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An Assessment of Beneficiary Knowledge of Medicare Coverage Options and the Prescription Drug Benefit

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Foreword

The Medicare Prescription Drug Improvement and Modernization Act of 2003 (MMA) introduced the most far reaching changes to the Medicare program since its inception in 1965. In addition to the landmark outpatient prescription drug benefit, Congress also added new coverage options (regional Preferred Provider Organizations and Special Needs Plans), changed the way participating private health plans are paid, and imposed a "lock-in" for most beneficiaries that requires them to remain with a selected coverage option for a specified period of time (i.e., six months in 2006 and nine months in subsequent years.) These changes have direct and indirect effects on the way people on Medicare interact with the program.

Of course, Medicare has changed through the years, and AARP and others have monitored the effect of these changes on beneficiaries. For example, in 1998, following the enactment of the Balanced Budget Act (BBA) (which introduced the Medicare+Choice (M+C) program), AARP commissioned Judith Hibbard of the University of Oregon, whose research expertise is in the area of consumer decision making and support, to assess beneficiaries' knowledge of the differences between the traditional Medicare program and the M+C (managed care plans).[1] That study found that most Medicare beneficiaries did not have an adequate understanding of the differences between the two types of coverage options. In view of the changes introduced in the MMA and the increasing emphasis on consumer choice and decision making, we thought it important to reassess beneficiary knowledge to help inform our efforts to educate and otherwise assist Medicare consumers. This present study represents a follow-up to the 1998 study.

This study's findings are sobering, yet encouraging. The authors found that although knowledge levels of both the prescription drug benefit and the changes affecting private health plans were low, those who were surveyed *later* in the study period were better informed than those who were surveyed earlier, an indication that educational efforts are useful. However, consistent with many other research studies, Hibbard and colleagues also found that many survey respondents were confused and stressed by the multiplicity of choices that were offered; some were so confused that they were unable to make a decision whether or not to elect coverage in the new prescription drug benefit.

It is clear that ongoing education and beneficiary assistance will be necessary. The richness of this study's findings can inform the efforts of the Centers for Medicare and Medicaid Services, AARP, and others to ensure that people on Medicare get the type of help they need to make appropriate decisions and to achieve maximum benefit from their Medicare coverage.

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[1] Hibbard, Judith and Jacquelyn Jewett, *An Assessment of Medicare Beneficiaries' Understanding of the Differences Between the Traditional Medicare Program and HMOs*, AARP Public Policy Institute, June 1998.

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Executive Summary

Background

Medicare beneficiaries are now eligible to enroll in Medicare Part D, the new, voluntary prescription drug benefit. Beneficiaries have to weigh the costs and benefits of enrolling during the initial start-up period or pay a financial penalty for enrolling at a later date unless they have "creditable" coverage from another source. Those electing coverage face a choice among numerous prescription drug plans whose benefits, premiums, and cost-sharing charges, and formularies vary. The large number of offerings that have emerged means that beneficiaries will likely have to expend considerable effort to make an informed choice.

In addition to having to consider a large number of drug plans, people on Medicare face many choices of coverage options for medical and hospital services; each of these options has implications for premiums, out-of-pocket costs, choice of providers, and benefits, including prescription drug coverage.

Making informed choices involves matching one's needs and preferences with an appropriate option. In the case of Medicare coverage options and prescription drug plans (PDPs), this means understanding not only each of the many options, but also how the differences might affect costs, access to services, and benefits.

Purpose

The purpose of this study is to answer the following research questions:

- How knowledgeable are beneficiaries about Medicare Part D? How knowledgeable are beneficiaries about the differences between the fee-for-service Medicare program (FFS Medicare) and Medicare Advantage (MA) plans?
- What factors contribute to differences in knowledge levels?
- What are the characteristics of the people who express confusion and stress over making Medicare Part D decisions?
- What are Medicare beneficiaries' intentions with regard to enrolling in a PDP?

Further, the study assesses the role patient activation, selected socioeconomic characteristics, and current prescription drug use and coverage play in predicting beneficiary knowledge, attitudes about information seeking, and intentions to elect Part D coverage. It also helps to assess whether health literacy is related to Medicare knowledge levels.

Methods

The study uses a cross-sectional survey design to examine levels of Medicare beneficiary knowledge, attitudes, and intentions to enroll in Medicare Part D. A nationally representative sample of 1,600 Medicare beneficiaries age 65 years or older was surveyed by telephone. The survey was conducted between October 13 and December 5 of 2005, during which time MA and stand-alone PDPs had begun marketing and enrollment activities.

The sampling frame, provided by the Centers from Medicare and Medicaid Services (CMS), included Medicare beneficiaries age 65 or older who were neither dually eligible for Medicaid nor institutionalized. We oversampled beneficiaries enrolled in MA plans, so that we would have an adequate sample to examine differences in understanding among levels of beneficiaries in both MA and FFS programs.

Principal Findings

Overall, understanding of the new prescription drug benefit was low. On average, respondents answered fewer than half of the knowledge items about Part D correctly. Almost as often, respondents reported they didn't know answers to the prescription drug benefit knowledge questions (i.e., they responded, "Don't Know," to the question.) In fact, respondents on average answered "Don't Know" for five of the 13 Part D knowledge questions.

More than half of the sample answered five specific questions correctly. Several of these questions were very basic, such as knowing that election of Medicare Part D is not required (60 percent correct), and that *all* Medicare beneficiaries (not just low-income beneficiaries) are eligible for Medicare Part D (53 percent). The majority of respondents understood that PDPs offered different premiums (52 percent), and that brand as well as generic prescription drugs are covered (52 percent).

About half (52 percent) of the respondents understood that current beneficiaries without prescription drug coverage after May 15, 2006, will have to pay an extra monthly charge if they want to enroll in a Medicare PDP in 2007. The higher premium charged for delaying enrollment, and therefore incurring a penalty, is a key feature of the program that beneficiaries should consider when making a decision about whether to enroll during the initial enrollment period. That only half of beneficiaries understand this is of concern.

As reflected by their incorrect responses, many respondents had misconceptions about specific details of the Part D prescription drug benefit. Almost half (45 percent) responded that Part D enrollees could buy prescription drugs at any pharmacy.

Approximately one in four did not know that an enrollee in a PDP could have out-of-pocket costs as high as $3,000 (though they can actually be higher), and a similar percentage (28 percent) thought that only Medicaid recipients were eligible for additional Part D subsidies. Additionally, there were misunderstandings about how prescription coverage deductibles work.

The ability to discern differences between FFS Medicare and MA plans is necessary to make informed choices. The survey included four items assessing knowledge of the difference between Medicare coverage options. These questions were also included in a 1997 AARP Public Policy Institute study to assess beneficiary knowledge. In contrast to the present study, which used a national sample, the 1997 survey was conducted in five high–penetration, managed care markets and was an in-depth analysis of beneficiary knowledge of the differences between FFS Medicare and MA plans. In the current survey, as in the earlier study, the findings indicate that knowledge of the differences between plan types is low. While it would be inappropriate to draw direct comparisons from both studies about observed differences in knowledge from 1997 to 2005, it is clear that knowledge levels about key characteristics that distinguish plan type were low in 2005.

In assessing the factors associated with knowledge levels, it appears that those who are more likely to take an active role in managing their health and health care are also more likely to know more about the new Medicare prescription drug benefit. Likewise, those with higher socioeconomic status also know more about Part D. Thus, those who have more resources, in the form of either more skill and experience in managing their health (greater activation) or more education, income, and better health, tend to know more about the prescription drug benefit in this early phase of enrollment.

Those with a greater need for prescription drugs also knew more about Part D. Specifically, those with higher monthly out-of-pocket prescription drug expenses ($61 or more) had Part D knowledge scores almost 10 percentage points higher than those with low expenses ($0–$20).

Beneficiary knowledge of Part D does not differ by the type of Medicare plan enrollment type. Those enrolled in an MA plan have knowledge levels similar to those enrolled in FFS Medicare.

An important finding, however, is the *pattern of knowledge levels* over the survey period. Beneficiaries surveyed later in the study appear to be better informed than are those who participated earlier. Those who completed their survey at the end of November or early December scored 6 percentage points higher than those who completed the survey a month earlier, holding all other factors constant. This suggests that while knowledge about Medicare Part D is low, it is increasing quickly.

Consistent with recent press reports and other research studies, our findings indicate widespread confusion over the new Medicare prescription benefit. Fifty-six percent of respondents in our study agreed or strongly agreed with the statement, “I am confused

about the changes in Medicare." Hundreds of respondents provided additional open-ended comments at the end of the telephone interview expressing their confusion about the new prescription benefit. Some examples of these comments include:

- *"Even people with educations don't understand it, so how do they expect me to, at my age?"*
- *"I've never seen people this confused."*
- *"It is entirely too complicated for old people."*
- *"All the people with whom I have talked seem very confused, and all the drug plans are sending mail ads making it even more confusing."*

It is notable that key socioeconomic measures did not predict confusion levels. In other words, those with a college degree are equally likely to report high levels of confusion as are those without a high school degree. Similarly, respondents at different income levels and ages were equally likely to report high levels of confusion. Also surprising is that knowledge about the prescription benefit is not predictive of confusion level. That is, even if a respondent had knowledge about the prescription drug benefit, he or she was no less likely to be confused than was a respondent who knew little.

Almost half of the respondents (47 percent) reported that they found making a decision about Medicare prescription drug coverage stressful. Nevertheless, a substantial minority (28 percent) of respondents believed that the Part D prescription benefit would help them personally.

At the time of our survey, 53 percent of respondents reported that they had decided whether they would elect Medicare prescription drug coverage, while 46 percent still had not made a decision. Forty percent of those who had not made a decision reported that they did not know enough about the options to make a decision, and an additional 18 percent cited confusion over the options as the reason they had not already made a decision.

Discussion

For seniors to benefit from the new prescription coverage, they must elect coverage; however, the complexity of the program and the number of choices appear to be a barrier to enrollment. Knowledge levels about the program are quite low, and there is considerable confusion about program details and how the plans differ. Those with less education and lower incomes or who have less experience and skill (activation), also tend to know less about Medicare coverage options as well as Part D.

However, higher levels of knowledge or having more education do not appear to protect beneficiaries from confusion about the new benefit. Those who knew more were just as likely to feel confused about Part D as were those with less knowledge.

A substantial proportion of beneficiaries (47 percent) view the task of choosing a prescription drug plan as stressful. This is particularly true for those beneficiaries for whom decisions dealing with Part D enrollment are likely to have consequences: those in poor health, those with high out-of-pocket costs, and those with lower incomes. In

addition, many beneficiaries have little confidence in their ability to make good decisions about their Medicare coverage. The combination of stress, low confidence, and low knowledge levels apparently contributes to many beneficiaries' simply not deciding.

The fact that beneficiaries do not understand the differences among health plan design options is troubling. The increasing complexity of the whole Medicare program may undermine beneficiaries' ability to understand and to make appropriate choices. This, in turn, may compromise attainment of the policy objective to improve quality and reduce costs through informed consumer choices.

Such a program would consist of expanding the use of processes that help consumers make the best use of information (See Hibbard, et al. Decision Making in Consumer-Directed Health Plans), including lowering the cognitive effort to use information by simply reducing the amount of information individuals must process, helping people understand the consequences of their choices, and designing the presentation of information to highlight its meaning and significance. These strategies both increase motivation to use information in choice, as well as, make it more accessible to those with fewer literacy and numeracy skills (Hibbard and Peters, 2003

The findings do allow some room for optimism. Those who have made a decision about enrollment are more likely to know more than those who have not yet decided, suggesting that these decisions are based on some level of knowledge. Further, beneficiary knowledge about Part D appears to be growing. Those taking the survey in the latter weeks of the study knew more about their options than did those taking the survey in the initial weeks. If this trend continues, some beneficiaries will be able to overcome the current knowledge gaps and make informed decisions within the initial election period.

