Defined Contributions as an Option in Medicare

Prepared by:

Mark E. Litow, F.S.A.
Consulting Actuary

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National Center for Policy Analysis
12770 Coit Rd., Suite 800
Dallas, Texas 75251
(972) 386-6272

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MILLIMAN & ROBERTSON, INC.

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Table of Contents

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I. OVERVIEW

At the request of the National Center for Policy Analysis (NCPA), we have analyzed a distinct new health care delivery and financing system for the Medicare aged population (excluding institutional and Medicaid individuals). The new alternative, referred to as the Medicare Defined Contribution Alternative (MDCA), allows an individual the choice between Medicare as it currently exists and a defined contribution from Medicare that must be used to purchase a plan that includes at least catastrophic insurance.

Plan Design

Under this alternative, Medicare eligible individuals ages 65 and over (non-institutionalized and non-Medicaid) have the option to choose between the current benefit package under Medicare and a defined contribution with which to buy their own coverage. The evaluation of proposed insurance programs reflects specified defined contribution amounts, cost levels and benefits for prescription drugs.

1. **Medicare Option -** Those individuals that do not choose the defined contribution option can remain in Medicare. The current Part A and Part B deductibles and the Part B coinsurance, as shown in the table below, remain the same for the aged population opting to stay in Medicare. Other cost sharing features, such as for hospital or nursing home coinsurance, have also been assumed to remain the same as for current Medicare benefits.

Medicare Cost Sharing	Estimates for Calendar Year 2000
Part A Deductible	$776
Part B Deductible	$100
Part B Coinsurance	20%

Provider fee limits as set by DRGs and RBRVS would still apply to those beneficiaries staying in Medicare. These limits are estimated to be about 50% to 55% of usual and customary levels in 1999.

2. **Defined Contribution Option –** Beginning in CY 2000, individuals ages 65 and over taking the defined contribution option (opting out of Medicare) would receive a defined contribution, on average, of slightly less than $4,400 from the Federal Government. This amount is intended to represent an average across all eligible individuals. Defined contributions for all individuals should vary with risk factors so that the money paid to those participating in the defined contribution program produce no gain or loss to Medicare. For instance, defined contribution amounts should vary by age and geography. Variations by geography should reflect area differences and could be similar to those used for average adjusted per capita costs (AAPCCs). Defined contributions could also be adjusted by health status of individuals and could also reflect earning levels. Our analysis, however, has not

estimated what defined contributions might be by risk class, nor has it attempted to specifically define such classes. Defined contribution amounts should be reduced for people in Part A and Part B only. Defined contributions are assumed to increase by 6.0% per year for CY 2001 and CY 2002.

The Part B premium from the insured would be added to the defined contribution for those choosing this option. The Part B premium in CY 2000 is estimated to be $582. The Part B premium is also trended at 6% per year. Thus, total monies available to provide insurance are estimated to be roughly $5,000 in calendar year 2000, $5,300 in 2001 and $5,600 in 2002.

The defined contribution must be used to purchase insurance. The insurance policy must provide at least catastrophic benefits. The insurance policy can be of any form such as an indemnity plan or a managed care plan. Any money from the defined contribution not used to purchase insurance would be deposited in a medical savings account (MSA). In addition, the value of the discontinued Part B premium will also be deposited in the MSA. The money in the MSA could be used to pay for non-covered medical expenses. Any remaining funds could accumulate tax free or could be withdrawn at year-end for non-medical expenses. However, any non-medical withdrawals would be taxed as ordinary income.

The insurance plan can take the form of managed care, a high deductible coverage, or any other form of insurance as long as it provides catastrophic protection. The rules underlying the insurance plan would need to be stable. For instance, government defined contributions would be indexed with inflation.

Specifically, we have modeled eight different plans. The first seven plans are alternatives under the defined contribution option and include catastrophic protection for prescription drugs. Plan 8 is representative of the average HMO risk contract, and is included for comparison purposes to Plans 1 through 7. The plan designs are as follows:

Plan	Benefit	Fee Level	Managed Care
1	High Deductible ($3,000)	Current	None
2	High Deductible ($3,000)	Increasing	None
3	High Deductible ($3,000)	Current	Low/Moderate
4	High Deductible ($3,000)	Increasing	Low/Moderate
5	High Deductible ($3,000)	Current	Moderate/Aggressive
6	High Deductible ($3,000)	Increasing	Moderate/Aggressive
7	HMO Commercial	Current	HMO
8	HMO Risk Contract	Current	HMO

Significant Findings

- An HMO should be able to provide comprehensive coverage, such as Plan 7, for an amount of money from Medicare (defined contribution) plus an additional amount slightly higher than a Medigap Plan F premium. The average out-of-pocket cost for Plan 7 is roughly $500 which reflects the copays shown in Exhibit 2 (page 7 of 7). The range of out-of-pocket costs (exposure) varies from a few dollars to several thousand dollars.

- Seniors who desire more choices should be able to purchase one of several other types of coverage. After testing various alternative plans (Plans 1 through 6), we have found that the additional amount of money (as referenced in the prior bullet), is less than that required under Plan 7 in most cases. The average out-of-pocket expense for these alternative plans is in the neighborhood of $1,200 with the exposure ranging from $775 to about $2,000.

- Seniors most likely to purchase fee-for-service insurance with these defined contributions include those in Medicare fee-for-service with no private (employer provided or risk contract or Medigap) health coverage and those with Medigap policies. These people do not have any insurance coverage for prescription drugs, with the exception of a small percentage of insureds who own a Medigap Plan H, I, or J. We expect a small percentage of people with employer provided (or sponsored) coverage or an HMO Medicare Risk Contract to purchase coverage under this alternative. These people in general have some coverage for prescription drugs and may have part of the cost of coverage paid for by someone else.

- The following table compares costs today (under current Medicare) with those for the defined contribution alternative for people with Medicare coverage only and those with Medicare plus Medigap coverage. A description of the components of insured cost are found in the key following the table.

