Socioeconomic Differences In Medicare Supplemental Coverage

Adding prescription drug coverage to Medicare could put a financial squeeze on lower-income beneficiaries.

by Nadereh Pourat, Thomas Rice, Gerald Kominski, and Rani E. Snyder

ABSTRACT: In this study we compare the beneficiaries with various types of Medicare supplemental insurance coverage to examine the impact of socioeconomic characteristics on such coverage. We found that those who are more disadvantaged are less likely to have any coverage, and those who have it are less likely to have it subsidized by a former employer. These findings have direct implications for the fairness of proposed programs to provide prescription drug coverage to Medicare beneficiaries, and for the advisability of various proposals for reforming Medicare, including "premium-support" programs.

THE CURRENT CONGRESSIONAL DEBATE on extending Medicare benefits to cover prescription drugs highlights the problems that program beneficiaries face in obtaining affordable coverage for needed health care services. Because of the many gaps in and costs associated with Medicare coverage, most beneficiaries need to obtain supplemental coverage. Going "bare" poses severe financial risks because Medicare provides no maximum on out-of-pocket spending for beneficiaries with very heavy service usage and because the program provides no coverage for certain expenses, particularly prescription drugs. Obtaining supplemental coverage is fraught with its own problems, including high premiums, restricted provider choice, benefit retrenchment, and red tape.

Beneficiaries therefore are forced to make difficult choices about supplemental coverage. In this paper we examine three such choices: (1) whether beneficiaries have supplemental coverage, and the type of coverage obtained; (2) among those who do so in the

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private market, whether they have employer-sponsored or individual coverage; and (3) among those with individual coverage, whether they choose Medigap or a Medicare health maintenance organization (HMO). We are particularly interested in examining differences in socioeconomic characteristics to determine whether certain groups of people are in a better or worse position to obtain affordable supplemental coverage.

■ **Background.** Medicare beneficiaries can use many different coverage vehicles to supplement program benefits. Medigap policies, sold by private insurers, have been available since the program's inception. They provide coverage for Medicare's required deductibles and copayments and sometimes limited payment for services not covered by the program such as prescription drugs, some preventive and home services, and physician charges in excess of what Medicare deems to be reasonable. Typically, beneficiaries pay the entire premium cost of this coverage; it is not subsidized.

Rather than obtaining Medigap policies, some beneficiaries enroll in employer-sponsored retiree coverage. Typically, these retirees enjoy the same benefits that active workers in a firm do and, because coverage is subsidized, pay less in premiums than those with Medigap policies pay.[1] In 1997, for example, it was estimated that those with employer-sponsored coverage paid an average of $712 annually in premiums, compared with $1,249 for those having Medigap coverage.[2] In addition, this coverage tends to provide more benefits than all but the most expensive Medigap policies do. Most notably, in 1995 an estimated 86 percent of those with employer-sponsored retiree coverage had some prescription drug coverage, compared with only 29 percent of those with Medigap policies.[3]

A third option is Medicare managed care plans ("Medicare HMOs"). Those plans tend to provide more extensive benefits than Medigap policies do, often at a fraction of the cost. In 1999, 64 percent did not charge an additional premium beyond that required by Part B of Medicare, and among those that did, the premium averaged only $15.50 per month, much less than the average Medigap premium.[4] Furthermore, more than 80 percent cover prescription drugs.[5] In joining an HMO, of course, beneficiaries are restricted to providers in the plan. As a result, most research has found that beneficiaries who are high utilizers are less likely to join these plans.[6]

The final option, available to some beneficiaries, is Medicaid. There are several ways to qualify: traditional or full coverage, available to those who qualify for cash payments or who are deemed medically needy as a result of high medical costs; the Qualified Medicaid Beneficiary (QMB) program for those at or below the poverty level; the Specified Low-Income Medicare Beneficiary

"Supplemental insurance is the norm, not the exception—89 percent of beneficiaries had it in 1996."

(SLMB) program for those with incomes no more than 20 percent above the poverty level; and the Qualified Individuals program (QI-1s) for those with incomes of 20–35 percent more than the poverty level.[7]

Supplemental insurance is the norm, not the exception. In 1996 an estimated 89 percent of Medicare beneficiaries had such coverage.[8] Of these, 28 percent purchased Medigap coverage, 11 percent were enrolled in Medicare HMOs, 30 percent obtained employment-related coverage, 4 percent had both Medigap and employer coverage, and 17 percent were enrolled in Medicaid.

