Department of Health and Human Services

# OFFICE OF INSPECTOR GENERAL

# BENEFICIARY PERSPECTIVES OF MEDICARE RISK HMOs 1996

## Beneficiaries With Functional Limitations, Comorbidities and Disabilities

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# EXECUTIVE SUMMARY

## PURPOSE

To describe and compare the experiences of functionally limited, comorbid and disabled Medicare HMO beneficiaries with those of healthier beneficiaries.

## BACKGROUND

Medicare beneficiaries may join a risk health maintenance organization (HMO) or remain in the fee-for-service program. In return for a predetermined monthly capitation payment, the HMO must provide all medically necessary, Medicare-covered services, except hospice care. As of October 1997, the Health Care Financing Administration (HCFA) reported 307 risk HMO plans serving 5 million Medicare enrollees.

We conducted a mail survey of 4 thousand enrollees and disenrollees from 40 Medicare HMOs. The OIG report entitled, "Beneficiary Perspectives of Medicare Risk HMOs 1996" presented an overview of findings from this survey data. One significant finding in this overview report was that functionally limited, chronically ill and disabled beneficiaries experienced more service access problems than healthier beneficiaries.

This report provides an in-depth analysis of the survey responses of functionally limited, disabled and chronically ill beneficiaries having comorbidities. Recent research has shown less healthy beneficiaries are less likely to join HMOs and more likely to leave them. Some research has also found that such vulnerable beneficiaries have less favorable medical outcomes in HMOs than in fee-for-service delivery systems.

We highlight and distinguish the responses of disenrollees in these groups since their unsatisfactory experiences may have motivated them to disenroll. Thus, their responses may sharpen our understanding of shortfalls in HMO services.

## FINDINGS

Although our overall report found that Medicare beneficiaries in HMOs generally had good access to health care services, beneficiaries who are impaired or less healthy experienced substantially more problems. We found significant differences between these vulnerable beneficiaries and their healthier counterparts regarding their experiences with enrollment, access to services, care from their primary doctors and difficulty of obtaining HMO care.

*Functionally limited, comorbid and disabled beneficiaries experienced more problems in accessing services, particularly specialized services, than healthier beneficiaries.*

- Functionally limited enrollees (8%) and disenrollees (20%), comorbid enrollees (9%) and disabled disenrollees (27%) said that their physician failed to give them needed Medicare-covered services. These proportions were significantly higher than their corresponding reference groups.

- Comorbid enrollees (8%) and disenrollees (21%), and disabled disenrollees (36%) said their physician failed to refer them to needed specialists.

- More comorbid disenrollees (36%) reported delays in obtaining non-routine services (i.e. physical therapy, diagnostic tests) in the six months prior to the survey.

*Vulnerable beneficiaries said obtaining care through their HMO was hard or very hard.*

Over 37 percent of disabled disenrollees and 24 percent of disabled enrollees said obtaining care through their HMO was hard or very hard. This was substantially higher than the proportion of elderly beneficiaries who reported this. Functionally limited and comorbid beneficiaries expressed similar difficulties in obtaining care.

*While able to obtain timely appointments when they were very ill, vulnerable beneficiaries were more critical of the care received from their primary physicians.*

- Functionally limited enrollees (16%) and disenrollees (24%), as well as disabled disenrollees (39%) more often reported that their primary physicians did not take their health complaints seriously.

- Disabled (61%) and functionally limited (68%) disenrollees were significantly less likely than aged (78%) and less impaired (79%) disenrollees to believe their physician explained all treatment options to them.

- Fewer functionally limited enrollees (34%) and disenrollees (29%), and disabled enrollees (38%) rated the care received from their primary physicians as excellent than their corresponding reference groups.

*While sizeable proportions of vulnerable enrollees said their health improved, about one fifth of vulnerable disenrollees said care provided by the HMO caused their health to worsen.*

Among vulnerable disenrollees, 23 percent of comorbid, 20 percent of functionally limited, and 18 percent of the disabled beneficiaries reported HMO care caused their health to worsen. However, on the positive side, 34 percent of disabled, 44 percent of functionally limited, and 52 percent of comorbid enrollees said their health improved under HMO care.

*Disabled beneficiaries and functionally limited and comorbid disenrollees were more likely than less impaired groups to have been inappropriately asked about their health problems when applying to their HMO.*

Disabled disenrollees (25%) more often reported being asked questions regarding their health at application than aged disenrollees (17%). Likewise, more functionally limited disenrollees, and comorbid disenrollees (22%) reported being asked about their health status at the time of application than beneficiaries without functional limitations or multiple illnesses.

## RECOMMENDATIONS

We recommend that HCFA address the problems identified by vulnerable beneficiaries in Medicare risk HMOs and suggest consideration of the following options.

- In developing the health status capitation risk adjusters required by the Balanced Budget Act of 1997, HCFA should take into account the following considerations:

  - Risk adjusters should be sufficiently specific to address the severity of illnesses or functional impairments contributing to the health service needs of beneficiaries.

  - Multi-plan studies should be conducted concurrently with implementation of the risk adjustment methodology to measure adequacy of adjusters and plan and beneficiary behavioral responses.

  - During the early implementation stage, the capitation methodology could include adjustments based upon actual cost experience.

- Service access problems encountered by vulnerable populations in HMOs should continue to be monitored.

- Contractual requirements could be used by HCFA to encourage or require plans to designate specialists as primary physicians in appropriate cases or to provide standing referrals for ongoing specialty care needs.

- HCFA could also use contractual requirements to assure that referral and utilization criteria are available on request to providers and to beneficiaries for use in accessing care and appealing any denials of service.

## AGENCY COMMENTS

We received comments from HCFA and the Assistant Secretary for Planning and Evaluation (ASPE). HCFA fully concurred with four of the six recommendations in the report and partially concurred with the remaining two recommendations regarding risk adjustment, by citing difficulties with implementation of parts of the recommendations. HCFA also offered several technical comments about sample size and questioned the connection between the report's analyses and our recommendations for risk adjustment. ASPE concurred with our recommendations, but suggested further study of the disabled population, and also noted some concerns on the sample size and composition. Based on HCFA and ASPE comments, we clarified information about our sample and cited literature demonstrating the connection between access to care issues and risk adjustment.

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# INTRODUCTION

## PURPOSE

To describe and compare the experiences of functionally limited, comorbid and disabled Medicare HMO beneficiaries with those of healthier beneficiaries.

## BACKGROUND

### *The Medicare risk HMO program*

Medicare beneficiaries may join a risk health maintenance organization (HMO) through the Medicare program. When enrolling beneficiaries, HMOs may not deny or discourage enrollment based on a beneficiary's health status except for end-stage renal disease (ESRD) or hospice care. They must also adequately inform beneficiaries about lock-in to the HMO and appeal/grievance procedures. Once enrolled, beneficiaries are usually required to use HMO physicians and hospitals (lock-in) and to obtain prior approval from their primary care physicians for other than primary care.[1] The Health Care Financing Administration (HCFA) has oversight responsibility for Medicare risk contracts with HMOs. Effective July 1997, HCFA's internal reorganization placed many managed care functions under the new Center on Health Plan and Provider Operations. Previously, the HCFA Office of Managed Care was the responsible agency. As of October 1997, HCFA reported 307 risk-based HMO plans served 5,049,296 Medicare enrollees.[2,3]

### *Functionally limited, chronically ill and disabled beneficiaries*

Several recent studies have focused attention on the experiences and outcomes of the less healthy Medicare beneficiaries who join HMOs. Since the Medicare HMO program is growing substantially and the population of beneficiaries over age 85 is growing it is anticipated that the health care needs of HMO members will intensify. Because they use the health care system more often and cost more to care for, the less healthy members have a more experienced view of their health care system than healthy members and are often more vulnerable to cost saving strategies employed in managed health care.[4,5] A recent medical outcomes study found that patients with chronic illnesses had worse outcomes in HMOs than in fee-for-service coverage, but such outcome differences were not found for a healthier population.[6] Another study of enrollment-disenrollment patterns and utilization of hospital services found that beneficiaries who disenroll from HMOs have higher inpatient admission rates than those who stayed in the fee-for-service system[7] suggesting that sicker beneficiaries are selectively disenrolling from HMOs. Given these findings, an examination of sicker beneficiaries experiences with HMOs is warranted, and is the focus of this report.

*Prior Office of Inspector General studies*

The Office of Inspector General (OIG) has conducted several studies of Medicare managed care. In 1995 the OIG released two final reports based on 1993 survey data from 2,882 Medicare HMO enrollees and recent disenrollees randomly sampled from 45 Medicare risk HMOs.[8] While the majority of enrollees and disenrollees reported access to medical care that maintained or improved their health, the results also indicated some serious problems with enrollment procedures and service access. Further, the reports suggested how HCFA could use information from beneficiaries to guide its performance monitoring and assessments of HMOs.

In 1996 OEI initiated a follow-up study,"Beneficiary Perspectives of Medicare Risk HMOs 1996" (OIG-OEI-06-95-00430), largely replicating the methodology of the 1993 survey for comparison purposes. One of the more substantial findings of the overview report was that experiences and perspectives of HMO enrollees and disenrollees who were functionally limited, chronically ill or disabled differed significantly from those of healthier beneficiaries. This report provides a more indepth look at these sub-populations.

## METHODOLOGY[*]

*Definition of access*

Beyond referencing medical necessity and an actual or likely adverse effect on the beneficiary, the law and regulations do not clearly delineate what full access to services through an HMO means. To adequately cover access to services, we adapted a definition from literature that uses five dimensions: availability, accessibility, accommodation, affordability, and acceptability. Operationally, we divided access into five areas: appointments, including waiting time and administrative processes for making them; restrictions on medical services; incidence and reasons for out-of-plan care; behavior of primary HMO doctors and other HMO personnel towards beneficiaries; and beneficiary awareness of appeal and grievance rights.

*Sample selection*

From HCFA's Group Health Plan (GHP) data base, we selected a two-stage random sample, stratified at the second stage. At the first stage, we selected Medicare risk HMOs from those under contract with HCFA as of May 1996. We first excluded those that did not meet our parameters for length of time in the Medicare program or for number of enrollees and disenrollees. From the remaining HMOs, we randomly selected 40. At the second stage, we selected current enrollees and recent disenrollees from each sampled HMO. After excluding enrollees and disenrollees who had not been members for at least 3 months, we randomly selected 51 enrollees and 51 disenrollees from each of the 40 HMOs. Finally, using HCFA's Enrollment Data Base, we dropped beneficiaries who had died or who appeared as current enrollees, but had actually disenrolled since the last update to the GHP file. This process resulted in 2,038 enrollees and 2,027 disenrollees for a total of 4,065 beneficiaries.

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[*] See Appendix A for the full text of the Methodology.

***Scope and data collection***

Since this study's primary focus is the Medicare beneficiaries' perceptions of their risk HMO experiences, we only collected information from them. We surveyed both enrollees and disenrollees to compare their responses, and thus, to gain greater insight into HMO issues. We did not contact HMOs or their staffs, nor did we attempt to assess the quality or propriety of medical care rendered by the HMOs to these beneficiaries. We initially mailed structured survey forms to 4,065 beneficiaries in early August 1996. In mid-September 1996, we mailed a follow-up letter and second survey form to non-respondents; we closed data collection in October 1996.

With the exception of four questions on overall ratings of their HMO experiences, we did not specifically ask beneficiaries about their satisfaction with the HMOs. Instead we asked for more concrete details on beneficiaries' perceptions and experiences, such as, how long were waits for appointments, or how often, if ever, did a primary physician fail to take their health complaints seriously. Both enrollees and disenrollees provided information on sample and demographic data, enrollment experience, past and present health status and functional level, cost of HMO membership, HMO environment, and available HMO services.

A total of 3,229 survey forms were returned. Of these, 3,003 were usable yielding an unweighted return rate of 74 percent overall, 82 percent for enrollees (N=1665) and 66 percent for disenrollees (N=1338).

***Weighting and interpretation***

We weighted the collected data to reflect a non-response bias, differences in enrollment size among the sampled HMOs, and distribution of enrollees and disenrollees in the universe (97% vs. 3%) for the sample period. The results are generalizable only to the 132 HMOs that met our sampling parameters.

Because of the imbalance between enrollees and disenrollees, we primarily analyzed the two groups separately. Comparisons between sub-populations of enrollees and disenrollees form the basis for all tables in this report. All tables show the weighted percentages with the weighted number of respondents in parentheses. Additionally, we computed 95 percent confidence intervals and statistical significance tests for key questions (see Appendix D ).

### *Defining Medicare vulnerable sub-populations*

We conducted a literature review of recent studies of Medicare beneficiaries which addressed less healthy sub-populations. Several working definitions were identified in the literature. We used definitions of vulnerable subgroups that were fairly consistent with those used in existing studies. In our overview report, we used a broad category of chronically ill beneficiaries since other studies had used this categorization. However, our more indepth analysis of vulnerable feneficiaries for this report, as well as prior research efforts, led us to focus on beneficiaries having multiple health problems as a more discriminating category for the chronically ill. [9] Therefore, we chose to use comorbidity as our definition of serious illness. For a more complete discussion of the categorization scheme used across other studies, see Appendix A.

We analyzed three categories of vulnerable beneficiaries: the disabled, functionally limited and comorbid individuals having multiple serious conditions. Disabled beneficiaries were shown on the GHP as meeting the Medicare criteria for disability and were younger than 65. We classified enrollees and disenrollees as functionally limited or comorbid based on their self reports of health conditions and activities of daily living. Functionally limited beneficiaries reported at least one limitation in the following activities of daily living: problems getting in or out of bed, bathing or showering, using the toilet, or climbing one flight of stairs. Comorbid beneficiaries reported two or more health conditions from a list including heart attack or heart condition, kidney failure, stroke, cancer (excluding skin cancer), diabetes, and other serious conditions (See Appendix A). The sub-populations of disabled and functionally limited beneficiaries are not the same, although some overlap exists. Disabled enrollees and disenrollees comprise 12 percent and 24 percent, respectively, of the functionally limited respondents.

The unweighted sample sizes for these vulnerable sub-groups resulting from these definitions are as follows: Disabled Enrollees - 91, Disabled Disenrollees - 98, Functionally Limited Enrollees - 258, Functionally Limited Disenrollees - 216, Comorbid Enrollees - 244, Comorbid Disenrollees - 207.

