ONE-THIRD AT RISK: THE SPECIAL CIRCUMSTANCES OF MEDICARE BENEFICIARIES WITH HEALTH PROBLEMS

Marilyn Moon and Matthew Storeygard
The Urban Institute

September 2001

The authors wish to thank Stephanie Maxwell and Brenda Spillman for their comments on the paper.

Support for this research was provided by The Commonwealth Fund. The views presented here are those of the authors and should not be attributed to The Commonwealth Fund or its directors, officers, or staff, or to the Urban Institute or its trustees or staff.

Copies of this report are available from The Commonwealth Fund by calling our toll-free publications line at 1-888-777-2744 and ordering publication number 474. The report can also be found on the Fund's website at www.cmwf.org.

CONTENTS

LIST OF FIGURES AND TABLES

EXECUTIVE SUMMARY

Before contemplating reforms in Medicare, it is crucial to understand the needs of vulnerable groups the program serves so that the important achievement of providing mainstream coverage to these populations is not undermined. While a considerable amount of a given year's health care expenses is unpredictable—the result of accidents or illnesses that strike without warning—many Medicare beneficiaries have health conditions that make substantial expenditures predictable. Elderly and disabled people have a disproportionate share of chronic and acute conditions. It is to be expected that members of these groups will make decisions about insurance and health care spending that reflect their knowledge of the expenses such conditions are likely to incur. Consequently, these populations are the least attractive customers for the private insurance sector and the ones at whom Medicare reforms and protections should be targeted.

Basic Characteristics of Vulnerable Groups

This report examines two categories of vulnerable Medicare beneficiaries—people with cognitive problems and those with physical ailments. The categories are derived from the Medicare Current Beneficiary Survey (MCBS). In 1966, 33 percent of Medicare beneficiaries suffered from either a cognitive or physical difficulty; and almost 13 percent had both cognitive and physical problems (Table ES-1).

Many of the impairments appear in predictable demographic groups. More than 13 percent of beneficiaries with incomes below the poverty line have both cognitive and physical difficulties; just over 5 percent of those with incomes of more than 400 percent of poverty have both problems. It is unclear whether the health problems are the result of low incomes or vice versa. However, those with higher incomes are more likely to be working and in better health. Age is also associated with a higher incidence of health problems. Nearly 37 percent of beneficiaries older than age 85 have physical and cognitive problems; fewer than 4 percent of beneficiaries between the ages of 65 and 69 have comparable limitations.

Table ES-1. Vulnerability Status by Health Spending and Beneficiary Characteristics, 1997

	Neither Cognitive nor Physical	Both Cognitive and Physical	Cognitive Only	Physical Only
All Beneficiaries	67.6%	12.7%	10.3%	9.3%
Poverty				
Below poverty	56.1%	13.2%	18.9%	11.8%
100%–200%	66.7%	9.6%	12.1%	11.6%
200%–400%	77.5%	5.8%	8.4%	8.4%
Greater than 400%	83.2%	5.2%	5.6%	6.1%
Age				
Disabled	29.3%	22.2%	31.9%	16.6%
65–69	83.9%	3.6%	5.1%	7.5%
70–74	80.8%	5.7%	5.8%	7.7%
75–79	74.9%	8.8%	7.8%	8.5%
80–84	64.1%	17.1%	8.7%	10.1%
85 and older	40.9%	36.7%	13.2%	9.2%
HMO Enrollment				
M+C beneficiary	77.9%	6.6%	7.6%	7.8%
FFS beneficiary	65.8%	13.8%	10.8%	9.6%
Mean Expenditures				
All health spending	$5,037	$20,332	$6,597	$14,573
Medicare spending	$2,920	$13,205	$3,933	$10,073
Out-of-pocket spending	$2,141	$3,989	$2,069	$2,744

Note: Expenditures exclude HMO and institutionalized beneficiaries.
Source: 1997 Medicare Current Beneficiary Survey.

In general, health maintenance organizations (HMOs) that serve the Medicare population attract healthier individuals than does traditional Medicare. Fourteen percent of the total traditional Medicare population had both cognitive and physical difficulties in 1996; fewer than 7 percent of Medicare HMO enrollees reported such problems. Managed care plans have strong incentives to limit enrollment of those with cognitive and/or physical conditions because it costs more to serve these beneficiaries, and the size of the Medicare premium is not sufficient to make them attractive enrollees. Further, beneficiaries with these conditions may be unwilling to risk joining a plan that restricts choice of physician and other health care providers. Indeed, this is why many health care analysts worry about selection issues in Medicare. Not just insurers, but beneficiaries themselves can affect enrollment and contribute to selection problems, particularly when they know they need extra care.

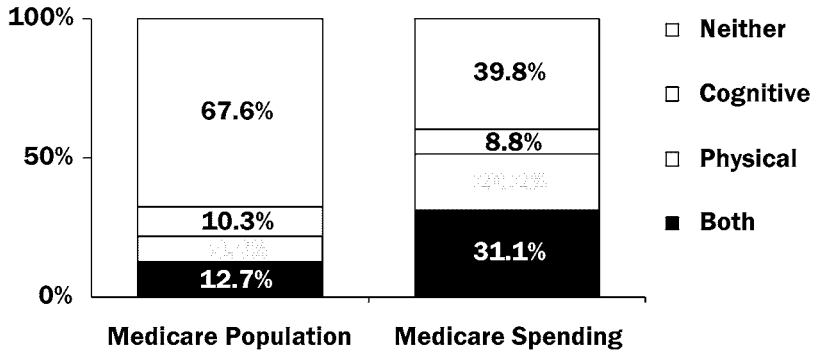
Even the 65-to-69-year-olds, an obvious enrollment target of Medicare HMO plans, choose traditional Medicare when they have health problems. In 1993, 4.8 percent of the Medicare HMO population in this age group had both cognitive and physical impairments.

In 1996, the percentage was down to 1.5 percent, while the proportion of vulnerable people in the age 65-to-69 non-HMO population rose from 4.2 percent to 4.6 percent.

Health Care Spending on the Vulnerable

Besides the obvious physical and psychological effect that health limitations have on beneficiaries and their families, there are also significant financial repercussions, particularly for those enrolled in traditional Medicare. In 1996, average overall health spending—which includes health spending by all sources—for an individual with a cognitive or physical condition was $5,037.[1] The figure was $20,332 for a beneficiary with both cognitive and physical difficulties (Table ES-1). Total spending on an individual with cognitive difficulties alone was $6,597, and spending on those with physical problems alone was $14,573. The total out-of-pocket spending for cognitively and physically disabled beneficiaries was $3,989; beneficiaries with neither condition spent $2,744.[2] Both the total spending and out-of-pocket spending figures reflect both acute and long-term care spending. Medicare reimbursement for those with both conditions was more than four times as high as it was for beneficiaries with neither problem. Furthermore, beneficiaries with either health condition account for more than 60 percent of Medicare spending even though they comprise only 32 percent of the Medicare population (Figure ES-1).

Figure ES-1. Beneficiaries with Health Conditions as a Percentage of Beneficiary Population and Total Medicare Expenditures, 1997



Note: All figures exclude ESRD beneficiaries and the Medicare expenditures also exclude HMO beneficiaries.

Source: Marilyn Moon and Matthew Storeygard, *One-Third at Risk: The Special Circumstances of Medicare Beneficiaries with Health Problems,* The Commonwealth Fund, September 2001.