Estimated Savings Under Defined Contribution Program for Two Groups of People

Current Insured Cost	Coverage Under Medicare Only *	Medicare Plus Medigap
➢ Average Out-of-Pocket Cost *(Estimate 1a)*	$1,406	$1,161
➢ Plan Premium *(Estimate 2)*	0	1,611
Current Total Insured Cost	$1,406	$2,772
Insured Cost Under Defined Contribution Program	**Plan 5**	**Average of Plan 1 and Plan 3**
➢ Average Out-of-Pocket Expense *(Estimate 1b)*	$845	$1,489
➢ Additional Premium/MSA Contribution *(Estimate 3)*	-627	226
Total Insured Cost Under Defined Contribution Program	$218	$1,715
Savings Under Defined Contribution Program (current cost minus defined contribution cost)	**$1,188**	**$1,057**

* These people do not have employer provided, risk contract or Medigap coverage.

Estimate 1a: Average out-of–pocket expenses paid by the insured to cover deductibles, coinsurance, or non-covered services, including prescription drugs. If only Medicare coverage exists, this is the cost of all Medicare coinsurance plus prescription drugs.

Estimate 1b: Average out-of-pocket expenses paid by the insured to cover the $3,000 deductible.

Estimate 2: The average amount of money a senior spends on Medigap coverage. Our estimates assume the senior purchases Plan F for $1,611.

Estimate 3: Additional Premium/MSA Contribution: The difference between the annual insurance plan premium and the average amount of money Medicare spends on each senior (in this program, that is equal to the amount of the defined contribution plus the Part B premium). If this value is positive, an additional premium from the insured is necessary to pay for the cost of coverage. If this value is negative, the excess of funds available versus premium is contributed to an MSA.

- This alternative is estimated to be revenue neutral to Medicare, whereas many other proposals adding prescription drug coverage are not. Defined contributions paid are revenue neutral to Medicare (i.e., they do not cost Medicare money as many current risk contracts do, nor do they make money for Medicare, as other risk contracts do). The Plan also assumes that prescription drugs are part of the benefit package, as opposed to allowing the option of purchasing prescription drug coverage separately as part of Medicare.

- The alternative limits movement back and forth by allowing individuals two opportunities to change options. The first is at their initial time of eligibility for this program. The second is at the beginning of any year that is at least four years after their initial option. In both cases, the move can be made without evidence of insurability, with the exception of individuals who already have drug coverage. In that case, people may opt out of the drug coverage, but not opt into drug coverage, unless they can pass underwriting standards as set by an insurer. Without these types of constraints, any reconfiguration of Medicare that adds prescription drugs will likely result in significant adverse selection against Medicare and increased costs to the program.

- The average defined contribution needs to be slightly less than $4,400 in calendar year 2000 and increases by 6% for each year thereafter. The Part B premium of $582 in year 2000, also trended by 6% each year, will be added to the defined contribution so that the total funds available to purchase insurance are roughly $5,000 in calendar year 2000, $5,300 in 2001 and $5,600 in 2002. The defined contribution amount should vary by age and area.

- Since Medigap policies do not exist under our assumptions, the money normally used to buy Medigap coverage is available to purchase insurance and/or can be deposited in the MSA account, subject to maximum funding limitations of the MSA.

- All defined contribution plans assume no coverage of deductibles where they exist. If coverage underneath the deductible exists, assumptions for high deductible plans in this report would not be appropriate.

- Various types of plans will create different cost scenarios with trade-offs of access to providers, financial incentives and exposure. Any insurance plan can be used with the defined contribution alternative, and the results will vary depending on the efficiency of the plan both clinically and financially. The only requirement in our analysis is that the plan cover at least 75% of costs above a threshold, which is to be based on the income level of the individual. An illustrative assumption for this concept is shown in the Attachment.

- Estimates of the defined contribution and aggregate deductible are based on a set of specified assumptions. A wide range of reasonable assumptions exist that could either increase or decrease these values. The impact of using alternate assumptions is considered in Section IV of this report; however, due to the many assumptions possible, this section discusses a subset of those possible.

Caveats

We have studied this alternative for a three-year period, assuming this alternative becomes available on January 1, 2000. The projections produce a revenue neutral result for the period 2000-2002 to Medicare. The projections reflect various assumptions as to participation rates between current Medicare and the defined contribution alternative, the morbidity of each group, selection differences, changes in utilization, and the variation in fee levels charged by providers. We have studied numerous insurance options including an HMO and high deductible plans with and without

managed care. Also, we have performed some limited sensitivity testing of the most critical assumptions.

The following sections of this report summarize the characteristics of the programs, the feasibility of defined contributions in the private market for MDCA where applicable, the methodology and assumptions, and discusses potential impacts of varying certain assumptions.

The analyses presented in this report are based on systems proposed by the NCPA. The proposed systems do not necessarily represent the opinions of Milliman & Robertson, Inc.

The opinions and conclusions expressed in this report are those of the author. The author's judgment was used to set assumptions in this report. There is significant uncertainty associated with many of the assumptions underlying these analyses. Changes in these assumptions may have a material impact on the estimated impact and/or viability of the proposal as currently drafted. Such changes could also represent reasonable assumptions, as reasonable people will differ in regard to what they consider to be reasonable assumptions. Further, actual experience may vary from the projected results in this report.

This report is intended for distribution for all who request, and therefore should be used in its entirety. The results and assumptions may be misinterpreted if taken out of context. As such, portions of this report should not be excerpted.

II. FEASIBILITY OF INSURANCE PROGRAMS UNDER THE MDCA DEFINED CONTRIBUTION OPTION

One of the most salient questions regarding the MDCA proposal is whether the defined contributions plus the value of discontinued Part B premiums will be sufficient to purchase insurance coverage in the private market. We analyzed a comprehensive HMO policy and the following six high deductible comprehensive insurance policies to test the feasibility: 1) no managed care with current fee levels, 2) no managed care with increasing fee levels, 3) a loose/moderate managed care plan with current fee levels, 4) a loose/moderate managed care plan with increasing fee levels, 5) a moderate/aggressive managed care plan with current fee levels, and 6) a moderate/aggressive managed care plan with increasing fee levels.

The premium rates for an HMO plan or high deductible policy are estimated from the total of CY 2000 Medicare costs plus the value of the Medicare cost sharing features. These total costs are adjusted for utilization, selection, trend, fee levels, deductible amount, and administrative expenses to estimate policy premiums. The premium calculations (for all plans with and without managed care), defined contribution amounts, and amounts available for the MSA are shown in Exhibit 2.

