
Impact of HMO Withdrawals on Vulnerable Medicare Beneficiaries

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The Medicare+Choice (M+C) program has faced successive waves of plan withdrawals since 1999. We collected data from 1,055 beneficiaries who were involuntarily disenrolled from a health maintenance organization (HMO) that withdrew from six large markets in 1999 to investigate how they were impacted by the forced change in coverage. Administrative data from this HMO were used to oversample beneficiaries who were perceived to be vulnerable based on their poor health status in the period before the HMO withdrawal. Although most beneficiaries dealt with the withdrawals without major problems, appreciable numbers of beneficiaries did report adverse impacts. These negative impacts were more likely to occur for low-education, low-income, minority beneficiaries. We found little evidence, however, that beneficiaries who were vulnerable due to their poorer health experienced more adverse effects.

INTRODUCTION

Established by the Balanced Budget Act of 1997, the M+C program was designed to expand the range of insurance choices available to Medicare beneficiaries. The program built on the earlier Medicare HMO program, where beneficiaries who

enrolled in managed care plans typically sacrificed some provider choice in return for lower out-of-pocket costs and enriched benefits (particularly, prescription drug coverage).

Instead of expanding beneficiary choice, however, the M+C program has been fraught with successive waves of plan withdrawals and service area reductions. The first large wave of withdrawals went into effect in January 1999, when the departure of 99 plans forced some 407,000 beneficiaries to make alternative insurance arrangements. Similar plan withdrawals affected 327,000 beneficiaries in 2000, 934,000 in 2001, and 536,000 in 2002 (Gold and McCoy, 2002). Effective January 2003, 33 plans withdrew or reduced their service area, affecting approximately 125,000 beneficiaries (Harrison, 2002). As of January 2004, additional closures were announced, leaving fewer alternative managed care choices in urban areas and about the same amount of choice in rural areas (Achman and Gold, 2004). The withdrawals have alternatively been attributed to insufficient Medicare payment rates, burdensome administrative and regulatory requirements, difficulty developing viable provider networks, and normal market competition (U.S. General Accounting Office, 1999; 2000). Whatever the cause, these withdrawals have left beneficiaries in most markets with less, rather than more, choice (Gold, 2001).

Simultaneous with the plan withdrawals, there has been a marked retrenchment of supplemental benefits offered by plans

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remaining in the program, and escalating costs for plan enrollees (Zarabozo, 2001; Achman and Gold, 2002). Most notably, coverage for prescription drugs has eroded as more plans restrict their coverage to generic drugs, impose lower limits on annual coverage, require higher cost sharing, or even discontinue drug coverage altogether. Likewise, premiums charged by plans are increasing dramatically, along with the cost-sharing requirements for most services. These higher cost-sharing requirements are expected to affect enrollees in poor health disproportionately, since these beneficiaries use more services (Gold and Achman, 2002).

Beneficiaries who are involuntarily disenrolled from a M+C plan may elect to join a different M+C plan if one is operating in their area (unless that plan has enrollment caps in place), or may return to the original fee-for-service (FFS) Medicare sector. Disenrollees who select a different HMO may have to change providers, and will likely face a different set of premiums and cost-sharing requirements as well as a different benefit package. Disenrollees who return to FFS Medicare should have a less-restricted choice of providers, but are likely to face higher deductibles and coinsurance payments and will not have coverage for outpatient prescription drugs. Those who opt for FFS Medicare coverage may also purchase supplemental (Medigap) insurance. However, these policies are expensive (Gold and Mittler, 2001), and none of the plans with guaranteed access under Federal law cover prescription drugs.

Several studies have examined the impact of plan withdrawals on beneficiaries. A Henry J. Kaiser Family Foundation survey of beneficiaries who were involuntarily disenrolled effective January 1999 found post-disenrollment declines in supplemental benefits, increases in premiums and expected cost sharing, and disruptions

in care arrangements, particularly for vulnerable subpopulations (Laschober et al., 1999). Beneficiaries who returned to FFS Medicare reported large declines in benefits, especially for drugs, and especially if they did not obtain supplemental coverage. FFS beneficiaries who were disabled, over age 85, had lower incomes, or were Black or Hispanic were less likely to obtain supplemental coverage.

A similar national survey focused on the January 1999 disenrollees in rural areas (Casey, Knott, and Moscovice, 2002). Since many of these beneficiaries had no HMO option remaining after their plan left the market, they were much more likely to return to FFS Medicare. They also experienced large declines in drug coverage and significant increases in premiums, particularly when supplemental coverage was obtained. Beneficiaries who were non-white, had less education, lower incomes, or reported being in poorer health were more likely to return to FFS Medicare without supplemental insurance. These beneficiaries also were more likely to report problems obtaining replacement coverage, either because they were confused about their options or could not afford coverage comparable to their prior HMO.

A study by the U.S. Department of Health and Human Services (2000), which surveyed involuntary disenrollees in 1999 and 2000, found that the insurance transition was relatively easy for most beneficiaries, but reported problems for non-trivial segments of the population. As expected, beneficiaries who returned to FFS Medicare reported fewer disruptions in their established relationships with providers, but faced higher costs, particularly for prescription drugs and supplemental insurance. This study did not examine differences by beneficiary health status or other demographic characteristics.

More recently, a CMS survey of disenrollees also found confusion about insurance options, higher out-of-pocket costs, service disruptions, and declines in drug coverage as well as satisfaction with coverage following the HMO withdrawals (Booske, Lynch, and Riley, 2002). Vulnerable subgroups—such as minorities, those with less education, and the disabled—were more likely to return to FFS Medicare without supplemental coverage, and to be adversely affected by the loss of their HMO coverage.

RESEARCH QUESTIONS

In this article, we examine similar issues regarding the impact of the involuntary disenrollments on beneficiaries, and investigate whether vulnerable subpopulations of beneficiaries were disproportionately affected. In particular, we examine whether beneficiaries who were in worse health prior to the HMO withdrawal—as measured by their actual health care utilization patterns in the preceding year—were more likely to suffer adverse consequences from the loss of HMO coverage. Specific questions include:

- Did disenrollees understand their insurance choices and know what they needed to do to select new coverage?
- What insurance choices did they make immediately following disenrollment? Did they subsequently select different coverage?
- Were there changes in prescription drug coverage as a result of the change in insurance coverage?
- How were out-of-pocket expenditures affected?
- Did the use of physicians or prescription drugs change following disenrollment?
- Were there disruptions in established patient-provider relationships?

- How was satisfaction with care affected?
- How did these impacts vary by type of beneficiary? Were beneficiaries in poor health prior to the HMO withdrawal affected more than other types of beneficiaries?

DATA

Data presented here are from a survey of aged beneficiaries who were involuntarily disenrolled from their Medicare HMO during the first large-scale wave of withdrawals of January 1999.¹ Working with our partner—UnitedHealth Group (UnitedHealth)—we selected six markets in which UnitedHealth had stopped offering their Medicare product at that time (Atlanta, Georgia; Dallas, Texas; Denver, Boulder, Colorado Springs, and Fort Collins, Colorado; Tampa and Orlando, Florida; Cleveland and Columbus, Ohio; and New York City and the New Jersey suburbs). This sampling frame differs from the national frame used by all other studies previously cited; it was chosen so that we would be able to sample beneficiaries specifically based on prior health status and utilization. A sensitivity analysis using the 1998 Medicare denominator file showed that our respondents were somewhat younger than the total M+C population in their respective States.

The UnitedHealth HMOs in all six markets maintained detailed administrative data on enrollees' health care utilization. We used claims from 1998, the year prior to the withdrawals, to distinguish between aged enrollees whose health status might have made them more vulnerable to loss of their HMO coverage versus other non-vulnerable beneficiaries. Beneficiaries were eligible for selection if they were enrolled in the HMO on November 1, 1998, and had been

¹ A copy of the complete questionnaire is available from the authors on request.

continuously enrolled in that same plan for at least the 6 prior months. Beneficiaries who had prescription drug expenditures in the top quartile for all eligible enrollees in the study HMOs (approximately \$570 over the 6-month reference period) and those who had a significant chronic disease burden (as indicated by classification in any of nine ambulatory care groups [ACGs])² were considered to be vulnerable from a prior health perspective, particularly regarding the loss of prescription drug coverage. These beneficiaries were oversampled so as to comprise one-half of the final sample of 2,400 disenrollees.

