Contradictory Incentives in the Medicare+Choice Medical Savings Account Program

Janice A. Hauge

With the creation of the Medicare+Choice program (M+C), the Balanced Budget Act of 1997 (BBA) instituted one of the largest changes to Medicare managed care since Medicare's inception. The Medicare+Choice program encompassed a variety of measures designed to increase Medicare beneficiaries' healthcare choices and to expand Medicare managed care offerings to more of the Medicare eligible population. One of the newly created offerings was the Medicare+Choice Medical Savings Account (M+C MSA) program. MSA plans combined a high deductible M+C plan with a contribution from the Centers for Medicare and Medicaid Services (CMS) to an MSA for the enrolled beneficiary.[1] The Department of Health and Human Services (HHS) *Federal Register* stipulated that any state-licensed risk-bearing entity would be permitted to offer an M+C MSA plan. This would include among others, private sector companies currently offering MSAs in the under-65 commercial market, and the newly created M+C organizations (M+COs).[2]

Various studies have analyzed the profitability of M+C MSAs for private companies.[3] The November 2000 Medicare Payment Advisory Commission's report (MedPAC) concluded that the private

Cato Journal, Vol. 26, No. 1 (Winter 2006). Copyright © Cato Institute. All rights reserved.

Janice A. Hauge is Assistant Professor of Economics at the University of North Texas. She is grateful to Michael Cannon and David Sappington for helpful comments and suggestions.

[1]When the M+C MSA program was instituted, the Health Care Financing Administration (HCFA) was responsible for its implementation. In June 2001, HCFA was renamed the Centers for Medicare and Medicaid Services (CMS).

[2]M+C organizations (M+COs) were created as part of the M+C Program designed to replace the existing system of Medicare managed care contracts with a broader range of healthcare options for eligible Medicare beneficiaries.

[3]Private companies include M+COs and companies currently offering MSAs (or Health Savings Accounts) to the non-Medicare population.

sector would not offer Medicare MSAs because of low beneficiary demand and the expense and difficulty of marketing the new offering (MedPAC 2000: v). It is not clear whether HHS anticipated M+COs would offer MSAs or if companies currently offering MSAs to the non-Medicare population would enter the M+CO MSA market. It is logical to suppose that the latter would incur higher expenses entering the government program from the private sector, so the MedPAC findings seem credible. However, given that M+COs were already part of the Medicare system and were not subject to the same increase in initial expenses, their lack of participation is curious.

The primary purpose of this article is to examine formally the structure of the MSA program and to identify the incentives of both M+COs who might choose to offer an MSA plan, and beneficiaries who might choose to enroll in such a plan. Because the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA) reauthorized the MSA program under the newly named Medicare Advantage, understanding the program's shortcomings is critical to ensuring the success of the Medicare Advantage (MA) MSA program.[4] As late as January 2005, HHS was still uncertain as to why the M+C MSA program had been unsuccessful. The *Federal Register* notes, "With regard to MSA plans, we remain uncertain, as noted in the proposed rules, about participation and enrollment in MSAs. . . . We are unable to determine whether the MMA provisions will result in such plans being introduced and the extent to which beneficiaries might enroll in such plans" (HHS *Federal Register* 2005: 4693). This analysis will illustrate that the incentives of M+COs and beneficiaries to participate in the MSA program were incompatible, and that an M+CO would always earn at least as much profit per enrollee by offering an M+C plan as it would by offering an MSA plan. The model suggests that given self-interested seniors and insurers, the MSA program was almost certain to fail, and given the similarity of the new MA MSA plan to the M+C MSA, success under the new program is unlikely. The empirical evidence that no MSA plans were implemented or even proposed during the demonstration project period supports this theory.

Structure of the Medical Savings Account Program

In the BBA, Congress authorized a limited number of beneficiaries to participate in an MSA program demonstration. The M+C MSA

[4]The final rules and regulations establishing the Medicare Advantage MSA program became effective on March 22, 2005.

plans were designed to be a combination of a high deductible M+C plan (health insurance policy) and a medical savings account. Medicare was to pay the beneficiary's premium for the M+C plan and to make a monetary deposit into a Medicare savings account for the beneficiary.[5] The beneficiary would use the money in the account along with his own personal money as necessary to pay for healthcare services until the deductible was met. After the deductible was met, the M+C plan was to pay for 100 percent of all Medicare covered healthcare services.

As defined by the HHS *Federal Register*, the MSA was "a tax exempt trust created solely for the purpose of paying the qualified medical expenses of the account holder" (HHS *Federal Register* 1998: 35032). Under the MSA demonstration project, qualified M+COs were authorized to accept enrollees in an MSA plan from January 1, 1999, until January 1, 2003, at which point the project would be evaluated and the MSA program either continued or terminated. The program was limited to 390,000 enrollees, or approximately 1 percent of the Medicare population. Two restrictions on enrollment differed from enrollment in an M+C plan. First, an enrollee had to reside in the United States for at least 183 days of the year in which he was enrolled. Second, beneficiaries with "first dollar" government health plans were specifically excluded (i.e., those with Medicaid or Veterans Administration benefits). These exclusions ensured enrolled individuals used their account funds rather than other insurance to pay for healthcare services until the deductible had been met.