These plans can be compared to HMO risk contracts today, where the government is providing a defined contribution that includes a subsidy in many cases (which is being phased out over time) if the insured selects the HMO. However, many of the HMOs are not meeting their target profit objectives and in some cases they are actually losing money (i.e. a plan subsidy). If the insureds did not receive these subsidies, we estimate the plan premium they would have to pay would be $814 on average versus an average premium of $150 today. The insured's cost sharing under an HMO Risk Contract is estimated at $866 on average. The cost sharing comes in the form of copays on various services and a maximum plan benefit for prescription drugs.

A comprehensive HMO plan under the defined contribution alternative would likely produce lower cost sharing than the current HMO plans since catastrophic coverage for prescription drugs would be available. If the government and plan subsidies were not available, as they are today under Rick Contracts, the average consumer outlay for an HMO plan in this instance, excluding the Part B premium, would be approximately $1,833 per year ($1,330 plan premium + $503 cost sharing). When compared to an individual with Medigap Plan F for which the average outlay is approximately $1,611 per year, the person gets comprehensive coverage for $222 more, or roughly 14% more.

For a high deductible policy in CY 2000, the annual per person premium for a $3,000 deductible plan (with loose/moderate managed care and current price controls) is estimated to be $4,924. The contributions from the defined contribution and Part B premium would be just enough to cover the cost of the insurance policy (sufficient by $33). The excess $33 would be deposited into an MSA along with additional money (limited by law) to cover deductible costs. This example is meant to illustrate an average high deductible plan. Other more aggressive managed care plans will result in lower premiums and larger MSA contributions while less aggressive (no managed care) plans will result in higher premiums and no defined contribution funds available for an MSA. Therefore, the amount of money left over after purchasing a policy can be significant or may be deficient depending on the type of policy chosen.

Accumulations for CY 2000 can be carried over to CY 2001 with interest (tax free) and likewise for CY 2002. Thus, balances for many people in CY 2001 and CY 2002 may be higher and could exceed the deductible. If true, the money could become available for purchasing LTC coverage or for other needs.

Under the defined contribution option, provider fee limits via DRGs and RBRVS (resource based relative value schedule) are eventually discontinued. They could be discontinued in many ways, such as after several years or gradually over time. In our analysis, we have tested two assumptions:

1. Providers would continue to charge fee levels consistent with Medicare for the years 2000 to 2002 and then increase as noted in #2. This scenario is referred to as current fee levels in this report.

2. In the first three years after implementation, provider fee levels charged on Part A and Part B type services would increase by 8% in year one, by 16% in year two, and by 24% in year three from Medicare levels in 1999. We assumed these percentages are consistent with maximum increases of 10%, 20% and 30% for years one, two, and three, respectively. This scenario is referred to as increasing fee levels in this report.

The plans where fee levels are increasing have higher costs and premiums. However, this extra initial cost may result in lower costs and/or better access to care after the three-year period. The annual per person premium will vary depending on the type of plan chosen (with or without managed care) and the fee level assumptions. The annual per person defined contribution amounts are relatively the same regardless of the plan features. In all cases, the scenarios with managed care show a greater likelihood than plans without managed care of having sufficient funds to purchase insurance. The trade off may be restrictions placed on access to providers and/or care.

Exhibit 3 provides two reconciliations of costs of the high deductible concept and the average HMO risk contract on the same basis. The first reconciliation illustrates the difference in total costs to consumers between the two approaches. The second reconciliation illustrates the differences in actual costs and subsidies to the consumer.

III. METHODOLOGY AND ASSUMPTIONS

The following paragraphs describe the methodology and primary assumptions used to estimate costs under the current Medicare system, Federal Government costs and similar costs for the new program.

A variety of assumptions were used in estimating the cost implications to the Federal Government. All assumptions are summarized in Attachment A and should be critically reviewed when interpreting the results of the new system. Alternate assumptions could either increase or decrease the results shown in this report.

A. Methodology - Current Medicare Program

The costs to the Federal Government for the current Medicare program were projected forward using a five-step approach.

Step 1 - Estimate the Medicare cost to the Federal Government per aged participant in CY 2000. This annual claim cost was estimated to be $5,832.

Step 2 - Project these costs forward to CY 2001 and CY 2002. We assumed the cost and utilization of medical services would increase at an annual rate of 6%. We also assumed the number of people eligible for Medicare would increase an additional 0.7% per year. Therefore, the total annual increase in medical expenditures was assumed to be roughly 6.7% per year. Providers are assumed to continue to be reimbursed consistent with the fee limits set by DRGs and RBRVS, unless otherwise noted in Attachment A.

Step 3 - Increase medical costs for administrative expenses. Administrative expenses were assumed to be 2.0% of medical costs.

Step 4 - Estimate the amount of future Part B premiums to be paid by the Medicare enrollees. The CY 2000 annual per person Part B premium is projected to be $582. Part B premiums beyond CY 2000 are assumed to increase 6% per year thereafter, which would be equivalent to 25% of the Part B Medicare reimbursed cost.

Step 5 - Estimate the cost to the Federal Government for the current Medicare program for the projection period. The total cost to the Federal Government is equal to the medical costs plus administrative expenses minus the Part B premium.

B. Methodology - Medicare Defined Contribution Alternative (MDCA)

The costs to the Federal Government for the proposed Medicare system were projected separately for those remaining in the Medicare system and those selecting the defined contribution option. We have assumed that an average of 30% of Medicare enrollees will select the defined contribution option in CY 2000 through CY 2002. The projections measure the impact of tax revenue generated from withdrawal of MSA balances and investment income generated from the savings.

i. MDCA - Medicare Option

The cost to the Federal Government for those individuals choosing to remain in the Medicare program was estimated using a six-step approach.

Step 1 – Estimate the Medicare cost to the Federal Government per aged participant in CY 2000.

Step 2 – Project these costs forward to CY 2001 and CY 2002. We assumed the cost and utilization of medical services would increase at an annual rate of 6.0%. We also assumed the number of people eligible for Medicare would increase an additional 0.7% per year. Providers were assumed to continue to be reimbursed using the fee limits as set by DRGs and RBRVS.

Step 3 – Increase costs for expected adverse selection. Those enrollees choosing to remain in the Medicare system were assumed to be less healthy, on average, than those choosing the defined contribution option. We assumed this adverse selection will vary depending on the percentage of enrollees selecting the defined contribution option.

