



Abt Associates Inc.

**Medicare Beneficiary
Behavior and
Information About the
Medicare Program**

**Contract No.
HCFA-95-0062/TO#2**

August 20, 2001

Prepared for
Suzanne Rotwein
Centers for Medicare &
Medicaid Services
7500 Security Blvd.
Mail Stop S1-15-03
Cubicle location S1-14-10
Baltimore, MD 21244

Prepared by
Gary Gaumer, Ph.D.
Jonathan Wilwerding, Ph.D.

Abt Associates Inc.
55 Wheeler Street
Cambridge, MA 02138

Internal Review

Project Director

Technical Reviewer

Management Reviewer

Contents

Executive Summary	iii
1.0 Utilization of Medicare Information	1
1.1 Introduction and Summary and Methods.....	1
1.1.1 Background.....	1
1.2 Methods	3
1.2.1 Data.....	3
1.2.2 Statistical Methods and Cautions.....	4
2.0 Findings.....	7
2.1 Overall Rates at which Beneficiaries Search for Information	7
2.1.1 Summary Statistics	7
2.2 Beneficiaries' Tendency to Search for Information.....	10
2.2.1 Statistical Models.....	10
2.3 Trends in Utilization	18
2.3.1 Summary Statistics	18
2.3.2 Statistical Models.....	20
2.4 Usage of Information on Particular Topics.....	22
2.4.1 Summary Statistics	22
2.4.2 Statistical Models.....	23
2.5 Channel-Specific Patterns of Utilization	25
2.5.1 <i>Medicare & You</i>	25
2.5.2 1-800 Numbers	26
2.5.3 Internet Web Sites.....	30
2.5.4 In-Person Counseling (Advice)	30
2.5.5 Health Fairs.....	31
2.5.6 Talking to Insurance/Plan Representatives	31
2.6 Socioeconomic Status and Use of Information.....	32
2.6.1 Knowledge of Medicare and Usage Difference of Sub Populations	32
2.7 Age and Searching for Information	37
2.8 Personal Situations and Market Events.....	39
2.9 Intensity	46
2.10 Beneficiary Knowledge and Awareness	47
2.10.1 Knowledge.....	47
2.10.2 Awareness of Publicity	51
2.11 Site to Site Differences in Information Use by Beneficiaries	51
2.12 Utilization Patterns of Formal and Informal Sources	52
2.12.1 Informal Sources.....	53
2.12.2 Formal Sources and Other Variables	54
3.0 Profiles	56
3.1 Discussion and Interpretation of Our Findings.....	56
3.1.1 General Findings.....	56
3.1.2 Interpretation.....	58

Appendices

Appendix A: Appendix of Regression Results

Appendix B: Summary Statistics

Appendix C: Description of Survey of Beneficiaries

Executive Summary

Today's Medicare beneficiary needs to be informed about the Medicare program, about insurance plan options, and about where to turn for specific information. However, little is known about what beneficiaries know, where they turn for information, or what factors may influence information seeking behavior. This report examines current survey data about Medicare beneficiaries' use of sources of information about Medicare. We examine the *levels of use* of particular types of information. We also examine the use that beneficiaries make of particular sources of information, including the Medicare handbook, help-lines, Internet, insurance and managed care plans, in-person counseling, and health fairs. We also examine *trends* in use of information since 1998, and the *patterns* of beneficiary behavior with respect to use of Medicare information.

Our data is taken from four waves of a special telephone survey of beneficiaries conducted by Abt Associates in six metropolitan areas of the U.S. that were selected for special monitoring for the National Medicare Education Program (NMEP). The survey was first conducted in the fall of 1998 (before the NMEP) and again in January/February 1999, 2000 and 2001. The fourth wave (January/February 2001) was supplemented with four additional sites and oversamples of involuntary health plan disenrollees and non-white beneficiaries.

We find that about two thirds of the surveyed beneficiaries search for information regarding Medicare during any given year. Moreover, there is evidence of a modest upward trend in information use over the four waves of the survey. Much of the trend—but not all—seems to be the result of increased use the Medicare & You handbook, which is now mailed annually to all beneficiary households. There are also increases in the use of channels like the Internet and the Medicare help-line (1-800-Medicar(e)). The handbook is by far the most frequently used source. Approximately 43 percent of beneficiaries report using the handbook. About one-half of the beneficiaries seek information from more than one source during a year.

There are important, systematic differences across subgroups of the beneficiary population. A simple, general story can be told about the patterns we observe. There are identifiable factors that seem to motivate people to seek information. There are also factors that enhance, or “enable”, them to seek information more or less readily. Motivational factors include special *events in markets* (like HMO terminations, retirement benefit changes, physicians leaving plans) and important *life events* (death of a spouse, financial difficulties, worsening health). All of these situations can create a time-sensitive need for Medicare information, and we see particularly strong impacts for the market events. Important enabling factors include formal education level, Medicare knowledge levels, and noticing publicity about Medicare information.

1.0 Utilization of Medicare Information

1.1 Introduction and Summary and Methods

1.1.1. Background

The National Medicare Education Program (NMEP) was implemented in late 1998 with the launch of the 1-800-MEDICARE help-line and the mailing of a new version of the Medicare handbook in five pilot states. Since 1998, CMS has begun a number of educational efforts, both from the central office and as part of the regional REACH component of NMEP. The purpose of this program is to make beneficiaries aware of their options within Medicare, and to provide information on which to base decisions about Medicare health care coverage. Our purpose is to describe how beneficiaries use information about Medicare.

In general, Medicare beneficiaries need information concerning:

- Insurance options—e.g., managed care;
- Supplementary insurance;
- Billing and payment for services;
- How to get help, to report fraud, to choose a physician; and
- What rights they have.

Many institutions offer help with issues like these. Some of these institutions are private; others are publicly funded, as CMS is. Health plans and insurance companies are important sources of information on Medicare risk plans and Medicare supplemental insurance. Health care providers (hospitals, physician offices) also offer help with matters health plan choice and fee for service billing. State and local senior organizations are important information providers as well, offering seminars, counseling, help-lines, and health fairs. Newspapers, other media, as well as friends and family, supply information and help to beneficiaries. In recent years, even the Internet has come to play a role, largely under CMS auspices.

CMS efforts at supplying information begin with *Medicare & You Handbook*, which is mailed each fall to all beneficiaries. Other CMS efforts include establishing the 1-800-MEDICAR help-line; the www.medicare.gov and www.hcfa.gov Internet sites; written materials; and a national partnering campaign with other organizations. Regional offices of CMS (ROs) have sponsored (alongside state and local partner organizations) thousands of events disseminating information about the Medicare program—including health fairs, presentations, special mailings, and media activities.

Amid all of this effort to keep beneficiaries informed, several questions remain unanswered:

What percent of the beneficiary population in fact search for information regarding the Medicare program, and is there reason to believe that this percent is too small?

How effective is the system that supplies information to beneficiaries? Does gaining access to information require more effort than necessary?

What information do beneficiaries want? On what topics do they want information that they do not already have?

How do they search for information? What sources are they most likely to consult? Are these sources likely to offer accurate information?

In general, what disposes beneficiaries to search for information, and what does this imply regarding CMS efforts at educating them?

Is there reason to believe that the system of supply is not serving particularly vulnerable populations?

This report begins with a summary of findings, followed by a description of data sources and methods. Section 2 treats specific issues concerning beneficiaries' disposition to search for and use information. In Section 3 we summarize and interpret our findings. An appendix contains tables of descriptive data from the survey, regressions and a discussion of the survey itself.

General Findings

- About 67 percent of beneficiaries surveyed in the six study sites reported that they had sought information from some source regarding Medicare during the prior year. This means that about one-third of the beneficiaries report not seeking information. About one-half of the beneficiaries who sought information contacted more than one source for information during the prior year (52 percent) and more than one-third contacted at least three.
- The largest increase in use rates of Medicare information occurred when the household mailings of the *Medicare & You* handbook were initiated in late 1998.
- Following this initial increase in information usage, there has been a small upward trend in the overall rate at which beneficiaries search for information between 1999 and 2001. Beneficiaries in the 2001 sample were 3.7 percentage points more likely to search for information than their counterparts in 1999. Use of the Internet increased since 1999 (by 1.5 percent), as did use of the Medicare Help-line (by 1.2 percent).
- On average, beneficiaries in the 2001 sample contacted 1.5 sources during the year. This is higher than in the 1998 and 1999 samples (1.35 and 1.37, respectively), but slightly lower than the average of 1.7 for the 2000 sample.
- Perhaps the most important findings of this report concern the variations in the tendency to search for information across beneficiary subgroups. In the models that we estimate, the probability that a given beneficiary will search for information is associated with

Age,
Gender,
Ethnicity,
Level of education,

Marital status, and
Personal situations and insurance market events.

Personal situations and market events include, but are not restricted to: involuntary disenrollment from a managed care plan that withdrew from Medicare; a change in employer-provided retirement health benefits; and loss of access to a personal physician due to his or her withdrawal from a managed care plan.

- The experience of personal and market-related events has, perhaps, the strongest association with beneficiaries' tendency to search for information. In the 2001 sample, roughly 61 percent of surveyed beneficiaries had such experience. 72 percent of such beneficiaries sought information regarding Medicare in the 2001 sample, as against 59 percent of beneficiaries experiencing no personal situation or market event (See Figure 2.6 below). Still, 28 percent of such beneficiaries report not searching for information at all.¹
- The Handbook is by far the information source most used by beneficiaries. In the 2001 sample, 43 percent of beneficiaries report using the Handbook, and about half these persons (22 percent) who search for information use **only** the handbook.
- For the subset of Beneficiaries seeking information about managed care (about 16.5 percent of surveyed beneficiaries), representatives of insurance companies and plans remain the second most frequently used sources of information.
- In the 2001 sample, of those who search for information, 80 percent report use of formal sources; 20 percent report no such use. Of those reporting use of formal sources, 87 percent report using the handbook at least once during the past year.
- In the 2001 sample, 23 percent of beneficiaries report noticing some publicity about Medicare changes and choices in the month prior to the survey. This is less than the 28 percent of the 2000 sample, and much less than the 40 percent and 33 percent, of the 1999 and 1998 samples, respectively.

1.2 Methods

1.2.1 Data

Data for this study comes chiefly from The NMEP Community Monitoring Survey. The Community Monitoring Survey has been in place since October 1998. In the intervening years, we have collected four waves of data. The first wave occurred in October 1998, immediately before the new Medicare + Choice Handbook was mailed in pilot states. Second and third waves took place in January and February 1999 and 2000, respectively. The most recent wave of the survey occurred in January and February of 2001. For nearly all questions in the survey, the recall period was one year.

¹ Of course, the fact that someone experiences a personal situation or market event does not strictly imply that she needs information. She may know what she needs to know before the relevant event occurs.

In all four waves, data for the Community Monitoring Survey were collected by telephone interview. In each of the first three waves, interviews were conducted in the same six communities: Sarasota FL, Springfield, MA, Dayton, OH, Tucson, AZ, Eugene, OR and Olympia, WA. In 2001 we conducted interviews in 10 sites, six of which were the original interview sites. Four sites were added in an effort to study involuntary disenrollment from Medicare managed care plans (Houston, Minneapolis, Nassau County NY, and Centre County PA).

We exclude several groups from the sample. First, we did not interview beneficiaries who had no telephone in their home, or whose telephone numbers we were not able to find. Second, we exclude beneficiaries whose physical or mental impairments prevent them from answering interview questions. Third, we did not interview beneficiaries with end-stage renal disease, or those who did not speak English. A pilot administration of the survey yielded extremely low response rates for beneficiaries over 85 years of age, and we exclude this group as well.

It is important to interpret our findings in light of these exclusions. In this report, we estimate rates at which beneficiaries search for information. But it is reasonable to believe that members of groups that we exclude are less likely than typical beneficiaries to search for information regarding Medicare. Our exclusions thus remove a population consisting largely of non-searchers. This will produce an upward bias in some of our estimates.

Using CMS administrative files, we drew our samples from a complete list of beneficiaries living in each of the study communities. We then attempted to match telephone numbers with beneficiaries whose numbers were listed under their own names. Approximately half of the beneficiary names did not yield telephone numbers. In 1998, the survey's response rate was 44 percent of eligible beneficiaries. In 1999, 2000 and 2001, the response rates were 54 percent, 41 percent and 44 percent, respectively.

In 2001 we stratified the sample to capture more involuntary disenrollees and minorities. Where necessary, estimates using the 2001 sample employ weights to account for the oversampling.

The four waves taken together comprise a data set of 12,910 observations, but most of the findings that we discuss in this report were derived using the 2001 sample. This consisted of 2316 observations from the original six sites. In most analyses, we drop observations on beneficiaries who are younger than 65.² This last restriction leaves an analytic sample of 2120 for the year 2001.

1.2.2 Statistical Methods and Cautions

This report includes both descriptive data and data generated by regression. Some descriptive data are contained in tables in the Appendix. These come directly from the survey, and are weighted to account for oversampling in the fourth wave. Apart from the Appendix, we weight descriptive data only when drawing comparisons between waves—as happens, for example, when we examine time trends. We estimate all of our regression models unweighted.

² Beneficiaries below the age of 65 are eligible for Medicare by virtue of disability. We drop this group from most of our analysis in order to avoid the assumption that disabled beneficiaries are very much like elderly beneficiaries.

We test for statistical associations by estimating a set of regression (probit) models. The dependent variables in these models are binary, taking the value 1 if someone sought information, for example, and zero if she did not. Models like these allow us to identify variables associated with the likelihood that someone will seek information about the Medicare program, or seek it in a particular way. Some details are provided here, while more detail about statistical methods are found below.

This report focuses on beneficiaries' tendency to search for information regarding Medicare. We use three dependent variables. The first relates to beneficiaries' tendency to seek information *on specific topics*. The second type of dependent variable concerns their tendency to seek information *by specific methods or channels*. The third type of measure relates to the number of attempts beneficiaries make as they search for information. We discuss each type of dependent measure in turn.

The survey asks about three *topics* on which beneficiaries search for information. Beneficiaries were asked whether, during the last year, they sought information regarding (i) Medicare claims, coverage and billing, (ii) supplemental coverage, and (iii) managed care plans. For each of these three behaviors, we define a variable that takes the value one if a beneficiary sought information on the relevant topic, and zero if she did not.

The survey also asks about *methods or sources* by which one could seek information regarding the Medicare program. Beneficiaries might search for information by calling a toll-free 800 number. They might also meet in person with a Medicare or senior counselor, or with a representative of a private insurance company. They might read the Medicare Handbook, use the Internet or visited a health fair. The survey also asked specifically about use of the 1-800-MEDICAR(e) help-line and the www.medicare.gov Internet site. For each of these sources, we define a variable indicating whether a beneficiary used that source.

We also define a *summary usage measure* indicating that a beneficiary reported using any information about Medicare at all in the prior twelve months. Indeed, this is our principal dependent variable. This measure takes the value 1 ("yes") if a beneficiary sought information on any of the three topics or from any of the eight sources.³ For the year 2001, the mean for this variable is approximately 0.66, indicating that about two thirds of surveyed beneficiaries used some form of information about Medicare in the prior year.

There are topics and sources of information not studied in the survey, so there will be cases where someone has, indeed, sought information regarding Medicare, but not on any of our three topics and not from any of our eight sources. There will be cases, then, where someone has sought information but where our variable does not capture the fact. This means that our measure is afflicted with some degree of unreliability: it does not perfectly indicate the phenomenon that we want to study. It is important to interpret our findings cautiously, in light of this fact.

It is also important to beware of the distinction between searching for information passively and searching actively. Conceptually, this is the distinction between (i) intending to gather information of a given kind, and (ii) merely running across information by happenstance. Questions on the survey

³ In cases where we use all waves of the survey, we redefine this variable in a way that excludes reference to the Medicare Help-line, the Medicare Internet site, and health fairs. Questions regarding these sources were not included on the Survey until the year 2000. Variables defined by use of the latter questions, therefore, would be undefined for earlier years.

render it impossible to distinguish the two. In some instances, for example, we ask, “Did you search for information about...”. Other questions ask whether beneficiaries received and “used” the handbook—where, ‘used’ might mean read the handbook intensively, read parts thoroughly, or merely glanced at it. Below, we refer to beneficiaries as “searching for” information. This is not meant to imply intentional action. We do not separate cases where someone embarked on a search from cases where someone encountered information without intending to.

It is possible to draw a rough distinction between *formal* and *informal* sources of information regarding Medicare. Formal methods are those that make use of official Medicare sources or sources that we expect to be reliable and unbiased conveyors of information about the Medicare program. As we define it, any of the following conditions are sufficient to have used formal sources:

- Talked with someone at a Medicare office or by calling the Medicare help-line;
- Read the *Medicare & You handbook*, or materials originating in a Medicare office;
- Talked with someone from AARP or a senior center or senior organization regarding Medicare;
- Met with a senior counselor; or
- Used the Medicare Internet site.
- Attended a health fair

Our variable for formal seeking takes the value one if a beneficiary did any of these, and zero otherwise.

The survey included a (seven-question) test indicating how much beneficiaries know about Medicare. We define a variable that has the value 1 if someone scored at or above the median on this test, and zero otherwise. We use this to identify beneficiaries with relatively good understanding of the Medicare program.

Finally, we define a variable that counts the number of sources that beneficiaries report using. We define this variable in two steps. For any of the three topics—claims, supplemental insurance, and managed care—the survey asked whether beneficiaries spoke with anyone regarding that topic, and whether they read anything about it. Subjects could indicate sources with whom they spoke and sources that they read (to a maximum of five in both cases). In the first step, we count sources reported on these questions. Second, the survey also includes a set of questions simply asking whether subjects used any of the eight sources that we listed earlier. In the second step, we add a count of these sources to the result of the first count. This gives a rough estimate of the number of sources that a beneficiary used.

We use these dependent variables in conjunction with a set of explanatory variables, like race, gender, or level of education. In general, our aim is to identify explanatory variables that associated with beneficiaries’ tendency to search for information regarding Medicare. We present and discuss the complete list of explanatory variable that we study in Section 2.2 below.

2.0 Findings

2.1 Overall Rates at which Beneficiaries Search for Information

2.1.1 Summary Statistics

In the 2001 monitoring sample,⁴ approximately 67 percent of beneficiaries surveyed in the original six study sites sought information regarding Medicare (Table 2.1). This means that roughly one-third of beneficiaries did not seek information, by our measures. Of those who sought information, 47.6 percent reported seeking information only once; roughly equal percentages report using two, three or four, or more than four sources (Figure 2.1).⁵

The *Medicare & You* Handbook is the source of information that beneficiaries use most commonly (Table 2.1). Indeed, 43 percent of beneficiaries report using the handbook, with about half of these persons (22 percent) using *only* the handbook as a source of information regarding the Medicare program. Of those who seek information only once, two-thirds use the handbook (Table 2.2, Column 2), 5 percent call an 800 number, and very few use any other source of information. Beneficiaries using more than one source resort, first, to the handbook and then to calling some 800 number, talking with representatives of insurance companies, visiting health fairs and calling the Medicare Help-line—in roughly that order (Table 2.2).⁶ *Only for those who seek very frequently, is there appreciable use of the Internet or the Medicare web site.*

The *Medicare & You* handbook is the most critical information resource for beneficiaries. Figure 2.1 below describes the beneficiary population who sought information regarding Medicare. Nearly one-third (32.4%) used only the handbook. Fifteen percent used only one source, but something other than the handbook. As we remark above, roughly equal percentages used two, three or four, or more than four sources.

⁴ The recall period for the 2001 NMEP Community Monitoring Survey sample was the twelve months prior to the survey date.

⁵ The NMEP Survey data makes it difficult very accurately to count the number of sources that beneficiaries use. By number of sources, we intend number of contacts with some source of information. Limitations of the data, however, mean that there may be some cases of double counting.

⁶ For more detailed information on use of the *Medicare & You* handbook, see also the Abt Associates Inc. companion report on this topic.

Table 2.1

Rates at which Beneficiaries Search for Information Regarding Medicare, 2001

Percent of Beneficiaries Searching for Medicare Information on Some Topic or from Some Source 66.7%

Percent of Beneficiaries Searching for Medicare Information on Specific Topics

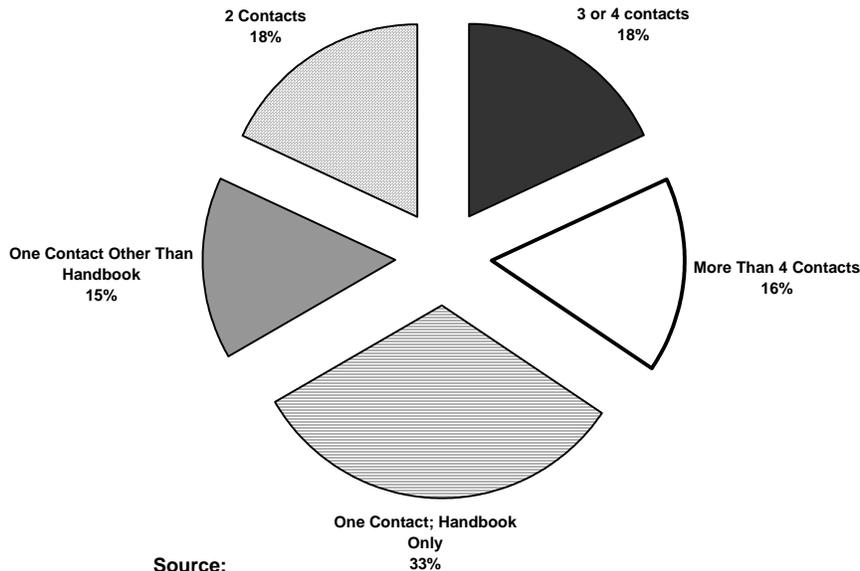
Claims and Billing	22.6
Medigap Supplemental Coverage	16.0
Managed Care	16.5

Percent of Beneficiaries Searching for Medicare Information from Specific Sources

Handbook	43.4%
Plan/Insurance Rep	10.1
Any 1-800 #	13.8
800- Medicare	5.6
Counseling	2.0
Any Internet	3.5
Medicare Website	2.0
Health fair	7.4

Source: 2001 NMEP Community Monitoring Survey of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ. Data weighted for comparability with previous waves.

