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Report to Congressional Requesters

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MEDICARE+CHOICE

Payments Exceed Cost of Fee-for-Service Benefits, Adding Billions to Spending

GAO

Accountability * Integrity * Reliability

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Abbreviations

AAPCC	Adjusted Average per Capita Cost
BBA	Balanced Budget Act of 1997
BBRA	Balanced Budget Refinement Act of 1999
CMHS	Continuous Medicare History Sample
CRS	Congressional Research Service
ESRD	end-stage renal disease
FFS	fee-for-service
HCFA	Health Care Financing Administration
HMO	health maintenance organization
HHS	Department of Health and Human Services
NPCM+CGP	national per capita Medicare+Choice growth percentage
RTM	regression-toward-the-mean

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Congressional Requesters

Recently, a number of health plans that participate in the Medicare+Choice program have announced that they will reduce or terminate their participation beginning January 1, 2001.[1] These announcements follow the substantial plan withdrawals that occurred in 1999 and 2000. Over the 3 years, more than 1.6 million beneficiaries will have had to switch to a different plan, or the fee-for-service program, because the plan in which they were enrolled no longer serves their geographic area.

These withdrawals are of special concern to policymakers not only because of the disruptions they cause for beneficiaries, but because the Medicare+Choice program, created by the Balanced Budget Act of 1997 (BBA), was designed to expand beneficiaries' health plan options. The act included payment changes and other provisions to encourage the wider availability of health maintenance organizations (HMO) and permitted other types of health plans, such as preferred provider organizations, to participate in Medicare.

The Medicare+Choice program was also expected to improve Medicare's financial posture by better controlling spending growth. Before the BBA's enactment, a number of studies—conducted by us and other government and independent researchers—concluded that Medicare spent more on beneficiaries enrolled in managed care plans than it would have spent if these individuals had received care through traditional, fee-for-service (FFS) Medicare.[2] The reason was that Medicare's payment method—which provides plans a fixed, per-enrollee payment, regardless of the enrollee's actual health care costs—did not adequately account for the fact that health plans tended to attract a disproportionate number of healthier-than-

[1]In this report a plan refers to a managed care organization's Medicare operations in a defined geographic area.

[2]Our studies include *Medicare HMOs: HCFA Can Promptly Eliminate Hundreds of Millions in Excess Payments (*GAO/HEHS-97-16, Apr. 25, 1997). Other studies were published by the former Physician Payment Review Commission (now the Medicare Payment Advisory Commission), the Health Care Financing Administration (HCFA), and the *New England Journal of Medicine*.

average beneficiaries with lower-than-average health care costs.[3] Accordingly, the BBA contained provisions to adjust plan payments to better reflect the expected health care utilization of Medicare beneficiaries enrolled in plans.

Industry representatives believe that the earlier studies' findings are no longer valid because the mix of beneficiaries enrolled in plans has changed. They claim that as Medicare's managed care program matured and more beneficiaries enrolled in plans, the health status differences between FFS beneficiaries and plan enrollees that may have previously existed largely disappeared—particularly in areas where a relatively high percentage of beneficiaries are enrolled in plans. Industry representatives contend that the BBA's payment rate changes were so severe that Medicare is no longer a sufficiently profitable line of business for many plans. They also have stated that the payment changes have caused many plans to reduce coverage for non-Medicare services, such as outpatient prescription drugs, that help attract beneficiaries to plans. Consequently, industry officials argue, Medicare must increase payments to maintain plan participation in the Medicare+Choice program.

To assist congressional deliberations on Medicare+Choice payment issues, you asked us to determine (1) whether program spending for Medicare+Choice plan enrollees has exceeded what Medicare-covered care for these beneficiaries would have cost in the FFS program and (2) the extent to which payments to individual plans differ from expected FFS costs. To conduct our study, we analyzed FFS and Medicare+Choice payment data maintained by the Health Care Financing Administration (HCFA), the agency that administers Medicare. Specifically, we analyzed the 1997 FFS claims history of nearly 800,000 beneficiaries who enrolled in a plan for the first time in 1998—the most recent years for which complete data were available. We adjusted these costs to reflect the fact that over time enrollees' FFS costs likely approach the average cost of demographically similar FFS beneficiaries. Finally, we compared these estimated costs with the actual capitation payment the plans received, and developed plan-specific and aggregate measures of excess payments or underpayments. Our study included 210 of the 346 Medicare+Choice plans

[3]Medicare risk contract HMOs—plans that received fixed monthly capitation payments—accounted for about 90 percent of Medicare managed care enrollment in 1998. Prior to BBA, Medicare managed care plans also included cost-contract HMOs and health care prepayment plans that were reimbursed for the costs they incurred, less the estimated actuarial value of beneficiary cost-sharing.

that were in operation in 1998.[4] These plans enrolled 87 percent of all beneficiaries in Medicare+Choice plans. Our work was done from September 1999 to July 2000 in accordance with generally accepted government auditing standards. (For more detail on our methodology, see app. I.)

Results in Brief

Medicare+Choice, like its predecessor managed care program, has not been successful in achieving Medicare savings. Medicare+Choice plans attracted a disproportionate selection of healthier and less-expensive beneficiaries relative to traditional FFS Medicare (a phenomenon known as favorable selection), while payment rates largely continued to reflect the expected FFS costs of beneficiaries in average health. Consequently, in 1998 we estimate that the program spent about $3.2 billion, or 13.2 percent, more on health plan enrollees than if they had received services through traditional FFS Medicare. This year HCFA implemented a new methodology to adjust payments for beneficiary health status. However, our results suggest that this new methodology, which will be phased in over several years, may ultimately remove less than half of the excess payments caused by favorable selection. In addition, the combination of spending forecast errors built into plan payment rates and BBA payment provisions caused an additional $2.0 billion, or 8 percent, in excess payments to plans. Instead of paying less for health plan enrollees, we estimate that aggregate payments to Medicare+Choice plans in 1998 were about $5.2 billion (21 percent), or approximately $1,000 per enrollee, more than if the plans' enrollees had received care in the traditional FFS program. It is largely these excess payments, and not managed care efficiencies, that enable plans to attract beneficiaries by offering a benefit package that is more comprehensive than the one available to FFS beneficiaries, while charging modest or no premiums.

Nearly all of the 210 plans in our study received payments in 1998 that exceeded expected FFS costs because their enrollees were healthier than average beneficiaries. However, the percentage of estimated excess payments varied substantially among plans. About two-thirds of the plans received payments that were at least 10 percent more than enrollees would have cost Medicare in the traditional program, even without considering excess payments due to forecast errors. The largest estimated excess

[4]We excluded 136 plans because they had too few new enrollees to produce statistically reliable results.

payment to an individual plan totaled $334 million, or 40 percent more than Medicare would have spent if the plan's enrollees had been covered under FFS. We also estimated that nine plans received payments below their enrollees' expected FFS costs. However, when excess payments due to forecast error are included, only 2 of the 210 plans were paid less ($1.7 million and $175,000) than its enrollees' expected FFS costs.

Background

Inherent in Medicare's FFS program is an incentive for providers to deliver more services than necessary because each additional service generates additional provider revenue. Policymakers have therefore looked to managed care plans to curb unnecessary spending. Plans have a financial incentive to provide care efficiently because they receive a fixed monthly amount for each beneficiary, regardless of what the individual enrollee's care actually costs. These potential efficiencies cannot result in actual savings for Medicare if plan payments are higher than beneficiaries' expected FFS costs. Before 1998, plan payment rates were based on average local FFS spending. Although payments were adjusted for certain beneficiary characteristics such as age and sex, this adjustment did not adequately account for differences in enrollees' health and expected health care costs. The BBA changed how plan payments were calculated beginning in 1998 and, beginning in 2000, required adjustments to make payment rates better reflect differences in beneficiary health status.

Medicare+Choice Payment Method Built on Experience With Risk Contract HMO Payments

Before 1998, Medicare's HMO capitation rates, established separately for each county, were set at 95 percent of the estimated average cost of care for the FFS population. The rates were discounted 5 percent under the assumption that the managed care plans provided care more efficiently than the less-restrictive FFS program and that the government should share in the savings. Under this methodology, county rates varied widely because they reflected the substantial differences in FFS per-beneficiary spending among counties. In 1997, for example, county rates ranged from a low of $221 per month in Arthur County, Nebraska, to a high of $767 in Richmond County (Staten Island), New York. The rates paid to plans for enrollees were also adjusted up or down in an attempt to account for estimated cost differences among beneficiaries due to variations in health care needs—a refinement known as risk adjustment.

Risk adjustment is necessary because individuals differ in the extent to which they use various health care services and their health care costs vary accordingly. Medicare's risk adjuster has relied on beneficiary age, sex, and

other demographic factors to predict expected health care utilization. This demographic-based risk adjuster could reflect only gross differences—such as the lower expected health care costs of 65-year-olds relative to 80-year-olds. If two individuals shared the same demographic characteristics, Medicare paid plans the same amount for both of them, even if one was in poor health and required extensive medical care while the other was in excellent health and rarely needed to see a physician.