The supplemental insurance market is experiencing a number of worrisome trends, all of which call into question its viability in satisfying the needs of Medicare beneficiaries. Those who are most vulnerable are low-income persons who have substantial needs for medical care services—particularly the near-poor. Individual coverage is increasingly expensive and absorbs a very large proportion of income.[9] Employer coverage is less available than previously (and has never been available to the majority of poorer beneficiaries).[10] Finally, many cannot or do not enroll in Medicaid.[11] The remainder of this paper focuses on these disparities, presenting descriptive and multivariate analyses of the characteristics of persons who have or do not have different types of supplemental coverage.

Data And Methods

■ **Data.** The study is based on data from the 1996 Medicare Current Beneficiary Survey (MCBS) Access File. The MCBS contains a nationally representative sample of more than 14,000 Medicare beneficiaries age sixty-five and older, living in the community. In 1996 the Health Care Financing Administration (HCFA) oversampled beneficiaries enrolled in HMOs, thereby providing a much larger managed care sample than is available in more recent MCBS surveys.

■ **Statistical methods.** We compared the socioeconomic and health status of five groups of Medicare beneficiaries based on their supplemental coverage: (1) Medicare only, (2) Medicaid supplementation, (3) employer-sponsored coverage, (4) Medicare HMO coverage, and (5) Medigap coverage. Next, we conducted three sets of logistic regression analyses to assess the factors that determine the type of supplemental coverage possessed, controlling for confounding factors.[12] These analyses examined whether the person has any (non-Medicaid) Medicare supplemental coverage, whether the person has employment-based or individual coverage, and whether the

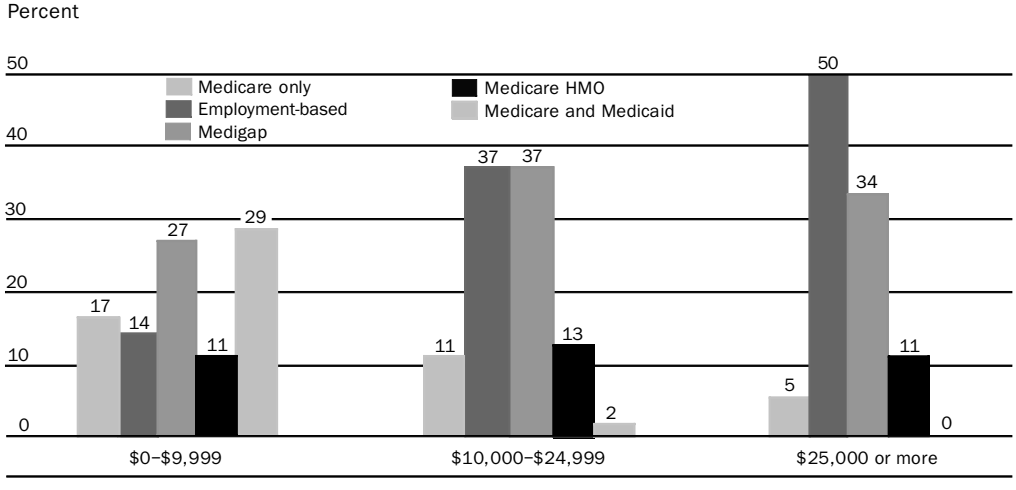
person has a Medicare HMO or a Medigap plan. We excluded those with Medicaid coverage because we believed that a person has less choice about Medicaid than other forms of coverage—that is, they must qualify for Medicaid and cannot simply choose it.

Study Results

Characteristics of Medicare supplemental policy owners. *Income.* Large income-related disparities exist in the types of supplemental coverage possessed. The proportion of those with no supplement fell as income rose (Exhibit 1). Only 5 percent of persons with the highest incomes (above $25,000) had Medicare coverage only in 1996, compared with 17 percent of those with the lowest incomes (less than $10,000). Similarly, employment-based coverage was much more common among higher-income beneficiaries: Half of those with the highest incomes had such coverage, compared with only 14 percent of those with the lowest incomes. Although there were no clear patterns in Medicare HMO and Medigap coverage according to income, the proportion of persons with Medicaid supplementation fell as income rose, as would be expected.