Figure 2.1: Annual Beneficiary Use of Medicare Information



Source: 2001 NMEP Community Monitoring Survey of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Table 2.2

Use of Specific Sources Among Those Searching for Information, by Number of Reported Contacts, 2001

Percent Using Particular Sources of Medicare Information

Number of Reported Contacts	Handbook	Plan Rep	Any 1-800 #	800-Medicare	Counseling	Any Internet	Medicare Web	Health Fair
Any Contact	68.81%	13.98%	19.22%	8.12%	3.10%	4.97%	3.03%	11.78%
One	66.91	3.24	5.06	1.09	1.08	0.72	0.00	3.97
Two	64.29	14.29	20.67	5.34	2.40	3.81	0.48	15.31
Three or Four	68.25	21.80	28.71	10.29	5.21	7.55	4.76	14.22
More than Four	80.00	36.32	48.42	29.57	7.41	15.79	12.90	28.04

Source: 2001 NMEP Community Monitoring Survey of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ. Data weighted for comparability with previous waves

Additional summary data appear in Appendix B.⁷ These descriptive data suggest that the tendency to search for information is associated with:

- Age,
- Marital and Living Status,
- Ethnicity,
- Education,
- The intention to review one's health coverage,
- Knowledge or understanding of the Medicare program,
- Awareness of publicity regarding change in the Medicare program, and
- The occurrence of personal situations or events in local health insurance and health care markets.

Data reported in the Appendix, however, were not subject to statistical testing. It is, thus, not certain these apparent associations are statistically real.

2.2 Beneficiaries' Tendency to Search for Information

What makes beneficiaries more (or less) likely to search for information regarding the Medicare program? What characteristics are associated with, or affect, the likelihood that someone will search for information? In addition to the unadjusted data appearing in Appendix B, we use multivariate statistical models to answer these questions.

2.2.1 Statistical Models

We would like to know whether beneficiaries are more likely to search for information, for example, if they are younger, married, better educated, and so on. In order to test associations like these, we begin by estimating a series of statistical models.⁸ The first of these models concerns beneficiaries' tendency to search for information at all; subsequent models concern their tendency to search for information on specific topics (section 2.3) or by specific means or channels (section 2.4).

We use a constructed variable to identify beneficiaries who sought information during the recall period of the survey (12 months). This variable takes the values 1 ("yes") if a beneficiary sought information on any of three topics or from any of eight sources mentioned in the survey.⁹ It has the value zero ("no") otherwise.

⁷ Summary data reported in the Appendix depart very slightly from some of the statistics that we reported earlier. This is due to the use of slightly different weights in estimating the data in the Appendix.

⁸ In all cases, these are probit models.

⁹ The three topics are: claims and billing, Medigap supplemental coverage, and managed care. The eight sources are: calling any 800 number, calling the Medicare Help-line, the Medicare Handbook, speaking with a senior counselor, speaking with an insurance representative, using the Internet, using the Medicare web site, or attending a health fair.

We test whether the constructed variable is associated with any of a set of explanatory variables. These variables appear in Table 2.3 below. With the exception of the income variable, all of the explanatory measures take the values one or zero (“yes” or “no”). The variable “African-American”, for example, has the value one if a beneficiary is African-American, and zero otherwise. In the case of the variable identifying African-Americans, the comparison, or excluded, group is white. Thus, the coefficient on the variable “African-American” indicates whether African-Americans are more (or less) likely than whites to search for information. . For each variable in the model we indicate the comparison, or *excluded*, group in Table 2.3. For several variable categories, we indicate the percent of the sample in the excluded group as well. No variable for these excluded groups appear in our models.

The last set of variables in Table 2.3 is likely to influence the behavior of beneficiaries in seeking information. But they are potentially codetermined with the information-seeking rate itself. This means that, where they are included in the models, our estimates of their coefficients cannot be assumed to be unbiased.

It is also true, that our models estimate statistical *associations* between information seeking rates and other measures, not causal relationships. For example, it might be true that beneficiaries with above median knowledge of Medicare are more likely to seek information *or* that persons who are more likely to seek information are more likely to have high knowledge of Medicare. Our models cannot distinguish between these two possibilities. Thus, when we talk about “effects”, we intend only to indicate statistical—not causal—associations. There is little that we can do to address the endogeneity problem here. In a rough way, we check to see whether our results are robust by first excluding the endogenous variables from our models and then adding them. As Table 2.4 below makes clear, only rarely does this very much effect on the coefficients corresponding to other (non-endogenous) variables.

Estimates for the Year 2001

Table 2.4 reports estimates for the most recent wave of the survey (completed in January/February 2001). For each variable, the coefficient in the table indicates the variable’s statistical association with the overall probability that a beneficiary will search for information regarding Medicare (holding other variables constant). The coefficient for males, for example, indicates that they are 7 percent less likely than females to search for information. All differences are expressed in percentage terms; the mean for all beneficiaries provides a reference point for comparison. Appendix A contains regression results corresponding to these estimates.

Table 2.3
Explanatory Variables

Variable (means for 2001 in parentheses)	Excluded Group	Variable Mean
Age	Age 80-85	
65-69		29.81
70-74		27.83
75-79		24.34
80-85		18.02
Site	Eugene, OR	
Springfield		17.12
Sarasota		15.24
Dayton		17.83
Eugene, OR		15.05
Tucson		17.22
Olympia		17.55
Gender	Female	
Male		42.74
Female		57.26
Race and Ethnicity	Whites	
Whites		79.76
African American		8.35
Hispanic		4.06
Other minority		5.94
Income (eight categories)	Not binary; no excluded group	
Education	Less than high school	
Less than high school		18.88
High school graduate		35.43
Post high school training		3.15
Some college		20.17
College graduate		22.37
Lives alone	Not Living alone	29.25
Married	Not Married	61.70
Insurance Status	Traditional Only	
Medicaid eligible		19.62
Other private insurance		45.85
Health good to excellent	Health Poor or Average	75.94
Personal Situations and Market Events	Not experiencing an event	
Health declined in the last year		23.35
Self or spouse involuntarily disenrolled		6.27
Spouse died in the last year		3.63
Self or spouse experienced financial difficulty		16.23

Table 2.3
Explanatory Variables

Variable (means for 2001 in parentheses)	Excluded Group	Variable Mean
Own or spouse's personal M.D. left the Medicare health plan		9.29
Beneficiary aware of another area plan left Medicare		2.88
Change in beneficiary's or spouse's retirement health benefits		12.64
Learned of new health coverage options in Medicare		14.67
Aware of physician joining some area health Plan		11.56

Potentially endogenous variables

Enrolled in managed care under Medicare	Not in managed care	33.30
At or above median knowledge of Medicare (as measured by the survey) --Medicare doesn't cover everything. --You do not have to leave Medicare if you join an HMO. --You can leave an HMO at any time. --You can appeal an HMO's treatment coverage decision. --Medicare covers colon cancer screening. --Medicare covers mammography screening. --HMOs can periodically change their fees and benefits.	Below median	62.64
Aware of publicity regarding change in Medicare	Not aware	23.21
No change in Medicare coverage during year	Change in Medicare insurance	23.25
Changed health insurance coverage or benefits(including Medicare or other)	No change	9.81

Source: 2001 NMEP Community Monitoring Survey of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

The table has two columns of estimates, each reflecting a separate model.

- Column 1 reports marginal effects of the indicated beneficiary characteristic, derived from what we refer to as *the basic model* estimated using data from the 2001 Survey.
- Column 2 reports marginal effects derived from the basic model augmented by variables indicating membership in managed care, knowledge of Medicare, awareness of publicity regarding change in the program, and change in health care coverage. These are the variables that we assume to be endogenous. The coefficients for these measures are likely to be biased, but the inclusion of them does not change the marginal effects of the other variables very much, indicating the basic model is robust.

These coefficients are the marginal effects of the variables. This means that they are computed holding constant the effects of other variables.¹⁰ For example, looking at the basic model in the first column, persons who have some college have a probability of searching for Medicare information over the last 12 months that is 7.64 percentage points higher than persons who did not graduate from high school (the excluded group). This effect adjusts for differences due to age, site, insurance coverage, health status, and other variables included in the model. Note that the college graduates have an even higher probability of searching, and persons who graduated from high school have a somewhat lower search rate.

Asterisks indicate cases where (underlying) coefficients are statistically different from zero.

Table 2.4
Marginal Effects of Explanatory Variables on the Probability of Searching for Information

	1	2
	Basic Model	Model with Added Variables
Mean for all Beneficiaries	66.0 %	66.0 %
Age 65-69	4.20 %	2.40 %
Age 70-74	6.92 *	5.98
Age 75-79	1.98	1.84
Springfield	0.37	2.13
Sarasota	-2.02	-0.06
Dayton	2.31	4.40
Tucson	6.82	7.37
Olympia	-1.78	-0.64
Male	-7.02 **	-6.06 *
African American	0.31	4.26

¹⁰ These marginal effects are estimated from the Probit coefficient estimates by setting all other variables at their respective mean values.

Table 2.4
Marginal Effects of Explanatory Variables on the Probability of Searching for Information

	1	2
	Basic Model	Model with Added Variables
Mean for all Beneficiaries	66.0 %	66.0 %
Hispanic	6.00	7.63
Other Minority	3.74	5.36
Income	-2.02 **	-2.09 *
High School Graduate	3.38	1.79
Post High School Training	8.91	7.06
Some College	7.64 *	5.30
College Graduate	8.56 *	6.00 *
Lives Alone	-5.01	-3.81
Married	1.51	2.63
Medicaid Eligible	2.11	2.64
Other Health Insurance	-0.31	1.06
Self/Spouse Disenrolled	11.17 *	6.20
Spouse Died	-4.96	-4.70
Financial Difficulty	2.96	3.07
M.D. Left Plan	9.23 *	7.04
Health Declined	9.72 *	10.11 **
Retirement coverage changed	10.64 **	8.82 **
Learned of New Options	9.80 **	7.42 *
M. D. Joined Area Plan	5.54 *	4.32
Other Plan Left Medicare	-31.61	-33.52
At or Above Median Knowledge		14.44 **
Aware of Publicity		9.07 **
Unchanged Medicare Coverage		-7.00
Changed Health Insurance		18.74 **

*Source: 2001 NMEP Community Monitoring Survey of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ. * denotes p<.05, ** denotes p<.01.*

There are slight indications of an age effect of information seeking, but it is not systematic. Persons 70-74 appear to use more information than the excluded group (80-85). Though not evident here, a companion paper on special populations shows that new enrollees by virtue of age (exactly 65 years old) use more information than older beneficiaries.¹¹

Sites do not differ in the frequency with which beneficiaries seek Medicare information, after controlling for other factors. Confirming our case study findings, Tucson appears to be the highest using site, and Sarasota the lowest—but these differences are not statistically significant.

In the 2001 sample, men were less likely than women to search for information. The coefficient on the gender variable is negative; this indicates that men were less likely than women to search for information. The information-seeking rate for men is about 7 percentage points lower than for women (the overall search rate is about 67 percent).

Beneficiaries' likelihood of searching for information declines with income, other factors held constant. Since we control for education, health status, and type of insurance, this may reflect the price of time—persons with lower incomes may feel that they must be more careful and deliberate in decision-making, and may act as if they have larger amounts of time to devote to search activity than their higher income counterparts.

Confirming prior work, education is a strong predictor of information usage. More highly educated beneficiaries are more likely to search for information. Recall that the left out category here consists of beneficiaries with less than a high school education. We observe that the coefficient for beneficiaries who had some college training is positive across all models. These beneficiaries have information searching rates that are about 7.6 percentage points higher than beneficiaries who did not graduate from high school. Beneficiaries with a college degree are even more likely to search for information.

The coefficients for the education variables are slightly smaller in the second model. Why does this occur? Unlike the basic model, this model includes measures of beneficiaries' knowledge of the Medicare program, and their general level of awareness regarding change in Medicare. One would expect education and knowledge of Medicare to be correlated. We interpret the data to mean that education is, indeed, associated with beneficiaries' tendency to search for information, but this is explained, at least in part, by the association between education and understanding of the Medicare program.

Living arrangements (living alone, marital status) are not significantly related to the odds of searching for Medicare information. Insurance arrangements (Medicaid, other insurance, or managed care enrollment) are also not related to the chance that beneficiaries search for information in the past 12 months.

Our models include a set of variables indicating beneficiaries who experienced what we might call *personal situations or market events*. These are occurrences in the lives of beneficiaries, or in their

¹¹ Gary Gaumer and Holly Korda, "Special Populations' Use of Medicare Information", Abt Associates Inc., August 2001. (HCFA-95-0062, T.O. # 2).

local health care or health insurance markets, that we expect to motivate searches for information.¹² About 7% of beneficiaries in the 2001 sample saw either their own or their spouse's health plan pull out of Medicare. Beneficiaries experiencing involuntary disenrollment of this kind were more likely than others to search for information. The coefficient for the variable in the basic model suggests that persons involuntarily disenrolled were about 11 percent points more likely to search for Medicare information. In the second model the coefficient on this variable falls in size and appears not to be significant. But the latter model includes a measure of whether a beneficiary changed insurance coverage or benefits during the last year. There is a high degree of correlation between disenrollment and change in health insurance, and this could account for the difference.

Beneficiaries were more likely to search for information in the 2001 sample if either their own or their spouse's health declined during the year. The coefficient for this variable is positive, and statistically significant, across all models. Moreover, the size of the coefficient is nearly unaffected in models that include any of the set of endogenous variables. The effect size suggests that health declines are associated with an increase of about 10 percentage points in the likelihood that Medicare information will be sought.

Among the remaining market events, beneficiaries were more likely to search for information about Medicare if (1) their own, or their spouse's physician left a managed care plan in the area; (2) their own, or their spouse's, employee retirement health benefits changed; or (3) they became aware of new health plan options open to them. Events that seem to not effect the likelihood of searching from Medicare information are death of a spouse and personal financial difficulty.

We include a variable indicating beneficiaries who live in an area where *some* health plan other than their own left Medicare. In our models, there is no statistical association between this variable and the tendency to search for information. This is what one might expect, since the models do control for whether *one's own* plan left Medicare. The departure of an area health plan from Medicare should not motivate someone to search for information, if the departing plan were not her own. The finding here is that the departure of *some* health plan is irrelevant, once we control for whether one's own plan left Medicare

Among the endogenous variables, a greater likelihood of searching for information is associated with better knowledge of Medicare, awareness of change regarding the program, and having changed ones (Medicare or non-Medicare) health insurance or health benefits. Once again, these estimates must be greeted with caution, since we cannot assume that they are unbiased.

Summary. To summarize, for the 2001 sample, statistical models indicate *prima facie* that beneficiaries are more likely to search for information if they:

- have lower incomes or
- are female.
- are highly educated,
- experienced a recent decline in their health,

¹² Gaumer and Korda (op cit) discuss these measures and their influence on information seeking in more depth.

- were involuntarily disenrolled from managed care under Medicare,
- saw their personal physician leave their health plan,
- had their employee retirement health benefits change, or
- became aware of new health care option.

These effect patterns were confirmed by estimating models on the pooled sample of 2000 and 2001 surveys. This permits roughly doubling sample size, and helps to see smaller effects more clearly. The modeling results are in the Appendix. The pooled sample estimates show somewhat larger associations between educational attainment and use of information about Medicare. The effects of urgent events situations on information usage is shown to be somewhat more pervasive—with significant effects seen for the same situations as we described above (involuntary disenrollment, physician departure from the plan, retiree benefit coverage changes, health decline), as well as for the variable for personal financial difficulty. In the pooled sample Hispanics are found to be about 10 percentage points more likely to use Medicare information than whites, holding other things the same. And Tucson is the sole site where differences are seen in the likelihood of beneficiaries seeking information (about 5 percentage points higher than the excluded site, Eugene).

The demand for Medicare information by beneficiaries appears to be consistent with a rational model of search behavior. Individuals clearly search for information in response to situational needs (changes in health, changes in insurance situation). Given need, they have higher chances of searching when search is likely to be most productive (if they have higher education levels) and least costly (when they have lower incomes). There do not appear to be site differences in the search behavior, nor differences for minorities.

2.3 Trends in Utilization

The NMEP, begun in late 1998, was intended to improve access to Medicare information. To understand the subsequent trends in use of Medicare information we examine the four waves of the monitoring survey results spanning the period October 1998 to January/February 2001.

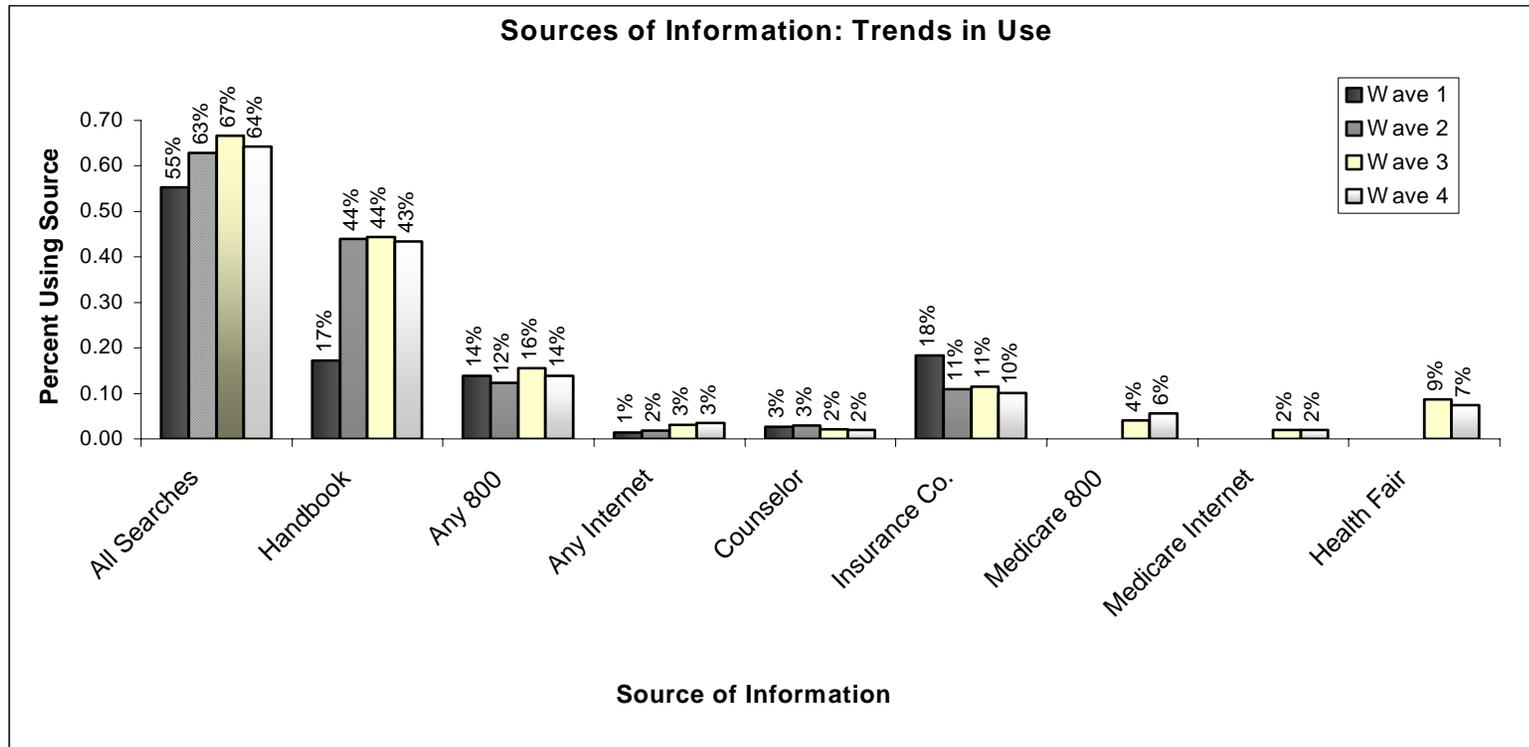
2.3.1 Summary Statistics

Figure 2.2 represents rates of searching by year. The first panel of bars on the Figure relates to trends in overall searching rates for the prior 12 months. We define this measure here as having the value 1 (“yes”), if a beneficiary sought information on any of three topics, or from any of *five* sources, and zero otherwise.¹³ Other bars on the figure are measures of use (or not) for particular channels of information.

The data reported here are simple averages and were not subject to statistical tests. Still, they give us an initial impression of what is happening over time, and a picture that is pretty consistent with the statistical modeling results in Table 2.5 below.

¹³ Earlier, our variable referred to three topics and *eight* sources. We omit three of the sources (Medicare Helpline, the Medicare Internet site, and health fairs) because we did not ask about them until the 2000 wave of the survey. This accounts for the slightly lower rate of searching reported for the year 2001 here (64%), as compared with earlier data reported in section 2.1 above (66.7%).

Source: NMEP Community Monitoring Survey 2001, of beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ. Data weighted for comparability across waves.



The overall rate at which beneficiaries search for information appears to have risen between 1998 and 2000 (from 55% to 67%), but fallen slightly since then. The trend was largely driven by the rate at which beneficiaries use the handbook, which rose markedly after the household mailing began in late 1998. Handbook usage appears unchanged since 1999; and the rates at which beneficiaries seek advice from seniors' counselors or insurance companies may have fallen. Use of the Internet and the Medicare help-line may have risen in the years since these items were included in the survey.

2.3.2 Statistical Models

We use statistical models to test for the presence of trends, beginning with the year 1998. These data appear in Table 2.5 below. In all cases, the estimated coefficients come from statistical (probit) models like those discussed earlier. The coefficients in the table represent the marginal effect of time, holding other variables constant.¹⁴ The columns indicate the trend for a given year *relative to* 1999. For example, the first cell of Column 1 indicates that the rate at which beneficiaries sought information was 9.3 percentage points lower in 1998 than it was in 1999 (against an overall all year average searching rate of 62 percent)¹⁵. We use 1999 as the base year because the 1999, 2000, and 2001 surveys were each conducted in January/February, making the coefficients for the 2000 and 2001 trends interpretable as annual changes. The 1998 survey was conducted in October, so the change reflected in the coefficient for 1998 reflects only a 3-4 month change.

The overall rate at which beneficiaries search for information has increased consistently since 1998, but the increase has tended to flatten out over time—from a 9.3 percentage point increase between 1998 and 1999, to a 3.7 percentage point increase between 1999 and 2001.¹⁶ As Table 2.5 indicates, there was actually a 3-4% *decline* in the overall rate between 2000 and 2001.

The rates at which beneficiaries search for information on specific *topics* displays a different pattern. For the cases of information regarding claims and billing, and for managed care, the rates dipped in 1999, but rose again in 2000. The rate for claims displays an upward trend as well between 1999 and 2001, but there is *no* increase for managed care over this period. There was no similar dip in the percent of beneficiaries who sought information concerning supplemental insurance; this did not change between 1998 and 1999. It displays a roughly 4 percent trend since then.

¹⁴ The model that we estimate here is not strictly identical to those reported earlier. This model was estimated using data from all four years of the survey. We, therefore, defined a new dependent variable using only measures surveyed in all four years. We also omitted explanatory variables not sampled in all four years. This policy forced us to exclude variables indicating the occurrence of personal situations and events. We also excluded the variable indicating that a beneficiary had changed his or her health coverage or benefits. These variables were not part of the survey until the year 2000 sample was drawn.