Consequently, if a plan attracted a disproportionate share of beneficiaries in better-than-average health, an outcome known as favorable selection, Medicare's payments to the plan would exceed the expected FFS cost of providing Medicare-covered benefits to the plan's enrollees.[5] Our 1997 study of Medicare payments to California HMOs found that, on average, payments exceeded the expected FFS costs of the plans' enrollees by approximately 19 percent in 1995.[6] Other studies have also found substantial excess plan payments.[7]

A 1996 survey of Medicare beneficiaries also indicated that plans likely experienced favorable selection (see table 1). Medicare beneficiaries enrolled in plans were more likely than beneficiaries in the FFS program to report that they were in good or excellent health. Moreover, these health status differences translate into cost differences. For example, in 1996, average per-person Medicare FFS spending for beneficiaries who reported they were in excellent health was approximately $2,100, whereas for beneficiaries reporting poor health the average was about $11,700.[8]

[5]Whether plans intentionally attract a healthier, or more favorable, selection of Medicare beneficiaries is controversial. Favorable selection may, in part, be the natural consequence of limits on provider choice. Because enrolling in a particular plan may mean having to switch providers, sicker individuals—who are more likely to have longstanding provider relationships—may prefer to remain in FFS, where unrestricted provider choice does not disrupt existing patient-provider relationships.

[6]As reported in the 1997 study, this difference represented 16 percent of total plan capitation payments.

[7]See Physician Payment Review Commission, "Risk Selection and Risk Adjustment in Medicare," *Annual Report to Congress*, ch.15 (Washington, D.C.: Physician Payment Review Commission, 1996) for a summary of studies on favorable selection.

[8]1996 Medicare Current Beneficiary Survey.

Table 1: Self-Reported Health Status of 1996 Medicare Beneficiaries in Health Plans Generally Better Than That of Beneficiaries in FFS
Numbers in percent

Self-reported health status	Beneficiaries in health plans	Beneficiaries in FFS
Excellent or good	81	70
Fair or poor	19	30
Limits on three or more daily living activities[a]	4.9	11.7

[a]Such as bathing, dressing, or eating.

Source: HCFA, "Medicare Current Beneficiary Survey, 1996," *A Profile of Medicare: Chartbook 1998* (May 1998).

The BBA Changed Payment Methodology and Required Improved Risk Adjustment

In establishing the Medicare+Choice program, the BBA also changed the methodology used to set plan payments. Although 1997 county rates formed the foundation for county rates in 1998 and subsequent years, annual rate increases were no longer tied to changes in local FFS spending. Specifically, each county's rate was to be set at the highest of

- a minimum amount, or "floor," set at $367 in 1998 and increased annually;
- an amount 2 percent higher than the previous year's county rate; or
- an amount reflecting a blend or weighted average of the county rate and a price-adjusted national rate.

The floor was meant to encourage plans to offer services in areas that historically had low payment rates and few if any participating plans—primarily rural counties. The blended rate—which is to be phased-in over 6 years—was designed to reduce the geographic variation in rates that had resulted from tying county rates to local FFS. The blending mechanism moves all county rates closer to the national average by assigning above-average payment rate increases to low-payment-rate areas, and below-average payment rate increases to high-payment-rate areas.[9]

[9]For example, in 2000 the average county rate increased by about 5 percent. However, some low-payment-rate counties experienced rate increases over 13 percent, while high-payment-rate counties were assigned the minimum 2-percent increase.

The BBA also sought to reduce the excess in Medicare's managed care payments by holding down per capita rate increases for 5 years. Specifically, the BBA set the annual factor used to update floor and blended payment rates equal to the projected national growth in per capita Medicare spending minus a specified percent: 0.8 percent in 1998 and 0.5 percent in each of the following 4 years.[10]

In 1998, 1999, and 2001 no county received a blended rate.[11] Instead, counties were either assigned the floor payment rate or the 2-percent minimum increase. This occurred because of a budget neutrality provision in the BBA. The law specified that estimated total Medicare+Choice payments should equal the amount that would have been spent if 1997 county rates had been trended forward by the national annual update factor. However, national per capita spending grew relatively slowly and the guaranteed 2-percent increase and floor payments pushed total estimated Medicare+Choice spending above the budget neutrality amount in these 3 years. The blending provision could not be implemented because doing so would have further increased spending.[12] If low-payment-rate counties received higher than average payment rate increases, the additional spending could not be offset by lowering the increases in the high-payment-rate counties because those counties were guaranteed a 2-percent minimum increase.

The BBA required HCFA to develop and implement a health-based risk adjuster by January 1, 2000.[13] The law authorized HCFA initially to collect hospital inpatient data from plans and later to collect more comprehensive

[10]The annual update factor is known as the national per capita Medicare+Choice growth percentage (NPCM+CGP). The Balanced Budget Refinement Act of 1999 (BBRA) increased the update factor in 2001 to the national growth in per capita Medicare spending minus 0.3 percent.

[11]In 2000, about 60 percent of counties received the blended rate. The remaining counties received the minimum 2-percent increase or the floor amount.

[12]In 1998 and 1999 the guaranteed 2-percent update and floor payment rate increased expected spending slightly above the budget neutrality amount. In 2000, spending under the BBA's county rates was projected to be budget neutral and the blending provision was implemented. However, the Congressional Research Service (CRS) reports that in 2001 the combination of the guaranteed 2-percent update and floor payment rate will result in aggregate plan payments that exceed the budget neutrality amount by about $1 billion.

[13]Technically, the law directs its requirements at the Secretary of the Department of Health and Human Services (HHS), but as a practical matter, compliance is carried out by HCFA, an HHS agency.

medical encounter data to use in developing the risk adjuster. HCFA announced a phase-in schedule that called for gradually applying an interim risk adjuster, based on hospital admissions data only, first to a fraction (10 percent) of a plan's Medicare payments and then to greater shares each year.

HCFA proposed to apply an improved risk adjuster, based on a more comprehensive set of medical services, to 100 percent of payments by 2004. The BBRA slowed the proposed phase-in schedule of the interim risk adjuster and called for additional studies by HCFA and the Medicare Payment Advisory Commission on risk adjustment implementation issues.[14]

1998 Medicare+Choice Payments Exceeded Estimated FFS Costs

Our analysis shows that Medicare+Choice payments in 1998 were 21 percent, or $5.2 billion, higher than the amount Medicare would have spent if plan beneficiaries had received care in the traditional FFS program. While Medicare payments to plans on behalf of these enrollees totaled $29.8 billion, we estimate that total FFS payments for the same population would have been $24.6 billion. Approximately $3.2 billion of the $5.2 billion difference was the result of inadequate risk adjustment. That is, Medicare payments were not adjusted sufficiently to account for the generally better health, and lower expected costs, of plan enrollees.[15] Excess payments due to inadequate risk adjustment will persist as long as there is favorable selection and plan payment rates do not sufficiently account for beneficiary health status. The remaining $2 billion resulted from errors in the Medicare spending forecasts used to establish the 1998 county payment rates. These excess payments will diminish over time as future county rates are adjusted to correct errors in prior spending forecasts. Table 2 summarizes our findings on aggregate excess payments.

[14]P.L. 106-113, app. F.

[15]In establishing minimum, or floor, county payment rates, the BBA intentionally set payment rates above average FFS spending in certain counties. If we had excluded the amount of plan payments above FFS costs due to the floor rates, our estimate of excess payments would have been approximately two-tenths of 1 percent lower.

Table 2: Summary of Findings on Aggregate Medicare+Choice Payments, 1998

Measures	Results
Number of Medicare+Choice plans in study	210
Share of all Medicare+Choice enrollees	87 percent
Aggregate payments to plans in study	$29.8 billion
Estimate of enrollees' expected costs in FFS	$24.6 billion
Aggregate excess payment amount	$5.2 billion
Excess due to inadequate risk adjustment	$3.2 billion
Excess due to forecast errors in payment rates	$2.0 billion

Source: GAO analysis of HCFA data.

Inadequate Risk Adjustment for Healthier-Than-Average Enrollees Resulted in Excess Plan Payments

As a group, beneficiaries who join plans tend to be healthier and use fewer Medicare services than beneficiaries who remain in FFS. For example, in 1997 Medicare spent about 30 percent less on those beneficiaries who joined a plan in 1998 than it spent on demographically similar beneficiaries who remained in FFS. Our analysis suggests beneficiaries who have been plan members for several years continue to use fewer health care services than FFS beneficiaries, although the gap is much narrower.