[1] These figures exclude those in institutions, where expenditure information is less comprehensive.

[2] Note that out-of-pocket spending includes the amount people pay directly plus the premiums they pay for additional protection and for Medicare. Because this is a different concept than either all Medicare spending or total spending, out-of-pocket cannot be added to Medicare to get the total.

Another key issue is whether the date of onset of a physical problem makes a difference in spending levels and whether there is persistence in spending through time for those with physical problems. If, for example, a broken hip leads to several limitations in activities of daily living, does Medicare spending remain high over time or decline after an initial treatment period?

Both cross-sectional and regression analyses of spending for individuals on the MCBS for whom we have three years of data find that year of onset does matter. The highest average spending in 1996 is for those whose problem began in 1996. This is closely followed by spending for those who report problems in 1996 and in at least one of the prior years. The discrepancies are considerably greater when Medicare spending alone is examined, suggesting that the problem's date of onset particularly affects acute-care spending.

Policy Implications

Due to their age and/or disability status, Medicare beneficiaries are more likely than the rest of the population to have physical problems. Those that do are more likely to spend considerably more on care than other Medicare beneficiaries. These findings raise a number of policy issues. First, if reliance on private-sector initiatives increases, it will be crucial to implement risk-selection adjustment mechanisms to assure that private plans are reasonably compensated for enrolling people with health problems (and are not overpaid for those who are healthy). These findings also mean that fee-for-service options to serve those with multiple problems are likely to be needed indefinitely. Improved benefits—e.g., coverage of prescription drugs and reduction in cost sharing charges—could help reduce out-of-pocket costs for traditional Medicare enrollees.

Finally, Medicare reform efforts sometimes try to hold down Medicare spending with higher cost sharing in areas such as home health care. Such changes would place an inordinate burden on those who already face very high out-of-pocket costs. Reform options that would drive up the premiums that individuals must pay for traditional Medicare by promoting lower-cost private plans are also likely to be detrimental to the beneficiaries described here.

ONE-THIRD AT RISK:
THE SPECIAL CIRCUMSTANCES OF MEDICARE BENEFICIARIES WITH HEALTH PROBLEMS

Introduction

Before the Medicare program began in 1966, many elderly people were unable to buy health insurance because of its high cost or because it was unavailable at any price to those with health problems. One of Medicare's important accomplishments is that it gives the very old and the very sick the same access to basic benefits as it does to younger, healthier beneficiaries. While there is certainly room for improvement in the benefit package, one's Medicare coverage is never rescinded because of poor health. In fact, the program redoubled its commitment to insuring those who are most in need when it expanded coverage in 1972 to those with disabilities. It is important to understand the needs of these vulnerable populations Medicare serves, particularly when contemplating reforms to the program. The considerable achievement of providing mainstream coverage to these populations should not be undermined.

The diversity of the Medicare population's age, income, race, geographic location, and education is well documented.[3] Such differences are associated with some of the variation in health care spending. Another key, direct source of variation in spending arises from differences in health status. A considerable amount of any given year's health care expenses are unpredictable—the result of accidents or illnesses that strike without warning—but many Medicare beneficiaries have health conditions that require predictably costly treatment. These are long-standing problems—some may arise from accidents or the sudden onset of illness, but others are chronic conditions that result in high rates of spending even if their onset was gradual. As a consequence, it is to be expected that those affected by such problems will make decisions about insurance and other matters that reflect the expectation of higher spending. Indeed, this is why many health care analysts worry about risk selection issues in Medicare's managed care program and in the supplemental insurance market. Not just insurers, but beneficiaries themselves can affect enrollment and contribute to risk selection. For example, when choosing private plans with different levels of benefits, Medicare beneficiaries with health problems might concentrate in certain plans. If so, and if appropriate risk-adjustment mechanisms are not in place, these people may lose the advantages of the pooling of risk across all types of beneficiaries.

[3] See, for example, Health Care Financing Administration, *Statistical Supplement 1999.* Washington, D.C.: U.S. Government Printing Office, 1999; and Barbara Gage, Marilyn Moon and Sang Chi, "State Level Variation in Medicare Spending," *Health Care Financing Review* 21 (Winter 1999): 85–98.

This paper examines Medicare and overall health care spending for those who have self-reported physical or cognitive health problems. We concentrate on those who report physical problems because these conditions are more likely to lead to higher Medicare spending.[4]

We use the Medicare Current Beneficiary Survey (MCBS) to identify vulnerable beneficiaries and to create two beneficiary categories—those with cognitive difficulties and those with physical limitations. One is classified as having cognitive difficulty if he reports problems using the telephone or paying bills, or has ever been told he has Alzheimer's disease or certain other mental conditions.[5] A beneficiary is assumed to have physical difficulties if she lived in a nursing home for any part of the year, has difficulty performing three or more activities of daily living (ADLs), or reports being in "poor" health. A person is also classified as having a physical condition if he or she reports three or more diagnoses, including rheumatoid arthritis, diabetes, Parkinson's disease, and emphysema. Beneficiaries who meet these screens are quite impaired.[6]

Socioeconomic Characteristics

A significant percentage of the beneficiary population falls into one of these categories. Almost one-third of all Medicare beneficiaries suffered from either a cognitive or physical difficulty in 1997; almost 13 percent had both problems (Table 1). Medicare beneficiaries are considerably more at risk of having such conditions than younger persons, which makes this issue particularly important for the program. The National Health Interview Survey indicates that people aged 65 and older are nearly three times more likely than the population as a whole to report "fair" or "poor" health or an activity limitation.[7]

[4] Another contributor to vulnerability is level of income. That is indirectly addressed here since a disproportionate number of older people with health problems also have low incomes.

[5] Our definitions of cognitive and physical conditions are given in more detail in the Appendix.

[6] Certainly, some individuals will meet several of the conditions, but since all are severe, we chose not to attempt to differentiate within the category of physical problems.

[7] National Center for Health Statistics, *Health, United States, 2000* (Washington, D.C.: U.S. Government Printing Office, 2000).

Table 1. Vulnerability Status by Socio-Demographic Characteristics*

	Neither Cognitive nor Physical (%)	Both Cognitive and Physical (%)	Cognitive Only (%)	Physical Only (%)
All Beneficiaries	67.6	12.7	10.3	9.3
Sex				
Female	67.5	13.7	8.9	9.9
Male	67.7	11.5	12.1	8.6
Marital Status				
Married	75.9	7.6	7.6	8.9
Unmarried	58.5	18.4	13.4	9.8
Age				
64 and younger	29.3	22.2	31.9	16.6
65–69	83.9	3.6	5.1	7.5
70–74	80.8	5.7	5.8	7.7
75–79	74.9	8.8	7.8	8.5
80–84	64.1	17.1	8.7	10.1
85 and older	40.9	36.7	13.2	9.2
Race				
Hispanic	63.2	13.1	10.9	12.8
White	68.8	12.5	9.9	8.8
Black	59.3	13.6	14.6	12.4
Other	68.4	15.2	8.8	7.6
Age 80 and Older	53.2	26.3	10.8	9.7
Marital Status				
Married	62.1	18.2	10.3	9.4
Unmarried	49.1	30.1	11.1	9.8
Sex				
Female	50.8	28.9	9.8	10.5
Male	58.0	21.1	13.0	8.0