Data were collected by Roper ASW using computer assisted telephone interviewing (CATI). Data collection began in October 1999 and continued through January 2000. The October start date was chosen to allow time for disenrollees to settle into new insurance arrangements and gain experience with the health care system under these arrangements. We note, however, that this choice may introduce recall bias for some survey items due to the time elapsed between the disenrollment and related decisions about subsequent coverage and the survey field period. A total of 1,055 interviews were completed from the 2,400 beneficiaries originally sampled, yielding an overall response rate of 61.5 percent.³ Proxy respondents were used for 65 of the completed cases; the sampled beneficiary's spouse was the proxy respondent in 60 percent of these cases, and his/her daughter in another 23 percent of the cases.

²These ACGs were 4430 (4-5 other ambulatory diagnostic group [ADG] combinations, with 2+ 'major' ADGs); 4910, 4920, 4930, and 4940 (6-9 other ADG combinations, regardless of the number of major ADGs); and 5040, 5050, 5060, and 5070 (10+ other ADG combinations, regardless of the number of major ADGs).

³ The response rate is computed using the standard method adopted by the Council of American Survey Research Organizations, which makes adjustments for unusable telephone numbers and respondents who are no longer eligible for the survey (e.g., because they moved out of the market area).

Table 1 provides a comparison of the respondents with the non-respondents, based on data available from the sampling frame. As a rule, we see that respondents were quite representative of non-respondents, with no significant differences in vulnerability status, prior health expenditures, sex, or the length of time in a UnitedHealth HMO before the involuntary disenrollment. Older beneficiaries were less likely to respond to the survey, as were those from the Colorado market. Respondents were more likely to be from a rural county, although the number of rural beneficiaries in the sample was small to begin with, reflecting the low penetration of Medicare HMOs in rural counties.

Just under one-half of the completed cases (513) were from beneficiaries sampled as vulnerable due to their health status. In Table 2, we use sampling frame and survey data to compare the vulnerable and non-vulnerable beneficiaries along a range of health status and other sociodemographic variables. It is immediately apparent that the sample selection criteria have successfully identified distinctly different populations in terms of health status. Those beneficiaries sampled as being vulnerable have significantly poorer health—whether measured by their own self-reported status, limitations in activities of daily living (ADLs) or instrumental ADLs (IADLs), ADG counts, prior health care expenditures or the presence of chronic conditions. Members of this group are also older and more likely to be female. On the other hand, there are no significant differences by marital status, race/ethnicity, education level, or household income.

ANALYTIC METHODS

Responses to the survey questions were analyzed using cross tabulations with Chi-square tests and logit models. The Chi-square

Table 1
Comparison of Disenrolled Respondents and Non-Respondents: 1998

Beneficiary Characteristic	Respondents	Non-Respondents ¹
	(n=1,055)	(n=1,130)
	Percent	
Sampled as Vulnerable	48.6	50.5
Other Health Status Measures		
Mean Number of Ambulatory Diagnosis Groups	4.9	5.0
Percent with Inpatient Expenditures (1998)	33.6	32.0
Mean Inpatient Expenditures (1998)	\$918	\$1,020
Mean Physician Expenditures (1998)	\$787	\$634
Mean Pharmacy Expenditures (1998)	\$322	\$323
Mean Total Expenditures (1998)	\$2,026	\$1,977
Sociodemographic Characteristics		
Percent Male	40.9	42.1
Mean Age	72.4	**73.8
65-69 Years	37.5	**31.9
70-74 Years	31.0	28.1
75-79 Years	20.1	21.2
80-84 Years	8.3	*11.2
85 Years or Over	3.0	**7.5
HMO Enrollment		
Mean Time Enrolled in any United HMO	15.0	14.6
7-12 Months	41.3	45.4
13-18 Months	30.5	28.2
19-24 Months	21.5	21.1
25+ Months	6.6	5.3
Location		
Rural County	4.3	**1.7
Atlanta	20.2	18.2
Dallas	18.7	17.3
Colorado	23.2	*27.3
New York City/New Jersey	11.4	11.1
Ohio	23.9	23.5
Florida	2.7	2.6

¹ Excludes sampled beneficiaries determined to be ineligible.

** $p \leq 0.01$.

* $p \leq 0.05$.

NOTE: HMO is health maintenance organization.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

tests were used to indicate whether a given survey response differed significantly across a single set of categorical variables (e.g., by levels of income or education). The logit models estimated the likelihood that the respondent said yes (or no) to a given question as a function of the respondent's age group, sex, marital status, race/ethnicity category, education level, income level, self-reported health status, ADL and IADL limitations, and whether the person was sampled as being vulnera-

ble or not. Results from these models indicate whether any of these variables has an independent effect on the survey response, while controlling for the confounding influence of all other included variables. In all analyses, we used SUDAAN[®] to account for the clustering of the sample in the six market areas, and sampling weights to account for the oversampling of vulnerable beneficiaries. Missing values were excluded from all calculations.

Table 2
Comparison of Vulnerable and Non-Vulnerable Disenrolled Beneficiaries: 1999

Sample Attributes	Vulnerable (n=513)	Non-Vulnerable (n=542)
Health Status Measures		
Percent Reporting Very Good or Excellent Health	40.3	**60.9
Mean Number of IADL Limitations	1.0	**0.5
Mean Number of ADL Limitations	0.8	**0.4
Mean Number of Ambulatory Diagnosis Groups	7.3	**2.7
Percent with Inpatient Expenditures (1998)	53.0	**15.3
Mean Inpatient Expenditures (1998)	\$1,750	**\$129
Mean Physician Expenditures (1998)	\$1,363	**\$241
Mean Pharmacy Expenditures (1998)	\$504	**\$150
Mean Total Expenditures (1998)	\$3,617	**\$521
Percent Whose Doctor Has Said They Have		
Arthritis	63.5	**45.8
Diabetes	21.2	**12.2
Hypertension	55.4	**41.9
Angina/Heart Disease	27.0	**13.8
COPD/Emphysema	18.2	**9.3
Osteoporosis	20.7	**11.7
Sociodemographic Characteristics		
Mean Age (Years)	73.0	**71.9
Percent Male	33.5	*40.4
Percent Married	58.5	63.6
Percent White, Non-Hispanic	89.3	85.5
Percent with High School Diploma or Higher	71.1	74.6
Mean Household Income	\$24,138	\$24,078

** $p \leq 0.01$.

* $p \leq 0.05$.

NOTES: IADL is instrumental activity of daily living. ADL is activity of daily living. COPD is chronic obstructive pulmonary disease.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

Tables 3-10 present the relevant percentages from the bivariate analyses, that is, the percent of respondents in the cell who answered the question in a given way. When results are outlined in a box, the Chi-square test indicated that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher. Additionally, variables for which the entry is bolded and marked with an asterisk were significant in the logit equation at the 95 percent confidence level or higher. Reference categories for the logit specification are marked with an (R).

RESULTS

Knowledge About Insurance Choices Following Disenrollment

Approximately two-thirds of all non-proxy respondents reported that they knew what options they had for selecting new Medicare coverage following their HMO disenrollment, and that they knew what actions to take to select new coverage (Table 3). Sixty percent indicated that they knew where to get additional information regarding their insurance choices, and 56 percent felt they knew about their options regarding Medicare supplemental coverage.