Medicare's risk adjustment methodology, unchanged in 1998 from previous years, did not adequately address differences in beneficiary health status. While health plans tended to enroll less-expensive beneficiaries, Medicare's payments were too generous because they were based on the expected costs of enrollees in average health.[16] Consequently, we estimate that in 1998 Medicare paid plans an average of 13.2 percent more than it would have spent if the plans' enrollees had received care under the traditional FFS arrangement. In the aggregate, the lack of an adequate risk adjustment

[16]A favorable selection of beneficiaries does not mean that plans attracted only the healthiest individuals, but rather that they served a smaller proportion of the costliest Medicare beneficiaries. HCFA reports that 10 percent of Medicare beneficiaries account for 63 percent of Medicare expenditures.

methodology in the face of favorable selection increased Medicare spending by approximately $3.2 billion.[17]

Our results suggest that HCFA's new health-based interim risk adjuster, when fully implemented, may only eliminate half of the excess payments due to favorable selection. The first year of plan-submitted data on beneficiaries' service use indicates that full implementation of the interim risk adjuster would have reduced plan payments by about 5.9 percent in 2000.[18] Its failure to eliminate more of the excess payments may be due to its reliance on limited data. The interim risk adjuster uses only certain hospital inpatient data to measure beneficiary health status because those are the only service-level data plans provide to HCFA. Although it represents a significant improvement over the previous methodology based strictly on demographic data, a risk adjuster that used more complete beneficiary data could set payments that better reflect beneficiaries' expected health care costs. In 2004, HCFA intends to implement a refined risk adjuster that would use medical data from physicians' offices and hospital outpatient departments, in addition to hospital inpatient data.

Errors in FFS Spending Forecasts and BBA Payment Provisions Add to Excess Plan Payments

Payment rates for Medicare+Choice plans are set partly on the basis of forecasted growth in national per capita spending in Medicare's FFS program. Consequently, inaccurate forecasts can result in plan payment rates that are overstated or understated compared to actual FFS spending per beneficiary in a particular year. The BBA's guaranteed 2-percent minimum annual increase and other payment provisions can also cause payment rates to deviate from expected per capita FFS spending. Our analysis indicates that the combination of a spending forecast error and the BBA payment provisions resulted in aggregate plan payments that exceeded enrollees' estimated FFS costs by approximately 8 percent, or $2 billion, in 1998.

[17]In conducting our analysis, we made conservative methodological choices that tended to reduce our estimates of excess payments. For example, we compared 1998 aggregate plan payments with full estimated FFS costs, even though, historically, plan payments were based on only 95 percent of these costs.

[18]To minimize disruptions for plans and beneficiaries, HCFA phased in the new risk adjuster and computed 90 percent of each plan's payments using the old methodology and 10 percent using the new methodology. Thus, on average, actual plan payments were reduced by less than 1 percent relative to what they would have otherwise been in 2000.

HCFA estimates that the 1997 county rates were set too high and overstated average FFS spending by about 3 percent. Prior to the BBA, this error would have had a limited effect on future county rates because rates in each subsequent year were based on spending forecasts that were corrected for previous errors.[19] In establishing the Medicare+Choice program, however, the BBA specified that 1997 county rates be used as the basis for all future county rates and did not allow an adjustment for prior forecasting errors.

Under the prior methodology, HCFA would have increased average 1998 rates by approximately 1 percent. Instead, nearly all Medicare+Choice plans received the BBA's 2-percent minimum payment rate increase in 1998. Plans that served beneficiaries living in counties subject to the floor rate received higher rate increases. In contrast to the payment rate increases received by plans, per capita FFS spending on the aged actually declined by about 3 percent between 1997 and 1998. Thus, even without considering the effects of favorable selection, the combination of the forecast error in the 1997 rates and the minimum annual rate increase resulted in $2 billion in excess payments to Medicare+Choice plans in 1998.

Although it may take more than 5 years, the effect of the 1997 forecast error will be largely mitigated by the BBA provision that slows Medicare+Choice rate increases relative to the growth in FFS spending between 1998 and 2002. Furthermore, the BBA does allow HCFA to correct post-1997 forecast errors when setting 1999 and later county rates. However, the agency's actions are constrained by the law's minimum payment provisions. For example, 2001 payment rates would be lowered by more than 1 percent if HCFA fully corrected the 1998, 1999, and 2000 FFS spending estimates and applied the reduced update factor. However, to fulfill the BBA's minimum

[19]One might expect forecast errors to be random. FFS spending would be overestimated and rates would be set too high in some years, but this would be balanced by underestimates in other years when rates would be set too low. In practice, however, HCFA has nearly always overestimated FFS spending on aged beneficiaries. Between 1985 and 2000, the agency overestimated spending in 13 years and underestimated spending in 3 years. In the 5 years before the implementation of the BBA, HCFA's average forecast error was 3.4 percent. As a result, instead of setting rates at 95 percent of FFS spending, HCFA effectively set rates at 98.2 percent (0.95 x 1.034) of FFS spending.

payment rate requirements all county rates will have to be increased by at least 2 percent.[20]

Excess Payments Helped Finance Additional Benefits Provided to Enrollees

Our current findings suggest that many of the additional benefits enjoyed by plan enrollees may have been the result of Medicare's overly generous payment rates, not of efficiencies achieved under managed care. Medicare+Choice plans must, at a minimum, provide all of the services available to beneficiaries under the traditional FFS program. However, plans have typically provided substantial additional benefits, such as reduced beneficiary cost sharing, coverage for outpatient prescription drugs, dental care, and routine vision care, while charging modest or no premiums. Plans offered some of these additional benefits to fulfill Medicare requirements. If a plan projects that its Medicare revenues will be higher than the projected cost of providing basic Medicare services, the plan must contract to deliver additional benefits at no additional cost to beneficiaries. Many plans, however, exceeded these minimum requirements and voluntarily provided extra benefits in an effort to retain existing members and attract new ones. Based on data submitted by plans, HCFA estimates that Medicare+Choice plans are using 22 percent of their Medicare revenues to provide additional benefits in 2000. This figure is consistent with our previously reported analysis of plans' 1997 data.[21]

Effect of Inadequate Risk Adjustment Varied Substantially Among Individual Plans

The effect of Medicare's inadequate risk adjustment methodology varied among plans because of differences in the health status of their enrollees. The vast majority of plans in our study (201 out of 210) served beneficiaries who tended to be healthier than FFS beneficiaries and thus received payments that exceeded their enrollees' expected FFS costs. Nine plans, however, served beneficiaries who were generally less healthy than FFS beneficiaries. Medicare paid these plans less than it would have spent to serve these plans' members in the FFS program.[22] Nevertheless, the widespread finding of excess payments counters claims that favorable

[20]As a result of a technicality in the rate setting process, payment rates will be increased by about 3.3 percent in counties that receive the floor rate.

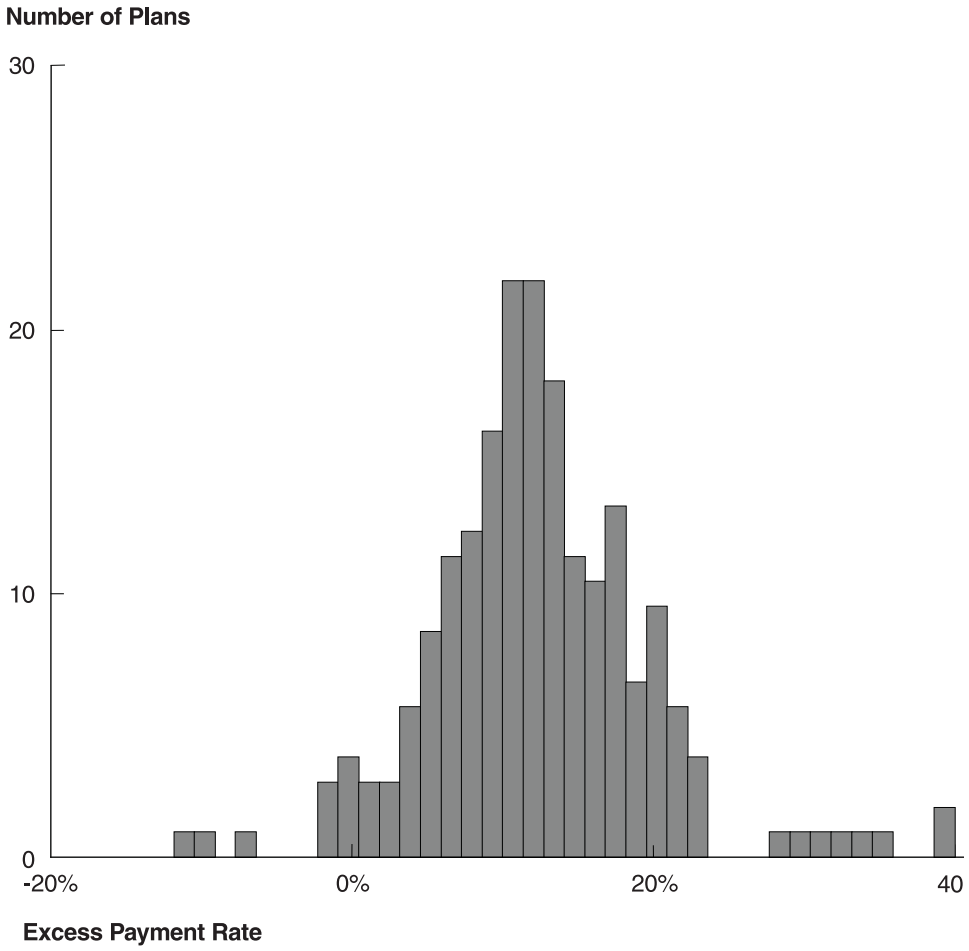
[21]*Medicare+Choice: Reforms Have Reduced, but Likely Not Eliminated Excess Plan Payments* (GAO/HEHS-99-144, June 18, 1999).