¹⁵ It is important to interpret these data cautiously; since the categories in the table are not mutually exclusive. The models on types of information and those on sources do not represent a decomposition of the overall rate of searching.

¹⁶ Note: The measure of overall searching here is a constructed variable like the one that we discuss earlier. For purposes of measuring trends, however, we define a version of the variable that refers only to topics and sources measured in all four years of the survey. Unlike our earlier measure, this excludes reference to use of the Medicare 800 number, the Medicare web site, and health fairs. The last column also reports means only for the sample for whom all variables in the relevant models were not missing. These are not means for the sample as a whole. This accounts for the slightly different rates of searching that we see in Column 5 of the table, as compared with the figure above.

Table 2.5
Effects of Trend on Rates of Searching for Information

Model	Trend Relative to 1999 (in Percents)			Dependent Mean
	1998	2000	2001	
All Seeking	-9.3%**	6.9%**	3.7%*	62.02%
Seeking by all Sources Excluding the Handbook	6.5**	7.1**	6.0**	45.0
By Topic				
Claims	2.7*	5.9*	8.2**	19.0
Supplemental Insurance	ns	3.8**	4.1*	14.6
Managed Care	3.0**	3.1**	ns	17.3
By Source or Channel				
By Handbook	-27.6**	3.7*	ns	37.2
By 1-800#	ns	3.5**	ns	13.9
By Insurance/Plan Representative	6.1**	ns	ns	12.7
By Counseling	ns	ns	ns	2.4
By Internet	ns	1.2**	1.5**	2.5
Medicare 800 Help-line			1.2*	4.5
Medicare Internet Site			ns	2.0
Health Fair			ns	8.1

p<0.05 = *; p<0.01 = **; ns = not significant

Source: NMEP Community Monitoring Survey 1998-2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ. Data weighted for comparability across waves.

It may seem surprising to find no change in the rate at which beneficiaries search for information regarding managed care for the period between 1999 and 2001. Medicare + Choice endured a turbulent period over these two years, and we might have expected beneficiary behavior to reflect that. It is striking that we find no increase in information seeking about managed care in the summary data, nor in our statistical models.

Use of the *Medicare & You* Handbook rose sharply in 1999. This is explained by the fact that most beneficiaries were sent a copy of the handbook in late 1998, as part of the NMEP. The trend between 1999 and 2000 is still upward, but the increase is small (3.7 percentage points). There is no trend in use of the handbook between 1999 and 2001. Note that reports of searching by means other than the handbook fell between 1998 and 1999—presumably, as the handbook replaced other sources of information.¹⁷ The rate at which beneficiaries sought information by means other than the handbook was

¹⁷ We have not defined our measure of searching by means other than the handbook. This is a binary variable taking the value 1 for beneficiaries who report searching for information on some topic or by one of the four channels other than the handbook. The value 1 in this case does not imply that a beneficiary did not use the handbook, but only that she used something else as well.

6.5 percentage points higher in 1998 than it was in 1999. Since 1999, searching by means other than the handbook has risen alongside searching for information overall.

There are upward trends in use of the Internet and in the Medicare Help-line. As we expected, use of the Internet is up over the years 1999-2001. Use of the Medicare help-line is up by 1.2 percentage points since last year.¹⁸

2.4 Usage of Information on Particular Topics

Beneficiaries presumably search for information regarding many topics. The NMEP Community Monitoring Survey does not treat an extensive list of topics. Indeed, it treats only three specific topics: Medicare claims and billing, Medigap supplemental coverage, and managed care. We are interested here in the extent to which beneficiaries are more likely to search more frequently for information on one of these topics than on others, and what factors are associated with topic-specific search.

2.4.1 Summary Statistics

About 40 percent of all beneficiaries surveyed in 2001 reported seeking information on one or more of three topics identified in the survey. About 22.6 percent reported seeking information on Medicare claims and billing (Table 2.6 below). This was somewhat higher than in the year 2000 survey, where roughly 20 percent reported having sought information regarding claims and billing. Approximately 16.5 percent of beneficiaries we surveyed reported searching for information about managed care; this is not changed much from the year 2000 survey (17.3 percent). Sixteen percent sought information on supplemental coverage, which also represents essentially no change from 2000.

Beneficiaries seek information about Medicare using different sources for particular topics. Many of the sources of information are from *non-official* sources, such as plan/insurance representatives, friends/family, doctor's offices and the like. The *Medicare & You* handbook is the leading source of information for each of the three types of search. In all cases, over half of beneficiaries use the handbook; this is the most commonly used source of information. The next most commonly consulted sources are physician offices (in the case of claims and billing) and plan or insurance representatives (in the case of supplemental coverage and for managed care).

¹⁸ We have no data on use of the Medicare Help-line or the Medicare web site before 2000, so we can track only its one-year trend here.

Table 2.6**Searching by Topic and Sources Used**

(for each source, percentages are for those beneficiaries reporting searching on the particular topic)

Topic	Sources Used								
	Overall Likelihood of Searching	Friend/Family	MD Office	Senior Org.	SSA	Help-line	Plan or Insur. Rep.	Handbook	Internet
Claims	22.60%	6.6%	27.3%	3%	4.8%	15.3%	13.9%	59.8%	7.6%
Supplemental	15.98	16.2	9.7	6	0.7	11.1	27.7	57.8	7.3
Managed Care	16.50	21.2	21.1	9.5	6.3	7.9	30.3	53.8	7.5

Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Which beneficiaries are more likely to search for information regarding claims and billing; for information on supplemental coverage, or for information on managed care? Table 2 of Appendix B reports summary statistics regarding the rates at which different beneficiary groups sought information on each topic. As before, these are averages, and we do not subject them to statistical testing. Still, we take note of the following summary facts:

- For all topics, rates of searching fall with age.
- On all topics, married people search at higher rates than unmarried.
- Those who live alone search for information at lower rates, across all topics.
- There is variation with ethnicity. Perhaps most dramatic are the facts (1) that non-African-American, non-Hispanic minorities seem to search for information about claims at *twice* the rate for whites and (2) African-Americans search for information on managed care at between one-half and one-third the rate for others.
- More highly educated beneficiaries search at higher rates across all topics.
- Rates of searching on specific topics vary with insurance coverage, though there is no plain overall pattern to this.
- Those with greater knowledge of Medicare search at higher rates across all topics.
- Beneficiaries experiencing relevant market events or changes in personal situation (for the worse) generally search at higher rates across all topics.

2.4.2 Statistical Models

For each of the three topics, we estimated a basic model using the data from the 2001 survey, and one augmented by variables that we regard as potentially endogenous. We report only the augmented models below (Table 2.7), and we discuss only estimated marginal effects, not the models' underlying coefficients. Our findings here are very much like those in Table 2.4. Searching for information, topic by topic, tends to be positively associated with (relative) youth and negatively associated with income. It is also positively associated with education, and with the occurrence of life events or personal situations that provide pressing reason to make a near term decision regarding health care.

Claims and Billing. Column 1 of Table 2.7 indicates that beneficiaries who are in the 65-69 age cohort are roughly 7% more likely to want information about claims than are those in the most elderly cohort

Table 2.7
Marginal Effects on Searching on Specific Topics

	Claims 1	Supplemental 2	HMO 3
Dependent Mean Value	22.1%	15.8%	15.9%
Age 65-69	6.52% *	7.57% **	8.79% **
Age 70-74	4.31	2.900	2.930
Age 75-79	-1.49	1.480	0.350
Springfield	1.75	-0.220	1.470
Sarasota	2.54	1.260	2.350
Dayton	-0.29	-1.560	-4.040
Tucson	4.06	-2.420	8.360 **
Olympia	-6.4 *	-0.760	-0.200
Male	-2.12	0.520	2.940
African American	5.56	0.350	-1.040
Hispanic	1.73	1.330	0.260
Other Minority	15.2 **	5.060	9.230 **
Income	-2.13*	0.340	-0.960
High School Graduate	-0.18	2.030	3.000
Post High School Training	-1.65	6.870	0.340
Some College	4.78	2.350	6.560 *
College Graduate	6.29	5.300	4.090
Lives Alone	-1.9	1.330	-1.570
Married	7.58 *	1.750	0.160
Health Good to Excellent	-1.25	-0.720	1.080
Medicaid Eligible	0.8	2.660	1.430
Other Health Insurance	3.77	-4.990 **	-3.570 *
In Managed Care	-6.55 **	-1.140	12.500 **
Health Declined	1.64	1.050	1.870
Self/Spouse Disenrolled	-1.24	-2.110	5.700
Spouse Died	4.68	-2.590	-0.340
Financial Difficulty	7.4 **	6.310 **	6.160 **
M.D. Left Plan	6.42	4.540	5.890 *
Retirement Benefits Changed	7.27	3.220	3.440
Other Plan Left Medicare	-10.88	5.700	-4.750
Learned of New Options	4.66	3.470	4.220 *
M. D. Joined Area Plan	-1.39	1.790	5.300 *
At or Above Median Knowledge	7.95 **	3.670 *	8.170 **
Aware of Publicity	2.83	-0.140	1.730
Unchanged Medicare Coverage	-6.86	-12.850 **	-4.860
Changed Health Insurance	4.32	11.650 **	15.230 **

Source: NMEP Community Monitoring Survey 2000 and 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

(80-84). Other minorities (Non-African-American, non-Hispanic minorities) are 15% more likely than whites to want information about Medicare claims. Married beneficiaries and those in financial trouble are similarly more likely. High-income beneficiaries are less likely than others to search for this kind of information. The education measures are not strictly significant here ($p > .05$), but they are often significant at the $p < .1$ level and the of *size* of the coefficients indicate a positive association between level of education and the rate of searching. Being married and having traditional Medicare coverage are also positively associated with higher seeking rates for claims/billing information. The only event or circumstance associated with higher rates of seeking is personal financial difficulty. More Medicare knowledge (though endogenous) appears to be associated with higher likelihood of seeking information about claims and billing. Except Olympia (lower) site-to-site differences are not seen in the demand for information about claims/billing.

Supplemental Insurance. Beneficiaries seeking information about supplemental insurance behave very much like beneficiaries who seek information regarding claims/billing. Important exceptions are the patterns with respect to insurance coverage, where persons with supplemental plans are more likely to seek information about them, while persons with traditional Medicare only are more likely to seek information about claims and billing. There is no pattern of differential demand for information by non-Hispanic non-African American minorities, nor any association with being married.

HMO Information Seeking. Patterns of information seeking are more evident for HMO information. Primary differences with the other models relate to the insurance variables, where persons in plans and those with other insurance are much more likely to seek information about HMOs. Holding constant insurance status, we see here strong associations of HMO information seeking with education level, and with the occurrence of situations that effect HMO enrollees (doctor left the plan, plans changed in the area, and involuntary disenrollment ($p < .1$)). Tucson's higher HMO information seeking rate is also evident here. Moreover, as before, knowledge of Medicare (as measured by the battery of T-F questions) is strongly associated with seeking information regarding managed care—though we are not sure in which direction causality runs (knowledgeable persons are more likely to seek information, or those that seek information acquire additional knowledge of Medicare).

2.5 Channel-Specific Patterns of Utilization

Beneficiaries can search for information in many ways. Some read documents; others seek out conversation with trusted advisors. The NMEP Community Monitoring Survey was not designed to examine beneficiary use of an exhaustive list of sources. Still, it does examine their use of a wide range of them. In this section, we describe beneficiaries' tendencies to use various sources. A separate report examines usage of the *Medicare & You* handbook in much more depth.¹⁹

2.5.1 *Medicare & You*

Just over 43% of surveyed beneficiaries report using the Medicare handbook as a source of information during in the year 2001 sample (Table 2.1). This means that, on average, beneficiaries were more than three times as likely to use the Handbook as they were to consult the next most commonly employed source of information. We also reported earlier that approximately one-third of the beneficiaries who sought information during the past year used only the handbook.

¹⁹ Taryn Brant and Catherine Joseph, "Medicare Beneficiary Use of *Medicare & You*", Abt Associates Inc., June 2001 (HCFA 95-0062 T.O. #2).

The NMEP creates these dominant patterns of handbook information use by means of an annual fall mailing of the handbook to all beneficiary households. In the first years of the NMEP, this mailing helped create a large increase in the percentage of beneficiaries who report using the handbook. Indeed, from the fall of 1998 (pre mailing) to January 1999 (post mailing) beneficiaries reporting using the handbook rose from 17% to roughly 44%. This rate is essentially unchanged since 1999.

Table 3 of Appendix B reports summary statistics on use of the handbook by various groups.²⁰ Variables that appear most strongly to be associated with use of the handbook include:

- Gender—males are 8% less likely than females to report use of the handbook in the 2001 sample.
- An intention to review one's health coverage—of those who claim this disposition, 50.2% report use of the handbook, as against 36.6% for those with no such intention.
- Above median knowledge of Medicare—45.4% of beneficiaries above the median use the handbook, as opposed to 20.2% of those below.
- Awareness of publicity regarding change in the Medicare program.
- Having experienced a change in Medicare coverage over the period of the recall year.

Do beneficiary characteristics affect use of the handbook, holding other variables constant? Table 2.8 reports marginal effects computed using the statistical models described earlier. Column 1 identifies the marginal effects of beneficiary characteristics on use of the handbook. As the table indicates, few variables are associated with use of the Handbook, indicating that there are few differentiating patterns of usage across the beneficiary population. Men are 8% less likely to use the handbook than women, and the rate at which beneficiaries use the handbook appears to decline with income. Above median knowledge of the Medicare program, and having changed one's insurance, appear strongly associated with use of the handbook. Those with above-median knowledge, in particular, seem to use the handbook at a rate that is 18 percentage points higher than those below the median. It is important to interpret this cautiously, however. The knowledge variable is potentially endogenous to the model, so we cannot assume this estimate to be unbiased.²¹

Why are few variables associated with use of the handbook? One possibility is that everyone gets the handbook in the mail, and not much active effort is needed.²² Other channels are different in this respect.

2.5.2 1-800 Numbers

There are many toll-free 800 numbers available for beneficiaries to get Medicare and other types of insurance information. These are sponsored by senior and provider organizations, SHIP's, Medicare contractors, and HCFA itself, which sponsors the 1-800-MEDICAR(E) help-line. In the 2001 sample, 13.8% of surveyed beneficiaries report calling *some* 800 number to get information about Medicare, while 5.6% report specifically calling the Medicare help-line. Summary statistics on the use of help-line usage show little trend over time (Figure 2.2). Figure 2.2 does suggest, however, that use of the Medicare help-line rose from 3.9% in the 2000 sample to 5.6% in the 2001 sample.

²⁰ These groups correspond to the explanatory variables in our multivariate models.

²¹ Recall that the variable for above-median knowledge is one of our endogenous variables, so our estimates of its association with use of the handbook cannot be assumed to be unbiased.

²² It should not *eliminate* variation, however. It is a little surprising, for example, that more highly educated beneficiaries, for whom using the handbook is easier, do not use it at a higher rate.

Table 3 of Appendix B, once again, reports summary statistics on the use of 800 numbers generally, and of the Medicare help-line as well. The patterns here are similar to the ones that we report above, for use of the handbook. We report only a selection of these summary data.

- Use of 800 numbers declines with age.
- Married beneficiaries and those who do not live alone use all 800 numbers at higher rates.
- Non-African American, non-Hispanic minorities use both 800 numbers at rates higher than others.
- More highly educated beneficiaries use 800 numbers at rates higher than those without a high school education.
- The pattern of variation with insurance coverage is unclear.
- Beneficiaries possessing above-median knowledge of Medicare, or who are aware of change in the program, call 800 numbers at higher rates than others.
- The occurrence of life events and personal situations, of the kind measured in our regression models, is generally associated with calling 800 numbers at higher rates.

Table 2.8 below reports the marginal effects of variables associated with use of any 800 number and use of the Medicare help-line. Observed differences between segments (i.e. the size of the coefficients) frequently are quite large relative to the average use rate of help-lines (which, in the regression sample was 12.8 percent of beneficiaries). The model for use of the 1-800 Medicar(e) number is similar to the model for use of any 800 number—though the former model has smaller coefficients (and a smaller dependent mean value) and fewer instances of statistically significant associations.

Use of help-lines, both generally and for 1-800 Medicar(e), is strongly associated with younger users, persons facing difficult situations or events, and persons enrolled in traditional Medicare. While use of help-lines is associated with market and life situations, involuntary disenrollment appears to be an exception. Other things equal, disenrollees are not more likely than others to use Any Help-line or the 1-800 Medicar(e). Persons enrolled in Medicaid are much less likely to search for information by use of a 1-800 number or the 1-800 Medicar(e) number.

Factors associated with greater use of 800 numbers include:

- Age—younger beneficiaries are between 4% and 6% more likely to call any 800 number and more likely to call the Medicare help-line.
- Those who live alone are 2% less likely to call the Medicare Help-line; there is no association with calling any 800 number.
- Beneficiaries eligible for Medicaid are 2% less likely to call the Medicare help-line.
- Beneficiaries with other insurance are more likely to call any 800 number. They are also more likely to call the Medicare help-line, though the statistical relationship here is weak.
- Market events and personal situations are associated with greater tendencies to call any 800 number; some events have similar association with beneficiaries' tendency to call the helpline.

There are differences across sites in use of any 800 help-line: beneficiaries in Sarasota, Dayton, and Tucson were more likely to report calling an 800 number than were beneficiaries in Eugene. These site-to-site differences are not apparent at all in the case of the 1-800 Medicar(e) number. This difference across models may reflect the rather uniform national marketing of the Medicare number (via the handbook) and

Table 2.8
Wave 4 Marginal Effects by Source

	Handbook	In-Person Advice	Insurance Rep.	Health Fair	Any 800	Medicare 800	Internet	Medicare Internet
Dependent Mean Variable	43.2%	2.5%	9.4%	7.6%	12.8%	5.5%	3.7%	2.2%
65-69	-1.60	0.00	4.59	2.17	5.57 *	4.15 **	4.57 **	1.45 *
70-74	2.50	-0.42	2.35 *	1.76	3.44	3.92 **	2.94 *	1.29
75-79	-2.13	-0.61	2.75	-0.99	0.25	0.81	0.32	0.10
Springfield	2.27	0.76	3.36	1.98	0.68	-0.84	-0.36	0.00
Sarasota	-7.55	-0.70	3.83	0.87	6.46 *	0.49	0.38	0.08
Dayton	3.62	-0.72	-1.33	1.06	6.61 *	0.14	-0.93	-0.19
Tucson	-1.69	0.03	2.72	1.07	7.88 **	1.50	-0.21	-0.10
Olympia	0.80	-0.35	0.20	0.17	-3.34	-1.83	-0.89	-0.23
Male	-8.15 **	-0.43	2.36	-2.43 *	0.84	-0.79	0.81	0.07
Black	5.54	0.06	-1.44 *	3.64	-1.75	-0.23	2.35	0.73
Hispanic	6.36	0.16	-2.11	5.35	-3.33	-1.12	-1.01	-0.21
Oth. Minority	-6.51	0.65	0.72	3.58	1.99	0.17	0.46	-0.25
Income	-3.36 **	-0.17	0.00	0.19	-0.92	-0.68	-0.35	-0.10
H.S. Grad	-0.78	1.17	1.83	2.68	1.44	-0.04	1.57	0.86
Post H.S Training	9.23	0.00	7.90	1.48	7.37	3.03	5.86	1.63
Some College	2.02	1.16	4.59	4.92 **	1.09	-0.57	4.66 **	3.09 *
College Grad	1.55	1.91	1.30 *	6.37 *	1.26	-1.33	4.10 *	3.56 *
Lives Alone	-3.17	-0.76	0.85	5.01	-2.68	-2.14 *	0.67	-0.14
Married	1.90	-0.35	0.71	3.56	3.17	0.11	1.44	0.83
Health Good+	1.98	-1.58 **	0.26	2.22	-0.76	0.29	0.58	0.08
Health Declined	-0.85	0.65	0.03	1.19	1.43	1.51	1.05	0.04
Medicaid Eligible	-2.33	1.45 *	0.30	0.28	-3.14	-2.03 **	-0.54	-0.26
Other Insurance	3.99	-0.48	-0.04	-0.07	3.02 *	1.18	0.13	0.03
Self/Spouse Disenrolled	4.45	0.20	-0.17	1.41	1.81	-0.82	-0.02	-0.26
Spouse Died	-2.53	0.67	-4.96	-1.63	14.20 **	3.69	-0.67	1.61
Financial Difficulty	-0.80	1.68 *	2.42	1.74	5.68 *	2.01	0.01	0.72
M.D. Left Plan	0.24	-0.02	2.04	1.18	5.23 *	1.67	1.42	0.73
Other Plan Left Medicare	-8.89	98.97	-2.14	-0.66	-5.36	-0.89	0.36	0.07
Retirement Changed	4.37	0.28	-1.61	1.59	2.70 *	2.32 *	0.88	0.06
Learned of New Options	5.48	0.29	3.86	0.00	4.32 *	0.05	0.50	-0.06
M. D. Joined Area Plan	-4.03	-0.18	1.52 **	0.94	0.04	1.48	-0.15	-0.25
In Managed Care	-1.22	0.02	5.37	1.74	-3.35 *	0.05	-0.65	-0.17
Above Median Knowledge	17.46 **	0.10	3.24 **	1.95	2.81	0.20	1.36	0.53
Aware of Publicity	9.97	0.93	1.66 **	4.11 **	3.99 *	1.92 *	2.09 **	0.55
Unchanged Medicare Coverage	-0.75	0.76	-3.14	-0.46	-3.94	-0.82	-0.42	-0.62
Changed Health Insurance	4.93 **	1.13	12.86	3.57	13.89 *	3.75 *	1.97	0.26

the differences in availability of other help-lines in particular sites, and the differences in how they may be marketed.

2.5.3 Internet Web Sites

As of the early 2001 survey, beneficiary use of the Internet to obtain information about Medicare remains very infrequent. Only about 3.5% of beneficiaries report any use of the Internet in the year 2001 sample, and fewer (2%) report use of the Medicare web site.

But, with a low base, the use of the Internet to seek information is growing quickly. In October of 1998 only about 1.4% of beneficiaries said they used the Internet to seek information about insurance or Medicare. By January of 2000 estimated use of the Internet was up to 3.1%. Use of the Medicare web site, which we have followed only since the year 2000 survey, is unchanged in 2001.

Table 3 of Appendix B indicates that beneficiaries virtually never use the Internet as a sole source of information. Indeed, significant use of the Internet is confined to beneficiaries who report at least two attempts at gathering information. In general, however, rates of Internet use are very small, and the averages reported in Table 3 are, for that reason, hard to interpret.