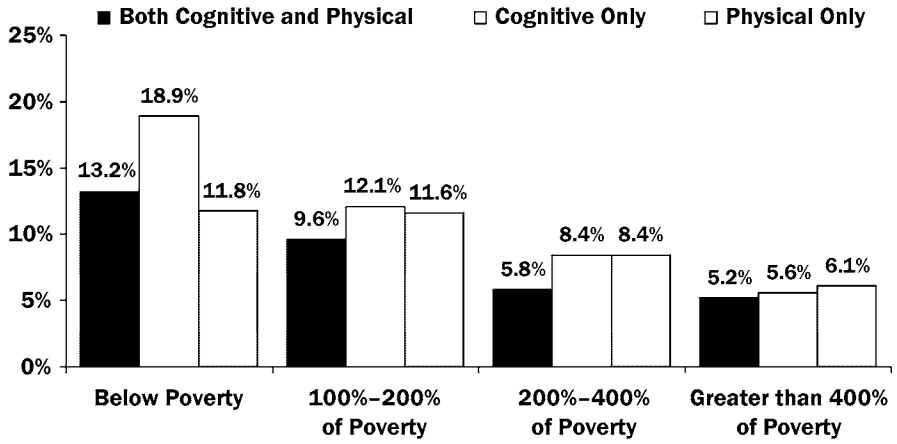
* Note: This figure and all following figures and data exclude End-Stage Renal Disease (ESRD) beneficiaries.
Source: 1997 Medicare Current Beneficiary Survey.

Although the vulnerable Medicare population is not limited to particular demographic groups, the distribution of cognitive and physical impairments is certainly not random. To the contrary, many of the impairments appear in predictable demographic groups. For instance, beneficiaries with cognitive or physical limitations are disproportionately poor. More than 13 percent of beneficiaries who live in the community and who have incomes below the poverty line have both cognitive and physical difficulties; only 5 percent of those with incomes over 400 percent of poverty have both problems[8] (Figure 1). The results are similar when expressed in terms of income

[8] People who live in nursing homes are omitted from the data on income and poverty because of the poor quality of the data on their incomes.

alone—almost 12 percent of those with annual family incomes of less than $15,000 have both cognitive and physical impairments while only 5 percent of those who make more than $50,000 report these conditions (Table 2). Low income or actual poverty may be a result of high health care expenses over time and/or a limited ability to work. Those with higher incomes are more likely to be working and in better health. The exact cause is unknown, but poor health and low income is a particularly burdensome combination.

Figure 1. Percentage of Beneficiaries with Health Conditions, by Type of Condition and Poverty Level, 1997



Note: All figures exclude beneficiaries residing in nursing homes.
Source: 1997 Medicare Current Beneficiary Survey.

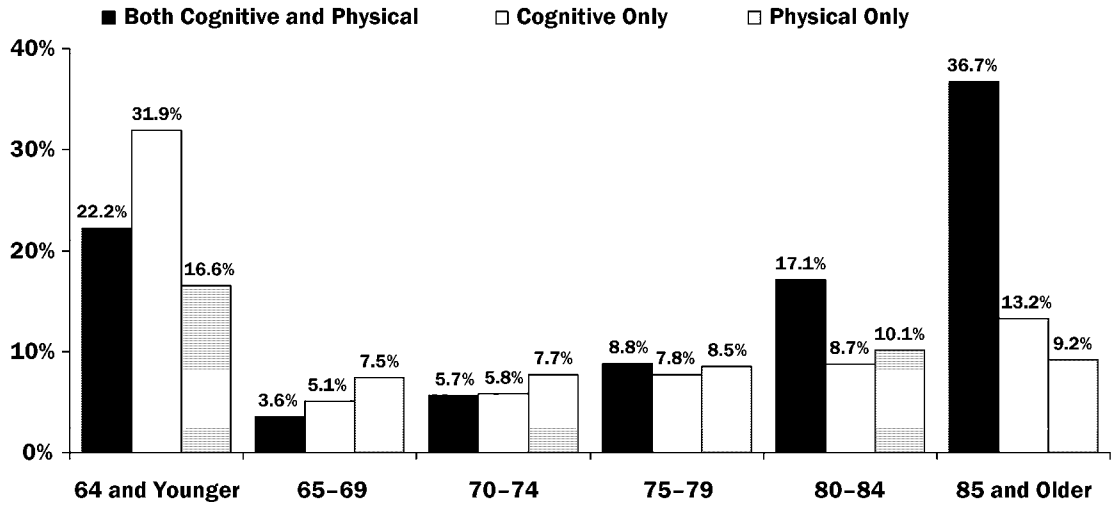
Table 2. Vulnerability Status by Poverty and Income

	Neither Cognitive nor Physical (%)	Both Cognitive and Physical (%)	Cognitive Only (%)	Physical Only (%)
All Beneficiaries	71.4	8.2	10.9	9.5
Poverty				
Below poverty	56.1	13.2	18.9	11.8
100%–200%	66.7	9.6	12.1	11.6
200%–400%	77.5	5.8	8.4	8.4
Greater than 400%	83.2	5.2	5.6	6.1
Income				
Less than $15,000	60.5	11.8	16.1	11.6
$15,000–$20,000	72.9	8.1	8.3	10.8
$20,000–$25,000	75.1	6.3	8.8	9.8
$25,000–$50,000	79.2	5.2	7.8	7.8
Greater than $50,000	84.6	4.9	5.2	5.3

Note: All figures exclude ESRD beneficiaries, as well as beneficiaries residing in nursing homes.
Source: 1997 Medicare Current Beneficiary Survey.

Almost 42 percent of unmarried beneficiaries have physical or cognitive difficulties, while only 24 percent of their married counterparts report having these conditions. This may be more a factor of age than of marital status. Only 22 percent of beneficiaries older than 85 are married; but 68 percent of beneficiaries between the ages of 65 and 69 are married. Nearly 37 percent of beneficiaries older than age 85 have both limitations while fewer than 4 percent of beneficiaries aged between 65 and 69 face such limitations (Figure 2). The situation for those aged 80 and older also illustrates this issue—both marital status and gender are of less consequence after controlling for age (Table 1).

Figure 2. Percentage of Beneficiaries with Health Conditions, by Type of Condition and Age, 1997



Source: 1997 Medicare Current Beneficiary Survey.

Even though cognitive and physical impairments are not evenly experienced throughout the Medicare population, their relative demographic distributions remain fairly constant. An analysis of the 1994, 1995, 1996, and 1997 MCBS found that the characteristics of people with these conditions change little over time.