This inspection was conducted in accordance with the *Quality Standards for Inspections* issued by the President's Council on Integrity and Efficiency.

# F I N D I N G S

## SUMMARY OF BENEFICIARIES' ASSESSMENTS

Overall, Medicare beneficiaries in risk HMOs gave favorable reports of their experiences and access to care in 1996. Problem areas identified by the overall group were beneficiaries' lack of awareness of their formal appeal and grievance rights, disenrollees receiving denials for emergency or urgent care, and awareness of the need for, and rules applying to gynecological care. However, we found that functionally limited and disabled beneficiaries experienced significantly more problems in accessing specialists, and other Medicare-covered services, and in receiving full explanations of their treatment options and having their health complaints taken seriously.

In our further analysis of the experiences of vulnerable sub-populations in Medicare risk HMOs, we found additional evidence of problems they encountered and differences in their perceptions of HMO care as compared to the overall HMO beneficiary population. These included problems with access to care, particularly referrals and specialized services, the perception that their primary doctor did not take their complaints seriously and difficulty they experienced in obtaining care. For this report, we expanded the set of questions examined to include the enrollment process, their rating of care received by their primary doctor, and the impact of the care they received on their health status.

## ENROLLMENT PROCESS

We found that vulnerable beneficiaries' most frequently mentioned reasons for joining HMOs, as for healthier beneficiaries, were to obtain more affordable health care, services not covered by Medicare fee-for-service, and better quality care (See Table C-1).

We noted few differences among specific sub-groups concerning why they joined an HMO. We found that disabled enrollees (70%) and disenrollees (58%) were much more likely than aged enrollees(36%) and disenrollees (37%) to have joined their HMO in order obtain services not covered by the fee-for-service plan. Additionally, comorbid disenrollees (40%) joined for this reason more often than their reference group (28%). Disabled disenrollees joined seeking more affordable health care (48%) less often than aged disenrollees (72%), which was also true for comorbid disenrollees (60% compared to 72%). See Table C-1. Most beneficiaries knew at enrollment that their primary HMO doctor must give them referrals for specialist services.

### Disabled Beneficiaries And Functionally Limited And Comorbid Disenrollees Were More Likely Than Less Impaired Groups To Have Been Inappropriately Asked About Their Health Problems At Application.

Due to concerns stated by other researchers over whether less healthy beneficiaries are being selectively excluded from HMO membership, we analyzed the experience of these vulnerable groups regarding being asked about their health problems at application. We found that disabled enrollees (22%) and disenrollees (25%) and disenrollees reporting comorbidities (22%) and functional limitations (23%) did more often report being asked about their health status at the

time of HMO application. See Table C-2.

## PERCEIVED HEALTH STATUS

Researchers have found self assessment of health status is strongly related to perceived health care needs and utilization of services.[10] Since health status has multiple dimensions, including the nature of the diagnosis, the severity of the condition, and functional limitations caused by the condition, the individual is able to take all of these dimensions into account in self-assessing their health status. Because perceived health status is an important predictor of perceived health care needs and service utilization, we examined the self-reported health status of each vulnerable beneficiary group.

**Table 1: Beneficiaries' Perceived Health at Time of Survey by Sub-Population**

| | Enrollees | | Disenrollees | |
|---|---|---|---|---|
| **Medicare Aged/Disabled** | **Aged** | **Disabled** | **Aged** | **Disabled** |
| Health at time of survey was: | | | | |
| ‣ good to excellent | **71%** (1,319,887) | **34%** (27,377) | **66%** (27,750) | **21%** (594) |
| ‣ fair | **25%** (460,975) | **42%** (34,091) | **25%** (10,403) | **48%** (1,378) |
| ‣ poor to very poor | **5%** (84,221) | **24%** (19,763) | **9%** (3,845) | **32%** (915) |
| **Functional Limits** | **No Limits** | **1+ Limits** | **No Limits** | **1+ Limits** |
| Health at time of survey was: | | | | |
| ‣ good to excellent | **77%** (1,197,149) | **31%** (104,547) | **74%** (25,054) | **16%** (1,355) |
| ‣ fair | **21%** (321,764) | **48%** (161,033) | **21%** (7,194) | **50%** (4,356) |
| ‣ poor to very poor | **2%** (32,450) | **21%** (70,717) | **5%** (1,645) | **34%** (2,972) |
| **Comorbidity** | **<2 Illnesses** | **2+ Illnesses** | **<2 Illnesses** | **2+ Illnesses** |
| Health at time of survey was: | | | | |
| ‣ good to excellent | **76%** (1,157,508) | **40%** (136,330) | **71%** (25,468) | **19%** (1,300) |
| ‣ fair | **22%** (332,433) | **43%** (146,675) | **23%** (8,099) | **45%** (3,105) |
| ‣ poor to very poor | **3%** (41,655) | **17%** (59,588) | **6%** (2,073) | **36%** (2,516) |

**As Expected, Vulnerable Beneficiaries Assessed Their Health Status As Much Poorer Than Other Beneficiaries.**

We found significant differences in the proportion of all vulnerable beneficiaries reporting poor to very poor health status compared to their reference groups (See Table 1). Disabled and functionally limited beneficiaries reported the highest proportions of poor health status. Disabled enrollees (24%) and disenrollees (32%) perceived their health status as poor or very poor more often than aged enrollees and disenrollees (9%). Comorbid enrollees (17%) and disenrollees (36%) more often reported poor to very poor health compared to 3 percent and 6 percent respectively, of their reference groups.

## ACCESS TO HEALTH SERVICES

Several health economists and health services researchers have expressed concern regarding the perverse payment incentives which exist in the current Medicare HMO capitation methodology which is not adjusted for health status. They note that plans which develop a reputation for quality care to the sickest patients will attract a disproportionate share of such enrollees without any additional compensation for their more expensive care. This can lead to plan failure or incentives to limit access and treatment for specific subgroups.[11,12,13] Due to these concerns, we focused much of our analysis of vulnerable beneficaries in Medicare risk HMOs on their access to health services.

**While Able To Obtain Timely Primary Physician Appointments When They Were Very Ill, Vulnerable Beneficiaries Experienced More Service Access Problems Than Healthier Beneficiaries.**

We first examined these beneficiaries' access to timely (1-2 days) primary physician appointments when they were very sick. We found no differences between the vulnerable beneficiaries and others in receiving timely doctor appointments. Most enrollees (92% to 97%) were able to obtain appointments within 1 to 2 days when very sick. Similarly, most disenrollees (84% to 87%) obtained timely appointments when very sick. See Tables 2.1 to 2.3.

***Functionally limited beneficiaries, comorbid enrollees and disabled disenrollees said their physician failed to give them Medicare-covered services more often than healthier beneficiaries.***

Of disabled disenrollees, 27 percent stated that their physicians failed to give them Medicare-covered services, whereas only 11 percent of aged disenrollees made this assertion. Among functionally limited beneficiaries, 8 percent of enrollees and 20 percent of disenrollees reported this failure to obtain services compared to 2 percent of enrollees and 11 percent of disenrollees in the less impaired group. Comorbid enrollees were also more likely than their healthier counterparts to report their physician failed to give them Medicare-covered services (9% compared to 2%).

***Comorbid beneficiaries and disabled disenrollees experienced more problems in obtaining referrals to specialists than healthier beneficiaries.***

Thirty-six percent of disabled disenrollees experienced failure of their physicians' to refer them to a specialist when the beneficiaries felt this was needed, which is significantly higher than the 13 percent of aged disenrollees making this claim (See Table 2.1).

**Table 2.1: Service Access by Medicare Aged/Disabled Sub-Population**

| | Enrollees | | Disenrollees | |
|---|---|---|---|---|
| **Service Access** | **Aged** | **Disabled** | **Aged** | **Disabled** |
| Received appointment with physician w/in 1-2 days when very sick. | **96%** (982,645) | **95%** (63,365) | **85%** (23,952) | **87%** (2,330) |
| Physician failed to give needed Medicare-covered services. | **3%** (62,609) | **4%** (3,233) | **11%** (5,265) | **27%** (970) |
| Experienced delays in receiving non-routine services in past 6 months. | **12%** (159,867) | **23%** (15,463) | **23%** (8,222) | **34%** (1,101) |
| Physician failed to admit beneficiary to hospital when needed. | **1%** (12,747) | **4%** (2,061) | **4%** (829) | **19%** (377) |
| Physician failed to refer beneficiary to a specialist when needed. | **4%** (64,581) | **16%** (12,935) | **13%** (4,586) | **36%** (918) |
| Had sought out-of-plan care. | **5%** (100,662) | **15%** (12,505) | **10%** (4,612) | **14%** (531) |

Table 2.3 indicates that beneficiaries with comorbidity experienced this problem with specialty referrals as well. Eight percent of enrollees and 21 percent of disenrollees reported a problem with specialist referrals, contrasted with healthier enrollees (4%) and disenrollees (13%).

| Table 2.2: Service Access by Functionally Limited Sub-Population | | | | |
|---|---|---|---|---|
| | Enrollees | | Disenrollees | |
| **Service Access** | **No Limits** | **1+ Limits** | **No Limits** | **1+ Limits** |
| Received appointment with physician w/in 1-2 days when very sick. | **97%** (768,985) | **92%** (233,233) | **84%** (17,717) | **87%** (7,320) |
| Physician failed to give needed Medicare-covered services. | **2%** (35,857) | **8%** (26,111) | **11%** (4,136) | **20%** (2,047) |
| Experienced delays in receiving non-routine services in past 6 months. | **11%** (123,089) | **16%** (41,497) | **22%** (6,495) | **30%** (2,589) |
| Physician failed to admit beneficiary to hospital when needed. | **1%** (8,241) | **3%** (6,110) | **4%** (660) | **8%** (522) |
| Physician failed to refer beneficiary to a specialist when needed. | **5%** (58,280) | **6%** (11,235) | **12%** (3,313) | **25%** (2,072) |
| Had sought out-of-plan care. | **4%** (63,105) | **13%** (46,648) | **10%** (3,751) | **13%** (1,327) |

***Comorbid disenrollees encountered more delays in obtaining non-routine services (e.g. physical therapy, diagnostic tests) than healthier disenrollees.***

We asked beneficiaries about any delays in receiving HMO approvals for non-routine services, such as physical therapy or diagnostic tests in the 6 months prior to the survey. Of disenrollees with comorbidities, 36 percent had experienced such delays, although only 21 percent of healthier disenrollees reported this (See Table 2.3).

| Table 2.3: Service Access by Comorbid Sub-Population | | | | |
|---|---|---|---|---|
| | Enrollees | | Disenrollees | |
| **Service Access** | **<2 Illnesses** | **2+ Illnesses** | **<2 Illnesses** | **2+ Illnesses** |
| Received appointment with physician w/in 1-2 days when very sick. | **97%** (742,513) | **94%** (265,966) | **85%** (18,893) | **87%** (6,482) |
| Physician failed to give needed Medicare-covered services. | **2%** (35,127) | **9%** (29,629) | **12%** (4,954) | **12%** (1,086) |
| Experienced delays in receiving non-routine services in past 6 months. | **13%** (134,787) | **12%** (33,394) | **21%** (6,450) | **36%** (2,465) |
| Physician failed to admit beneficiary to hospital when needed. | **1%** (5,665) | **4%** (8,346) | **4%** (455) | **13%** (712) |
| Physician failed to refer beneficiary to a specialist when needed. | **4%** (51,794) | **8%** (25,434) | **13%** (3,769) | **21%** (1,510) |
| Had sought out-of-plan care. | **6%** (84,684) | **7%** (23,663) | **9%** (3,628) | **14%** (1,170) |

***Beneficiaries with comorbidities and disabled disenrollees more often reported their primary***

***physician failed to admit them to the hospital when they felt this was needed.***

As shown in Table 2.,3 comorbid diserollees (13%) and enrollees (4%) stated that their physician failed to admit them to the hospital when they felt this was needed more often than healthier beneficiaries. This problem was also experienced by disabled disenrollees (19%), whereas significantly smaller proportions of their reference groups noted this problem (See Table 2.1).

## PRIMARY HMO PHYSICIAN CARE

We also analyzed a set of questions asking about beneficiaries' perceptions of the care received from their primary physicians. Given the "gatekeeper" role of the primary physician in an HMO, their relationship with beneficiaries is important to how HMO members perceive the quality of care they receive.

The perceptions of comorbid beneficiaries were very similar to those of healthier beneficiaries. See Table 3.

### Functionally Limited Beneficiaries And Disabled Disenrollees Were More Critical Of The Care Received From Their Primary Physicians.

***Disabled and functionally limited disenrollees and enrollees more often said their primary care physician did not take their health complaints seriously.***

As seen in Table 3, a substantial proportion of disabled disenrollees (39%) reported their primary physician did not take their complaints seriously, as contrasted with only 17 percent of aged disenrollees. Our overview report discussed examples of provider behavior which generated these concerns, such as not listening to the beneficiary, impatience, and not letting beneficiaries fully explain their concerns.[14] Among disenrollees, 39 percent of disabled and 24 percent of the functionally limited felt their primary care physician did not take their complaints seriously. To a lesser extent, disabled and functionally limited enrollees also shared this view.

***Disabled and functionally limited disenrollees were also less likely to believe their physician explained all their treatment options than less impaired disenrollees.***

Explaining treatment options is another important aspect of the physician patient relationship. Only 61 percent of disabled disenrollees believed their primary physician explained all their treatment options, whereas 78 percent of aged disenrollees felt this was true. Likewise, only 68 percent of the functionally limited disenrollees were comfortable that all treatment options were explained by their physician compared to 79 percent of the less impaired disenrollees. We found no significant differences in comparing enrollees from these sub-populations with their reference groups, nor between comorbid beneficiaries and their healthier counterparts.