[22]Excludes excess payments due to forecast errors.

selection is not a problem in markets with substantial Medicare+Choice enrollment.

A few plans had an excess payment rate above 30 percent, but the median excess payment rate was approximately 12 percent. Among the nine plans in our study that were disadvantaged because their enrollees tended to be in below-average health, Medicare's payments were as much as 10.6 percent below enrollees' expected heath care costs (see fig. 1).

Figure 1: Excess Payments Due to Inadequate Risk Adjustment Varied Widely Across Medicare+Choice Plans, 1998



Note: Excess payments are defined as Medicare payments to a plan minus the expected FFS costs of a plan's enrollees. Payments exclude the excess amounts caused by forecast errors imbedded in the 1998 county rates. The excess payment rate is computed as the ratio of a plan's excess payments to its enrollees' expected FFS costs.

Source: GAO analysis of HCFA data.

The amount of excess payment that plans received depends upon both the degree to which they experience favorable selection and the number of Medicare beneficiaries they served. In 1998, 40 plans each received more than $20 million in excess payments due to inadequate risk adjustment. The largest estimated excess payment to an individual plan totaled $334 million, or 40 percent more than Medicare would have spent if the plan's enrollees

had been covered under FFS. Among the nine plans that were paid less than their enrollees' estimated FFS costs, the largest difference between estimated costs and payments was $8.4 million (see table 3). However, when excess payments due to forecast error are included, only 2 plans were paid less ($1.7 million and $175,000) than their enrollees' expected costs.

Table 3: Number of Plans That Received Payments Below and Above Expected Fee–for-Service Costs, 1998

Amount by which plan payments differed from expected FFS costs because of inadequate risk adjustment	Number of plans
Up to $8.4 million below FFS	9
Up to $2 million above FFS	35
Over $2 million to $5 million above FFS	57
Over $5 million to $10 million above FFS	44
Over $10 million to $20 million above FFS	25
Over $20 million to $50 million above FFS	31
Over $50 million above FFS	9
Total	**210**

Note: Dollar amounts reflect only those excess payments or underpayments due to inadequate risk adjustment. They do not include excess payments attributable to forecast errors.

Source: GAO analysis of HCFA data.

While the lack of an adequate risk adjuster can lead to excess payments, it can also result in plans being penalized if they serve a disproportionate share of Medicare beneficiaries with expensive health care needs. This can discourage a plan from seeking to enroll those beneficiaries, or developing programs that would foster a reputation for effectively treating certain costly diseases.

Some analysts have suggested that favorable selection might diminish over time. They hypothesize that health status differences between beneficiaries in health plans and beneficiaries in FFS could disappear as plan enrollment grows. However, our results indicate that this is not likely. Most plans that were well-established, enrolled a substantial number of beneficiaries, and were located in areas with relatively high rates of Medicare managed care enrollment experienced some level of favorable selection and therefore received excess payments. For example, a plan in our sample had an

estimated excess payment rate of 18.5 percent and received more than $100 million in excess payments, even though it had been serving Medicare beneficiaries for more than a decade, had well over 200,000 enrollees in 1998, and was a dominant plan located in an area where over 33 percent of the Medicare beneficiaries were enrolled in Medicare+Choice plans.

Excess payments persisted, in part, because total enrollment in managed care plans continued to grow and because many of the new enrollees were in relatively good health. In 1998, about 15 percent of all enrollees in our sample had been in FFS the previous year. On average, these beneficiaries used about 30 percent less Medicare services (in dollar terms) in the year before they switched from FFS to managed care than demographically similar beneficiaries who remained in FFS.

The difference between the health care needs of plan beneficiaries and FFS beneficiaries is smaller for beneficiaries who have been plan members for several years. However, our analysis indicates that for up to 8 years, plan beneficiaries continue to have somewhat lower expected costs than their demographic counterparts who remained in FFS. Almost three-quarters of the enrollees in our 1998 sample were in managed care plans for 5 years or less, so that the effect of enrollees' better-than-average health produced excess payments for most plans.

Conclusions

In creating the Medicare managed care program that preceded Medicare+Choice, the Congress sought a mechanism to better control program spending. However, evidence indicated that the payment methods used in the earlier program resulted in Medicare paying more, not less, for beneficiaries enrolled in plans. To address this and other problems, the BBA substantially changed the methodology used to set plan payments, beginning in 1998. Some industry representatives have suggested that the BBA's payment reforms were too severe. They point to the recent plan withdrawals to support their claims that the Medicare+Choice program is in danger.

Our current study indicates that, in 1998, Medicare paid plans $5.2 billion, or 21 percent, more than the estimated FFS costs of plans' Medicare beneficiaries. The seeming paradox between our findings and the industry's position is resolvable. Medicare+Choice plans are being paid too much for what was originally intended—providing beneficiaries the package of Medicare-covered services at less cost than the traditional FFS program. However, Medicare+Choice plans may not be paid enough for what they

have been offering to attract beneficiaries—a more comprehensive benefit package beyond that covered for FFS beneficiaries for only modest or no premiums.

The problem of excess payments can be addressed in part by better adjusting payments for the actual health status of enrollees. Such a step would also protect those plans that attract sicker-than-average enrollees. This year, HCFA began to implement a new risk adjuster that does a better job of calibrating payments to reflect differences in beneficiary health status. The agency also is developing an even more refined risk adjustment methodology. However, because of the slow and uncertain phase-in schedules, it may be several years before excess payments caused by health status differences are reduced substantially.

The decision on whether to adjust the county rates so that the remaining excess payments are eliminated or to heed plans' calls for higher Medicare+Choice payment rates will require balancing the concerns of beneficiaries, taxpayers, and plans. Adjusting plan payments so that the program pays no more for a Medicare+Choice enrollee than for a traditional Medicare beneficiary with equivalent health status is going to mean smaller payments and most likely lower profits for plans, fewer plans participating, and less-generous extra benefits for enrollees. These consequences raise for the Congress the question of whether payments should be modified to protect plans and the fraction of the Medicare beneficiary population enrolled—even if that protection results in Medicare spending more on the Medicare+Choice enrollee than for the traditional FFS Medicare beneficiary and increases the difficulty of financially sustaining the Medicare program.

Agency Comments

In commenting on our report, HCFA agreed that Medicare spends more on Medicare+Choice enrollees than it would have spent if those enrollees had received services through the traditional FFS program. The agency said that our findings were consistent with previous studies of favorable selection, which also concluded that Medicare managed care plans tend to attract beneficiaries with better-than-average health status. In addition, HCFA agreed that the BBA payment provisions and a 1997 spending forecast error had contributed to excess plan payments.

HCFA noted that it is phasing in a risk adjustment method based on hospital diagnosis data to help reduce excess payments caused by favorable selection. If the method were fully implemented, plan payments

would be reduced by an average of 5.9 percent. In 2004, HCFA will begin phasing in a risk adjustment method based on more comprehensive information that will more accurately measure health status and help avoid excess payments. The agency commented that our report reinforces the importance of proceeding with the implementation of risk adjustment.

Finally, HCFA agreed with our conclusion that Medicare+Choice payments are too high for providing the Medicare benefit package, but may not be enough for the expanded benefit package that plans have offered to attract beneficiaries. According to its own analysis, approximately 76 percent of Medicare+Choice payments support Medicare-covered services. Plans use the remaining 24 percent to provide extra health care benefits (9 percent) and to reduce beneficiaries' premiums and cost sharing (15 percent). It acknowledged that some plans may not find Medicare payments adequate to finance Medicare-covered services and the additional benefits they have been offering. The full text of HCFA's comments appears in app. II.

We are sending copies of this report to the Honorable Donna E. Shalala, Secretary of Health and Human Services; the Honorable Nancy-Ann Min DeParle, Administrator of HCFA; and other interested parties. We will also make copies available to others upon request.

If you or your staffs have any questions about this report, please call me on (202) 512-7114 or Laura A. Dummit on (202) 512-7119. Other major contributors to this report included James C. Cosgrove, Hannah F. Fein, Jim S. Hahn, and Richard M. Lipinski.