Step 4 - Increase medical costs for administration expenses. Administration expenses were assumed to be approximately 2.2% of medical costs in each year. The administrative costs were assumed to increase, as a percentage of medical costs, because a portion of the Medicare administrative expenses were assumed to be fixed costs.

Step 5 - Estimate the amount of future Part B premiums paid by the Medicare enrollee. The annual Part B premiums for CY 2000 were projected to be $582. Each subsequent year is expected to increase by 6% per year.

Step 6 - Estimate the cost to the Federal Government for those enrollees choosing to remain in the Medicare option. The total cost to the Federal Government is equal to the medical claim costs plus the administration expenses minus the Part B premium.

ii. MDCA - Defined Contribution Option

Values under the defined contribution option were projected forward using a nine-step process.

Step 1 - Project the future cost of a high deductible insurance policy. These costs are developed and shown in Exhibit 2.

Step 2 - Project the value of future Part B premiums. The value of the Part B premium, along with the defined contribution provided by the Federal Government, could be used to purchase private insurance and fund the MSA.

Step 3 - Project the average MSA contribution. The average MSA contribution is equal to the defined contribution amount provided by the government plus the value of the Part B premium minus the cost for the insurance policy minus an MSA administrative expense.

Step 4 - Estimate the Medigap premium for Plan F (or any other plan as applicable).

Step 5 - Estimate the differences in drug costs covered on average by the defined contribution option insurance plan and current costs of the insured or carrier.

Note: Steps 4 and 5 assume an individual has a Medigap Plan F, which is the most common type of Medigap coverage. If the individual has another form of coverage, this step should be revised.

Step 6 - Project the additional tax revenue which would be generated from those withdrawing their MSA balances at the end of the year. In making this projection, we assume that 50% of those who select the defined contribution option will have an MSA. Others were assumed to spend their entire defined contribution amount for insurance coverage. We also assume that for those with an MSA, an average balance will remain at the end of the year and 33% of that amount will be withdrawn causing a taxable event. Finally, tax revenue was assumed to be 15% of the amount withdrawn. We have not accounted for tax implications in our calculations. These could result in savings being higher or lower than estimated.

Step 7 - Estimate the value of the investment income which would accrue on the amount saved from the proposed program. In the projection, we assumed a 5% investment income rate and the savings would accrue uniformly throughout the year.

Step 8 - Compare the sum of the MSA and Medigap premium to the insurance deductible.

Step 9 – Target the defined contribution so that the difference between current programs costs and costs of those under MDCA is revenue neutral to Medicare and the defined contribution in Step 8 is attractive to consumers.

C. Assumptions - Medicare and Defined Contribution Option

1. Available to all Aged (Non-Institutionalized, Non-Medicaid) Medicare eligibles.

2. Defined contribution amounts have been modified to be consistent with changes in the levels of health care costs since CY 1995. The estimated defined contribution for CY 2000 (national average) is slightly less than $4,400 plus the estimated Part B premium of $582, so that approximately $5,000 will be available to purchase insurance and fund the MSA account. The Part B premium would be a mandatory contribution to the MSA and/or insurance premium. The combined contribution of $5,000 will increase by 6% each year thereafter.

3. Part B premium is discontinued for those choosing the defined contribution option, but must be contributed directly to the MSA (or insurance) as noted in #2 above.

4. Any type of private catastrophic plan can be purchased with any remaining amount of the defined contribution going into an MSA account. The models are based on either a comprehensive HMO with copays ($10 for physician office visits, $10 for generic drugs, $15 for brand name drugs, mental health costs are capped at 1/3 of costs and $50 for emergency room visits) or a $3,000 deductible with 100% coverage thereafter in CY 2000. The deductible will increase at 6% per year thereafter. Both plans include prescription drug coverage.

5. Medicare deductibles and coinsurance, for those remaining in Medicare (not taking the defined contribution option) are assumed to be:
   - Part A deductible is $776 in CY 2000 and will increase at 3% per year thereafter
   - Part B deductible is $100 in all years
   - Part B coinsurance is 20.0%

6. The annual Part B premium for those who remain in Medicare is $582 in CY 2000 and increases 6% per year thereafter.

7. This plan is estimated to be revenue neutral to Medicare over the three-year period 2000 to 2002.

IV. SENSITIVITY TESTS

A wide range of reasonable assumptions exist which could either increase or decrease this analysis. Therefore, we have performed a few sensitivity tests on this alternative to show the impact of a change in two of the assumptions.

This program is intended to be dynamic and could be designed to impact the Medicare program in various ways. Savings/costs could be increased or decreased by modifying the level of the defined contribution amounts, Medicare plan cost sharing provisions, Part B premium levels, or other characteristics of the programs. The MDCA is currently targeted to be approximately revenue neutral to Medicare.

One of the key assumptions driving the savings/cost impact to Medicare has to with the morbidity of those selecting the defined contribution option each year. A change in the morbidity of those selecting the defined contribution option means a corresponding change in the morbidity of people remaining in traditional Medicare.

Since the defined contribution amount is predetermined based on an anticipated level of morbidity of those choosing this option, lower morbidity of these people will mean the defined contribution is too high and a loss to Medicare will result. To the contrary, if the morbidity of the people choosing the defined contribution is higher, Medicare will save money. Once the morbidity estimate varies from the underlying target, variation in the participation rate becomes significant to the overall result. But at the target morbidity level, any variation in participation is of little consequence (while the table shows no difference, a negligible difference does exist).

The following table shows results under nine morbidity/participation scenarios, assuming defined contributions are based on selection consistent with the high deductible scenarios. Our best estimate of the morbidity for those selecting the defined contribution option is 83.9% relative to the total Medicare population. Morbidity is therefore expressed as 83.9% of the current Medicare for people taking the defined contribution option (the average for our best estimate). We then tested this assumption by modifying the morbidity by plus or minus five percentage points. Participation is set at 20%, 30% or 40% under the defined contribution option, with 30% being our best estimate.

Savings (+) / Cost (-) to Medicare for Years 2000-2002* (Billions of Dollars)			
Morbidity as a Percent of Current Medicare	Participation Rate		
	20%	30%	40%
78.9%	$-5.50	$-8.25	$-11.00
83.9%	$0.00	$0.00	$0.00
88.9%	$+5.50	$+8.25	$+11.00

* Dollars rounded to nearest 0.25 billion.