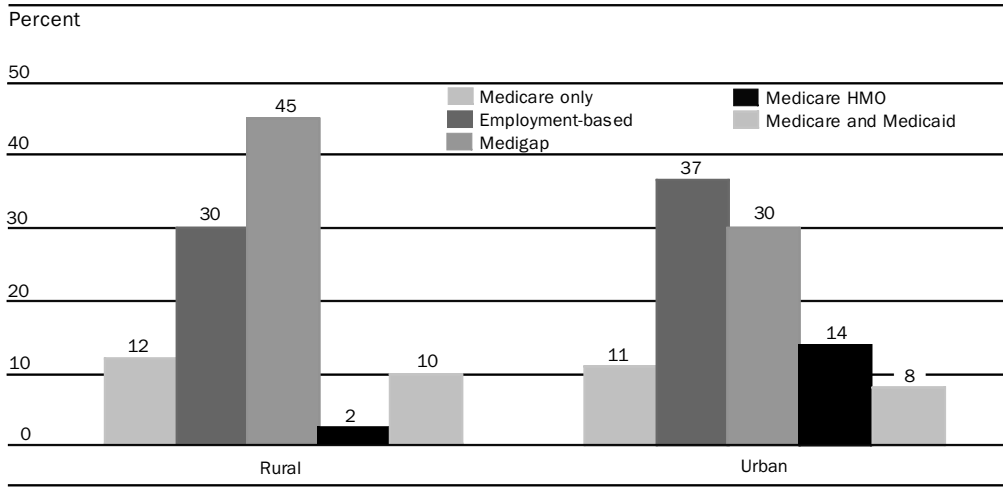
Availability. Comparing the type of coverage in urban/rural areas (Exhibit 2) reveals that the percentage of rural beneficiaries in Medicare HMOs was far lower than those in urban areas, and the percentage with Medigap coverage was far higher than for urban beneficiaries. Persons living in rural areas were less often covered by employment-based coverage than urban dwellers were. The differ-

EXHIBIT 1
Percentage Of Medicare Beneficiaries With Different Types Of Supplemental Coverage, By Income, 1996



SOURCE: Authors' analysis of the 1996 Medicare Current Beneficiary Survey Access File.
NOTE: HMO is health maintenance organization.

EXHIBIT 2
Percentage Of Medicare Beneficiaries With Different Types Of Supplemental Coverage, By Urban/Rural Residence, 1996

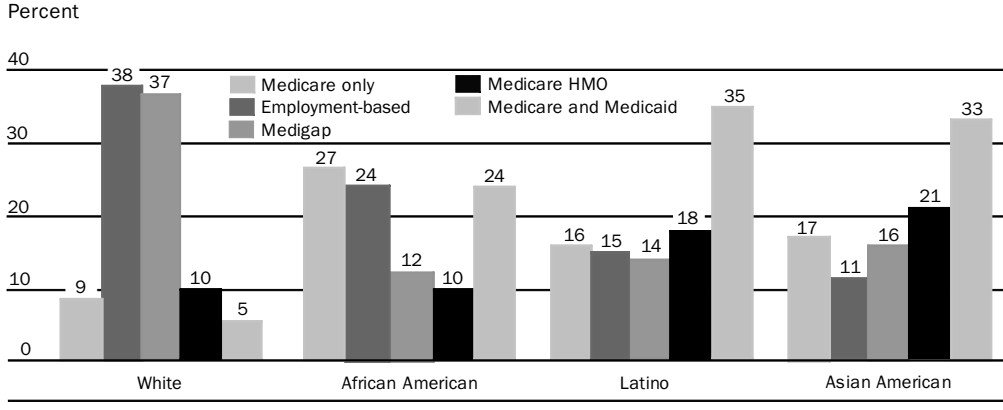


SOURCE: Authors' analysis of the 1996 Medicare Current Beneficiary Survey Access File.
NOTE: HMO is health maintenance organization.

ences in type of coverage in various geographic areas mainly reflect the availability of insurance in those areas. Managed care companies' continued withdrawal from less lucrative rural markets will leave rural beneficiaries with even less choice of supplemental coverage.

Other sociodemographic differences. The largest disparities in supplemental coverage were for race/ethnicity (Exhibit 3). Whereas only 9 percent of whites had no supplemental coverage in 1996, more than 15 percent of the other groups did, and a full 27 percent of African Americans do. Similarly, whites were far more likely than the other

EXHIBIT 3
Percentage Of Medicare Beneficiaries With Different Types Of Supplemental Coverage, By Race/Ethnicity, 1996



SOURCE: Authors' analysis of the 1996 Medicare Current Beneficiary Survey Access File.
NOTE: HMO is health maintenance organization.