William J. Scanlon
Director, Health Financing
and Public Health Issues

List of Requesters

The Honorable Charles E. Grassley
Chairman
The Honorable John B. Breaux
Ranking Minority Member
Special Committee on Aging
United States Senate

The Honorable William V. Roth, Jr.
Chairman
The Honorable Daniel Patrick Moynihan
Ranking Minority Member
Committee on Finance
United States Senate

The Honorable John D. Dingell
Ranking Minority Member
Committee on Commerce
House of Representatives

The Honorable William M. Thomas
Chairman
The Honorable Pete Stark
Ranking Minority Member
Subcommittee on Health
Committee on Ways and Means
House of Representatives

Methodology

We developed a methodology to estimate how much Medicare would have spent on each Medicare+Choice plan enrollee if he or she received services under the traditional fee-for-service (FFS) arrangement in 1998.[1] The difference between the estimated FFS costs of a plan's enrollees and Medicare's payments to that plan is a measure of excess (or under-) payment. The aggregate excess payments we report are the sum of the excess payments made to the 210 plans in our sample. These plans served approximately 87 percent of all beneficiaries in Medicare+Choice plans in 1998. We excluded plans that had relatively few new enrollees (typically, small plans), so our aggregate excess payment amount is not an estimate of national excess payments.[2]

To conduct our analysis, we obtained HCFA data from the following sources: (1) the Standard Analytic File, a repository of claims information; (2) the Continuous Medicare History Sample (CMHS), a database that contains longitudinal cost and enrollment information on a sample of Medicare beneficiaries from 1974 to the present; (3) the Group Health Plan file, a database that contains health plan enrollment information; and (4) the 1997 Adjusted Average per Capita Cost (AAPCC) rate book and accompanying worksheets, which contain summary demographic and cost information on Medicare beneficiaries in each county, and the 1998 payment rate file.

Medicare+Choice Enrollees' FFS Costs and Excess Plan Payments

We classified Medicare+Choice enrollees into two groups—survivors (beneficiaries who did not die in 1998) and decedents (beneficiaries who died in 1998)—and developed slightly different methodologies to estimate FFS costs for each group. Although relatively few beneficiaries die each year, their health care costs before death tend to be high and may follow a different pattern than other beneficiaries' costs. We then aggregated the estimated FFS costs by plan and compared them to Medicare+Choice payments to estimate excess plan payments.

[1]In addition to the amount Medicare pays for claims, our estimate of FFS costs includes other reimbursable provider expenses and Medicare's claims processing costs.

[2]To minimize the undue influence of outlier observations on our estimates, we excluded 136 plans that had fewer than 500 new enrollees in 1998 from our analysis. Our estimates apply to enrollees entitled to Medicare benefits because they are aged or disabled. Beneficiaries with end-stage renal disease (ESRD) were excluded because Medicare uses a different formula to set plan payments rates for these individuals.

Methodology to Estimate FFS Costs of Survivors

To estimate the FFS costs of plan enrollees who survived 1998, we analyzed the 1997 FFS costs of beneficiaries who switched from FFS to a plan between 1997 and 1998. We then extrapolated from their cost patterns to estimate the FFS costs of all plan enrollees. To implement this approach we had to (1) estimate a base rate that reflected 1997 per capita spending on FFS survivors in each county, (2) calculate a joiner cost ratio for each plan that measured 1997 FFS spending on new plan enrollees relative to spending on demographically similar beneficiaries who remained in FFS, (3) derive a set of regression-toward-the-mean (RTM) factors for each plan that estimate how much FFS costs of enrollees in the plan differ from joiner's 1997 FFS costs, and (4) develop a national update factor to convert 1997 spending levels to equivalent 1998 spending. The following describes the four steps.

1. *Estimate a base rate for each county that reflects the cost of serving the average FFS beneficiary who did not die during 1997.* (Separate base costs were estimated for the aged and disabled Medicare populations.) We began with the 1997 county per capita costs, which represent HCFA's estimated cost of providing Medicare-covered services to the average FFS beneficiary in each county.[3] However, these rates reflect the cost experience of a county's entire FFS population and thus include the typically high costs associated with persons who died during the year.[4] To estimate the cost of survivors only, we used the fact that each county's per capita costs can be expressed as a weighted average of the per capita costs of survivors and the per capita costs of decedents. That is,

[3]This figure does not include the 5-percent discount used to set county payment rates.

[4]For a discussion of death-related costs, see J. Lubitz, J. Beebe, and C. Baker, "Longevity and Medicare Expenditures," *New England Journal of Medicine*, Vol. 332, No. 15 (1995), pp. 999-1003; J. Lubitz and R. Prihoda, "Medicare Services in the Last 2 Years of Life," *Health Care Financing Review*, Vol. 5, No. 3 (1984), pp. 117-31; and J. Lubitz and G. Riley, "Trends in Medicare Payments in the Last Year of Life," *New England Journal of Medicine*, Vol. 328, No. 15 (1993), pp. 1092-96.

Equation 1

$$\text{County per Capita Cost} = \left[\left(\text{Average Survivor Cost}\right) \times p_s\right] + \left[\left(\text{Average Decedent Cost}\right) \times p_d\right]$$

where

p_s = (number of survivor-months)/(total beneficiary-months), and

p_d = (number of decedent-months)/(total beneficiary-months)

We then used the CMHS to estimate a national death factor that measures the difference in costs between persons who die and those who survive during the calendar year.[5] Separate death factors were estimated for the aged and disabled Medicare populations.[6] As shown in table 4, the cost of aged decedents is approximately 4 times the cost of aged survivors while the cost of disabled decedents is nearly 5 times the cost of disabled survivors.

[5]Because our analysis of death-related costs was restricted to the period of January 1997 to December 1997, the death factor is not equivalent to the costs associated with death over the last year of life. That is, for persons who died in January we observe 1 month of FFS costs, and for those who died in December, 12 months of costs. However, higher costs for persons who died in 1998 raised the estimated 1997 cost of survivors. We assumed that the relationship between survivor and decedent costs was the same across counties. The CMHS did not contain a sufficient number of cases to allow reliable estimates of county-specific death factors. Our state-level analysis of decedent and survivor FFS costs showed that the death factor was similar among states and that, consequently, use of a national death factor was reasonable.

[6]Beneficiaries, excluding plan enrollees and persons with ESRD, were assigned to one of five age cohorts. Mean 1997 FFS costs were then computed separately for survivors and decedents in each age cohort. We weighted these mean costs by the proportion of survivors and decedents in the FFS population within each age cohort and calculated an aggregate ratio of decedent-to-survivor costs. Population weights were determined from the 1997 Denominator File, a HCFA database that contains enrollment information on all Medicare beneficiaries.

Table 4: Mean FFS Costs for Aged and Disabled Medicare Survivors and Decedents, 1997

Medicare status	Mean survivor costs	Mean decedent costs	Death factor (survivor costs/ decedent costs)
Aged	4,606	18,973	4.12
Disabled	5,291	25,673	4.85

Note: To control for age differences in the CMHS and the FFS populations, group means are weighted by the proportion of the FFS survivors and decedents in each age cohort.

Source: GAO analysis of the CMHS.

Average decedent costs could then be expressed as the product of the death factor and average survivor costs in equation 1. We combined terms and rearranged equation 1 to solve for average survivor costs in terms of the county per capita costs, proportions of survivors and decedents, and the national death factor.[7] This yielded equation 2:

Equation 2

$$\text{Average Survivor Cost} = \left(\text{County per Capita Cost}\right) / \left[p_s + \left(\text{Death Factor} \times p_d\right)\right]$$

where

p_s = (number of survivor-months)/(total beneficiary-months), and

p_d = (number of decedent-months)/(total beneficiary-months)

[7]Because decedents were enrolled, on average, for only 6 months of the year, we annualized the death factors.

Because the demographic mix of survivors varies among counties, we then adjusted each county's costs using the average demographic factor for FFS survivors in that county. The result is our estimate of the base cost in each county.[8]

2. *Compute a joiner cost ratio for each plan that measures prior FFS spending on that plan's new enrollees relative to average FFS spending on demographically similar beneficiaries in the same county.* We computed 1997 Medicare spending on each beneficiary who left FFS and joined a plan in 1998 (these beneficiaries were termed joiners).[9] We then compared that spending to the base rate for demographically similar beneficiaries in the joiner's county of residence.[10] The ratio of aggregate FFS spending on each plan's joiners to the spending of demographically similar beneficiaries is the plan's joiner cost ratio. For example, a joiner cost ratio of 0.75 indicates that a plan's joiners had costs that were three-fourths of those of demographically comparable FFS beneficiaries in the year before

[8]The average demographic factor for survivors must be imputed because information on beneficiaries who are working-aged or Medicaid-eligible is not available from HCFA enrollment files. To determine the average demographic factor for survivors in each county, we multiplied the cell frequencies for each risk group (from the 1997 AAPCC workbook) by the corresponding age and gender survival rates of FFS beneficiaries in that county. We then multiplied the adjusted cell frequencies by the 1997 risk-score for each cell and calculated a separate average demographic factor for aged part A, aged part B, disabled part A, and disabled part B. Age and gender survival rates for a county were obtained from the 1997 denominator file. Our approach assumes similar survival rates across the following risk groups: working-aged, Medicaid eligible, non-Medicaid eligible, and institutionalized.

