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TAKE-UP OF MEDICARE PART D:
RESULTS FROM THE HEALTH AND RETIREMENT STUDY

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ABSTRACT

We analyze data from the Health and Retirement Study on senior citizens' take-up of Medicare Part D. Take-up among those without drug coverage in 2004 was high; about fifty to sixty percent of this group have Part D coverage in 2006. Only seven percent of senior citizens lack drug coverage in 2006 compared with 24 percent in 2004. We find little circumstantial evidence that Part D crowded out private coverage in the short run, since the persistence of employer coverage was only slightly lower in 2004 – 2006 than it was in 2002 – 2004. We find that demand for prescription drugs is the most important determinant of the decision to enroll in Part D among those with no prior coverage. Many of those who remained without coverage in 2006 reported that they do not use prescribed medicines, and the majority had relatively low out-of-pocket spending. Thus, for the most part, Medicare beneficiaries seem to have been able to make economically rational decisions about Part D enrollment despite the complexity of the program. We also find that Part D erased socioeconomic gradients in drug coverage among the elderly.

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1. Introduction

The Medicare prescription drug benefit, commonly referred to as "Part D," went into effect in January 2006. Unlike Medicare Parts A and B, take-up of which is close to universal among eligible individuals as a result of essentially automatic enrollment, Part D requires most beneficiaries to make an active choice about whether or not to participate. Beneficiaries who want to enroll in Part D must choose a prescription drug insurance plan and, in most cases, pay a separate premium for this coverage. How successfully did elderly Medicare beneficiaries navigate the complex set of choices presented by Part D? We are particularly interested in whether people took up the benefits available to them – who signed up, who did not, and why.

Understanding take-up is interesting for at least three reasons. First, we want to know whether these benefits are reaching the individuals they are intended to help. Second, low rates of take-up may suggest costs of enrolling that reduce the value of the program even for those who enroll. In the words of Blundell, Fry, and Walker (1988): "the existence of non-take-up also suggests that there are costs associated with claiming, which not only deter non-claimants but also partly offset the value of benefits to those who do claim." Third, the underlying "managed competition" framework of the Part D program, in which individuals choose private insurance plans in a regulated and subsidized market, forms the basis for many proposals to expand health insurance coverage in the under-65 population as well. The primary alternative framework for policies to expand coverage is one in which government functions as insurer, like Part A of the Medicare program. The success or failure of Part D becomes, in effect, an important test case for the potential of market-based reforms relying on private plans and individual choices to expand insurance coverage.

A priori, there is considerable reason to expect low take-up of Part D. Take-up of most social benefits is low (for a review, see Currie 2006); take-up among elderly individuals is especially low. Moreover, the tasks required of prospective Part D enrollees – who in most cases had to decide not only whether to take up the program but also had to choose a plan from a long and complicated menu of options – are considerably more complex than deciding whether or not to take up programs like SSI or Food Stamps. Too many choices may repel people, a result that List (2002) dubs the "more is less" phenomenon. Medicare beneficiaries may be particularly ill-suited to tackle these complex decisions involving large numbers of choices because of declines in cognitive ability that come with aging. The difficulties associated with the introduction of Medicare HMOs in 1997, which were initially unpopular with enrollees, provide a discouraging example of how such a scenario might play out.

In this paper, we present evidence from the Health and Retirement Study (HRS) which suggests that in spite of all of these challenges, take-up of Part D among elderly Medicare beneficiaries was relatively high. Only seven percent of all seniors lack drug coverage in 2006 compared with 24 percent in 2004. The most important predictors of Part D take-up among those without prior drug coverage are proxies for the demand for prescription drugs; this is consistent with the idea that beneficiaries made a rational cost/benefit tradeoff in deciding whether or not to enroll. Those with low levels of education or income were no less likely to enroll in Part D than were beneficiaries with more education or income. This casts doubt on the idea that confusion or financial barriers presented significant obstacles to enrollment. Indeed, we find that one effect of Part D was to erase socioeconomic gradients in lack of coverage among the elderly.

Focusing on the relatively small group of individuals who chose to go without coverage, there is very little evidence to suggest that substantial numbers of them were confused or

misinformed; rather, they appear to have low demand for prescription drugs, and most of them had low drug spending in 2006. At the same time, there is some evidence that beneficiaries with the highest level of cognitive ability are more likely to take up benefits and that older beneficiaries are less likely to do so, holding other factors equal, so we cannot rule out the possibility that those who are more mentally acute are better able to navigate the enrollment process. Thus, the overall picture is one in which take-up is driven by economic factors and beneficiaries acted rationally; but pockets of confusion may remain, particularly for older beneficiaries or those with lower levels of cognitive ability.

The paper proceeds as follows. The next section describes the relevant institutional features of the Part D program. Section 3 discusses the literature on program take-up among the elderly, including some studies of Part D. Section 4 discusses the HRS data and the definition of key variables for our analysis. Section 5 presents descriptive and multivariate results and Section 6 concludes.

2. Background on Part D and the Low-Income Subsidy

The Medicare Modernization Act of 2003 established the prescription drug benefit known as Part D, which is administered by the Center for Medicare and Medicaid Services (CMS). In addition, the Act also established a means-tested subsidy to help cover premiums, deductibles and copayments for beneficiaries with low incomes and few assets. The application and approval process for the Low-Income Subsidy (referred to as "Extra Help" in the public information campaign) is handled by the Social Security Administration.