There are many other sensitivity test that could be run to determine the impact of varying assumptions. We have limited our testing to two assumptions to show how significant a change can easily take place.

Defined Contributions as an Option in Medicare

Summary of Assumptions

A. Current Medicare Program

1. CY 2000 Claim Cost Levels for Medicare Aged Enrollees:

Estimated CY 2000 Claim Cost Levels per Medicare Aged Beneficiary			
	Medicare	Medicare Cost Share	Total
Part A	$3,655	$298	$3,953
Part B	2,177	823	3,000
Total	$5,832	$1,121	$6,953

2. **Annual Medical Trend:** 6%

3. **Annual Growth in Eligible Population:** 0.7%

4. **Part B Premium:** $582 in CY 2000 increasing at 6% thereafter

5. **Administration Costs:** 2% of Medical Costs

6. **Provider Reimbursement Levels:** 50% to 55% of Billed Charges

7. **Population:** Aged Only, Non-Institutionalized, Non-Medicaid

Defined Contributions as an Option in Medicare

Summary of Assumptions

B. Proposed System

1. Annual Medical Trend: 6%

2. Annual Growth in Eligible Population: 0.7%

3. Administration Cost to Government (Medicare Option):

MDCA		
CY 2000	CY 2001	CY 2002
2.2%	2.2%	2.2%

4. MSA Administration Cost to Policyholder (Defined Contribution Option):

2% of MSA contributions

5. Provider Fee Charges (Levels) Relative to 1999:
- **for Parts A and B Only:**

	MDCA		
	CY 2000	CY 2001	CY 2002
Current Fee Levels	1.00	1.00	1.00
Increasing Fee Levels	1.08	1.16	1.24

6. Discounts:
- **for Parts A and B Only:**
  - all years without managed care: 1.00 (0% discount)
  - all years with managed care: 0.90 (10% discount)

  for prescription drugs:
  - all years without managed care: 0.98 (2% discount)
  - all years with managed care: 0.80 (20% discount)

7. Population (in Millions):

CY 2000	CY 2001	CY 2002
29.0	29.2	29.4

8. Distribution of Enrollees Choosing Option:

MDCA

Defined Contributions as an Option in Medicare

Summary of Assumptions

MDCA	
Average for CY 2000-CY 2002	
Medicare Option	**Defined Contribution Option**
70%	30%

9. Morbidity by Option:

Calendar Year	**MDCA**	
	Restructured Medicare Option	**Defined Contribution Option**
1999	NA	NA
2000	1.069	0.839
2001	1.069	0.839
2002	1.069	0.839

Defined Contributions as an Option in Medicare

Summary of Assumptions

10. Annual Per Person Medicare Option Cost Sharing (All Years):

	MDCA Medicare Option
Part A Deductible	$776
Part B Deductible	$100
Part B Coinsurance	20%

MDCA	CY 2000	CY 2001	CY 2002
Deductible - all Benefits	$3,000	$3,180	$3,371
Coinsurance Above Deductible - all Benefits	100%	100%	100%

11. Average Annual Defined Contribution Amount per Person:

Varies by policy type. See Exhibit 2.

The defined contribution amounts assumed in this report represent nationwide averages. In practice, the defined contribution amount should vary by age and area. Also, the Defined contributions are consistent with those who participate in both Part A and Part B. For those who participate in Part A only or Part B only, the defined contribution would need to be reduced accordingly.

Defined contributions have not been assumed to vary by income level or health status, but these are both options. Defined contributions could vary by income level so that low income individuals could purchase lower deductible coverage and high income individuals could purchase higher deductible coverage. Health status adjustments could be made to provide individuals in poor health with high defined contributions and those in better health with lower defined contributions.

Defined Contributions as an Option in Medicare

Summary of Assumptions

12. Part B Premium to MSA (Defined Contribution Option):

MDCA		
CY 2000	CY 2001	CY 2002
$582	$617	$654

13. Private Insurance Policy Premium (Defined Contribution Option):

Varies by policy type. See Exhibit 2.

14. Private Insurance

Insurance plans cannot have more than 25% of total (aggregate) costs above a certain claim level (thresholds) paid for by insureds. This threshold varies relative to income level for purposes of illustration. We have assumed this threshold would be 10% of income, but not less than $3,000. The minimum value of $3,000 would be indexed with the defined contribution level. Note that the minimum value of $3,000, adjusted for trend, is consistent with the deductibles used in our high deductible plans. Thus, no adjustment was needed in our analysis to reflect this formula.

15. Costs/Additional Premium for Risk Groups

	Medicare Coverage Only*	Medigap	Employer Provided	Risk Contract
Participation Rate	90%	57.5%	2%	1%
Fee per Model	Medicare Fee Levels			
Insurance Program	High Deductible; Moderate/aggressive managed care)	High Deductible; 50% no managed care, 50% low/ moderate managed care	High Deductible; no managed care	HMO Plan without subsidies
Defined Contribution	$4,375, same as high deductible plan with moderate/aggressive managed care			

* These people do not have employer sponsored, risk contract or Medigap coverage.

16. Assumed MSA Annual Contribution per Person Assuming No Carryover Only (Defined Contribution Option):

Varies by policy type. See Exhibit 2.

17. Supplemental Coverage for High Deductible Option*:

Defined Contributions as an Option in Medicare

Summary of Assumptions

MDCA – Medicare Option	New Plans are Allowed
MDCA – Defined Contribution	Assumes no coverage underneath the deductible

* Rules are the same as for Medigap coverage today. For MDCA, drug coverage can be rated for health status if the individual already has drug coverage.

18. **Tax Rate on Withdrawn MSA Balance:** 15%

19. **Investment Rate:** 5%

20. **No Change in Medicare Payroll Taxes**

Defined Contributions as an Option in Medicare

Summary of Assumptions

21. Total Utilization Adjustment for MSA Plans Without Managed Care (Defined Contribution Option):

Calenda r Year	Due to Presence of High Deductible*	Increasing Fee Levels	Total
2000	0.819	0.957	0.783
2001	0.819	0.915	0.749
2002	0.819	0.872	0.714
*Applicable only for plans assuming current fee levels.			