The MSA program imposed requirements on beneficiaries, M+COs, and CMS that differed from the requirements each assumed under an M+C plan. Under the MSA program, beneficiaries had greater responsibilities than they had under standard M+C plans. Because MSA plans combined an MSA account with an M+C plan policy, eligible beneficiaries had to choose a policy offered by an M+CO, and then choose a bank or other institution to serve as trustee for the account. Beneficiaries then could enroll for one year beginning January 1.[6] At the beginning of the year, CMS was to make a lump sum deposit into the beneficiary's account for the entire year. The beneficiary then would use that money to pay for his healthcare.

[5]Two-thirds of all Medicare managed care plans did not charge any premium in 1997 (GAO 1997: 2). Only 34.3 percent did not charge any premium in 2003; the average premium in 2003 was $40. See www.cms.hhs.gov/researchers/pubs/datacompendium/2003/03pg60.pdf.

[6]Contrary to other M+C plans, beneficiaries were required to remain enrolled in the MSA for the entire year; they were not permitted to terminate the plan during the year but could nonrenew the following January.

The money could be used for medical or nonmedical expenses. If the money was used for anything other than a qualified medical expense, the money was to be taxed as income and might carry an additional tax penalty.[7] After exhausting the money in the account, the beneficiary was to use his own money to pay for healthcare services until he reached his deductible. If the account money was not used, it was to remain in the beneficiary's account the following year and would be increased by another annual lump sum on January 1. If the beneficiary disenrolled, any money in his account remained and could continue to be used to help pay for healthcare.[8] Beneficiaries may or may not have been restricted to particular doctors and hospitals, depending on the policy.[9] Once the deductible was met, the policy coverage would become effective and the policy would pay for covered Medicare expenses. The only payment beneficiaries would be required to make was the Medicare Part B (medical insurance for doctors' services and other outpatient healthcare) monthly premium.[10] The beneficiary was to pay no monthly premium to the M+CO. In theory, the beneficiary was to pay a lower monthly premium than under a standard M+CO plan, for what was essentially a catastrophic insurance policy with a high deductible. He would use the lump sum payment and his own money to cover expenses before reaching the deductible.

M+COs' responsibilities also were different under an MSA plan than under a standard M+C plan. M+COs were to make available to an enrollee or provide reimbursement for all Medicare covered services after the enrollee's countable expenses reached the plan's annual deductible. The M+CO was to count toward the deductible either the actual costs paid by the beneficiary for services, or the amount that would have been paid by a beneficiary under a Medicare fee-for-service arrangement, whichever was less. (This feature would encourage the beneficiary to obtain reasonably priced healthcare

[7]Qualified medical expenses are defined by IRS rules relating to itemized deductions for medical expenses. This definition encompasses a broader range of items than are covered by Medicare (for example, dental care). Items considered qualified medical expenses by the IRS did not necessarily count toward a plan's deductible. Expenses countable toward the deductible were to be specified by each policy. Money used other than for qualified medical expenses were to be taxed, and a penalty to apply, as outlined by IRS rules.

[8]Account money of a beneficiary who died during the policy year was to be returned to Medicare on a prorated basis for the portion of the year the beneficiary was not enrolled.

[9]Unlike original Medicare and other M+C plans, the program did not limit the amount providers could charge a beneficiary. It was to be each beneficiary's responsibility to ensure charges were commensurate with acceptable Medicare charges and to choose services wisely.

[10]The beneficiary would make this payment under both an M+C plan and an M+C MSA plan.

services, as only reasonable expenses would be counted toward the deductible). M+COs were free to include additional expenses in the countable expenses if they so desired. After the deductible was met, the M+CO would pay the lesser of 100 percent of the actual cost of service, or 100 percent of the amount that would have been charged under original Medicare for that beneficiary.

CMS's monetary distribution amount under the MSA program in the majority of cases was exactly the same amount as paying the monthly individually adjusted payment rate that was paid to M+COs for M+C plans.[11] Under an MSA plan, CMS would pay into a beneficiary's account the difference between the countywide payment rate (as determined by CMS for each county in the United States) and the premium the M+CO would charge a beneficiary under its M+C plan. On January 1, CMS would deposit this difference into the beneficiary's account as a lump sum. By this methodology, each enrolled beneficiary within the same county would receive the same lump sum deposit into his account.[12] In addition to this payment, each month CMS would pay the premium for the beneficiary to the M+CO, and also pay the M+CO additional money for beneficiaries whose demographically adjusted payment rate was greater than the average county rate that was used to determine the lump sum. The main difference between the payments CMS was to make under the M+C plan and under the MSA plan was under the M+C plan, CMS would pay the entire per-enrollee demographically adjusted rate directly to the M+CO. Under the MSA plan, CMS would pay part of the per-enrollee demographically adjusted rate to the M+CO, and part to the beneficiary. Figure 1 illustrates the flow of funds under an M+C plan. The beneficiary's coinsurance payments to the M+CO applied after the deductible had been met.

