diagnoses.

**Other Considerations**

A recent study by the Society of Actuaries examined some of the leading risk adjustment techniques. Among the conclusions that can be drawn from that study were:

• Available methods are improving and presently capture a sizable portion of the predictable variation in health care costs; still, the level of variation not captured by any method should give us pause;

• It will also be important to use quality of care measures and risk assessment techniques to be sure that plans deliver high quality and are not overcompensated or undercompensated for the treatment they provide to their enrollees;

• The changes scheduled for 1999, to include new risk entities and greater freedom with respect to plan design, will exacerbate the potential for risk segmentation; although the administrative changes with respect to freedom of movement, open enrollments, and centralized communications are good attempts to alleviate this potential problem, risk adjustment is a necessary additional step in this process.

**Recent Developments**

In the Federal Register dated September 8, 1998, HCFA for the first time published information publicly regarding the implementation of risk adjusters. In this notice, HCFA requested comments on the implementation of its proposed risk adjustment methodology and announced a public meeting that was held on September 17, 1998.

In the notice and meeting, HCFA outlined the plan to implement the PIPDCG methodology, including how it would be applied to calculate county specific rates and risk scores for individual beneficiaries. Although much was clarified, many questions remained regarding the risk adjustment model and its implementation. HCFA requested comments to be submitted by October 6, 1998. Final adjustments were being made to
the model and encounter data would be processed through the model in October through December 1998. The county-specific ratebook is scheduled to be distributed on March 1, 1999 and Medicare+Choice organizations may not receive information regarding risk scores for their enrollees until that time. Estimates of the effect of the rescaling of the payment rates based on the FFS risk adjustment factor may not be available until sometime in the first quarter of 1999.

Due to the late timing of the results of the risk adjustment process, Medicare+Choice plans will need to react quickly in finalizing plans for their benefit offering for 2000, which are required to be submitted to HCFA by May 1, 1999.
Impact on Retiree Medical Benefits

BBA '97 increases the number of managed care providers and options available to beneficiaries. This expansion of Medicare options potentially enables employers to offer more benefit options to their retirees. At the same time, the changes to the financing of these options will potentially increase employer costs of providing these benefits as well as curtail the potential growth of the markets for these options.

Retiree Medical Benefit Options
Prior to BBA '97

Prior to BBA '97, employers that sponsored retiree medical programs typically offered some form of indemnity type benefits that coordinated with the traditional fee-for-service Medicare program on a secondary basis. Managed care plan offerings were also sometimes offered to retirees, but were less prevalent than for the active employee population due to communication challenges as well as retiree resistance towards and unfamiliarity with managed care.

The introduction of the accounting rules for retiree medical benefits, SFAS 106, beginning in 1992, substantially increased employer sensitivity to the current and future costs of retiree medical benefits. Under SFAS 106, employers are required to recognize and accrue for the future costs of retiree medical during the active working lifetimes of eligible employees. Past service liabilities due to the initial enactment or future plan changes are also amortized. Many employers have reduced their commitments to retiree medical benefits through cutbacks in benefits, eligibility, and, in some instances, elimination of the program in order to mitigate the impact of SFAS 106 on their balance sheet.

The increased availability over the past few years of Medicare HMOs with very comprehensive benefits at no or low costs has caused many major employers to encourage their retirees to elect these plans. In particular, Medicare HMOs that offered additional benefits (e.g., prescription drug benefits) due to the current payment rates were especially attractive. These options allowed employers to substantially reduce SFAS 106 expenses and liabilities while offering additional plans to employers with lower retiree out-of-pocket costs. Most employers who have encouraged retirees into Medicare HMOs have taken accounting credit for future cost savings from these plans consistent with the environment prior to BBA '97.