Table 3
Beneficiary Knowledge About Selecting New Insurance Following Medicare HMO Disenrollment: 1999

Demographics	Number of Non-Proxy Respondents ¹	Percent						Could Return to FFS Medicare (n=922)
		Knew Options for Choosing New Coverage (n=975)	Knew Where to Get Information (n=968)	Knew Actions to Take to Select New Coverage (n=970)	Knew About Medigap Options (n=970)	Could Select Another HMO (n=939)	Could Return to FFS Medicare (n=922)	
All Beneficiaries	990	65.1	59.5	63.4	55.5	83.0	90.7	
Vulnerable	478	65.5	58.0	62.2	*49.4	82.7	90.0	
Not Vulnerable (R)	512	64.8	60.5	64.2	59.6	83.2	91.1	
Age								
65-69 Years (R)	382	67.7	62.3	67.6	61.2	84.2	92.2	
70-74 Years	314	66.9	61.4	65.2	55.6	86.1	90.2	
75-79 Years	199	61.6	53.6	57.7	*47.9	77.4	89.6	
80 Years or Over	95	55.0	54.0	50.9	46.9	78.5	87.7	
Sex								
Male	357	70.9	67.9	70.8	61.6	85.6	93.4	
Female (R)	633	61.6	54.7	59.1	52.0	81.4	89.0	
Marital Status								
Married	596	*70.9	64.9	66.5	62.1	84.9	91.6	
Not Married (R)	386	55.9	50.7	58.0	45.2	80.1	88.9	
Race								
White, Not Hispanic (R)	828	68.6	63.8	67.4	59.5	85.1	92.5	
Black, Not Hispanic	77	*41.2	*33.9	*37.4	*28.8	*70.0	*79.2	
Hispanic	41	*45.0	*30.7	*36.8	*31.0	90.1	83.0	
Education								
No High School (R)	98	45.5	31.2	39.3	32.1	74.1	89.0	
Some High School	146	44.9	43.2	47.9	39.4	77.6	87.7	
High School Graduate	404	*68.4	*62.2	*65.2	*56.4	84.4	89.6	
Some College	128	*72.3	*66.9	*70.5	*67.6	82.6	88.7	
College Graduate	182	*82.5	*75.6	*79.9	*72.9	*89.6	98.1	
Income								
< \$10,000 (R)	142	49.1	37.1	47.0	38.2	72.2	85.7	
\$10,000-\$24,999	378	62.5	55.8	59.9	52.9	84.8	87.8	
\$25,000>	250	74.3	*70.0	71.5	66.1	87.9	95.1	

See footnotes at the end of the table.

Table 3—Continued
Beneficiary Knowledge About Selecting New Insurance Following Medicare HMO Disenrollment: 1999

Demographics	Number of Non-Proxy Respondents ¹	Percent					
		Knew Options for Choosing New Coverage (n=975)	Knew Where to Get Information (n=968)	Knew Actions to Take to Select New Coverage (n=970)	Knew About Medigap Options (n=970)	Could Select Another HMO (n=939)	Could Return to FFS Medicare (n=922)
Health							
Excellent/Very Good	503	72.0	65.6	69.9	*63.3	85.9	93.0
Good	267	59.6	58.2	60.4	49.2	81.2	88.2
Fair/Poor (R)	207	52.7	44.4	50.3	41.7	79.4	87.2
IADL							
No Limits (R)	634	68.5	63.7	66.8	60.0	83.0	91.6
1 Limit	192	65.1	57.5	64.1	53.2	85.5	89.1
>1 Limit	160	49.5	43.5	47.4	37.9	80.2	88.1
ADL							
No Limits (R)	728	68.3	62.2	66.7	58.8	85.0	91.7
1 Limit	135	58.9	53.1	52.1	50.4	80.3	90.1
>1 Limit	125	52.0	50.9	54.9	41.3	72.8	84.9

*Significant in the logit equation at the 95 percent confidence level or higher.

¹ Questions not asked of proxy respondents.

NOTES: FFS is fee-for-service. HMO is health maintenance organization. IADL is instrumental activity of daily living. ADL is activity of daily living. Reference categories for the logit specification are marked with an R. Results outlined in a box indicate, through the Chi-square test, that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

Bivariate analyses revealed that knowledge about all of these factors was significantly lower among female beneficiaries, those who were not married, Black and Hispanic beneficiaries, those with less education, those with lower incomes, and those in worse health, as measured by self-reported health status and the number of ADL and IADL limitations. Significant differences between beneficiaries sampled as vulnerable versus non-vulnerable were found, however, only with respect to knowledge about Medigap options—with vulnerable beneficiaries reporting less knowledge about these options.

Multivariate logit analysis showed persistently lower levels of knowledge about insurance options among minority populations and those with less education, even after controlling for the influence of other beneficiary characteristics.

The survey also included two test questions to check the accuracy of respondents' knowledge regarding insurance options. These questions asked whether the beneficiary could have selected another Medicare HMO in their area, and whether they could have returned to FFS Medicare. In fact, in the markets included in this study, all beneficiaries had at least one other Medicare HMO option available to them in 1999. Thus, the correct answer to both questions should be yes, unless the available HMOs had enrollment caps in place at the time of the survey.

Overall, 83 percent of the disenrollees indicated that another HMO option was available to them (i.e., 17 percent were not aware that they had this option), and 91 percent said they could return to FFS Medicare. Logit analyses showed that the likelihood of being misinformed about these options was significantly higher among Black persons, and that college graduates were least likely to misunderstand the availability of other HMO options.

Insurance Choices Following Disenrollment

All respondents were asked about their type of insurance coverage on January 1, 1999, and at the time of the survey, providing information on their initial choices following disenrollment and any changes made after that choice. Nearly 83 percent of all disenrollees reported that they had selected another Medicare HMO as of January 1, 1999, while 17 percent had returned to FFS Medicare (Table 4). Bivariate analysis showed that Black persons were more likely to have opted for FFS Medicare, with 30 percent of this population returning to FFS Medicare rather than enrolling in another Medicare HMO. This finding is most likely related to the previous findings regarding knowledge of insurance options.

Following these initial choices, some changes in insurance coverage were reported. Between January 1 and the time of the survey (i.e., sometime between October 1999 and January 2000), 9 percent of respondents changed from their initial HMO to a different HMO; 2 percent changed from their initial HMO to FFS Medicare; and another 2 percent moved from FFS Medicare to an HMO. Most beneficiaries, however, remained with their initial post-disenrollment insurance choice.

Bivariate analysis showed significant differences in these change patterns by education and income. Beneficiaries without a high school diploma were somewhat more likely to move from an HMO to FFS Medicare or to remain in FFS Medicare if that had been their initial choice. Conversely, beneficiaries with at least a high school education were more likely to move between HMOs or to elect an HMO after an initial period of coverage under FFS Medicare. The lowest income beneficiaries were also somewhat more likely to

Table 4

Beneficiary Insurance Choices Following Medicare Health Maintenance Organization (HMO) Disenrollment: 1999

Demographics	Insurance Status on January 1, 1999			Changes in Insurance Status Between January 1, 1999 and Time of Survey ¹				
	Number of Respondents	In HMO	In FFS Medicare	Stayed in Same HMO	Selected a Second New HMO	Changed from HMO to FFS Medicare	Stayed in FFS Medicare	Changed from FFS Medicare to an HMO
				Percent				
All Beneficiaries	1,043	82.6	17.4	71.8	9.0	1.8	15.4	2.0
Vulnerable	507	83.4	16.6	71.8	10.5	1.2	15.0	1.6
Not Vulnerable (R)	536	82.1	17.9	71.8	8.0	2.2	15.7	2.2
Age								
65-69 Years (R)	393	83.4	16.6	73.0	9.1	1.3	14.5	2.2
70-74 Years	322	82.7	17.3	72.6	8.6	1.5	16.1	1.2
75-79 Years	209	81.0	19.0	71.9	7.3	1.7	16.0	3.1
80 Years or Over	119	82.8	17.2	65.1	13.0	4.8	15.8	1.4
Sex								
Male	385	83.4	16.6	74.3	7.9	1.2	14.7	1.8
Female (R)	658	82.1	17.9	70.3	9.6	2.2	15.8	2.1
Marital Status								
Married	633	83.7	16.3	73.2	8.6	1.8	14.6	1.8
Not Married (R)	402	81.3	18.7	69.7	9.8	1.9	16.3	2.4
Race								
White, Not Hispanic (R)	873	83.5	16.5	72.3	9.4	1.8	14.8	1.8
Black, Not Hispanic	83	69.9	30.1	61.5	7.1	1.4	26.3	3.7
Hispanic	43	87.7	12.3	76.2	8.9	2.6	9.7	2.6
Education								
No High School (R)	116	80.3	19.7	71.2	7.0	2.1	19.7	0.0
Some High School	156	79.2	20.8	67.8	7.3	4.0	19.6	1.3
High School Graduate	416	85.1	14.9	74.4	8.9	1.8	13.0	1.9
Some College	132	80.9	19.1	69.2	11.1	0.6	15.5	3.6
College Graduate	187	85.4	14.6	74.1	10.2	1.1	11.3	3.3
Income								
< \$10,000 (R)	155	78.5	21.5	66.7	7.4	4.4	21.5	0.0
\$10,000-\$24,999	399	82.7	17.3	72.4	8.6	1.7	14.4	2.9
\$25,000>	258	84.2	15.9	71.3	11.7	1.2	14.3	1.5
Health								
Excellent/Very Good Health	524	83.4	16.6	71.9	10.0	1.5	14.2	2.4
Good Health	282	80.7	19.3	71.4	8.1	1.3	16.9	2.4
Fair/Poor Health (R)	223	83.1	16.9	72.3	7.3	3.5	16.5	0.4

See footnotes at the end of the table.