Figure 2 illustrates the flow of funds under an MSA plan. A beneficiary's payments for medical services would be made only until the deductible had been met. M+CO's payments would be made only after the deductible had been met.

There are no structural differences between the basic M+C and

[11]CMS would pay the beneficiary's premium to the M+CO. This does not affect the analysis of incentives for the M+CO or the beneficiary, but does affect the overall benefits of the M+CO MSA program.

[12]This would serve to limit the possibility for moral hazard. There would be no incentive for an individual to claim to be less healthy or to actually become less healthy in order to garner a higher lump sum payment. In addition, from a political standpoint, an account deposit based solely on county of residence is more tenable than deposits based on specific beneficiary characteristics.

MA MSA programs.[13] There are however, some general modifications to the MSA program. Under the MMA, MSA plans may be offered as a permanent option, and there is no longer a limit on the number of enrollees permitted. MAs also are exempt from certain quality assurance and reporting requirements. HHS estimated that MA MSA reporting burdens are now half that for other MA plans, and that limiting the burden will result in an estimated five organizations offering an MSA plan (HHS *Federal Register* 2005: 4688). These program modifications were made in response to assertions that these factors caused a lack of participation in the demonstration MSA program.

The MSA program seems to be a worthy program for a number of reasons. First, it adds greater flexibility in coverage options for beneficiaries. In addition to obtaining healthcare services from the plan's network of doctors and hospitals, beneficiaries can use account money to pay for services of nonnetwork heathcare providers, for services not covered by original Medicare, or for services not specifically covered by their plan's policy.[14] This flexibility allows beneficiaries to seek the type of treatment they believe is best for them, and to practice preventive healthcare, which currently amounts to no more than a one-time screening upon enrolling in a Medicare plan.

A second benefit of an MSA plan is that it ties a beneficiary directly to the cost of the services used and forces the beneficiary to play a greater role in determining healthcare purchases until the deductible is met. A primary cause of rapidly increasing healthcare costs is the availability of insurance coverage for the majority of healthcare expenses. Insurance coverage reduces the personal cost of healthcare services so greatly that services are overused (GAO 1999: 3). MSAs have the potential to discourage overutilization of healthcare services. Because beneficiaries have a limited amount of money in their account, they may be more prudent in the type of service requested, the doctors and hospitals selected, and the frequency of utilization of healthcare services. This benefit might be especially pronounced for higher-risk beneficiaries who might otherwise significantly overuse services. By setting the beneficiary's deposit equal to the countywide average payment rate, the plan potentially leaves higher-risk beneficiaries with less than they might need (i.e., it is more likely those

[13]The MMA "contains the same rules for MSA plans that existed under the previous M+C program. The only MMA change in the payment provision is that . . . we will make payment to MA organizations for MSA enrollees based on the nondrug benchmark amount, less 1/12 of the annual lump sum amount (if any) we deposit to the enrollee's MA MSA" (HHS *Federal Register* 2005: 4656).

[14]It is intended that the policy will include more covered services than original Medicare.