Retiree Medical Benefit Options
Under BBA

Medicare+Choice expands the number of potential managed care plan options available, adding plans that allow beneficiaries more choice in providers and that may more closely resemble the plan options available to them as active employees (e.g., PPO or POS plans). Additionally, BBA '97 was intended to expand the Medicare managed care marketplace through a variety of mechanisms (revised payment methodology, new rules for entrance, etc.). These features may encourage employers to offer additional Medicare managed care options to their retirees. In some instances, employers may attempt to use the Medicare+Choice program as a vehicle to replace current retiree medical plans in order to further reduce the expense and complexity associated with providing health benefits to their retirees.

Increased Cost Shifting and Balanced Billing

The Balanced Budget Act is projected to save Medicare $22 billion from fiscal years 1998 through 2002. The majority of these savings are due to reducing the rate of spending growth to hospitals, physicians, and other providers. One potential result of the spending reduction is cost shifting from Medicare providers to other payors, including employers, though evidence for such cost-shifting is unclear.

Pressure for additional Medicare balance billing and private contracts may also increase as the growth in Medicare payment is curtailed. Many providers today have agreed to accept Medicare payments in full and, consequently, do not balance bill beneficiaries. Providers who do not agree to accept Medicare assignment can generally balance bill beneficiaries as much as 15 percent above the Medicare payment (under Medical Savings Accounts, balance billing is allowed with no limit).

If retiree medical costs escalate, employers may increasingly seek to curtail their existing retiree medical plans and commitments.

Impact on Employer SFAS 106 Expenses

The impact of BBA ‘97 on employers’ SFAS 106 expenses will largely depend upon current retiree plan offerings and past assumptions related to the future growth in medical expenses including the impact of managed care. Presumably, increased participation in managed care health plans, in particular plans with low or no premiums, will reduce the cost of retiree health care. To the extent not already anticipated in current retiree medical accounting, this should result in reduced SFAS 106 expenses.

On the other hand, the number of Medicare HMOs that offer zero premium products with rich benefits (e.g., prescription drugs) may decrease in the future due to reductions in Medicare payment levels. The availability of Medicare HMOs may also decrease in some markets over time. To the extent employers had anticipated continued availability and growth of such options in their SFAS 106 accounting, reversals of prior anticipated savings may need to be reflected in the SFAS 106 expense going forward. These pressures may further reduce employer retiree medical commitments.
Provider Sponsored Organization Availability

BBA '97 establishes new rules for health care providers to contract directly with HCFA in order to assume financial risk for and provide Medicare+Choice plans. The new rules are primarily implemented through new alternative federal solvency requirements specifically promulgated for providers under BBA '97. Policy makers intend that these provider sponsored organizations (PSOs), as the actual providers of care, can enhance the delivery of quality managed care to Medicare beneficiaries. Another goal is to improve access and delivery of care in rural areas, which are often underserved.

Provider Organizations Prior to BBA '97

Previous legislative obstacles to provider organizations’ ability to direct contract with HCFA included state solvency requirements and minimum enrollment requirements. Prior to BBA '97, provider organizations could generally only contract for health care risk if they were licensed as a risk-taking entity (e.g., HMO or insurance company) by the state(s), or if they contracted through such a licensed entity. These legislative rules were designed to ensure that entities taking health care risk had sufficient capital and administrative capacity to deliver the promised health care benefits in accordance with the laws of that state. In addition to federal Medicare HMO regulations, HCFA also required state licensure to provide Medicare HMO benefits to limit Medicare beneficiary exposure to health care ventures that may have a high potential risk of failure.

Many provider organizations believed that the state requirements for licensure were unfairly burdensome. This was viewed as particularly true of the state solvency requirements that did not differentiate between HMOs that contracted with networks of providers to provide care and HMOs that actually provided care.

Another provider concern was the federal “50/50 rule.” This required that no more than 50 percent of the membership be comprised of Medicare and Medicaid beneficiaries. This eliminated the potential for provider organizations (and other organizations) to contract specifically for Medicare beneficiaries without first developing a significant non-Medicare population.