Total Utilization Adjustment for MSA Plans With Managed Care (Defined Contribution Option):

Calenda r Year	Due to Presence of MSA	Increasing Fee Levels	Total
2000	0.781	0.957	0.747
2001	0.781	0.915	0.714
2002	0.781	0.872	0.681
*Applicable only for plans assuming current fee levels.			

22. Average Medigap Premium (Defined Contribution Option Only):

The average Medigap premium is shown to indicate additional dollars that may be available to contribute to the MSA. These values equal the value of Medicare cost sharing under the current system divided by 0.70 (the assumed loss ratio). We trended these premiums forward from CY 2000 at 6.0%.

Defined Contributions as an Option in Medicare

Summary of NCPA Medicare Proposal

A. Medicare Option

1. Annual Cost Sharing Features:

Part A Deductible	$776
Part B Deductible	100
Coinsurance	20.0%

2. If Medicare costs are higher or lower per person than the defined contribution program, deductibles and coinsurance could be modified.

3. All other features of Medicare, including DRGs and RBRVS, remain unchanged.

4. Part B premiums are equal to $582 in CY 2000 and trended forwarded at 6% thereafter.

B. Defined Contribution Option

1. Available to aged Medicare eligibles – non-institutionalized, non-Medicaid.

2. Average defined contribution of slightly less than $4,400 for CY 2000 (national average with area adjustment excluded).

3. Defined contribution should be adjusted for area as exists with AAPCC factor for Medicare.

4. Individuals have two open enrollment options during their lifetime, subject to some exceptions. The first open enrollment option is at time of actual eligibility for MDCA (i.e., program inception or attaining age 65). The second option is at the beginning of any year at least four years after the initial option. However, in both cases, individuals who already have drug coverage (or had coverage in the last eighteen months) can be underwritten and rated by insurers according to normal underwriting rules. For other situations, insurers would again be able to underwrite and rate accordingly, including rejecting individuals for coverage or offering limited benefits to certain individuals.

5. Defined contributions for CY 2001 and CY 2002 are assumed to increase by 6% annually.

6. Part B premium is discontinued.

Defined Contributions as an Option in Medicare

Summary of NCPA Medicare Proposal

7. Any type of private plan can be purchased (e.g., managed care, indemnity), but at least a catastrophic plan must be purchased.

C. Other - Revenue neutral to Medicare

Defined Contributions as an Option in Medicare

Development of Policy Premium and Amount Available for High Deductible Plan

No Managed Care Plan with Current Fee Levels			
	Calendar Year		
	2000	2001	2002
CY 2000 Cost	$8,157	8,157	8,157
Selection Factor	0.839	0.839	0.839
Utilization Factor	0.853	0.853	0.853
Trend and Price Controls	0.997	1.057	1.120
Deductible Adjustment	0.795	0.795	0.795
Administration (15%)	816	866	918
Policy Premium	5,443	5,770	6,116
MSA Available			
Defined Contribution Amount and Part B Premium	4,950	$5,247	$5,562
Policy Premium	5,443	5,770	6,116
MSA Administration (2%)	0	0	0
Remaining Defined Contribution Available for MSA	(483)	(512)	(543)
Medigap Premium (Plan F)	1,611	1,708	1,810
Prescription Drug Cost above Ded *	680	721	764
Subtotal of Amounts Available for Claims	$1,808	$1,917	$2,031
Average Policy Deductible Amount	3,000	3,180	3,371

* Prescription Drugs are covered by only a very small percentage of Medigap Plans. We have assumed that $1,000 of the $3,000 deductible would go towards the purchase of drugs and that the additional cost above $1,000 would be covered by the high deductible plan. Therefore, the drug cost above $1,000 previously spent out of pocket will now be available to cover a portion of the corridor.

Defined Contributions as an Option in Medicare

Development of Policy Premium and Amount Available for High Deductible Plan

No Managed Care Plan with Increasing Fee Levels			
	Calendar Year		
	2000	2001	2002
CY 2000 Cost	$8,157	8,157	8,157
Selection Factor	0.839	0.839	0.839
Utilization Factor	0.853	0.853	0.853
Trend and Price Controls	1.019	1.097	1.172
Deductible Adjustment	0.798	0.800	0.801
Administration (15%)	837	903	966
Policy Premium	5,584	6,023	6,445
MSA Available			
Defined Contribution Amount and Part B Premium	4,950	5,247	5,562
Policy Premium	5,584	6,023	6,445
MSA Administration (2%)	0	0	0
Remaining Defined Contribution Available for MSA	(622)	(761)	(866)
Medigap Premium (Plan F)	1,611	1,708	1,810
Prescription Drug Cost above Ded *	680	721	764
Subtotal of Amounts Available for Claims	$1,669	$1,668	$1,708
Average Policy Deductible Amount	3,000	3,180	3,371

* Prescription Drugs are covered by only a very small percentage of Medigap Plans. We have assumed that $1,000 of the $3,000 deductible would go towards the purchase of drugs and that the additional cost above $1,000 would be covered by the high deductible plan. Therefore, the drug cost above $1,000 will now be available to cover a portion of the corridor.

Defined Contributions as an Option in Medicare

Development of Policy Premium and Amount Available for High Deductible Plan

Loose/Moderate Managed Care Plan with Current Fee Levels			
	Calendar Year		
	2000	2001	2002
CY 2000 Cost	$8,157	8,157	8,157
Selection Factor	0.839	0.839	0.839
Utilization Factor	0.801	0.813	0.813
Trend and Price Controls	0.985	1.030	1.092
Deductible Adjustment	0.775	0.775	0.775
Administration (15%)	738	784	831
Policy Premium	4,924	5,225	5,538
MSA Available			
Defined Contribution Amount and Part B Premium	$4,951	$5,248	$5,563
Policy Premium	4,924	5,225	5,538
MSA Administration (2%)	1	1	1
Remaining Defined Contribution Available for MSA	26	22	24
Medigap Premium (Plan F)	1,611	1,708	1,810
Prescription Drug Cost above Ded *	680	721	764
Subtotal of Amounts Available for Claims	$2,317	$2,451	$2,598
Average Policy Deductible Amount	3,000	3,180	3,371

* Prescription Drugs are covered by only a very small percentage of Medigap Plans. We have assumed that $1,000 of the $3,000 deductible would go towards the purchase of drugs and that the additional cost above $1,000 would be covered by the high deductible plan. Therefore, the drug cost above $1,000 will now be available to cover a portion of the corridor.