However, it is the less advantaged beneficiaries whose knowledge levels are lowest and have the least confidence in their decision making. These beneficiaries will need assistance in making choices. The findings further suggest that these less advantaged beneficiaries are not necessarily the ones seeking help.

Over time, beneficiaries may improve their knowledge and may respond differently to their options from the way they did during the early weeks of enrollment in PDPs. The findings suggest that, at this point, many beneficiaries need help to navigate their way through the maze of information and choices confronting them. In addition, simplifying the program may be necessary if most beneficiaries, particularly those with poor decision-making skills, are to benefit from the new drug coverage.

Background

On January 1, 2006, a new Medicare benefit, Medicare Part D, took effect, giving 43 million beneficiaries the option of electing prescription drug coverage. Beneficiaries have to weigh the costs and benefits of enrolling during the initial enrollment period or paying a financial penalty in the form of higher monthly premiums if they enroll after the first election period (unless they have "creditable coverage" from another source.[2]) Those deciding to enroll face a choice of prescription drug plans whose benefits, costs, and formularies vary. The large numbers of offerings available means that beneficiaries will likely have to expend considerable effort to make an informed choice.

In 46 states, Medicare beneficiaries can choose from 40 or more different prescription drug plans (PDPs) (Kaiser Family Foundation 2005). Premiums for the drug benefit alone range from $0 to $85 a month. PDPs have different formularies and may also differ in pharmacies included and size of networks. Also, most plans contain the so-called doughnut hole, which requires enrollees to pay the full cost of drug expenses once they have accrued $2,250 of allowable drug expenses and until they reach $5,100 ($3,600 in out-of-pocket costs) in allowable drug expenses; at this point, catastrophic coverage takes effect. Thus, beneficiaries must weigh multiple features of the PDPs to make an informed choice.

Marketing by Medicare Advantage (MA) health plans and PDPs began in October 2005, and news stories and surveys have documented widespread confusion and anxiety among beneficiaries (Kaiser Family Foundation 2005). Making informed choices involves matching one's needs and preferences with an appropriate option. In the case of Medicare health plans and PDPs, this means not only understanding each of the many options, but how the differences will affect one's costs, access, and coverage as well. This matching process is likely to be difficult for many beneficiaries.

The level of confusion is not surprising given the complexity of the information and the fact that older adults have lower literacy levels than do younger adults (Kirsch, Jungeblut, Jenkins, & Kolstad 2002). Previous research showed that as many as 57 percent of Medicare beneficiaries have difficulty correctly interpreting simple displays of comparative Medicare health plan information (Hibbard et al. 2001; Hibbard et al. 2000).

The complexity of drug plan options adds to the overall complexity of the larger array of Medicare health plan choices. Virtually all beneficiaries now have the option of enrolling in an FFS Medicare or an MA plan, such as a preferred provider organization (PPO), private fee-for-service plan, or health maintenance organization (HMO); half will be able to choose from among at least 16 MA plans. The MA plan choices are in addition to the stand-alone PDPs. Each of these choices has implications for premiums, out-of-pocket costs, choice of providers, and coverage. The choice of a Medicare coverage option (i.e., FFS Medicare or MA) directly affects the type of drug coverage a beneficiary will have.

[2] "Creditable" coverage is prescription drug coverage that is at least as good as Medicare prescription drug coverage.

What is likely to happen when older adults are faced with too much information to process and/or information that is complex and difficult to understand? First, it is likely to raise their level of anxiety and worry. In such situations, individuals often avoid the burden of decision making by simply making no decision and staying with the status quo (Tversky, Sattah, & Slovic 1988). This suggests that beneficiaries, and particularly those with limited literacy and numeracy skills who could profit from enrolling in a prescription drug plan, may not do so because they find the decision-making process too burdensome. In this study, we specifically examine whether this phenomenon is occurring in the initial enrollment period for the new prescription drug benefit.

Purpose

This study provides an early assessment of beneficiary knowledge of Medicare following enactment of the Medicare Prescription Drug Improvement and Modernization Act of 2003 (MMA). The study answers the following research questions:

- How knowledgeable are beneficiaries about Medicare Part D? What are the least well understood elements of Medicare Part D? What are the common misconceptions?
- How knowledgeable are beneficiaries about the differences between FFS Medicare and MA plans? How knowledgeable are beneficiaries about changes in enrollment rules for MA plans?
- What factors contribute to differences in knowledge levels? Does patient activation level predict beneficiary knowledge of Medicare plan options?
- What are the characteristics of people who express confusion and stress over making Medicare prescription drug coverage, and what are the characteristics of those who feel they will personally benefit from Medicare Part D?
- What are Medicare beneficiaries' intentions with regard to enrolling in a new prescription drug benefit plan? To what degree do lack of understanding and feelings of stress influence whether respondents have made an enrollment decision and whether they decided to enroll in a PDP? Are the factors similar for those beneficiaries without current prescription drug coverage?
- What are the characteristics of Medicare beneficiaries who have confidence in making Medicare decisions? What are the characteristics of those who have sought help in the past with Medicare decision making, plan to seek help now, and have made PDP comparisons?

The study also helps to assess whether health literacy is related to Medicare knowledge levels. Finally, it examines the degree to which taking an active role in one's health and health care (patient activation) is related to Medicare knowledge, help seeking, and intentions to elect prescription drug coverage. The findings will determine whether Medicare beneficiaries adequately understand their health coverage options, including Part D benefits. They will also help to identify characteristics of beneficiaries who may have difficulty with either understanding or securing assistance in making their choices. The findings will also identify areas of the program that are well understood and areas that are not.

Methods

The study uses a cross-sectional survey design to examine early levels of Medicare beneficiary knowledge, attitudes, and intentions to elect prescription drug coverage. We conducted a nationally representative telephone survey of 1,600 Medicare beneficiaries age 65 or older. The survey was conducted between October 13 and December 5, 2005, during which time health plan and PDP marketing and enrollment had begun.

The sampling frame, provided by the Centers from Medicare and Medicaid Services (CMS), included Medicare beneficiaries age 65 or older who were neither dually eligible for Medicaid or nor institutionalized. We excluded the dually eligible because plan options and costs differed for this population. We oversampled beneficiaries enrolled in MA plans, so that we would have an adequate sample to examine differences in understanding in levels among beneficiaries in both MA and the FFS Medicare. We obtained telephone numbers for 57 percent of the original sample through matching recipient name and address with a reverse directory.

Market Strategies, Inc., an independent survey research firm, conducted the survey in English over the telephone. Eligible participants were called at least 10 times, and the final response rate, based on the American Association for Public Opinion (AAPOR) standard definition, was 49 percent. The survey took 26 minutes to complete on average. In addition to the measures described in detail below, at the end of the interview, respondents were asked whether they had any additional comments about the Medicare prescription drug benefit. Answers to this question were recorded verbatim.

Measures

Dependent Variables

There are four sets of dependent variables in this study: (1) Medicare-related knowledge levels; (2) attitudes about Medicare Part D; (3) intentions to elect Medicare Part D coverage; and (4) confidence in Medicare decision making. Below we describe each dependent variable.

Medicare Knowledge Levels. The survey items to determine Medicare Part D knowledge were developed through a four-part process. First, an expert panel of AARP and CMS staff prioritized the domains of knowledge for the study. Second, the authors developed a pool of additional items to correspond with the established priorities, and the panel reviewed these items to determine their relevance. Items were added, deleted, and edited as a result of this review. Third, we conducted three waves of cognitive tests on the items with a small number of Medicare beneficiaries. Based on this testing, we made appropriate changes in the items. Finally, we conducted a pilot study with a convenience sample of 250 Medicare beneficiaries during the summer of 2005. Based on the pilot results and new information about Medicare Part D implementation, we made additional changes in the questions, primarily to improve variation in responses and question appropriateness.

We asked all participants 13 Medicare Part D knowledge questions. These items, which are listed below, form a highly reliable index (Cronbach's alpha = .744). A knowledge index score was computed for each respondent indicating the proportion of the knowledge questions he or she answered correctly. Additionally, we asked respondents to self-report their Medicare Part D knowledge level. Specifically, we asked, "Overall, how much would you say you know about the new Medicare prescription drug benefit? Would you say that you know nothing, very little, some, or a lot?" We computed a knowledge score that was the proportion of the 13 items answered correctly. Correct answers are bolded in the following table. The average score was 43 percent correct.

Knowledge Index of Medicare Part D Prescription Benefit

- People with Medicare will be offered prescription drug coverage starting in 2006. Is this true for… **(All people with Medicare,** Only low-income people with Medicare, Or is it not true)
- People with Medicare are required to enroll in a Medicare prescription drug plan for 2006. (True/**False**)
- Medicare prescription drug plans can charge different monthly premiums. (**True**/False)
- Once you join a Medicare prescription drug plan, you can only change to another plan once a year. (**True**/False)
- People who do not have prescription drug insurance in 2006 will have to pay an extra monthly charge if they want to enroll in a Medicare prescription drug plan in 2007. (**True**/False)
- Only people who have Medicaid will be eligible for "extra help" in paying for Medicare prescription drug coverage. (True/**False**)
- All Medicare prescription drug plans will only cover generic prescription drugs and not brand-name drugs. (True/**False**)
- All Medicare prescription drug plans will cover the same list of prescription drugs. (True/**False**)
- With all Medicare prescription drug plans, you can buy your prescription drugs at any pharmacy. (True/**False**)
- No matter which prescription drug plan you choose, the amount you spend on your drugs will be the same. (True/**False**)
- People enrolled in a Medicare prescription drug plan would never have to spend more than $3,000 of their own money on prescription drugs in a year. (True/**False**)
- Stella has just enrolled in a Medicare prescription drug plan with a $250 deductible. In the first year, she buys $200 worth of prescription drugs. Will her Medicare prescription drug plan cover all, some or none of her costs? (All/Some/**None**)
- Phillip currently has regular Medicare and has no prescription drug coverage. If he waits two years before signing up for a drug plan, will his monthly premium be: (The same as it would have been if he had enrolled initially, Lower than it would have been, **Higher by 1% for each month he waited**, or Higher by 2% for each month he waited).

We also examine two additional knowledge topics in this study: (1) knowledge about the differences between the FFS Medicare program and MA plans, and (2) knowledge about new rules that apply to MA plans. To assess knowledge of the differences between Medicare coverage options (i.e., FFS Medicare and MA), we used four items that were included in a 1997 survey sponsored by the AARP Public Policy Institute that was conducted in five markets with high managed care penetration (Hibbard & Jewett 1998). We developed two

new items to assess knowledge of changes enacted in the MMA about enrollment in Medicare Advantage plans. These two items were cognitively tested and pretested with the convenience sample as detailed above. In some analyses we report on all knowledge items; such reports combine the 19 knowledge items into one index (Cronbach's alpha = .773). The overall knowledge index is weighted toward Part D, as 13 of the 19 items in the index assess knowledge about Medicare Part D. As with the Part D knowledge index above, index scores were calculated to indicate the proportion of the knowledge items for each area (FFS Medicare versus MA, and MA changes) that were answered correctly.

Knowledge Index of Fee-for-Service and MA Plan Differences

- A patient is given a list of approved doctors. To get full coverage, she can only choose doctors from that list. Does this best describe... Regular Medicare, **A Medicare HMO**, Both, Neither?
- A medical bill that should have been covered is not paid. The patient has the right to appeal this. Does this best describe… Regular Medicare, A Medicare HMO, **Both**, Neither?
- To help pay her "out-of-pocket" doctor bills, a patient may need a Medigap or supplemental policy. Does this best describe... **Regular Medicare**, A Medicare HMO, Both, Neither?
- A patient has a heart attack and is taken to the nearest hospital. The next day he is notified that to have the bill paid, he must be transferred to a hospital that is on an approved list. Does this best describe… Regular Medicare, **A Medicare HMO**, Both, Neither?

Scoring on this index was computed by the percent of the four items that were answered correctly. The average score was 41 percent correct.