FIGURE 1

FLOW OF FUNDS UNDER AN M+C PLAN

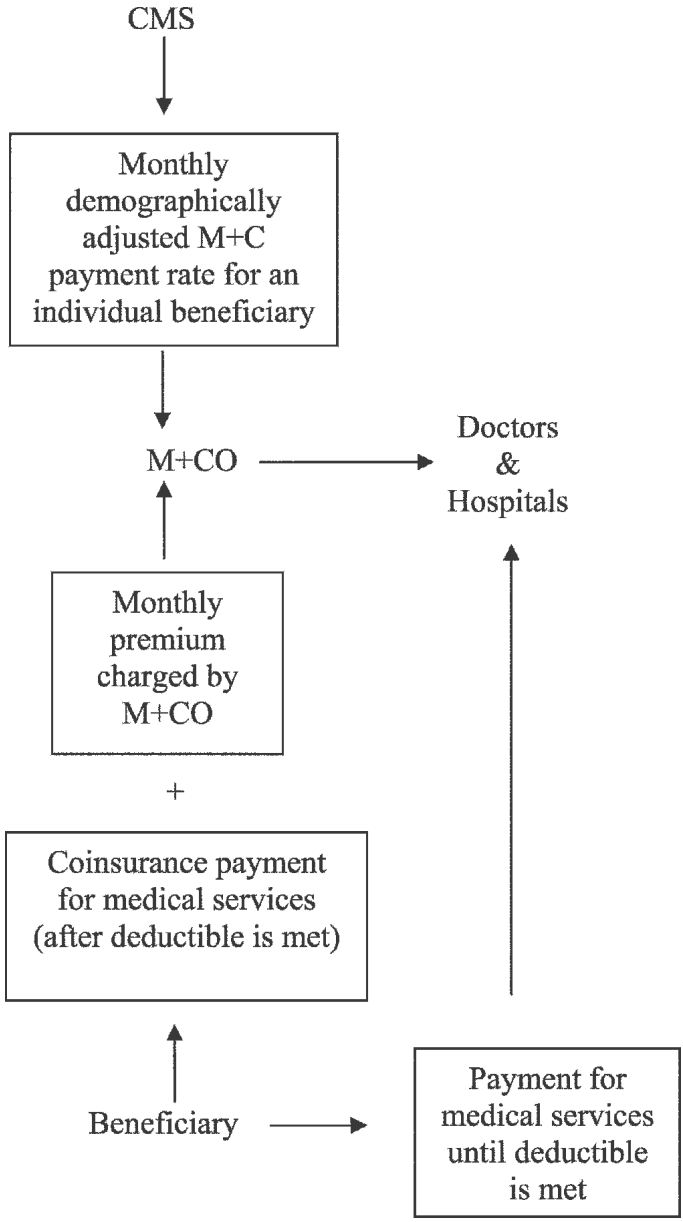
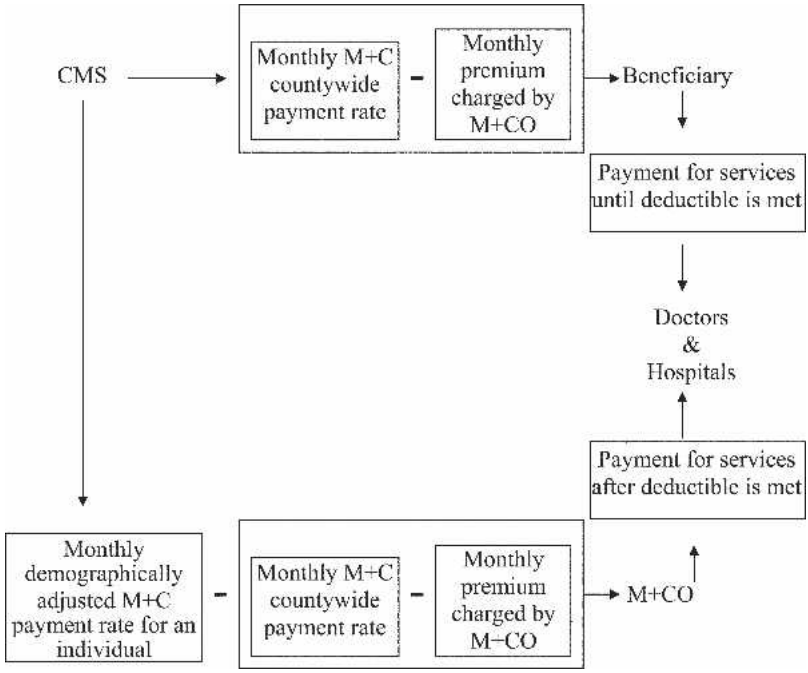


FIGURE 2
FLOW OF FUNDS UNDER AN MSA PLAN



beneficiaries will need to use their own money to supplement the lump sum deposit before meeting the deductible). In this instance, the higher-risk beneficiary might instead find it to be cost-effective to limit activities contributing to his higher-risk status. Furthermore, because a higher-risk beneficiary who proves to be low cost is the most profitable beneficiary, the MA MSA provider has greater incentive to help the higher-risk beneficiary economize, leading to an overall reduction in healthcare utilization.[15] Finally, MSA plans require a greater investment of a beneficiary's own money before the deductible is met, another factor that could limit utilization and overall costs.

The third benefit of the MSA program is that government costs are the same under an MSA plan as they are under an MA non-MSA plan in the majority of cases. The costs are greater only if CMS is responsible

[15]Conversely, lower-risk beneficiaries' MSA deposits might exceed their medical expenses, costing taxpayers more than if those beneficiaries remained in traditional Medicare. This possibility will need to be analyzed more fully once MSAs are offered and beneficiary characteristics can be analyzed.

for a beneficiary's premium payment to the MA provider. Otherwise, CMS pays the same total amount under both plans. However, under an MSA plan, cost-cutting responsibilities are divided between the provider and the beneficiary. This allows CMS to spread its risks slightly rather than relying solely on the providers to control costs. Having two parties responsible for controlling costs also can serve as a benchmark. If the beneficiary is able to obtain necessary services at lower cost than the provider either can or does, CMS will have reason to more carefully monitor the MA provider, and will gain greater information to use in developing more accurate payment rates for the county or counties in which the provider operates.

Inherent Conflicts in the M+C MSA Program

The M+C MSA plan reallocated CMS funds from the M+CO to the beneficiary, and relieved the beneficiary of a monthly or annual policy premium in exchange for a high deductible policy. The following simple model explains why M+COs would not offer MSA plans. The model shows that if both M+COs and beneficiaries acted in their own best interest, their preferences for a particular plan type would be incompatible. The following notation is required to prove this result formally.