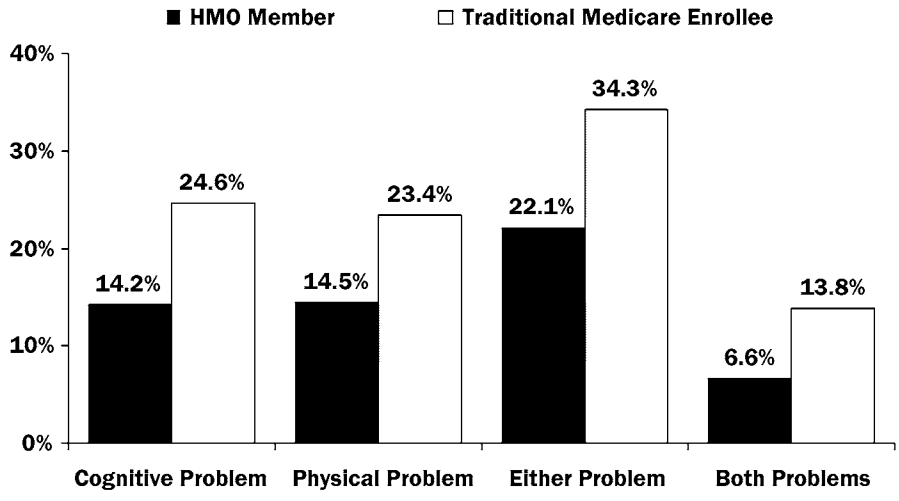
Traditional Medicare vs. HMO Enrollment

An examination of our beneficiary groups by insurance status shows that on average, health maintenance organizations (HMOs) that contract with the Medicare program have attracted individuals who are healthier than those who remain in traditional (fee-for-service) Medicare.[9] Fourteen percent of the traditional Medicare population had both

[9] The data for this analysis predates the Medicare+Choice program, which now allows HMOs and other types of plans to participate in Medicare's private plan option. But HMOs remain the dominant type of insurance.

cognitive and physical difficulties in 1996; fewer than 7 percent of HMO enrollees were similarly afflicted (Figure 3). In addition, more than 65 percent of the traditional Medicare population had neither cognitive nor physical difficulties, compared to 78 percent of the Medicare HMO population. Since the treatment of beneficiaries with cognitive, physical, or both conditions is more costly than caring for their healthier counterparts, managed care plans have incentives to limit these groups' enrollment, particularly since plans are not compensated specifically for taking on such patients. Moreover, beneficiaries with these conditions may be unwilling to take a chance on joining a plan that restricts their choice and use of physician and other health care providers. Hence, even absent insurers' efforts to discourage enrollment, beneficiaries with such problems are likely to be skeptical about HMOs.

Figure 3. Percentage of Beneficiaries with Health Conditions, by Type of Condition and HMO Status, 1997



Source: 1997 Medicare Current Beneficiary Survey.

Even though the Medicare managed-care population grew by 62 percent (from 2.34 million to 3.79 million) between 1993 and 1996, its share of enrollees with cognitive or physical problems remained essentially the same. In 1993, for example, 21 percent of Medicare HMO beneficiaries had either a cognitive or physical difficulty. This increased only slightly—to 22 percent—in 1997 (Table 3). Six percent of the Medicare HMO population had both cognitive and physical ailments in 1993; and this figure too remained fairly constant through 1996.

Table 3. Beneficiaries with Cognitive or Physical Conditions by HMO Status, 1993–97

	All Beneficiaries		Beneficiaries Ages 65–69	
Year	HMO (%)	Non-HMO (%)	HMO (%)	Non-HMO (%)
1993	20.8%	33.7%	16.2%	17.3%
1994	23.8	34.8	15.0	18.2
1995	23.6	34.7	11.3	17.4
1996	23.2	34.6	9.1	17.8
1997	22.1	34.3	11.0	17.4

Source: 1993–97 Medicare Current Beneficiary Surveys.

Conventional wisdom states that the prevalence of health problems among managed care enrollees should increase when plan enrollment increases significantly. However, not only does the percentage of enrollees with either limitation remain relatively constant overall, but the percentage of Medicare HMO enrollees aged 65 to 69 with limitations drops over the period. In 1993, 16.2 percent of 65-to-69-year-olds in Medicare HMOs had at least one of the conditions; in 1997, only 11 percent did. Meanwhile, the percentage of the 65-to-69-year-old population with either type of condition in traditional Medicare stayed relatively constant, starting at 17.3 percent in 1993 and rising to 17.4 percent in 1997. The 65-to-69-year-olds are a natural enrollment target of Medicare HMOs because they are more familiar with managed care, are new to Medicare, and are healthier on average than older beneficiaries. However, these data indicate that new Medicare enrollees who have health problems choose the traditional Medicare program in disproportionate numbers.

In contrast, there is a modest increase in the share of people with cognitive or physical limitations over the same period among older HMO beneficiaries, perhaps indicating an "aging in" of the population. That is, beneficiaries may be younger and healthier when they enroll, but retain their HMO coverage when health care problems develop.

Health Care Spending on the Vulnerable

Besides the obvious physical and psychological effect that health limitations have on beneficiaries and their families, there are significant financial repercussions, particularly for those in traditional Medicare.[10] The correlation between cognitive and physical difficulties and spending is striking. In 1997, average total health spending for those with neither condition was $5,037; spending for beneficiaries with both cognitive and physical

[10] In an earlier paper, however, we find that people with health problems who are enrolled in HMOs also have substantially higher out-of-pocket costs. See Jessica Kasten, Marilyn Moon and Misha Segal, *What Do Medicare HMO Enrollees Spend Out-of-Pocket?* The Commonwealth Fund, August 2000.

difficulties was $20,332[11] (Table 4). Spending for individuals with cognitive difficulties alone totaled $6,597; for those with physical problems alone spending was $14,573. Out-of-pocket spending for cognitively and physically burdened beneficiaries was $3,989; beneficiaries with neither condition spent $2,141. Medicare program spending for those with both conditions was more than 4 times as high as it was for beneficiaries with neither problem. In aggregate terms, the cost of treatment for beneficiaries with either a cognitive or physical limitation accounts for 60.2 percent of total traditional Medicare spending, yet these groups make up just 34.3 percent of the traditional Medicare population.

Table 4. Health Spending per Beneficiary, by Type of Condition and Type of Spending, 1997

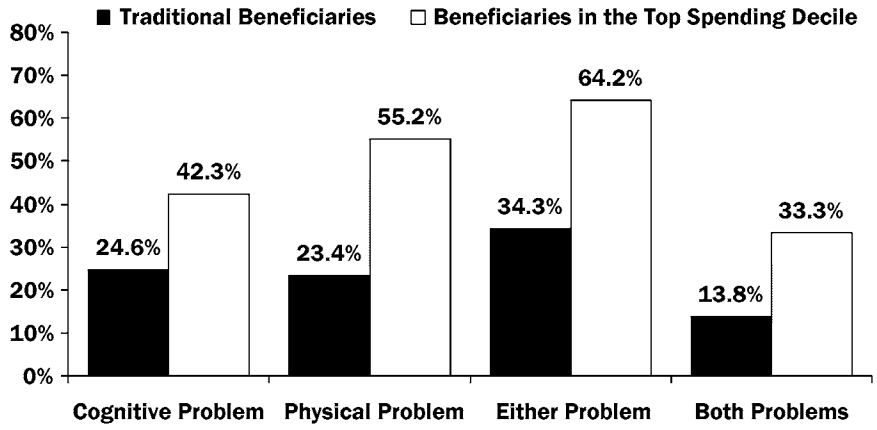
Type of Condition	Total Health Spending	Medicare Spending	Out-of-Pocket Spending
Neither Cognitive nor Physical	$5,037	$2,920	$2,141
Both Cognitive and Physical	$20,332	$13,205	$3,989
Cognitive Only	$6,597	$3,933	$2,069
Physical Only	$14,573	$10,073	$2,744

Note: All figures exclude HMO and ESRD beneficiaries, as well as beneficiaries residing in nursing homes.
Source: 1997 Medicare Current Beneficiary Survey.