Table 4—Continued
Beneficiary Insurance Choices Following Medicare Health Maintenance Organization (HMO) Disenrollment: 1999

Demographics	Number of Respondents	Insurance Status on January 1, 1999			Changes in Insurance Status Between January 1, 1999 and Time of Survey ¹			
		In HMO	In FFS Medicare	Stayed in Same HMO	Selected a Second New HMO	Changed from HMO to FFS Medicare	Stayed in FFS Medicare	Changed from FFS Medicare to an HMO
					Percent			
IADL								
No Limits (R)	651	82.9	17.1	73.2	8.1	1.6	15.4	1.6
1 Limit	207	*87.7	*12.3	74.3	11.8	1.6	11.2	1.2
>1 Limit	180	75.4	24.6	62.9	9.6	2.9	20.8	3.8
ADL								
No Limits (R)	762	83.7	16.3	72.9	9.0	1.8	14.6	1.7
1 Limit	141	82.2	17.9	70.1	10.6	1.4	15.0	2.9
>1 Limit	139	76.7	23.3	67.0	7.3	2.5	20.7	2.6

*Significant in the logit equation at the 95 percent confidence level or higher.

¹ Survey fielded between October 1999 and January 2000.

NOTES: FFS is fee-for-service. IADL is instrumental activity of daily living. ADL is activity of daily living. Reference categories for the logit specification are marked with an R. Logit equations for variables showing changes in insurance after January 1 were not estimated. Results outlined in a box indicate, through the Chi-square test, that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

remain with their initial choice of FFS Medicare or to move into FFS Medicare after trying an HMO.

Insurance Coverage at the Time of Survey

Even with these insurance changes, by the time of the survey (i.e., between October 1999 and January 2000) we still found that 83 percent of disenrollees were in an HMO and 17 percent were in FFS Medicare (Table 5). Approximately 6 of every 10 beneficiaries in FFS Medicare reported being without private supplemental coverage (10.5 percent of all disenrollees), while approximately 40 percent of FFS Medicare enrollees had also obtained Medigap coverage (6.6 percent of all disenrollees). Bivariate analyses revealed that Black persons, those without a high school diploma, those with lower incomes, and those with multiple IADL limits were significantly more likely to have FFS Medicare coverage without supplemental insurance.⁴

Changes in Prescription Drug Coverage

All respondents were asked whether they had coverage for prescription drugs during the time they were enrolled in the UnitedHealth HMO and whether they had drug coverage at the time of the survey. In both questions, they were encouraged to think about all sources from which they may have had drug coverage. Eighty-seven percent of all respondents reported that they had had coverage for prescription drugs during the time they were enrolled in the UnitedHealth HMO (Table 6). In

⁴ One would expect lower coverage through Medigap plans for these population groups to the extent that they are more likely to be covered through Medicaid. Our survey did not investigate Medicaid coverage, so we are unable to determine the importance of this factor in the lower Medigap take-up rates for these demographic groups.

fact, all UnitedHealth HMOs in this study included some form of prescription drug coverage in 1998, indicating a level of misunderstanding among survey respondents about their HMO benefits. It is possible that some disenrollees had exceeded UnitedHealth's annual limit on covered drug expenses in 1998, and thus, no longer considered themselves to have had drug coverage in that year. However, it seems clear that beneficiaries had some difficulty answering this question accurately.

Beneficiaries with an annual income more than \$25,000 were more likely to have reported prescription drug coverage while in their UnitedHealth HMO, as were those who subsequently decided to enroll in a new HMO rather than return to FFS Medicare. It may be that the higher awareness of pre-disenrollment drug benefits exhibited by these beneficiaries played a role in their decision to remain in the HMO sector.

The post-withdrawal insurance choices were also highly correlated with whether the beneficiary reported having prescription drug coverage after disenrollment. Nearly 93 percent of those who enrolled in another HMO after being disenrolled reported that they had coverage for drugs. In contrast, only 32 percent of those in FFS Medicare without privately purchased supplemental coverage reported having drug coverage; this coverage could have been through an employer-sponsored retirement plan, Medicaid, the military system, or a State prescription drug program. Among FFS Medicare enrollees with supplemental insurance, the percent reporting coverage for prescription drugs rose to 45. Since fewer than one-third of those with Medigap coverage indicated that their policy covered prescription drugs (data not shown), it appears that some Medigap enrollees have access to drug coverage

Table 5
Insurance Coverage 9-12 Months After Disenrollment: 1999

Demographics	Number of Respondents	HMO	Fee-for-Service	
			With Medigap	Without Medigap
Percent				
All Beneficiaries	1,055	82.9	6.6	10.5
Vulnerable	513	83.8	7.6	8.6
Not Vulnerable (R)	542	82.3	5.9	11.8
Age				
65-69 Years (R)	396	84.4	7.4	8.2
70-74 Years	327	82.7	6.2	11.1
75-79 Years	212	82.2	7.0	10.9
80 Years or Over	120	79.7	4.1	16.2
Sex				
Male	391	84.3	6.0	9.7
Female (R)	664	82.1	6.9	11.0
Marital Status				
Married	640	83.7	7.2	9.2
Not Married (R)	407	82.0	5.5	12.5
Race				
White, Not Hispanic (R)	882	83.6	7.2	9.2
Black, Not Hispanic	85	72.9	3.3	23.8
Hispanic	43	87.7	4.5	7.8
Education				
No High School (R)	117	78.4	7.7	13.9
Some High School	159	76.8	5.2	18.0
High School Graduate	421	85.2	5.3	9.6
Some College	134	84.1	8.2	7.7
College Graduate	188	87.7	8.0	4.3
Income				
<\$10,000 (R)	157	74.4	7.6	18.0
\$10,000-\$24,999	404	*84.1	5.9	*10.1
\$25,000>	259	84.5	8.6	6.8
Health				
Excellent/Very Good Health	529	84.4	6.7	8.9
Good Health	285	81.8	6.0	12.2
Fair/Poor Health (R)	227	80.4	7.5	12.2
IADL				
No Limits (R)	657	83.1	7.5	9.4
1 Limit	210	87.5	4.6	8.0
>1 Limit	183	76.3	5.5	18.2
ADL				
No Limits (R)	767	83.7	7.1	9.2
1 Limit	143	83.2	5.2	11.6
>1 Limit	143	77.4	5.0	17.6

*Significant in the logit equation at the 95 percent confidence level or higher.

NOTES: HMO is health maintenance organization. IADL is instrumental activity of daily living. ADL is activity of daily living. Reference categories for the logit specification are marked with an R. Results outlined in a box indicate, through the Chi-square test, that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

through other means. Females and unmarried beneficiaries also were less likely to have drug coverage following disenrollment.