Let b denote the annualized demographically adjusted M+C payment rate for an individual beneficiary (i.e., the amount the M+CO received from CMS over the course of a year for a specific beneficiary). Let r denote the annualized M+C countywide payment rate. Define p as the annualized premium charged by the M+CO, where $0 \leq p \leq r$.[16] Let d_i denote the annual deductible the beneficiary was to pay before the plan policy paying any or all benefits under plan i, where $i \in$ {M+C plan, MSA plan}, and $0 \leq d_i \leq \$6{,}000$.[17] Let c_i denote the coinsurance the beneficiary was to pay for services received under plan i, where $i \in$ {M+C plan, MSA plan}. Coinsurance payments are given by $c_{M+C} = .20$ and $c_{MSA} = 0$.[18] Define m as the annual medical expenses incurred by a beneficiary. Let Π_i denote the annual per beneficiary profit the M+CO would earn under plan i,

[16]The annualized premium was required to be no greater than the annualized M+C countywide payment rate as determined by CMS. Allowing the M+CO to offer different premiums for the different plans (i.e., one premium for the managed care plan and a different premium for the MSA plan) does not alter the results of the model; all conclusions hold. (Proof is available upon request.)

[17]The maximum allowable deductible was $6,000 per year for MSA plans. There was no minimum allowable deductible.

[18]No coinsurance was permitted with an M+C MSA plan. For most services, the coinsurance rate for Medicare beneficiaries under original Medicare was 20 percent.

where $i \in$ {M+C plan, MSA plan}. Finally, let C_i denote the total annual direct beneficiary cost under plan i, where $i \in$ {M+C plan, MSA plan}. The M+CO and the beneficiary are risk neutral.[19]

Under an M+C plan, the M+CO received the beneficiary's premium payment (p) and CMS's demographically adjusted M+C payment rate for that beneficiary (b). The M+CO paid 80 percent of all medical expenses (m) incurred after the deductible (d_{M+C}) had been met. Therefore, the per-enrollee profit of an M+CO offering an M+C plan was given by

$$(1) \quad \Pi_{\text{M+C}} = [p + b - .80(m - d_{M+C})].$$

Under an MSA plan, the M+CO would receive CMS's demographically adjusted M+C payment rate for that beneficiary (b) minus the lump sum amount CMS deposited directly into the beneficiary's account (the monthly countywide payment rate minus the beneficiary's monthly premium for 12 months = $(r - p)$). The M+CO would pay 100 percent of all medical expenses (m) incurred after the deductible (d_{MSA}) had been met. Therefore, profit of an M+CO offering an MSA plan would be given by

$$(2) \quad \Pi_{\text{MSA}} = [b - (r - p) - (m - d_{MSA})].$$

An MSA plan would be more profitable than an M+C plan if (2) > (1), i.e., if and only if $\Pi_{\text{M+C}} < \Pi_{\text{MSA,}}$ or $[p + b - .80(m - d_{M+C})] < [b - (r - p) - (m - d_{MSA})]$, which reduces to

$$(3) \quad .20m + .80d_{M+C} + r < d_{MSA}.$$

Therefore, an M+CO's profit under an MSA plan would be greater than its profit under an M+C plan if and only if equation (3) holds.

Under an M+C plan, the beneficiary was responsible for paying the M+C plan premium (p) plus 20 percent of all medical expenses (m) incurred after the deductible (d_{M+C}) had been met, plus the deductible. Therefore, the cost incurred by a beneficiary enrolling in an M+C plan was given by

$$(4) \quad C_{M+C} = [p + .20(m - d_{M+C}) + d_{M+C}].$$

Under an MSA plan, the beneficiary would be responsible for

[19]If the beneficiary is risk averse, the central conclusion of the model still holds. If expected medical costs were greater than actual costs, the beneficiary would maximize utility by selecting an MSA plan, while the M+CO would maximize profit by choosing an M+C plan. If expected medical costs were less than actual cost, the beneficiary would maximize utility by selecting an M+C plan, while the M+CO would maximize profit by selecting an MSA plan.

paying the deductible (d_{MSA}). He would receive for use toward the deductible the lump sum CMS deposit into his account (the monthly countywide payment rate minus his monthly premium = $(r - p)$). Therefore, the cost incurred by a beneficiary enrolling in an MSA plan would be given by

$$(5) \quad C_{MSA} = [d_{MSA} - (r - p)].$$

An MSA plan would be less costly for a beneficiary than an M+C plan if (4) > (5), i.e., if and only if $C_{M+C} > C_{MSA}$, or $[p + .20m - .20d_{M+C} + d_{M+C}] > [d_{MSA} - (r - p)]$, which reduces to

$$(6) \quad .20m + .80d_{M+C} + \mathrm{r} > d_{MSA}.$$

Therefore, beneficiary costs under an MSA plan would be less than costs under an M+C plan if and only if equation (6) holds.[20]

The M+CO would prefer the most profitable plan. The beneficiary would prefer the least costly plan. Comparing equations (3) and (6), it is clear that the M+CO and the beneficiary would not prefer the same plan. For the M+CO to prefer an MSA plan, the MSA deductible must be greater than the M+C plan deductible plus 20 percent of medical expenses plus the annualized countywide payment rate. For a beneficiary to prefer the MSA plan, the MSA deductible would have to be less than this sum. Consequently, there were no instances in which it was in both the M+CO's and the beneficiary's best interest to adopt an MSA plan.