Another way to look at the higher costs for beneficiaries with health problems is to examine those who fall into the top 10 percent of Medicare spending (Figure 4). Of those beneficiaries, 42.3 percent have a cognitive difficulty, and 55.2 percent report serious physical problems. Further, nearly two-thirds of these beneficiaries have either a cognitive or physical ailment, and more than one-third have both types of conditions. By contrast, the prevalence of these conditions in the overall traditional Medicare population is almost half as high. Thus, beneficiaries with physical and/or cognitive conditions strongly correlate with higher spending both on average and at the highest level.

[11] The differences would be even greater if we included people who live in nursing homes. However, the MCBS does not collect all health expenditure data for this group, so it is omitted here.

Figure 4. Traditional Medicare Beneficiaries with Health Conditions: Percentage in the Top 10 Percent of Spending, 1997



Note: All figures exclude HMO and ESRD beneficiaries.

Source: 1997 Medicare Current Beneficiary Survey.

Spending on Those with Physical Problems

The rest of this paper focuses on beneficiaries with physical problems because of the way these conditions affect Medicare spending. The treatment of those with cognitive difficulties creates lower Medicare spending levels largely because cognitive illnesses are less likely to be precipitated by a costly, acute event. Further, family members often furnish care for the cognitively impaired beneficiaries so the cost does not show up in formal spending numbers. Finally, Medicare covers less treatment for cognitive ailments than for physical ones. Long-term mental health benefits, as well as payment for the supportive needs of Alzheimer's or other dementia patients, are outside the acute and post-acute scope of Medicare. Table 5 shows that the percentage of traditional Medicare beneficiaries who had physical problems (and resided in the community) in 1997 was 18.6 percent. Total spending on these beneficiaries averaged $17,285. Spending for Medicare beneficiaries with no physical problems totaled $5,257 in 1997. Out-of-pocket spending was also high for the physically limited group. At $3,330, it was more than 50 percent higher than that for those without physical difficulties.[12] Finally, spending for prescription drugs, both total and out-of-pocket, was substantially higher among physically impaired beneficiaries.

[12] Even with missing data, including those in nursing homes would result in a substantially higher out-of-pocket number.

Table 5. Health Spending per Beneficiary, by Presence or Absence of Physical Conditions, 1997

	With Physical Conditions	Without Physical Conditions
Percentage of Traditional Medicare Population	18.6%	81.4%
Total Health Spending	$17,285	$5,257
Medicare Spending	$11,547	$3,063
Out-of-Pocket Spending	$3,330	$2,131
Total Prescription Drug Spending	$1,305	$731
Out-of-Pocket Prescription Drug Spending	$558	$351

Note: All figures exclude HMO and ESRD beneficiaries, as well as beneficiaries residing in nursing homes.
Source: 1997 Medicare Current Beneficiary Survey.

Does this phenomenon persist over time or do the high costs occur mainly at the onset of a physical problem? If, for example, a broken hip leads to several limitations in ADLs, does Medicare spending remain high or decline after the initial episode of illness? To answer that question, we examine a subset of individuals on the MCBS for whom we have three years of data (1994–96). Characteristics of the longitudinal group tend to be quite similar to those for the full 1996 sample. (See the Appendix for a comparison of 1996 data and the three-year subsample.)

The year of onset of an illness does seem to make a difference in spending levels[13] (Table 6). The highest total health care spending in 1996 ($16,652) was for treatment of those whose health problem began in that year. This is followed by total spending for those who report problems in 1996 and in at least one of the prior years. Even greater spending discrepancies ($12,957 and $9,273, respectively) exist between these groups when Medicare spending alone is examined. In contrast, out-of-pocket burdens are highest for those with problems both in 1996 and earlier years. Drug expenses for the first two groups are similar; they are substantially lower for those who do not meet the physical or cognitive screens (Table 6).

[13] The specific dollar amounts vary somewhat from Table 4 because we are using a different population sample, but the trends are very similar for those with no physical difficulties.

Table 6. Health Spending per Beneficiary, by Year of Onset of Physical Condition, 1994–96

	Physical Difficulty Onset in 1996	Physical Difficulty in 1996, and in 1994 and/or 1995	Physical Difficulty in 1994 or 1995, but Not in 1996	No Physical Difficulty
Percentage of Longitudinal Population	3.1%	17.3%	4.3%	75.4%
Total Health Spending	$16,652	$13,071	$8,560	$4,815
Medicare Spending	$12,957	$9,273	$6,148	$2,911
Out-of-Pocket Spending	$2,484	$2,652	$2,005	$1,987
Total Prescription Drug Spending	$1,169	$1,230	$994	$595
Out-of-Pocket Prescription Drug Spending	$482	$494	$476	$289

Note: All figures exclude HMO and ESRD beneficiaries, as well as beneficiaries residing in nursing homes.
Source: 1994–96 Medicare Current Beneficiary Surveys.

The simple reporting of these differences in average total spending does not indicate whether the variations would remain if other factors that affect health care spending were taken into account. Do these differences hold up after controlling for beneficiaries' age, income, and insurance status? Using a regression analysis to control for other factors, we found that physical problems are overwhelmingly significant in explaining Medicare spending.[14] Further, recent date of onset does matter. The largest marginal increase in Medicare spending occurred for those with physical problems who triggered the screen only in 1996. Their spending is 14.6 times higher than spending for persons who did not qualify as having physical problems in any of the three years. And spending is nearly three times greater for those with a 1996 onset than for those with problems in 1996 that began earlier. Further, spending for all of those who had physical problems during some period over the three years was substantially higher than it was for those without any of these problems. Thus, there seems to be an important effect at time of onset as well as persistence in higher spending for those with serious physical conditions. These findings are not surprising—by definition, individuals with health problems are likely to use the acute health care system. It is the order of magnitude of that higher spending that is particularly interesting.

Conclusions

Medicare beneficiaries are more likely than the rest of the population to have physical problems. Those that do are likely to spend considerably more than that spent by other Medicare beneficiaries. Because more than one-third of Medicare beneficiaries have physical problems, spending on vulnerable populations is a major issue for the program.

[14] Details of this regression analysis are contained in the Appendix.

Further, these findings raise a number of policy issues that should be included in the debate over various reform options.

First, if Medicare's reliance on managed care plans or other private sector initiatives increases, mechanisms that adequately adjust for risk selection will be necessary. Both beneficiaries and plans will know who expects to have much higher than average spending. Without such protections, private plans will not welcome those in poor health. Beneficiaries who know they have special needs will be skeptical of joining such plans unless they can be assured that government payments will be enough to assure access to care.

These findings also mean that the fee-for-service approach is likely to be needed for some time in order to serve people with multiple problems. Until private plans serve such patients well and can convince vulnerable beneficiaries of that, those with physical and cognitive problems are likely to remain in fee-for-service in disproportionate numbers. Arguments for a level playing field for Medicare must take into account the higher costs that traditional Medicare will face regardless of its efficiency since it will continue to serve a sicker population.

Efforts to slow the growth in Medicare spending through higher cost sharing would place an inordinate burden on those who already face very high health care spending. Further, since many of these physically vulnerable beneficiaries also have low incomes, out-of-pocket cost issues are even more important. It might be necessary to extend protections for low-income people further up the income scale than the levels in the Medicare savings programs, which cover people up to 175 percent of the poverty level.[15] Additional efforts to change such protections to raise participation would also be crucial to meeting the needs of vulnerable Medicare beneficiaries.

Finally, the higher-than-average levels of prescription drug costs for those with physical problems suggest that the addition of a prescription drug benefit to Medicare could be especially helpful for this group. Such an expansion would not be enough to resolve problems of burdensome out-of-pocket costs, but it would be an important first step in that direction.