[9]We define joiners as enrollees who spent at least 6 months in FFS in 1997 and at least 7 months in a Medicare+Choice plan in 1998. Beneficiaries who enrolled in a plan immediately upon becoming eligible for Medicare were excluded from our joiner group because they had no prior Medicare FFS costs. However, our 1997 study (GAO/HEHS-97-16) indicated that these individuals—known as "age-ins"—tended, like other joiners, to be healthier than demographically comparable beneficiaries in FFS. We therefore estimated FFS costs for age-ins using the same methodology applied to other enrollees. In our sample, age-ins composed about 28 percent of all new plan enrollees during 1998.

[10]We applied Medicare's demographic-based risk adjustment factors to the base rate to account for gross differences in beneficiary health status. For example, in 1997, the part A risk factor was 0.65 for a 65-year-old man who was not institutionalized, not eligible for Medicaid, and not classified as "working aged," which means that his part A FFS costs were expected to equal 65 percent of the average per capita cost. Thus, we compared the part A cost of a joiner with these demographic characteristics to an amount equal to 65 percent of the part A base rate in the joiner's county of residence. We followed the same approach for part B costs.

enrollment. In our study, the weighted average joiner cost ratio was 0.67, and 93 percent of plans had a ratio of 0.80 or lower.[11]

The joiner cost ratio did not vary substantially with the number of years since the start of a plan's Medicare contract or the size of a plan, but tended to be slightly higher among plans operating in markets with relatively high percentages of beneficiaries enrolled in plans (see table 5).[12] However, even in those areas where Medicare managed care has a significant presence, beneficiaries who join plans generally have costs that are substantially below those of comparable FFS beneficiaries.

Table 5: Joiner Cost Ratio by Market Penetration and Size and Age of Plan

Plan characteristics	Mean joiner cost ratio	Number of plans
Years since start of plan's Medicare contract		
1-5 years	0.69	135
6-10 years	0.69	34
11+ years	0.68	41
Medicare+Choice market penetration (percent)		
<10	0.65	23
10 to 19	0.67	60
20 to 29	0.69	72
30 to 39	0.72	24
40+	0.72	31
Plan size (number of enrollees)		
<10,000	0.69	86
10,000 to 49,000	0.70	97
50,000+	0.65	27

Source: GAO analysis of HCFA data.

[11]Weights were assigned according to the number of enrollees in a plan. The distribution of joiner cost ratios is consistent with our 1997 study (GAO/HEHS-97-16). In that study, the average joiner's costs were 64 percent of FFS beneficiaries' costs.

[12]Market penetration for each plan was calculated as an enrollee-weighted average of the market penetration rates (percentage of Medicare beneficiaries enrolled in any plan) in the counties it served.

3. *Compute a set of regression-toward-the-mean (RTM) factors for each plan that indicate how longer-term members' FFS costs compare to joiners' costs*. The RTM factors account for the tendency of individual enrollee costs to converge toward the group mean over time. Beneficiaries who had lower-than-average costs before enrollment in a plan may incur increased costs in subsequent years. Conversely, beneficiaries who had higher-than-average costs before enrollment may experience reduced costs. That is, enrollees' costs tend to regress toward the mean the longer they remain plan members.[13] The RTM factors specify the degree to which enrollees' estimated FFS costs differ from the pre-enrollment FFS costs of new enrollees.

We used CMHS data to analyze how FFS costs changed for a sample of beneficiaries over a 5-year period.[14] We grouped beneficiaries into eight cost cohorts based on their 1993 FFS costs relative to the overall sample mean cost in that year ($2,575).[15] We then computed average FFS spending for each cohort relative to the sample mean FFS costs in each of the following 4 years. For example, among beneficiaries who had the lowest FFS costs in 1993, the average cost was 3 percent of the sample mean. (Many beneficiaries in this group had no Medicare costs.) In 1994, FFS costs for the same individuals averaged 44 percent of that year's sample mean. By 1997, the group's FFS costs averaged 59 percent of the year's sample mean. In contrast, average spending on the group of beneficiaries who were most expensive in 1993 dropped from 1,678 percent of the sample mean in 1993 to 317 percent of the sample mean in 1997. We then extrapolated the CMHS cost trends to impute an additional 4 years of relative spending for each cost cohort.

We then computed plan-specific joiner cost ratios from the CMHS cost trends and estimated each enrollee's 1998 FFS costs relative to the average

[13]Such cost increases are plausible for two reasons. First, beneficiaries may postpone discretionary care in the months before joining a health plan to avoid paying Medicare coinsurance and deductibles. Alternatively, beneficiaries may be more likely to join a plan during a spell of unusually good health and low service use but subsequently resume service use at a level that reflects average use by a demographically comparable beneficiary. In both cases, prior FFS spending may be atypically low.

[14]We excluded plan enrollees and individuals who died during this period.

[15]We adjusted beneficiaries' FFS costs using HCFA's average geographic adjusters to account for geographic cost differences. The eight cost cohort categories were defined by the ratio of beneficiaries' 1993 costs relative to the overall sample mean using the following ranges: less than 0.10, 0.11-0.25, 0.26-0.50, 0.51-1.0, 1.01-2.0, 2.01-4.0, 4.01-10, greater than 10.

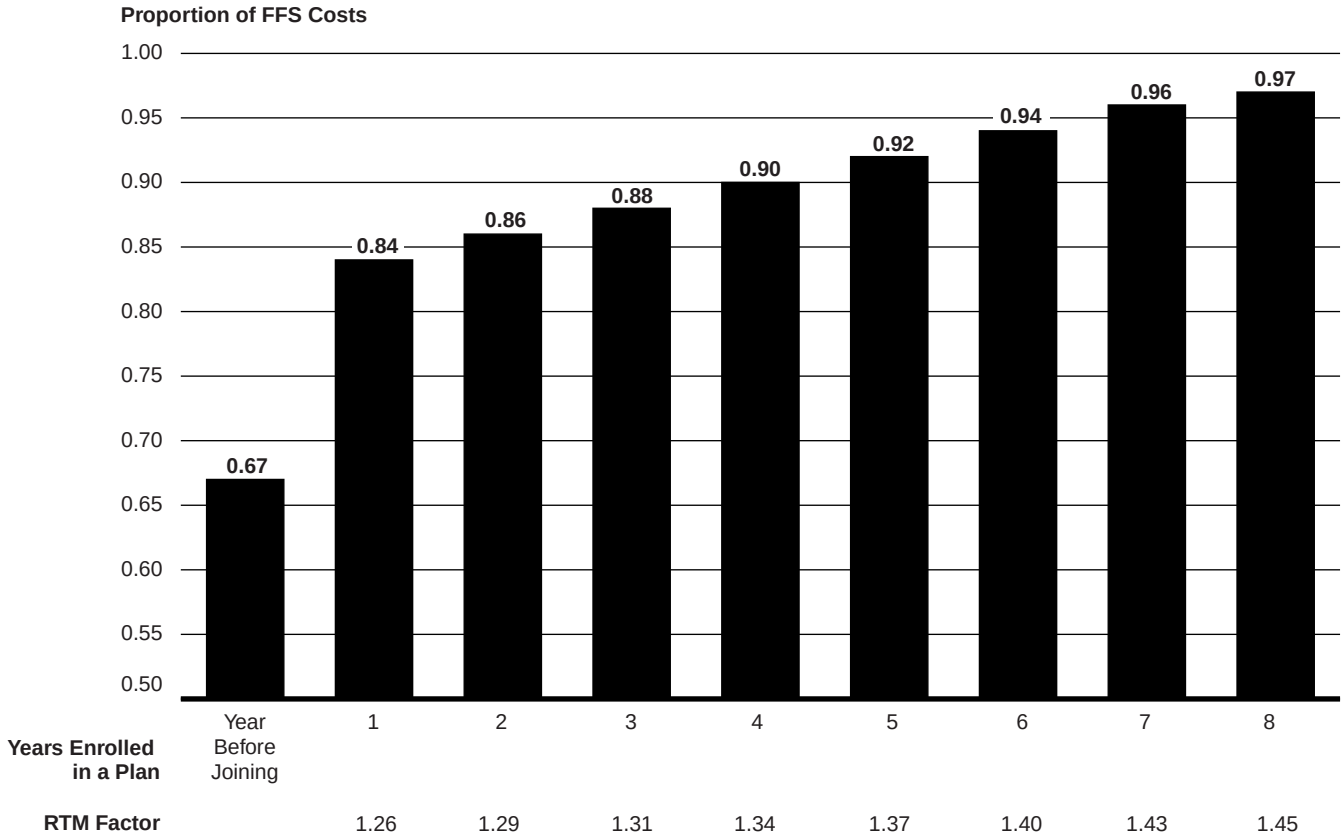
cost of a demographically similar beneficiary in FFS. An average cost trend for each plan was computed by using the distribution of its joiners' 1997 FFS costs to weight the eight CMHS cost trends. Each enrollee was then assigned a plan-specific RTM factor based on the number of years he or she had been a plan member.[16] These factors express the relationship between estimated relative FFS costs and the plan's joiner cost ratio. [17] For example, figure 2 illustrates the estimated RTM for beneficiaries enrolled in a hypothetical plan Z, which has a joiner ratio and RTM factors typical of an average plan in our sample. Joiners to the plan had 1997 FFS costs that equaled 67 percent of the average FFS cost for demographically similar beneficiaries who did not enroll in a plan. However, the CMHS cost trends indicate that in 1998—during their first year of plan membership—plan joiners' FFS costs would have increased to 85 percent of average FFS costs. Thus the RTM factor for plan Z enrollees in their first year of membership is 1.27 (0.67 x 1.27 = 0.85). We similarly estimated relative FFS costs for enrollees with 8 or fewer years of plan membership. We assumed that there was no difference between plan enrollees' costs and FFS beneficiaries' costs for enrollees who had 9 or more years of plan membership.[18]

[16]To determine the amount of RTM an individual enrollee experienced, we calculated the total number of years he or she had been enrolled in any Medicare health plan that received a fixed monthly payment per enrollee.