As Table 2.8 indicates, there is little variation in use of the Internet across segments of the beneficiary population. It is difficult to identify patterns of use here, partly because of the small sample of users. Younger beneficiaries do seem to be more likely than older ones to use the Internet, including the Medicare site. Highly educated beneficiaries are more likely to use the Internet than those without a high school education. This is particularly true of the Medicare web site (where the effect sizes are quite large relative to the average). There are no other statistically significant between-group differences.²³

2.5.4 In-Person Counseling (Advice)

HCFA has invested in training SHIP volunteers (counselors) in all states. Beneficiaries receive phone and in-person support from these counselors, as well as from senior organizations, from government ombudspersons, from provider organizations, and from SSA offices. Some of this support relates to claims and billing issues, though this component of counseling is being replaced in large part by decision support on issues of managed care and supplemental insurance decision-making. The survey does not differentiate SHIP counseling from others.

In the year 2001 sample beneficiaries were very unlikely to use in-person counseling. Roughly 2 percent of beneficiaries report doing this (Table 2.1). Earlier data also show no trend in use of in-person counseling (Figure 2.2). Table 3 of Appendix B reports rates of use of in-person counseling that are uniformly very small. Indeed, these are too small for meaningful interpretation. The regression estimates in Table 2.8 also reveal little evidence of usage patterns, though the models often show some encouraging patterns. Beneficiaries in poor health are more likely than others to have used in-person counseling. Beneficiaries who are eligible for Medicaid, or who are experienced financial difficulties are more likely to have used a counseling service. We detect no other statistical relationships.

²³ Setting aside the potentially endogenous variable indicating awareness of publicity regarding change in the Medicare program.

2.5.5 Health Fairs

It has been an objective of CMS's REACH program to use partnerships to sponsor health fairs. These events—which, often, provide screening services and flu shots, for example—are intended to be a channel through which beneficiaries can obtain Medicare information, ask questions, and become aware of the help-line and other information resources. Prior to the survey in the year 2000, there were no data on beneficiaries who attend these events. In the year 2000 sample, 8.7% of beneficiaries reported visiting a health fair (Figure 2.2). In the year 2001 sample, this number declined slightly, to 7.4 percent.

Table 3 in the Appendix provides descriptive data on health fairs. It shows that beneficiary groups uniformly visit health fairs at very low rates, though there is some variation:

- The young are more likely to attend than the more elderly.
- Hispanics seem to be more likely than others to attend a health fair.
- The rate of attendance rises with level of education.
- Awareness of publicity regarding change in the Medicare program is associated with higher rates of attendance
- Market events and personal situations appear to be at least weakly associated with higher rates of attendance.

Table 2.8 above reports the marginal effects of beneficiary characteristics on that probability that someone will visit a health fair:

- Women are more 2-percentage points more likely than men to have attended a health fair.
- More highly educated beneficiaries are more likely to attend a health fair than are beneficiaries without a high school education. Indeed those with some college training, or a college degree, are 5-6 percentage points more likely to attend.
- Beneficiaries who noticed publicity about Medicare changes in the past month are 4 percentage points more likely to have attended a fair.

2.5.6 Talking to Insurance/Plan Representatives

In the year 2001 sample, 10 percent of beneficiaries reported seeking information from an insurance representative (Table 2.1). The 10 percent rate is much lower than the 18 percent recorded for the 1998 sample (Figure 2.2), but the rate at which beneficiaries consult insurance representatives is essentially unchanged since the 1999 survey. Of those who sought information regarding managed care or supplemental coverage, 14 percent and 27.7 percent consulted an insurance representative, respectively.

Table 3 of the Appendix reports summary data on the overall rates at which beneficiaries consult insurance companies.

- African-Americans were 7-12 percent less likely than others to consult insurance companies.
- Less highly educated beneficiaries are less likely to consult insurance companies.
- Beneficiaries who intend to review their health insurance in the coming year are twice as likely to talk with an insurance representative.
- Beneficiaries in Dayton and Eugene talk with insurers at much lower rates than elsewhere.

- Beneficiaries who report a change in their Medicare insurance are 23 percent more likely than others to have spoken with an insurance company regarding Medicare.
- And, in general, market events and personal situations are associated with higher rates.

In the multivariate model reported in Table 2.11, we see very few statistical associations between beneficiary characteristics and the tendency to consult insurance representatives for information regarding Medicare. Men are more 2.4 percentage points more likely than women to do this; beneficiaries with some college training consult insurance/plan representatives at rates 5 percentage points greater than those of beneficiaries with less than a high school education; beneficiaries who learn of new coverage options are more likely than others to talk with an insurance company. The largest effects seem to be associated with the potentially endogenous variables. Members of managed care are 5 percentage points more likely to have talked with insurance company—this, of course, is not surprising. Beneficiaries who report having changed their health coverage talked with insurance companies at an estimated 13 percentage point higher rate (which is more than 100 percent of the average rate).

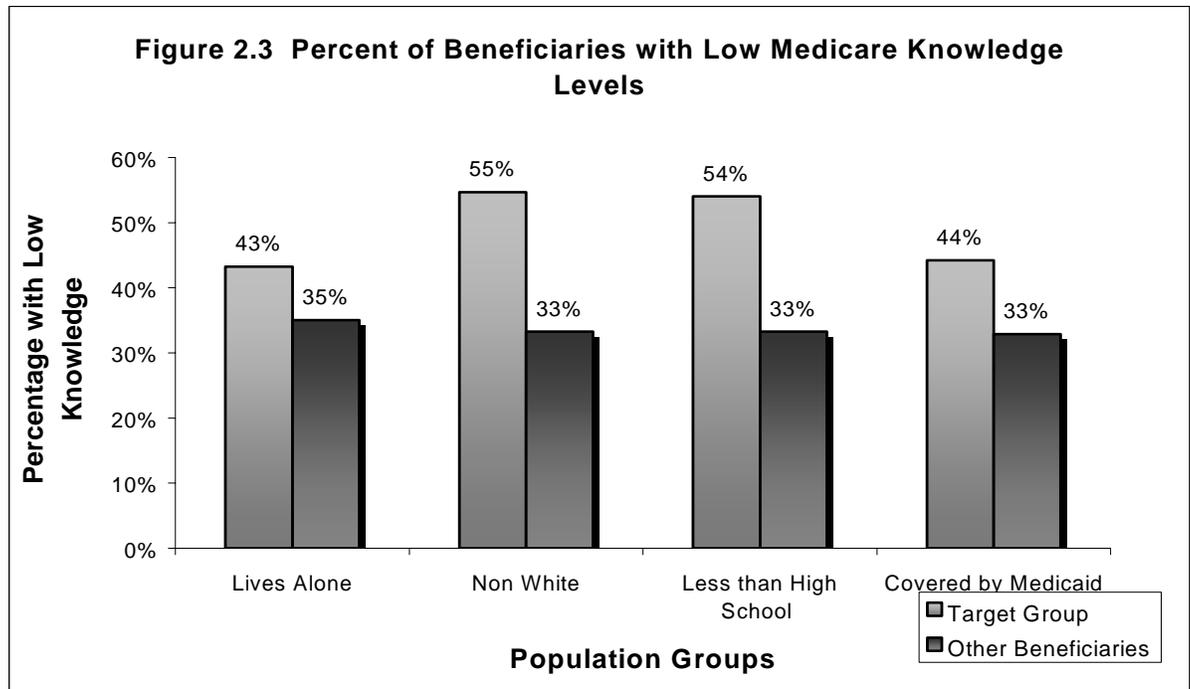
2.6 Socioeconomic Status and Use of Information

The NMEP and REACH programs try to make information available to special populations. These groups include minorities and the poor, populations for whom English is a second language, poorly educated beneficiaries, rural residents, and the disabled. The presumption is that these groups have, or may have, deficient knowledge of the Medicare program and deficient awareness even of their own need for information. The Appendix (B) tables contain summary statistics regarding socioeconomic status and use of information. We present data from the year 2001 sample below. A companion report provides more details about the information usage of these and other sub populations of the beneficiary population.²⁴

2.6.1 Knowledge of Medicare and Usage Difference of Sub Populations

There is reason to believe that some socioeconomic groups have, if not deficient knowledge of Medicare, at least a much poorer understanding of it than others. The Survey included a series of true-false questions testing beneficiaries' knowledge of the Medicare program. Figure 2.3 graphs the percent of beneficiaries scoring *below the median* on this test for selected socioeconomic groups. In all cases here, relevant groups are much more likely than others to score below the median. The median score for the 2001 sample was 4 (out of eight possible). More than half of non-white beneficiaries answer fewer than 4 questions correctly. The same was true for those with less than a high school education. We use Medicaid eligibility as a proxy for poverty. Thus interpreted, the graph suggests that, on average, the poor are also much more likely than others to score below the median on the knowledge test.

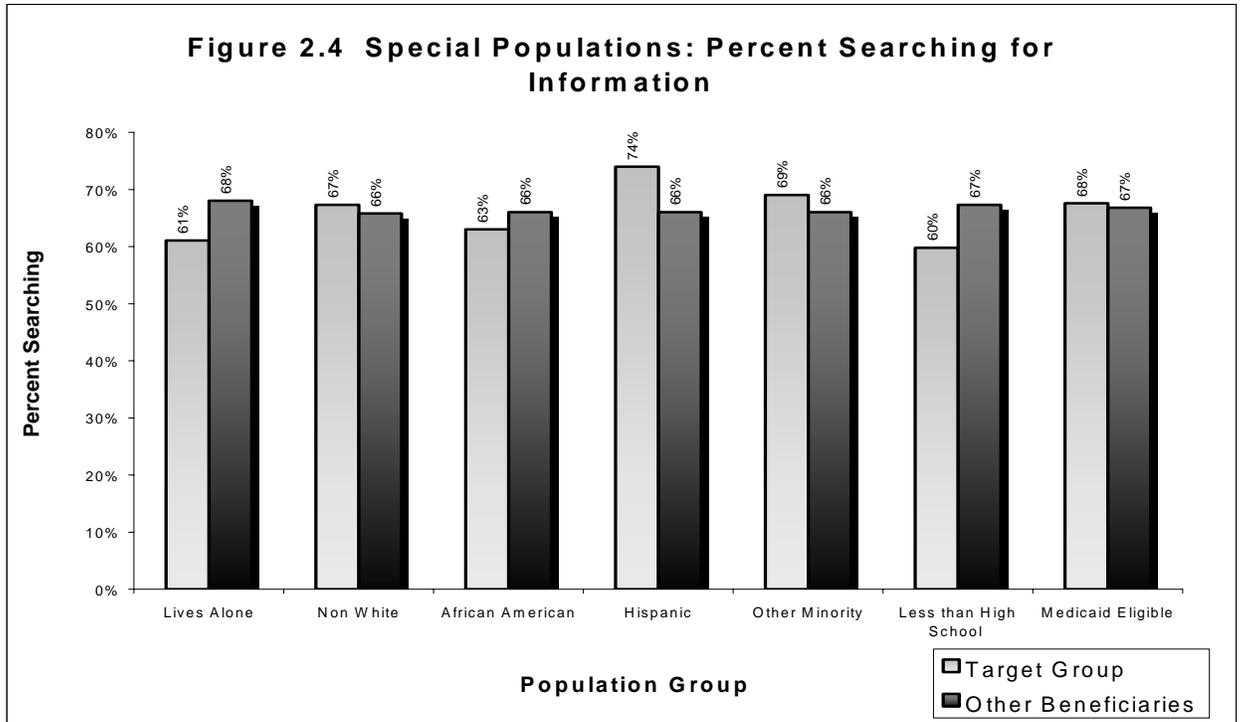
²⁴ Gaumer and Korda, op cit.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Why are members of these groups more likely than others to fall below the median level of knowledge regarding Medicare? One might assume that members of relevant socioeconomic groups search for information at rates that are much lower than others. But we do not see this consistently in the data. Figure 2.4 reports overall rates (averages) for these groups in the year 2001 sample. The key findings here are these:

- Those who live alone, on average, are 7 percent less likely to search for information.
- Hispanics are 8 percent more likely than others to have sought information, but ethnicity seems otherwise not to have much effect.
- Differences between African-Americans and other minorities, on the one hand, and whites on the other are very small.
- Those with less than a high school education are 7 percent less likely than others to have sought information.
- There is essentially no difference between the rate at which Medicaid-eligible and Medicaid ineligible beneficiaries search for information.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Some socioeconomic groups appear to search for information at lower rates. But the between-group differences represented in Figure 2.4 are not large. Indeed, all of the relevant groups search at rates at or near the overall rate of searching for the 2001 sample as a whole.

Table 2.9 reports the coefficients on socioeconomic variables from our regression models, previously described. Each row on the table relates to a particular dependent variable (and a specific model). Each column relates to particular descriptors of the beneficiary population. The cells of the table contain the estimated marginal effects of the beneficiary characteristic on the dependent variable. For example, the first row describes the coefficients pertaining to the overall searching measure. For the overall searching model live alone status and African American were not significant, and Hispanics were 10.6 percentage points more likely to have sought some Medicare information during the prior year. The table includes only numerical coefficients for variables having coefficients that were statistically significant.

Education. Variables identifying highly educated beneficiaries are more consistently significant than any other. Beneficiaries who had some college training are 6 percentage points more likely to search for information overall than were those without a high school diploma. Those with a college degree were 10 percentage points more likely.

Race. In the summary statistics, it appeared as though race is associated with beneficiaries' tendency to search for information. Holding other variables fixed, however, variables indicating race, taken one by one, are statistically significant in only three cases. Their effects, however, are large. Hispanics are 10 percentage points *more* likely than whites to search for information in general, other things the same. Non-African, non-Hispanic minorities are 15 percentage points more likely than whites to search for

information on claims and 9 percentage points more likely than whites to search for information on managed care. These are large effect sizes, but inconsistent across models.

Living Arrangements. Living status at first appears *not* to be associated with rates of searching for information in Table 2.9, once we control for other variables. This, however, is not correct. Table 2.10 reports tests of joint significance. It emerges here that the variables indicating married beneficiaries and those living alone are jointly significant in models of overall searching.²⁵

Tests of joint significance, as summarized in Table 2.10, are done by considering the claim that the race variables taken together have no association with searching for information, or that living arrangements do not. In cases where the joint test is significant, we reject these claims, and infer that race, or living arrangement in general do bear on the likelihood that someone will search for information.²⁶

Dual Eligibility. The dually eligible are different, as would be expected. They are the only sub-population to use the Medicare help-line and counseling services differently. Specifically, they appear to be less disposed to use the Medicare help-line, and more disposed to use counseling services.

²⁵ Tests of joint significance ascertain whether a set of variables taken together is associated with the dependent variable, even though the variables in the set might not be taken one by one.

²⁶ This was done using the Wald test in Stata.

Table 2.9
Marginal Effects of Socioeconomic Variables On the Probability of Searching for Information

	Lives Alone	Black	Hispanic	Other Minority	Some College	College Degree	Dual Eligible
Model							
All Searching	ns	ns	10.6%	ns	6.3%	10.2%	ns
By Topic							
Searching for Claims Info	ns	ns	ns	15.2%	ns	ns	ns
Searching for Supplement Info	ns	ns	ns	ns	ns	ns	ns
Searching for Managed Care Info	ns	ns	ns	9.2%	6.6%	ns	ns
By Source or Channel							
<i>Medicare & You</i> Handbook	ns	ns	ns	ns	ns	ns	ns
Any 1-800#	ns	ns	ns	ns	ns	ns	ns
Medicare Help-line	ns	ns	ns	ns	ns	ns	-2.0%
Insurance/Plan Representative	ns	ns	ns	ns	4.6%	ns	ns
Counseling	ns	ns	ns	ns	ns	ns	1.4%
Internet	ns	ns	ns	ns	4.7%	4.1%	ns
Medicare Internet	ns	ns	ns	ns	4.9%	6.4%	ns
Health Fair	ns	ns	ns	ns	ns	ns	ns

* P<.05 ** P<.01

Table 2.10
Tests of Joint Significance for Living Status and Race Variables

	Married/Live alone	Race Variables
Any Searching	*	*
Searching for Claims Info	**	**
Searching for Supplement Info	ns	ns
Searching for Managed Care Info	ns	*
Medicare & You Handbook	ns	ns
Any 1-800 #	**	ns
Insurance/Plan Representative	ns	ns
Counseling	ns	ns
Internet	ns	ns
Health Fair	ns	ns

P<.05 = *; P<.01 = **; ns = not significant

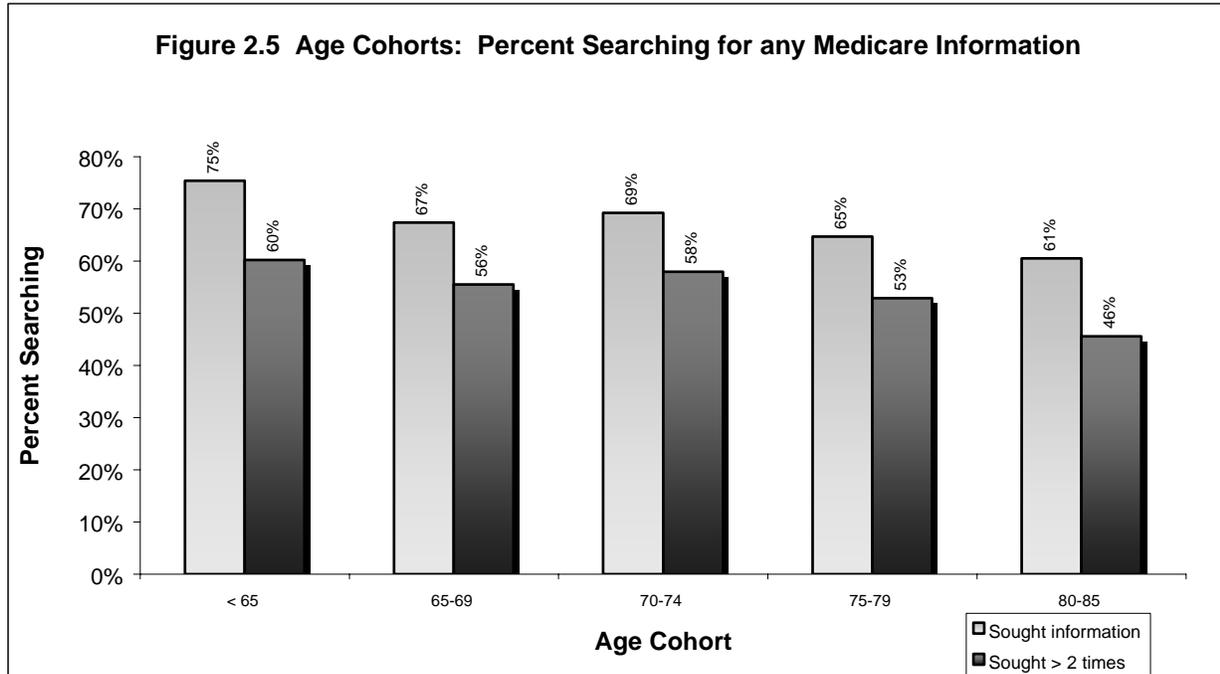
Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

2.7 Age and Searching for Information

Focus groups and expert interviews suggest that younger Medicare beneficiaries may be more inclined to seek information about Medicare than more elderly ones. This generalization seems to be true. In the 2001 sample survey, the overall rate at which beneficiaries sought information varies from 67%, for the 65-69 age group, to 61%, for the 80-85 cohort (Figure 2.5 below).²⁷ Of those in the 65-69 cohort, 65% sought information from more than one contact, as contrasted with 46% for the 80-84 cohort. While a downward trend is visible in Figure 2.5, these rates of use are essentially constant between the ages of 65 and 79.

The pattern, in which the tendency to search for information declines with age, obtains as well for each of the three types of information asked about in the survey and for each of the sources or channels. This is suggested by Table 2 of Appendix B, which reports rates of use by topic. Table 3 of the same Appendix reports rates of searching by method. Once again, rates of use for each source or channel appear either to decline with age, or not be associated with age at all.

²⁷ Disabled beneficiaries (<age 65) tend to use information more than the aged.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

The impression encouraged by our summary data is largely confirmed by statistical testing. Table 2.11 below reports age-related results from our statistical models. For the ‘all seeking model’ the estimates for the 70-74 cohort are higher than they are for the 65-69 and the 75-79 cohorts. We have no account for this pattern, other than to suggest that the 70-74 cohort has greater reason to search for information but has not yet fully experienced the difficulties that age poses. In any case, it is clear that the younger beneficiaries’ search for information at rates higher than the elderly.

Our models of searching for information on specific *topics* display a clear pattern. We include non-significant coefficients, once again, in order to see this. In each case, the size of the estimated coefficient declines with age but remains positive. This is what we would expect: the effect of age, relative to the most elderly, should decline as it does here. Moreover, the coefficients are statistically significant for the 65-69 cohort, though not for older cohorts. Indeed, this is consistent with a pattern in which the difference between those 80-84 on the one hand, and younger cohorts on the other, falls to zero quickly.

Table 2.11
Marginal Effects of Age on the Probability of Searching for Information

Model	Age Group Coefficient (relative to age >80)		
	65-69	70-74	75-79
All Seeking	2.4	6.0	1.8
<i>Type of Information</i>			
Seeking Claims Info	6.5*	4.3	-1.5
Seeking Supplement Info	7.6**	2.9	1.5
Seeking Managed Care Info	8.8**	2.9	.03
<i>Sources or Channels</i>			
Medicare & You Handbook	ns	ns	ns
Any 1-800#	5.6*	ns	ns
Medicare Help-line	4.1**	3.9**	ns
Insurance/Plan Representative	.046*	ns	ns
Counseling	ns	ns	ns
Internet	4.6**	2.9*	ns
Medicare Internet	1.4*	ns	ns
Health Fair	ns	ns	ns

P<.05 = *; P<.01 = **; ns = not significant

Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Something similar happens in the remaining rows, which treat information sources. In three cases, the youngest cohort is more likely than the 80-84 cohort to use the source in question. But, in two models, the difference (statistically) falls to zero immediately afterward. The exception is the case of the Internet, where we see something more like a linear decline.

2.8 Personal Situations and Market Events

Focus groups, counselors, and advocates suggest that beneficiaries are motivated to seek information primarily when urgent personal situations or events that befall them. It is not clear that this is a problem, in the ordinary sense of the word. Apart from the fact that demand for information looks *reactive*, it does not follow that this sort of situational demand is any problem. We return to this issue of adequacy in the

next chapter (3.0), presenting data on persons who were confronted with particular situations, but did not report seeking any information.²⁸

Specific, immediate events and situations do appear to affect beneficiary behavior. Indeed, they are among the variables that are most consistently and most strongly associated with beneficiaries' tendency to search for information about Medicare. We examined a set of particular, urgent, situations and events. These include the following.