Knowledge Index of MA Plan Enrollment Rules

- Starting in 2006, people can sign up with a Medicare health plan only at a certain time during the year? (**True**/False)
- In 2006, people with Medicare can change Medicare health plans up to three times a year. (True/**False**)

Scoring on this index was computed by the percent of the two items that were answered correctly. The average score was 51 percent correct.

Attitudes about Medicare Prescription Drug Coverage. Below are the four separate items that assess respondent attitudes about Medicare Part D. The first three were developed for this study; the fourth is from the Kaiser Family Foundation Health Poll Survey Report from November/December 2004.

- I am confused about the changes in Medicare. (Strongly agree, Agree, Disagree, Strongly Disagree)
- When it comes to the number of Medicare prescription drug plans available to you, do you feel that there are too few choices, too many choices, or just the right number of choices? (Too few choices, too many choices, right number of choices)
- How stressful do you find making a decision about the Medicare prescription drug plans? (Not at all stressful, a little stressful, somewhat stressful, very stressful)
- How helpful do you think the new Medicare drug benefit will be for you personally? (Very helpful, somewhat helpful, not too helpful, not helpful at all)

Intention to Elect Medicare Part D Coverage. We asked one question to ascertain respondents' intent to elect coverage in Medicare Part D: Do you plan to enroll in a Medicare prescription drug plan, have you already enrolled, or have you not decided yet? We examine two different outcomes from this question: first, whether respondents have made a decision or remain undecided, and, second, among those who had made a decision, what was the decision?

Confidence in Medicare Decision Making. We used four measures to assess confidence of Medicare decision making. The first measure is a nine-item index that assesses respondents' confidence in making Medicare decisions. The items, which are listed below, form a highly reliable index (Cronbach's alpha = .768). We calculated an index score by taking the mean of the nine items, ranging from 1 to 4.

Confidence in Medicare Decision-Making Index

(Answer categories for all variables are: Strongly disagree, Disagree, Agree, Strongly agree.)

- I am more likely to make a wrong choice if I have lots of different options to choose from.
- When it comes to making decisions about my Medicare coverage, I prefer to have someone knowledgeable decide for me.
- I prefer NOT to have the responsibility for making decisions about Medicare.
- I prefer to choose a plan without help from anyone. (Reverse coded)
- Choosing a Medicare plan is a task I would rather avoid.
- I often feel overwhelmed because there is too much information about each plan to take in.
- I have difficulty understanding the information about Medicare coverage options.
- Whenever I make a choice about Medicare, I worry it will be the wrong one.
- Instead of choosing myself, I'd rather have a family member or close friend help me decide which Medicare plan to choose.

A higher score indicates more confidence in Medicare decision making. The average score on the confidence in Medicare decision-making scale is 2.44 on a scale from 1 to 4.

The remaining three measures of decision making were: whether respondents reported seeking help for past Medicare decisions; whether they sought help in making a Medicare prescription drug plan decision or planned to do so; and whether they had tried to compare the costs and benefits of different plan options. For some of the analysis these variables are used as predictor factors, then later, they are also examined as outcome variables.

Independent Variables

In this study we examine the role of patient activation, sociodemographic variables, current prescription drug use and coverage in predicting knowledge, attitudes, and intent to enroll in Medicare Part D. In addition, we use a proxy for health literacy.

Patient Activation. Patient activation encompasses having the knowledge, skills, beliefs, and confidence to manage one's health. The Patient Activation Measure (PAM), developed using Rasch analysis, is a unidimensional, interval-level, Guttman-like (i.e., where items are graded according to difficulty) measure. It has very strong psychometric properties and is predictive

of a wide range of health behaviors and health outcomes. Those with higher scores tend to take a more active role in managing their own health and health care. We use a 13-item version of the PAM to measure patient activation (Hibbard, Mahoney, Stockard, & Tusler 2005). A screening question identified respondents with a chronic illness; respondents received a slightly modified version of the PAM questions based on whether they reported having a chronic illness. PAM scores are calculated to range from 0 (lowest activation) to 100 (highest activation).

Patient Activation (Reliability = .89)

(Answer categories for all variables are: Strongly disagree, Disagree, Agree, Strongly agree.)

- When all is said and done, I am the person who is responsible for managing my health condition(s).
- Taking an active role in my own health care is the most important factor in determining my health and ability to function.
- I am confident that I can take actions that will help prevent or minimize some symptoms or problems associated with my health condition(s).
- I know what each of my prescribed medications does.
- I am confident that I can tell when I need to go get medical care and when I can handle a health problem myself.
- I am confident I can tell a doctor concerns I have even when he or she does not ask.
- I am confident that I can follow through on medical treatments I need to do at home.
- I understand the nature and causes of my health condition(s).
- I know the different medical treatment options available for my health condition(s).
- I have been able to maintain the lifestyle changes for my health condition(s) that I have made.
- I know how to prevent further problems with my health condition(s).
- I am confident I can figure out solutions when new situations or problems arise with my health condition(s).
- I am confident that I can maintain lifestyle changes, like diet and exercise, even during times of stress.

A higher score indicates greater patient activation. The mean patient activation score in this study sample is 58.

A Proxy Measure for Health Literacy---The Screening Index. A three-item index, developed in an earlier AARP funded project, has been shown to be 70 percent accurate in identifying older adults for low or inadequate health literacy. The measure, which can be used to screen for low health literacy, includes self-rated health, age, and education. The measure has 71 percent accuracy in classifying older adults as having marginal/inadequate health literacy or adequate literacy (Hibbard, Greene, & Tusler 2005). We use it here to determine if it is related to Medicare knowledge levels.

Other Variables Considered. The main sociodemographic variables included are *age* (65–74, 75–84, 85+); *education* (less than high school, high school diploma, some college, college graduate or more); *gender*, *self-rated health* (excellent/very good, good, fair/poor); annual *household income* (less than $15,000, $15,000–$24,999, $25,000–$34,999, $35,000 or more); and *marital status* (married or not).

Out-of-pocket costs for medications and type of current prescription drug coverage are also included in the analysis. In addition, we use the confidence in decision-making index (described in the dependent variable section) in some analyses.

Analytic Approach

We first characterize the sample with respect to demographics, health status, patient activation, and current level of prescription drug use. Similar characteristics from noninstitutionalized respondents from the 2004 Medicare Current Beneficiary Survey who were 65 or older and not eligible for Medicaid are presented for comparison. We then examine bivariate associations between the independent variables and each of the knowledge measures. Finally, we assess significant differences in knowledge levels among different demographic groups using analysis of variance statistical tests.

We conduct multivariate regression models for each dependent variable to isolate the independent influence of each predictor variable. With continuous dependent variables, we use ordinary least squares regression. We dichotomize the attitude and enrollment intention dependent variables and then use logistic regression. We present the logistic regression adjusted odds ratios in the tables that present the findings. In the text, we have opted to "translate" odds ratios for key independent variables into predicted probabilities to facilitate interpretation. Predicted probabilities use logistic regression findings from all of the variables in the equation to predict the likelihood of the dependent variable under different scenarios. For instance, we can predict, on average, how likely respondents at different income levels would be to report that making a decision about Medicare prescription drug coverage is "very stressful." We calculate the predicted probabilities holding all the other independent variables in the regression equation constant (at the mean).

In the multivariate models, we also include controls for the period (October 13–31, November 1–15, November 16–December 6) in which the respondent completed the survey. This is done to control for learning that, presumably, occurred over the study period. In addition, we control for whether the respondent was enrolled in MA or FFS Medicare. All analyses are weighted to adjust for the oversampling of MA respondents, and standard error estimates are adjusted for stratification of the sample.

Findings

Table 1 compares the demographics of the study population to noninstitutionalized respondents age 65 or older in the 2004 Medicare Current Beneficiary Survey (MCBS). The distribution of age and self-rated health is similar in the study sample and the MCBS. Our sample has slightly higher socioeconomic status but lower health status. Thirty-six percent of the study sample has inadequate or marginal health literacy, as computed by the literacy screening index (Hibbard, Greene, & Tusler 2005).

The mean patient activation score is 58. In an earlier national survey conducted by Hibbard et al. (2004), older adults had a mean score of 57, while younger adults (age 40–64) scored two points higher on average.

Table 1. Characteristics of the Study Sample

Sociodemographic Characteristics	Study Sample (n = 1,600)		Column 3: MCBS*
	Column 1: Number of Respondents	Column 2: Weighted Percentages	
Age			
65–74	872	55%	46%
75–84	594	38%	40%
85 or older	132	8%	14%
Education			
Less than high school	216	14%	24%
High school diploma	607	38%	31%
Some college/vocational school	417	26%	26%
College graduate or more	352	22%	19%
Gender			
Male	676	43%	47%
Female	919	57%	53%
Self-Rated Health			
Excellent/Very Good	629	40%	49%
Good	560	35%	33%
Fair/Poor	402	25%	18%
Household Income (annual)			
Less than $15,000	186	15%	22%
$15,000–$24,999	338	26%	23%
$25,000–$34,999	249	19%	18%
$35,000 or more	506	40%	29%
Marital Status			
Married	992	62%	59%
Widowed/divorced/single/other	620	38%	41%
Health Literacy (Computed)			
Inadequate/Marginal	569	36%	n/a
Adequate	1,016	64%	n/a
Patient Activation			
Stage 1	239	15%	n/a
Stage 2	324	20%	n/a
Stage 3	756	47%	n/a
Stage 4	279	17%	n/a

SOURCE: Medicare Current Beneficiary Survey (MCBS), 2004.

*MCBS data are weighted to reflect the national population of noninstitutionalized Medicare beneficiaries age 65 and older who are not dually eligible.

Current prescription drug use, costs, and coverage for respondents in the sample are presented in Table 2. Almost all (87 percent) study respondents take at least one prescription drug on a regular basis. Almost half (47 percent) take four or more prescription drugs regularly. Out-of-pocket costs for these medications were low ($20 or less per month) for 28 percent of those regularly taking prescription drugs; however, more than one in four paid over $100 a month for their prescription drugs. Thirty-nine percent reported having no prescription drug coverage. Twelve percent said they did not fill a prescription or took a lower dose than recommended to save money in the prior year.

Table 2. Prescription Drug Use and Existing Coverage in Study Sample

	Study Sample (n = 1,600)	
	Column 1: Number of Respondents	Column 2: Weighted Percentages
Number of prescription drugs taken on regular basis		
0	211	13%
1	168	11%
2–3	454	29%
4–5	405	25%
6+	358	22%
Monthly out-of-pocket prescription drug spending (among those who take prescription drugs regularly)		
$0–$20	368	28%
$21–$60	391	30%
$61–$100	209	16%
$101–$300	289	21%
$301+	91	6%
Not filled a prescription or taken less than the recommended dose to save money in the last year		
Yes	197	12%
No	1,399	88%
Current Prescription Drug Coverage		
None	642	39%
Employer Based	449	31%
Medigap	221	13%
Other	217	17%

FFS Medicare versus MA Knowledge

- ***How knowledgeable are beneficiaries about the differences between the Fee-for-Service Medicare Plan and the Medicare Advantage Plans?***

The ability to discern differences between FFS Medicare and MA plans is needed to make informed choices. We included four items assessing knowledge of the difference between plan types in the survey that were also included in a knowledge survey commissioned by AARP in 1997. Because the samples were different (five high-penetration managed care markets versus national), one should compare findings from the two studies with caution.

In the current survey, the findings indicate that knowledge of these differences was low, in fact, lower than was observed in the 1997 survey. For instance, only 42 percent of respondents in 2005 understood that a Medigap policy is most often needed to supplement the FFS Medicare (rather than a Medicare HMO). In the 1997 survey, 67 percent of respondents understood that a Medigap policy is often needed with the Medicare FFS program. Similarly, in the current sample, 52 percent of respondents understood that the concept of a network was associated with an HMO. In 1997, 91 percent understood this same concept. Consistent with this pattern, fewer respondents in the current study knew that all

Medicare beneficiaries, regardless of enrollment in an MA plan, have the right to appeal unpaid bills (25 percent in 2005 versus 35 percent in 1997). Likewise, fewer in this sample knew that managed care enrollees may have to transfer hospitals to have their bills paid (46 percent versus 67 percent). Unlike the 1997 survey, in which knowledge of managed care enrollees was greater, in this sample we found no differences in knowledge level between those enrolled in MA plans and those in FFS Medicare (Table 3).