Defined Contributions as an Option in Medicare

Development of Policy Premium and Amount Available for High Deductible Plan

Loose/Moderate Managed Care Plan with Increasing Fee Levels			
	Calendar Year		
	2000	**2001**	**2002**
CY 2000 Cost	$8,157	8,157	8,157
Selection Factor	0.839	0.839	0.839
Utilization Factor	0.801	0.813	0.813
Trend and Price Controls	1.007	1.169	1.310
Deductible Adjustment	0.778	0.780	0.781
Administration (15%)	758	819	877
Policy Premium	5,056	5,461	5,846
MSA Available			
Defined Contribution Amount and Part B Premium	$4,951	$5,248	$5,563
Policy Premium	5,056	5,461	5,846
MSA Administration (2%)	0	0	0
Remaining Defined Contribution Available for MSA	(103)	(209)	(277)
Medigap Premium (Plan F)	1,611	1,708	1,810
Prescription Drug Cost above Ded *	680	721	764
Subtotal of Amounts Available for Claims	$2,188	$2,220	$2,297
Average Policy Deductible Amount	3,000	3,180	3,371

* Prescription Drugs are covered by only a very small percentage of Medigap Plans. We have assumed that $1,000 of the $3,000 deductible would go towards the purchase of drugs and that the additional cost above $1,000 would be covered by the high deductible plan. Therefore, the drug cost above $1,000 will now be available to cover a portion of the corridor.

Defined Contributions as an Option in Medicare

Development of Policy Premium and Amount Available for High Deductible Plan

Moderate/Aggressive Managed Care Plan with Current Fee Levels			
	Calendar Year		
	2000	2001	2002
CY 2000 Cost	$8,157	8,157	8,157
Selection Factor	0.839	0.839	0.839
Utilization Factor	0.801	0.813	0.813
Trend and Price Controls	0.885	0.926	0.981
Deductible Adjustment	0.758	0.758	0.758
Administration (15%)	650	689	731
Policy Premium	4,330	4,594	4,870
MSA Available			
Defined Contribution Amount and Part B Premium	$4,957	$5,254	$5,570
Policy Premium	4,330	4,594	4,870
MSA Administration (2%)	12	13	14
Remaining Defined Contribution Available for MSA	615	647	686
Medigap Premium (Plan F)	1,611	1,708	1,810
Prescription Drug Cost above Ded *	680	721	764
Subtotal of Amounts Available for Claims	$2,906	$3,076	$3,260
Average Policy Deductible Amount	3,000	3,180	3,371

* Prescription Drugs are covered by only a very small percentage of Medigap Plans. We have assumed that $1,000 of the $3,000 deductible would go towards the purchase of drugs and that the additional cost above $1,000 would be covered by the high deductible plan. Therefore, the drug cost above $1,000 will now be available to cover a portion of the corridor.

Defined Contributions as an Option in Medicare

Development of Policy Premium and Amount Available for High Deductible Plan

Moderate/Aggressive Managed Care Plan with Increasing Fee Levels			
	Calendar Year		
	2000	2001	2002
CY 2000 Cost	$8,157	8,157	8,157
Selection Factor	0.839	0.839	0.839
Utilization Factor	0.801	0.743	0.709
Trend and Price Controls	0.905	1.050	1.178
Deductible Adjustment	0.762	0.764	0.766
Administration (15%)	668	721	772
Policy Premium	4,449	4,807	5,147
MSA Available			
Defined Contribution Amount and Part B Premium	$4,955	$5,252	$5,567
Policy Premium	4,449	4,807	5,147
MSA Administration (2%)	10	8	7
Remaining Defined Contribution Available for MSA	496	437	413
Medigap Premium (Plan F)	1,611	1,708	1,810
Prescription Drug Cost above Ded *	680	721	764
Subtotal of Amounts Available for Claims	$2,787	$2,866	$2,987
Average Policy Deductible Amount	3,000	3,180	3,371

* Prescription Drugs are covered by only a very small percentage of Medigap Plans. We have assumed that $1,000 of the $3,000 deductible would go towards the purchase of drugs and that the additional cost above $1,000 would be covered by the high deductible plan. Therefore, the drug cost above $1,000 will now be available to cover a portion of the corridor.

Defined Contributions as an Option in Medicare

Development of Policy Premium and Amount Available for HMO Plan

HMO Plan with Current Fee Levels		
Calendar Year 2000	HMO With Comprehensive Design*	Risk Contract Today
CY 2000 Cost	$8,157	$8,157
Discount	0.970	0.970
Selection Factor	0.860	0.850
Utilization Factor	0.831	0.829
Trend and Price Controls	NA	NA
Cost Sharing Adjustment	0.911	0.845
Administration (19%)	0.820	0.810
Policy Premium	6,287	$5,821
MSA Available		
Defined Contribution Amount and Part B Premium	$5,085	$5,026
Policy Premium	6,287	5,821
MSA Administration (2%)	0	0
Remaining Defined Contribution Available for MSA	(1,202)	(795)
Medigap Premium (Plan F)	1,611	1,611
Other Costs (Cost Sharing)	504	866
Insured Cost Minus Medigap Premium	95	50
Average Policy Deductible Amount		NA

* $10 copay for physician office visit
$10 copay for generic prescription drugs
$15 copay for brand name prescription drugs
$50 copay on emergency room visits

High Deductible MSA with No Managed Care
With Current Fee Levels

1) Defined Contribution Amount	$4,368
2) Part B Premium	582
3) Total Funds Available (1+2)	4,950
4) Deductible	3,000
5) Insurance Premium	5,443
6) MSA Deposit (3-5) / 1.02	(484)
7) MSA Administration Expense (3-5) x .02	0
8) Medigap Premium	1,611
9) Exposure (4-6-8)	1,873

	HMO Risk Contract	High Deductible With No Managed Care	Difference
Insurance Cost	$5,821	$5,443	$378
Cost Sharing	866	1,194	(328)
Total Insurance Cost	$6,688	$6,637	$50