[15] These are the Qualified Medicare Beneficiary, Specified Low-Income Medicare Beneficiary, and Qualified Individual programs.

APPENDIX

Definition of Vulnerable Beneficiaries

We define vulnerable beneficiaries as members of either or both of two categories—persons with cognitive problems and those with physical ailments—that we created using the Medicare Current Beneficiary Survey. The person was classified as having a cognitive difficulty if he reported having problems using the telephone or paying bills, or had ever been told he had Alzheimer's disease, mental retardation, or various other mental disorders. A beneficiary had physical problems if she had difficulty performing three or more activities of daily living (ADLs) which include bathing, dressing, eating, getting in and out of chairs, and using the toilet. A physical problem was also coded if the beneficiary was in a nursing home or similar facility for any part of the year or reported being in "poor" health. Finally, a beneficiary was classified as having a physical difficulty if he or she had three or more conditions including but not limited to a heart condition, stroke, diabetes, rheumatoid arthritis, Parkinson's disease, emphysema, and osteoporosis.

There is often a significant overlap between the two groups; in 1996, 56 percent of beneficiaries with physical impairments also had cognitive problems. Upon analyzing our regression results, we determined that physical difficulties are a better predictor of health spending levels, and therefore chose to limit most of our analysis to these disabilities.

The 1994–1996 Longitudinal File

The longitudinal file was derived from merging the 1994, 1995, and 1996 Medicare Current Beneficiary Cost and Use files using the unique person identifier. There are several factors to consider when comparing the longitudinal files to the 1996 MCBS data. (Table A-1). First, since there are three years of data for every beneficiary, we know that members of the longitudinal database were generally healthier because they were healthy enough to be surveyed every year. On a related note, we were forced to remove "ghosts" from each year, because there were overlapping identifier values.[16] In 1996, ghosts accounted for 6.3 percent of the MCBS sample, and had at least 2.5 times the level of total, Medicare, and out-of-pocket spending as their non-ghost counterparts. Therefore, we are missing a high-cost segment of the MCBS population.

[16] A "ghost" is a beneficiary who is part of a supplemental sample that began the survey late. Since the ghost identifier values are reset each year, we could not link them longitudinally.

Table A-1. Socio-Demographic Characteristics by Study Population

	1996 MCBS Population		Longitudinal Population	
	With Physical Difficulties (%)	Without Physical Difficulties (%)	With Physical Difficulties (%)	Without Physical Difficulties (%)
All Beneficiaries	23.0	77.0	26.7	73.4
Sex				
Female	60.4	55.4	60.9	56.5
Male	39.6	44.6	39.1	43.5
Poverty				
Below poverty	44.4	16.2	31.6	16.8
100%–200%	28.0	30.3	36.6	32.7
200%–400%	20.4	34.0	23.7	34.3
Greater than 400%	7.2	19.5	8.2	16.2
Income				
Less than $5,000	29.1	4.3	7.1	4.2
$5,000–$15,000	37.0	34.0	54.5	35.8
$15,000–$20,000	8.3	11.9	10.0	13.6
$20,000–$25,000	7.7	10.9	10.6	10.9
$25,000–$50,000	13.7	27.2	13.7	25.5
Greater than $50,000	4.2	11.8	4.2	10.0
Marital Status				
Married	38.1	56.3	37.4	52.3
Unmarried	61.9	43.7	62.7	47.7
Age				
64 and younger	21.0	8.5	16.8	7.3
65–69	12.2	28.2	7.8	9.8
70–74	15.2	24.7	19.7	35.4
75–79	14.5	19.0	16.0	23.7
80–84	15.6	11.9	16.8	13.0
85 and older	21.6	7.8	23.0	10.8
Race				
Hispanic	7.4	5.3	6.7	5.4
White	80.2	84.2	79.7	84.1
Black	10.1	8.2	11.7	8.7
Other	2.4	2.3	1.9	1.8
Receive Medicaid				
Yes	13.4	4.0	12.7	3.7
No	86.6	96.1	87.3	96.3

Source: 1994–96 Medicare Current Beneficiary Surveys.

There was also a difference in the institutionalized population. When we conducted demographic runs including and excluding institutionalized beneficiaries, there was a much bigger difference in the static 1996 MCBS population with respect to poverty and income. We believe that the sickest institutionalized beneficiaries (and consequently

the poorest) from the 1994 MCBS probably died before 1996, and therefore were not included in the longitudinal data set.

When running regressions on the longitudinal data set, we excluded Medicare+ Choice beneficiaries because they do not have claims data, and beneficiaries with current employer insurance because Medicare is not the first payer. Additionally, we excluded beneficiaries with end-stage renal disease, because they are certainly not typical of an average Medicare beneficiary, and therefore should not be considered in a predictive model.

Regression Analysis

We ran regressions on the longitudinal population sample in order to determine the effects of physical disabilities on Medicare expenditures. This technique allowed us to control for a number of potentially important factors at the same time. And by using the log of the dependent variable, the coefficients from the regression can be viewed as percentage changes from the norm. Our dependent variable was the logarithm of Medicare reimbursements in 1996, and we looked at people who had physical disabilities with different years of onset. We divided them into three categories—those who had a physical problem beginning in 1996, those who had a physical problem in 1996 as well as in 1994 and/or 1995, and those who had a disability in 1994 and/or 1995 but not 1996. The comparison group was composed of beneficiaries who did not have a physical problem in any of the three years. We controlled for several other independent variables, including dummies for being white, male, residing in a nursing home, receiving Medicaid, having employer-sponsored insurance, and having individually purchased insurance (the comparison group was composed of those with no supplemental insurance). Additionally, there were continuous variables for income and age.

The results confirmed our suspicions that the date of onset of the condition in question made an enormous difference in spending levels. Controlling for all of the aforementioned demographic characteristics, a beneficiary who had a physical disability that began in 1996 had Medicare reimbursements 14.6 times higher than beneficiaries with no physical difficulties did.[17] Onset in 1996 was also important; those with earlier onset or those who had recovered had Medicare costs 5.0 and 2.2 times higher than healthy beneficiaries respectively, indicating that while there were key differences, 1996 onset was a more important factor. All three groups were significant. Also significant were age, employer-sponsored insurance, and individually purchased Medigap insurance (Table A-2).

[17] This value was obtained from exponentiation of the coefficients in our logarithmic model. We did this because the percentage approximation breaks down at coefficient values as high as the ones that we obtained.

Table A-2. Coefficients for Variables Explaining Medicare Spending*

Explanatory Variable	Coefficient
Physical difficulty in 1994 or 1995, but not 1996	.781** (.373)[a]
Physical difficulty in 1996 and 1994 and/or 1995	1.60*** (.171)
Physical difficulty only in 1996	2.68*** (.292)
Age in 1996	.026*** (.005)
Male	-.205 (.136)
White	.182 (.200)
Resided in a nursing facility in 1996	.252 (.215)
Income in 1996	-.00000143 (.000)
On Medicaid in 1996	.308 (.244)
Had employer-sponsored supplemental insurance in 1996	.466** (.185)
Had individually purchased supplemental insurance in 1996	.486*** (.187)

* Dependent variable is the log of Medicare spending in 1996.

** Significant coefficient at the 5 percent level of significance.

*** Significant coefficient at the 1 percent level of significance.

[a] Standard errors are in parentheses.

