Avoidance Of Health Care Services Because Of Cost: Impact Of The Medicare Savings Program

The QMB program for low-income seniors appears to improve access to care, but only one-third of eligible seniors participate.

by Alex D. Federman, Bruce C. Vladeck, and Albert L. Siu

ABSTRACT: The Qualified Medicare Beneficiary (QMB) program, part of the Medicare Savings Program, provides Medicare premium and cost-sharing assistance to low-income beneficiaries but has low participation rates. We examined the potential for QMB coverage to reduce the avoidance of health care services because of cost among low-income seniors in eight states. Only one-third of eligible seniors participated. Adjusted for demographics and health status, QMB enrollees were half as likely as nonenrollees to avoid physician visits because of cost. Despite its potential to improve access to primary care, the QMB program is underused. Future policy and research efforts should address low participation rates.

MEDICARE PREMIUMS AND COST SHARING contribute greatly to out-of-pocket costs for elderly Medicare beneficiaries, an issue that has been overshadowed by the recent debate on prescription drugs. For Part B, beneficiaries have a $100 deductible, a 20 percent copayment for most services, and a premium that increased 13 percent in 2004 to $799. About 12 percent of elderly beneficiaries have incomes at or below the federal poverty level; such beneficiaries are particularly susceptible to the ill effects of these costs.[1] Poverty-level seniors without supplemental coverage spent 6 percent of their income on copayments for outpatient services and 8 percent on the Part B premium in 1997, amounts that are likely to be greater today.[2] The cost-sharing burden will grow for these and other seniors under the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003, which mandates rises in the deductible with premium increases. The premium itself is expected to increase 15 percent in 2005, with an average annual increase of 6.6 percent through 2014—well above inflation.

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Medigap (Medicare supplemental), Medicare managed care, and Medicaid are low-income seniors' principal options for assistance with Part B costs, but access is often a problem. The most basic Medigap plans have premiums that average more than $1,000 per year. Medicare managed care has low market penetration and uptake: Only 11 percent of seniors were enrolled in 2003, and this number is not expected to grow despite increased payments to private insurers under MMA.[3] Lastly, income eligibility for Medicaid is 64–100 percent of poverty, which effectively restricts access for many near-poor and poor seniors.

The Medicare Savings Program (MSP) is a promising alternative for helping low-income beneficiaries pay their Medicare costs.[4] Through Medicaid, the MSP pays Part B premium and copayments for Medicare beneficiaries—known as qualified Medicare beneficiaries (QMBs)—with annual incomes below 100 percent of poverty and annual assets less than $4,000 for singles or $6,000 for couples. Part B premium assistance alone is provided to beneficiaries with incomes at 100–120 percent of poverty, known as specified low-income Medicare beneficiaries (SLMBs). The MSP may have another benefit beginning in 2006, since policymakers are considering providing MSP beneficiaries with automatic subsidies for Part D prescription coverage.

Despite its benefits, the MSP is underenrolled by as much as 65 percent.[5] A better understanding of the MSP's impact on access to care could bolster efforts to promote the program, but data on its performance are limited. To help define the impact, we compared self-reported avoidance of medical care because of costs between MSP enrollees and nonenrollees.

Study Data And Methods

■ **Data source and subjects.** We used data from the 2001 Study of Seniors' Prescription Coverage, Use, and Spending, a survey of noninstitutionalized Medicare beneficiaries age sixty-five and older. The survey oversampled seniors with full and partial Medicaid coverage from low-income neighborhoods in eight states (California, Colorado, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas). English- and Spanish-language surveys were mailed to 24,950 seniors in 2001, with a 55 percent response rate. Overall, respondents were somewhat younger and less representative of minorities and people from low-income areas than nonrespondents were. Details of the sampling design are described elsewhere.[6]

Our analyses focused on the QMB program. We included people who reported income and assets that would qualify them for QMB benefits. Data from the Centers for Medicare and Medicaid Services (CMS) were used to determine actual QMB enrollment. One limitation of the CMS data is that Illinois did not indicate whether QMB enrollees also have full Medicaid benefits. Moreover, QMB programs in different states may provide prescription drug coverage through Medicaid, thereby complicating analyses of basic QMB benefits. We addressed these data limitations by excluding from our primary analyses any respondents who

said that they were enrolled in Medicaid. We also conducted two subgroup analyses, one that excluded Illinois residents and another that excluded those who reported having Medicaid prescription drug coverage, which we used as a proxy for full Medicaid benefits. The results of the former subgroup analysis were qualitatively similar to those of the primary analysis and are not reported here.