**Table 3: Primary Physician Care by Medicare Aged/Disabled and Functionally Limited Sub-Populations**

| | Enrollees | | Disenrollees | |
|---|---|---|---|---|
| **Primary Physician Care** | **Aged** | **Disabled** | **Aged** | **Disabled** |
| Primary physician did not take health complaints seriously. | **7%** (127,608) | **13%** (11,106) | **17%** (7,943) | **39%** (1,441) |
| Primary physician explained treatment options | **89%** (1,399,300) | **92%** (73,799) | **78%** (31,090) | **61%** (2,176) |
| Cost <u>most important</u> to primary physician. | **9%** (138,033) | **5%** (4,030) | **20%** (7,135) | **24%** (516) |
| Believed care given by PCP was: | | | | |
| ‣ excellent | **48%** (919,845 | **38%** (34,275) | **36%** (17,545) | **33%** (1,221) |
| ‣ good | **43%** (821,073) | **45%** (40,620) | **37%** (17,733) | **24%** (882) |
| ‣ fair | **7%** (131,841) | **14%** (12,959) | **17%** (8,085) | **29%** (1,072) |
| **Primary Physician Care** | **No Limits** | **1+ Limits** | **No Limits** | **1+ Limits** |
| Primary physician did not take health complaints seriously. | **5%** (72,319) | **16%** (58,381) | **17%** (6,444) | **24%** (2,418) |
| Primary physician explained treatment options | **91%** (1,143,058) | **85%** (280,598) | **79%** (25,390) | **68%** (6,742) |
| Cost <u>most important</u> to primary physician. | **8%** (114,317) | **9%** (25,475) | **18%** (5,631) | **27%** (1,795) |
| Believed care given by PCP was: | | | | |
| ‣ excellent | **51%** (804,503) | **34%** (117,306) | **38%** (14,759) | **29%** (3,201) |
| ‣ good | **41%** (654,904) | **50%** (172,946) | **37%** (14,368) | **29%** (3,191) |
| ‣ fair | **6%** (101,383) | **12%** (41,298) | **15%** (5,664) | **30%** (3,264) |

We also analyzed the proportion of vulnerable beneficiaries who believed that <u>cost</u> was the most important consideration of their primary physician and generally found no difference between the vulnerable beneficiaries and healthier groups, except that 27 percent of functionally limited disenrollees believed this to be true versus 18 percent of less impaired disenrollees.

***Fewer functionally limited beneficiaries and disabled enrollees rated the care they received from their primary physician as excellent than their reference groups.***

We asked beneficiaries to give a summary rating of the care received from their primary physicians. Fewer disabled (38%) than aged (48%) enrollees rated this care as excellent. Likewise, fewer functionally limited enrollees (34%) and disenrollees (29%) rated the care provided by their primary physician as excellent than less impaired enrollees (51%) and disenrollees (38%). We found no differences between comorbid enrollees and healthier enrollees. However, comorbid (41%) disenrollees rated their care as excellent more often than those not so impaired. See Table 3.

## ASSESSING HMO OVERALL CARE

**While Sizeable Proportions Of Vulnerable Enrollees Said Their Health Improved, About One Fifth Of Vulnerable Disenrollees Said Care Provided By The HMO Caused Their Health To Worsen.**

Among vulnerable disenrollees, 23 percent of the comorbid, 20% of the functionally limited, and 18 percent of the disabled reported HMO care caused their health to worsen. However, on the positive side, 34 percent of disabled, 44 percent of functionally limited, and 52 percent of comorbid enrollees said their health improved under HMO care.

**More Vulnerable Beneficiaries Said Obtaining Care Through Their HMO Was Hard Or Very Hard.**

Table 4 presents beneficiary assessments of the ease with which they obtained care through their HMO. Significantly more disabled enrollees (24%) and disenrollees (37%) and functionally limited enrollees (11%) and disenrollees (31%) said that obtaining care was hard or very hard compared to aged and less impaired beneficiaries. This greater difficulty in obtaining care was also a concern of comorbid disenrollees.

**Table 4: Beneficiaries' Perceptions of HMO Care by Medicare Status, Functionally Limited and Comorbid Sub-Populations**

| | Enrollees | | Disenrollees | |
|---|---|---|---|---|
| **Medicare Aged/Disabled** | **Aged** | **Disabled** | **Aged** | **Disabled** |
| Ease of obtaining care was: | | | | |
| ▸ easy or very easy | **68%** | **45%** | **52%** | **45%** |
| ▸ neither easy nor hard | **27%** | **31%** | **29%** | **18%** |
| ▸ hard or very hard | **5%** | **24%** | **18%** | **37%** |
| HMO care caused health to: | | | | |
| ▸ improve | **44%** | **34%** | **30%** | **17%** |
| ▸ stay the same | **54%** | **62%** | **59%** | **66%** |
| ▸ worsen | **3%** | **4%** | **11%** | **18%** |
| **Functional Limits** | **No Limits** | **1+ Limits** | **No Limits** | **1+ Limits** |
| Ease of obtaining care was: | | | | |
| ▸ easy or very easy | **70%** | **55%** | **55%** | **40%** |
| ▸ neither easy not hard | **26%** | **35%** | **28%** | **29%** |
| ▸ hard or very hard | **5%** | **11%** | **16%** | **31%** |
| HMO care caused health to: | | | | |
| ▸ improve | **43%** | **44%** | **34%** | **17%** |
| ▸ stay the same | **56%** | **48%** | **58%** | **63%** |
| ▸ worsen | **1%** | **9%** | **9%** | **20%** |
| **Comorbid** | **<2 Illnesses** | **2+ Illnesses** | **<2 Illnesses** | **2+ Illnesses** |
| Ease of obtaining care was: | | | | |
| ▸ easy or very easy | **67%** | **66%** | **53%** | **47%** |
| ▸ neither easy nor hard | **28%** | **27%** | **28%** | **28%** |
| ▸ hard or very hard | **5%** | **7%** | **18%** | **25%** |
| HMO care caused health to: | | | | |
| ▸ improve | **41%** | **52%** | **28%** | **37%** |
| ▸ stay the same | **58%** | **41%** | **63%** | **40%** |
| ▸ worsen | **1%** | **7%** | **9%** | **23%** |

# RECOMMENDATIONS

As the agency responsible for the growing Medicare risk HMO program, HCFA must exercise leadership in monitoring the performance of HMOs and in assuring full access to services for all Medicare HMO beneficiaries. Using 1996 data, we identified areas of the Medicare risk HMO program that were working well for vulnerable beneficiaries or that apparently needed improvement. Based on this work we also suggest techniques HCFA could use to strengthen the consumer protections in its contractual requirements with HMOs to address several problems identified by these vulnerable sub-populations. We further suggest factors for HCFA to consider in developing the capitation rate risk adjusters required by the Balanced Budget Act of 1997.

We recommend that HCFA take appropriate actions to address the problems of vulnerable beneficiaries. We suggest HCFA consider the following options.

**In developing and refining the health status capitation rate risk adjusters required by the Balanced Budget Act of 1997, HCFA should consider the following:**

- **Risk adjusters should be sufficiently specific to address the severity of illness or functional impairments which contribute to the health service needs of beneficiaries.**

- **Large scale, multi-plan studies should be conducted concurrently with implementation of the risk adjustment methodology to test the adequacy of adjusters and measure plan and beneficiary behavioral responses.**

- **During the early implementation stage, the capitation methodology could include adjustments based upon actual cost experience.**

Health economists have, over the past several years, raised concerns about the financial incentives inherent in a capitation payment methodology which does not adequately adjust for the health risks of a diverse Medicare population. Specifically, they predict that managed care plans have incentives not to enroll sicker or disabled beneficiaries and that access problems will emerge for sicker patients in these plans.[15] Our analysis of beneficiary survey responses adds to a growing number of studies which have shown evidence of enrollment and health access problems of these vulnerable groups.[16] These health economists have described risk adjustment methodologies as the appropriate payment approach for addressing such problematic incentives.

The findings of this report and a review of recent research suggest that multiple dimensions of health status need to be incorporated in a health status capitation rate methodology. Broad categories of health status or diagnoses are not likely to capture the range of variation in costs and health care needs of sicker and disabled populations. The Balanced Budget Act of 1997 requires HCFA to submit a report by March, 1999 on a method of risk adjustment for captation rates paid to Medicare HMOs, and to implement a risk adjustment methodology by January 1, 2000. However, the Act does not specify the methodology to be used. Health economists, over the past several years, have developed and conducted analyses of methodologies to serve this purpose.[17] [18] These studies have noted the importance of functional limitations and comorbidity in developing

appropriate risk adjusters.

However, both plan and beneficiary behavioral responses to the new incentives created by a risk adjustment methodology could vary from theoretical predictions. Thus, it is important for HCFA to conduct studies of the actual behavior of these actors concurrent with implementation of the risk adjustment methodology. A blend of prospective risk adjusters, coupled with actual cost experience, as proposed by Newhouse et. al.,[19] might help to correct for initial variance from the expected effects of the new incentive structure of capitation risk adjustment as the methodology is being refined.

**Service access problems encountered by functionally limited, comorbid and disabled beneficiaries should be identified and carefully monitored to assure optimal access to needed health care services by these vulnerable groups.**

Both the 1993 and 1996 HMO beneficiary surveys identified service access problems for these vulnerable populations. HMOs and HCFA will be conducting disenrollee surveys and the Consumer Assessment of Health Plans Survey (CAHPS) to assess beneficiary experience and satisfaction with their HMOs. We believe these surveys should identify the health conditions and functional limitations of beneficiaries, and analyze the responses of these vulnerable populations, due to our findings on the problems they have experienced. These analyses could provide an important beneficiary protection as the altered incentives of a risk adjusted capitated methodology come into play.

**HMOs may be encouraged, or required by contract, to improve access to needed specialty care, by designating medical specialists as primary care providers for individuals with severe, disabling or degenerative conditions. Alternatively, HMOs could be encouraged or required to provide standing referrals to specialists for beneficiaries determined by the HMO to have conditions that require on-going specialty care.**

Problems with access and acceptability of care in HMOs for privately insured persons are currently being addressed by several state governments through legislation and regulation of the managed care industry. New York and New Jersey have proposed regulations requiring HMOs to designate medical specialists as primary care providers for these vulnerable beneficiaries. New York has also proposed regulations which would allow enrollees to receive a standing referral to a specialist for conditions requiring on-going specialty care.[20]

At the Federal level, a "Patients Bill of Rights" is being considered. For Medicare beneficiaries HMO contractual requirements afford a mechanism for protecting vulnerable plan members. The problems in obtaining specialist referrals reported by vulnerable beneficiaries indicate such protection is warranted.

**To address problems experienced by vulnerable beneficiaries in obtaining needed Medicare-covered services and specialty care, HCFA could, through contractual requirements, require that referral and utilization criteria be available on request to providers and to beneficiaries for use in accessing care and appealing any denials of service.**

In our overview report we found that beneficiaries are experiencing problems in understanding their appeal rights. In this report we found that vulnerable beneficiaries are experiencing more problems than healthier beneficiaries in accessing needed health services, particularly specialty services. We suggest that HCFA strengthen its requirements of HMOs to assure beneficiaries have appropriate information regarding the basis upon which decisions regarding their access to care are made.

Denial of service letters, written in clear language, must be provided by HMOs to plan enrollees when services are denied. These letters provide an appropriate mechanism to provide the enrollees and their providers with the criteria which were used to deny services. The HCFA HMO/CMP Manual requires specificity in reasons for denials to be stated in denial determination letters. However, criteria used by the plan in their determinations are not explicitly required.[21] This could also aid these enrollees and their providers in pursuing expedited appeals, which are required in urgent situations. New York has proposed regulations requiring such disclosures.[22] Monitoring state experiences with such regulations could assist HCFA in deciding whether to include such requirements in its Medicare HMO contracts.

# A G E N C Y C O M M E N T S

We received comments on the report from the Health Care Financing Administration (HCFA) and the Assistant Secretary for Planning and Evaluation (ASPE). The full text of their comments is in Appendix E.

**Health Care Financing Administration**

Of the report's six recommendations, HCFA fully concurred with four: 1) identifying and monitoring service access problems encountered by vulnerable beneficiaries; 2) improving these beneficiaries' access to needed specialty care; 3) improving the processes for informing providers and beneficiaries' of referral and utilization criteria; and 4) testing the adequacy of risk adjusters, and measuring plan and beneficiary behavioral responses.

We also suggested that HCFA consider using health status adjusters to address severity of illness and functional impairments, as well as a blend of prospective adjusters and retrospective adjustments based upon actual cost in developing capitation rates. HCFA seriously considered these options and partially concurred by accepting their intent while raising substantive concerns about their feasibility.

HCFA also noted that it is developing data and methods for risk adjustment based on severity of illness. By the year 2000, it will most likely implement a risk adjustment system that uses inpatient diagnoses to assign relative predicted risk scores to managed care enrollees. HCFA anticipates moving to a more comprehensive risk adjustment model in later years. HCFA does not foresee, however, implementing risk adjustment based on functional limitations as it would require an additional expense of another data collection, is difficult to do accurately, and is of questionable value to them.

We also suggested that HCFA consider a partial capitation approach that blends prospective and retrospective adjustments. HCFA agrees that such an approach "may help mitigate against the possible incentives under full capitation to restrict the use of services." However, HCFA believes that this approach is not generally consistent with the prospective payment rate required by the Balanced Budget Act of 1997, would be difficult to operationalize based on their experience with demonstration projects, and again, would require data they do not have.

HCFA also offered several technical comments on the report's title, the sufficiency of information about the sample sizes of the vulnerable subgroups, the connection between the report's analyses and our recommendations for risk adjustment, and the ability of some of these beneficiaries to be referred to appropriate specialty centers or clinics at least for diagnosis or case management. We modified the report title, added clarifications that specify the unweighted sample sizes, the smallest of which was 91 beneficiaries, and cited the literature that demonstrates the connection between access to care issues and risk adjustment. Acquiring sufficiently specific health data to identify beneficiaries with rare conditions or to analyze their referrals to specialty centers or clinics was beyond the intended scope of our study.

**Assistant Secretary for Planning and Evaluation**

ASPE concurred with the recommendations and offered comments on sample composition and size, the statistical significance of our findings, and the need for further study of the disabled population. ASPE noted incorrectly that our sample included only elderly Medicare beneficiaries and not disabled Medicare beneficiaries. In fact, as the methodology mentions, we did sample beneficiaries who met the Medicare criteria for disability and were younger than age 65. Of the 3,003 respondents to our survey, 189 were Medicare disabled beneficiaries. Appendix D shows the tests of statistical significance between the disabled and aged Medicare respondents, as well as those for the other vulnerable group comparisons. We acknowledge ASPE's interest in further study of the disabled population.