It is surprising that knowledge levels in 2005 would be lower than in 1997. Several possible factors could account for this:

- This 2005 survey is national, in contrast to the 1997 study, which was conducted only in high-penetration managed care markets. A survey in high-penetration markets might yield results more similar to those of the earlier survey.
- Enrollment in managed care has declined in the intervening years, and experience with that program is less widespread.
- The Medicare program has become more complex in the intervening years, and beneficiaries are simply less sure about its details.

Because the samples are not comparable (a national sample in 2005 and a high-penetration market sample in 1997), it is not possible to draw firm conclusions about these observed differences. What is clear from the findings is that knowledge levels about key characteristics that distinguish Medicare coverage options are quite low. These findings raise questions about the degree to which informed choices are possible when beneficiaries hardly understand the differences.

People seem to have a fairly good sense of their own knowledge levels. The correlation between self-assessed knowledge of the differences between MA plans and the FFS Medicare program and actual knowledge was moderately strong ($r = .317$, $p<.001$). Also confirming the low level of knowledge was the large discrepancy we observed between what the CMS administrative records showed for respondent plan type enrollment and self-reports of plan type enrollment. Only 59 percent of respondents correctly identified whether they were enrolled in “regular Medicare” or a “Medicare health plan like an HMO.” This confusion over enrollment status is consistent with the low levels of MA knowledge discussed above.

- ***How knowledgeable are beneficiaries about changes in enrollment rules for MA plans?***

Respondents were slightly more likely to know about the changes in enrollment rules for MA plans for 2006 than they were to know about differences between managed care and the Medicare FFS program (analysis above). Over half (54 percent) knew that, in 2006, there would be a one–time, open enrollment period for MA plans. Almost as many (48 percent) knew that enrollees could not switch MA plans up to three times a year. Although this is a limited assessment of the MA plan changes, beneficiaries seem to know more about MA plans than they do about Medicare Part D.

Medicare Part D Prescription Drug Benefit Knowledge

- ***How knowledgeable are beneficiaries about Medicare Part D? What are the least well understood elements of Medicare Part D? What are the common misconceptions?***

Overall, understanding of the new prescription drug benefit was low (Questions 17–35 in Appendix A show the knowledge items with correct responses). On average, respondents answered fewer than six of the 13 (43 percent) knowledge items correctly. Almost as often, respondents reported that they didn't know answers to the prescription drug benefit knowledge questions. In fact, on average, respondents reported "don't know" for five of the 13 questions. Very few respondents had a good understanding of Part D. Only 1 percent of respondents correctly answered 90 percent or more of the 13 items on Medicare Part D.

Over half of the sample answered five questions correctly; several of these questions were very basic, including knowing that enrollment in Medicare Part D is voluntary (60 percent answered correctly), and that all, not just low–income, Medicare beneficiaries are eligible for Medicare Part D (53 percent). The majority of respondents understood that Part D plans involved different premiums (52 percent), and that brand-name as well as generic prescription drugs are covered (52 percent). About half of respondents (52 percent) understood that current beneficiaries without prescription drug coverage in 2006 will have to pay an extra monthly charge if they want to enroll in a Medicare prescription drug plan in future years. The higher premium charged for delaying election after the initial enrollment period (i.e., incurring the penalty) is a key feature of the program that beneficiaries should consider when making informed choices about whether to enroll in this initial enrollment period. That only slightly more that half of beneficiaries understood this issue is of concern. Among those with no current prescription drug coverage, 57 percent understood the effect of delaying election of Part D.

As indicated by their incorrect responses, many respondents had misconceptions about specific details of the PDPs. Almost half (45 percent) of respondents responded that Part D enrollees could buy prescription drugs at any pharmacy. Approximately one in four (23 percent) did not know that an enrollee in a PDP could have out-of-pocket costs as high as $3,000, and a similar percentage (28 percent) thought that only Medicaid beneficiaries were eligible for Part D subsidies. Additionally, there was great misunderstanding about how deductibles in prescription coverage work. When given a scenario of how much a PDP would cover if there were a $250 deductible and a woman spent $200 in drugs, a third of respondents thought that some of the costs would be covered, and another 20 percent reported that they did not know.

There were additional knowledge items about which respondents did not appear to have misconceptions, but they simply could not answer the question. (Instead of giving an erroneous answer, they were more likely to say they "didn't know" in response to these items.) For instance, 50 percent reported they "didn't know" whether it was true that enrollees could only change PDPs once a year. Forty-four percent said they did not know whether PDPs all covered the same prescription drugs, and 42 percent did not know that out-of-pocket drug costs could differ depending on which PDP they chose.

We examined the relationship between the self-assessed Medicare Part D knowledge item and the index of actual Part D knowledge and found that self-assessed Medicare Part D knowledge is a fairly good indicator of actual knowledge. Correlation between self-assessed knowledge about the prescription drug plan and actual scores on the prescription drug knowledge items is .476 ($p < .001$).

Predictors of Medicare Knowledge

- ***What factors contribute to differences in knowledge levels? Does patient activation level predict beneficiary knowledge of Medicare plans options?***

In Table 3 we examine the bivariate relationships between Medicare beneficiary characteristics and Medicare knowledge index levels. Column 1 shows that the higher a beneficiary's patient activation stage, the higher his or her Part D knowledge level. Those with the highest activation levels (stage 4) scored 10 percentage points higher on the knowledge index than did those in the lowest stage (stage 1). That is, those who are more likely to take an active role in managing their health and health care are also more likely to know more about the new Medicare Part D benefit. Likewise, those with higher socioeconomic status also know more about Medicare Part D. For instance, those with a college degree scored 20 percentage points higher than did those who did not finish high school. Thus, those with more resources, in the form of either more skill and experience in managing their health (greater activation), or more education, income, and better health, tend to know more about the prescription drug benefit in this early phase of enrollment. This is consistent with previous assessments of beneficiary understanding of Medicare plan options (Isaacs 1996; McCormack et al 2001; Hibbard et al, 2001; Government Accountability Office [GAO] 2005). Age is also highly associated with Part D knowledge. The knowledge scores of respondents ages 65–75 were 13 points higher than those of respondents age 85 or older. These findings are consistent with previous assessments of beneficiary understanding of Medicare plan options (Isaacs 1996; McCormack et al. 2001; Hibbard et al. 2001; GAO 2005).

Those with a potentially greater need for prescription drug coverage also knew more about Part D. Specifically, the knowledge scores of those with higher monthly out-of-pocket prescription drug expenses ($61 or more) were almost 10 percentage points higher than were those of respondents with low expenses ($0-$20). Additionally, those without existing prescription drug coverage or with Medigap coverage knew slightly more about Part D than did those with employer-based prescription drug coverage (45 percent, 46 percent, and 42 percent, respectively).

A simple three-item screening index developed to assess health literacy in older adults and tested in a previous study (Hibbard, Greene, & Tusler, 2005) significantly correlates with three of the four knowledge indices. There were moderate correlations ($r = .30$) between the screening index and the three knowledge indices (prescription knowledge index, the managed care knowledge index, and the overall knowledge index.) The relationship with the index of MA knowledge is weaker but still significant. This suggests that the screening index could be used to identify beneficiaries who will need help in making decisions about their Medicare coverage.

Predictors of the other knowledge indices were similar to the predictors for Medicare Part D knowledge (Table 3). Sociodemographics and current prescription drug coverage predicted the other knowledge indices: the Medicare FFS program versus MA knowledge (column 2) and total Medicare knowledge (column 4). Knowledge about changes in MA enrollment rules was only related to higher education levels and prescription drug costs (column 3).

Table 3. Bivariate Relationships between Beneficiary Characteristics and Knowledge Indices: Percent of Each Knowledge Index Correct by Beneficiary Characteristics (n = 1,600)

Respondent Characteristics	Column 1: Part D Prescription Plan Knowledge	Column 2: FFS Knowledge versus MA Knowledge	Column 3: Changes in MA Enrollment Knowledge	Column 4: Overall Knowledge
All Respondents	42.8	41.1	51.0	43.3
Age				
65–74	45.2***	45.6***	52.6	46.1***
75–84	41.6	37.4	49.8	41.6
85 or older	31.5	25.8	45.5	31.8
Education				
Less than high school	30.1***	23.7***	42.5**	30.0***
High school diploma	41.9	38.7	52.4	42.3
Some college/vocational school	44.7	46.0	53.9	46.0
College graduate or more	50.0	49.8	50.5	50.0
Gender				
Male	44.7*	41.8	52.1	44.9*
Female	41.4	40.5	50.2	42.1
Self-Rated Health				
Excellent/Very Good	45.0***	43.2**	51.0	45.2***
Good	43.7	42.3	52.2	44.3
Fair/Poor	38.5	36.3	49.8	39.2
Household Income (annual)				
Less than $15,000	32.5***	28.3***	46.5	33.1***
$15,000–$24,999	41.8	38.6	51.5	42.2
$25,000–$34,999	47.5	43.6	53.9	47.4
$35,000 or more	47.0	47.0	51.9	47.5
Prefer not to report	39.4	39.3	50.0	40.3
Marital Status				
Married	45.0***	43.0**	52.5	45.4***
Widowed/divorced/single/other	39.1	37.8	48.6	39.9
Patient Activation				
Stage 1	39.6***	35.7***	50.1	39.9***
Stage 2	39.8	36.7	48.6	40.1
Stage 3	42.8	42.0	51.6	43.6
Stage 4	49.8	48.2	53.2	49.4
Monthly Prescription Spending (out-of-pocket)				
$0–$20	39.0***	39.1	45.7***	39.7***
$21–$60	42.1	42.8	53.3	43.4
$61–$100	48.0	44.4	53.7	47.9
$101+	47.8	42.2	56.8	47.6
Current Prescription Coverage				
None	44.5**	40.4**	51.3	44.4***
Employer-based	42.2	43.9	50.9	43.5
Medigap	46.0	44.6	55.2	46.7
Other	38.2	35.6	48.3	38.7
2005 Plan Enrollment				
MA	42.0	39.7	52.2	42.6
FFS Medicare	42.9	41.3	50.9	43.4
Literacy Screening Index				
3–10 adequate literacy	43.2***	47.0***	52.7*	45.0***
11–18 low literacy	33.5	30.4	48.6	34.4

*p < .05; ** p < .01; ***p<.001

In Table 4 we present multivariate regression models that examine the individual predictive power of each independent variable while controlling for the other predictor variables, as well as survey administration period and plan enrollment type. The four multivariate models yield very similar findings to the bivariate models described above. For example, column 1 shows predictors of Medicare Part D knowledge. Even after controlling for sociodemographics and other factors, the regression coefficient for stage 1 patient activation, the lowest level of activation, is -6.6. This indicates that, after controlling for the other variables in the regression, the Part D knowledge scores of those with stage 1 activation are almost 7 points lower than the scores of the reference group (i.e., those with stage 4 activation; the reference group is indicated with a dash). This suggests that taking an active role in managing one's own health is independently predictive of understanding Medicare Part D, and the relationship is not driven by differences in income and education. Education also continues to exhibit a strong relationship with Part D knowledge. The Part D knowledge scores of those who did not finish high school were almost 16 points lower than the scores of college graduates.

In the multivariate model, we continue to see that those in greater need of Part D coverage are more informed about the program. Those with monthly out-of-pocket drug costs of more than $60 scored approximately 10 percentage points higher on the knowledge index than did those with low costs ($20 or less).

Those with no prescription coverage and those with Medigap coverage both had higher knowledge levels (6 and 4 percentage points, respectively) than did those with employer-based coverage. This may indicate that those with employer-based prescription drug coverage feel that they do not have to consider the new program because they already have coverage. However, they may not realize that future coverage from their employer is not guaranteed.