■ **Outcomes and statistical analysis.** We examined the association between QMB coverage and avoidance of physician visits, hospital visits, and prescription filling because of costs in the twelve months before the survey. Outcomes were based on responses to the following questions: (1) Have you gone without getting care from a doctor because it cost too much? (2) Was there a time you thought you needed to be admitted to the hospital but you did not go because you worried about what it would cost you? (3) How many times did you decide not to fill a prescription because it was too expensive (coded as none versus one or more times)?

We modeled these outcomes as a function of QMB status using logistic regression and adjusted for factors that might influence access to or need for health care. We included covariates in a model if their bivariate association with the outcome had a *p* value less than .25. We used multiple imputation to impute missing data on race, ethnicity, and education.[7] Results from models involving the multiply imputed data sets were qualitatively similar to those that involved the nonimputed data. All analyses were weighted and performed with SUDAAN statistical software (version 8.02) to account for the multilevel sampling design. Lastly, we converted the adjusted odds ratios to relative risks.[8]

Study Results

■ **Respondents' characteristics.** Of the 10,100 seniors surveyed, 1,145 met the inclusion criteria for the primary analyses, representing 22,476 low-income elderly Medicare beneficiaries. The respondents had numerous risk factors for poor access to medical care, including advanced age, low educational attainment, language barriers, and social isolation (Exhibit 1). Fourteen percent lacked supplemental insurance, consistent with previously reported national estimates, and 25 percent lacked prescription drug coverage (Exhibit 2).[9] Although most had a regular physician, emergency room use was common (62.6 percent).

As expected, these beneficiaries had high rates of chronic disease: More than three-fourths reported having one or more conditions (Exhibit 2). Hypertension and arthritis occurred most commonly, but a large fraction reported other important conditions, such as diabetes and congestive heart failure. Twenty-eight percent regularly used eight or more prescription drugs.

■ **Characteristics of QMB enrollees and nonenrollees.** Because the study oversampled Medicaid enrollees and low-income seniors, 67.5 percent of respondents were QMBs. After we accounted for the oversampling, QMBs represented only 34.3 percent of low-income elderly Medicare beneficiaries from the eight states, which is consistent with national estimates of QMB participation reported else-

EXHIBIT 1
Socioeconomic Characteristics Of Low-Income Elderly Medicare Beneficiaries, Weighted Analysis, 2001

		QMB enrollment	
	Full sample	**Yes**	**No**
Unweighted sample size	1,145	773 (67.5%)	372 (32.5%)****
Weighted sample size	22,476	7,699 (34.3%)	14,777 (65.7%)****
Age (years)	75.3	76.0	75.0*
Percent female	64.5%	71.9%	61.1%***
Race/ethnicity			
White, non-Hispanic	58.8%	47.8%	64.4%****
Black, non-Hispanic	14.0	13.8	14.1
Hispanic	18.2	23.5	15.4****
Other	9.1	14.9	6.1****
Usually speaks language other than English	24.5%	36.3%	18.3%****
State of residence			
California	18.7%	26.0%	14.9%****
Colorado	2.0	1.5	2.3****
Illinois	11.7	10.0	12.7****
Michigan	6.9	5.7	7.4****
New York	18.7	18.8	18.7
Ohio	11.7	7.3	14.0****
Pennsylvania	13.7	15.8	12.5****
Texas	16.7	15.0	17.5****
Education			
Less than grade 9	36.0%	44.4%	31.7%****
Grade 9–12	50.5	44.9	53.3**
More than grade 12	13.5	16.7	15.0
Marital status			
Married	42.5%	25.5%	51.3%****
Divorced/separated	15.4	21.3	12.4****
Widowed	36.1	45.3	31.3****
Never married	6.0	7.9	5.0*
Lives alone	37.4%	48.3%	31.8%****

SOURCE: 2001 Study of Seniors' Prescription Coverage, Use, and Spending.
NOTES: Analyses are weighted to adjust for the complex sampling design. QMB is qualified Medicare beneficiary. Significance tests indicate difference between QMBs and non-QMBs.
*$p < .10$ **$p < .05$ ***$p < .01$ ****$p < .001$

where.[10] Respondents were largely unaware of their buy-in status: Three-fourths of QMB enrollees denied participating in the program.