# ENDNOTES

1. This excludes the effect of the point-of-service option which was relatively new for the Medicare program at the time we completed the data collection phase of our study.

2. "Medicare Managed Care Plans," October 1997, a monthly report prepared by Office of Managed Care, HCFA.

3. In recent years, HCFA has begun to broaden the range of service delivery options within the Medicare managed care program. In October 1995, HCFA issued guidelines to HMOs on offering a point-of-service (POS) option to Medicare enrollees. The POS benefit increases flexibility for Medicare HMO enrollees by allowing them to seek care outside the HMO's provider network, typically with higher cost-sharing, i.e. the HMO will provide partial reimbursement for out-of-network services. In January 1997, HCFA launched the Medicare Choices demonstration project designed to provide beneficiaries a wider variety of managed care plans and to extend managed care options to rural areas. The demonstration plans include four provider sponsored networks, a preferred provider organization and a "triple option" hybrid that lets members see gatekeeper physicians, other plan providers without a gatekeeper referral, or providers outside the plan.

4. Paul Fishman et al., "Chronic Care Costs in Managed Care," *Health Affairs*, May/June 1997, pp. 239-247.

5. John E. Ware Jr., et al., "Differences in 4-Year Health Outcomes for Elderly and Poor, Chronically Ill Patients Treated in HMO and Fee-For-Service Systems," *Journal of the American Medical Association*, 1996:276:13:1039-1047.

6. Ware et al., October 1996.

7. Robert O. Morgan et al., "The Medicare-HMO Revolving Door - The Healthy Go In and The Sick Go Out", *The New England Journal of Medicine* (July 17, 1997), 172-175.

8. "Beneficiary Perspectives of Medicare Risk HMOs" (OEI-06-91-00730), "Medicare Risk HMO Performance Indicators" (OEI-06-91-00734)

9. <u>Physician Payment Review Commission 1997 Annual Report to Congress</u>, p. 108.

10. Hornbrook and Goodman present a study of the linkage of health status, functional limitations and health service utilization in the context of developing appropriate capitation risk adjusters. They reported that functional limitations, self-reported diseases and perceived health status to be strongly associated with service utilization and perceived health care needs. Consequently, they stress the importance of capturing multiple dimensions of health status, perception of health status, functional limitations as well as specific conditions in developing appropriate predictors of health service utilization.

(Mark C. Hornbrook and Michael J. Goodman, "Chronic Disease, Functional Health Status and Demographics:  A Multi-Dimensional Approach to Risk Adjustment," *Health Services Research*, 31:3, August 1996, pp. 283-305.

11. Robert H. Miller and Harold S. Luft, "Does Managed Care Lead to Better or Worse Quality of Care," *Health Affairs*, September/October 1997, pp. 7-25.

12. Hornbrook and Goodman, 1996.

13. Morgan et. al., 1997.

14. "Beneficiary Perspectives of Medicare Risk HMOs 1996," OEI-06-95-00430, p.18.

15. Joseph Newhouse et. al. succinctly presents the logical connection between lack of risk adjustment and plan attempts to enroll healthier patients and increased access problems for the chronically ill.  His basic argument is that, without risk adjustment, plans that enroll sicker patients and provide them good access to services weaken their financial position to compete with other plans in a market area.  "Risk Adjustment and Medicare:  Taking a Closer Look," *Health Affairs*, September/October 1997, pp. 26-43.

    For additional descriptions of this logic see Physician Payment Review Commission 1997 Annual Report to Congress, Chapter 5 and Mark C. Hornbrook and Michael J. Goodman, "Chronic Disease, Functional Health Status and Demographics:  A Multi-Dimensional Approach to Risk Adjustment," *Health Services Research*, 31:3, August 1996, pp. 284-285.

16. John E. Ware, et al., "Differences in 4-Year Health Outcomes for Elderly and Poor, Chronically Ill Patient Treated in HMO and Fee-For-Service Systems", *Journal of the American Medical Association*, 1996:276:13:1039-1047.

    Robert O. Morgan et al., "The Medicare-HMO Revolving Door - The Healthy Go In and The Sick Go Out", *The New England Journal of Medicine* (July 17, 1997), 172-175.

    Marsha Gold et al., "Disabled Medicare Beneficiaries In HMOs," *Health Affairs*, September/October 1997, 155-158.

17. Joseph Newhouse et. al. have analyzed the risk adjustment methodologies which have been developed and conclude that the work on diagnostic cost groups and that on hierarchial coexisting conditions offer the most promise. (Newhouse et. al., 1997, pp. 26-43).

    Hornbrook and Goodman have also addressed the multi-dimensional nature of health status adjustment and suggest that functional limitations compound specific diagnostic categories in determining the amount and type of health service needs and, consequently, need to be accounted for in risk adjustment methodologies. (Hornbrook and Goodman,

1996).

18. Physician Payment Review Commission 1997 Annual Report to Congress.

19. Newhouse et. al., September/October 1997.

20. "HMO Consumers at Risk:  States to the Rescue," Washington:  Families USA, July 1996 (http://epn.org/families/farisk.html).

21. HCFA HMO/CMP Manual, Revision 6, section 2403.4.

22. "HMO Consumers at Risk:  States to the Rescue," 1996.

# B I B L I O G R A P H Y


Adler, Gerald S., and M. Phil, "Medicare Beneficiaries Rate Their Medical Care: New Data From the MCBS," *Health Care Financing Review,* Summer 1995, 16:4:175-187.

Annas, George J., "Legal Issues in Medicine: Patients' Rights in Managed Care -- Exit, Voice, and Choice," *The New England Journal of Medicine,* July 17, 1997, 337:3:210-215.

Beebe, James, "An outlier pool for Medicare HMO payments," *Health Care Financing Review,* Fall 1992, 14:1:59-63.

Bergeron, Jeanette, Randall S. Brown, and Jerrold Hill, final "First Annual Report: The Evaluation of the TEFRA HMO/CMP Program," June 1990, Mathematica Policy Research, under Health Care Financing Administration contract # 500-88-0006.

Brown, Randall S., Dolores Clement, Jerrold Hill, Sheldon Retchin, and Jeanette Bergeron, "Do Health Maintenance Organizations Work for Medicare?" *Health Care Financing Review*, Fall 1993, 15:1:7-23.

Brown, Randall S., Kathryn Langwell, Katherine Berman, Ann Ciemenecki, Lyle Nelson, Alisa Schreier, and Anthony Tucker, "Enrollment and Disenrollment in Medicare Competition Demonstration Plans: A Descriptive Analysis," September 15, 1986, Mathematica Policy Research, under Health Care Financing Adminstration contract # 500-83-0047.

Cleary, Paul D. and Barbara J. McNeil, "Patient Satisfaction as an Indicator of Quality Care," *Inquiry*, Spring 1988, 25:25-36.

Clements, Dolores G., Sheldon Retchin, Randall S. Brown, Meribeth H. Stegall, "Access and Outcomes of Elderly Patients Enrolled in Managed Care," *Journal of the American Medical Association,* May 18, 1994, 271:19:1487-92.

*Consumer Reports,* "Health Care in Crisis: Are HMOs The Answer?" August 1992, pp. 519-529.

Dallek, Geraldine, Aileen Harper, Carol Jimenez, Christina Nunez Daw, "Medicare Risk-Contract HMOs in California: A Study of Marketing, Quality, and Due Process Rights," Medicare Advocacy Project, Inc., January, 1993.

Davies, Allyson Ross, John E. Ware, Jr., Robert H. Brook, Jane R. Peterson and Joseph P. Newhouse, "Consumer Acceptance of Prepaid and Fee-for-Service Medical Care: Results from a Randomized Controlled Trial," *Health Services Research*, August 1986, 21:3:429-451.

Docteur, Elizabeth R., David C.Colby, and Marsha Gold, "Shifting the Paradigm: Monitoring Access in Medicare Managed Care," *Health Care Financing Review,* Summer 1996, 17:4:5-21.

Donabedian, Avedis, "The Quality of Care: How Can It Be Assessed?" *Journal of the American Medical Association,* September 23/30, 1988, 260:12:1743-48.

Edgman-Levitan, Susan and Paul D. Cleary, "What Information Do Consumers Want And Need?" *Health Affairs,* Winter 1996, 15:4:42-56.

Families USA, "HMO Consumers at Risk: States to the Rescue," Washington, D.C., July 1996 (http://epn.org/families/farisk.html).

Fishman, Paul et al., "Chronic Care Costs in Managed Care," *Health Affairs*, May/June 1997, pp. 239-247.

Franks, Peter, Carolyn M. Clancy and Paul A. Nutting, "Sounding Board: Gatekeeping Revisited -- Protecting Patients From Overtreatment," *The New England Journal of Medicine,* August 6, 1992, 327:6:424-29.

Freeborn, Donald, Clyde Pope, and Bentson McFarland, "Consistently High and Low Elderly Users of Medical Care: Executive Summary," Center for Health Research, Kaiser Permanente, Northwest Region, NCHSR Grant No. HS 05316-02, March, 1988.

Freudenheim, Milt, "Many Patients Unhappy With H.M.O.s," *The New York Times,* August 18, 1993.

Friedman, Emily, "Policy Perspectives: Money Isn't Everything - Nonfinancial Barriers to Access," *The Journal of the American Medical Association,* May 18, 1994, 271:19:1535-1538.

Gold, Marsha et al., "Disabled Medicare Beneficiaries In HMOs," *Health Affairs*, September/October 1997, pp. 151-152.

Griffith, Mary Jane, Nicholas Baloff, and Edward L. Spitznagel, "Utilization Patterns of Health Maintenance Organization Disenrollees," *Medical Care*, September 1984, 22:9:827-833.

Hays, Ron D., "The Quality of Patients' Ratings -- Letters to the Editor," *Health Affairs,* Winter, 1988, pp. 174-75.

*Healthy People 2000 - 1995-96 Review*, National Center for Health Statistics, Hyattsville, MD: Public Health Service: Department of Health and Human Services, 1996.

Hellinger, Fred J., "Selection Bias in Health Maintenance Organizations: Analysis of Recent Evidence," *Health Care Financing Review*, Winter 1987, 9:2:55-63.

Hibbard, Judith H. and Jacquelyn J. Jewett, "Will Quality Report Cards Help Consumers?" *Health Affairs,* May/June 1997, 16:3:218-228.

Hill, Jerrold W., and Randall S. Brown, "Biased Selection in the TEFRA HMO/CMP Program," Final Report of September 21, 1990, Mathematica Policy Research under Health Care Financing Administration contract # 500-88-0006.

Hornbrook, Mark C. and Michael J. Goodman, "Chronic Disease, Functional Health Status and

Demographics: A Multi-Dimensional Approach to Risk Adjustment," *Health Services Research*, 31:3, August 1996, pp. 283-305.

Lamphere, Jo Ann, Patricia Neumann, Kathryn Langwell, and Daniel Sherman, "The Surge in Medicare Managed Care: An Update," *Health Affairs,* May/June 1997, 16:3:127-133.

Langwell, Kathryn M. and James P. Hadley, "National Evaluation of the Medicare Competition Demonstrations - Summary Report," January 31, 1989, Mathematica Policy Research and the David Williamson Institute for Health Studies, Medical College of Virginia, under Health Care Financing Administration contract # 500-83-0047.

McArthur, John H., and Francis D. Moore, "The Two Cultures and the Health Care Revolution: Commerce and Professionalism in Medical Care," *The Journal of the American Medical Association,* March 26, 1997, 277:12:985-989.

McMillan, James R., "Measuring Consumer Satisfaction to Improve Quality of Care," *Health Progress*, March 1987, 68:2:54ff.

*Medicare and Medicaid Guide,* Commerce Clearing House,

--"ProPAC Calls for Combined Action to Contain Costs," Number 751, June 11,1993, pp. 4-6.

--"Disabled Americans Support Universal Health Care Coverage," Number 789, February 17, 1994, p. 5.

--"HCFA Stresses Commitment to Managed Care," Number 790, February 24, 1994, p. 10.

--"Medicare Managed Care Plans," October 1997.

--"Proposed HMO Regs Would Require Beneficiary Post-Contract Protections," Number 795, March 31, 1994, p. 5.

--"Legislation Would Encourage Medicare Managed Care Plan Enrollment," Number 796, April 7, 1994, p. 9.

Miller, Robert H. and Harold S. Luft, "Does Managed Care Lead to Better or Worse Quality of Care," *Health Affairs*, September/October 1997, pp. 7-25.

Morgan, Robert O., Beth A. Virnig, Carolee A. DeVito, and Nancy A. Persily, "The Medicare-HMO Revolving Door -- The Healthy Go In And The Sick Go Out," *The New England Journal of Medicine,* July 17, 1997, 337:3:169-175.

Nelson, Lyle, Randall Brown, Marsha Gold, Anne Ciemnecki, and Elizabeth Docteur, "Access to Care in Medicare HMOs, 1996," *Health Affairs,* March/April 1997, 16:2:148-156.

Newhouse, Joseph et al., "Risk Adjustment and Medicare: Taking a Closer Look," *Health Affairs*, September/October 1997, pp. 26-43.

Office of Inspector General, Department of Health and Human Services

--"Marketing Practices of South Florida HMOs Serving Medicare Beneficiaries," OEI-04-91-00630, November 1991.

--"Miami Area HMOs: Medicare Enrollment Patterns," OEI- 04-91-00640, November 1991.

--"HMO Customer Satisfaction Surveys," OEI-02-94-00360, March 1996.

--"Medicare HMO Appeal and Grievance Processes Overview," OEI-07-94-00280, December 1996.

--"Medicare HMO Appeal and Grievance Processes: Beneficiaries Understanding," OEI-07-94-00281, December 1996.

--"Medicare HMO Appeal and Grievance Processes: Survey of HMOs," OEI-07-94-00282, December 1996.

--"Medicare HMO Appeal and Grievance Processes: Review of Cases," OEI-07-94-00283, December 1996.