Program Reform

Given rational beneficiaries, an M+CO would always earn at least as great a profit per enrollee by offering an M+C plan as it would earn offering an MSA plan. Since both M+COs and beneficiaries could observe the value of the countywide payment rate and the deductibles

[20]In effect, m is expected medical expenses because the beneficiary and M+CO were to choose the plan before incurring expenses. This means risk may be incorporated into the model through m (risk-averse individuals with expected medical expenses of $500 per year might base their plan choice on a value of m = $750). There is a distribution of expenditures for which one plan would be more generous than the other to a beneficiary, depending on the values of m, d_{M+C}, d_{MSA} and r. For example, given a per county payment rate (r) of $1,000, for $0 < m <$ $25,000 and $0 < d_{M+C} <$ $6,250, the beneficiary may fare better under either plan depending on the combination of values of m and d_{M+C}. Here, if $m = 0$ and $d_{M+C} \leq$ $6,250, the beneficiary would choose the M+C plan. For different m and d_{M+C} values, the beneficiary may choose the MSA plan. For $m >$ $25,000, the beneficiary would choose the MSA plan. Regardless, the incompatibility of preferences between M+COs and beneficiaries holds.

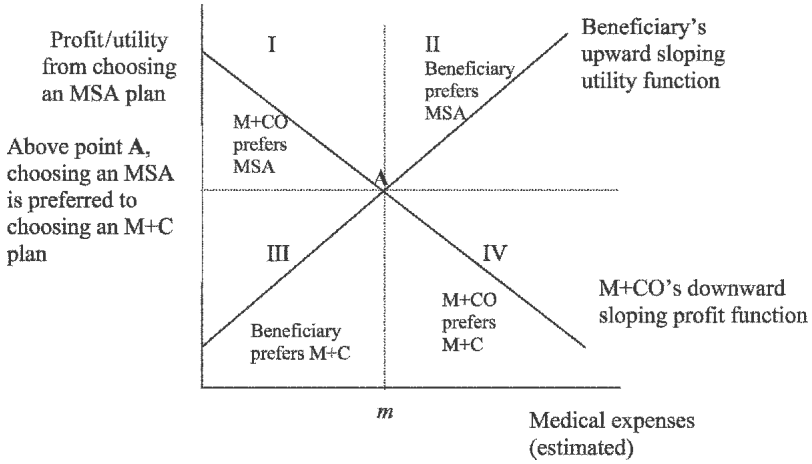
for both plans, the beneficiary should have greater knowledge of the values of plans. The beneficiary should have greater knowledge of his health status and therefore a more accurate estimate of the costs of his medical expenses for the year. Given this knowledge, the beneficiary would select the plan that cost him the least, which would be the plan that provided the M+CO a lower profit. Therefore, there was no incentive for the M+CO to offer an MSA as it could never earn greater profits by doing so than it could earn by offering only an M+C plan.[21] Figure 3 illustrates this conclusion. The quadrants indicate incompatible preferences for beneficiaries and M+COs. The only point at which both an M+CO and a beneficiary would be indifferent between an MSA and an M+C plan is *m*. Therefore, there is no incentive to select an MSA plan as each could fare as well with an M+C plan.

The MMA modified the M+C program by removing the program's time limit and enrollment cap and decreasing reporting requirements. If reporting requirements imposed an excessive cost, it is possible that limiting those burdens would result in enough overlap of beneficiary and MA MSA preferences to induce entry in the MSA market. This, however, does not seem likely as HHS estimates the submission (reporting) burden to be only 50 hours per insurer per year (HHS *Federal Register* 2005: 4688). To realize the potential benefits of an MSA program, the program must be improved. One possible reform is the provision of an additional payment to MA organizations offering an MSA plan in a county previously unserved by an MSA plan. Such a reform would be similar in nature to the bonus payment program enacted in the 1999 Balanced Budget Refinement Act. Under the bonus payment program, the M+CO that offered the first M+C plan in a previously unserved county was paid a 5 percent bonus payment for 12 months, followed by a 3 percent bonus payment in the next 12 months. The goal was to provide an

[21]There is no effect of asymmetric information (by which the beneficiary has greater knowledge of his health status than the M+CO does). It serves no purpose for a beneficiary to hide health status since the M+CO must allow any enrollee to select any plan offered within its service area, regardless of health. Whenever it costs the beneficiary less to join an MSA, it will cost the M+CO more. Formal proof is available upon request. In addition, whether the M+CO offered only an M+C plan, only an MSA plan, or both simultaneously, the result that the M+C plan would always be more profitable still holds under all but one condition: if the MSA was the only plan available to a beneficiary. In that situation, the MSA plan would be equally as profitable as an M+C plan would have been if it were the only plan available.

FIGURE 3

INCOMPATIBILITY OF PREFERENCES



incentive to M+COs to offer M+C plans in counties that would otherwise not have an M+C option for Medicare beneficiaries.[22]

To provide an incentive to offer an MSA plan, MA organizations might be given an additional payment of a certain percentage of the countywide payment rate for each beneficiary enrolled in a new MSA. Such an incentive would temporarily create conditions under which both an MA organization and a beneficiary might prefer an MSA plan. This result can be shown formally using the same notation as above.