When comparing beneficiaries' responses regarding the existence of drug coverage before and after disenrollment, we found that 11 percent reported losing drug

Table 6
Changes in Prescription Drug Coverage Following Medicare HMO Disenrollment: 1999

Demographics	Number of Respondents	Prescription Drug Coverage		Change in Prescription Drug Coverage Since HMO Closure (n=1,019)		
		Before (n=1,025)	After (n=1,049)	Lost Coverage	Gained Coverage	No Change in Coverage
All Beneficiaries	1,055	87.3	83.2	Percent 11.4	7.5	81.1
Vulnerable	513	88.2	85.5	11.1	8.1	80.9
Not Vulnerable (R)	542	86.7	81.6	11.7	7.1	81.2
Age						
65-69 Years (R)	396	89.1	83.8	12.5	7.8	79.7
70-74 Years	327	87.7	85.9	9.8	8.1	82.0
75-79 Years	212	86.5	81.2	12.2	7.4	80.4
80 Years or Over	120	81.3	76.9	10.8	4.7	84.5
Sex						
Male	391	87.5	86.3	*9.4	8.1	82.5
Female (R)	664	87.1	81.3	12.7	7.1	80.2
Marital Status						
Married	640	87.6	86.0	9.4	8.0	82.7
Not Married (R)	407	87.0	78.9	14.6	6.6	78.9
Race						
White, Not Hispanic (R)	882	88.3	84.0	11.0	6.9	82.1
Black, Not Hispanic	85	80.5	75.4	15.2	10.5	74.3
Hispanic	43	91.1	86.6	13.4	8.9	77.7
Education						
No High School (R)	117	83.0	78.7	13.8	11.5	74.8
Some High School	159	88.7	79.7	16.2	6.8	77.1
High School Graduate	421	87.0	82.7	11.8	7.3	80.9
Some College	134	90.3	86.4	9.9	6.1	84.0
College Graduate	188	88.8	89.1	5.8	7.2	87.1
Income						
< \$10,000 (R)	157	80.8	76.1	14.1	15.7	75.2
\$10,000-\$24,999	404	88.4	84.3	11.3	29.0	81.4
\$25,000>	259	*91.9	85.8	11.1	14.3	83.3
Health						
Excellent/Very Good Health	529	88.1	82.3	11.9	6.6	81.5
Good Health	285	89.1	83.1	10.8	4.7	84.5
Fair/Poor Health (R)	227	84.1	86.5	10.8	12.9	76.3
IADL						
No Limits (R)	657	86.7	82.7	11.5	8.0	80.6
1 Limit	210	90.6	87.5	9.4	6.0	84.6
>1 Limit	183	85.4	79.4	14.2	7.5	78.3
ADL						
No Limits (R)	767	87.8	83.7	10.9	7.3	81.9
1 Limit	143	*81.7	80.3	13.4	11.4	75.2
>1 Limit	143	90.0	83.1	12.1	4.7	83.3
Insurance After Disenrollment						
New HMO	876	*90.0	*92.6	*4.6	7.3	88.1
FFS Medicare with Medigap	71	76.9	44.9	44.5	13.7	41.8
FFS Medicare Only (R)	108	72.1	32.2	45.3	4.9	49.8

*Significant in the logit equation at the 95 percent confidence level or higher.

NOTES: HMO is health maintenance organization. FFS is fee-for-service. IADL is instrumental activity of daily living. ADL is activity of daily living. Logit equation estimated only for Lost Coverage versus Did Not Lose Prescription Coverage. Reference categories for the logit specification are marked with an R. Results outlined in a box indicate, through the Chi-square test, that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

coverage and 8 percent said they had gained coverage. Again, the likelihood of losing coverage was significantly correlated with the post-disenrollment insurance choice. While 45 percent of those returning to FFS Medicare reported a loss of prescription drug coverage (regardless of whether they obtained Medigap coverage), only 5 percent of those who subsequently enrolled in a new HMO said they had lost drug coverage.

Changes in Out-of-Pocket Expenses

Changes in out-of-pocket expenditures were assessed by asking the beneficiary to think about the current expense for the item, then to indicate whether this amount was higher, lower, or about the same as the amount paid under their old UnitedHealth HMO. All beneficiaries were asked about changes in out-of-pocket expenses for a typical physician office visit and for prescription drugs (in an average month), and those who were in an HMO at the time of the survey were asked about changes in HMO premiums. These questions referred by name to the insurance plans covering the beneficiary in the two time periods, thereby attempting to focus on changes in expenses associated with the insurance change. It is possible, however, that some beneficiaries experienced and reported changes in expenses that were not attributable to the insurance change. In particular, we could observe increases in expenditures for prescription drugs because the person has aged by a year and may have more health problems.

One-quarter of all beneficiaries who selected another HMO following disenrollment reported that the premium they paid for their new coverage was lower than they had been paying previously, while only 10 percent said their new premium was higher (Table 7).

One-fifth of all respondents said they were now paying more for physician office visits. Hispanic beneficiaries and those with higher incomes were more likely than other beneficiaries to report an increase in these expenses. Those who returned to FFS Medicare were more likely to say their expenses for physician visits had changed in some way, with these expenses more likely to have declined if the beneficiary had obtained Medigap insurance and more likely to have increased if the only coverage was through FFS Medicare.

One-third of all beneficiaries reported that their out-of-pocket expenses for prescription drugs had increased. Those rating their health as only fair/poor were more likely to report higher prescription expenses after disenrollment from their HMO, as were beneficiaries who were sampled as being vulnerable to the loss of HMO coverage (many of whom had very high expenditures for prescription drugs prior to disenrollment). Selecting a new HMO appears to have insulated beneficiaries somewhat from an increase in their out-of-pocket drug expenditures, compared with those who returned to FFS Medicare. However, we find somewhat counterintuitive results regarding the benefits of obtaining Medigap insurance: 63 percent of FFS Medicare enrollees with Medigap coverage reported higher personal drug expenses, compared to 50 percent of those without Medigap insurance. This finding may be related to the fact that fewer than one-third of the Medigap policies obtained by disenrollees were said to cover prescription drugs, or could occur if a significant proportion of beneficiaries who did not purchase a Medigap plan have drug coverage through Medicaid.

Changes in Utilization

All beneficiaries were asked whether—since leaving their UnitedHealth HMO—cost considerations had ever caused them

Table 7

Changes in Out-of-Pocket Expenses Following Medicare HMO Disenrollment: 1999

Demographics	Number of Respondents in Demographic Category	HMO Premium (n=759)			Physician Office Visit (n=958)			Prescription Drugs (n=871)		
		Up	Down	No Change	Up	Down	No Change	Up	Down	No Change
All Beneficiaries	1,055	9.5	24.6	65.9	19.7	14.0	66.3	34.0	14.2	51.9
Vulnerable	513	11.9	23.3	64.8	17.7	15.3	67.0	38.8	13.7	47.4
Not Vulnerable (R)	542	7.9	25.5	66.7	21.1	13.1	65.8	30.6	14.5	54.9
Age						Percent				
65-69 Years (R)	396	8.2	26.8	65.0	19.0	12.8	68.3	38.4	12.4	49.2
70-74 Years	327	8.2	21.1	70.7	20.4	12.5	67.1	*28.1	14.7	57.2
75-79 Years	212	11.1	26.7	62.2	20.7	17.7	61.6	35.0	16.6	48.4
80 Years or Over	120	15.6	22.5	61.9	18.9	16.4	64.8	33.0	14.7	52.3
Sex										
Male	391	7.2	27.5	65.3	18.7	11.4	70.0	31.0	13.6	55.5
Female (R)	664	11.1	22.6	66.3	20.4	15.7	63.9	35.8	14.6	49.6
Marital Status										
Married	640	8.3	25.8	65.9	20.4	13.3	66.2	33.7	13.1	53.2
Not Married (R)	407	11.6	22.2	66.2	18.7	15.3	66.0	34.2	16.4	49.4
Race										
White, Not Hispanic (R)	882	8.6	24.2	67.2	18.9	13.7	67.4	33.2	13.4	53.4
Black, Not Hispanic	85	13.1	22.8	64.1	21.8	13.8	64.4	38.1	20.4	41.5
Hispanic	43	*18.3	27.5	54.3	*30.4	17.2	52.4	35.5	12.1	52.4
Education										
No High School (R)	117	14.1	23.9	62.0	16.0	16.8	67.2	41.7	16.5	41.8
Some High School	159	12.7	19.9	67.5	18.5	17.5	64.0	39.1	16.3	44.6
High School Graduate	421	8.8	27.4	63.8	19.3	12.0	68.7	34.0	12.9	53.1
Some College	134	8.2	18.9	73.0	21.1	16.7	62.2	28.6	12.8	58.6
College Graduate	188	7.9	27.3	64.8	22.0	12.8	65.3	27.0	15.2	57.7
Income										
< \$10,000 (R)	157	18.5	17.3	64.2	10.5	22.5	67.0	38.8	20.9	40.3
\$10,000-\$24,999	404	*7.6	24.2	68.2	*20.4	11.4	68.3	33.3	13.3	53.4
\$25,000>	259	8.1	25.9	66.0	*22.9	12.5	64.6	34.2	11.8	54.0
Health										
Excellent/Very Good Health	529	8.5	22.7	68.8	20.7	12.5	66.8	31.6	12.0	56.4
Good Health	285	9.5	23.2	67.3	18.7	15.6	65.7	34.4	17.0	48.6
Fair/Poor Health (R)	227	12.5	31.6	55.9	18.7	15.9	65.4	39.3	17.0	43.7

See footnotes at the end of the table.