Pear, Robert, "Medicare To Stop Pushing Patients to Enter H.M.O.s," *The New York Times,* December 27, 1993, p. A-1.

Pear, Robert, "Once in Forefront, H.M.O.'s Lose Their Luster in Health Debate," *The New York Times,"* August 23, 1994, p. A-10.

Penchansky, Roy, and J. William Thomas, "The Concept of Access: Definition and Relationship to Consumer Satisfaction," *Medical Care,* February 1981, 12:2:127-140.

Physician Payment Review Commission, 1997 PPRC Annual Report to Congress, Washington, D.C.

Podolsky, Doug and Joanne Silberner, "How Medicine Mistreats the Elderly," *U.S. News and World Report,* January 18, 1993, pp. 72-79.

Porell, Frank W., Carolyn Cocotas, Peter J. Perales, Christopher P. Tompkins, and Mitchell Glavin, "Factors Associated with Disenrollment from Medicare HMOs: Findings from a Survey of Disenrollees," July 1992, Health Care Financing Administration and the Health Policy Research Consortium of Brandeis University under Cooperative Agreement # 99-C99256/11-06.

Prasad, V. Kanti and Rajshekhar G. Javalgi, "Understanding Needs and Concerns of the Elderly Regarding Medicare Health Maintenance Organizations," *The Journal of Consumer Affairs,*

Summer, 1992, 26:1:47-67.

Richardson, David A., James Phillips, Dean Conley, Jr., "A Study of Coverage Denial Disputes Between Medicare Beneficiaries and HMOs," Network Design Group, Inc., under HCFA Cooperative Agreement No. 17-C-90070/2-01, September 1993.

Riley, Gerald, James Lubitz and Evelyne Rabey, "Enrollee Health Status under Medicare Risk Contracts: An Analysis of Mortality Rates," *Health Services Research*, June 1991, 26:2:137-163.

Rossiter, Louis F., Kathryn Langwell, Thomas T.H. Wan, and Margaret Rivnyak, "Patient Satisfaction Among Elderly Enrollees and Disenrollees in Medicare Health Maintenance Organizations: Results from the National Medicare Competition Evaluation," *Journal of the American Medical Association*, July 7, 1989, 262:1:57-63.

Rossiter, Louis, Thomas Wan, Kathryn Langwell, James Hadley, Anthony Tucker, Margaret Rivnyak, Kenneth Sullivan, John Narcross, final analysis report, "National Medicare Competition Evaluation: An Analysis of Patient Satisfaction for Enrollees and Disenrollees in Medicare Risk-Based Plans," April 1988, Williamson Institute for Health Studies, Medical College of Virginia and Mathematica Policy Research, under contract # 500-83-0047.

Sherrid, Pamela, "Cutting the cost of staying healthy," *U.S. News and World Report,* January 18, 1993, pp. 80-81.

Sullivan, Louis W., Secretary, Department of Health and Human Resources, final report "Disenrollment Experience in the Medicare HMO and CMP Risk Program: 1985 to 1988," 1990, based on Mathematica Policy Research study under contract # 500-88-0006.

Thomas, J. William, and Roy Penchansky, "Relating Satisfaction With Access to Utilization of Services," *Medical Care,* June 1984, 22:6:553-568.

Tumlinson, Anne, et. al, "Choosing A Health Plan: What Information Will Consumers Use?" *Health Affairs,* May/June 1997, 16:3:229-238.

United States General Accounting Office,

--"Managed Care: Explicit Gag Clauses Not Found in HMO Contracts, But Physician Concern Remains," GAO/HEHS-97-175, August 1997.

--"Medicare: Issues Raised by Florida Health Maintenance Organization Demonstrations," Chapter 5, GAO/HRD-86-97, July 1986.

--"Medicare: Experience Shows Ways to Improve Oversight of Health Maintenance Organizations," HRD-88-73, August 17, 1988, GAO report summary.

--"Medicare: Physician Incentive Payments by Prepaid Health Plans Could Lower Quality of Care," GAO/HRD-89-29, December 1988.

--"Medicare: PRO Review Does Not Assure Quality of Care Provided by Risk HMOs," GAO/HRD-91-48, March 1991.

--"Medicare: HCFA Needs to Take Stronger Actions Against HMOs Violating Federal Standards," GAO/HRD-92-11, November 1991.

--"Medicare: Increased HMO Oversight Could Improve Quality and Access to Care," GAO/HEHS-95-155, August 1995.

--"Medicare: Federal Efforts to Enhance Patient Quality of Care," GAO/HEHS-96-20, April 1996.

--"Medicare: HCFA Should Release Data to Aid Consumers, Prompt Better HMO Performance," GAO/HEHS-97-23, October 1996.

--"Medicare: Fewer and Lower Cost Beneficiaries With Chronic Conditions Enroll in HMOs," GAO/HEHS-97-160, August 1997.

--"Medicare HMOs: Rapid Enrollment Growth Concentrated in Selected States," GAO/HEHS-96-63, January 1996.

--"Medicare HMOs: Potential Effects of a Limited Enrollment Period Policy," GAO/HEHS-97-50, February 1997.

United States Senate, Special Committee on Aging, Minority Staff Report, "Medicare and HMOs: A First Look, with Disturbing Findings," April 7, 1987.

Ware, John E., Jr. and Ann H. Karmos, "Volume II - Perceived Health and Patient Role Propensity," *Development and Validation of Scales to Measure Patient Satisfaction with Health Care Services*, prepared for National Center for Health Services Research, Public Health Service, 1976. National Technical Information Service, Publication No. PB-288-331.

Ware, John E., Jr., W. Russell Wright, and Mary K. Snyder, "Volume IV - Key Health Concepts; Methodological Appendix," *Development and Validation of Scales to Measure Patient Satisfaction with Health Care Services*, prepared for National Center for Health Services Research, Public Health Service, 1976. National Technical Information Service, Publication No. PB-288-333.

Ware, John E. Jr., Martha S. Bayliss, William H. Rogers, Mark Kosinski, and Alvin R. Tarlov, "Differences in 4-Year Health Outcomes for Elderly and Poor, Chronically Ill Patients Treated in HMO and Fee-for-Service Systems," *The Journal of the American Medical Association,* November 12, 1996, 276:13:1039-1047.

# APPENDIX A

## METHODOLOGY

### *Definition of access*

Beyond referencing medical necessity and an actual or likely adverse effect on the beneficiary, the law and regulations do not clearly delineate what full access to services through an HMO means. In order to construct a survey instrument that adequately covered access to services, we adapted a definition from literature.[1,2] Basically, it uses five dimensions (availability, accessibility, accommodation, affordability, and acceptability) that represent the degree of "fit" between the patient and the health care system, e.g. existing services and the patient's medical needs, or price of services and the patient's ability to pay. To tailor the survey for Medicare risk HMOs, we expanded the idea of service availability to include the role of gatekeepers, primary physicians or others associated with the HMO, in preventing or facilitating beneficiaries' receipt of covered services. Operationally, we divided access into five areas: appointments, including waiting time and administrative processes for making them; restrictions on medical services; incidence and reasons for out-of-plan care; behavior of primary HMO doctors and other HMO personnel towards beneficiaries; and beneficiary awareness of appeal and grievance rights.

### *Sample selection*

From HCFA's Group Health Plan (GHP) data base, we selected a two-stage random sample, stratified at the second stage.

At the first stage, we selected Medicare risk HMOs[3] from those under contract with HCFA as of May 1996. From a total of 208 risk HMOs, we excluded 76 because they: 1) had not been enrolling Medicare beneficiaries for at least 6 months as of May 1996, 2) did not have at least 100 enrollees who had been members for 3 months or longer as of June 1996, or 3) did not have at least 60 disenrollees from March 1996 through June 1996 who had been members for 3 months or longer. We set these restrictions to avoid collecting data on HMOs and beneficiaries with little Medicare HMO experience and to assure an adequate sampling universe per HMO. From the remaining 132 HMOs, we randomly selected 40.

At the second stage, we selected Medicare beneficiaries from each sampled HMO. The universe of beneficiaries for each sampled HMO contained two strata -- Medicare beneficiaries (enrollees) who were enrolled as of June 1996 and Medicare beneficiaries (disenrollees) who had disenrolled from March 1996 through June 1996 for reasons other than death. From each sampled HMO, after excluding enrollees and disenrollees who had not been members for at least 3 months, we randomly selected 51 enrollees and 51 disenrollees. While we could have selected a proportional sample of beneficiaries, we chose not to because of a planned but separate analysis of the same data at the HMO level. Instead, for this report, we weighted the beneficiary data as described below. Finally, using HCFA's Enrollment Data Base, we dropped beneficiaries who had died or who appeared as current enrollees, but had actually disenrolled since the last update to the GHP file. This process resulted in 2,038 enrollees and 2,027 disenrollees for a total of 4,065 beneficiaries.

*Scope and data collection*

Since this study's primary focus is the Medicare beneficiaries' perceptions of their risk HMO experiences, we only collected information from them. We surveyed both enrollees and disenrollees to compare their responses, and thus, to gain greater insight into HMO issues. We did not contact HMOs or their staffs, nor did we attempt to assess the quality or propriety of medical care rendered by the HMOs to these beneficiaries. We initially mailed structured survey forms to 4,065 beneficiaries in early August 1996. In mid-September 1996, we mailed a follow-up letter and second survey form to non-respondents; we closed data collection in October 1996.

With the exception of four questions on overall ratings of their HMO experiences, we did not directly and specifically ask beneficiaries about their satisfaction with the HMOs. Instead we asked for more concrete details on beneficiaries' perceptions and experiences, such as, how long were waits for appointments, or how often, if ever, did a primary physician fail to take health complaints seriously. Both enrollees and disenrollees provided information on sample and demographic data, enrollment experience, past health status and functional level, cost of HMO membership, HMO environment, and available HMO services. Additionally, enrollees were asked about current health status and future plans for HMO membership while disenrollees were asked about health status at disenrollment and reasons for disenrollment.

A total of 3,229 survey forms were returned. Of these, 3,003 were usable[4] yielding an unweighted return rate of 74 percent overall, 82 percent for enrollees (N=1665) and 66 percent for disenrollees (N=1338).

*Weighting and interpretation*

We weighted the collected data to reflect a non-response bias, differences in enrollment size among the sampled HMOs, and distribution of enrollees and disenrollees in the universe. To determine non-response bias, we tested unweighted data for differences of means and proportions to discern significant differences between respondents and non-respondents by four demographic characteristics -- age, race, sex and number of months enrolled in the sampled HMO. Since significant differences did exist, we conservatively weighted the sample to approximate the response rate per stratum per sampled HMO.[5] The weighted data also approximates the relative Medicare enrollment sizes of the sampled HMOs and the disproportionate distribution of enrollees and disenrollees in the universe (97% vs. 3%) for the sampling period.[6] The results are generalizable to the 132 HMOs described in the sampling section, but not to those that didn't meet our sampling parameters. However, the beneficiary universe from which we sampled our enrollees and disenrollees was 96 percent and 99 percent, respectively, of enrollees and disenrollees who were members of all 208 HMOs for 3 months or longer.[7] Further, our universe of enrollees and disenrollees was 87 percent and 85 percent of all Medicare risk enrollees and disenrollees.

Because of the imbalance between enrollees and disenrollees, we primarily analyzed the two groups separately.[8] Comparisons between sub-populations form the basis for all tables in this report, particularly when these groups differed markedly in reporting their HMO experiences. All tables show the weighted percentages with the weighted number of respondents in parentheses.[9]

Additionally, we computed 95 percent confidence intervals and statistical significance for key questions (see Appendix D). A few of the confidence intervals are quite broad, particularly for disenrollees, due to the small number of responses for some questions. Standard errors for the weighted percentages and number of beneficiaries were corrected using the SUDAAN software.

*Defining disabled, functionally limited, and comorbid sub-populations*

A literature review was conducted of several recent studies of Medicare beneficiaries which addressed less healthy sub-populations. Three categories of sub-populations were selected based on definitions used in these studies and information available from our survey; functionally limited, chronically ill and disabled. The definition of the disabled population was consistent across all of the studies examined [10,11] which was Medicare beneficiaries who met the Medicare disability criteria and were younger than age 65.

Functionally limited (or impaired) sub-populations were examined in two studies.[12,13] However, the definitions given were quite general referencing only "Activities of Daily Living" limitations and "functional impairment. We decided to examine a similar group because of the expectation that this category would include beneficiaries who have more severe health conditions or were quite frail. We defined the functionally limited as including respondents who identified one or more of the following limitations to their activities of daily living: problems with getting in and out of bed, problems with bathing or showering, using the toilet, or climbing one flight of stairs.

The most variance we found in the literature defining these sub-populations was in categorizing the "chronically ill" or "chronic conditions." A medical outcomes study of chronically ill HMOs and fee-for-service systems used the following list of chronic illnesses: hypertension, heart attacks, congestive heart failure and clinical depression.[14] A recently issued GAO Report on chronically ill Medicare beneficiaries in HMOs defined this sub-population as those with diabetes, ischemic heart disease, congestive heart failure or chronic obstructive pulmonary disease.[15] A literature survey of multiple studies regarding quality of care and HMOs referenced research which also included arthritis, cancer and stroke in their definitions of "chronically ill."[16]

Recent research has also identified comorbidity as a complication of health status which has significant implications for health services utilization and the complexity of health care for such individuals.[17] Our indepth analysis showed this to be a more focused way to identify beneficiaries with significant health conditions. We defined comorbid beneficiaries as respondents who reported two or more health conditions from the following list of survey options: survey form; heart attack or heart condition, cancer (not skin cancer), kidney failure, stroke, broken bones, internal bleeding, pneumonia, diabetes, lung problems.

The unweighted sample sizes for these vulnerable sub-groups resulting from these definitions are as follows: Disabled Enrollees - 91, Disabled Disenrollees - 98, Functionally Limited Enrollees - 258, Functionally Limited Disenrollees - 216, Comorbid Enrollees - 244, Comorbid Disenrollees - 207.

## APPENDIX A - ENDNOTES

1. Penchansky, Roy, DBA, and J. William Thomas, PhD, "The Concept of Access: Definition and Relationship to Consumer Satisfaction," *Medical Care,* February 1981, 12:2:127-140.