Beneficiary knowledge of Part D does not differ by the type of Medicare coverage option selected. Those enrolled in a Medicare Advantage plan have knowledge levels similar to the levels of those enrolled in the Fee-for-Service Medicare plan. An important observation, however, is the pattern of knowledge levels over the survey period. Beneficiaries appear to know more in the latter weeks of the study than they did in the earlier weeks. Those who completed their survey at the end of November or early December scored 6 percentage points higher than those who completed the survey a month earlier, holding all other factors constant. This suggests that while Medicare Part D knowledge levels are low, they are increasing quickly.

Attitudes about Medicare Part D

- ***What are the characteristics of the people who express confusion and stress over making Medicare Part D decisions and of those who feel they will personally benefit from Medicare Part D?***

Consistent with recent press reports, we have found widespread confusion over the new Medicare Part D prescription benefit. Fifty-six percent of respondents agreed or strongly agreed with the statement, "I am confused about the changes in Medicare." Hundreds of respondents elaborated on their confusion when we asked them for additional comments about the Medicare Part D prescription benefit at the conclusion of the survey. Respondent comments reflect their frustration with the program:

- *"Even people with educations don't understand it, so how do they expect me to, at my age?"*
- *"I've never seen people this confused."*
- *"It is entirely too complicated for old people."*
- *"All the people with whom I have talked seem very confused, and all the drug plans are sending mail ads making it even more confusing."*

One of the main sources of confusion appears to be the large number of plan choices. Over a third of respondents (37 percent) reported that there were "too many choices" of plans. As the comments below illustrate, when asked to share any additional comments about the Medicare Part D prescription benefit, many respondents mentioned the difficulty of deciding among so many plans. Many respondents wished the government would "simplify, simplify, simplify."

- *"I think there are too many options for the majority of people to make a decision, it confuses them."*
- *"Seniors sometimes don't learn too fast. We can find it hard to grasp multiple choices, unless they are explained and we feel confident in the person who is helping us judge."*
- *"They should have maybe three plans instead of 43. With three plans you could go over everything and make a good plan [decision]."*

Almost half of respondents (47 percent) reported that they found making a decision about the PDPs "somewhat" or "very" stressful. Less than one-third (29 percent) reported that it was "not at all stressful." A substantial minority, though, believed that the Part D prescription benefit would help them personally. Twenty percent said it would be "somewhat helpful," while only 8 percent reported that it would be "very helpful."

Table 4. Multivariate Regressions Predicting Medicare Knowledge Indices

Respondent Characteristics	Regression Coefficients			
	Column 1: Knowledge of Part D Prescription Drug Benefit	Column 2: Knowledge of differences between FFS versus Medicare Advantage	Column 3: Knowledge of Changes in MA Enrollment	Column 4: Overall Knowledge
Age				
65–74	–	–	–	–
75–84	-1.4	-5.9***	-1.7	-2.4*
85 or older	-10.0***	-16.0***	-4.0	-10.6***
Education				
Less than high school	-15.8***	-21.4***	-5.3	-15.9***
High school diploma	-5.7**	-9.2***	3.6	-5.5***
Some college / vocational school	-3.6	-3.6	5.2	-2.7
College graduate or more	–	–	–	–
Gender				
Female	–	–	–	–
Male	2.0	0.3	2.5	1.7
Self-Rated Health				
Excellent/Very Good	–	–	–	–
Good	-1.0	1.4	0.6	-0.3
Fair/Poor	-4.4**	-2.0	-1.6	-3.6*
Household Income (annual)				
Less than $15,000	-5.7*	-7.5*	1.0	-5.4*
$15,000–$24,999	0.4	-1.7	2.1	0.2
$25,000–$34,999	2.9	0.2	3.0	2.3
$35,000 or more	–	–	–	–
Prefer not to report	-3.2	-1.2	0.9	-2.4
Marital Status				
Married	2.6	0.4	2.3	2.1
Widowed/divorced/single/other	–	–	–	–
Patient Activation				
Stage 1	–	–	–	–
Stage 2	-6.6**	-6.5*	-4.4	-6.3**
Stage 3	-5.7**	-5.4*	-5.5	-5.6**
Stage 4	-5.1**	-2.7	-3.2	-4.4**
Monthly Prescription Drug Spending (Out-of-Pocket)				
$0–$20	–	–	–	–
$21–$60	3.6*	3.7	7.5**	4.0**
$61–$100	9.5***	4.9	7.9*	8.4***
$101+	9.2***	3.4	11.0***	8.2***
Current Prescription Coverage				
None	5.6***	2.3	0.9	4.4**
Employer Based	–	–	–	–
Medigap	4.1*	2.1	3.4	3.6*
Other	-1.4	-4.9*	-1.3	-2.1
Survey Administration Period				
October 13–31	-5.9***	1.0	-7.8**	-4.7**
November 1–15	-3.1	1.1	-3.4	-2.3
November 16–December 6	–	–	–	–
R-Square	0.158	0.121	0.037	0.177

*p < .05; ** p < .01; ***p<.001 (Regression model controls for 2005 plan enrollment, that is, the FEE-FFS Medicare program or MA.)

Table 5 presents multivariate logistic models examining predictors of these four attitudinal questions. Column 1 examines those who "strongly agree" that they are confused by the changes in Medicare, compared to all other respondents. The two main predictors are patient activation level and self-confidence in Medicare decision making. For patient activation, we observe odds ratios that are significantly less than 1 for those with stages 1–3 activation relative to state 4. Odds ratios of less than 1 indicate a lower likelihood of the dependent variable (in this case, a lower likelihood of "strongly agreeing" that respondents are confused by the changes in Medicare). Conversely, odds ratios greater than 1 indicate a greater likelihood that respondents "strongly agree" that they are confused. Thus, those with lower patient activation in this study, surprisingly, were less likely to be confused about changes in Medicare than were those with high levels of activation. Because interpreting odds ratios can be difficult, for most of the key logistic regression findings, we have "translated" the regression findings into predicted probabilities. Predicted probabilities enable us to estimate the proportion of respondents who would choose the independent variable under different conditions, such as changing activation level. When we do this, we find that 16 percent of those with the highest patient activation levels (stage 4) would "strongly agree" they are confused, compared with approximately 5 percent of those at any other stage. (Predicted probabilities are not shown in the tables.) Open-ended respondent comments, listed below, shed light on this unexpected relationship. Respondents who had been proactive in learning about the plan options experienced confusion as they learned the more specific details and grappled with making a plan choice.

- *"Everybody has their own formulary. My wife is having trouble finding any one plan that covers her medications. There's no one thing that fits all."*
- *"At this meeting an insurance agent said there were a lot plans where you didn't have a $250 deductible; is this true? I read the Medicare book. I thought I understood it pretty well, $250 deductible. After you reach the $250, Medicare pays 75 percent, that's what I got from the booklet.*
- *"Even the person who gave the workshop did not know all the answers to our questions."*

The other important predictor of confusion over the changes in Medicare was an index of confidence in making general Medicare decisions. As we expected, the greater one's general confidence in Medicare decision making, the less likely one is to be confused about changes in Medicare.

It is notable that key socioeconomic measures did not predict confusion levels. Those with a college degree were equally likely to report high levels of confusion as were those without a high school diploma. Similarly, respondents of different income levels and ages were equally likely to report high levels of confusion. Also surprising is that knowledge of the Part D prescription benefit does not predict confusion level. Those with the highest levels of Part D benefit understanding were no less confused than were those with the lowest levels of program knowledge. One respondent's comment may explain this phenomenon, "The more you know, the more confused you get."

Column 2 of Table 5 presents the multivariate logistic model examining those who believe there are "too many choices" of PDPs compared to all other respondents. The more a respondent knows about Part D, the more likely he or she is to believe that there are too many choices. When we "translate" the odds ratio of 1.02 into predicted probabilities, we would expect that 57 percent of those with scores of 80 on the Part D knowledge index would feel that there are too many plan choices, compared with 40 percent of those with a score of 50 on the knowledge index. In contrast, the higher a respondent's confidence in Medicare decision making, the less likely he or she is to feel that there are too many plan choices.

Awareness of the number of plan choices seems to have increased over the study period. Those who completed the survey in the last few weeks of administration were substantially more likely to believe there were too many choices than were those who completed the survey earlier. This is not surprising as marketing of plans ramped up during the latter weeks of the survey.

We see a different pattern among respondents who reported that deciding about Medicare prescription drug plans was "very stressful" (column 3). For those whose decision about enrollment is likely to be quite consequential, the choice is more stressful. The odds ratios for those with lower incomes, worse health, and higher out-of-pocket drug expenses are all significantly above 1, indicating that they have higher stress levels about making decisions. Based on the regression findings, we would expect that 28 percent of those with less than $15,000 in annual household income would find deciding very stressful, compared to only 16 percent of those with annual incomes of $35,000 or more.

Understanding the details of the Medicare Part D benefit does not appear to ameliorate stress. In fact, we find the opposite pattern: those who have higher knowledge report higher stress.

Column 4 of Table 5 presents the multivariate model predicting those who find the Part D benefit to be "very helpful" to them personally. As anticipated, those with no current prescription drug coverage were more likely to find the plan very helpful than were those with employer-based coverage. Other factors that we expected to predict finding the Part D benefit "very helpful" were not, however, significant predictors. We only observe a trend that those with high out-of-pocket monthly prescription drug costs and those with low incomes find the benefit "very helpful." In neither case are these factors significantly related.

Intentions to Elect Medicare Part D Coverage

- ***What are Medicare beneficiaries' intentions to enroll in a PDP? To what degree do lack of understanding and feelings of stress influence whether respondents make a decision about enrollment? What factors predict an affirmative decision to enroll?***

At the time of our survey, 53 percent of respondents reported having decided whether they would elect Part D, while 46 percent still had not made a decision. Almost half (44 percent) of those who had not yet decided reported that they did not know enough about the options yet to make a decision. Twenty percent cited confusion over the options as the reason they had not yet decided.

Sixteen percent planned to enroll or already had done so at the time of the survey. Those respondents most commonly cited cost savings as the key reason for enrolling (43 percent). One-quarter also reported wanting to keep premiums affordable in the future or wanting to avoid the penalty (25 percent). Almost a third (32 percent) of this group had already decided on the plan in which they would enroll. When they were asked how they made their plan choice, their most common response was that they choose a plan with which they had had prior health or other insurance coverage. The second most common way respondents selected Part D plans was through information provided by a Part D plan, through either a representative or an advertisement. The third most common method was comparing plan benefits and costs, although fewer than half who had chosen a Part D plan (41 percent) reported having compared costs and benefits of different plans. Those who had compared, did so for only four plans, on average. Early electors do not appear to compare the full range of plans available in their markets.

Of those who made an enrollment decision, far more respondents decided not to elect Part D coverage. Over one-third (38 percent) reported that they would not enroll in a plan. The key reason cited among respondents planning not to enroll was having existing, cheaper coverage (66 percent). An additional 12 percent reported that they did not need prescription drug coverage, and 6 percent said the plans were too expensive.