Table 7—Continued
Changes in Out-of-Pocket Expenses Following Medicare HMO Disenrollment: 1999

Demographics	Number of Respondents in Demographic Category	HMO Premium (n=759)			Physician Office Visit (n=958)			Prescription Drugs (n=871)		
		Up	Down	No Change	Up	Down	No Change	Up	Down	No Change
Percent										
IADL										
No Limits (R)	657	9.8	23.7	66.5	18.6	13.7	67.8	31.2	14.9	53.9
1 Limit	210	8.1	23.8	68.0	18.1	13.8	68.1	35.3	12.4	52.3
>1 Limit	183	10.6	30.1	59.3	26.6	15.9	57.5	43.3	13.9	42.8
ADL										
No Limits (R)	767	9.4	23.4	67.2	19.0	13.5	67.5	32.6	13.4	54.0
1 Limit	143	10.6	25.5	63.9	15.6	14.3	70.1	32.1	20.7	47.2
>1 Limit	143	8.0	31.7	60.3	28.7	16.3	55.1	44.8	11.0	44.2
Insurance After Disenrollment										
New HMO	876	N/A	N/A	N/A	*18.1	11.0	70.9	*30.1	13.9	56.1
FFS Medicare with Medigap	71	N/A	N/A	N/A	24.0	40.4	35.6	63.1	10.2	26.7
FFS Medicare Only (R)	108	N/A	N/A	N/A	33.2	25.7	41.1	49.5	20.6	30.0

*Significant in the logit equation at the 95 percent confidence level or higher.

NOTES: FFS is fee-for-service. HMO is health maintenance organization. IADL is instrumental activity of daily living. ADL is activity of daily living. Logit equations estimated only for Cost Increased versus Cost Did Not Increase. Reference categories for the logit specification are marked with an R. Results outlined in a box indicate, through the Chi-square test, that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher. N/A is not applicable.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

Table 8
Changes in Utilization Following Medicare HMO Disenrollment: 1999

Demographics	Number of Respondents	All Beneficiaries		Beneficiaries Who Changed Prescription Use (n=117)		
		Did Not See Doctor Because of Cost (n=1,046)	Changed Drug Use Because of Cost (n=1,032)	Taking Fewer Pills	Changed to Generic	Stopped Using a Drug Altogether
All Beneficiaries	1,055	4.2	11.2	Percent 37.2	67.0	22.3
Vulnerable	513	5.3	11.9	40.0	65.0	21.7
Not Vulnerable (R)	542	3.5	10.8	35.1	68.4	22.8
Age						
65-69 Years (R)	396	4.3	14.4	49.7	62.1	32.6
70-74 Years	327	3.5	10.8	22.1	77.5	*9.2
75-79 Years	212	6.1	8.2	36.9	51.8	17.0
80 Years or Over	120	3.1	6.8	11.0	89.0	15.6
Sex						
Male	391	3.9	9.4	30.5	63.2	19.6
Female (R)	664	4.5	12.3	40.3	68.7	23.6
Marital Status						
Married	640	3.7	10.9	32.9	69.5	21.9
Not Married (R)	407	5.2	12.0	43.4	63.3	23.0
Race						
White, Not Hispanic (R)	882	4.3	10.7	32.7	69.0	20.4
Black, Not Hispanic	85	4.6	15.0	43.9	43.9	9.3
Hispanic	43	0.0	17.5	*73.9	63.1	*52.3
Education						
No High School (R)	117	6.2	10.6	44.4	82.8	54.5
Some High School	159	6.7	13.4	36.4	52.5	24.6
High School Graduate	421	3.3	11.4	30.0	70.0	20.2
Some College	134	0.9	9.9	30.4	87.5	0.0
College Graduate	188	5.6	10.7	*46.7	57.4	24.2
Income						
< \$10,000 (R)	157	8.5	15.8	42.0	58.6	45.0
\$10,000-\$24,999	404	4.6	10.9	39.9	78.0	*20.9
\$25,000>	259	2.8	11.8	25.1	56.8	13.1
Health						
Excellent/Very Good Health	529	3.1	8.9	35.8	72.6	18.1
Good Health	285	5.0	13.8	36.3	57.6	19.5
Fair/Poor Health (R)	227	6.7	14.2	38.9	72.1	33.6
IADL						
No Limits (R)	657	2.5	9.4	27.4	65.7	13.3
1 Limit	210	6.8	11.6	48.5	70.4	29.1
>1 Limit	183	8.2	18.3	*48.7	67.1	35.6
ADL						
No Limits (R)	767	2.4	9.4	30.1	66.0	12.6
1 Limit	143	8.4	15.2	46.8	68.8	31.2
>1 Limit	143	*10.7	18.2	51.0	68.4	45.4
Insurance After Disenrollment						
New HMO	876	*3.4	11.0	34.7	70.2	20.7
FFS Medicare with Medigap	71	6.2	8.8	47.1	66.7	0.0
FFS Medicare Only (R)	108	9.6	15.2	47.8	47.8	40.5

*Significant in the logit equation at the 95 percent confidence level or higher.

NOTES: HMO is health maintenance organization. IADL is instrumental activity of daily living. ADL is activity of daily living. FFS is fee-for-service. Reference categories for the logit specification are marked with an R. Results outlined in a box indicate, through the Chi-square test, that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

to not see a physician when they felt care was needed or desired, or to change their use of prescription medicines. Overall, 4 percent of disenrollees reported not seeking needed or desired physician care because of costs after losing their HMO coverage (Table 8). The likelihood of having rationed care in this way was higher among beneficiaries with more ADL/IADL limitations (who probably need or desire more physician visits), and lower among those who had selected another HMO after disenrollment.

A larger number of beneficiaries (11 percent) reported cost-related changes in their use of prescription drugs following disenrollment. As with physician visits, the likelihood of changing drug use due to costs was higher among disenrollees in poorer health (whether measured by self-reported health status or ADL/IADL limitations). The probability of making a cost-related change in drug use also declined consistently with age.

Among the 117 beneficiaries who said they had made cost-related changes in their use of prescription drugs, 67 percent reported a switch to generic rather than brand-name drugs, making this the most common type of change reported. When computed across all respondents, 8 percent of all disenrollees reported making a change to generic drugs because of cost considerations.

More than one-third of those reporting a cost-related change in drug use said they were taking fewer pills per day or using the drug less frequently than prescribed (4 percent of all disenrollees), and 22 percent said they had stopped taking one or more of their drugs altogether because of cost (3 percent of all disenrollees). Hispanic beneficiaries were more likely than other beneficiaries to be limiting their drug use in these ways. There was also evidence that the probability of completely stopping use

of one or more drugs was higher among disenrollees with lower incomes and the lowest educational level, and among those with more ADL/IADL limitations.

Changes in Usual Sources of Care

All beneficiaries were asked whether they had had a primary care physician that they usually saw when they needed care while enrolled in the UnitedHealth HMO, and those reporting a usual primary care physician were asked if they were still able to see this physician under the new insurance arrangement. Nearly 9 of every 10 beneficiaries reported having a usual primary care physician in the UnitedHealth HMO (Table 9). The likelihood of having a usual primary care physician was higher among younger beneficiaries and among beneficiaries sampled as being vulnerable. Since vulnerable beneficiaries were identified through their higher use of prescription drugs and their higher burden of chronic disease, they would be expected to have stronger ties with a specific primary care physician.

Thirty percent of all beneficiaries with a usual primary care physician indicated that they were no longer able to see that physician following disenrollment from their UnitedHealth HMO. Those who returned to FFS Medicare, especially those who obtained Medigap insurance, were much less likely to report such disruptions in their primary care physician relationships. Conversely, those who opted for a new HMO, which probably had a different network of providers, were more likely to have to change primary care providers.