	HMO	High Deductible With No Managed Care	Difference
Government Subsidy	$428	$0	$428
Plan/Provider Subsidy	236	0	236
Plan Premium	150	0	150
Part B Premium	582	582	0
Selection Adjustment	48	0	48
Cost Sharing	866	0/1194	866
Med Supp Premium	N/A	1,611	(1,611)
MSA Balance	N/A	66	(66)
Total Consumer Cost and Subsidy	$2,310	$2,259	$51

High Deductible MSA with No Managed Care
Increasing Fee Levels

1) Defined Contribution Amount	$4,368
2) Part B Premium	582
3) Total Funds Available (1+2)	4,950
4) Deductible	3,000
5) Insurance Premium	5,584
6) MSA Deposit (3-5) / 1.02	(622)
7) MSA Administration Expense (3-5)x.02	0
8) Med Supp Premium	1,611
9) Exposure (4-6-8)	2,011

	HMO	High Deductible With No Managed Care	Difference
Insurance Cost	$5,821	$5,584	$237
Cost Sharing	866	1,203	(337)
Total Insurance Cost	$6,688	$6,787	($100)

	HMO	High Deductible With No Managed Care	Difference
Government Subsidy	$428	$0	$428
Plan/Provider Subsidy	236	0	236
Plan Premium	150	0	150
Part B Premium	582	582	0
Selection Adjustment	45	0	45
Cost Sharing	866	0/1203	866
Med Supp Premium	N/A	1,611	(1,611)
MSA Balance	N/A	214	(214)
Total Consumer Cost and Subsidy	$2,307	$2,407	($99)

High Deductible MSA with Loose/Moderate Managed Care With Current Fee Levels

1) Defined Contribution Amount	$4,369
2) Part B Premium	582
3) Total Funds Available (1+2)	4,951
4) Deductible	3,000
5) Insurance Premium	4,924
6) MSA Deposit (3-5) / 1.02	26
7) MSA Administration Expense (3-5)x.02	1
8) Med Supp Premium	1,611
9) Exposure (4-6-8)	1,363

	HMO	High Deductible Loose/Moderate Managed Care	Difference
Insurance Cost	$5,821	$4,924	$897
Cost Sharing	866	1,217	(351)
Total Insurance Cost	$6,688	$6,142	$546

	HMO	High Deductible Loose/Moderate Managed Care	Difference
Government Subsidy	$428	$0	$428
Plan/Provider Subsidy	236	0	236
Plan Premium	150	0	150
Part B Premium	582	582	0
Selection Adjustment	57	0	57
Cost Sharing	866	0/1217	866
Med Supp Premium	N/A	1,611	(1,611)
MSA Balance	N/A	(420)	420
Total Consumer Cost and Subsidy	$2,319	$1,773	$546

High Deductible MSA with Loose/Moderate Managed Care With Increasing Fee Levels

1) Defined Contribution Amount	$4,369
2) Part B Premium	582
3) Total Funds Available (1+2)	4,951
4) Deductible	3,000
5) Insurance Premium	5,056
6) MSA Deposit (3-5) / 1.02	(103)
7) MSA Administration Expense (3-5)x.02	(2)
8) Med Supp Premium	1,611
9) Exposure (4-6-8)	1,492

	HMO	High Deductible Loose/Moderate Managed Care	Difference
Insurance Cost	$5,821	$5,056	$765
Cost Sharing	866	1,227	(361)
Total Insurance Cost	$6,688	$6,283	$405

	HMO	High Deductible Loose/Moderate Managed Care	Difference
Government Subsidy	$428	$0	$428
Plan/Provider Subsidy	236	0	236
Plan Premium	150	0	150
Part B Premium	582	582	0
Selection Adjustment	54	0	54
Cost Sharing	866	0/1227	866
Med Supp Premium	N/A	1,611	(1,611)
MSA Balance	N/A	(281)	281
Total Consumer Cost and Subsidy	$2,316	$1,912	$404

High Deductible MSA with Moderate/Aggressive Managed Care With Current Fee Levels

1) Defined Contribution Amount	$4,375
2) Part B Premium	582
3) Total Funds Available (1+2)	4,957
4) Deductible	3,000
5) Insurance Premium	4,330
6) MSA Deposit (3-5) / 1.02	615
7) MSA Administration Expense (3-5)x.02	12
8) Med Supp Premium	1,611
9) Exposure (4-6-8)	774

	HMO	High Deductible Moderate/Aggressive Managed Care	Difference
Insurance Cost	$5,821	$4,330	$1,492
Cost Sharing	866	1,174	(308)
Total Insurance Cost	$6,688	$5,504	$1,183

	HMO	High Deductible Moderate/Aggressive Managed Care	Difference
Government Subsidy	$428	$0	$428
Plan/Provider Subsidy	236	0	236
Plan Premium	150	0	150
Part B Premium	582	582	0
Selection Adjustment	63	0	63
Cost Sharing	866	0/1174	866
Med Supp Premium	N/A	1,611	(1,611)
MSA Balance	N/A	(1,051)	1,051
Total Consumer Cost and Subsidy	$2,325	$1,142	$1,183

High Deductible MSA with Moderate/Aggressive Managed Care With Increasing Fee Levels

1) Defined Contribution Amount	$4,373
2) Part B Premium	582
3) Total Funds Available (1+2)	4,955
4) Deductible	3,000
5) Insurance Premium	4,448
6) MSA Deposit (3-5) / 1.02	496
7) MSA Administration Expense (3-5)x.02	10
8) Med Supp Premium	1,611
9) Exposure (4-6-8)	893

	HMO	High Deductible Moderate/Aggress Managed Care	Difference
Insurance Cost	$5,821	$4,448	$1,373
Cost Sharing	866	1,183	(317)
Total Insurance Cost	$6,688	$5,631	$1,056

	HMO	High Deductible Moderate/Aggress Managed Care	Difference
Government Subsidy	$428	$0	$428
Plan/Provider Subsidy	236	0	236
Plan Premium	150	0	150
Part B Premium	582	582	0
Selection Adjustment	63	0	63
Cost Sharing	866	0/1183	866
Med Supp Premium	N/A	1,611	(1,611)
MSA Balance	N/A	(924)	924
Total Consumer Cost and Subsidy	$2,325	$1,269	$1,057