Under the new MSA incentive program, the MA organization would receive CMS's demographically adjusted MA payment rate for that beneficiary (b) minus the lump sum amount CMS deposited directly into the beneficiary's account (the monthly countywide payment rate minus the beneficiary's monthly premium for 12 months = $(r - p)$), plus some percent χ of the annualized countywide payment rate (r), where $\chi \leq 1$. The MA organization would still pay 100 percent of all medical expenses (m) incurred after the deductible (d_{MSA}) is met. Therefore, the profit of the MA organization offering a new MSA plan is given by

$$(2a) \quad \Pi_{MSA} = [b - (r - p) - (m - d_{MSA}) + \chi r].$$

An MSA plan would be more profitable than a non-MSA MA plan if

[22]The bonus payment program required plans to be offered between January 1, 2000, and December 31, 2001. The bonus was a percentage of the countywide payment rate.

(2a) > (1), i.e., if and only if $[p + b - .80(m - d_{MA})] < [b - (r - p) - (m - d_{MSA}) + \chi r]$, which reduces to

(3a) $.20m + .80d_{MA} - \chi r + r < d_{MSA}$.

The beneficiary's incentives would not be affected by this plan. An MSA plan is less costly for a beneficiary than an MA plan if equation (6) holds. Comparing equations (3a) and (6), it is clear that the MA organization and the beneficiary no longer have mutually exclusive preferences:

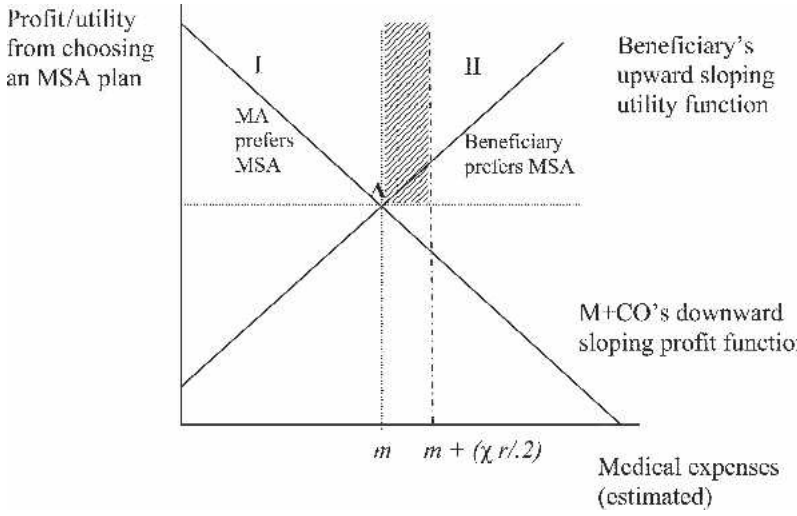
(6a) $.20m + .80d_{MA} - \chi r + r < d_{MSA} < .20m + .80d_{MA} + r$.

Figure 4 illustrates how the incompatibility might be avoided for a segment of the market. The area in which the MA prefers an MSA plan, previously labeled quadrant I, expands rightward to account for the additional incentive so that between m and $m + (\chi r/.2)$ the MA and beneficiary each will prefer to enroll in an MSA. Therefore, there is a range of medical expenses m for which both MA and beneficiary will prefer an MSA. The shaded area indicates these overlapping preferences for an MSA.

For this to be cost-effective, the incentive (χ) would have to be less than or equal to the savings from acquiring benchmarking information to more accurately set the payment rates, plus any savings from

FIGURE 4

POTENTIAL RESOLUTION OF INCOMPATIBLE PREFERENCES



reduced use of services. The first number is potentially high given the disparate payment rates among contiguous counties and the government's continuing attempts to adjust the payment rates to more accurately reflect costs. The difficulty with this reform is that the bonus payments would have to be temporary to be financially feasible, similar to the bonus payment program in the 1999 Balanced Budget Refinement Act. Once the bonus program expired, there would be nothing to preclude MA organizations from rescinding their MSA offerings.

Another potential (and possibly permanent) program reform is to provide MA organizations greater incentive to offer MSA plans by allowing them to retain above-normal earnings. MA organizations are required each year to reconcile costs with payments and to reimburse CMS for payments made to them in excess of the cost of treating their Medicare beneficiaries. MA organizations are permitted to retain some earnings in a benefit stabilization fund to use in offsetting costs in future years; however, this benefit stabilization fund is a non-interest bearing account, which deters MA organizations from utilizing the fund.[23] Permitting MA organizations to retain a greater portion of above-normal earnings in both their MSA and non-MSA programs, and to invest these earnings in an interest bearing account or other profitable investment would help to offset the losses incurred from catastrophic illnesses of beneficiaries enrolled in an MSA plan. An MA organization earning above-normal profits will therefore have an incentive to offer an MSA plan along with its MA plan.

Others have suggested offering the MSA benefit package through Medicare, thereby eliminating participation of any MA or private organization (MedPAC 2000: 18; Kendix and Lubitz 1999: 289).[24] Alternatively, Medicare might lower the capitation in order to accrue savings from beneficiaries' reduced use of health services. This possibility would have to be thoroughly analyzed to accurately estimate beneficiaries' use of healthcare services under various forms of insurance.