Provider Organizations Under BBA '97

BBA '97 required creation of Federal solvency standards so that there are consistent solvency requirements that will not be overly restrictive in any state. BBA '97 also defines lower minimum enrollment thresholds for PSOs to become a Medicare contractor than are required for other Medicare risk contractors. PSOs must have at least 1,500 enrollees in non-rural areas (versus 5,000 for other contractors) and 500 enrollees in rural areas (versus 1,500 for other contractors). These two changes eliminate two real barriers to PSOs entering the Medicare risk market. The “50/50 rule” no longer applies.

PSOs Defined

Under BBA '97, PSOs are defined as entities: (1) established or organized, and operated, by a health care provider, or group of “affiliated” health care providers; (2) that provide a “substantial proportion” of the health care items and services under contract directly through the provider or “affiliated” group of providers; and (3) where “affiliated” providers have at least a “majority financial interest” and directly or indirectly share “substantial financial risk” for the provision of health care items and services.

Many aspects of the BBA '97 definition of a PSO need further clarification. The intent of the regulation was to provide enough guidance to providers who may be interested in contracting with HCFA as a PSO to determine whether it is feasible to pursue a contract, and to allow for the development of Federal Solvency standards for PSOs, as required by the BBA. In general, the regulation allows for some flexibility in the definitions, and allows HCFA to decide on satisfaction of some of the key term definitions on a case by case basis.

There are specific definitions in the regulations on how to determine whether a group of providers are “affiliated.” A “substantial portion” of health care services being provided by affiliated providers is defined as 70 percent of health care expenditures for non-rural areas and 60 percent for rural areas. The regulation is flexible in its definition of “control” and “substantial financial risk” by providing examples of how the definitions might be satisfied. The definitions also clarify that all members of the affiliated group do not have to have a “majority financial interest.”

Federal Solvency Requirements

BBA '97 required development of federal solvency standards for PSOs under a negotiated rule-making process. The federal solvency standards may apply for a PSO if a PSO can demonstrate that a state, in the process of reviewing the PSO’s licensure application, takes more than 90 days, applies discriminatory standards, or applies solvency requirements that are more difficult to comply with than federal standards. Under these interim rules, the PSO will receive a three-year waiver from state solvency requirements with no renewals of that waiver. No waivers will be granted after January 2003. PSOs must continue to apply for a state license before applying for a waiver and, in any event, must still comply with state quality of healthcare requirements.

The minimum initial federal solvency requirement for PSOs is $1,000,000 (at HCFA’s discretion after the filing of a business plan, and $1,500,000 otherwise), which can include $100,000 of intangible assets, excluding any deferred acquisition asset and which must include $750,000 of cash equivalents. After the effective date of a PSO’s Medicare+Choice contract, a PSO must maintain the greater of $750,000 or 40 percent of the minimum net worth amount in cash or cash equivalents.

In determining net worth for a PSO, the liability for claim payment due members of the PSO is not included in the...
liabilities.

Ongoing net worth requirements are the greater of:

• $1,000,000;

• 2 percent of annual capitation revenues up to $150,000,000 and 1 percent of the excess;

• Three months of uncovered health care expenditures; or

• The sum of the following percentages of provider payments:

<table>
<thead>
<tr>
<th>Affiliated Provider</th>
<th>Capitated Payments</th>
<th>Non-Capitated Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>Non-Affiliated Provider</td>
<td>4%</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Effect of BBA '97 on PSO Availability**

While it was intended that BBA '97 would substantially increase the availability of PSOs as Medicare contracting entities, PSO concerns and barriers are likely to continue to exist related to solvency, operational, and compliance requirements. While BBA '97 moved away from a “level playing field” between PSOs and other managed care organizations, specifically in the area of solvency requirements, the differences are not great.

**Solvency Requirements**

The concern about solvency is that the delivery of health care to Medicare beneficiaries should not be interrupted in the event that a PSO has miscalculated its ability to deliver guaranteed medical services for the capitations received from HCFA plus any additional amounts received from the beneficiaries. This is of particular concern with PSOs since they are new and involve players that may not be familiar with the financial requirements of a risk-bearing entity. Even in the absence of solvency requirements, some PSOs may be increasingly risk averse as failure of some entities becomes publicized.