[17]RTM factors are plan-specific because they depend on the FFS cost history of each plan's joiners.

[18]Approximately 15 percent of enrollees in our sample had more than 8 years of HMO enrollment.

Figure 2: Illustration of Regression-Toward-the-Mean for Enrollees in Hypothetical Plan Z



Note: Numbers have been rounded to the nearest hundredth.

4. *Compute a national update factor that adjusts estimated 1997 spending to 1998 levels.* As a result of BBA, HCFA no longer calculates AAPCC rates. Therefore, we multiplied 1997 FFS spending by the ratio of 1997 national per capita spending to 1998 national per capita spending to estimate 1998 spending. Because per capita FFS spending fell between 1997 and 1998, the update factor was 0.97 for aged beneficiaries and 0.96 for disabled beneficiaries.

After we completed the preceding subtasks, imputing the 1998 FFS cost of each survivor enrolled in a plan involved multiplying a series of terms. Essentially, for each month in which a surviving beneficiary was enrolled in a plan, we began with the 1997 base rate multiplied by the beneficiary's risk adjustment factor to obtain the expected average cost of a demographically

comparable FFS beneficiary who was alive for the entire preceding year. We then multiplied that amount by the plan's joiner cost ratio and the RTM factor applicable for the beneficiary's tenure in a Medicare plan. Finally, we updated the resulting estimate to account for the change in the base rate between 1997 and 1998. This process is illustrated for one survivor by equation 3.

Equation 3

$$\text{Costs}_{i}^{\text{Survivor}} = \sum_{\substack{\text{1998}\\ \text{Enrolled}\\ \text{Months}}} \left(\text{Base Rate}_{j} \times \text{Demographic Factor}_{i} \times \text{Joiner Cost Ratio}_{k} \times \text{RTM}_{k} \times \text{Update Factor}\right)$$

where

i	=	index for each survivor in a Medicare+Choice plan
j	=	index for the county where individual i resides
k	=	index for Medicare+Choice plan that enrolled individual i
Base Rate	=	the county-specific average per capita monthly cost of FFS survivors (separate base rates for aged and disabled)
Demographic Factor	=	a demographic scaling factor that adjusts the base rate for individual i's age, gender, institutional status, and Medicaid/non-Medicaid status
Joiner Cost Ratio	=	a plan-specific adjustment that reflects the relative costliness of plan k's new enrollees to that of a comparable group of FFS beneficiaries
RTM	=	a regression-toward-the-mean adjustment factor that incorporates the tenure of the individual in managed care as well as a plan-specific time path of average costs based on the cost distribution of beneficiaries who enroll in plan k
Update Factor	=	a cost update factor that converts 1997 Medicare spending figures to 1998 levels

Example 1:
Mrs. Smith is 69 years old and lives in Dade County, Florida. She has been a member of plan x for 4 years. The 1997 county per capita cost for Dade County is $787. Adjusting the county per capita costs to remove decedents' costs yields a base rate of $686. According to HCFA's demographic risk factors, women aged 69 who are not living in an institution, not eligible for Medicaid, and not working have costs that are 62.3 percent of the county average. Thus, the base rate for Mrs. Smith is estimated to be $427 per month or $5,124 per year. The new enrollees in Mrs. Smith's plan have joiner cost ratios of 0.65. We assume, therefore, that when Mrs. Smith joined her HMO she had costs that were 65 percent of the annual base rate, or $3,331 in 1997 terms. After 4 years in the plan, however, we assume her costs have risen closer to the average of demographically similar survivors. The estimated RTM factor in plan x for a beneficiary with 4 years of plan tenure is 1.37. As a result, we estimate that Mrs. Smith's FFS costs in 1997 would equal $4,563 (1.37 times $3,331). Because per capita FFS spending for aged beneficiaries fell by approximately 3 percent between 1997 and 1998, Mrs. Smith's estimated 1998 FFS costs would be $4,426 (0.97 times $4,563).

Our approach assumes that when longer-term plan members first enrolled in a plan, they had FFS spending that was similar to the spending for current joiners. That is, we assume that a plan that experienced favorable or adverse selection of enrollees (healthier or sicker than average) in 1998

experienced similar favorable or adverse selection in previous years. This approach allows us to estimate costs for all plan enrollees based on the subset of enrollees who had FFS costs in the prior year.[19] Some plan representatives have indicated that new enrollees in recent years have been less healthy and more costly compared to new enrollees in earlier years. To the extent this is true, our joiner ratios will overestimate what was spent on long-term enrollees when they were last in FFS and result in an underestimate of excess payments. [20]

Methodology to Estimate FFS Costs of Enrollees Who Died During 1998

We assumed that decedents in plans have the same costs as decedents in FFS and that these costs can be expressed as a fixed ratio, referred to as a death factor, of the average annual cost of FFS survivors. Consequently, we estimated the total costs associated with a decedent as the product of three terms: the annualized base rate, the death factor, and the cost update

[19]Our method assumes that the health status of a plan's joiners is similar from year to year. In an earlier study, we tested this assumption by examining the costs of joiners from different counties over a period of several years. We found that the costs of joiners did not differ greatly from year to year.

[20]Analyses by GAO and other researchers suggest that favorable selection, as measured by joiner cost ratios, may be slightly lower (indicating relatively less-healthy joiners) in markets with relatively high managed care enrollment. See Call, Dowd, Feldman, and Maciejewski, "Selection Experiences in Medicare HMOs: Pre-Enrollment Expenditures," *HCFA Review*, Vol. 20, No. 4 (Summer 1999) , pp. 207-208. Although this study found that favorable selection declines as the market share of Medicare HMOs increases, favorable selection remained substantial in areas with high HMO penetration.

factor. We then aggregated the decedent-related costs experienced by each plan. These steps are illustrated for a single decedent by equation 4.

Equation 4

$$\text{Costs}_i^{\text{Decedent}} = 12 \times \text{Base Rate}_j \times \text{Death Factor} \times \text{Update Factor}$$

where

i	=	index for each decedent in a Medicare+Choice plan
j	=	index for the county where individual i resides
Base Rate	=	the county-specific average per capita monthly cost of FFS survivors (separate base rates for aged and disabled)
Death Factor	=	a multiplicative factor that reflects the additional health care costs incurred by persons who die relative to persons who survive the calendar year
Update Factor	=	a cost update factor that converts 1997 Medicare spending figures to 1998 levels

Example 2:
Mr. Jones was 74 years old, living in Dade County, Florida, and a member of plan y when he passed away in September 1998. As in the first example, the monthly base rate for survivors in Dade County was $686 in 1997. Decedents, however, have expected costs that are 4.12 times that of the average annual spending on survivors. Thus, Mr. Jones's expected 1997 FFS costs are $33,916 (4.12 times 12 times $686). Updating the amount to 1998 spending levels yields an FFS spending estimate of $32,899 (0.97 times $33,916).

Methodology to Estimate Excess Payments or Underpayments

We used 1998 Medicare+Choice payment rates, along with the number and demographic characteristics of each plan's enrollees, to calculate plans' monthly Medicare payments. We then subtracted from this amount the estimated FFS costs of the plan's enrollees (both survivors and decedents). The difference between these amounts is our measure of excess payments (or underpayments). The excess payment rate expresses excess payments as a proportion of total estimated costs. This is illustrated in equation 5.