- decline in one's own or spouse's health
- death of a spouse;
- personal financial difficulty
- involuntary disenrollment from health plan for self or spouse
- change in retiree health benefits for self or spouse
- becoming aware of new health care coverage options; and
- personal physician (self or spouse's) either joining or leaving a locally operating health plan.

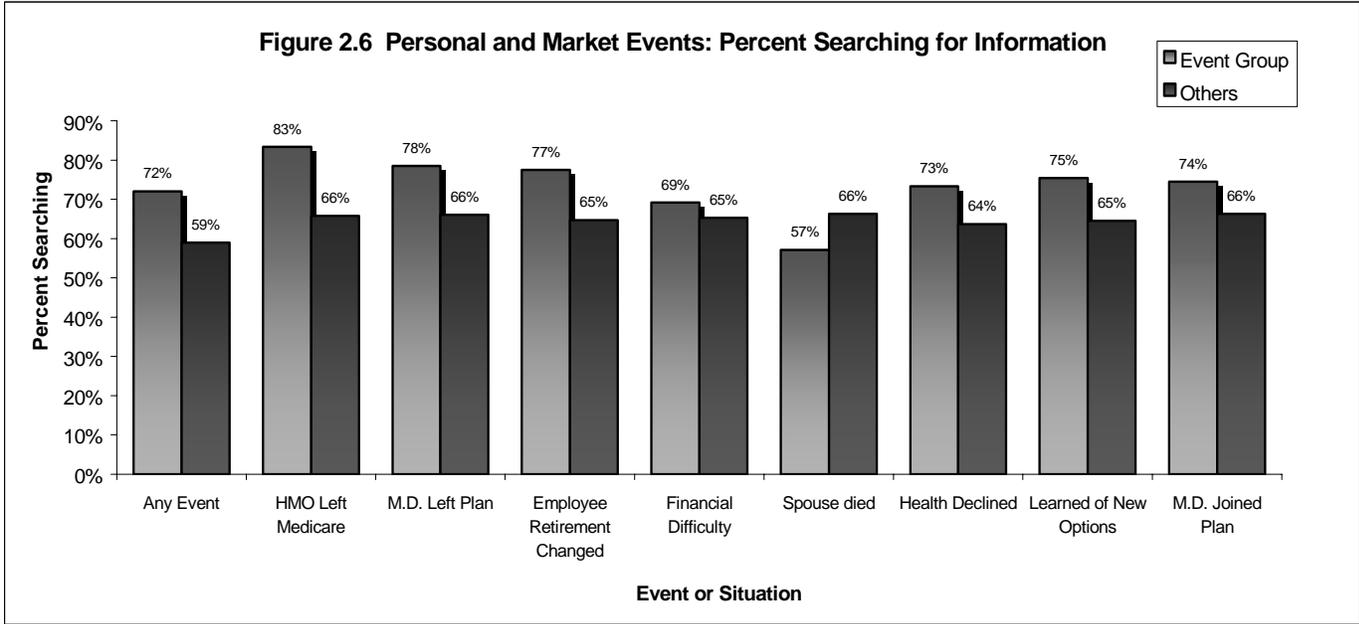
Table 2.12 reports the incidence of these events for the 2001 sample.

Table 2.12	
Incidence of Personal Situations and Market Events, 2001	
(as a percent of sample)	
Self/Spouse Health Plan Left Medicare	6.27 %
Own/Spouse's M.D. Left Plan	9.29
Changed Own/Spouse's Retirement Benefits	12.64
Self/Spouse Had Financial Difficulties	16.23
Spouse Died in the Last Year	3.63
Own/Spouse's Health Declined	23.35
Learned of New Health Insurance Options	14.67
Own/Spouse's M.D. Joined Area Plan	11.56
Any Situation or Event	60.50

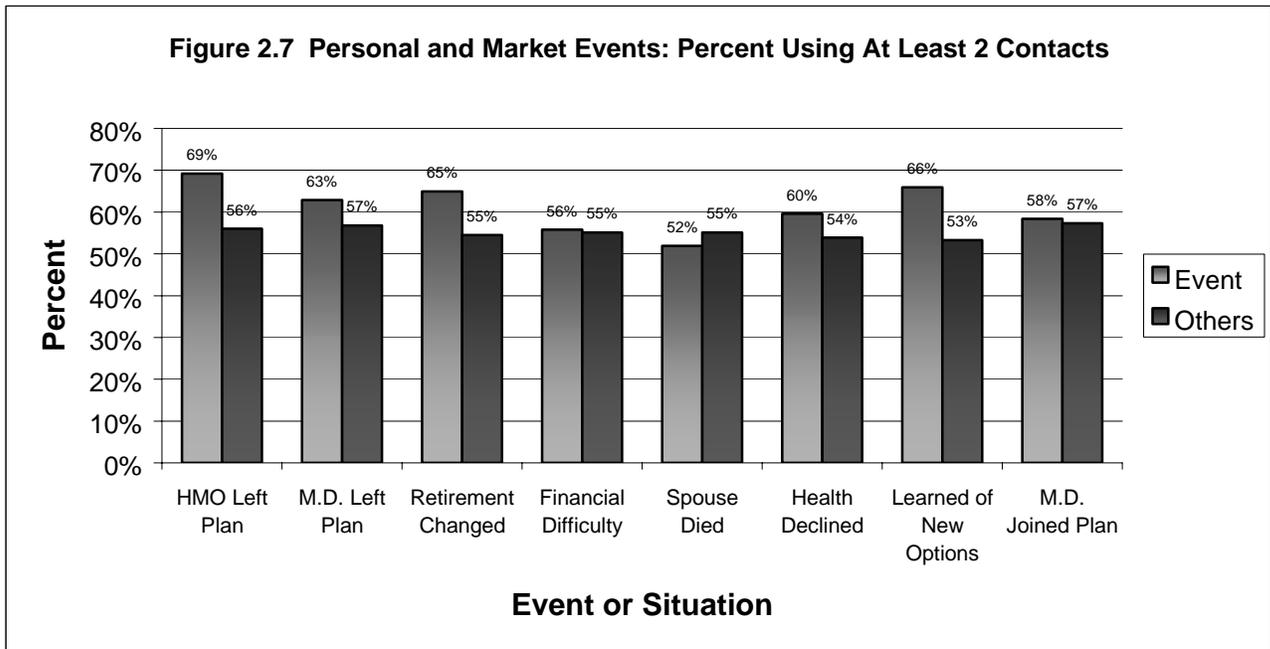
Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

In the year 2001 sample, 60.5% of the surveyed beneficiaries experienced one or more life or market events. Figure 2.6 below indicates the association between such experiences and the overall rate at which beneficiaries search for information about Medicare. Figure 2.7 indicates the association between such experiences and the use of at least two contacts.

²⁸ These same issues of situational demand for information are dealt with in the companion document by Gaumer and Korda, op cit.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

A first, striking fact in Figure 2.6 is that beneficiaries who experienced at least one urgent event or situation, 71% sought information regarding the Medicare program, as against 59% for those who did not have such an event. While the 71% appears high, the interesting fact is that beneficiaries sought information at a substantially high rate—nearly 60%—*even if* none of the situations that we list arose for them. This means that either (i) the events and situations on which we focus do not exhaust the class of life events and situations that prompt people to search for information, or (ii) not all searching *is related*

to more or less immediate events. Moreover, 29% of those experiencing a personal event or situation *do not search for information*. This, too, is a little startling. Beneficiaries in these situations and experiencing these events appear to have more or less immediate reason to search for information, but many are not moved to do so.

Setting this issue aside, the summary data suggest that many events and situations are, indeed, associated with the rate at which beneficiaries search for information. And there is some difference in the demand for information across these kinds of situations. In nearly all cases, the rate at which beneficiaries search for information is 8-10 percentage points greater for those experiencing the event or situation in question.

Figures 2.8 and 2.9 below give us a sense of how life events and situations affect the sources of information that beneficiaries use and how intensely they use them. In the first two figures we see that beneficiaries who fell victim to life events or market situations make greater use of sources other than the handbook. For those in market situations, use of the handbook *and other sources* rises from 19% in Figure 2.9 to 28% in Figure 2.8. Meanwhile, use of sources absent the handbook rises from 11% to 19%. All of this is consistent with the view that beneficiaries who search least search by means of the handbook, while those who search more actively use other sources either with or without the handbook.

Figures 2.10 and 2.11 deal with number of information sources used, contrasting beneficiaries experiencing personal or market events with those to whom no such things happen. Over 38% of beneficiaries in the former group used more than one source (Figure 2.10), as against less than 25% for others (Figure 2.11).

Figure 2.8 Experience of Personal or Market Events: Use of Information Sources

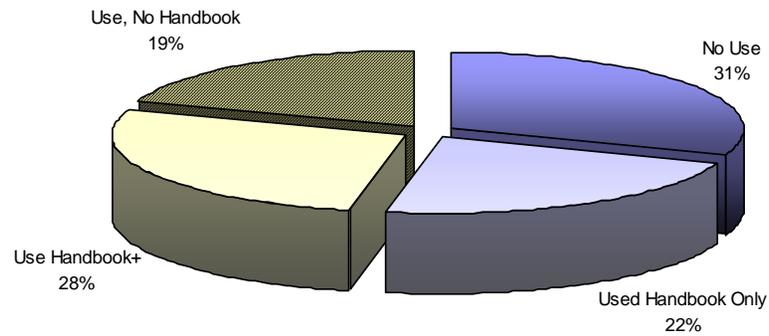


Figure 2.10 Experience of Personal or Market Events: Number of Sources Used

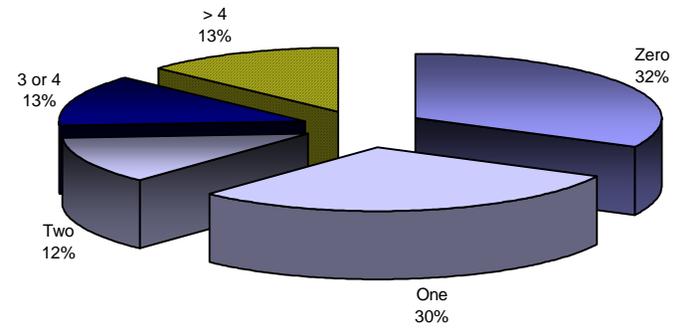


Figure 2.9 No Experience of Personal or Market Events: Use of Information Sources

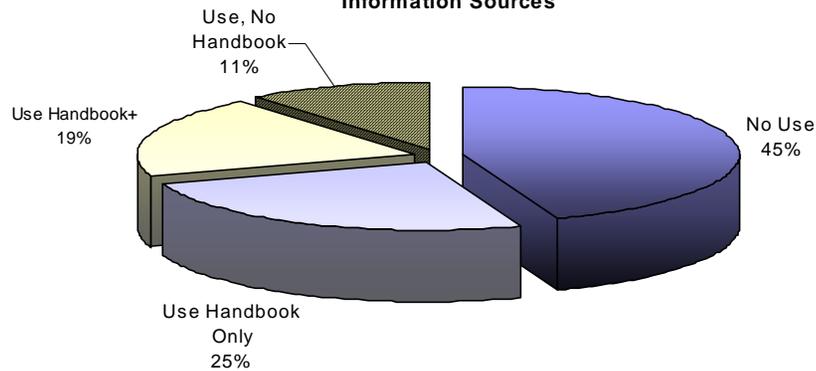
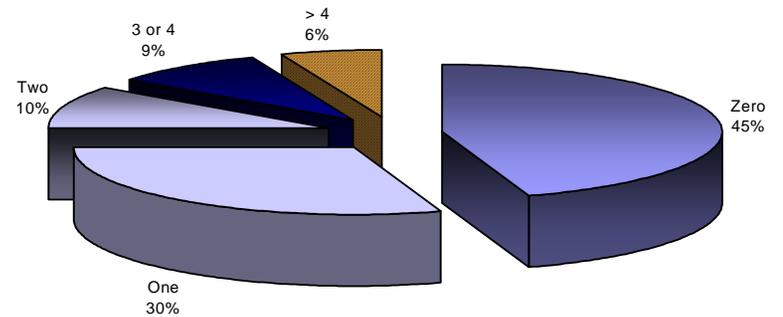


Figure 2.11 No Experience of Personal or Market Events: Number of Sources Used



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Table 2.13 reports the marginal effects of events and situations on beneficiaries' overall tendency to search for information (Row 1). It also reports marginal effects on their tendency to search for information on specific topics (next three rows) and by specific channels and sources (last set of rows). Column 1 of the table indicates the results of tests for joint significance. This is a test of whether the set of situational and event variables taken together is associated with the likelihood that a beneficiary will search for information. The balance of the columns consider the situations and event one at a time. Only statistically significant associations are shown.

The event and situation variables are jointly significant for nearly all models (Column 1). Only for use of the handbook, use of the Internet, and attendance at health fairs are these variables not jointly significant. Taken together, then, the occurrences of events and situations are, indeed, associated with the rates at which beneficiaries search for information.

As we see in Row 1 of the table, several specific event and situation variables are statistically associated with the overall rate at which beneficiaries search for information. Seven of the nine situations we study here are associated with higher rates of searching for Medicare information by beneficiaries. As an example, involuntarily disenrolled beneficiaries search for information at a rate that is 5 percentage points greater than the other beneficiaries, other things the same—this is the smallest of the six effects.²⁹ Those whose health declined, who experienced financial difficulties, or who learned of new coverage options were also 5-to-6 percentage points more likely to search for information. Physician affiliation with, and departure from, a health plan prompted 8-to-10 percentage point increases in the rate. Changes in employee retirement prompted 9 percentage point increases.

Few of the specific event variables display statistically significant effects in models of searching on specific topics. In all three such models, however, financial difficulties are associated with a six-to-seven percentage point increase in the rate at which beneficiaries search for information. This means that, for each of these topics, beneficiaries are motivated to search for information when financial pressures confront them. In the case of managed care, in particular, beneficiaries are also more likely to search for information if their physician joined an area health plan.

Still fewer event variables display statistically significant effects in models of searching by specific channels and sources. Six of nine variables affect the likelihood that a beneficiary will an 800 number, but no other model has more than one significant coefficient. In all cases, the effects remain positive, however, so we can say that, where events have effects at all, they raise the likelihood that beneficiaries will search for information about Medicare.

²⁹ Readers will observe that, in Table 2.17, the disenrollment variable has an estimated marginal effect of about 5%, but it is not statistically significant. The coefficient on this variable *is* significant in all models that do not include variables indicating change of insurance. Moreover, beneficiaries may have said that they changed insurance because they were disenrolled and were forced to find another health plan. The disenrollment variable and the change of insurance variable, for this reason, are likely to display a high degree of correlation. For these reasons, we regard disenrollment as affecting the overall rate at which beneficiaries search for information despite its failure to be statistically significant in the models that we most discuss here.

Table 2.13
Marginal Effects on the Probability of Searching for Information
Associated with Personal Situations and Market Events

	Joint Significance	Health Worse	HMO Left	Spouse Died	Financial Difficult	M.D. Left	Are HMO Left	Retirement	New Options	M.D. joined Plan
Any Searching	yes	5.5%	4.6%	ns	4.7%	8.0%	ns	8.7%	4.7%	10.2%
Seeking Claims Info	yes	ns	ns	ns	7.4%	ns	ns	ns	ns	ns
Seeking Supplement Info	yes	ns	ns	ns	6.3%	ns	ns	ns	ns	ns
Seeking Managed Care Info	yes	ns	ns	ns	6.2%	ns	ns	ns	4.2%	5.3%
By Handbook	No	ns	ns	ns	ns	ns	ns	ns	ns	ns
Any 1-800 #	yes	ns	6.3%	13.8%	5.8%	6.2%	ns	4.0%	4.9%	ns
Medicare 800	yes	ns	ns	ns	ns	ns	ns	2.3%	ns	ns
Insurance/Plan Representative	Yes	ns	ns	ns	ns	ns	ns	ns	3.9%	ns
Counseling	Yes	ns	ns	ns	1.7%	ns	ns	ns	ns	ns
Internet Use	No	ns	ns	ns	ns	ns	ns	ns	ns	ns
Health Fair	No	ns	ns	ns	ns	ns	ns	ns	ns	ns

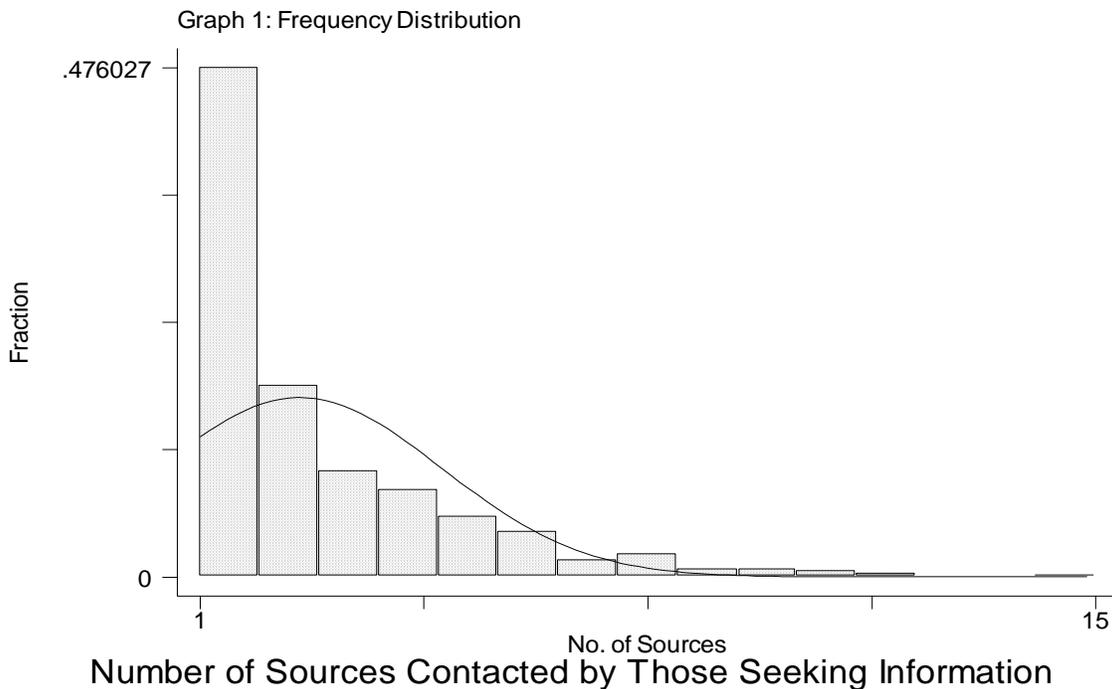
P<.05 = * P<.01 = **

Source: NMEP Community Monitoring Survey 2000 and 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

2.9 Intensity

Thus far, we have concentrated on beneficiaries' tendency to search for information at all, to search for information on specific topics, and to search by specific methods. This section focuses on the question: On average, how many times did beneficiaries contact the Medicare information infrastructure or how many sources of information did beneficiaries use. While our data make it difficult to separate many contacts with a single source from many contacts with different sources, we can gain a rough descriptive picture of the intensity with which beneficiaries search for information.

Graph 1 represents the distribution of the contacts, or sources, used by beneficiaries who sought information in the 2001 sample. There are several observations to make in this connection. First, the distribution falls off very rapidly. Of those who search for information, large numbers of beneficiaries report using 1 contact (48%). Many fewer report using exactly two, three or four, or more than four. But, of those who search for information, about 34% report using more than two contacts. So, we have at least some reason to believe that a large percentage of those who search do not gain answers to their questions on either the first or second attempt.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

2.10 Beneficiary Knowledge and Awareness

It would be very useful to know how the NMEP itself affects beneficiaries' tendency to search for information. There is no direct way of examining data on this issue since NMEP was implemented nationally. One indirect way to examine this issue is to understand how the level of beneficiary use of information is related to awareness of publicity concerning changes in the Medicare program. The survey asks beneficiaries to note whether, in the past three months prior to the survey, they have observed publicity concerning changes in the Medicare program. Our statistical models include this variable. In effect, these models ask what is the relationship between awareness of the Medicare program and the rate at which beneficiaries search for information. Another strategy would estimate the association between knowledge of the Medicare program and the rate at which beneficiaries search for information. As with awareness, most of our statistical models include a measure of beneficiary knowledge.

It is important to be cautious as we interpret the association between awareness or knowledge of Medicare, on the one hand, and the rate at which beneficiaries search for information on the other. It is natural to believe that someone who has greater awareness of changes in Medicare will be more likely to search for information about it. But it is also natural to believe that someone who is more likely to search for information regarding Medicare will be more likely to be aware of changes. The same is true of knowledge. Two problems arise over this fact. First, we cannot make any inferences about causation. More importantly, we cannot assume that the estimates in our statistical models are unbiased. For this reason, we set statistical models aside and concentrate on summary statistics in this section.

What we find here is very strong association between the likelihood of using information and our measures of knowledge and awareness. Overall, persons more knowledgeable about Medicare (based on a set of knowledge questions asked on the survey) are more likely to use information, and are more likely to use multiple sources of information.

2.10.1 Knowledge

The survey asks a small battery of questions about Medicare in order to assess beneficiaries' knowledge about the program. We summarize data from these questions in Table 2.14 below. The last two rows of the table indicate that the vast majority of beneficiaries know what type of Medicare coverage they have. But more than half of beneficiaries got the right answer on only four of eight questions. Moreover, on the remaining questions, the percentages of beneficiaries answering correctly were quite low.

Beneficiaries appear to understand that Medicare does not cover everything, that it covers mammograms, and that not all supplemental insurance includes prescription drug coverage. To this extent, they appear to understand their general predicament with regard to Medicare. But beneficiaries do not understand Medicare+Choice very well. Fewer than half know that they can have Medicare while they are in an HMO. Over half know that they can appeal decisions by an HMO, but many fewer than half know that they can drop out of managed care under Medicare, if they

want, or that Medicare managed care plans can raise their fees each year. In general, then, the level of understanding displayed by this test looks very low, on average.