QMB enrollees tended to have lower socioeconomic status than nonenrollees (Exhibit 2). They were more likely to be non-English speakers, lack a high school or college education, and live alone. They were less likely to have non-Medicaid supplemental insurance but more likely to have prescription drug coverage, largely through Medicaid. Similar proportions of QMB enrollees and nonenrollees had a regular doctor, although more QMB enrollees than nonenrollees got their

EXHIBIT 2
Health Status, Insurance Coverage, And Service-Use Characteristics Of Low-Income, Elderly Medicare Beneficiaries, 2001

		QMB enrollment (%)	
Characteristic	**Full sample (%)**	**Yes**	**No**
Supplemental insurance			
Medicaid	46.7	86.3	26.2****
Employer-sponsored	15.2	3.7	21.2****
HMO	23.4	13.1	28.7****
Medigap	24.0	5.8	32.6****
VA or other	16.4	9.6	20.0****
FFS Medicare only	14.3	9.2	16.9****
Prescription drug coverage			
All	72.2	84.7	65.6****
Non-Medicaid	35.2	10.6	48.0****
Medicaid	37.0	74.1	17.6****
Health status/chronic conditions			
Poor general health	17.3	19.0	16.4
Arthritis	51.9	52.8	51.5
Asthma/COPD	15.1	21.6	11.8****
Cancer	9.8	11.0	9.2
Congestive heart failure	16.2	16.7	15.9
Diabetes	25.7	25.2	26.0
Depression	25.1	28.1	23.6
Myocardial infarction	20.2	21.7	19.4
Hypertension	60.2	66.4	56.9***
≥3 medical conditions	35.2	40.0	32.7**
Total number of medications used			
0–2	22.8	19.9	24.3
3–4	23.7	22.5	24.3
5–7	25.6	24.2	26.3
8 or more	28.0	33.4	25.1***
Language barrier	11.3	12.4	10.8
Has regular doctor	88.3	86.6	89.1
Site of most medical care			
Private office	65.1	61.4	67.1
Community clinic	11.4	17.8	8.1****
Hospital clinic	11.4	13.2	10.5
VA/other facility	12.1	7.7	14.3***
ER visit in past 12 months	62.6	57.2	65.4**
Hospitalization in past 12 months	27.0	29.6	25.6

SOURCE: 2001 Study of Seniors' Prescription Coverage, Use, and Spending.

NOTES: Analyses are weighted to adjust for the complex sampling design. QMB is qualified Medicare beneficiary. Significance tests indicate difference between QMBs and non-QMBs. HMO is health maintenance organization. FFS is fee-for-service. VA is Department of Veterans Affairs. COPD is chronic obstructive pulmonary disease. ER is emergency room.

$^{**}p < .05$ $^{***}p < .01$ $^{****}p < .001$

care in community-based clinics.

In contrast to the socioeconomic differences between QMB enrollees and non-enrollees, their illness burdens were similar. Although QMBs used slightly more

prescription drugs, there were few significant differences in rates of chronic illnesses. Also, similar percentages of QMBs and non- QMBs were hospitalized in the past twelve months, and fewer QMB enrollees used the emergency room.

■ **Avoidance of care because of cost.** These low-income seniors commonly avoided health care because of cost (Exhibit 3). Overall rates of avoidance were 30.9 percent for physician visits, 20.7 percent for hospital visits, and 26.0 percent for prescription filling. QMB participation may have had a protective effect: QMB enrollees were half as likely as nonenrollees to say that they avoided a doctor visit and were less likely to avoid a hospital visit or a prescription refill because of cost. After we accounted for demographics, health insurance, drug coverage, health status, and having a regular doctor, QMBs remained less likely than non-QMBs to avoid physician visits because of cost. Differences in the risk of avoiding hospital visits and prescription refills were no longer significant after we adjusted for potential confounders.

The subgroup analysis of low-income seniors without Medicaid drug coverage (n = 501) represented 14,165 people, with 14 percent QMB enrollment. As in the primary analysis, QMBs in this subgroup were less likely than nonenrollees to report avoiding a physician visit because of cost (Exhibit 3). They were also less likely to avoid filling prescriptions, but the association lost significance in the adjusted analysis. QMB status was not significantly associated with avoidance of hospital visits.