Source: Urban Institute analysis using 1994–96 Medicare Current Beneficiary Surveys.

RELATED PUBLICATIONS

In the list below, items that begin with a publication number are available from The Commonwealth Fund by calling our toll-free publications line at 1-888-777-2744 and ordering by number. These items can also be found on the Fund's website at www.cmwf.org. Other items are available from the authors and/or publishers.

#470 *Medicare+Choice: An Interim Report Card* (July/August 2001). Marsha Gold, Mathematica Policy Research, Inc. *Health Affairs,* vol. 20, no. 4. The author gives Medicare+Choice (M+C) a "barely passing grade," noting disparities between what Congress intended under M+C and what was achieved. The author suggests that while operational constraints help explain experience to date, fundamental disagreements in Congress over Medicare's future mean that dramatic growth in M+C was then, and remains now, highly unlikely.

#467 *Raising Payment Rates: Initial Effects of BIPA 2000* (June 2001). Marsha Gold and Lori Achman, Mathematica Policy Research, Inc. This "Fast Facts" brief, published by Mathematica, examines how the Benefits Improvement and Protection Act (BIPA) changed payment rates to Medicare+Choice plans in counties with a metropolitan area of 250,000 people or more. Available online at www.mathematica-mpr.com/PDFs/fastfacts6.pdf *or* www.cmwf.org/programs/medfutur/gold_bipa_467.pdf.

#463 *Strengthening Medicare: Modernizing Beneficiary Cost-Sharing* (May 2001). Karen Davis. In invited testimony before a House Ways and Means Health Subcommittee hearing , the Fund's president cautioned that any effort to reform Medicare's benefit package must take into account the circumstances of all beneficiaries, including those who are older, low-income, and chronically ill.

#461 *Reforming Medicare's Benefit Package: Impact on Beneficiary Expenditures* (May 2001). Stephanie Maxwell, Marilyn Moon, and Matthew Storeygard, The Urban Institute. This report presents four possible options for modernizing Medicare that would reverse spiraling costs for beneficiaries and reduce or eliminate the need for private supplemental insurance.

Medicare Works (Spring 2001). Bruce Vladeck. *Harvard Health Policy Review,* vol. 2, no. 1. Reprinted from *New Jersey Medicine,* March 2000. Available online at http://hcs.harvard.edu/~epihc/currentissue/spring2001/vladeck.html.

#460 *Trends in Premiums, Cost-Sharing, and Benefits in Medicare+Choice Health Plans, 1999–2001* (April 2001). Marsha Gold and Lori Achman, Mathematica Policy Research, Inc. This issue brief provides an early look at trends in Medicare+Choice plans from 1999 to 2001, revealing continued growth in premiums and a simultaneous continued decline in benefit comprehensiveness.

Dynamics in Drug Coverage of Medicare Beneficiaries: Finders, Losers, Switchers (March/April 2001). Bruce Stuart, Dennis Shea, and Becky Briesacher. *Health Affairs,* vol. 20, no. 2. Copies are available from *Health Affairs,* 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133, Tel: 301-656-7401 ext. 200, Fax: 301-654-2845, www.healthaffairs.org.

Health Policy 2001: Medicare (March 22, 2001). Marilyn Moon. *New England Journal of Medicine,* vol. 344, no. 12. Copies are available from Customer Service, New England Journal of Medicine, P.O. Box 549140, Waltham, MA 02454-9140, Fax: 800-THE-NEJM, (800-843-6356), www.nejm.org.

#430 *Growth in Medicare and Out-of-Pocket Spending: Impact on Vulnerable Beneficiaries* (January 2001). Stephanie Maxwell, Marilyn Moon, and Misha Segal, The Urban Institute. Medicare beneficiaries

will have to pay substantially more out of their own pockets for health care in the future, according to this new report. The authors find that those with low incomes and health problems will be at even greater risk than average beneficiaries for costs such as Medicare premiums, medical services, and prescription drugs.

A Moving Target: Financing Medicare for the Future (Winter 2000/2001). Marilyn Moon, Misha Segal, and Randall Weiss, The Urban Institute. *Inquiry,* vol. 37, no. 4. Copies are available from *Inquiry,* P.O. Box 527, Glenview, IL 60025, Tel: 847-724-9280.

#436 *Designing a Medicare Drug Benefit: Whose Needs Will Be Met?* (December 2000). Bruce Stuart, Becky Briesacher, and Dennis Shea. Many current proposals for providing a prescription drug benefit under Medicare would cover only beneficiaries with incomes at the federal poverty level or slightly above. In this issue brief, the authors propose a broader definition of need that includes beneficiaries without continuous and stable coverage, those with high expenditures, and those with multiple chronic conditions. Under this expanded definition, nearly 90 percent of beneficiaries would be eligible for coverage.

Socioeconomic Differences in Medicare Supplemental Coverage (September/October 2000). Nadereh Pourat, Thomas Rice, Gerald Kominski, and Rani E. Snyder. *Health Affairs,* vol. 19, no. 5. Copies are available from *Health Affairs,* 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133, Tel: 301-656-7401 ext. 200, Fax: 301-654-2845, www.healthaffairs.org.

#395 *Early Implementation of Medicare+Choice in Four Sites: Cleveland, Los Angeles, New York, and Tampa–St. Petersburg* (August 2000). Geraldine Dallek and Donald Jones, Institute for Health Care Research and Policy, Georgetown University. This field report, based on research cofunded by The Commonwealth Fund and the California Wellness Foundation, examines the effects of Medicare+Choice—created by the Balanced Budget Act of 1997—on Medicare beneficiaries in four managed care markets.

#394 *Medicare+Choice in 2000: Will Enrollees Spend More and Receive Less?* (August 2000). Amanda Cassidy and Marsha Gold, Mathematica Policy Research, Inc. Using information from HCFA's Medicare Compare consumer-oriented database of Medicare+Choice plans, this report provides a detailed look at changes in benefits offered under Medicare+Choice in 1999–2000, focusing on benefit reductions and small capitation rate increases that are shifting costs to beneficiaries.

#393 *What Do Medicare HMO Enrollees Spend Out-of-Pocket?* (August 2000). Jessica Kasten, Marilyn Moon, and Misha Segal, The Urban Institute. Medicare+Choice plans are scaling back benefits and shifting costs to enrollees through increases in service copayments and decreases in the value of prescription drug benefits. This report examines the financial effects of these actions on Medicare managed care enrollees.

#405 *Counting on Medicare: Perspectives and Concerns of Americans Ages 50 to 70* (July 2000). Cathy Schoen, Elisabeth Simantov, Lisa Duchon, and Karen Davis. This summary report, based on *The Commonwealth Fund 1999 Health Care Survey of Adults Ages 50 to 70,* reveals that those nearing the age of Medicare eligibility and those who recently enrolled in the program place high value on Medicare. At the same time, many people in this age group are struggling to pay for prescription drugs, which Medicare doesn't cover.

#406 *Counting on Medicare: Perspectives and Concerns of Americans Ages 50 to 70* (July 2000). Cathy Schoen, Elisabeth Simantov, Lisa Duchon, and Karen Davis. This full report of findings from *The Commonwealth Fund 1999 Health Care Survey of Adults Ages 50 to 70* reveals that those nearing the age of Medicare eligibility and those who recently enrolled in the program place high value on Medicare. At the same time, many people in this age group are struggling to pay for prescription drugs, which Medicare doesn't cover.