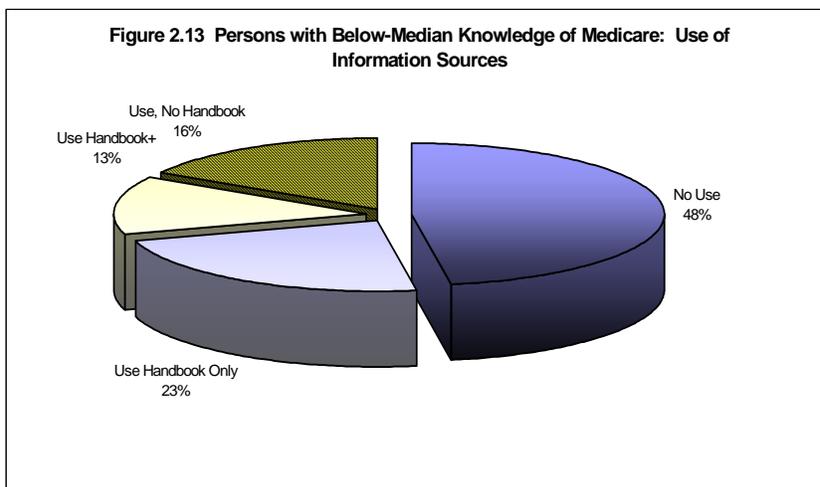
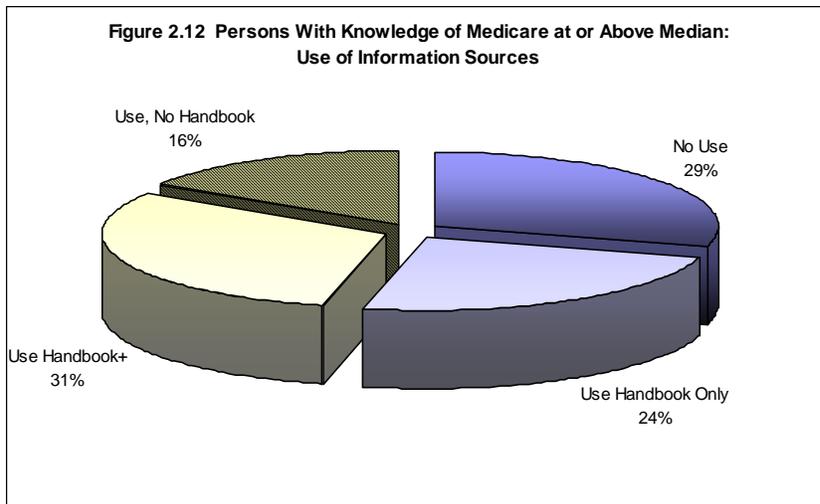
Table 2.14 shows substantial consistency across groups. Those who changed their insurance in the past year, or who intend to review it in the next, display slightly greater accuracy on the knowledge test. Highly educated beneficiaries are better informed on at least some questions. But, in general, the pattern of wrong and right answers varies little.

Table 2.14
Knowledge of at least One Item on Knowledge Test

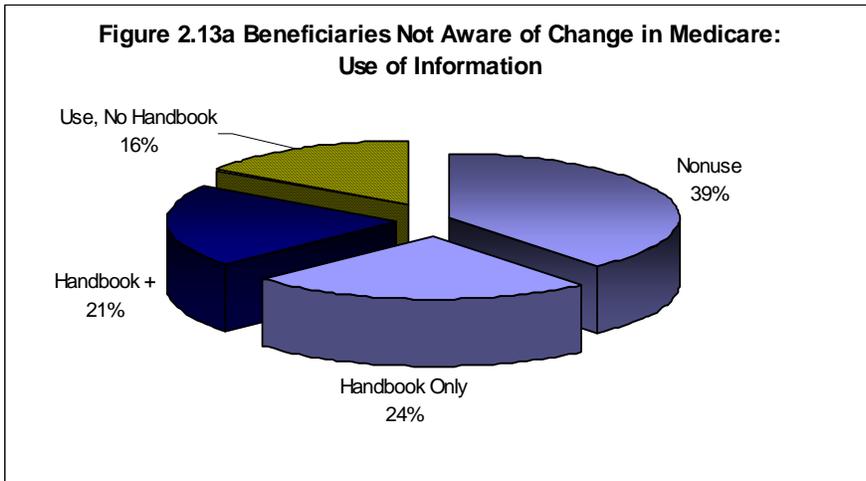
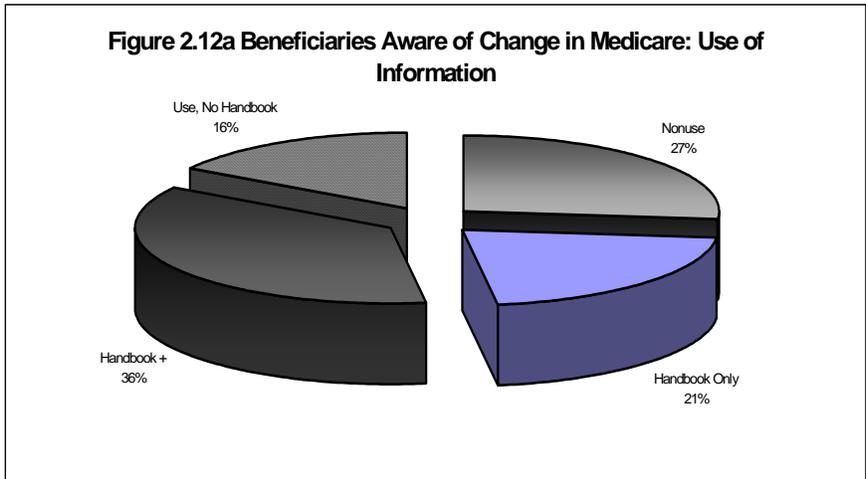
	All Bene's	Experienced Some Event	College Degree	Will Review	Changed Insurance	Medicare Insurance Changed
Medicare does not cover everything.	86%	86%	93%	88%	90%	87%
Can have Medicare and HMO coverage.	46	48	57	49	48	50
Can drop out of HMO at any time during the year.	18	19	20	20	26	32
Have a right to appeal decisions by your HMO.	59	63	60	64	74	80
Medicare covers cost of screening for colon cancer.	31	33	34	31	33	36
Medicare covers the cost of routine mammograms	63	64	60	63	70	70
Medicare managed care plans may raise fees each year.	40	43	41	44	52	57
Not all supplemental insurance covers prescription drugs.	62	65	72	64	71	74
Report knowing type of insurance coverage	96	97	98	97	99	98
Answered at least one question incorrectly.	98	98	98	98	96	95

Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

It is clear that beneficiary knowledge is associated with both the tendency of beneficiaries to search for information and the intensity with which they do this. Figures 2.12 and 2.13 report summary statistics regarding knowledge of the Medicare program and the intensity with which beneficiaries search for information. Overall, roughly seventy percent of beneficiaries scoring at or above the median sought information regarding Medicare. This contrast with 52% for those scoring below the median. Note also the difference in the percentage who uses the handbook together with other sources. Of beneficiaries with at-or-above-median knowledge of Medicare, 31% do this, as against 13% of those with below-median knowledge. In other words, better-informed beneficiaries are more likely to use multiple sources of information, including the handbook.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

2.10.2 Awareness of Publicity

About 24 percent of surveyed beneficiaries reported noticing some publicity regarding change in the Medicare in the year 2001 sample. This is down from 28 percent in the year 2000 sample, and down still further from the 40 percent in 1999 when the NMEP program was initiated.

Figures 2.12a and 2.13a above report summary statistics on awareness of publicity and use of sources. The patterns that we see here closely resemble those that we observed in Figures 2.12 and 2.13 for knowledge. Of those who reported awareness of publicity regarding change in the Medicare program, 73 percent sought information in the 2001 sample. This contrasts with 61 percent for those not aware of any such publicity. The figures otherwise indicate that awareness of publicity is associated with a greater tendency to use multiple sources of information. Of beneficiaries who had notice publicity about Medicare 36 percent reported use of the handbook together with other sources; of those who had not noticed such publicity, 20.7 percent used the handbook and some other source. As with knowledge, then, awareness of publicity regarding Medicare is associated with a greater likelihood of searching for information and with more intense use of sources.

2.11 Site to Site Differences in Information Use by Beneficiaries

The six NMEP monitoring sites (Springfield, Sarasota, Dayton, Tucson, Eugene, and Olympia) were selected in order to study the NMEP from a local perspective. Five of the sites (all but Springfield) were selected primarily because of they were in CMS' NMEP pilot states. Across sites there is variation in many of the variables that we study here—most notably in the rate at which market events occur.

There are some differences across sites in the rate at which beneficiaries seek information. (See the Appendix for the tables on cross site differences). Tucson had the highest overall (any type of information, any source of information) rate, with about 74 percent of beneficiaries seeking information about Medicare in the prior 12 months; all other sites displayed overall rates of roughly 65 percent. The average number of sources contacted was highest in Tucson (2.3 contacts per year) and the lowest in Dayton (about 1.3 contacts per year). Use of any official Medicare sources is higher in Sarasota and Tucson (Table 5 of Appendix B).

We report the results of statistical testing for site effects in Table 2.15 below. These site differences need to be interpreted cautiously. The variable for site in our models here captures only site-to-site differences that are above and beyond site differences in other variables in the model. We are concerned about one particular possibility. The NMEP may have created site-to-site differences in information usage in several ways. One possibility is that local programs may have caused more publicity about Medicare changes in some sites than others. Our statistical models control for beneficiaries' awareness of publicity regarding Medicare. In principle, this could have the effect of absorbing the site-specific NMEP effects into the coefficient on the 'noticed publicity about Medicare' variable.

The results suggest that site-to-site differences in information usage by beneficiaries are rare, after adjusting for demographics, education, insurance plan differences, and the occurrence of life and market events. The table shows site-to-site differences relative to the excluded site, Eugene. Beneficiaries in Tucson, on average, search for information at a rate that is 6 percentage points higher than Eugene. Beneficiaries in Olympia are 6 percentage points less likely to search for information

regarding Medicare claims and billing. Residents of Tucson, once again, are 8 percentage points likelier to search for information regarding managed care. Residents of Dayton, Sarasota, and Tucson are more roughly 7 percentage points more likely to use an 800 number than were beneficiaries in Eugene.

Table 2.15
Site Variation in Utilization of Information

	Springfield	Sarasota	Dayton	Tucson	Olympia
Any searching	ns	ns	ns	5.8%*	ns
Claims Info seeking	ns	ns	ns	ns	-6.4%
Supplement Info Seeking	ns	ns	ns	ns	ns
Managed Care Info Seeking	ns	ns	ns	8.4%**	ns
By Handbook	ns	ns	ns	ns	ns
By 1-800#	ns	6.5%*	6.6%*	7.9%**	ns
Medicare Help-line	ns	ns	ns	ns	ns
By Insurance/ Plan Representative	ns	ns	ns	ns	ns
By Counseling	ns	ns	ns	ns	ns
By Internet Use	ns	ns	ns	ns	ns
By Health Fair	ns	ns	ns	ns	ns

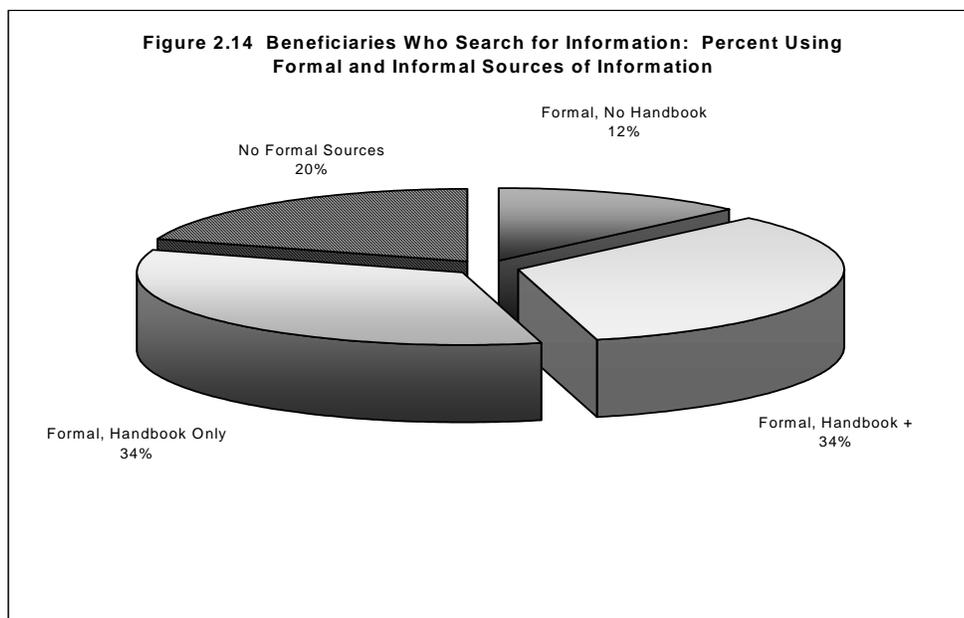
Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

2.12 Utilization Patterns of Formal and Informal Sources

Many types of organizations provide Medicare information. Some have business interests in doing so (health plans, insurers), some are paid to provide information (carriers, intermediaries), while others are government agencies or non-profit organizations with missions relating to seniors or insurance. The patterns of use across different types of organizations are potentially important, since not all sources disseminate information for the same reason. We might view the Medicare Help-line, for example, as a source of information that seeks primarily to encourage beneficiaries to make decisions that are best from their own points of view. Representatives of insurance companies, on the other hand, have interests that may not be closely aligned with those of beneficiaries.

We define **formal** channels of information as those provided by CMS, or by core CMS partners. These include anything disseminated by CMS itself, such as the *Medicare & You Handbook*; the Medicare Help-line and web site; health fairs; and senior counselors. We exclude information obtained through family or friends, 800 numbers and web sites not specified to be the Medicare Help-line or web site, medical office personnel, and information provided by health plan and insurer representatives. These excluded categories are defined as **informal** sources of information.

The key finding here is that, when beneficiaries search for information, a great deal of this is done from informal, non-official sources of information. Figure 2.14 represents the relative importance of formal and informal sources of information as reported by beneficiaries. The figure examines only those persons who reported searching for Medicare information in the past year. In the 2001 sample, 52 percent of the beneficiaries who searched for some type of Medicare information used some formal source. About 48 percent of these information users did not use any formal source. Of those who sought information in the 2001 sample, 20 percent report no use of formal sources; 12 percent used formal sources but not the handbook; equal percentages used the handbook alone or the handbook alongside other sources (34 percent). The first of these numbers is, perhaps the most worrying: while a large majority of those who search for information use formal sources, one in five do not use any formal source.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Most use of formal sources includes use of the handbook. Figure 2.15 shows that of those persons who use formal sources, 42.8 percent use **only** the handbook, 44.3 percent use the handbook and other sources, and 12.9 percent use sources exclusive of the handbook.

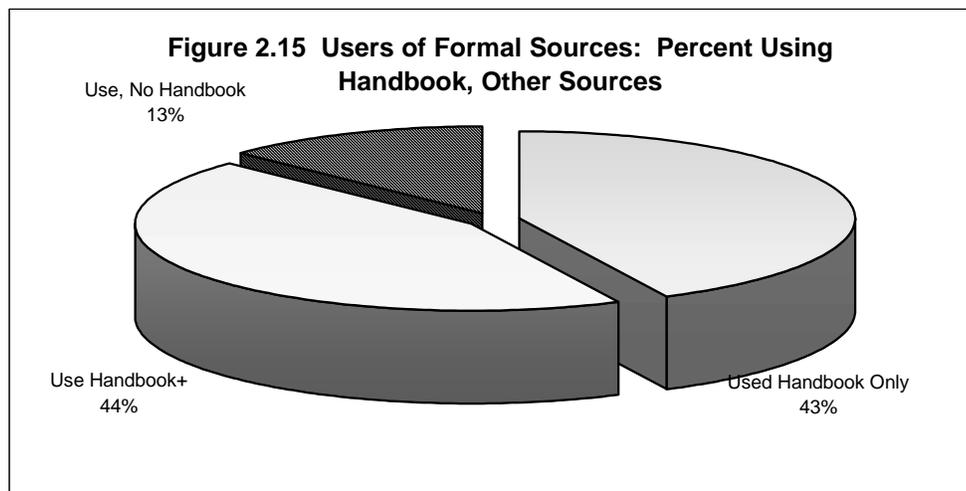
2.12.1 Informal Sources

What informal sources do beneficiaries use? Among informal sources, physician offices were the most common source of information in the 2001 sample (Table 6 of Appendix B). Approximately 24 percent of beneficiaries obtained information this way, as against 18 percent from a plan or insurance representative, and 13 percent from friends and family.³⁰

³⁰ Note that these are percentages of the entire 2001 sample, not of those who sought information at all.

2.12.2 Formal Sources and Other Variables

Table 6 of the Appendix provides summary statistics regarding variation in the use of formal and informal sources across demographic and other groups. There is some, potentially important variation here. First, beneficiaries with less than a high school education appear less likely to use formal sources (45%) than beneficiaries do on average (52%). Of those with below-median understanding of Medicare, 31% use formal sources, as against 54% of those at or above the median. Finally, many of the market events and personal situations that we list appear to be associated with higher rates of use of formal sources.



Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

We employed a statistical model to identify variables associated with use of formal sources. We report our results in Table 2.16. The pattern that we see is largely the pattern that we see in the basic model of beneficiaries' tendency to search at all (Table 2.4 earlier). This is probably the result of the fact that the Medicare & You handbook is so dominant a source, and a good portion of the explained variation in both models is the result of the tendencies to use or not use the handbook. In Table 2.16, men are less likely than women to search for information by formal means; income is negatively associated with the tendency to use formal sources; education is positively associated with it, as are several of the event variables and the variables that we regard as potentially endogenous. All in all, the finding here, is that use of formal sources is affected by roughly the same variables that affect overall information seeking behavior.

Table 2.16
Marginal Effects of Explanatory Variables on the
Probability of Searching by Use of Formal Sources

Age 65-69	-2.96
Age 70-74	0.68
Age 75-79	-6.44
Springfield	1.64
Sarasota	-1.88
Dayton	4.88
Tucson	2.58
Olympia	1.88
Male	-9.37 **
African American	6.12
Hispanic	9.34
Other Minority	1.26
Income	-2.69 *
High School Graduate	3.82
Post High School Training	8.66
Some College	7.86 *
College Graduate	7.23
Lives Alone	-2.55
Married	1.99
Health Good to Excellent	1.20
Health Declined	5.25
Medicaid Eligible	2.13
Other Health Insurance	2.41
Self/Spouse Disenrolled	5.62
Spouse Died	1.51
Financial Difficulty	1.49
M.D. Left Plan	1.46
Other Plan Left Medicare	-33.27 *
Retirement Changed	8.67 **
Learned of New Options	8.10 **
M. D. Joined Area Plan	-0.43
In Managed Care	-3.17
Knowledge of Medicare \geq Median	15.34 **
Aware of Publicity	8.00 **
Unchanged Medicare Coverage	-3.71
Changed Health Insurance	12.19 **

P<.05 = * P<.01 = **

Source: NMEP Community Monitoring Survey 2001, of beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

3.0 Profiles

Table 2.17 below profiles several groups of beneficiaries. The purpose here is to understand how the compositions of persons with different searching behaviors may differ. The searching behaviors we consider are:

- Those who did not search for information
- Those who did search for information
- Those who sought information by use of fewer than 3 sources
- Those who sought information by use of at least 3 sources
- Those who sought information without using the handbook exclusively
- Those who sought information using the handbook exclusively
- Those who experienced no personal situation or life event
- Those who experienced at least one personal situation or life event.

Note that this table reverses the structure of earlier tables. The upper left cell, for example, indicates that, *of those who did not search for information*, 28.9% were in the 65-69 years of age category. In general, the cell values are the percents, *of those in the relevant column*, who were also in the group indicated by the relevant row.

The table gives a general impression regarding how these groups differ from one another. In general, it presents findings that confirm points made earlier, but in a somewhat different form. It is particularly clear here, that those who search for information, who search more intensely, and who do not search using only the handbook are younger, more highly educated, and more likely to have experienced personal situations or market events.

3.1 Discussion and Interpretation of Our Findings

3.1.1 General Findings

- About 67 percent of beneficiaries surveyed in the six study sites reported that they had sought information from some source regarding Medicare during the prior year. This means that about one-third of the beneficiaries report not seeking information. About one-half of the beneficiaries who sought information contacted more than one source for information during the prior year (52 percent) and more than one-third contacted at least three.
- The largest increase in use rates of Medicare information occurred when the household mailings of the *Medicare & You* handbook were initiated in late 1998.
- Following this initial increase in information usage, there has been a small upward trend in the overall rate at which beneficiaries search for information between 1999 and 2001. Beneficiaries in the 2001 sample were 3.7 percentage points more likely to search for information than their counterparts in 1999. Use of the Internet increased since 1999 (by 1.5 percent), as did use of the Medicare Help-line (by 1.2 percent).

- On average, beneficiaries in the 2001 sample contacted 1.5 sources during the year. This is higher than in the 1998 and 1999 samples (1.35 and 1.37, respectively), but slightly lower than the average of 1.7 for the 2000 sample.
- Perhaps the most important findings of this report concern the variations in the tendency to search for information across beneficiary subgroups. In the models that we estimate, the probability that a given beneficiary will search for information is associated with

Age,
 Gender,
 Ethnicity,
 Level of education,
 Marital status, and
 Personal situations and insurance market events.

Personal situations and market events include, but are not restricted to: involuntary disenrollment from a managed care plan that withdrew from Medicare; a change in employer-provided retirement health benefits; and loss of access to a personal physician due to his or her withdrawal from a managed care plan.

- The experience of personal and market-related events has, perhaps, the strongest association with beneficiaries' tendency to search for information. In the 2001 sample, roughly 61 percent of surveyed beneficiaries had such experience. 72 percent of such beneficiaries sought information regarding Medicare in the 2001 sample, as against 59 percent of beneficiaries experiencing no personal situation or market event (See Figure 2.6 below). Still, 28 percent of such beneficiaries report not searching for information at all.
- The Handbook is by far the information source most used by beneficiaries. In the 2001 sample, 43 percent of beneficiaries report using the Handbook, and about half these persons (22 percent) who search for information use **only** the handbook.
- For the subset of Beneficiaries seeking information about managed care (about 16.5 percent of surveyed beneficiaries), representatives of insurance companies and plans remain the second most frequently used sources of information.
- In the 2001 sample, of those who search for information, 80 percent report use of formal sources; 20 percent report no such use. Of those reporting use of formal sources, 87 percent report using the handbook at least once during the past year.
- In the 2001 sample, 23 percent of beneficiaries report noticing some publicity about Medicare changes and choices in the month prior to the survey. This is less than the 28 percent of the 2000 sample, and much less than the 40 percent and 33 percent, of the 1999 and 1998 samples, respectively.

3.1.2 Interpretation

Roughly 67 percent of beneficiaries sought information regarding Medicare in the calendar year 2000; about one-third of beneficiaries did not. The first question to ask about these numbers is whether they indicate a problem of any kind. Is it a problem, in particular, that one-third of beneficiaries do not appear to search for information about Medicare?