   Thomas, J. William, PhD, and Roy Penchansky, DBA, "Relating Satisfaction With Access to Utilization of Services," *Medical Care,* June 1984, 22:6:553-568.

2. The Penchansky and Thomas five dimensions of access to services are:

   a. *Availability* - the relationship of the volume and type of existing services (and resources) to the client's volume and types of need. It refers to the adequacy of supply of medical providers, facilities and specialized programs and services, such as mental health and emergency care.
   b. *Accessibility* - the relationship between the location of supply and the location of clients, taking account of client transportation resources and travel time, distance and cost.
   c. *Accommodation* - the relationship between the manner in which the supply resources are organized to accept clients (including appointment systems, hours of operation, walk-in facilities, telephone services) and the client's ability to accommodate to these factors and the client's perception of their appropriateness.
   d. *Affordability* - The relationship of prices of services and the providers' insurance (or deposit requirements) to client's income, ability to pay and existing health insurance. Client perception of worth relative to total cost is a concern, as is client knowledge of prices, total cost and possible credit arrangements.
   e. *Acceptability* - the relationship of clients' attitudes about personal and practice characteristics of providers to the actual characteristics of existing providers, as well as to provider attitudes about acceptable personal characteristics of clients. In turn, providers have attitudes about the preferred attributes of clients or their financing mechanisms. Providers may be unwilling to serve certain types of clients or, through accommodation, make themselves more or less available.

3. Actually, the sample is a mix of HMOs and competitive medical plans (CMP). Since the rules governing their particpation in the Medicare risk program are the same, we use HMO to refer to both.

4. Of the 3,229 returned survey forms, 226 were not usable: 58 were returned for bad addresses, with no known forwarding address; 129 were not usable because the beneficiary was deceased or was unwilling/unable to complete the survey form; 39 were not usable because the beneficiary's responses indicated (s)he may not be referring to the sampled HMO, or few to none of the key questions were answered.

5. The range of response rates for unweighted data per HMO was 59 percent to 92 percent for enrollees and 43 percent to 84 percent for disenrollees.

6. Formulas used to weight data:

Enrollees

$$\frac{\text{HMO universe (N = 132)}}{\text{HMO sample (N = 40)}} \times \frac{\text{Enrollee universe per sampled HMO}}{\text{Sampled enrollees per HMO}}$$

Disenrollees

$$\frac{\text{HMO universe (N = 132)}}{\text{HMO sample (N = 40)}} \times \frac{\text{Disenrollee universe per sampled HMO}}{\text{Sampled disenrollees per HMO}}$$

7.

| **Comparison of Beneficiary Universe Sizes** | | | |
|---|---|---|---|
| **Stratum** | **3 months** (132 HMOs) | **3 months** (208 HMOs) | **All members** (208 HMOs) |
| Enrollees | 3,218,351 | 3,335,189 | 3,719,713 |
| Disenrollees | 110,539 | 112,015 | 130,436 |

8. For those tables that do not show the proportion of all beneficiaries answering a question, that proportion is usually the same as or one point (+/-) that of the proportions shown for enrollees.

9. Respondents did not answer every survey question. Many respondents were not eligible to answer every item because the survey form used screening questions. Thus, the weighted value of the beneficiaries eligible to answer varied by question. Some beneficiaries simply did not answer questions for which they were eligible. To accommodate these two factors, we calculated a response rate for each question based on the weighted value of eligible respondents. Questions with response rates of less than 50% are not reported. The majority of questions had response rates of 80% to 99%. In addition, percentages throughout the report are based only on the weighted responses to each question, not on the weighted value of all survey respondents.

10. Robert H. Miller and Harold S. Luft, "Does Managed Care Lead to Better or Worse Quality of Care," *Health Affairs*, September/October 1997.

11. Marsha Gold et al., "Disabled Medicare Beneficiaries In HMOs," *Health Affairs*, September/October 1997, pp. 151-152.

12. Miller and Luft, 1997.

13. Gold et al., 1997.

14. John E. Ware et al., "Differences in 4-Year Outcomes for Elderly and Poor, Chronically Ill Patients Treated in HMO and Fee-For-Service Systems," *The Journal of the American Medical Association*, October 2, 1996.

15. U.S. General Accounting Office, "Medicare: Fewer and Lower Cost Beneficiaries With Chronic Conditions Enroll in HMOs," GAO/HEHS-97-160, 18 August 1997, p. 3.

16. Miller and Luft, 1997.

17. Ware Jr., et. al., (1996) and Newhouse et. al.(1997).

# APPENDIX B

## SAMPLE DEMOGRAPHIC DATA - 1996

### BY BENEFICIARY
### Weighted Data

| Demographics | Enrollees | Disenrollees |
|---|---|---|
| SEX | | |
| Female | 56% (1,226,765) | 55% (34,004) |
| Male | 44% (968,928) | 45% (27,910) |
| RACE/ETHNICITY | | |
| White | 83% (1,812,704) | 82% (50,565) |
| Non-White | 11% (242,742) | 8% (5,243) |
| Unknown | 6% (140,247) | 10% (6,106) |
| AVERAGE AGE | 73 Years | 72 Years |
| EDUCATION | | |
| < Than High School | 20% (432,333) | 19% (11,564) |
| High School Diploma | 30% (648,906) | 24% (15,226) |
| > Than High School | 44% (978,774) | 45% (27,790) |
| No Response | 6% (135,679) | 12% (7,335) |
| MEDICARE CATEGORY | | |
| Aged | 96% (2,098,465) | 93% (57,687) |
| Disabled/ESRD** | 4% (97,229) | 7% (4,227) |
| HMO EXPERIENCE | | |
| Prior Experience | 26% (560,948) | 21% (12,996) |
| No Experience | 66% (1,451,278) | 71% (39,212) |
| No Response | 8% (183,466) | 8% (4,853) |
| AVERAGE LENGTH OF TIME IN HMO | 34 Months | 21 Months |

### BY HMO

| HMOs | MODEL TYPES | | | TAX STATUS | | STATES |
|---|---|---|---|---|---|---|
| | IPA | Group | Staff | Profit | Nonprofit | Number |
| 1996 (N=40) | 29 (73%) | 8 (20%) | 3 (8%) | 28 (70%) | 12 (30%) | 19 |

** No ESRD beneficiaries were selected in the disenrollee sample.

# APPENDIX C

## SUPPLEMENTARY TABLES FOR BENEFICIARY SURVEY FINDINGS

**Table C-1: Reasons Beneficiaries Joined HMOs by Sub-Populations**

| | **Enrollees** | | **Disenrollees** | |
|---|---|---|---|---|
| **Medicare Aged/Disabled** | **Aged** | **Disabled** | **Aged** | **Disabled** |
| Joined HMO for: | | | | |
| ▸ more affordable care | **68%**<br>(1,424,521) | **67%**<br>(64,155) | **72%**<br>(40,512) | **48%**<br>(2,016) |
| ▸ better quality care | **20%**<br>(422,557) | **37%**<br>(35,115) | **23%**<br>(12,908) | **31%**<br>(1,304) |
| ▸ services not covered by Medicare | **36%**<br>(749,314) | **70%**<br>(67,019) | **37%**<br>(20,794) | **58%**<br>(2,453) |
| **Functional Limits** | **No Limits** | **1+ Limits** | **No Limits** | **1+ Limits** |
| Joined HMO for: | | | | |
| ▸ more affordable care | **68%**<br>(1,164,095) | **71%**<br>(104,547) | **71%**<br>(32,185) | **65%**<br>(7,756) |
| ▸ better quality care | **21%**<br>(354,503) | **21%**<br>(161,033) | **25%**<br>(11,173) | **17%**<br>(2,058) |
| ▸ services not covered by Medicare | **37%**<br>(632,466) | **43%**<br>(70,717) | **37%**<br>(16,660) | **40%**<br>(4,736) |
| **Comorbidity** | **<2 Illnesses** | **2+ Illnesses** | **<2 Illnesses** | **2+ Illnesses** |
| Joined HMO for: | | | | |
| ▸ more affordable care | **69%**<br>(1,175,581) | **64%**<br>(241,400) | **72%**<br>(34,802) | **60%**<br>(5,833) |
| ▸ better quality care | **19%**<br>(328,569) | **25%**<br>(95,456) | **23%**<br>(10,957) | **26%**<br>(2,537) |
| ▸ services not covered by Medicare | **38%**<br>(640,867) | **36%**<br>(137,167) | **40%**<br>(19,396) | **28%**<br>(2,729) |

| Table C-2: Beneficiaries' Enrollment Experience by Sub-Populations | | | | |
|---|---|---|---|---|
| | **Enrollees** | | **Disenrollees** | |
| **Medicare Aged/Disabled** | **Aged** | **Disabled** | **Aged** | **Disabled** |
| Were asked at application about health problems, excluding kidney failure and hospice care. | **15%** (221,010) | **22%** (16,325) | **17%** (7,252) | **25%** (933) |
| Did know from beginning PCP must give referrals to specialists. | **86%** (1,707,238) | **84%** (77,347) | **86%** (46,228) | **85%** (3,544) |
| **Functional Limits** | **No Limits** | **1+ Limits** | **No Limits** | **1+ Limits** |
| Were asked at application about health problems, excluding kidney failure and hospice care. | **16%** (188,259) | **15%** (43,020) | **16%** (5,499) | **23%** (2,171) |
| Did know from beginning PCP must give referrals to specialists. | **87%** (1,433,664) | **83%** (294,197) | **88%** (38,458) | **80%** (8,631) |
| **Comorbidity** | **<2 Illnesses** | **2+ Illnesses** | **<2 Illnesses** | **2+ Illnesses** |
| Were asked at application about health problems, excluding kidney failure and hospice care. | **15%** (181,149) | **15%** (37,218) | **16%** (6,239) | **22%** (1,573) |
| Did know from beginning PCP must give referrals to specialists. | **87%** (1,426,326) | **82%** (286,096) | **87%** (40,466) | **82%** (7,289) |

| Table C-3: Primary Physician Care by Comorbid Sub-Population | | | | |
|---|---|---|---|---|
| | **Enrollees** | | **Disenrollees** | |
| **Primary Physician Care** | **<2 Illnesses** | **2+ Illnesses** | **<2 Illnesses** | **2+ Illnesses** |
| Primary physician did not take health complaints seriously. | **6%** (90,197) | **14%** (48,293) | **19%** (7,544) | **17%** (1,492) |
| Primary physician explained treatment options | **91%** (1,127,161) | **86%** (289,295) | **78%** (26,239) | **72%** (5,979) |
| Cost <u>most important</u> to primary physician. | **8%** (114,020 | **6%** (18,076) | **19%** (5,847) | **21%** (1,375) |
| Believed care given by PCP was: | | | | |
| ‣ excellent | **48%** (751,985) | **45%** (160,539) | **35%** (14,565) | **41%** (3,500) |
| ‣ good | **44%** (694,642) | **38%** (136,548) | **38%** (15,822) | **25%** (2,154) |
| ‣ fair | **6%** (96,683) | **12%** (42,423) | **17%** (7,023) | **21%** (1,763) |

**Table C-4: Beneficiaries' Perceptions of HMO Care by Medicare Status and Functionally Limited Sub-Populations**

| | Enrollees | | Disenrollees | |
|---|---|---|---|---|
| **Medicare Aged/Disabled** | **Aged** | **Disabled** | **Aged** | **Disabled** |
| Ease of obtaining care was: | | | | |
| ‣ easy or very easy | **68%** (1,283,272) | **45%** (40,033) | **52%** (24,640) | **45%** (1,640) |
| ‣ neither easy nor hard | **27%** (517,876) | **31%** (26,971) | **29%** (13,834) | **18%** (659) |
| ‣ hard or very hard | **5%** (85,526) | **24%** (21,226) | **18%** (8,616) | **37%** (1,364) |
| HMO care caused health to: | | | | |
| ‣ improve | **44%** (813,276) | **34%** (29,458) | **30%** (13,691) | **17%** (537) |
| ‣ stay the same | **54%** (1,007,339) | **62%** (53,440) | **59%** (26,360) | **66%** (2,140) |
| ‣ worsen | **3%** (46,894) | **4%** (3,449) | **11%** (4,888) | **18%** (563) |
| **Functional Limits** | **No Limits** | **1+ Limits** | **No Limits** | **1+ Limits** |
| Ease of obtaining care was: | | | | |
| ‣ easy or very easy | **70%** (1,092,719) | **55%** (184,029) | **55%** (21,128) | **40%** (4,388) |
| ‣ neither easy not hard | **26%** (408,357) | **35%** (116,287) | **28%** (10,837) | **29%** (3,198) |
| ‣ hard or very hard | **5%** (70,889) | **11%** (35,229) | **16%** (6,225) | **31%** (3,468) |
| HMO care caused health to: | | | | |
| ‣ improve | **43%** (661,669) | **44%** (148,583) | **34%** (12,162) | **17%** (1,738) |
| ‣ stay the same | **56%** (867,462) | **48%** (162,160) | **58%** (20,778) | **63%** (6,295) |
| ‣ worsen | **1%** (20,861) | **9%** (29,482) | **9%** (3,228) | **20%** (1,947) |

**Table C-5: Beneficiaries' Perceptions of HMO Care by Comorbid Sub-Population**

| HMO Care | Enrollees <2 Illnesses | Enrollees 2+ Illnesses | Disenrollees <2 Illnesses | Disenrollees 2+ Illnesses |
|---|---|---|---|---|
| Ease of obtaining care was: | | | | |
| ▸ easy or very easy | **67%** (1,034,404) | **66%** (229,315) | **53%** (21,490) | **47%** (4,003) |
| ▸ neither easy nor hard | **28%** (429,819) | **27%** (94,391) | **28%** (11,418) | **28%** (2,359) |
| ▸ hard or very hard | **5%** (76,607) | **7%** (24,416) | **18%** (7,431) | **25%** (2,176) |
| HMO care caused health to: | | | | |
| ▸ improve | **41%** (622,048) | **52%** (187,868) | **28%** (10,754) | **37%** (2,982) |
| ▸ stay the same | **58%** (871,125) | **41%** (147,742) | **63%** (24,060) | **40%** (3,186) |
| ▸ worsen | **1%** (21,894) | **7%** (26,665) | **9%** (3,257) | **23%** (1,880) |