Discussion

■ **The good news.** The MSP was created to reduce out-of-pocket Medicare Part B costs for low-income Medicare beneficiaries. The good news is that this assistance

EXHIBIT 3
Seniors' Avoidance Of Health Care Services Because Of Cost, 2001

	QMB enrollment (%)			
Primary analysis	**Yes**	**No**	**Unadjusted relative risk (95% CI)**	**Adjusted relative risk (95% CI)**
Physician visit	18.0	37.6	0.49 (0.38, 0.63)****	0.54 (0.35, 0.82)***
Hospital visit	15.4	23.4	0.70 (0.53, 0.91)***	0.80 (0.51, 1.22)
Prescription filling	18.3	30.0	0.63 (0.50, 0.81)****	1.02 (0.45, 2.00)
Subgroup analysis				
Physician visit	28.3	40.0	0.63 (0.42, 0.95)**	0.55 (0.33, 0.89)**
Hospital visit	20.5	24.8	0.81 (0.51, 1.26)	0.73 (0.43, 1.18)
Prescription filling	43.6	33.0	1.48 (1.02, 2.15)**	1.26 (0.79, 1.88)

SOURCE: 2001 Study of Seniors' Prescription Coverage, Use, and Spending.

NOTES: The primary analysis included 1,145 seniors (weighted N = 22,476). The subgroup analysis included only low-income seniors who said that they did not have Medicaid prescription coverage. The sample size for the subgroup analysis is 501 (weighted n = 14,165). All analyses are weighted and adjusted for demographics, health insurance, prescription drug coverage, health status, and having a regular doctor. QMB is qualified Medicare beneficiary. CI is confidence interval. Statistical significance denotes test of hypothesis of relative risk (RR) ratio not equal to 1.

**$p < .05$ ***$p < .01$ ****$p < .001$

appears to improve access to care. Medicare beneficiaries with QMB coverage are less likely than non-QMBs to avoid outpatient physician visits because of cost. By extension, our results suggest that QMB participation may facilitate continuity of care by removing financial barriers to outpatient care.

We found no difference in avoidance of hospital visits or prescription filling because of cost. Since hospital visits are often made for urgent care needs, seniors may have prioritized such care over concerns about costs. Less use of prescription drugs by non-QMB enrollees might explain the lack of a difference in avoidance of prescription filling.

Our findings are consistent with earlier studies demonstrating higher rates of health services use by QMB enrollees compared with nonenrollees.[11] For example, Stephen Parente and colleagues found that QMBs had 12 percent more use of Part B services and 44 percent greater Part B spending than non-QMBs. However, this and another previous study measured health care use through administrative claims data. This approach does not clarify whether the MSP improves access to care, since MSP enrollees might use more services because of greater need. In contrast, we analyzed data from seniors who were explicitly asked about avoidance of care because of cost, which may involve less selection bias than use of claims data.

■ **The bad news.** The bad news about the MSP is the low participation rate. Despite efforts in many states to increase enrollment, fewer than two-thirds of eligible seniors participate in the program. Complicated enrollment forms, mandatory face-to-face interviews, asset tests, and lack of awareness of the program contribute to the problem.[12] Notably, QMBs use community clinics more often than nonenrollees. Access to social services, and therefore to the MSP, may be greater in such settings than in private medical offices.

■ **Limitations.** Some limitations to our study deserve mention. First, because we used cross-sectional data, we cannot conclusively state that a causal relationship exists between QMB participation and use of medical care. Second, we used self-reported outcomes, which may be subject to recall bias. However, recall bias would tend to underestimate the number of beneficiaries who avoid care because of cost. Lastly, we used data from 2001, and rates of QMB participation may have changed in the years since these data were collected. Nonetheless, responses to cost pressures by low-income elderly Medicare beneficiaries are unlikely to have changed.