Lastly, it would be beneficial for CMS to fully consider the fixed costs associated with offering an MSA product. While the model presented did not provide a formal result, it is clear that if start-up costs are high enough, the preference incompatibility is replaced with

[23]Section 604 of the Benefit Improvement and Protection Act of 2001 required that the additional amounts paid must be used to provide additional benefits, to stabilize providers, to enhance provider access, or to supplement a stabilization fund. Existing limits on the amount that could be contributed to the fund were waived under section 604(d).

[24]Kendix and Lubitz (1999) found possible savings for Medicare under such a program.

an equilibrium in which both MA organization and beneficiary choose the MA plan. To bring about an equilibrium in which both choose the MSA, CMS might absorb more of the cost of beneficiary notification and education regarding MSA plans.

The potential benefits of the MSA plan must be weighed against the cost of allowing MA organizations to profit from Medicare managed care; however, it is possible that the benefits of a well-designed Medicare MSA program will outweigh the costs of encouraging implementation of the program.

Model Assessment

The model described above clearly illustrates the inherent conflict in the design of the M+C MSA program, and by extension, the MA MSA program. The model, however, fails to account for the change in beneficiaries' demand for healthcare services based on the type of healthcare program selected. There is evidence that the effect of an MSA plan on health expenditures among the working-age population is small, in the range of +1 to –2 percent (Keeler et al. 1996). Conversely, another study found that a substantial reduction in healthcare expenditure occurs in the working-age population when deductibles are high (Manning et al. 1987). Since MSAs are essentially high-deductible health insurance policies, the two findings appear to be contradictory. An extension of this model might consider profitability of MSAs in general, and more specifically, profitability using solely the Medicare population. To more fully investigate the value of the MA MSA program, these seemingly contradictory results must be disseminated.

Also, the model does not account for nonfinancial variables that might be important to beneficiaries, for example, the ability to obtain preventive medical care under Medicare, or to visit any providers of choice. Similarly, the costs of joining a traditional managed care plan (limited provider networks, administrative difficulty) might be high for some beneficiaries. Taking into account these nonfinancial variables might allow for some overlap of incentives such that it might be the case that MA organizations and beneficiaries would select an MSA simultaneously. An empirical analysis would better provide for inclusion of this information. Regardless of the size of the potential overlap due to nonfinancial variables, the model does provide a strong argument for further investigation into the MA MSA program's basic design.

Conclusion

One of the goals of both the Medicare+Choice program and the Medicare Modernization Act of 2003 was to provide Medicare beneficiaries with a wider range of healthcare options under Medicare. Medical Savings Accounts were thought to be able to help achieve this goal by providing an alternative to managed care plans. In addition, MSAs allow greater flexibility in treatment options for beneficiaries (since beneficiaries are permitted to use their account money however they choose), they discourage overutilization of services, and they encourage overall cost savings by making beneficiaries more aware of the costs of healthcare services. MSA plans also might enable CMS to better determine costs of services within counties and thereby contribute to more accurate development of countywide payment rates. The literature currently does not have an empirical study of potential savings. However, a thorough analysis of this question would be a valuable extension to this paper in order to determine the quantifiable benefits of reforming the MSA program.

Unfortunately, the structure of the program is such that there are no incentives for an MA organization to participate in the MSA program. By reforming the program to include incentives for offering MSA plans, the benefits of the MSA program may yet be realized. Without reform, the MSA program will not succeed in enlisting MA organizations to participate and any potential benefits of the program will be lost.

References

Center for Medicare and Medicaid Services, www.cms.hhs.gov.

Department of Health and Human Services (1998) *Federal Register* 63 (123) (June 26): Rules and Regulations.

_____ (2000) *Federal Register* 65 (126) (June 29): Rules and Regulations.

_____ (2005) *Federal Register* 70 (18) (January 28): Rules and Regulations.

Keeler, E.; Malkin, J. D.; Goldman, D. P.; and Buchanan, J. L. (1996) "Can Medical Savings Accounts for the Nonelderly Reduce Health Care Costs?" *Journal of the American Medical Association* 275 (1): 1666–71.

Kendix, M., and Lubitz, J. D. (1999) "The Impact of Medicare Savings Accounts on Medicare Program Costs." *Inquiry* 36 (3): 280–90.

Manning, W. G.; Newhouse, J. P.; Duan, N.; Keeler, E. B.; Leibowitz, A.; and Marquis, M. S. (1987) "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment." *American Economic Review* 77 (3): 251–77.

Medicare Payment Advisory Commission (2000) *Report to the Congress: Medical Savings Accounts and the Medicare Program.*

United States General Accounting Office (1997) "Testimony before the Special Committee on Aging, U.S. Senate, Medicare Managed Care: HMO Rates, Other Factors Create Uneven Availability of Benefits." Statement of William J. Scanlon, Director, Health Financing and Public Health Issues, Health, Education, and Human Services Division, GAO/T-HEHS-97-133.

_____ (1999) "Testimony before the Committee on Finances, U.S. Senate, Medicare Options for Reform." Statement of William J. Scanlon, Director, Health Financing and Public Health Issues, Health, Education, and Human Services Division, GAO/T-HEHS-99-130.