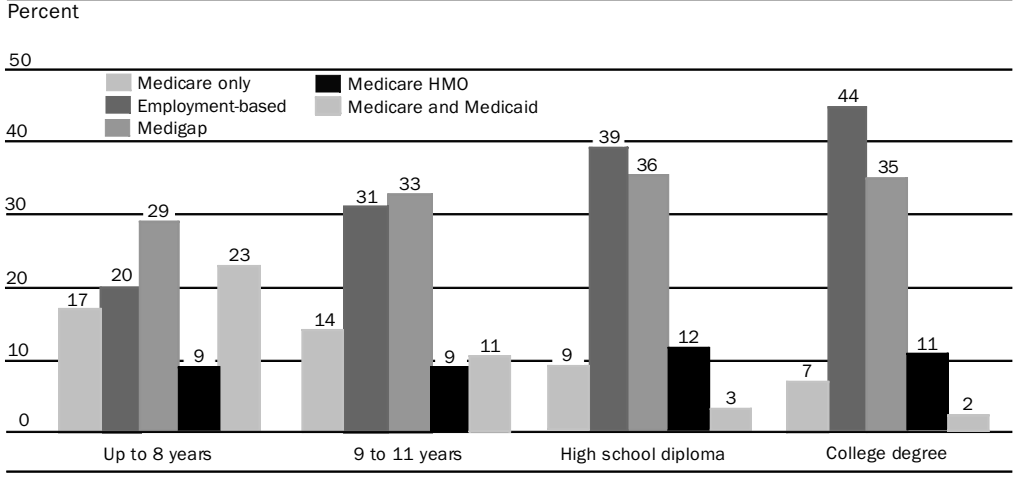
racial and ethnic groups were to have employer-based or Medigap coverage. Latinos and Asian Americans were most likely to have Medicaid, and whites were least likely. Asian Americans and Latinos had the highest Medicare HMO coverage rates, although this may be due in part to the areas of the country where they lived.

Disparities in type of supplemental coverage also are observed among persons having attained various educational levels (Exhibit 4). The rates of no supplementation and Medicaid coverage decreased as education increased. Conversely, the rates of employment-based and Medigap coverage rose with education levels. These differences reflect both the higher incomes and the types of jobs previously held by more-educated beneficiaries.

Health. More beneficiaries who considered their health to be fair or poor had no supplemental coverage (14 percent) compared with those in excellent or good health (10 percent) (Exhibit 5). Healthier beneficiaries were more likely to have employment-based and Medigap coverage and less likely to have Medicaid. A slightly higher percentage (11 percent versus 9 percent) of persons reporting better health were in Medicare HMOs. Examining other measures of health—physical and mental illnesses, limitations to performing daily activities, and other functional difficulties—showed that Medicaid beneficiaries had the poorest health status (Exhibit 6).[13] For example, they averaged 1.3 activities of daily living (ADL) limitations, compared with 0.5–0.7 for other groups. The health status of other beneficiaries was relatively similar to one another.

EXHIBIT 4

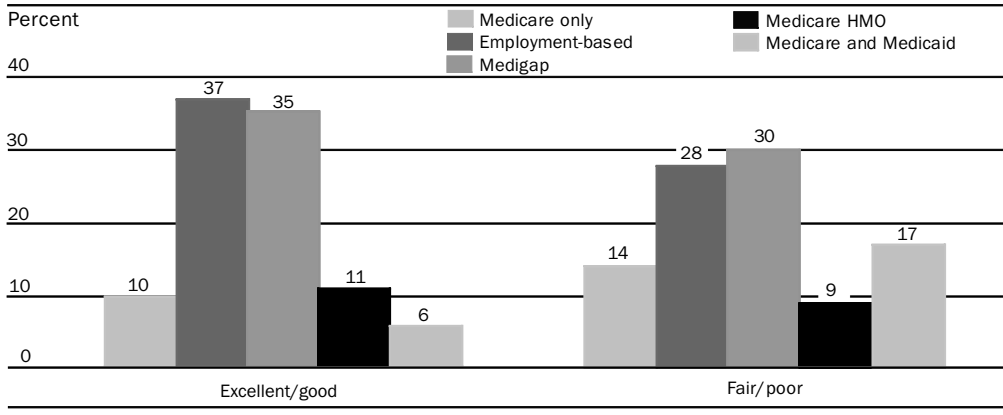
Percentage Of Medicare Beneficiaries With Different Types Of Supplemental Coverage, By Education Level, 1996



SOURCE: Authors' analysis of the 1996 Medicare Current Beneficiary Survey Access File.
NOTE: HMO is health maintenance organization.