It is somewhat surprising to find that any beneficiaries returning to FFS Medicare would report that they could no longer see their usual primary care physician, since beneficiaries in this sector should not be facing the provider networks typical of

Table 9
Changes in Usual Sources of Care Following Medicare HMO Disenrollment: 1999

Demographics	Number of Respondents	Primary Care Physician (PCP)		Specialist		
		Had Usual PCP Before (n=1,049)	Lost PCP (n=932)	Had Usual Specialist Before (n=1,040)	Lost ≥ 1 Specialists (n=544)	Had to Have Tests Redone (n=371)
All Beneficiaries	1,055	88.8	29.9	Percent 54.4	31.3	14.8
Vulnerable	513	*93.7	30.0	*66.9	30.1	15.1
Not Vulnerable (R)	542	85.6	29.9	46.1	32.5	14.5
Age						
65-69 Years (R)	396	91.9	28.4	51.3	31.8	18.5
70-74 Years	327	89.4	30.2	54.7	29.7	15.7
75-79 Years	212	84.2	*32.7	58.7	32.3	8.3
80 Years or Over	120	84.8	30.0	56.3	31.9	11.9
Sex						
Male	391	88.5	32.1	56.8	32.0	16.4
Female (R)	664	89.0	28.7	52.8	30.8	13.7
Marital Status						
Married	640	89.1	30.2	57.5	30.6	14.1
Not Married (R)	407	88.4	29.7	49.7	33.2	16.1
Race						
White, Not Hispanic (R)	882	89.0	28.6	54.9	30.8	14.8
Black, Not Hispanic	85	90.0	34.7	44.8	38.8	17.9
Hispanic	43	81.7	49.8	62.1	34.3	13.8
Education						
No High School (R)	117	84.8	30.9	52.7	34.7	10.6
Some High School	159	89.9	29.7	48.8	35.0	14.5
High School Graduate	421	89.5	29.6	52.9	29.2	14.7
Some College	134	89.7	29.4	*59.4	38.1	8.3
College Graduate	188	89.9	33.1	60.1	28.9	*21.6
Income						
< \$10,000 (R)	157	87.5	26.3	49.6	33.2	13.0
\$10,000-\$24,999	404	88.4	30.1	54.7	34.8	19.7
\$25,000>	259	92.4	29.2	61.2	28.0	10.6
Health						
Excellent/Very Good Health	529	88.6	32.4	49.1	30.0	13.1
Good Health	285	90.3	*24.8	60.3	27.8	15.0
Fair/Poor Health (R)	227	87.8	30.2	60.6	37.3	18.2
IADL						
No Limits (R)	657	88.2	30.1	49.5	28.3	13.7
1 Limit	210	90.8	29.6	60.3	36.6	14.8
>1 Limit	183	88.4	30.3	66.7	34.9	18.7
ADL						
No Limits (R)	767	88.6	30.0	50.8	28.7	13.8
1 Limit	143	88.3	32.1	65.5	37.8	17.1
>1 Limit	143	90.5	28.1	64.8	36.3	17.5
Insurance After Disenrollment						
New HMO	876	89.9	*33.0	54.3	33.1	15.0
FFS Medicare with Medigap	71	87.5	7.1	*70.3	*11.0	14.1
FFS Medicare Only (R)	108	81.1	18.8	44.3	34.4	14.8

*Significant in the logit equation at the 95 percent confidence level or higher.

NOTES: HMO is health maintenance organization. IADL is instrumental activity of daily living. ADL is activity of daily living. FFS is fee-for-service. Reference categories for the logit specification are marked with an R. Results outlined in a box indicate, through the Chi-square test, that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

HMOs. However, the cost of seeing these physicians has increased for some FFS Medicare enrollees relative to the price they paid while in an HMO (Table 7), which may cause them to feel that they can no longer see their physician.

All beneficiaries were also asked whether they had particular specialists that they saw regularly while enrolled in UnitedHealth. Those reporting regular specialists were asked whether they are still able to see all, some, or none of these specialists since leaving the UnitedHealth HMO. Fifty-four percent of respondents reported having regular specialists prior to their HMO disenrollment. As might be expected, the likelihood of having usual sources of specialty care was higher for beneficiaries reporting worse health, and for beneficiaries sampled as being vulnerable. Following disenrollment, 31 percent of beneficiaries who had usual sources of specialty care indicated that they were no longer able to see one or more of their specialists. Beneficiaries who returned to FFS Medicare and purchased Medigap insurance were less likely to experience disruptions in their specialty care. It is likely that their higher attachment to specialists while in the UnitedHealth HMO was instrumental in their decision to return to FFS Medicare and obtain Medigap coverage so they could continue seeing these specialists with minimal disruption or added cost.

Finally, all disenrollees who reported a disruption in either primary or specialty care were asked whether they had to have any tests redone because they had changed physicians. Fifteen percent of respondents answered this question affirmatively.

Changes in Satisfaction

Non-proxy respondents were asked to rate their satisfaction with their choice of physicians, out-of-pocket expenses, and

overall benefit package while in the UnitedHealth HMO and for their new insurance arrangement following disenrollment. Comparison of the ratings at the two points in time enables us to determine how satisfaction has changed for each beneficiary.

For all three of the factors considered, approximately one-quarter of beneficiaries reported a decline in satisfaction, 15 percent reported higher satisfaction, and 60 percent reported no change in satisfaction (Table 10). Relative to FFS Medicare enrollees, those enrolled in a new HMO were more likely to report a decline in satisfaction with physician choice, no doubt due to facing a different network of providers under the new HMO. Conversely, satisfaction with out-of-pocket expenses was much more likely to have declined among FFS Medicare enrollees, most of whom faced higher cost-sharing requirements than if they had enrolled in an HMO. Changes in satisfaction with benefits did not vary significantly according to the insurance coverage selected after disenrollment.

DISCUSSION

Many beneficiaries appear to have dealt with the transition without any major problems, and some even reported that their situation had improved in terms of added benefits, lower HMO premiums, or higher satisfaction with care. However, disruptions and detrimental impacts were reported by appreciable numbers of beneficiaries, and there is evidence that specific subpopulations were disproportionately affected by the HMO withdrawals. In general, these subpopulations can be defined by the standard socioeconomic variables, rather than by the prior drug expenditures and health status measures we used to identify beneficiaries feared to be vulnerable from a health status perspective.

Table 10

Changes in Beneficiary Satisfaction Following Medicare HMO Disenrollment: 1999

Demographics	Number of Non-Proxy Respondents ¹	Satisfaction with Doctor Choice (n=883)			Satisfaction with Costs (n=862)			Satisfaction with Benefits (n=862)		
		Down	Up	No Change	Down	Up	No Change	Down	Up	No Change
All Beneficiaries	990	24.2	14.8	61.0	23.4	16.5	60.1	26.7	16.1	57.3
Vulnerable	478	25.9	12.9	61.2	24.4	13.3	62.3	29.0	14.2	56.8
Not Vulnerable (R)	512	23.1	16.1	60.9	22.7	18.8	58.6	25.1	17.4	57.5
Age						Percent				
65-69 Years (R)	382	23.8	16.3	59.9	24.0	16.6	59.4	32.0	15.7	52.4
70-74 Years	314	25.1	12.7	62.2	24.5	16.0	59.6	*23.3	19.1	57.6
75-79 Years	199	25.3	13.8	60.9	21.7	17.3	61.0	25.4	13.1	61.5
80 Years or Over	95	20.6	17.4	61.9	20.4	16.2	63.4	*16.9	12.9	70.2
Sex										
Male	357	*19.5	15.0	65.5	22.4	18.1	59.5	25.7	15.8	58.5
Female (R)	633	27.0	14.7	58.3	24.0	15.5	60.5	27.3	16.2	56.5
Marital Status										
Married	596	25.5	13.3	61.3	23.0	15.7	61.3	26.4	16.1	57.6
Not Married (R)	386	22.1	17.6	60.3	24.2	18.0	57.8	27.3	16.1	56.6
Race										
White, Not Hispanic (R)	828	24.8	14.9	60.4	23.2	15.5	61.3	26.7	15.9	57.4
Black, Not Hispanic	77	23.4	13.3	63.3	17.6	22.5	60.0	27.6	16.0	56.4
Hispanic	41	21.5	13.8	64.8	32.9	19.9	47.2	21.3	17.7	61.0
Education										
No High School (R)	98	20.3	14.4	65.3	19.8	17.4	62.8	23.6	12.2	64.3
Some High School	146	31.3	14.5	54.2	22.9	19.9	57.2	31.3	14.6	54.1
High School Graduate	404	24.2	16.3	59.5	26.8	16.2	57.1	27.8	20.3	51.9
Some College	128	18.4	15.7	65.9	19.0	19.0	62.1	27.2	14.4	58.3
College Graduate	182	26.0	11.5	62.5	21.6	13.7	64.7	22.3	12.5	65.3
Income										
< \$10,000 (R)	142	21.5	15.8	62.7	23.9	18.9	57.2	29.2	20.2	50.5
\$10,000-\$24,999	378	24.0	15.5	60.5	24.2	18.4	57.4	24.4	15.7	59.9
\$25,000>	250	27.5	14.3	58.3	22.0	13.4	64.6	29.4	18.0	52.6
Health										
Excellent/Very Good Health	503	22.5	14.9	62.7	21.7	16.4	61.9	24.6	15.4	60.0
Good Health	267	29.7	14.5	55.8	26.7	16.3	57.0	29.9	17.2	52.8
Fair/Poor Health (R)	207	22.4	15.5	62.2	23.7	17.7	58.6	29.3	16.2	54.6