Equation 5

$$\text{Plan Excess (or Under-) Payment Rate} = \frac{\text{Actual Payments}_k - \left(\text{Costs}_k^{\text{Survivors}} + \text{Costs}_k^{\text{Decedents}}\right)}{\left(\text{Costs}_k^{\text{Survivors}} + \text{Costs}_k^{\text{Decedents}}\right)}$$

Comments From the Health Care Financing Administration

DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care Financing Administration

Office of the Administrator
Washington, D.C. 20201

AUG 17 2000

TO: Laura A. Dummit
Associate Director
General Accounting Office (GAO)

FROM: Nancy-Ann Min DeParle
Administrator

SUBJECT: Comments on the Draft GAO Report "Medicare+Choice Payments Exceed Cost of Benefits in Fee-for-Service, Adding Billions to Spending" Number GAO/HEHS-00-161

The Health Care Financing Administration (HCFA) is committed to ensuring that Medicare beneficiaries continue to have many health options available to them while improving the administration of the Medicare+Choice (M+C) program. Clearly, M+C has made a positive contribution to modernizing the Medicare program. Many Medicare HMOs offered a range of preventive benefits before those benefits were incorporated into the fee-for-service (FFS) Medicare program, and they have also taken the lead in providing prescription drug benefits, a benefit not available to beneficiaries in FFS.

We agree with the findings in the GAO's report referenced above and were most interested in your strongly supported conclusions that:

- Medicare spends more on M+C enrollees than it would if those enrollees had received services through traditional fee-for-service Medicare, due to a combination of favorable selection and the payment methodology under the Balanced Budget Act of 1997 (BBA). This GAO finding is consistent with earlier analyses of selection bias, which found that payments to Medicare HMOs exceeded fee-for-service costs by 5 to 15 percent.

- The seeming paradox between this finding and the M+C plans' perspective that their payments are not adequate can be reconciled. As the GAO states, "Medicare+Choice plans are being paid too much for what was originally intended—providing beneficiaries the package of Medicare-covered services at less cost than the traditional FFS program. However, Medicare+Choice plans may not be paid enough for what they have been offering to attract beneficiaries—a more comprehensive benefit package beyond that covered for FFS beneficiaries for only modest or no premiums." The GAO also correctly delineates the difficulty in resolving this paradox.

- Excess payments for Medicare-covered services can be addressed by risk adjusting payments to M+C plans. As noted in the GAO's report, HCFA is currently using a risk adjuster based on inpatient hospital data to adjust a fraction of payment to M+C plans. Under the phase-in of this method, payments in 2000 are being reduced by 0.59 percent; if the method were fully implemented, payment would have been reduced to 5.9 percent, which is consistent

with the findings of favorable selection in this and other analyses of selection bias. We will begin phasing in a comprehensive risk adjuster in 2004.

The best way to address the paradox described above and to ensure a strong M+C program is to make sure that all beneficiaries have access to affordable drug coverage and to pay plans directly for providing it. The President's proposal to create a voluntary, affordable prescription drug benefit would provide an estimated $2 billion in 2001 and $25 billion over 5 years to M+C plans for the cost of providing prescription drugs. The President also proposes to change the way M+C plans are paid by creating a competitive defined benefit program where plans would be paid through a market-based process rather than through the current administered pricing method.

We look forward to continuing to work with the Congress, GAO, and M+C plans to ensure that Medicare beneficiaries have many health plan options available to them. We appreciate the effort that went into this report and look forward to working with GAO on this and other important issues.

Comments on the Draft GAO Report "Medicare+Choice Payments Exceed Cost of Benefits in Fee-for-Service, Adding Billions to Spending"

GAO prepared this report in response to requests by several congressional representatives to determine: (1) whether program spending for Medicare+Choice (M+C) plan enrollees has exceeded what Medicare-covered care for these beneficiaries would have cost in the fee-for-service (FFS) program, and (2) the extent to which payments to individual plans differ from expected FFS costs. The report concludes that payments made to managed care organizations are more than the Medicare program would have paid if beneficiaries had remained in Medicare FFS. According to GAO, a decision on whether to adjust county payment rates so that excess payments are eliminated or to heed managed care organizations' calls for higher M+C payment rates will require balancing the concerns of beneficiaries, taxpayers and managed care organizations.

In its report, GAO estimated that aggregate payments to M+C organizations in 1998 were about $5.2 billion (21 percent) more than if the organizations' enrollees had received care in the traditional fee-for-service program. These excess payments were divided into two categories: 1) $2.0 billion, or 8 percent, was due to the combination of spending forecast errors and Balanced Budget Act (BBA) payment provisions; and 2) $3.2 billion, or 13.2 percent due to favorable selection.

The findings of this report are consistent with previous studies that have found a considerable degree of favorable selection in Medicare managed care enrollment, i.e., enrollment of a disproportionately higher share of beneficiaries with better-than-average health status in managed care plans. The Balanced Budget Act of 1997 required HCFA to implement a risk adjustment methodology that accounts for variations in health status by January 1, 2000. HCFA is now in the process of phasing in a risk adjustment system based on diagnosis data from hospital admissions. Under the phase-in of this method, payments in 2000 are being reduced by 0.59 percent; if the method were fully implemented, payment would have been reduced to 5.9 percent, which is consistent with the findings of favorable selection in this and other analyses of selection bias. Beginning in 2004, we will incorporate diagnosis data from physician services and hospital outpatient services into the risk adjustment system. The report reinforces the importance of proceeding with the implementation of risk adjustment.

Spending Forecast Errors and BBA Payment Provisions

GAO correctly pointed out that the Health Care Financing Administration (HCFA) overestimated Medicare's spending for 1997 in developing the 1997 payment rates for managed care organizations. Over- and under-estimations are inevitable when projecting Medicare spending levels and the pre-BBA statute provided authority for HCFA to adjust subsequent payment rates to account for projection errors. In 1997, the BBA changed the method used to calculate county payment rates. We concur with GAO that the BBA precluded HCFA from adjusting the payment rates for the over-estimation of the 1997 payment rates, which tended to overpay M+C organizations. We also concur with GAO that the 1998 payment rates increased

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HCFA's overpayment to these organizations because of the minimum 2 percent increase provision in the BBA. This 2 percent minimum increase was higher than the increase in the original fee-for-service program. Further, the amount of overpayment continues for calendar years 1999, 2000, and 2001. In two of these years, the minimum 2 percent provision in the BBA was used to establish a significant number of county payment rates (i.e., in those years, all county payment rates were established at the floor or using the 2 percent minimum increase).

Favorable Selection

The methodology used by GAO is consistent with the methods used in some of the previous studies that have attempted to measure the appropriateness of HCFA's payment to Medicare managed care organizations. These studies have concentrated on the issue of favorable selection, that is, whether plans have attracted a disproportionately higher share of beneficiaries with better-than-average health status. Using several different methods, these studies have consistently found that HCFA has overpaid Medicare managed care organizations due to favorable selection in the Medicare managed care programs. The GAO study uses more recent data (from 1997 and 1998) than the previous studies, and still reaches conclusions about risk selection that are within the same range as previous studies (i.e., 5 to 15 percent).

Some have asserted that, because of changes in enrollment, prior studies of selection that used older data were no longer valid. However, this study, using the most recent data available for this type of analysis, confirms the findings of those earlier studies.

HCFA is implementing a risk adjusted payment system based upon health status. Our current model, which is based on a method that uses only inpatient hospital data to measure health status, uses the most current data possible and employs inpatient hospital diagnosis data (from July 1998-June 1999). This effort is a first step toward implementation of a comprehensive risk adjusted payment system. The comprehensive risk adjustment model will more accurately measure health status and reduce more of the favorable selection bias in the future.

Based on the current risk adjustment model, payments to M+C organizations were reduced by .59 percent, at the 10 percent phase-in level, indicating favorable selection. If we had fully phased in risk adjustment, payment would have been reduced by 5.9 percent, which is well within the range of this report's findings and prior overpayment estimates. Overall, the evidence, whether using past studies, the current GAO effort, or HCFA's risk adjustment findings, clearly indicates that M+C payments exceed the costs of benefits in FFS.

While there is continuous evidence that M+C rates overpay plans for Medicare covered benefits, M+C organizations have indicated that Medicare's payments are not adequate. In fact, as this study, the previous studies, and HCFA's risk adjusted payments have shown, managed care organizations are being paid adequately for Medicare-covered benefits. However, organizations are finding it difficult to continue providing extra benefits that they were able to provide in previous years without additional premiums in many cases. Our analysis of M+C premium benefit submissions shows that approximately 76 percent of Medicare's payment supports

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payment for Medicare covered services (less an amount representing deductibles and coinsurance the Medicare beneficiary would pay under original Medicare). The remaining 24 percent is split between paying for extra health care benefits (9 percent) and paying down the beneficiaries' premium and cost sharing (15 percent). That M+C organizations are able to use Medicare payments to furnish extra health care benefits and reduce cost sharing indicates that these payments have been more than adequate to cover the costs (including organizations' profits) of providing the Medicare benefit package. M+C organizations thus are now faced with the business decision of either decreasing benefits and/or increasing premiums (with the possibility of losing Medicare membership) or leaving the program.

* * * *

Therefore, as GAO points out in their conclusion, the question of payment adequacy depends on whether M+C payments are intended to return a reasonable profit on furnishing Medicare services, or whether they are intended to support the more generous packages that have been offered by Medicare managed care organizations.

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