EXHIBIT 5

Percentage Of Medicare Beneficiaries With Different Types Of Supplemental Coverage, By Self-Assessed Health Status, 1996

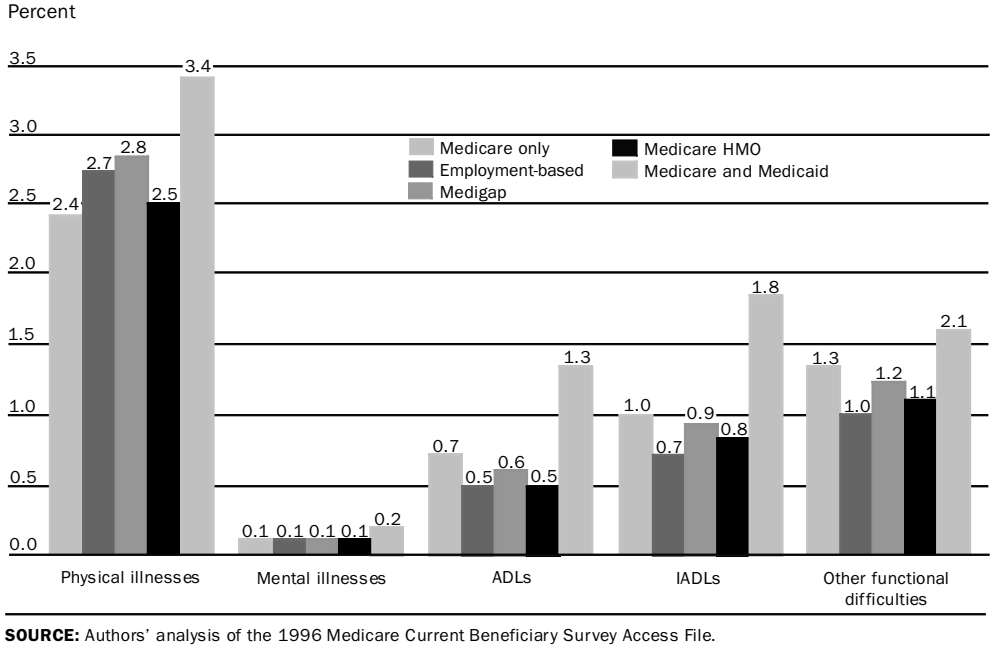


SOURCE: Authors' analysis of the 1996 Medicare Current Beneficiary Survey Access File.
NOTE: HMO is health maintenance organization.

■ **Determinants of type of supplemental coverage.** We next used logistic regression analyses to isolate the impact of each of these characteristics on the type of supplemental coverage possessed and found additional support for our descriptive findings.[14]

EXHIBIT 6

Number Of Health Indicators Reported By Medicare Beneficiaries With Different Types Of Supplemental Coverage, 1996



SOURCE: Authors' analysis of the 1996 Medicare Current Beneficiary Survey Access File.
NOTE: HMO is health maintenance organization. ADL is activities of daily living. IADL is instrumental activities of daily living.

Income. Compared with higher-income Medicare beneficiaries ($25,000 or more per year), the lowest-income beneficiaries (less than $10,000 a year) have lower odds (0.25, $p < .001$) of any non-Medicaid supplemental coverage, and such coverage is less likely (odds ratio = 0.34, $p < .001$) to be obtained through employment and more likely to be individual. If coverage is by individual policies, it is more likely (odds ratio = 1.82, $p < .001$) to be Medicare HMO than Medigap. A similar pattern was observed for beneficiaries with annual incomes between $10,000 and $25,000.

The gravitation of lower-income beneficiaries to HMOs is not surprising, since most have much lower cost sharing and premium contributions than Medigap policies have. Lower likelihood of employment-based coverage reflects previous employment in jobs without retiree coverage. Similarly, lower likelihood of any supplemental coverage indicates that the associated premiums are unaffordable.