Table 5. Multivariate Logistic Regression Models Predicting Attitudes toward Medicare Part D Plans (Adjusted Odds Ratios)

	Dependent Variables			
	Column 1: Confused about the Changes in Medicare[1]	Column 2: Too Many Choices[2]	Column 3: Deciding Is Very Stressful[3]	Column 4: Drug Benefit Will Be Very Helpful[4]
Age: 65–74	–	–	–	–
75–84	0.92	1.05	0.69*	1.48
85 or older	1.07	1.10	0.48*	1.90
Education				
Less than high school	0.88	0.82	0.94	1.65
High school diploma	0.90	0.98	0.86	0.67
Some college/vocational school	0.89	0.88	0.60*	0.82
College graduate or more	–	–	–	–
Gender: Female	–	–	–	–
Male	0.90	0.79	0.57***	0.73
Self-Rated Health				
Excellent/Very Good	–	–	–	–
Good	1.46	1.13	1.12	1.47
Fair/Poor	1.31	1.05	1.67**	1.23
Household Income (annual)				
Less than $15,000	1.19	1.41	2.08**	1.71
$15,000–$24,999	0.68	1.17	1.67*	1.01
$25,000–$34,999	0.82	1.27	1.16	1.52
$35,000 or more	–	–	–	–
Prefer not to report	0.93	1.08	1.63*	0.84
Marital Status				
Married	0.56*	0.87	0.84	1.02
Widowed/divorced/single/other	–	–	–	–
Patient Activation				
Stage 1	0.31**	0.70	1.56	0.68
Stage 2	0.28***	0.84	1.55	0.67
Stage 3	0.31***	0.78	1.18	0.43**
Stage 4	–	–	–	–
Monthly Prescription Drug Spending (Out-of-Pocket)				
$0–$20	–	–	–	–
$21–$60	1.05	1.11	0.61	0.62
$61–$100	1.81	1.11	0.67	0.81
$101+	1.49	1.14	1.47*	1.57
Current Prescription Coverage				
None	0.74	0.95	1.37	1.80*
Employer-based	–	–	–	–
Medigap	0.60	1.21	1.44	1.52
Other	0.47*	1.08	0.96	1.31
Knowledge of Medicare Part D Score	1.00	1.02***	1.02***	0.99
Medicare Decision-Making Confidence Score	0.08***	0.42***	0.21***	1.05
Survey Administration Period				
October 13–31	1.27	0.42***	0.91	0.60
November 1–15	1.05	0.45***	0.98	0.57*
November 16–December 6	–	–	–	–
Pseudo R-Square	0.204	0.096	0.157	0.083

* p < .05; ** p < .01; *** p < .001 (regression model controls for 2005 plan enrollment)

KEY: 1. Replied "Strongly Agree" to "I am confused about the changes in Medicare"; 2. Replied "Too many choices," to "When it comes to the number of Medicare prescription drug plans available to you, do you feel that there are too few choices, too many choices or just the right number of choices?"; 3 Replied "Very Stressful" to "How stressful is it deciding about Medicare coverage?"; 4. Replied "Very Helpful" to "How helpful do you think the new Medicare Drug benefit will be for you personally?"

Table 6 presents multivariate logistic regression models examining predictors of intentions regarding election of Part D coverage for all respondents (first two columns), and for those without current prescription drug coverage (columns 3 and 4). Since enrollment decisions for those who are not currently covered are of particular importance, we examined this group separately. The first and third columns are analyses of the predictors of having made any enrollment decision about coverage (to enroll or not to enroll) versus having not made a decision yet. In other words, it answers the question, "What predicts having made up one's mind about enrollment?" The second and fourth columns are analyses of whether respondents had decided for or against enrolling among those respondents who had made an enrollment decision. The question answered in these regression models is, "What predicts an intention to enroll in a Part D plan?"

Column 1 shows a significant odds ratio of 1.01 for Part D knowledge levels, indicating that those who know more about Part D knowledge are significantly more likely to have made an enrollment decision than are those who know less. Similarly, those with higher activation levels are more likely to have decided. In contrast, those who feel stress about the choice are substantially less likely to have made an enrollment decision. Predicted probabilities based on the regression results indicate that 74 percent of those reporting that the choice is "not at all stressful" have made an enrollment decision, compared to only 43 percent of those reporting that the process is "very stressful." Thus, the stress and anxiety associated with the decision appear to be a barrier to actually making an enrollment decision.

The factors predictive of having made an affirmative decision to enroll in a Part D plan, among those who made any enrollment decision, are shown in column 2. The key factors predicting whether respondents intend to enroll were: out-of-pocket prescription drug spending; having no current coverage; and feeling stress around Medicare choices. The predicted probabilities of enrollment based on the regression findings for those with $21–$60, $61–$100, and $101 or more in monthly out-of-pocket prescription drug costs were 21 percent, 37 percent, and 58 percent, respectively, compared with 9 percent for those with monthly costs of $20 or less. (Predicted probabilities are not shown in the table.) Those without any current prescription coverage were also substantially more likely than were those with employer-based coverage to have decided to enroll. Respondents experiencing stress about making Medicare choices were more likely to choose to enroll in a Part D plan than to choose not to.

Higher levels of Part D benefit knowledge also predict enrollment in a Part D plan. It is not clear, however, if knowing more about the program motivates enrollment, or if deciding to enroll in a plan results in learning more about the program. Females and those with low patient activation were also more likely to decide to enroll. Given the subsidies to lower-income beneficiaries, it is surprising that household income does not predict an intention to enroll in a Part D plan, particularly in light of low or "zero" premium options in many markets.

We replicated our analyses for the 39 percent of respondents who reported having no current prescription drug coverage, since they have the most to gain from the program. Interestingly, this subset of respondents was no more likely to have decided whether to enroll in a Part D plan than was the total sample. Only 46 percent had made an enrollment decision, compared to 53 percent of all respondents. Twenty-two percent of those without current coverage had decided to enroll in a Part D plan, while a similar proportion (24 percent) had decided that they would not enroll in a plan.

In column 3 of Table 6, we present the logistic regression findings for the factors that predict being undecided about Part D enrollment among those without current prescription drug coverage. As for the entire sample, those with higher Part D knowledge levels and higher patient activation were more likely to have made an enrollment decision. Again, stress appears to be a barrier to making an enrollment decision. Interestingly, lower-income respondents were substantially more likely to have made an enrollment decision.

Those without current coverage who decided to enroll in a PDP were also more likely to have high out-of-pocket drug costs (column 4). Older respondents and those with less confidence in their decision making were substantially less likely to have decided to enroll in a PDP. However, this analysis was hampered by the relatively small sample size.

Medicare Decision Making

- ***What are the characteristics of those who have sought or will seek help for Medicare decisions? What are the characteristics of Medicare beneficiaries who have confidence in making Medicare decisions?***

One-third of respondents in the survey report that, in the past, they have sought help or advice regarding a Medicare coverage decision. For Part D, the proportion seeking help is highly related to whether an enrollment decision has been made. Of those who have already come to a decision about whether to enroll, only 25 percent reported having sought help in making the decision. The most common sources of help, for those who sought assistance, were family and friends, current insurance plans (HMOs and supplemental plans), and PDP representatives. Those who have not yet decided whether to enroll are more likely to indicate that they will seek assistance in the future when they do make Part D decisions. Seventy-five percent of the undecided group indicates they plan to seek help.

A minority of respondents (17 percent) report having compared the costs and benefits of PDPs. Of those who compared plan designs, the overwhelming majority (80 percent) reported that it was very or somewhat hard to compare “the actual differences in plans’ costs and benefits.” While most beneficiaries have at least 40 plans from which to chose, the average number of plans compared by those respondents who compared plans was fewer than four.

Table 6. Logistic Regression Models Predicting Medicare Part D Enrollment Decisions

	All Respondents		Respondents without Coverage	
	Column 1: Any Decision	Column 2: Enrolling	Column 3: Any Decision	Column 4: Enrolling
Age: 65–74	–	–	–	–
75–84	1.04	0.80	0.84	0.64
85 or older	1.20	0.54	1.05	0.08***
Education				
Less than high school	0.81	0.62	0.56	0.67
High school diploma	1.02	0.83	0.66	0.86
Some college/vocational school	1.55*	0.82	1.37	1.13
College graduate or more	–	–	–	–
Gender: Male	0.89	0.57*	1.20	1.06
Female	–	–	–	–
Self-Rated Health				
Excellent/Very Good	–	–	–	–
Good	1.29	1.03	1.30	0.59
Fair/Poor	1.06	0.71	0.68	0.52
Household Income (annual)				
Less than $15,000	1.43	1.91	2.42*	3.68
$15,000–$24,999	1.27	1.25	1.13	0.99
$25,000–$34,999	1.18	1.21	1.09	1.49
$35,000 or more	–	–	–	–
Prefer not to report	1.29	0.85	1.71	1.80
Marital Status				
Married	1.63**	0.88	1.41	0.68
Widowed/divorced/single	–	–	–	–
Patient Activation				
Stage 1	0.60*	2.33*	0.42*	3.52
Stage 2	0.90	1.37	1.46	0.78
Stage 3	0.88	1.33	1.25	1.39
Stage 4	–	–	–	–
Monthly Prescription Drug Spending (out-of-pocket)				
$0-$20	–	–	–	–
$21–$60	0.94	2.67**	1.39	2.29
$61–$100	0.67*	5.71***	0.71	3.81*
$101+	0.84	14.02***	1.41	38.20***
Current Prescription Coverage				
None	0.54***	3.12***	–	–
Employer-based	–	–	–	–
Medigap	0.57**	2.05*	–	–
Other	0.75	1.65	–	–
Knowledge of Medicare Part D Scores	1.01***	1.01*	1.02**	1.01
Stress of Making Drug Plan Decision				
Not at all stressful	–	–	–	–
A little stressful	0.24***	4.09***	0.30***	10.44***
Somewhat stressful	0.32***	3.09***	0.33***	2.45
Very stressful	0.27***	2.99**	0.39**	2.92*
Medicare Decision Making Confidence Scores	1.71	0.61	1.04	0.25**
Survey Administration Period				
October 13–31	0.64**	1.29	1.05	0.89
November 1–15	0.65*	1.31	0.99	2.44
November 16–December 6	–	–	–	–
Pseudo R-Square	0.137	0.333	0.123	0.424

"Any decision" is versus having made no enrollment decision. "Enrolling" is versus not enrolling, among those who have made an enrollment decision. Sample sizes are 1,540, 826, 622, and 290 in the four columns, respectively. All models control for 2005 plan enrollment type.
* p < .05; ** p < .01; *** p < .001

Table 7 presents multivariate regression models examining the characteristics of the Medicare decision-making items. The first column, in which we examine predictors of an index of confidence in general Medicare decision making, consists of nine items that are described in detail in the methods section. Sociodemographic characteristics and patient activation predict general confidence in Medicare decision making. Those with more education and better health status have higher levels of confidence. Even after controlling for these factors, those with higher patient activation levels still have greater confidence in their Medicare decision making.

Column 2 presents an analysis examining predictors of seeking help for past Medicare decisions. Most notable is that those with less education are substantially less likely to have sought help or assistance when making past Medicare decisions. Translating the regression results from Table 7 into predicted probabilities, we estimate that 17 percent, 27 percent, and 30 percent, respectively, of those with less than a high school diploma, a high school diploma, or some college/vocational education are likely to have sought help in the past, compared with 38 percent of those who are college graduates. Men, those with high levels of confidence in Medicare decision making, and those with employer-based prescription coverage are also less likely to have sought help in the past.

The analysis assessing predictors of having sought help or planning to seek help for Medicare Part D decisions is presented in column 3. Again, those with less education are less likely to seek assistance in making a decision, as are those in worse health. The higher one's monthly out-of-pocket prescription drug costs and the more knowledgeable one is about the Part D benefit, the more likely one is to seek assistance in decision making. Thus, those most in need of assistance are not those most likely to seek it.

The final column examines the characteristics of those who report having compared prescription drug plan costs and benefits. Two factors are highly predictive of having compared plans: the higher one's monthly out-of-pocket drug costs and the more knowledgeable one is about the Part D benefit, the more likely one is to compare plan designs.