# A P P E N D I X D

## STATISTICAL DATA FOR KEY QUESTIONS

## Table D-1: Point Estimates, Confidence Intervals, and Statistical Significance by Functional Status

**KEY**: ✓ = statistical significance tested ** = difference is significant at .05 level

| | Proportion of beneficiaries: | 1+ Functional Limits: Point Estimate | 1+ Functional Limits: Standard Error | 1+ Functional Limits: 95% Confidence Interval | | No Functional Limits: Point Estimate | No Functional Limits: Standard Error | No Functional Limits: 95% Confidence Interval |
|---|---|---|---|---|---|---|---|---|
| | Health at time of survey was poor to very poor. | | | | | | | |
| ✓ | ▸ enrollees | 21.03 | 3.00 | 15.2 - 26.9 | ** | 2.09 | 0.64 | 0.8 - 3.3 |
| ✓ | ▸ disenrollees | 34.23 | 3.59 | 27.2 - 41.3 | ** | 4.85 | 1.06 | 2.8 - 7.0 |
| | HMO care caused health to improve. | | | | | | | |
| | ▸ enrollees | 43.67 | 4.59 | 34.7 - 52.7 | | 42.69 | 1.94 | 38.9 - 46.5 |
| ✓ | ▸ disenrollees | 17.41 | 4.06 | 9.5 - 25.4 | ** | 33.63 | 2.99 | 27.8 - 39.5 |
| | HMO care caused health to worsen. | | | | | | | |
| ✓ | ▸ enrollees | 8.67 | 2.32 | 4.1 - 13.2 | ** | 1.35 | 0.40 | 0.6 - 2.1 |
| ✓ | ▸ disenrollees | 19.51 | 4.25 | 11.2 - 27.8 | ** | 8.92 | 1.50 | 6.0 - 11.9 |
| | Primary physician explained treatment options. | | | | | | | |
| ✓ | ▸ enrollees | 84.99 | 2.64 | 79.8 - 90.2 | ** | 91.23 | 0.90 | 89.5 - 93.0 |
| ✓ | ▸ disenrollees | 68.47 | 5.21 | 58.3 - 78.7 | ** | 79.10 | 2.87 | 73.5 - 84.7 |
| | Physician failed to give needed Medicare-covered services. | | | | | | | |
| ✓ | ▸ enrollees | 7.88 | 2.93 | 2.1 - 13.6 | ** | 2.30 | 0.46 | 1.4 - 3.2 |
| ✓ | ▸ disenrollees | 19.84 | 4.13 | 11.7 - 28.0 | ** | 10.65 | 1.70 | 7.3 - 14.0 |
| | Physician failed to admit beneficiary to hospital when needed. | | | | | | | |
| ✓ | ▸ enrollees | 2.89 | 1.55 | 0.0 - 6.0 | | 1.19 | 0.44 | 0.3 - 2.1 |
| ✓ | ▸ disenrollees | 8.18 | 3.08 | 2.1 - 14.2 | | 3.99 | 1.69 | 0.8 - 7.3 |

## Table D-1: Point Estimates, Confidence Intervals, and Statistical Significance by Functional Status

**KEY**: ✓ = statistical significance tested | ** = difference is significant at .05 level

| | Proportion of beneficiaries: | 1+ Functional Limits | | | | No Functional Limits | | |
|---|---|---|---|---|---|---|---|---|
| | | Point Estimate | Standard Error | 95% Confidence Interval | | Point Estimate | Standard Error | 95% Confidence Interval |
| | Physician failed to refer beneficiary to a specialist when needed. | | | | | | | |
| | ▸ enrollees | 6.38 | 2.28 | 1.9 - 10.8 | | 4.91 | 0.95 | 3.0 - 6.8 |
| ✓ | ▸ disenrollees | 25.16 | 5.31 | 14.8 - 35.6 | ** | 11.56 | 1.82 | 8.0 - 15.1 |
| | Physician did not take health complaints seriously. | | | | | | | |
| ✓ | ▸ enrollees | 16.39 | 3.29 | 9.9 - 22.8 | ** | 4.64 | 0.68 | 3.3 - 6.0 |
| ✓ | ▸ disenrollees | 23.90 | 3.69 | 16.7 - 31.1 | ** | 16.62 | 2.19 | 12.3 - 20.9 |
| | Believed care given by PCP was excellent. | | | | | | | |
| ✓ | ▸ enrollees | 33.68 | 4.09 | 25.7 - 41.7 | ** | 50.78 | 2.91 | 45.1 - 56.5 |
| ✓ | ▸ disenrollees | 29.06 | 4.49 | 20.3 - 37.9 | ** | 38.12 | 4.03 | 30.2 - 46.0 |
| | Believed care given by PCP was good. | | | | | | | |
| ✓ | ▸ enrollees | 49.66 | 3.36 | 43.1 - 56.2 | ** | 41.34 | 2.52 | 36.4 - 46.3 |
| ✓ | ▸ disenrollees | 28.97 | 4.19 | 20.8 - 37.2 | ** | 37.11 | 2.32 | 32.6 - 41.7 |
| | Believed care given by PCP was fair. | | | | | | | |
| ✓ | ▸ enrollees | 11.86 | 3.38 | 5.2 - 18.5 | ** | 6.40 | 1.14 | 4.2 - 8.6 |
| ✓ | ▸ disenrollees | 29.64 | 6.11 | 17.7 - 41.6 | ** | 14.63 | 2.80 | 9.1 - 20.1 |
| | Ease of obtaining care was hard or very hard | | | | | | | |
| ✓ | ▸ enrollees | 10.50 | 2.63 | 5.3 - 15.7 | ** | 4.51 | 0.78 | 3.0 - 6.0 |
| ✓ | ▸ disenrollees | 31.38 | 2.42 | 20.2 - 42.6 | ** | 16.30 | 2.42 | 11.6 - 21.0 |

**Table D-2: Point Estimates, Confidence Intervals, and Statistical Significance by Medicare Aged/Disabled**

**KEY**: ✓ = statistical significance tested        ** = difference is significant at .05 level

| | **Proportion of beneficiaries:** | **Disabled** Point Estimate | **Disabled** Standard Error | **Disabled** 95% Confidence Interval | | **Age 65 or Older** Point Estimate | **Age 65 or Older** Standard Error | **Age 65 or Older** 95% Confidence Interval |
|---|---|---|---|---|---|---|---|---|
| | Health at time of survey was poor to very poor. | | | | | | | |
| ✓ | ▸ enrollees | | | | | | | |
| ✓ | ▸ disenrollees | 24.33 | 6.61 | 11.4 - 37.3 | ** | 4.52 | 0.61 | 3.3 - 5.7 |
| | | 31.70 | 6.01 | 19.9 - 43.5 | ** | 9.15 | 1.55 | 6.1 - 12.2 |
| | HMO care caused health to improve. | | | | | | | |
| | ▸ enrollees | 34.12 | 6.16 | 22.0 - 46.2 | | 43.55 | 1.74 | 40.1 - 47.0 |
| ✓ | ▸ disenrollees | 16.56 | 5.37 | 6.0 - 27.1 | ** | 30.47 | 2.18 | 26.2 - 34.7 |
| | HMO care caused health to worsen. | | | | | | | |
| | ▸ enrollees | 3.99 | 2.48 | 0.0 - 8.9 | | 2.51 | 0.60 | 1.3 - 3.7 |
| ✓ | ▸ disenrollees | 17.68 | 6.38 | 5.2 - 30.2 | ** | 10.88 | 1.69 | 7.6 - 14.2 |
| | Primary physician explained treatment options. | | | | | | | |
| | ▸ enrollees | | | | | | | |
| ✓ | ▸ disenrollees | 92.03 | 3.09 | 86 0 - 98.1 | | 89.47 | 0.91 | 87.7 - 91.3 |
| | | 61.03 | 8.83 | 43.7 - 78.3 | ** | 78.48 | 2.55 | 73.5 - 83.5 |
| | Physician failed to give needed Medicare-covered services. | | | | | | | |
| | ▸ enrollees | 3.67 | 2.02 | 0.0 - 7.6 | | 3.36 | 0.68 | 2.0 - 4.7 |
| ✓ | ▸ disenrollees | 27.54 | 8.91 | 10.1 - 45.0 | ** | 11.00 | 1.61 | 7.8 - 14.2 |
| | Physician failed to admit beneficiary to hospital when needed. | | | | | | | |
| | ▸ enrollees | 4.01 | 2.69 | 0.0 - 9.3 | | 1.44 | 0.48 | 0.5 - 2.4 |
| ✓ | ▸ disenrollees | 19.23 | 8.87 | 1.8 - 36.6 | ** | 3.82 | 1.40 | 1.1 - 6.6 |

## Table D-2: Point Estimates, Confidence Intervals, and Statistical Significance by Medicare Aged/Disabled

**KEY**: ✓ = statistical significance tested    ** = difference is significant at .05 level

| | Proportion of beneficiaries: | Disabled | | | | Age 65 or Older | | |
|---|---|---|---|---|---|---|---|---|
| | | Point Estimate | Standard Error | 95% Confidence Interval | | Point Estimate | Standard Error | 95% Confidence Interval |
| | Physician failed to refer beneficiary to a specialist when needed. | | | | | | | |
| ✓ | ▸ enrollees | 16.26 | 6.10 | 4.3 - 28.2 | ** | 4.40 | 0.68 | 3.1 - 5.7 |
| ✓ | ▸ disenrollees | 36.15 | 8.27 | 19.9 - 52.4 | ** | 12.65 | 2.04 | 8.7 - 16.6 |
| | Physician did not take health complaints seriously. | | | | | | | |
| | ▸ enrollees | 12.83 | 5.38 | 2.3 - 23.4 | | 6.75 | 0.93 | 4.9 - 8.6 |
| ✓ | ▸ disenrollees | 39.27 | 8.24 | 23.1 - 55.4 | ** | 17.05 | 1.86 | 13.4 - 20.7 |
| | Believed care given by PCP was excellent. | | | | | | | |
| | ▸ enrollees | 37.73 | 7.69 | 22.7 - 52.8 | | 48.16 | 3.05 | 42.2 - 54.1 |
| ✓ | ▸ disenrollees | 33.18 | 8.00 | 17.5 - 48.9 | ** | 36.35 | 2.54 | 31.4 - 41.3 |
| | Believed care given by PCP was good. | | | | | | | |
| | ▸ enrollees | 44.71 | 9.67 | 25.8 - 63.7 | | 42.99 | 2.36 | 38.4 - 47.6 |
| | ▸ disenrollees | 23.97 | 7.32 | 9.6 - 38.3 | | 36.74 | 2.32 | 32.2 - 41.3 |
| | Believed care given by PCP was fair. | | | | | | | |
| | ▸ enrollees | 14.26 | 5.21 | 4.0 - 24.5 | | 6.90 | 1.49 | 4.0 - 9.8 |
| | ▸ disenrollees | 29.14 | 8.65 | 12.2 - 46.1 | | 16.75 | 2.03 | 12.8 - 20.7 |
| | Ease of obtaining care was hard or very hard | | | | | | | |
| ✓ | ▸ enrollees | 24.06 | 6.15 | 12.0 - 36.1 | ** | 4.53 | 0.74 | 3.1 - 6.0 |
| ✓ | ▸ disenrollees | 37.24 | 8.91 | 19.8 - 54.7 | ** | 18.30 | 3.00 | 12.4 - 24.2 |

## Table D-3: Point Estimates, Confidence Intervals, and Statistical Significance by Comorbidity

**KEY**: ✓ = statistical significance tested　　　　** = difference is significant at .05 level

| | Proportion of beneficiaries: | 2+ Illnesses | | | | <2 Illnesses | | |
|---|---|---|---|---|---|---|---|---|
| | | Point Estimate | Standard Error | 95% Confidence Interval | | Point Estimate | Standard Error | 95% Confidence Interval |
| | Health at time of survey was poor to very poor. | | | | | | | |
| ✓ | ▸ enrollees | 17.39 | 3.70 | 10.1 - 24.6 | ** | 2.72 | 0.64 | 1.5 - 4.0 |
| ✓ | ▸ disenrollees | 36.36 | 4.88 | 26.8 - 45.9 | ** | 5.82 | 1.16 | 3.5 - 8.1 |
| | HMO care caused health to improve. | | | | | | | |
| ✓ | ▸ enrollees | 51.86 | 3.24 | 45.5 - 58.2 | ** | 41.06 | 1.86 | 37.4 - 44.7 |
| ✓ | ▸ disenrollees | 37.05 | 6.19 | 24.9 - 49.2 | ** | 28.25 | 2.20 | 23.9 - 32.6 |
| | HMO care caused health to worsen. | | | | | | | |
| ✓ | ▸ enrollees | 7.36 | 2.91 | 1.7 - 13.1 | ** | 1.45 | 0.40 | 0.7 - 2.2 |
| ✓ | ▸ disenrollees | 23.36 | 4.78 | 14.0 - 32.7 | ** | 8.55 | 1.44 | 5.7 - 11.4 |
| | Primary physician explained treatment options. | | | | | | | |
| | ▸ enrollees | 85.91 | 2.56 | 80.9 - 90.9 | | 90.93 | 1.13 | 88.7 - 93.1 |
| | ▸ disenrollees | 72.25 | 4.45 | 63.5 - 81.0 | | 78.08 | 2.41 | 73.4 - 82.8 |
| | Physician failed to give needed Medicare-covered services. | | | | | | | |
| ✓ | ▸ enrollees | 8.52 | 2.99 | 2.7 - 14.4 | ** | 2.30 | 0.53 | 1.3 - 3.3 |
| | ▸ disenrollees | 11.78 | 3.63 | 4.7 - 18.9 | | 12.36 | 2.22 | 8.0 - 16.7 |
| | Physician failed to admit beneficiary to hospital when needed. | | | | | | | |
| ✓ | ▸ enrollees | 3.56 | 1.45 | 0.7 - 6.4 | ** | 0.85 | 0.36 | 0.1 - 1.6 |
| ✓ | ▸ disenrollees | 13.10 | 3.46 | 6.3 - 19.9 | ** | 2.59 | 2.59 | 0.0 - 5.5 |