Availability. Beneficiaries in urban areas have higher odds of supplemental coverage (1.25, $p < .01$), and higher odds of HMO rather than Medigap coverage (11.77, $p < .001$).

Other sociodemographic differences. Race/ethnicity consistently and significantly determines supplemental coverage. African American, Latino, and Asian American beneficiaries have much smaller odds (0.25, 0.53, $p < .001$, and 0.36, $p < .01$, respectively) of possessing any supplemental coverage compared to whites. Among those who had supplemental coverage and compared to whites, African Americans have higher odds of employment-based (1.56, $p < .001$) rather than individual coverage. The reverse was true for Latino and Asian Americans, who have lower odds (0.67, $p < .05$ and 0.46 $p < .01$, respectively) of individual than employment-based coverage. Among those with private coverage, both African American and Latino beneficiaries have significantly higher likelihood (odds ratio = 3.35 and 4.20, $p < .001$) of having Medicare HMO than privately purchased Medigap coverage.

Minority beneficiaries' lack of assets and the ensuing inability to afford supplemental policies are the most likely explanation for their lower likelihood of supplemental coverage and the type of coverage owned. Segregation into jobs without retirement benefits may be a second explanation for this finding. However, it appears that when offered the chance, African American beneficiaries most often take advantage of retiree coverage, in part because they tend to be the least likely to purchase Medigap policies. Minority beneficiaries also choose the lower-cost managed care options over Medigap policies, most likely because of a lack of assets.

Education also has an effect on supplemental coverage. Those with the lowest educational attainment—eight or fewer years of

"Disadvantaged beneficiaries are least likely to have supplemental coverage and most likely to gravitate into HMOs."

schooling—are less likely (odds ratio = 0.56, $p < .001$) than the college educated are to have supplemental coverage, and when they do, they are less likely (odds ratio = 0.70, $p < .001$) to have employment-based coverage. High school–educated beneficiaries (nine to eleven years) are less likely (odds ratio = 0.67, $p < .01$) than those with some college are to have supplemental coverage, but we detected no other education differences.

Health. Those reporting excellent or good health have higher odds (1.49, $p < .001$) of having supplemental coverage but do not differ significantly in the type of coverage possessed. The presence of multiple illnesses, however, increases the odds of supplemental coverage by 1.16 ($p < .001$) for each additional chronic condition. Similarly, each additional condition increases the odds of employment-based coverage by 1.03 ($p < .05$) but decreases the odds of Medicare HMO coverage by 0.91 ($p < .001$).

The presence of additional mental health conditions decreases the odds of supplemental coverage by 0.73 ($p < .01$) and increases the odds of having employment-based coverage (odds ratio = 1.06, $p < .001$) but does not alter the odds of Medicare managed care coverage. ADL, instrumental ADL (IADL), or other types of difficulties do not affect the probability or type of coverage.

In short, the evidence is mixed regarding selection bias in the supplemental insurance market. Although policy owners report better self-assessed health status and fewer mental illnesses, they have more physical illnesses than nonowners have. In the individual market there is some mild evidence of favorable selection into Medicare HMOs. Beneficiaries in HMOs report fewer physical illnesses and functional disabilities; however, no significant differences were found with respect to ADLs, IADLs, and mental illness.

Discussion

Both the descriptive and the multivariate analyses point to the same pattern: Those who are most disadvantaged—beneficiaries with low income and education, and nonwhites—are least likely to have supplemental coverage, and when they do it is less likely to be subsidized by an employer. Although the pattern is a little less strong, there also is a tendency for more-disadvantaged groups to gravitate into Medicare HMOs.

The results have important implications for various proposals to reform Medicare. President Bill Clinton has proposed to provide

voluntary coverage for some prescription drug costs. When fully phased in, it would cover 50 percent of prescription drug costs with maximum Medicare payout of $2,500 annually. Low-income beneficiaries would receive some assistance with premiums.[15]

The results of this study, however, raise concerns about who will purchase this coverage. They are likely to be those who are most able to afford it: persons with higher incomes and educational levels, whites, and those who are married. The availability of such a voluntary insurance program also would put lower-income beneficiaries above the subsidy threshold level (150 percent of the poverty level) in a difficult position. If they chose to purchase this coverage, they might not be able to afford a regular Medigap plan that provides financial protection against incurring catastrophic Part A or Part B expenses.