The solvency requirements proposed for PSOs under the BBA '97 regulations are similar to the existing HMO solvency requirements for most states (patterned after the National Association of Insurance Commissioners (NAIC) model regulation). The primary differences in the federal PSO solvency requirements are reductions in required capital utilized to support payments to affiliated providers. The capital requirements are reduced on the basis that payments to affiliated providers are more easily controlled by the PSO, and potentially reduced if PSO losses occurred. Even after a PSO has met the minimum capital requirements, it may generate losses in the future and eat into the capital, and possibly even impairing the organization.

The NAIC and the American Academy of Actuaries currently have task forces developing solvency standards for all healthcare organizations, including PSOs. The solvency standards being proposed by these organizations take into account the risks inherent in the types of coverage being offered by MCOs, including PSOs.

**Operational Requirements**

In addition to meeting the solvency requirements, a PSO needs to be in a position to handle many operational functions that managed care organizations such as HMOs have traditionally assumed. These include quality assurance, utilization management, claims processing, provider contracting, enrollment and disenrollment, customer services, sales and marketing, appeals and grievances, financial and actuarial, and compliance. Depending on their type, some PSOs may handle some of these functions already.

A significant amount of labor and capital is required to implement and maintain these operational functions. PSOs may decide to outsource some of these functions or partner with existing HMOs or insurance companies. Such partnerships could lead to less control for providers within the PSOs, but may provide efficient sources for PSO marketing and administration services.

**Compliance**

Entering into a contract with HCFA to assume risk for a Medicare beneficiary population includes assuming responsibility for all of HCFA’s compliance requirements. While health care providers may be familiar with HCFA’s focus on enforcing compliance on provider billing, HCFA also has compliance requirements for risk-bearing health care organizations that include reporting requirements, provider participation, and the elimination of hold harmless clauses in provider agreements. Some of these requirements are time-consuming to develop, implement, and to satisfy on an ongoing basis and can generate stiff financial sanctions in the event of non-compliance. In addition, as indicated above, PSOs must also continue to satisfy state requirements related to network access, quality management, and administrative and marketing capabilities.
Medicare+Choice under BBA ‘97 has the potential to radically change how medical care and coverage is provided to Medicare eligible beneficiaries. It can have a major impact on beneficiaries by offering new plan options that are reflective of the varied private sector options available to other population sectors. Similarly, it can expand the opportunities for the private sector (insurers, HMOs, and provider organizations) to play a major role in managing and integrating the delivery and financing of health care for this population.

However, significant issues will need to be addressed as “choice” is introduced. Greater consumer disclosure requirements will be necessary as non-standard market-based plan designs are introduced. Risk segmentation will need to be addressed through risk adjustment mechanisms to ensure a financially stable and non-discriminatory marketplace. Medicare capitation payments will also need to continually be examined to ensure public policy and federal financing goals are being achieved as intended. Finally, regulatory and solvency requirements will need to be reexamined as new entities and issues emerge. How these issues are ultimately addressed will have a major impact on consumers, insurers, HMOs, and providers.

The American Academy of Actuaries plays a leading role in helping policy makers confront issues of an actuarial nature on a non-partisan basis. This paper outlines some of the key actuarial issues related to the rollout of the Medicare+Choice program. For more information, please contact the American Academy of Actuaries.

**Summary**

The American Academy of Actuaries and the Society of Actuaries (SOA) have been playing leading roles in the development and assessment of Medicare Reform strategies and related issues. The following may also be helpful in evaluating some of the key issues. For more information, please contact the American Academy of Actuaries.

**Medicare Reform**

**Quality Data**

**Medigap Market**
- Testimony of Michael Thompson before the Senate Finance Committee on Medigap Portability, March 19, 1997.

**Risk Adjustment**

**Medicare Payment**

**Provider Sponsored Organizations**

**Health Organization Risk Based Capital**