Table 7. Multivariate Regression Models Predicting Medicare Decision Making

	Regression Coefficients	Adjusted Odds Ratios		
	Column 1: Medicare Decision-Making Confidence	Column 2: Sought Help for Past Medicare Decisions	Column 3: Sought Help or Plan to Seek Help for Medicare Part D Decisions	Column 4: Have Compared Prescription Drug Plans
Age: 65–74	–	–	–	–
75–84	-0.05*	0.88	0.83	1.12
85 or older	-0.04	0.99	0.55*	1.21
Education				
Less than high school	-0.29***	0.33***	0.66	1.22
High school diploma	-0.22***	0.59**	0.56***	1.24
Some college/vocational school	-0.13***	0.69*	0.47***	1.28
College graduate or more	–	–	–	–
Gender				
Female	–	–	–	–
Male	0.05*	0.70**	0.86	1.01
Self-Rated Health				
Excellent/Very Good	–	–	–	–
Good	-0.07**	1.44*	0.73*	0.90
Fair/Poor	-0.06*	1.09	0.65*	0.96
Household Income (annual)				
Less than $15,000	-0.11*	1.22	1.29	1.30
$15,000–$24,999	-0.03	0.87	1.23	1.20
$25,000–$34,999	-0.07	0.88	1.06	1.81*
$35,000 or more	–	–	–	–
Prefer not to report	-0.02	0.99	1.03	1.35
Marital Status				
Married	0.00	1.11	0.86	1.24
Widowed/divorced/single/other	–	–	–	–
Patient Activation				
Stage 1	-0.14**	1.39	0.89	0.76
Stage 2	-0.14**	1.15	0.73	0.83
Stage 3	-0.06	1.25	0.98	1.08
Stage 4	–	–	–	–
Monthly Prescription Spending (out-of-pocket)				
$0–$20	–	–	–	–
$21–$60	–	–	1.23	1.96**
$61–$100	–	–	1.52*	2.30**
$101+	–	–	2.42***	2.38***
Current Prescription Coverage				
None	–	2.05***	1.41*	1.18
Employer-based	–	–	–	–
Medigap	–	2.82***	1.69*	1.05
Other	–	1.70**	0.78	1.11
Knowledge of Medicare Part D Scores	–	–	1.01*	1.03***
Medicare Decision-Making Confidence Scores	–	0.45***	0.20***	1.13
Survey Administration Period				
October 13–31	–	–	–	0.76
November 1–15	–	–	–	0.99
November 16–December 6	–	–	–	–
R-Square	0.116	0.061	0.126	0.096

* p < .05; ** p < .01; *** p < .001 (regression model controls for 2005 plan enrollment)

Discussion and Recommendations

For Medicare beneficiaries to benefit from the new prescription coverage, they must elect Part D coverage (unless they have creditable coverage). However, the complexity of the program and the plethora of choices appear to be a barrier to enrollment. Knowledge about the program is quite low, and there is considerable confusion about the program details and how plan offerings differ. Those who are less advantaged, in terms of their education and income, or who have less experience and skill (activation) also tend to know less about Medicare coverage, including Part D.

A substantial proportion (47 percent) of beneficiaries views the task of choosing a prescription drug plan as stressful. This is particularly true for those beneficiaries for whom the decisions about Part D enrollment are likely to be quite consequential: those with poor health, high out-of-pocket costs, and lower incomes. In addition, many beneficiaries have little confidence in their ability to make good decisions about their Medicare coverage. Feeling anxiety or stress actually lowers one's cognitive abilities and lessens the capability of making appropriate choices. When people feel overwhelmed by making a choice, a likely response is to take no action (Tversky et al. 1988). This appears to be the case for a large portion of the respondents. The combination of stress, low confidence, and little knowledge apparently contributes to many beneficiaries' simply not deciding. The inability to decide, even when there is a clear advantage in participation, was also observed in the earlier prescription drug discount card program. In this program beneficiaries were confused and overwhelmed by the myriad different factors to consider and the number of options to choose from. Enrollment in the discount card program was much lower than anticipated (GAO 2005), and initial enrollment figures for Part D appear to be below projections as well (Kaiser Family Foundation 2006).

The fact that beneficiaries do not adequately understand the differences among health plan design options is troubling. The increasing complexity of the Medicare program may undermine beneficiaries' ability to understand and to make appropriate choices. This, in turn, may compromise the efficacy of the larger policy objective that seeks to improve quality and reduce costs through informed consumer choices. The multiple choices and complicated options may be counterproductive at both a policy level and in terms of the interests of individual beneficiaries. For the program to work most effectively, beneficiaries need to be confident managers of their health and health care. Confidence is built on experiencing success in that role (Bandura 1991). When beneficiaries feel overwhelmed and unable to understand their options, their feelings of competence is undermined, along with their overall ability to manage their health effectively. Thus, the program would be more effective all around if it were simplified.

However, more knowledge or higher levels of education appear not to protect beneficiaries from confusion about the new benefit. Those who had higher knowledge scores were just as likely to feel confused about Part D as those with less knowledge. Even those beneficiaries who typically take an active role in managing their health (e.g., higher activation) were likely to be confused by Part D. Typically, people search out information as a way to allay confusion. However, because, the information necessary to understand the prescription drug benefit is so complex, the strategy of seeking more information appears not to help. As one respondent put it, "The more you know the more confused you get."

Those who have reviewed information and compared options for prescription drug plans are in a distinct minority. Those who did report comparing options were most likely to have only reviewed a few of the plan options, and they often relied on plan representatives to help them decide which plan to join. While this may be a rational way to cope with the complexity, it may result in choices that fail to meet the decision maker's needs.

The stand-alone feature of the prescription drug benefit may make the program more complicated for beneficiaries. One way to simplify it would be to reconsider the structure of the program so that the drug benefit is integrated into the basic Medicare benefit. Another potential simplifying strategy would be to standardize the options in a manner similar to the way Medigap plans are standardized to make them more comprehensible to beneficiaries. Even with structural changes aimed at simplifying the program, beneficiaries will still need a broad-based educational program to help them understand their choices and make appropriate coverage decisions.

The findings do allow some room for optimism. Those who have made a decision regarding enrollment are more likely to have more knowledge than those who have not yet decided suggesting that these decisions are based on some level of knowledge. Further, beneficiary knowledge about Part D appears to be growing. The findings here suggest that at this point beneficiaries need help navigating through the maze of information and choices. Making changes to simplify the Medicare program may be necessary for all who could benefit from the new coverage to use it fully and not to further disadvantage those who lack the skills to understand their choices.

Such a program would consist of expanding the use of processes that help consumers make the best use of information, including lowering the cognitive effort to use information by simply reducing the amount of information individuals must process, helping people understand the consequences of their choices, and designing the presentation of information to highlight its meaning and significance (Hibbard et al., 2003). These strategies both increase motivation to use information in choice, as well as, make it more accessible to those with fewer literacy and numeracy skills (Hibbard and Peters, 2003).

Respondents taking the survey in the latter weeks of the study knew more than did those taking the survey in the initial weeks. Thus, if this trend continues, some beneficiaries will be able to overcome the current knowledge gaps and make choices appropriate to their needs during the open enrollment period. However, it is the less advantaged beneficiaries who have the largest knowledge gap and who have the least confidence in their own decision making. These are the beneficiaries who may not overcome the barriers and will need assistance in making choices. The findings, also observed in previous research, indicate that less advantaged beneficiaries are not necessarily the ones seeking help (Hibbard et al. 2001). Reaching out to beneficiaries to provide decision assistance will likely be necessary.

Over time beneficiaries may learn more about and respond differently to their options than they did in these early weeks of enrollment for Medicare Part D.

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Appendix: Survey and Responses

Correct answers are bolded.

Q3. How much would you say you know about which medical costs Medicare does and does not cover? Do you know a lot, some, very little or nothing at all? (n = 1,600)

14% A lot
36% Some
36% Very little
12% Nothing at all
3% Don't Know
0% Refused

Q4. How much do you know about the difference between Regular Medicare and Medicare health plans like HMOs? Do you know a lot, some, very little, or nothing at all? (n = 1,600)

8% A lot
22% Some
36% Very little
32% Nothing at all
1% Don't Know
0% Refused

For the next set of questions, I'm going to read to you some situations and I want you to tell me WHICH type of Medicare plan you think it best describes. Does it best describe Regular Medicare, a Medicare HMO, BOTH, or NEITHER. If you are NOT SURE, just tell me. This is not a test; we're just trying to learn more about how people understand the Medicare program.

Q5. A patient is given a list of approved doctors. To get full coverage, she can only choose doctors from that list. Does this best describe… (n = 1,600)

11% Regular Medicare
52% **A Medicare HMO**
4% Both
9% Neither
24% Don't Know
0% Refused

Q6. A medical bill, which should have been covered, is not paid. The patient has the right to appeal this. Does this best describe… (n = 1,600)

36% Regular Medicare
8% A Medicare HMO
25% **Both**
6% Neither
25% Don't Know
0% Refused

Q7. To help pay her 'out-of-pocket' doctor bills, a patient may need a Medigap or supplemental policy. (n = 1,600)

42% **Regular Medicare**
8% A Medicare HMO
18% Both
8% Neither
25% Don't Know
0% Refused

Q8. A patient has a heart attack and is taken to the nearest hospital. The next day he is notified that to get the bill paid, he must be transferred to a hospital that is on an approved list. (n = 1,600)

11% Regular Medicare
46% **A Medicare HMO**
7% Both
9% Neither
27% Don't Know
0% Refused

This next set of questions is about some possible new changes to Medicare health plans in 2006. For each one, please tell me whether you think the answer is "True" or "False". Not everyone is familiar with the changes so if you are not sure of the answer, just tell me that you don't know.

Q9. Starting in 2006, people can sign up with a Medicare health plan only at a certain time during the year. Would you say this is true or false? (n = 1,600)

54% **True**
23% False
23% Don't Know
0% Refused

Q10. In 2006, people with Medicare can change Medicare health plans up to three times a year. (n = 1,600)

8% True
48% **False**
44% Don't Know
0% Refused

Now we have some questions about prescription drugs.

Q11. Do you currently take any prescription medicine on a regular basis? (n = 1,600)

87% Yes
13% No
0% Don't Know
0% Refused

{IF Q11 = 1 ASK Q12, OTHERWISE GO TO Q13}

Q12. How many different prescription drugs do you take on a regular basis? (n = 1,389)

[RECORD NUMBER OF PRESCRIPTION DRUGS 1-20]
Don't Know
Refused

{IF Q12 = Don't Know ASK Q12A, otherwise go to q13}

Q12a. On a regular basis, do you take one, two to three, four to five or more than five prescription drugs? (n = 1)

1
2-3
4-5
More than 5
Don't Know
Refused

Q13. In the past year, have you ever NOT filled a prescription or taken less than the recommended dose in order to save money? (n = 1,600)

12%	Yes
87%	No
0%	Don't Know
0%	Refused

Q14. Do you currently have any insurance for prescription drugs? (n = 1,600)

60%	Yes
39%	No
1%	Don't Know
0%	Refused

{IF Q14 = 1 ASK q15, otherwise go to q16}

Q15. Is that drug coverage through: (n = 958)

49%	Your (or your spouse's) employer or former employer
6%	A Medicare health plan like an HMO
23%	A Medigap or supplemental plan
22%	Another source
0%	Don't Know
0%	Refused

{IF Q15 = 4 ask q15a, otherwise go to q16}

Q15a. Is that other source: (n = 213)

0%	Medicaid (TERMINATE2}
49%	Veteran's Administration or Tri-care/military
51%	Some other source (Please specify)
0%	Don't Know
0%	Refused

{TERMINATE2}
Those are all the questions we have for you today. This survey is intended for people who just have regular Medicare or a Medicare health plan. Thank you very much for your time.

Q16. In a typical month, how much do you pay out of your own pocket for your prescriptions – that is spending you do not get reimbursed for? (n = 1,600)

[RECORD AMOUNT OF MONTHLY COST 0-1000]
Don't Know
Refused

{IF Q16 = dk ask q16a, otherwise go to intro before q17}

Q16a. In a typical month do you spend…(n = 152)

21%	$0 - $20
35%	$21 - $60
19%	$61 - $100
18%	$101 - $300
4%	$301 - $400
4%	$401 or higher
2%	Don't Know
0%	Refused

Now I will ask you some questions about possible changes in Medicare related to prescription drugs. Not everyone is familiar with the new Medicare prescription drug program, also called Medicare Part D, so if you are not sure of the answer, just tell me that you don't know.