There are two possibilities. The first is that non-searchers—at least many of them— are people who need information but do not search for it. A second hypothesis is that beneficiaries who do not search for information, on average, have less reason to search. In either case, we have only indirect evidence for thinking that the 33 percent represent a problem. Personal situations and market events are strongly associated with searches for information. Situations and events require us to make decisions, so they place us in heightened need of information. But, in Table 3.1 we see that, among those who do not search for information, roughly *half* experienced one or more of these situations and events. In other words, they had reason to search for information, but appear not to have done so. We also know that those who do not search tend to be more elderly, to be less highly educated, and to understand the Medicare program less well. Of course, none of this proves that half of non-searchers need information but do not have it. Still, this is at least *prima facie* reason for further study of beneficiaries who seem to have reason for gathering information but also appear not to have done so.

We have asked, and tried to answer a second question. What disposes someone to search for information? In the most general way, we find that the behaviors suggested in the pattern of our modeling evidence are consistent with a rational model of decision making----that persons who find search necessary or find it easier and less time consuming to search for Medicare information are more likely to do so. The fact that the most elderly, or the least educated seem to search less (other things the same) is likely evidence that searching more difficult for these persons. Age makes searching more difficult, and so more costly. Education makes searching easier, and so less costly. Educated people read written materials more easily, they know how to negotiate the system of information supply. Those who are married or do not live alone have, in a sense, twice the probability of needing to make use of, or a decision about, health insurance. The fact that persons search more often when they experience personal situations that may require or benefit from having Medicare information is encouraging, suggesting that there is an association between need and demand for information, and that beneficiaries are responsive to changes in market circumstances.

One cause of concern is the patterns of evidence pertaining to unmet need for information and the possibility that persons not seeking information simply do not understand Medicare well enough to know what they don't know. It is true, for example, that there is an association between rates of searching and understanding of Medicare. Nearly half of beneficiaries with low understanding of Medicare report use no source of information whatever.

There are groups who appear to search for information at lower rates, and so groups whose understanding the Medicare program might be a cause of concern. Contrary to expectations, these are not racial minorities.

The data we present also suggest that beneficiary demand for information has been relatively stable of the period since 1999. Since the obvious increase in usage following the implementation of household mailing program, the *Medicare & You* handbook has remained the predominant source of Medicare information for beneficiaries. Many (about 22 percent of beneficiaries we surveyed) use it as their

only source of information. Many of the beneficiaries who do use information (about one-fifth of them) make use of informal sources of Medicare information. This means that a great deal of information is disseminated outside the reach of CMS. This is particularly true of information about Managed care in particular, where the dominant sources are the plans and insurers (far exceeding the handbook as the source of this kind of Medicare information).

Table 3.1**Profiles of Beneficiary Groups, 2001**

(percent of all beneficiaries with the search characteristic noted by the column who were members of the row category)

	All who Did Not Search	All Who Searched for Information	All with < 3 Contacts	All with ≥ 3 Contacts	All who did Not Use Handbook	All who Used Only the Handbook	All who Experienced No Event	All who Experienced An Event
Age 65-69	28.94%	30.75%	25.46%	40.80%	35.19%	21.69%	31.69%	28.59%
Age 70-74	25.25	29.22	29.37	31.09	29.40	29.28	28.33	27.51
Age 75-79	25.11	23.67	27.94	16.42	22.25	26.90	22.57	25.49
Age 80-84	20.71	16.36	17.23	11.69	13.17	22.13	17.41	18.41
Male	45.82	40.83	39.16	44.28	43.13	36.66	42.74	42.74
White	80.28	79.62	80.03	80.85	79.00	81.34	79.59	79.88
African-American	8.94	7.96	7.96	6.72	7.95	7.81	8.40	8.31
Hispanic	3.12	4.38	4.83	3.48	3.97	5.21	3.60	4.35
Other Minority	5.53	6.21	4.96	7.21	7.26	3.90	6.00	5.91
Low Income	10.78	10.15	9.27	10.20	9.53	11.06	8.40	11.97
Less Than High School.	21.84	16.73	19.71	11.19	14.64	20.39	18.85	18.57
High School Graduate	35.89	34.77	36.81	30.10	33.60	37.09	33.37	36.13
Some College	18.30	21.04	18.54	24.88	22.36	18.44	20.29	19.74
College Graduate	20.71	22.86	20.89	28.36	24.97	19.09	23.53	21.21
Lives Alone	33.48	27.03	29.50	20.65	24.63	31.45	27.61	30.30
Married	58.30	63.70	61.23	69.15	66.29	58.79	63.99	60.22
Health Good	75.89	76.33	76.76	79.85	76.05	76.79	84.87	70.16
Medicaid Eligible	18.72	20.09	20.76	16.17	19.30	22.13	19.57	19.66
Private Health Insurance	46.52	45.58	49.48	40.55	44.27	48.37	50.78	42.66
In Managed Care	30.50	34.84	32.25	41.04	35.98	32.54	26.77	37.53
Spouse Died	4.68	3.21	3.00	4.23	3.18	3.25	0.00	5.98
Financial Difficulties	14.47	16.73	13.71	21.64	18.50	13.02	0.00	26.73
Disenrolled	3.12	8.04	5.35	12.69	9.88	4.34	0.00	10.33
M.D. Left HMO	5.96	11.18	8.09	15.42	13.39	6.72	0.00	15.31
Retirement Changed	8.37	14.83	12.53	19.40	16.69	11.28	0.00	20.82
Learned of New Options	10.64	16.80	15.01	22.39	18.50	13.67	0.00	24.16
M.D. Joined HMO	8.65	13.00	10.18	16.17	14.30	10.41	0.00	19.04
Event or Situation	51.49	65.23	60.31	72.14	69.13	57.70	0.00	100.00
Knowledge >= Median	51.91	69.61	64.10	83.08	71.96	64.86	57.62	65.89
Aware of Publicity	17.30	26.44	23.24	33.08	29.74	20.82	18.85	26.03
Medicare Ins. Unchanged	97.30	91.09	95.04	84.08	88.65	96.10	97.12	90.75
Changed Health Insurance	3.26	13.44	6.79	25.12	18.39	3.90	4.68	13.13
N	705	1369	766	402	881	461	833	1287

Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Appendix A

Appendix of Regression Results

Table A
Regression (Probit) Models:
Probability of Searching for Information Regarding Medicare, 2001 Sample

Dependent Variable: Sought Information Regarding Medicare

Model	1	2	3	4	5	6
Intercept	1.467** (0.542)	1.435** (0.544)	1.129* (0.572)	1.054 (0.605)	1.118* (0.574)	0.687 (0.635)
Age 65-69	0.118 (0.092)	0.115 (0.092)	0.069 (0.093)	0.116 (0.092)	0.068 (0.093)	0.068 (0.093)
Age 70-74	0.196* (0.091)	0.194* (0.091)	0.172 (0.092)	0.195* (0.091)	0.171 (0.092)	0.170 (0.092)
Age 75-79	0.055 (0.092)	0.055 (0.092)	0.037 (0.092)	0.070 (0.092)	0.037 (0.092)	0.052 (0.093)
Springfield	0.010 (0.10)	0.022 (0.101)	0.047 (0.101)	0.020 (0.101)	0.051 (0.102)	0.060 (0.103)
Sarasota	-0.056 (0.106)	-0.032 (0.110)	-0.002 (0.107)	-0.059 (0.106)	0.006 (0.111)	-0.002 (0.112)
Dayton	0.065 (0.102)	0.079 (0.103)	0.117 (0.103)	0.069 (0.102)	0.121 (0.104)	0.126 (0.105)
Tucson	0.196 (0.110)	0.198 (0.110)	0.224* (0.111)	0.186 (0.111)	0.224* (0.111)	0.214 (0.112)
Olympia	-0.049 (0.10)	-0.050 (0.10)	-0.035 (0.101)	-0.032 (0.101)	-0.036 (0.101)	-0.018 (0.102)
Male	-0.194** (0.065)	-0.192** (0.065)	-0.178** (0.066)	-0.187** (0.066)	-0.177** (0.066)	-0.169* (0.067)
African-American	0.009 (0.113)	0.011 (0.113)	0.099 (0.115)	0.031 (0.114)	0.10 (0.115)	0.122 (0.116)
Hispanic	0.173 (0.164)	0.168 (0.164)	0.233 (0.166)	0.169 (0.165)	0.231 (0.166)	0.226 (0.168)
Other Minority	0.106 (0.128)	0.112 (0.128)	0.152 (0.130)	0.108 (0.129)	0.153 (0.130)	0.155 (0.132)
Income	-0.056** (0.030)	-0.055** (0.030)	-0.063* (0.031)	-0.051* (0.031)	-0.062* (0.031)	-0.058* (0.031)

Table A
Regression (Probit) Models:
Probability of Searching for Information Regarding Medicare, 2001 Sample

Dependent Variable: Sought Information Regarding Medicare

Model	1	2	3	4	5	6
High School Graduate	0.094 (0.086)	0.094 (0.086)	0.055 (0.087)	0.091 (0.086)	0.055 (0.087)	0.050 (0.088)
Post High School Training	0.264 (0.191)	0.263 (0.191)	0.237 (0.194)	0.234 (0.193)	0.237 (0.194)	0.208 (0.196)
Some College	0.219* (0.099)	0.218* (0.099)	0.161 (0.101)	0.210* (0.10)	0.161 (0.101)	0.152 (0.102)
College Graduate	0.246* (0.103)	0.248* (0.103)	0.187* (0.105)	0.230* (0.104)	0.188* (0.105)	0.172* (0.106)
Lives Alone	-0.137 (0.109)	-0.138 (0.109)	-0.111 (0.110)	-0.134 (0.109)	-0.112 (0.110)	-0.105 (0.110)
Married	0.042 (0.110)	0.040 (0.110)	0.067 (0.111)	0.047 (0.110)	0.066 (0.111)	0.073 (0.112)
Health Good to Excellent	0.105 (0.076)	0.104 (0.076)	0.120 (0.077)	0.097 (0.077)	0.119 (0.077)	0.112 (0.077)
Health Declined	0.280** (0.076)	0.283** (0.077)	0.280** (0.077)	0.294** (0.077)	0.281** (0.077)	0.295** (0.078)
Medicaid Eligible	0.059 (0.077)	0.059 (0.077)	0.075 (0.078)	0.061 (0.078)	0.075 (0.078)	0.075 (0.078)
Other Health Insurance	-0.009 (0.063)	0.007 (0.066)	0.024 (0.063)	-0.007 (0.063)	0.029 (0.066)	0.030 (0.067)
Self/Spouse Disenrolled	0.336* (0.150)	0.335* (0.150)	0.335* (0.152)	0.184 (0.157)	0.335* (0.152)	0.181 (0.159)
Spouse Died	-0.134 (0.157)	-0.136 (0.157)	-0.138 (0.159)	-0.126 (0.158)	-0.138 (0.159)	-0.128 (0.160)
Financial Difficulty	0.083 (0.088)	0.080 (0.088)	0.091 (0.089)	0.079 (0.088)	0.090 (0.089)	0.087 (0.089)
M.D. Left Plan	0.271* (0.116)	0.266* (0.117)	0.229 (0.118)	0.249* (0.118)	0.227 (0.118)	0.206 (0.119)

Table A
Regression (Probit) Models:
Probability of Searching for Information Regarding Medicare, 2001 Sample

Dependent Variable: Sought Information Regarding Medicare

Model	1	2	3	4	5	6
Other Plan Left Medicare	-0.816 (0.555)	-0.814 (0.555)	-0.858 (0.583)	-0.832 (0.563)	-0.857 (0.583)	-0.868 (0.591)
Retirement Changed	0.314** (0.097)	0.317** (0.097)	0.298** (0.098)	0.276** (0.097)	0.299** (0.098)	0.260** (0.099)
Learned of New Options	0.287** (0.088)	0.286** (0.088)	0.218* (0.089)	0.287** (0.088)	0.218* (0.089)	0.216* (0.090)
M. D. Joined Area Plan	0.158* (0.102)	0.149* (0.103)	0.134 (0.103)	0.153 (0.103)	0.131 (0.104)	0.124 (0.104)
In Managed Care		0.058 (0.074)			0.020 (0.075)	0.012 (0.075)
Above Median Knowledge			0.397** (0.065)		0.396** (0.065)	0.397** (0.066)
Aware of Publicity Re: Medicare			0.252** (0.075)		0.252** (0.075)	0.263** (0.075)
Unchanged Medicare Coverage				-0.202 (0.176)		-0.205 (0.179)
Changed Health Insurance				0.593** (0.162)		0.610** (0.165)
R-sq	0.061	0.061	0.08	0.07	0.08	0.089
# obs :	2074	2074	2074	2074	2074	2074

Standard errors in parentheses. p<0.05 = *, p<0.01 = **

Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Table B
Regression (Probit) Models:
Probability of Searching for Information Regarding Medicare, Pooled 2000 and 2001 Samples

Dependent Variable: Sought Information Regarding Medicare

Model :	1	2	3	4	5	6
Intercept	1.331** (0.406)	1.280** (0.407)	1.244** (0.416)	1.126* (0.444)	1.230** (0.418)	1.003* (0.455)
Wave	-0.086* (0.043)	-0.085* (0.043)	-0.135** (0.044)	-0.078 (0.043)	-0.135** (0.044)	-0.127** (0.044)
Age 65-69	0.158* (0.066)	0.156* (0.066)	0.110 (0.067)	0.139* (0.066)	0.109 (0.067)	0.090 (0.067)
Age 70-74	0.185** (0.066)	0.182** (0.066)	0.144* (0.067)	0.180** (0.066)	0.143* (0.067)	0.138* (0.067)
Age 75-79	0.043 (0.067)	0.042 (0.067)	0.020 (0.067)	0.047 (0.067)	0.020 (0.067)	0.024 (0.068)
Springfield	0.028 (0.072)	0.041 (0.073)	0.065 (0.073)	0.032 (0.072)	0.068 (0.073)	0.072 (0.074)
Sarasota	0.045 (0.074)	0.069 (0.076)	0.092 (0.075)	0.042 (0.074)	0.098 (0.077)	0.091 (0.077)
Dayton	0.114 (0.072)	0.129 (0.073)	0.165* (0.073)	0.120 (0.072)	0.169* (0.074)	0.175* (0.074)
Tucson	0.150* (0.075)	0.153* (0.075)	0.176* (0.076)	0.145 (0.076)	0.176* (0.076)	0.171* (0.077)
Olympia	-0.011 (0.071)	-0.012 (0.071)	0.008 (0.071)	-0.001 (0.071)	0.007 (0.071)	0.019 (0.072)
Male	-0.119** (0.046)	-0.118* (0.046)	-0.105* (0.046)	-0.116* (0.046)	-0.105* (0.046)	-0.10* (0.047)
African American	0.112 (0.099)	0.114 (0.099)	0.198* (0.101)	0.125 (0.10)	0.198* (0.101)	0.212* (0.101)
Hispanic	0.311* (0.140)	0.304* (0.140)	0.344* (0.141)	0.307* (0.141)	0.341* (0.142)	0.337* (0.143)
Other Minority	0.063 (0.092)	0.069 (0.092)	0.087 (0.094)	0.062 (0.093)	0.088 (0.094)	0.087 (0.095)

Table B
Regression (Probit) Models:
Probability of Searching for Information Regarding Medicare, Pooled 2000 and 2001 Samples

Dependent Variable: Sought Information Regarding Medicare

Model :	1	2	3	4	5	6
Income	-0.037 (0.021)	-0.036 (0.021)	-0.043* (0.021)	-0.036 (0.021)	-0.043* (0.021)	-0.043* (0.022)
High School Graduate	0.145* (0.063)	0.144* (0.063)	0.096 (0.064)	0.140* (0.063)	0.096 (0.064)	0.090 (0.064)
Post High School Training	0.20 (0.119)	0.199 (0.119)	0.164 (0.120)	0.188 (0.120)	0.163 (0.120)	0.151 (0.121)
Some College	0.273** (0.072)	0.273** (0.072)	0.193** (0.074)	0.269** (0.073)	0.193** (0.074)	0.188* (0.074)
College Graduate	0.385** (0.075)	0.386** (0.075)	0.314** (0.076)	0.381** (0.075)	0.314** (0.076)	0.308** (0.076)
Lives Alone	-0.018 (0.078)	-0.019 (0.078)	-0.007 (0.078)	-0.004 (0.078)	-0.008 (0.078)	0.009 (0.079)
Married	0.128 (0.078)	0.127 (0.078)	0.143 (0.078)	0.138 (0.078)	0.143 (0.078)	0.155* (0.079)
Health Good to Excellent	0.032 (0.055)	0.029 (0.055)	0.029 (0.055)	0.028 (0.055)	0.029 (0.056)	0.026 (0.056)
Health Declined	0.168** (0.052)	0.170** (0.052)	0.155** (0.053)	0.176** (0.053)	0.156** (0.053)	0.163** (0.053)
Medicaid Eligible	-0.044 (0.056)	-0.045 (0.056)	-0.030 (0.057)	-0.040 (0.057)	-0.031 (0.057)	-0.028 (0.057)
Other Health Insurance	-0.038 (0.044)	-0.017 (0.047)	-0.013 (0.044)	-0.032 (0.044)	-0.007 (0.047)	-0.005 (0.047)
Self/Spouse Disenrolled	0.30** (0.110)	0.295** (0.111)	0.275* (0.112)	0.165 (0.114)	0.274* (0.112)	0.136 (0.115)
Spouse Died	0.148 (0.110)	0.149 (0.110)	0.139 (0.111)	0.153 (0.110)	0.140 (0.111)	0.147 (0.111)
Financial Difficulty	0.141* (0.066)	0.139* (0.066)	0.142* (0.067)	0.139* (0.066)	0.141* (0.067)	0.141* (0.067)
M.D. Left Plan	0.293** (0.084)	0.287** (0.084)	0.277** (0.085)	0.261** (0.085)	0.275** (0.085)	0.246** (0.086)

Table B
Regression (Probit) Models:
Probability of Searching for Information Regarding Medicare, Pooled 2000 and 2001 Samples

Dependent Variable: Sought Information Regarding Medicare

Model :	1	2	3	4	5	6
Other Plan Left Medicare	-0.464 (0.385)	-0.455 (0.385)	-0.470 (0.396)	-0.542 (0.390)	-0.467 (0.396)	-0.535 (0.40)
Retirement Changed	0.330** (0.068)	0.331** (0.068)	0.308** (0.069)	0.289** (0.068)	0.309** (0.069)	0.266** (0.069)
Learned of New Options	0.194** (0.058)	0.194** (0.058)	0.135* (0.059)	0.20** (0.058)	0.135* (0.059)	0.139* (0.059)
M. D. Joined Area Plan	0.350** (0.069)	0.340** (0.069)	0.322** (0.069)	0.343** (0.069)	0.320** (0.070)	0.314** (0.070)
In Managed Care		0.068 (0.052)			0.019 (0.053)	0.007 (0.053)
Above Median Knowledge			0.374** (0.045)		0.372** (0.046)	0.375** (0.046)
Aware of Publicity			0.249** (0.051)		0.250** (0.051)	0.259** (0.051)
Unchanged Medicare Coverage				-0.291* (0.117)		-0.291* (0.119)
Changed Health Insurance				0.448** (0.108)		0.468** (0.111)
R-sq	0.059	0.059	0.077	0.067	0.077	0.085
# obs :	4182	4182	4182	4182	4182	4182

Standard errors in parentheses. p<0.05 = *; p<0.01 = **

Source: Source: NMEP Community Monitoring Survey 2000 and 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Table C
Regression (Probit) Models of
The Probability of Searching for Information Regarding Specific Medicare Topics

Dependent Variable: Sought Information Regarding	Claims and Billing		Supplemental Coverage		Managed Care	
	1	2	3	4	5	6
Model :						
Intercept	-0.647 (0.367)	-0.742 (0.437)	-0.676 (0.383)	-0.822 (0.454)	-0.479 (0.402)	-1.760** (0.484)
Age 65-69	0.246* (0.102)	0.223* (0.103)	0.334** (0.112)	0.324** (0.115)	0.511** (0.121)	0.436** (0.126)
Age 70-74	0.164 (0.101)	0.148 (0.103)	0.126 (0.114)	0.129 (0.116)	0.201 (0.122)	0.155 (0.127)
Age 75-79	-0.045 (0.106)	-0.053 (0.107)	0.055 (0.117)	0.066 (0.118)	0.046 (0.127)	0.019 (0.133)
Springfield	0.076 (0.110)	0.061 (0.112)	-0.015 (0.120)	-0.010 (0.122)	-0.060 (0.124)	0.079 (0.130)
Sarasota	0.151 (0.114)	0.088 (0.119)	0.070 (0.124)	0.056 (0.131)	-0.231 (0.137)	0.123 (0.150)
Dayton	0.013 (0.112)	-0.010 (0.115)	-0.074 (0.124)	-0.073 (0.127)	-0.388** (0.140)	-0.248 (0.149)
Tucson	0.124 (0.116)	0.138 (0.117)	-0.116 (0.128)	-0.116 (0.129)	0.339** (0.123)	0.393** (0.128)
Olympia	-0.256* (0.114)	-0.243* (0.115)	-0.054 (0.119)	-0.035 (0.119)	-0.047 (0.121)	-0.011 (0.124)
Male	-0.087 (0.071)	-0.075 (0.071)	0.013 (0.077)	0.024 (0.079)	0.085 (0.080)	0.160 (0.084)
African-American	0.132 (0.121)	0.185 (0.123)	-0.033 (0.137)	0.016 (0.141)	-0.186 (0.153)	-0.059 (0.161)
Hispanic	-0.001 (0.168)	0.060 (0.170)	0.030 (0.185)	0.059 (0.187)	-0.034 (0.188)	0.014 (0.195)
Other Minority	0.449** (0.129)	0.465** (0.131)	0.198 (0.142)	0.210 (0.144)	0.295* (0.141)	0.412** (0.147)
Income	-0.070* (0.033)	-0.075* (0.033)	0.009 (0.036)	0.016 (0.036)	-0.055 (0.038)	-0.053 (0.041)

Table C
Regression (Probit) Models of
The Probability of Searching for Information Regarding Specific Medicare Topics