The findings also have implications for proposals calling for more fundamental reform of Medicare through a premium-support program. The results of this study demonstrate that disadvantaged beneficiaries will be less likely to be able to afford to supplement their "vouchers" and may find themselves segmented into "bare-bones" plans. Such plans would tend to cover only the most basic Medicare services and would be likely to have more-limited provider panels. There also could be problems associated with access and quality, although previous research on this is far from definitive. This problem would be especially acute if, over time, the value of the vouchers did not keep pace with premium increases.

Even more serious problems arise from the fact that sicker beneficiaries tend to be poorer. As a result, low-cost plans could have a disproportionate share of enrollees in poorer health. To keep premiums in check, these plans would have to exercise particularly stringent control over utilization, which in turn would seriously jeopardize access to needed services. Little progress has been made thus far in the adoption of an effective risk adjustment formula, which would mitigate this problem.

THE CHALLENGE FACING POLICYMAKERS is to come up with reforms to Medicare that will help to bridge the gap between more-disadvantaged beneficiaries and others. This can be done by expanding program benefits to all beneficiaries, but obviously it is a costly solution. The idea should not be rejected out of hand, however. It is not clear, for example, why prescription drug benefits should not receive the same level of subsidy that Medicare Part A and Part B services receive. Our findings suggest that issues of equity and fairness should receive more consideration as the debate to reform Medicare progresses.

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NOTES

1. M. Morrisey, G. Jensen, and S. Henderlite, "Employer-Sponsored Health Insurance for Retired Americans," *Health Affairs* (Spring 1990): 57–73.
2. D. Gross et al., "Out-of-Pocket Spending by Medicare Beneficiaries Age 65 and Older: Further Analysis of 1997 Projections" (Paper presented at the Association for Health Services Research Annual Meeting, Washington, D.C., June 1998, prepared by the AARP Public Policy Institute and the Lewin Group, 23 June 1998).
3. M. Gluck, *A Medicare Prescription Drug Benefit*, Medicare Brief no. 1 (Washington: National Academy of Social Insurance, April 1999).
4. "Insufficient Government Funding for Beneficiaries Forces Medicare HMO Cutbacks" (Press release, American Association of Health Plans, Washington, D.C., 1 July 1999.)
5. Gluck, *A Medicare Prescription Drug Benefit.*
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7. Families USA Foundation, *Shortchanged: Billions Withheld from Medicare Beneficiaries*, Pub. no. 98-102 (Washington: Families USA Foundation, July 1998).
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9. L. Alecxih et al., "Key Issues Affecting Accessibility to Medigap Insurance" (New York: Commonwealth Fund, August 1997).
10. U.S. General Accounting Office, *Retiree Health Insurance: Erosion in Retiree Health Benefits Offered by Large Employers*, Pub no. GAO/T-HEHS-98-110 (Washington: GAO, 1998); and KPMG Peat Marwick, *Health Benefits in 1998* (Washington: KPMG Peat Marwick, 1998).
11. Families USA Foundation, *Shortchanged.*
12. All analyses were weighted by the annual MCBS weights for cross-sectional data, and weights were normalized so that their sum equaled the sample size. The standard errors of the estimates were corrected for the design effect of the MCBS using SUDAAN statistical software. Confounding factors included sex, marital status, and region of residence.
13. Physical illnesses include an index of hardening of arteries, hypertension, myocardial infarction, angina pectoris/coronary heart disease, heart conditions, stroke/brain hemorrhage, skin cancer, other cancer/tumor, diabetes, rheumatoid arthritis, arthritis, osteoporosis, broken hip, emphysema, asthma, chronic obstructive pulmonary disorder, and partial paralysis. Mental illnesses or diseases with mental illness components include Parkinson's disease, mental disorders, Alzheimer's disease, and mental retardation. ADLs include difficulties with bathing/showering, dressing, eating, getting in/out of chairs, walking, and using the toilet. IADLs include difficulties with using the phone, doing housework, making meals, shopping, and managing money. Other difficulties include difficulties with stooping/kneeling, lifting ten pounds, reaching overhead, writing, and walking.
14. For a table of these results, e-mail Thomas Rice at trice@ucla.edu.
15. Nancy-Ann Min DeParle, testimony on "A Medicare Prescription Drug Benefit" before the House Ways and Means Health Subcommittee, 11 May 2000.