## Table D-3: Point Estimates, Confidence Intervals, and Statistical Significance by Comorbidity

**KEY**: ✓ = statistical significance tested ** = difference is significant at .05 level

| | Proportion of beneficiaries: | 2+ Illnesses: Point Estimate | 2+ Illnesses: Standard Error | 2+ Illnesses: 95% Confidence Interval | | <2 Illnesses: Point Estimate | <2 Illnesses: Standard Error | <2 Illnesses: 95% Confidence Interval |
|---|---|---|---|---|---|---|---|---|
| | Physician failed to refer beneficiary to a specialist when needed. | | | | | | | |
| | ▸ enrollees | 7.98 | 2.47 | 3.1 - 12.8 | | 4.44 | 0.85 | 2.8 - 6.1 |
| ✓ | ▸ disenrollees | 20.67 | 4.60 | 11.7 - 29.7 | ** | 12.66 | 2.73 | 7.3 - 18.0 |
| | Physician did not take health complaints seriously. | | | | | | | |
| ✓ | ▸ enrollees | 13.85 | 3.58 | 6.8 - 20.9 | ** | 5.81 | 0.82 | 4.2 - 7.4 |
| | ▸ disenrollees | 16.94 | 4.39 | 8.3 - 25.5 | | 18.78 | 2.23 | 14.4 - 23.2 |
| | Believed care given by PCP was excellent. | | | | | | | |
| | ▸ enrollees | 44.97 | 5.45 | 34.3 - 55.7 | | 48.08 | 2.91 | 42.4 - 53.8 |
| | ▸ disenrollees | 41.32 | 7.90 | 25.8 - 56.8 | | 35.00 | 2.46 | 30.2 - 39.8 |
| | Believed care given by PCP was good. | | | | | | | |
| | ▸ enrollees | 38.25 | 3.26 | 31.9 - 44.6 | | 44.41 | 2.62 | 39.3 - 49.5 |
| ✓ | ▸ disenrollees | 25.43 | 6.48 | 12.7 - 38.1 | ** | 38.02 | 2.72 | 32.7 - 43.4 |
| | Believed care given by PCP was fair. | | | | | | | |
| | ▸ enrollees | 11.88 | 4.58 | 2.9 - 20.9 | | 6.18 | 0.98 | 4.3 - 8.1 |
| | ▸ disenrollees | 20.81 | 3.93 | 13.1 - 28.5 | | 16.88 | 2.25 | 12.5 - 21.3 |
| | Ease of obtaining care was hard or very hard | | | | | | | |
| | ▸ enrollees | 7.28 | 2.20 | 3.0 - 11.6 | | 4.97 | 0.76 | 3.5 - 6.5 |
| | ▸ disenrollees | 25.29 | 6.00 | 13.5 - 37.1 | | 18.42 | 2.80 | 12.9 - 23.9 |

# A P P E N D I X  E

**AGENCY COMMENTS**

DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care
Financing Administration

# Memorandum

DATE: JUL 14 1998

TO: June Gibbs Brown
Inspector General

FROM: Nancy-Ann Min Deparle NMD
Administrator

SUBJECT: Comments on Office of Inspector General (OIG) Draft Report: "Beneficiary Perspectives of Medicare Risk HMO--1996--Functionally Limited, Comorbid, and Disabled Beneficiaries," (OEI-06-95-00434)

We reviewed the above-referenced report that compares the reported experiences of beneficiaries with functional limitations, comorbidities, and disabilities with those of individuals not reporting such limitations. OIG conducted a mail survey of 4,000 enrollees and disenrollees from 40 Medicare health maintenance organizations (HMOs) during 1996. In an earlier report, OIG concluded from the survey that beneficiaries with limitations experienced more access problems in HMOs than healthier beneficiaries. This report conducted further analyses of that survey, comparing vulnerable beneficiaries (defined as beneficiaries with functional limitations, comorbidities, and/or disabilities) to aged beneficiaries within groups of HMO enrollees and nonenrollees. Specifically, the report found that vulnerable beneficiaries experienced more problems in accessing needed Medicare covered services and in obtaining a referral for specialty care or for non-routine services, such as physical therapy, and were more critical of the care they received from their primary physician. About 1/5 of vulnerable enrollees said the care provided by their HMO caused their health to worsen, and some vulnerable subgroups were more likely than less impaired subgroups to have been asked about their health problems when applying to their HMO.

The recommendations included in the OIG report relate to implementation of risk adjustment, improved monitoring of service access problems, changes to contracting arrangements to require that plans designate specialists as primary care physicians in appropriate cases; and changes to contractual requirements to ensure that referral and utilization criteria are available to providers and beneficiaries for use in accessing care and appealing service denials.

Our detailed comments on the report recommendations follow.

IG ✓
EAIG
SAIG
PDIG ✓
DIG-AS
DIG-EC ✓
DIG-EI ✓
DIG-OI
DIG-MP
AIG-LC
OGC/IG ✓
ExecSec
Date Sent 7-16

**OIG Recommendation 1**
Risk adjusters should be sufficiently specific to address the severity of illnesses or functional impairments contributing to the health service needs of beneficiaries.

**HCFA Response**
We partially concur with this recommendation. OIG should note that the implementation of a risk adjustor that sufficiently incorporates illness severity requires the collection of a comprehensive set of managed care encounter data. The Balanced Budget Act of 1997, (BBA) requires that plans submit hospital encounter data for discharges after July 1, 1997 and allow the Secretary to require other data beginning July 1. HCFA is in the process of collecting hospital data from plans; the collection of more comprehensive data (including physician and hospital outpatient department data) may begin in late 1999. The collection of encounter data requires major changes in the administrative processes of managed care plans and substantial funding for HCFA to process the data. The only risk adjustment mechanism that can be implemented in the schedule required in the BBA is one based on inpatient hospital data. A comprehensive risk adjustor, which includes diagnostic information from inpatient and outpatient settings, is required in order to accurately adjust for severity. Because of difficulties in collecting the data to support an individual risk adjustor, the implementation of a sufficiently specific risk adjustor is several years away.

OIG should also note that the collection of functional limitation information on an enrollee basis for inclusion in a risk adjustor would require the administration of a survey to obtain these data or the implementation of a plan-by-plan data collection strategy to obtain patient-specific functional limitations data. These data are highly gameable and less amenable to auditing to determine their accuracy. Moreover, it is not clear that incorporating functional limitations into a risk adjustor, in addition to diagnostic information, is worth the additional expense of another data collection mechanism.

The risk adjustment method that HCFA will likely implement to meet the year 2000 mandate will use beneficiary inpatient diagnoses to assign relative predicted risk scores to managed care enrollees. This system is one way to estimate relative severity of illness among beneficiaries. HCFA anticipates moving to a more comprehensive risk adjustment model at a later date; for example, one which uses diagnoses from all sites of service to predict relative health risk. However, this expanded system is dependent on more extensive data than HCFA has the authority or funding to collect in time for year 2000 implementation.

HCFA has developed and experimented with risk adjustment systems which are based on estimates of beneficiary functional limitations. Usually referred to as "survey" based models, this approach is being tested in HCFA Social HMO II demonstration. It is unlikely at this time that a functional limitation, or survey-based, risk adjustment model

will be implemented in the full Medicare program to meet the BBA mandate, largely because the legislation refers specifically to the collection of inpatient encounter data to meet the mandate, and because HCFA analysis suggests that for the full Medicare population claims-based risk adjustment models are more accurate in predicting costs.

**OIG Recommendation 2**
Multi-plan studies should be conducted concurrently with implementation of the risk adjustment methodology to measure adequacy of adjusters and plan and beneficiary behavioral responses.

**HCFA Response**
We concur with this recommendation. HCFA will assess indicators of change in enrollment, disenrollment, and beneficiary satisfaction using encounter data and the Consumer Assessment of Health Plans Survey.

We plan to evaluate and monitor all the effects of the Medicare+Choice legislation, including the impact of risk adjustment. These studies will be used to inform policy makers of possible program refinements.

**OIG Recommendation 3**
While the adequacy of the new capitation methodology is being studied, a blend of prospective adjustments and retrospective adjustments based upon actual experience could be utilized.

**HCFA Response**
We partially concur with this recommendation. A partial capitation approach, such as a blend of prospective and retrospective adjustments, may help mitigate against the possible incentives under full capitation to restrict the use of services. That is, under partial capitation, a portion of the payment to a plan or provider is based on the actual services that are used.

However, the implementation of a shared risk approach is not generally consistent with the BBA, which requires a prospective payment rate. A shared risk approach is difficult to operationalize, since prospective payments must be determined, with retrospective adjustments coming after the payment year. HCFA has attempted to test this concept on a demonstration basis (most recently under the Medicare Choices project), in which the usual regulations governing the payments of managed care plans can be waived. However, under the Choices demonstration, no plans chose to ultimately implement a blended payment system.

In addition, an experience-based payment method requires extensive information from plans either in the form of a cost report or full encounter data. The information provided on cost reports is gameable. For an experience-based payment to appropriately compensate plans, information on all services provided--even those that are not Medicare covered (e.g., drugs)--would be required. Major changes in managed plans administrative processes would be required as well. These data, instead, could be used to implement a comprehensive, fully prospective risk adjustor.

**OIG Recommendation 4**
Service access problems encountered by functionally limited, comorbid and disabled beneficiaries should be identified and carefully monitored to ensure optimal access to needed health care services by these vulnerable groups.

**HCFA Response**
We concur with this recommendation. We will use this recommendation in the development of policy and evaluation of Part C organizations. The Quality Improvement System for Managed Care (QISMC) standards which measure access to services by subpopulations of Medicare beneficiaries will be implemented in Part C contracts.

**OIG Recommendation 5**
HMOs may be encouraged, or required by contract, to improve access to needed specialty care, by designating medical specialists as primary care providers for individuals with severe disabling or degenerative conditions. Alternatively, HMOs could be encouraged or required to provide standing referrals to specialists for beneficiaries determined by the HMO to have conditions that require on-going specialty care.

**HCFA Response**
HCFA concurs that there are situations where greater access to specialists may be necessary for beneficiaries with disabilities and degenerative conditions. Under section 1876 of the Social Security Act requirements, Managed Care Contractors have had the flexibility to designate a specialist as a primary care provider and some have done this on a case-by-case basis. The Part C regulation will add requirements that Managed Care Organizations (MCOs) must provide direct access referrals to specialists for beneficiaries with complex and/or serious medical conditions.

**OIG Recommendation 6**
To address problems experienced by vulnerable beneficiaries in obtaining needed Medicare-covered services and specialty care, HCFA could, through contractual requirements, require that referral and utilization criteria be available on request to providers and to beneficiaries for use in accessing care and appealing any denials of service.

**HCFA Response**
HCFA concurs with this recommendation. Section 1876 contractors have been required to disclose information to beneficiaries regarding appeal rights and access to care. The Part C regulation will also address required disclosure by MCOs of information regarding beneficiary appeals and access to care. In addition, MCOs will be required to disclose upon request information regarding the MCO's utilization management procedures, rates of grievance, information regarding determinations on appeals, a summary of the method of physician compensation, and information on the financial conditions of the organization.

**Technical Comments**
The subtitle of this report, "Functionally Limited, Comorbid, and Disabled Beneficiaries" is inappropriate and suggest that it be changed. Suggestions included: "Vulnerable Medicare Beneficiaries" or "Beneficiaries with Functional Limitations, Comorbidities, and Disabilities."

There is insufficient information in this report to determine whether sample sizes for the vulnerable subgroups were sufficient to make the kinds of recommendations provided in the report. Thus, it is not clear that the comparisons are valid. OIG needs to provide unweighted sample sizes for the three subgroups of vulnerable beneficiaries. OIG also needs to provide a justification for basing these types of conclusions on very small numbers of beneficiaries.

The report does not sufficiently demonstrate a connection between the analyses conducted for this report and the recommendations regarding risk adjustment. The risk adjustment recommendations, placed first in the recommendations section, are not logical conclusions from the analyses, which were solely related to issues of access to care. While OIG indicated that there were problems with the demographic adjustors currently used to determine payment to health plans, there was no discussion of how this methodology led to access problems. Without an understanding of the relationship between payment and access, there is no assurance that any change in payment will also improve access.

The report did not adequately address the ability for these beneficiaries, who have specific conditions/genetic disorders/rare diseases where expertise in a plan be very limited, to be referred to appropriate specialty centers/clinics at least for diagnostic and case management purposes. As an example, for many of these situations, adequate second opinion by knowledgeable practitioners is not apparently available.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of the Secretary

Washington, D.C. 20201

AUG 10 1998

TO: June Gibbs Brown
Inspector General

FROM: Margaret A. Hamburg, M.D.
Assistant Secretary for Planning and Evaluation

SUBJECT: OIG Draft Report: Beneficiary Perspectives of Medicare Risk HMOs - 1996, Functionally Limited, Comorbid and Disabled Beneficiaries, OEI-06-95-00434- **CONCUR WITH COMMENT**

I have reviewed the OIG draft report: Beneficiary Perspectives of Medicare Risk HMOs - 1996, Functionally Limited, Comorbid and Disabled Beneficiaries. It recommends several items to help assure quality care for those in Medicare managed care plans with disabilities, including risk adjustment (which is something already underway), better HCFA monitoring of managed care plans, and more control over contract language regarding appeals, utilization review, referral policy, and designation of specialists as PCPs. ASPE endorses these concepts.

However, a major limitation of the report is that the study group seemed to include only elderly Medicare beneficiaries and is, therefore, NOT a report on persons on Medicare by reason of disability. As far as we can tell, almost ALL the people surveyed are over the age of 65. This limitation stands out in several areas, including health screening. For example, the report (page 5) says there is a discrepancy between disabled and non-disabled beneficiaries. However, when the number of respondents is small, it is difficult to determine whether it is significant that there is "twice as much" (13 percent versus 7 percent) screening occurring . For that reason, we would like to see more breakout tables on the various populations (such as on pages 8 and 11). Further we suggest adding an explicit statement of this limitation in the report.

Last, we would suggest language be added to the recommendation section that calls for a new report that surveys only the under 65 population. There may also be other reports from the Picker Institute, AHCPR, or Mathematica's PPRC report that could be useful background for this analysis.

Thank you for your concern, let us know if we can be of further assistance.