#371 *An Assessment of the President's Proposal to Modernize and Strengthen Medicare* (June 2000). Marilyn Moon, The Urban Institute. This paper discusses four elements of the President's proposal for Medicare reforms: improving the benefit package, enhancing the management tools available for the traditional Medicare program, redirecting competition in the private plan options, and adding further resources to ensure the program's security in the coming years.

#382 *Drug Coverage and Drug Purchases by Medicare Beneficiaries with Hypertension* (March/April 2000). Jan Blustein. *Health Affairs,* vol. 19, no 2. This article shows that Medicare beneficiaries age 65 and older with high blood pressure are less likely to purchase hypertension medication if they are without drug coverage.

Who Is Enrolled in For-Profit vs. Nonprofit Medicare HMOs? (January/February 2000). Jan Blustein and Emma C. Hoy. *Health Affairs,* vol. 19, no. 1. Copies are available from *Health Affairs,* 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133, Tel: 301-656-7401 ext. 200, Fax: 301-654-2845, www.healthaffairs.org.

#365 *Prescription Drug Costs for Medicare Beneficiaries: Coverage and Health Status Matter* (January 2000). Bruce Stuart, Dennis Shea, and Becky Briesacher. This issue brief reports that prescription drug coverage of Medicare beneficiaries is more fragile than previously reported, that continuity of this coverage makes a significant difference in beneficiaries' use of prescription medicine, and that health status affects drug coverage for beneficiaries primarily through their burden of chronic illness.

#360 *Understanding the Diverse Needs of the Medicare Population: Implications for Medicare Reform* (November 1999). Tricia Neuman, Cathy Schoen, Diane Rowland, Karen Davis, Elaine Puleo, and Michelle Kitchman. *Journal of Aging and Social Policy,* vol. 10, no. 4. This profile of Medicare beneficiaries, based on an analysis of the *Kaiser/Commonwealth 1997 Survey of Medicare Beneficiaries,* reveals that a relatively large share of the Medicare population has serious health problems and low incomes.

#353 *After the Bipartisan Commission: What Next for Medicare?* (October 1999). Stuart H. Altman, Karen Davis, Charles N. Kahn III, Jan Blustein, Jo Ivey Boufford, and Katherine E. Garrett. This summary of a panel discussion held at New York University's Robert F. Wagner Graduate School of Public Service considers what may happen now that the National Bipartisan Commission on the Future of Medicare has finished its work without issuing recommendations to the President. It also examines possible reform opportunities following the November 2000 elections.

#346 *Should Medicare HMO Benefits Be Standardized?* (July/August 1999). Peter D. Fox, Rani Snyder, Geraldine Dallek, and Thomas Rice. *Health Affairs,* vol. 18, no. 4. The only Medicare supplement (Medigap) policies that can be sold are those that conform to the 10 standardized packages outlined in federal legislation enacted in 1990. In this article the authors address whether Medicare HMO benefits should also be standardized for the roughly 6 million Medicare beneficiaries now enrolled in HMOs.

#232 *Risk Adjustment and Medicare* (June 1999). Joseph P. Newhouse, Melinda Beeuwkes Buntin, and John D. Chapman, Harvard University. Medicare's payments to managed care plans bear little relationship to the cost of providing needed care to beneficiaries with different health conditions. In this revised paper, the authors suggest using two alternative health risk adjusters that would contribute to more cost-effective care and reduce favorable risk selection and the incentive to stint on care.

#318 *Growth in Medicare Spending: What Will Beneficiaries Pay?* (May 1999). Marilyn Moon, The Urban Institute. Using projections from the 1998 Medicare and Social Security Trustees' reports to examine how growth in health care spending will affect beneficiaries and taxpayers, the author explains that no easy choices exist that would both limit costs to taxpayers while protecting Medicare beneficiaries from the burdens of health care costs.

#317 *Restructuring Medicare: Impacts on Beneficiaries* (May 1999). Marilyn Moon, The Urban Institute. The author analyzes premium support and defined contribution—two of the more prominent approaches proposed to help Medicare cope with the health care needs of the soon-to-retire baby boomers—and projects these approaches' impacts on future beneficiaries.

#310 *Should Medicare HMO Benefits Be Standardized?* (February 1999). Peter D. Fox, Rani Snyder, Geraldine Dallek, and Thomas Rice. The only Medicare supplement (Medigap) policies that can be sold are those that conform to the 10 standardized packages outlined in federal legislation enacted in 1990. In this paper the authors address whether Medicare HMO benefits should also be standardized for the roughly 6 million Medicare beneficiaries now enrolled in HMOs.

Budget Bills and Medicare Policy: The Politics of the BBA (January/February 1999). Charles N. Kahn III and Hanns Kuttner. *Health Affairs,* vol. 18, no. 1. Copies are available from *Health Affairs,* 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133, Tel: 301-656-7401 ext. 200, Fax: 301-654-2845, www.healthaffairs.org.

Will the Care Be There? Vulnerable Beneficiaries and Medicare Reform (January/February 1999). Marilyn Moon. *Health Affairs,* vol. 18, no. 1. Copies are available from *Health Affairs,* 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133, Tel: 301-656-7401 ext. 200, Fax: 301-654-2845, www.healthaffairs.org.

The Political Economy of Medicare (January/February 1999). Bruce C. Vladeck. *Health Affairs,* vol. 18, no. 1. Copies are available from *Health Affairs,* 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133, Tel: 301-656-7401 ext. 200, Fax: 301-654-2845, www.healthaffairs.org.

#308 *Medicare Beneficiaries: A Population at Risk—Findings from the* Kaiser/Commonwealth 1997 Survey of Medicare Beneficiaries (December 1998). Cathy Schoen, Patricia Neuman, Michelle Kitchman, Karen Davis, and Diane Rowland. This survey report, based on beneficiaries' own accounts of their incomes and health status, points to serious challenges in insuring an aging, vulnerable population.

#294 *Improving Coverage for Low-Income Medicare Beneficiaries* (December 1998). Marilyn Moon, Niall Brennan, and Misha Segal, The Urban Institute. The authors examine ways in which the Qualified Medicare Beneficiary and related programs could be modified to increase participation and protect more sick and low-income Medicare beneficiaries.

#302 *The Future of Medicare* (November 1998). Brian Biles, Susan Raetzman, Susan Joseph, and Karen Davis. This issue brief discusses the two ways in which the National Bipartisan Commission on the Future of Medicare is examining the Medicare program and making recommendations to keep it fiscally healthy into the twenty-first century: through the development of incremental reforms and the analysis of major restructuring. The authors also discuss projections of the future costs of care and sources of revenues to finance care for the elderly and disabled.

#272 *Shaping the Future of Medicare* (April 1998). Karen Davis. Presented as invited testimony before the National Bipartisan Commission on the Future of Medicare's hearing on "Medicare and the Baby Boomers" on April 21, 1998, this report suggests ways to prepare the Medicare program for the challenge of coping with unprecedented numbers of elderly and disabled Americans. The author identifies several principles to guide the debate.

#280 *Potential Effects of Raising Medicare's Eligibility Age* (March/April 1998). Timothy A. Waidmann. *Health Affairs,* vol. 17, no. 2. This article examines the potential impact of raising Medicare's eligibility age to 67 on public-sector health spending and individual insurance coverage, estimating that if the age change were implemented, up to half a million people ages 65 and 66 would be left without any insurance, and even more would not be able to afford coverage with benefits similar to those of Medicare.