Q17. People with Medicare will be offered prescription drug coverage starting in 2006. Is this true for… (n = 1,600)

53%	**All people with Medicare,**
13%	Only low income people with Medicare,
6%	Or is it not true
29%	Don't Know
0%	Refused

Q18. Overall, how much would you say you know about the new Medicare prescription drug benefit? Would you say that you know… (n = 1,600)

24% Nothing,
45% Very little,
26% Some, or
5% A lot
0% Don't Know
0% Refused

(IF Q18 = 1 OR 2 RESTORE "We understand you don't know very much about this new benefit but we would still like to ask you a few questions about it. It's okay to say you don't know.") We know people are hearing a lot of different things about Medicare these days. We're interested in what people actually think is true. I'll read you a few statements. Please tell me whether you think the answer is "True," "False," or you "Don't Know."

Q19. People with Medicare are required to enroll in a Medicare prescription drug plan for 2006. (n = 1,600)

22% True
60% **False**
17% Don't Know
0% Refused

Q20. Medicare prescription drug plans can charge different monthly premiums. (n = 1,600)

51% **True**
14% False
35% Don't Know
0% Refused

Q21. Once you join a Medicare prescription drug plan, you can only change to another plan once a year. (n = 1,600)

41% **True**
9% False
50% Don't Know
0% Refused

Q22. People who do not have prescription drug insurance in 2006 will have to pay an extra monthly charge if they want to enroll in a Medicare prescription drug plan in 2007. (n = 1,600)

52% **True**
9% False
39% Don't Know
0% Refused

Q23. Only people who have Medicaid will be eligible for "extra help" in paying for Medicare prescription drug coverage. (n = 1,600)

28% True
29% **False**
43% Don't Know
0% Refused

Q24. All Medicare prescription drug plans will only cover generic prescription drugs, and not brand name drugs. (n = 1,600)

16% True
52% **False**
33% Don't Know
0% Refused

Q25. All Medicare prescription drug plans will cover the same list of prescription drugs. (n = 1,600)

21% True
35% **False**
44% Don't Know
0% Refused

Q26. With all Medicare Prescription drug plans, you can buy your prescription drugs at any pharmacy. (n = 1,600)

45% True
28% **False**
27% Don't Know
0% Refused

Q27. No matter which prescription drug plan you choose, the amount you spend on your drugs will be the same. (n = 1,600)

16% True
48% **False**
36% Don't Know
0% Refused

{IF Q2 = 1 ASK Q28, OTHERWISE GO TO FILTER BEFORE Q29}

Q28. The prescription drug coverage included in most Medigap plans has better coverage than the new Medicare prescription drug plans. (n = 1,034)

18% True
20% **False**
62% Don't Know
0% Refused

{IF Q17 = 1 ask q29, otherwise go to q30}

Q29. Employers that currently offer prescription coverage for retirees will be required to continue offering their coverage in 2006. (n = 470)

40% True
23% **False**
37% Don't Know
0% Refused

Q30. People enrolled in a Medicare prescription drug plan would never have to spend more than $3,000 of their own money on prescription drugs in a year. (n = 1,600)

24% True
26% **False**
49% Don't Know
0% Refused

How helpful do you think the new Medicare Drug benefit will be for the following people? [*Questions 31-34 are from the Kaiser Family Foundation November/December 2004 Health Poll Report Survey]*

Q31. Low-income people with Medicare. (n = 1,600)

38% Very helpful
38% Somewhat helpful
7% Not too helpful
4% Not helpful at all
13% Don't Know
0% Refused

Q32. People with Medicare who have very high prescription drug costs. (n = 1,600)

30% Very helpful
42% Somewhat helpful
9% Not too helpful
4% Not helpful at all
16% Don't Know
0% Refused

Q33. A typical person with Medicare. (n = 1,600)

11% Very helpful
47% Somewhat helpful
14% Not too helpful
8% Not helpful at all
20% Don't Know
1% Refused

Q34. You personally. (n = 1,600)

8% Very helpful
20% Somewhat helpful
15% Not too helpful
41% Not helpful at all
15% Don't Know
0% Refused

In the next two questions I will present situations about people choosing a prescription drug plan and we want you to answer the questions as best you can, given what you've heard about the prescription drug plans.

Q35. Stella has just enrolled in a Medicare prescription drug plan with a $250 deductible. In the first year, she buys $200 worth of prescription drugs. Will her Medicare prescription drug plan cover all, some or none of her costs? (n = 1,600)

10% All
23% Some
48% **None**
20% Don't Know
0% Refused

Q36. Phillip currently has regular Medicare and has no prescription drug coverage. If he waits two years before signing up for a drug plan, will his monthly premium be: (n = 1,600)

5% The same as it would have been if he had enrolled initially
1% Lower than it would have been
34% **Higher by one percent for each month he waited**
17% Higher by two percent for each month he waited
42% Don't Know
0% Refused

Now I have some questions about what it feels like when you make Medicare decisions.

Q37. For some people, deciding about Medicare and private health plan coverage is very stressful, and for others it is not. For you, how stressful is it deciding about Medicare coverage? (n = 1,600)

32% Not at all stressful
19% A little stressful
25% Somewhat stressful
19% Very stressful
3% Not applicable
2% Don't Know
0% Refused

Q38. How stressful do you find making a decision about the Medicare prescription drug plans? (n = 1,600)

29% Not at all stressful
17% A little stressful
23% Somewhat stressful
24% Very stressful
5% Not applicable
3% Don't Know
0% Refused

Q39. When it comes to the number of Medicare prescription drug plans available to you, do you feel that there are too few choices, too many choices or just the right number of choices? (n = 1,600)

13% Too few choices
37% Too many choices
19% Right number of choices
31% Don't Know
1% Refused

Q40. Have you recently reviewed any information about the Medicare health plan or prescription drug options available for 2006? (n = 1,600)

53% Yes
46% No
1% Don't Know
0% Refused

{IF q40 = 1 ask q41, otherwise go to q42}

Q41. Where did you get the information? (n = 850)

[OPEN END]

Q42. During the last couple of months have you tried to compare the costs and benefits of different plan options? (n = 1,600)

17% Yes
83% No
0% Don't Know
0% Refused

{IF Q42 = 1 ask q43, otherwise go to q45}

Q43. How hard or easy is it to compare the actual differences in plans' costs and benefits? (n = 272)

36%	Very hard
43%	Somewhat hard
4%	Neither hard nor easy
8%	Somewhat easy
8%	Very easy
0%	Don't Know
0%	Refused

Q44. How many plans did you compare? (n = 271)

5%	1
31%	2
31%	3
15%	4
5%	5
9%	6-10
1%	11-15
2%	16-20
1%	21+
7%	Don't Know
0%	Refused

Q45. The last time you made a decision about your Medicare or private health plan coverage, did you ask anyone for help or advice? (n = 1,600)

30%	Yes
69%	No
1%	Don't Know
0%	Refused

Q46. Do you plan to enroll in a Medicare prescription drug plan, have you already enrolled, or have you not decided yet? (n = 1,600)

13%	Yes, will enroll
3%	Yes, already enrolled
37%	No, will not enroll
45%	Have not decided
2%	Don't Know
0%	Refused

{IF q46 = 1 ask q47, otherwise go to filter before q48}

Q47. Why have you decided to enroll? (n = 211)

44% It will save me money
26% Important to afford coverage in the future
30% Other (Please specify)
0% Don't Know
0% Refused

{IF Q46 = 2 ASK Q48, OTHERWISE GO TO FILTER BEFORE Q49}

Q48. Why did you decide to enroll? (n = 46)

33% It will save me money
17% Important to afford coverage in the future
49% Other (Please specify)
0% Don't Know
0% Refused

{IF Q46 = 3 ask q49, otherwise go to filter before q50}

Q49. Why have you decided NOT to enroll? (n = 598)

61% Have better coverage
6% Can't afford it/too expensive
12% Don't need it now/don't have many prescriptions
1% Don't like prescription drugs
20% Other (Please specify)
0% Don't Know
0% Refused

{IF q46 = 4 ask q50, otherwise go to filter before q51}

Q50. Why do you think you have not decided yet? (n = 720)

40% Don't know enough about options
18% Confused by options
43% Other (Please specify)
0% Don't Know
0% Refused

{IF q46 = 1 ask q51, otherwise go to filter before q52}

Q51. Have you chosen which Medicare prescription drug plan to enroll in? (n = 211)

17% Yes
83% No
0% Don't Know
0% Refused

{IF q46=2 or q51=1 ask q52, otherwise go to filter before q54}

Q52. How did you decide on the plan you chose? (n = 81)

[OPEN END]
Don't Know
Refused

{IF (q46 = 2 OR 3) OR (Q51 = 1) ask q54, otherwise go to filter before q56}

Q54. Did you get help in deciding about Medicare Prescription Drug plans? (n = 679)

25% Yes
74% No
0% Don't Know
1% Refused

{IF q54=1 ask q55, otherwise go to filter before q56}

Q55. What source was the most helpful to you in deciding about these plans? (n = 165)

[OPEN END]

Q55a. Were there any other sources that you consulted? (n = 165)

[OPEN END]

{IF (q46 = 4) or (q51 = 2 or dk or ref) ask q56, otherwise go to intro before q59}

Q56. Do you think you will ask anyone for help in deciding about Medicare prescription drug plans? (n = 921)

75% Yes
21% No
4% Don't Know
0% Refused

{IF Q56 = 1 ASK Q57, OTHERWISE GO TO INTRO BEFORE Q59}

Q57. Whom would you ask for advice? (n = 688)

[OPEN END]

When it comes to making changes in your Medicare coverage, how much do you agree or disagree with the following statements?

Q59. I am more likely to make a wrong choice if I have lots of different options to choose from. Would you say that you… (n = 1,600)

15% Strongly agree
44% Agree
28% Disagree
9% Strongly disagree
4% Don't Know
1% Refused

Q60. When it comes to making decisions about my Medicare coverage, I prefer to have someone knowledgeable decide for me. Would you say that you… (n = 1,600)

17% Strongly agree
38% Agree
33% Disagree
11% Strongly disagree
2% Don't Know
0% Refused

Q61. I prefer to have lots of information about each option. (n = 1,600)

18% Strongly agree
61% Agree
16% Disagree
2% Strongly disagree
3% Don't Know
1% Refused

Q62. I prefer NOT to have the responsibility for making decisions about Medicare. (n = 1,600)

4% Strongly agree
19% Agree
55% Disagree
18% Strongly disagree
3% Don't Know
1% Refused

Q63. I prefer to choose a plan without help from anyone. (n = 1,600)

4% Strongly agree
22% Agree
60% Disagree
12% Strongly disagree
2% Don't Know
1% Refused

Q64. Choosing a Medicare plan is a task I would rather avoid. (n = 1,600)

11% Strongly agree
43% Agree
36% Disagree
5% Strongly disagree
4% Don't Know
1% Refused

Q65. I often feel overwhelmed because there is too much information about each plan to take in. (n = 1,600)

16% Strongly agree
50% Agree
25% Disagree
4% Strongly disagree
4% Don't Know
1% Refused

Q66. I am more likely to make a good choice if I have lots of different options to choose from. (n = 1,600)

6% Strongly agree
44% Agree
41% Disagree
4% Strongly disagree
4% Don't Know
1% Refused

Q67. I have difficulty understanding the information about Medicare coverage options. (n = 1,600)

9% Strongly agree
52% Agree
29% Disagree
4% Strongly disagree
5% Don't Know
1% Refused

Q68. Whenever I make a choice about Medicare, I worry it will be the wrong one. (n = 1,600)

7% Strongly agree
42% Agree
43% Disagree
5% Strongly disagree
3% Don't Know
1% Refused

Q69. Instead of choosing myself, I'd rather have a family member or close friend help me decide which Medicare plan to choose. (n = 1,600)

8% Strongly agree
48% Agree
35% Disagree
6% Strongly disagree
2% Don't Know
1% Refused

Q70. I am confused about the changes in Medicare. (n = 1,600)

11% Strongly agree
55% Agree
26% Disagree
3% Strongly disagree
4% Don't Know
1% Refused