■ **Implications for policy.** Low enrollment in the MSP holds two important messages for policymakers and health care providers. First, many low-income seniors may unnecessarily avoid using health care services because of the 20 percent Part B copayment. Second, experience with MSP underenrollment during its sixteen-year history should prompt concerns about access to subsidized drug coverage for low-income seniors under MMA. Medicare will subsidize Part D premiums and coinsurance for beneficiaries with incomes below 135 percent of poverty who meet specific asset tests. As with the MSP, the state Medicaid programs will determine beneficiaries' eligibility for subsidized coverage. Although the new legislation man-

dates the development of simplified enrollment forms, states have taken similar steps to improve MSP enrollment, only to achieve modest increases.[13]

Given states' poor performance with enrolling seniors in the MSP, automatic qualification for Part D subsidies for MSP enrollees deserves serious consideration by policymakers. This mechanism could help ensure access to subsidized coverage for many of the neediest seniors and, if properly advertised, could also increase enrollment in the MSP. Future research should examine state-level variations in subsidized Part D coverage among MSP enrollees.

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NOTES

1. M.E. Gluck, *Medicare Chart Book* (Menlo Park, Calif.: Henry J. Kaiser Family Foundation, Fall 2001).
2. The 2003 federal poverty level was $8,980 for individuals and $12,120 for couples. For data on beneficiary spending, see S. Crystal et al., "Out-of-Pocket Health Care Costs among Older Americans," *Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 55S, no. 1 (2000): S51–62; and D.J. Gross et al., "Out-of-Pocket Health Spending by Poor and Near-Poor Elderly Medicare Beneficiaries," *Health Services Research* 34, no. 1, Part 2 (1999): 241–54.
3. Henry J. Kaiser Family Foundation, "Medicare Advantage Fact Sheet" (Menlo Park, Calif.: Kaiser Family Foundation, March 2004).
4. K. Glaun, *Medicaid Programs to Assist Low-Income Medicare Beneficiaries: Medicare Savings Programs Case Study Findings* (Menlo Park, Calif.: Kaiser Commission on Medicaid and the Uninsured, May 2003).
5. Ibid.; J.A. Lamphere and M.L. Rosenbach, "Promises Unfulfilled: Implementation of Expanded Coverage for the Elderly Poor," *Health Services Research* 35, no. 1, Part 2 (2000): 207–217; S.T. Parente, W.N. Evans, and E.J. Bayer, *The Impact of QMB Enrollment on Medicare Costs and Service Utilization* (Bethesda, Md.: Project HOPE Center for Health Affairs, July 1995); and P.J. Neumann et al., *Identifying Barriers to Elderly Participation in the Qualified Medicare Beneficiary Program,* Report to the Health Care Financing Administration (Bethesda, Md.: Project HOPE CHA, August 1994).
6. The survey was conducted by Dana Gelb Safran and colleagues at Tufts–New England Medical Center and was supported by the Commonwealth Fund and the Henry J. Kaiser Family Foundation. See D.G. Safran et al., "Prescription Drug Coverage and Seniors: How Well Are States Closing the Gap?" *Health Affairs,* 31 July 2002, content.healthaffairs.org/cgi/content/abstract/hlthaff.w2.253 (25 October 2004).
7. Missing data were greatest for type of disease (6.1 percent missing), education (5.7 percent), number of medications used (5.7 percent), and type of primary care practice (5.1 percent). For a description of multiple imputation, see J.L. Schafer, "Multiple Imputation: A Primer," *Statistical Methods in Medical Research* 8, no. 1 (1999): 3–15.
8. J. Zhang and K.F. Yu, "What's the Relative Risk? A Method of Correcting the Odds Ratio in Cohort Studies of Common Outcomes," *Journal of the American Medical Association* 280, no. 19 (1998): 1690–1691.
9. Sixteen percent of seniors with incomes below 100 percent of poverty lacked supplemental coverage in 1997. See Gluck, *Medicare Chart Book.*
10. Lamphere et al., "Promises Unfulfilled"; Glaun, *Medicaid Programs*; Parente et al., *The Impact of QMB Enrollment;* and M. Moon, N. Brennan, and N. Segal, "Options for Aiding Low-Income Medicare Beneficiaries," *Inquiry* 35, no. 3 (1998): 346–356.
11. Parente et al., *The Impact of QMB Enrollment;* and R.J. Ozminkowski, A. Aizer, and G. Smith, "The Value and Use of the Qualified Medicare Beneficiary Program: Early Evidence from Tennessee," *Health and Social Work* 22, no. 1 (1997): 12–19.
12. Glaun, *Medicaid Programs.*
13. Ibid.