See footnotes at the end of the table.

Table 10—Continued
Changes in Beneficiary Satisfaction Following Medicare HMO Disenrollment: 1999

Demographics	Number of Non-Proxy Respondents ¹	Satisfaction with Doctor Choice (n=883)			Satisfaction with Costs (n=862)			Satisfaction with Benefits (n=862)		
		Down	Up	No Change	Down	Up	No Change	Down	Up	No Change
IADL										
No Limits (R)	634	22.3	14.7	63.0	21.3	17.9	60.8	23.1	16.9	60.0
1 Limit	192	29.1	14.1	56.8	29.2	13.2	57.5	*35.4	14.0	50.7
>1 Limit	160	26.6	16.5	56.9	25.8	14.2	60.0	31.9	15.3	52.7
ADL										
No Limits (R)	728	22.6	14.4	63.0	22.3	17.1	60.6	25.3	15.7	59.0
1 Limit	135	25.7	11.6	62.7	27.4	11.8	60.7	28.6	18.2	53.2
>1 Limit	125	*33.2	19.9	47.0	26.6	15.9	57.5	33.6	16.5	50.0
Insurance After Disenrollment										
New HMO										
FFS Medicare with Medigap	822	*26.9	13.8	59.2	*21.0	15.9	63.2	25.4	16.0	58.6
FFS Medicare Only (R)	68	5.9	23.3	70.8	38.5	25.8	35.6	35.2	20.0	44.8
FFS Medicare only (R)	100	14.1	16.8	69.1	34.6	15.1	50.3	31.5	13.5	55.0

*Significant in the logit equation at the 95 percent confidence level or higher.

¹ Questions not asked of proxy respondents.

NOTES: FFS is fee-for-service. HMO is health maintenance organization. IADL is instrumental activity of daily living. ADL is activity of daily living. Reference categories for the logit specification are marked with an R. Results outlined in a box indicate, through the Chi-square test, that the response differed significantly according to the given beneficiary characteristic, with 95 percent probability or higher. Logit equations estimated only for Satisfaction Decreased versus Satisfaction Did Not Decrease.

SOURCE: The Robert Wood Johnson Foundation 1999 Survey of Medicare HMO Closures.

Although the majority of beneficiaries seemed to understand their insurance choices and to have sufficient knowledge to make an informed choice, this was not true for all beneficiaries. One-third to more than two-fifths of disenrollees lacked information regarding their insurance choices, did not know where to get additional information, or did not know what they needed to do to enroll in their new plan of choice. Confusion around these issues was significantly greater for racial and ethnic minorities, those with less education and lower income, and those in worse health. Additional efforts appear to be needed to educate all disenrollees about their choices and help them through the post-withdrawal transition period, with an added focus on reaching these vulnerable subpopulations.

The generalizability of our results may be of issue because of our selection of only six withdrawal markets. Compared to the Nation, we found the markets chosen for this analysis tended to have greater proportions of beneficiaries age 75 to 79. If there is an apparent bias in our markets, it is that they might be more vulnerable to disruptions since they were older. However, the sample markets also had proportionately fewer frailer elderly beneficiaries over age 85.

Although our population of six UnitedHealth markets does not provide the equivalent of a national probability sample for studying the consequences of HMO withdrawals, the ability to identify the population using claims data is a unique contribution. Though these results focus on only the first stage of withdrawals, our findings provide insights into the downside of discontinuous enrollment in a Medicare-financed managed care plan at a time when more abundant choices were available than later years of withdrawals.

Consistent with all prior research on this topic, we also found that these vulnerable subgroups were significantly more likely to return to FFS Medicare without purchasing supplemental coverage. This finding is most likely due to their lower level of knowledge about insurance choices, as well as an inability to afford Medigap coverage.⁵ Their lower health status, however, would seem to make these beneficiaries high users of care and thus, disproportionately affected by higher cost-sharing requirements and lack of drug coverage.

Despite a small amount of churning among HMOs after the initial choice was made, nearly all disenrollees stayed in the HMO or the FFS sector after making their initial selection. When switching occurred, the patterns varied by education and income. Less educated and lower income beneficiaries were more likely to return to FFS Medicare after a trial period in a new HMO, while more educated beneficiaries tended to select HMO coverage after a period in FFS Medicare. The tendency of most beneficiaries to stay with their initial choice further points to the importance of providing disenrollees with good information about their choices so they can make an informed enrollment decision.

In choosing their new coverage, beneficiaries were making the expected tradeoffs between desired supplemental benefits, out-of-pocket costs, and provider choice. Selecting a new HMO was clearly the best avenue for maintaining some type of coverage for prescription drugs and for insulating against increases in out-of-pocket payments for drugs. For beneficiaries returning to FFS Medicare, Medigap coverage offered one way to secure drug coverage, but only one-third of those with Medigap policies had a policy covering drugs.

⁵ Some of the lower-income beneficiaries may be dually eligible for Medicaid, and thus, do not need to purchase supplemental coverage.

Medigap coverage also helped to protect against higher expenses for physician visits. Of course, as discussed previously, some of the most vulnerable groups of beneficiaries are less likely to obtain supplemental coverage when they return to FFS Medicare, and thus, will not have this protection against higher out-of-pocket costs.

The drug coverage and protection against out-of-pocket expenses available to most HMO enrollees appears to have come at the price of restricted provider choice. Beneficiaries having prior relationships with primary care physicians or specialists were three to five times more likely to report disruptions in these relationships if they joined a new HMO instead of returning to FFS Medicare with supplemental coverage. Furthermore, these cost/choice tradeoffs were clear to beneficiaries: HMO enrollees were more likely to report a decline in their satisfaction with provider choice, while FFS enrollees were more likely to say their satisfaction with out-of-pocket expenses had declined.

Concern about out-of-pocket costs led small numbers of beneficiaries to not seek needed or desired physician care or to change their use of prescription drugs. These patterns of behavior were more pronounced among beneficiaries in poorer health. The most common cost-driven change in drug utilization was a move from brand name to generic drug, but some beneficiaries reported rationing their medications by taking less than the prescribed dosage, or stopping use of the drug altogether. Hispanic beneficiaries, those with less education and lower income, and those in poorest health were more likely to discontinue drug use because of cost concerns.

In sum, the post-withdrawal coverage arrangements selected by the beneficiary appear to be a strong determinant of the subsequent benefits, cost-sharing requirements, provider choice, and satisfaction.

All beneficiaries in this sample had at least one other HMO option available to them, and the vast majority elected to join a new HMO following disenrollment, securing drug coverage, and protection against higher out-of-pocket costs in exchange for limits on provider choice. There were, however, some striking differences in beneficiary knowledge about insurance options and their subsequent coverage choices. Of particular concern, minority populations, those with lower income and education, and in poorer health exhibited more confusion about their options and were more likely to return to FFS Medicare without supplemental coverage. This finding is consistent with all prior work on the topic, and reiterates the need for increased attention to how these populations fare when their HMO withdraws from the Medicare Program.

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