Dependent Variable: Sought Information Regarding	Claims and Billing		Supplemental Coverage		Managed Care	
	1	2	3	4	5	6
Model :						
High School Graduate	0.029 (0.097)	-0.006 (0.099)	0.127 (0.108)	0.092 (0.110)	0.180 (0.114)	0.161 (0.120)
Post H.S Training	-0.010 (0.203)	-0.060 (0.205)	0.335 (0.212)	0.275 (0.215)	0.106 (0.242)	0.019 (0.255)
Some College	0.222* (0.108)	0.163 (0.110)	0.154 (0.122)	0.104 (0.124)	0.371** (0.125)	0.323* (0.132)
College Graduate	0.266* (0.114)	0.212 (0.116)	0.273* (0.126)	0.227 (0.128)	0.245 (0.136)	0.211 (0.143)
Lives Alone	-0.102 (0.119)	-0.068 (0.121)	0.030 (0.130)	0.060 (0.133)	-0.091 (0.136)	-0.089 (0.142)
Married	0.240* (0.118)	0.276* (0.120)	0.048 (0.130)	0.081 (0.133)	0.013 (0.134)	0.009 (0.141)
Health Good to Excellent	-0.063 (0.083)	-0.044 (0.084)	-0.012 (0.091)	-0.033 (0.092)	0.096 (0.098)	0.061 (0.102)
Health Declined	0.060 (0.080)	0.057 (0.081)	0.031 (0.087)	0.048 (0.088)	0.056 (0.090)	0.10 (0.094)
Medicaid Eligible	0.008 (0.084)	0.028 (0.085)	0.096 (0.091)	0.117 (0.092)	0.043 (0.096)	0.077 (0.099)
Other Health Insurance	0.167* (0.068)	0.133 (0.072)	-0.245** (0.075)	-0.231** (0.080)	-0.417** (0.080)	-0.199* (0.087)
Self/Spouse Disenrolled	0.030 (0.144)	-0.044 (0.150)	0.124 (0.144)	-0.101 (0.153)	0.498** (0.141)	0.273 (0.154)
Spouse Died	0.121 (0.178)	0.156 (0.179)	-0.160 (0.209)	-0.127 (0.214)	0.009 (0.204)	-0.019 (0.217)
Financial Difficulty	0.220* (0.091)	0.245** (0.093)	0.258** (0.097)	0.263** (0.099)	0.301** (0.10)	0.301** (0.105)
M.D. Left Plan	0.231* (0.113)	0.212 (0.115)	0.230 (0.118)	0.191 (0.120)	0.418** (0.115)	0.284* (0.120)

Table C
Regression (Probit) Models of
The Probability of Searching for Information Regarding Specific Medicare Topics

Dependent Variable: Sought Information Regarding	Claims and Billing		Supplemental Coverage		Managed Care	
	1	2	3	4	5	6
Other Plan Left Medicare	-0.416 (0.343)	-0.474 (0.349)	0.343 (0.338)	0.233 (0.348)	-0.377 (0.348)	-0.320 (0.365)
Retirement Changed	0.285** (0.094)	0.240* (0.095)	0.198 (0.103)	0.139 (0.105)	0.20 (0.106)	0.176 (0.111)
Learned of New Options	0.192* (0.088)	0.157 (0.089)	0.155 (0.096)	0.150 (0.097)	0.245* (0.098)	0.213* (0.102)
M. D. Joined Area Plan	-0.074 (0.108)	-0.050 (0.109)	0.079 (0.110)	0.079 (0.112)	0.347** (0.106)	0.260* (0.109)
In Managed Care		-0.240** (0.082)		-0.053 (0.087)		0.609** (0.090)
Above Median Knowledge		0.290** (0.074)		0.172* (0.082)		0.487** (0.095)
Aware of Publicity		0.098 (0.077)		-0.006 (0.085)		0.093 (0.089)
Unchanged Medicare Coverage		-0.225 (0.156)		-0.480** (0.157)		-0.237 (0.163)
Changed Health Insurance		0.146 (0.144)		0.446** (0.145)		0.633** (0.150)
R-sq	0.058	0.074	0.084	0.106	0.17	0.234
# obs :	2075	2075	2079	2079	2087	2087

Standard errors in parentheses. p<0.05 = *; p<0.01 = **

Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Table D
Regression (Probit) Models of the Probability of Searching for Information Regarding
Medicare Using Specific Sources

Dependent Variable: Sought by [Source]

	Any 800		Medicare 800		Any Internet		Medicare Internet		Handbook		Counselor		Insurance Rep		Health Fair	
Model :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	-1.235**	-1.796**	-1.321*	-1.563*	-3.301**	-4.371**	-3.691**	-4.409**	0.598	0.039	-5.896**	-6.851**	-0.833*	-1.913**	-2.042**	-2.690**
	(0.421)	(0.489)	(0.533)	(0.638)	(0.770)	(0.931)	(1.037)	(1.231)	(0.349)	(0.415)	(0.000)	(0.000)	(0.424)	(0.511)	(0.484)	(0.580)
65-69	0.321**	0.301*	0.530**	0.539**	0.867**	0.90**	0.792*	0.819*	0.012	-0.041	0.022	0.002	0.401**	0.364*	0.170	0.169
	(0.121)	(0.123)	(0.183)	(0.186)	(0.274)	(0.293)	(0.401)	(0.418)	(0.088)	(0.090)	(0.214)	(0.223)	(0.142)	(0.148)	(0.137)	(0.140)
70-74	0.195	0.190	0.494**	0.507**	0.640*	0.648*	0.751	0.737	0.092	0.063	-0.177	-0.177	0.230	0.197	0.155	0.138
	(0.122)	(0.124)	(0.182)	(0.185)	(0.278)	(0.296)	(0.401)	(0.417)	(0.087)	(0.088)	(0.216)	(0.223)	(0.143)	(0.149)	(0.136)	(0.139)
75-79	0.002	0.014	0.125	0.124	0.118	0.095	0.125	0.090	-0.038	-0.055	-0.304	-0.277	0.229	0.224	-0.072	-0.084
	(0.127)	(0.129)	(0.195)	(0.198)	(0.312)	(0.331)	(0.452)	(0.469)	(0.088)	(0.089)	(0.228)	(0.234)	(0.146)	(0.152)	(0.146)	(0.148)
Springfield	0.049	0.039	-0.080	-0.152	-0.109	-0.125	0.001	0.003	0.026	0.058	0.196	0.242	0.142	0.263	0.105	0.151
	(0.137)	(0.140)	(0.181)	(0.188)	(0.210)	(0.221)	(0.260)	(0.276)	(0.097)	(0.099)	(0.223)	(0.230)	(0.142)	(0.149)	(0.149)	(0.153)
Sarasota	0.374**	0.327*	0.232	0.077	0.132	0.111	0.052	0.069	-0.229*	-0.196	-0.356	-0.355	0.058	0.292	-0.004	0.069
	(0.134)	(0.142)	(0.177)	(0.186)	(0.201)	(0.220)	(0.262)	(0.287)	(0.103)	(0.108)	(0.303)	(0.324)	(0.152)	(0.167)	(0.158)	(0.169)
Dayton	0.353**	0.336*	0.076	0.022	-0.349	-0.386	-0.227	-0.231	0.041	0.092	-0.323	-0.356	-0.228	-0.127	0.019	0.083
	(0.131)	(0.135)	(0.175)	(0.179)	(0.237)	(0.249)	(0.293)	(0.308)	(0.098)	(0.10)	(0.272)	(0.286)	(0.163)	(0.174)	(0.155)	(0.159)
Tucson	0.396**	0.388**	0.236	0.213	-0.070	-0.069	-0.137	-0.103	-0.059	-0.043	0.019	0.010	0.171	0.216	0.095	0.084
	(0.138)	(0.140)	(0.182)	(0.187)	(0.210)	(0.217)	(0.281)	(0.293)	(0.104)	(0.105)	(0.249)	(0.256)	(0.145)	(0.151)	(0.155)	(0.158)
Olympia	-0.234	-0.213	-0.377	-0.375	-0.404	-0.363	-0.344	-0.291	0.002	0.020	-0.144	-0.151	-0.048	0.018	-0.018	0.014
	(0.145)	(0.147)	(0.202)	(0.208)	(0.216)	(0.223)	(0.271)	(0.279)	(0.096)	(0.097)	(0.246)	(0.253)	(0.144)	(0.148)	(0.149)	(0.150)
Male	0.035	0.049	-0.139	-0.131	0.167	0.246	-0.022	0.069	-0.229**	-0.209**	-0.193	-0.170	0.143	0.206*	-0.230*	-0.204*
	(0.082)	(0.084)	(0.113)	(0.116)	(0.131)	(0.139)	(0.166)	(0.175)	(0.062)	(0.063)	(0.162)	(0.165)	(0.092)	(0.096)	(0.098)	(0.099)

Table D
Regression (Probit) Models of the Probability of Searching for Information Regarding
Medicare Using Specific Sources

Dependent Variable: Sought by [Source]

	Any 800		Medicare 800		Any Internet		Medicare Internet		Handbook		Counselor		Insurance Rep		Health Fair	
Model :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Black	-0.180 (0.152)	-0.108 (0.155)	-0.062 (0.204)	-0.039 (0.210)	0.345 (0.239)	0.468 (0.253)	0.289 (0.343)	0.428 (0.362)	0.034 (0.109)	0.140 (0.112)	-0.011 (0.270)	0.021 (0.278)	-0.218 (0.185)	-0.142 (0.194)	0.201 (0.161)	0.255 (0.165)
Hispanic	-0.257 (0.211)	-0.222 (0.212)	-0.259 (0.296)	-0.222 (0.302)	-0.437 (0.442)	-0.540 (0.484)	-0.196 (0.490)	-0.30 (0.544)	0.10 (0.148)	0.161 (0.151)	0.104 (0.315)	0.059 (0.325)	-0.207 (0.240)	-0.223 (0.254)	0.335 (0.213)	0.347 (0.216)
Oth. Minority	0.135 (0.158)	0.109 (0.164)	0.091 (0.215)	0.027 (0.224)	0.179 (0.241)	0.129 (0.257)	-0.316 (0.431)	-0.363 (0.456)	-0.188 (0.123)	-0.169 (0.126)	0.177 (0.270)	0.202 (0.283)	0.053 (0.177)	0.062 (0.186)	0.277 (0.165)	0.249 (0.170)
Income	-0.054 (0.039)	-0.054 (0.039)	-0.112* (0.054)	-0.111* (0.055)	-0.088 (0.065)	-0.112 (0.069)	-0.081 (0.083)	-0.099 (0.087)	-0.077** (0.029)	-0.086** (0.030)	-0.057 (0.074)	-0.065 (0.076)	0.002 (0.044)	0.000 (0.046)	0.013 (0.043)	0.016 (0.044)
H.S. Grad	0.109 (0.116)	0.083 (0.118)	0.029 (0.153)	-0.006 (0.156)	0.372 (0.274)	0.426 (0.293)	0.654 (0.438)	0.620 (0.454)	0.023 (0.083)	-0.020 (0.085)	0.381 (0.220)	0.391 (0.225)	0.153 (0.137)	0.158 (0.145)	0.238 (0.145)	0.210 (0.146)
Post H.S Training	0.396 (0.215)	0.351 (0.218)	0.415 (0.260)	0.359 (0.268)	0.773 (0.406)	0.803 (0.432)	0.788 (0.642)	0.665 (0.674)	0.284 (0.174)	0.233 (0.176)			0.493* (0.246)	0.497 (0.256)	0.152 (0.287)	0.112 (0.295)
Some College	0.111 (0.131)	0.062 (0.134)	-0.054 (0.175)	-0.099 (0.180)	0.783** (0.277)	0.816** (0.295)	1.109* (0.445)	1.085* (0.459)	0.128 (0.095)	0.051 (0.097)	0.338 (0.261)	0.347 (0.269)	0.369* (0.147)	0.348* (0.155)	0.408** (0.155)	0.345* (0.158)
College Grad	0.138 (0.136)	0.071 (0.140)	-0.184 (0.195)	-0.248 (0.20)	0.726* (0.287)	0.771* (0.305)	1.210** (0.452)	1.194* (0.466)	0.112 (0.099)	0.039 (0.101)	0.526 (0.270)	0.519 (0.278)	0.121 (0.159)	0.111 (0.167)	0.471** (0.162)	0.435** (0.163)
Lives Alone	-0.197 (0.142)	-0.163 (0.145)	-0.428* (0.183)	-0.404* (0.189)	0.138 (0.308)	0.191 (0.330)	-0.195 (0.514)	-0.150 (0.559)	-0.118 (0.103)	-0.081 (0.104)	-0.323 (0.228)	-0.340 (0.236)	0.061 (0.162)	0.074 (0.167)	0.329 (0.173)	0.365* (0.177)
Married	0.151 (0.137)	0.190 (0.140)	-0.005 (0.171)	0.017 (0.177)	0.445 (0.295)	0.515 (0.315)	0.863 (0.471)	0.947 (0.505)	0.017 (0.103)	0.049 (0.105)	-0.115 (0.229)	-0.129 (0.235)	0.043 (0.159)	0.065 (0.164)	0.293 (0.174)	0.308 (0.178)

Table D
Regression (Probit) Models of the Probability of Searching for Information Regarding
Medicare Using Specific Sources

Dependent Variable: Sought by [Source]

	Any 800		Medicare 800		Any Internet		Medicare Internet		Handbook		Counselor		Insurance Rep		Health Fair	
Model :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Health Good+	-0.045 (0.096)	-0.044 (0.098)	0.023 (0.131)	0.049 (0.134)	0.162 (0.175)	0.207 (0.186)	0.038 (0.222)	0.078 (0.236)	0.038 (0.073)	0.051 (0.074)	-0.494** (0.164)	-0.452** (0.169)	0.053 (0.111)	0.024 (0.116)	0.187 (0.118)	0.197 (0.121)
Health Declined	0.079 (0.092)	0.081 (0.094)	0.205 (0.122)	0.220 (0.125)	0.278 (0.147)	0.278 (0.153)	0.036 (0.192)	0.035 (0.199)	-0.016 (0.071)	-0.022 (0.072)	0.231 (0.158)	0.217 (0.163)	-0.044 (0.104)	0.003 (0.107)	0.087 (0.107)	0.094 (0.108)
Medicaid Eligible	-0.207* (0.102)	-0.198 (0.103)	-0.420** (0.150)	-0.419** (0.154)	-0.230 (0.186)	-0.195 (0.192)	-0.364 (0.261)	-0.322 (0.268)	-0.079 (0.074)	-0.060 (0.075)	0.395* (0.167)	0.409* (0.171)	-0.018 (0.112)	0.026 (0.115)	0.002 (0.114)	0.023 (0.116)
Other Insurance	0.203* (0.079)	0.175* (0.085)	0.286** (0.108)	0.189 (0.115)	0.047 (0.131)	0.041 (0.144)	0.040 (0.168)	0.027 (0.184)	0.073 (0.060)	0.102 (0.064)	-0.182 (0.155)	-0.186 (0.167)	-0.177 (0.090)	-0.004 (0.099)	-0.076 (0.091)	-0.006 (0.098)
Self/Spouse Disenrolled	0.303* (0.153)	0.10 (0.163)	-0.042 (0.214)	-0.153 (0.227)	0.213 (0.238)	-0.005 (0.262)	-0.132 (0.342)	-0.387 (0.366)	0.173 (0.129)	0.113 (0.134)	0.037 (0.295)	0.071 (0.313)	0.234 (0.156)	-0.015 (0.168)	0.224 (0.179)	0.108 (0.189)
Spouse Died	0.575** (0.185)	0.60** (0.187)	0.350 (0.248)	0.417 (0.250)	-0.104 (0.469)	-0.283 (0.540)	0.737 (0.564)	0.661 (0.627)	-0.063 (0.157)	-0.065 (0.160)	0.288 (0.340)	0.206 (0.347)	-0.843* (0.421)	-0.801 (0.413)	-0.153 (0.261)	-0.149 (0.264)
Financial Difficulty	0.287** (0.106)	0.292** (0.108)	0.262 (0.138)	0.274 (0.142)	0.000 (0.194)	0.005 (0.203)	0.429 (0.233)	0.446 (0.244)	-0.017 (0.082)	-0.020 (0.083)	0.413* (0.170)	0.449** (0.174)	0.201 (0.119)	0.195 (0.124)	0.151 (0.123)	0.133 (0.125)
M.D. Left Plan	0.302* (0.126)	0.266* (0.129)	0.206 (0.172)	0.228 (0.179)	0.331 (0.195)	0.332 (0.203)	0.433 (0.236)	0.434 (0.245)	0.060 (0.103)	0.006 (0.105)	0.027 (0.240)	-0.009 (0.251)	0.290* (0.130)	0.164 (0.135)	0.137 (0.144)	0.092 (0.147)
Other Plan Left Medicare	-0.456 (0.371)	-0.404 (0.379)	-0.173 (0.451)	-0.170 (0.462)	-0.120 (0.604)	0.102 (0.650)	-0.009 (0.687)	0.066 (0.732)	-0.315 (0.332)	-0.233 (0.344)	4.838** (0.563)	5.146** (0.711)	-0.236 (0.336)	-0.228 (0.352)	-0.20 (0.417)	-0.057 (0.438)

Table D
Regression (Probit) Models of the Probability of Searching for Information Regarding
Medicare Using Specific Sources

Dependent Variable: Sought by [Source]

	Any 800		Medicare 800		Any Internet		Medicare Internet		Handbook		Counselor		Insurance Rep		Health Fair	
Model :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Retirement Changed	0.207*	0.147	0.350**	0.304*	0.279	0.229	0.122	0.055	0.157	0.111	0.110	0.098	-0.072	-0.158	0.160	0.122
	(0.105)	(0.107)	(0.133)	(0.136)	(0.163)	(0.169)	(0.212)	(0.222)	(0.086)	(0.088)	(0.209)	(0.214)	(0.127)	(0.134)	(0.123)	(0.125)
Learned of New Options	0.249*	0.228*	0.033	0.009	0.244	0.141	0.029	-0.064	0.210**	0.139	0.138	0.103	0.305**	0.293**	0.065	0.000
	(0.10)	(0.102)	(0.142)	(0.147)	(0.157)	(0.165)	(0.211)	(0.220)	(0.079)	(0.081)	(0.190)	(0.198)	(0.109)	(0.112)	(0.119)	(0.122)
M. D. Joined Area Plan	-0.020	0.002	0.130	0.207	-0.053	-0.049	-0.337	-0.334	-0.081	-0.104	-0.034	-0.074	0.205	0.126	0.102	0.074
	(0.124)	(0.126)	(0.159)	(0.164)	(0.197)	(0.205)	(0.275)	(0.285)	(0.093)	(0.094)	(0.237)	(0.243)	(0.122)	(0.127)	(0.136)	(0.138)
In Managed Care		-0.204*		-0.479**		-0.223		-0.184		-0.031		0.007		0.427**		0.138
		(0.10)		(0.142)		(0.166)		(0.207)		(0.070)		(0.171)		(0.104)		(0.106)
Above Median Knowledge		0.169		0.033				0.389*		0.252**		0.297		0.307**		0.166
		(0.086)		(0.119)				(0.185)		(0.068)		(0.155)		(0.107)		(0.103)
Aware of Publicity		0.216*		0.271*		0.483**		-0.383		-0.019		0.463		0.140		0.298**
		(0.087)		(0.117)		(0.143)		(0.361)		(0.147)		(0.377)		(0.101)		(0.098)
Unchanged Medicare Coverage		-0.205		-0.121		-0.118		0.201		0.125		0.320		-0.239		-0.037
		(0.168)		(0.229)		(0.285)		(0.342)		(0.132)		(0.318)		(0.171)		(0.202)
Changed Health Insurance		0.607**		0.437*		0.422				0.454**		0.040		0.739**		0.251
		(0.150)		(0.206)		(0.238)				(0.064)		(0.171)		(0.158)		(0.178)

Table D
Regression (Probit) Models of the Probability of Searching for Information Regarding Medicare Using Specific Sources

Dependent Variable: Sought by [Source]

	Any 800		Medicare 800		Any Internet		Medicare Internet		Handbook	Counselor		Insurance Rep		Health Fair		
Model :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R-sq	0.103	0.127	0.142	0.17	0.148	0.191	0.186	0.223	0.031	0.055	0.169	0.188	0.147	0.198	0.058	0.077
# obs :	2100	2096	2052	2047	1843	1828	1730	1718	2114	2114	1932	1833	2114	2114	2061	2061

Standard errors in parentheses. $p < 0.05 = *$; $p < 0.01 = **$

Source: NMEP Community Monitoring Survey 2001 of Beneficiaries >64 years of age in Dayton, OH, Eugene, OR, Olympia, WA, Sarasota, FL, Springfield, MA, and Tucson, AZ.

Appendix B
Summary Statistics

Appendix C

Description of Survey of Beneficiaries

For the 2001 survey, we attempted to contact 7,732 beneficiaries in the six sites covered by this report, and eventually obtained completed interviews from 3,041.³¹ The contact procedure differed slightly this year from that used in the 2000 survey. In 2000, we terminated attempts to contact 461 (6 percent) of the 7,131 telephone numbers because the survey period ended before we had reached these persons. This year we made 20 attempts to reach every beneficiary. As a result, we contacted 6,112 individuals (79 percent of the telephone numbers selected for the survey). A total of 11 percent of the people we contacted (688) were ineligible for the interview because they were now institutionalized or deceased, or could not be interviewed because of language or other barriers. Assuming that the same proportion of the 1,620 we did not contact would also have been ineligible, we were left with an estimated 6,862 eligible beneficiaries to be interviewed. Of these, 2,383 (35 percent of the estimated eligible respondents) refused the interview and another 1,438 (21 percent of the estimated eligible respondents) were never contacted. We obtained completed data from the remaining 3,041 (55 of which said they were not on Medicare were not asked the remaining questions). These interviews represent 44 percent of the total number of estimated eligible beneficiaries that we attempted to survey. This is slightly higher than the response rate (41 percent of total attempts) obtained in 2000.³²

**Appendix Table A-1
Response to survey, by wave**

Survey Outcome	Survey Wave			
	1998 Baseline	1999	2000	2001
Responded	2,520	2,636	2,562	3,041
Not on Medicare	168	163	180	55
Ineligible	522	402	450	688
Refused	2,324	1,747	2,700	2,383
Never reached a person, eligibility unknown	893	478	958	1,620
Overall response rate	45%	54%	41%	44%
Overall cooperation rate	52%	60%	49%	56%

* Note: this table includes contacts with persons determined to be ineligible for interview.

Source: Abt Associates Inc.

The cooperation rate for 2001 was 56 percent. In each year that we have conducted the survey, minorities and the oldest respondents have been consistently less likely to comply. This continues to be true in 2001. The patterns of cooperation are not significantly different from those of earlier years. In 2001, however, we did stratify the sample according to HCFA's records of the beneficiaries' minority status. This allowed us to adjust the data so that minority respondents contribute to the sample estimates in the same proportion as they do to the total population. Thus a small source of bias that was present in the 2000 survey has been removed in 2001. This is unlikely to affect year-to-

³¹ This includes 55 whom we did not further interview because they said they were not on Medicare.

³² In recalculating the response rates for 2000 we treated the 461 abandoned attempts as though we had attempted to contact the beneficiaries but never reached a person. In earlier years' reports, these abandoned attempts were excluded from the calculations.

year comparisons. In 2000, HCFA-identified minorities were 3 percent of eligible beneficiaries and 2.5 percent of respondents. Thus correcting for this bias has an effect between zero and ½ percent. In most cases the effect is completely invisible, because minority responses differ by only a small amount from those of other beneficiaries.