Medicare beneficiaries were affected very differently by Part D and the subsidy depending on what their prior prescription drug insurance was:

- Individuals with "other creditable coverage" – that is, insurance coverage with actuarial value greater than or equal to the standard Part D plan – were instructed to keep that coverage. This was, for the most part, employer-sponsored group coverage, and those employers received a subsidy from the government to continue offering it.[1]

- Medicaid-covered Medicare beneficiaries ("dual eligibles") were automatically enrolled in both Part D and the subsidy.

- Medicare Advantage (MA) plans, also known as Medicare HMOs, were in many cases already providing drug coverage prior to 2006.[2] MA plans essentially had to offer drug coverage under Part D, so that their enrollees were more or less assured of participating in Part D.[3] Application for the Low-Income Subsidy, however, was a separate process.

- Individuals with privately purchased prescription drug insurance (including Medigap plans) or with no coverage for prescription drugs had to decide whether they wanted to enroll in Part D and if so, they had to choose a plan and sign up for it.[4] They also had the option of enrolling in a Medicare Advantage plan — many of which were marketed by the same companies as stand-alone Part D plans. If they wanted to apply for the subsidy they had to make a separate application to SSA including information on income and assets.

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[1] Duggan, Healy and Scott Morton (2008) provide details on this subsidy and other institutional features of the Part D program.

[2] In our sample in 2004, 77 percent of those in MA plans had drug coverage through their MA plan. Town and Siu (2003) report that almost half of the consumer surplus associated with MA plans in 2000 was due to drug coverage.

[3] Enrollees in MA plans could not enroll in a stand-alone Part D plan without losing their MA benefits for outpatient and inpatient care, so that in effect MA plans not already providing drug coverage would have lost most of their enrollees if they had not started to provide it.

[4] Medigap plans that included prescription drug coverage prior to 2006 could continue to sell that product to existing enrollees but could not enroll new members. Presumably, any Medigap plan that included drug coverage became a Part D plan.

In effect, then, individuals with privately purchased drug coverage and individuals with no drug coverage had to decide whether or not to sign up for Part D and whether or not to apply for the subsidy. Medicare Advantage enrollees had to decide only whether or not to apply for the subsidy. Individuals with employer-sponsored coverage for the most part had no decisions to make. Medicaid/Medicare dual eligibles could either do nothing and be automatically enrolled in both a Part D plan and the subsidy, or they could actively choose a plan and switch into it from the one to which they had been automatically assigned. Given that some people had a choice to make and others did not, the issue of how to define take-up is considerably more complicated than it is, for example, in the case of the Food Stamp program. As we discuss in more detail below, we will focus primarily on the enrollment decisions of those who had no drug coverage in 2004.

3. Take-up of Part D and other programs by the elderly

Moffitt (1983) is considered the starting point of modern economic models of program take-up. He used a simple utility-maximizing framework to incorporate both the magnitude of potential benefits and the costs of enrollment and participation. He focused in particular on "stigma"—psychic costs associated with means-tested welfare programs. Subsequent research has found pure stigma effects to be relatively unimportant, while transactions costs—the time spent navigating the system—can be quite significant (see Currie [2006] for a review of the take-up literature). Existing research on program take-up among the elderly suggests that they take up means-tested social programs at particularly low rates compared with younger individuals; see, for example analyses of Food Stamps by Haider, Jacknowitz, and Schoeni (2003), of Medicaid by Pezzin and Kasper (2002), and of SSI by McGarry (1996) and by Elder and Powers (2004, 2006).

These results suggest that take-up of the Part D program might be low. On the other hand, Medicare Part D is quite different from the other programs (Food Stamps, SSI, Medicaid) in several ways. First of all, since Medicare Parts A and B have near-universal take-up, we would not expect much stigma to be associated with taking up the new benefits under Part D. Given the complexity of the program, transaction costs might be quite significant for Part D. Of course, applying for means-tested public benefits like Food Stamps is also complex (requiring documentation of income, for example); but there is nothing in means-tested programs that is analogous to the choice of a private insurance plan that faces would-be Part D enrollees.

Another way in which Part D is different is that unlike means-tested transfer programs, Part D has a direct financial cost: the premium the beneficiary must pay. For some fraction of the eligible population, this premium exceeds the individual's expected benefit from the program, so that individuals may quite reasonably decide not to participate as they consider costs and benefits in the coming year. In particular, individuals with low expected total prescription drug spending may pay more in premiums than they get in benefits.[5] Heiss, McFadden, and Winter (2007) estimate that enrollment is "immediately beneficial" for almost eighty percent of those who faced an active choice in the sense that they would pay less out-of-pocket right away by enrolling in Part D. Taking into account the insurance value of Part D and the fact that enrolling now means avoiding premium penalties in the future changes the picture; Heiss, McFadden, and Winter (2007) estimate that these dynamic considerations make Part D enrollment "intertemporally optimal" for essentially everyone without other drug coverage. To some extent, this result offers a rationale for thinking of failure to take up of Part D, like the failure to take up programs like Food Stamps, as leaving money on the table. On the other hand,

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[5] Under the standard plan in 2006, the break-even point – that is, the level of total prescription drug spending at which signing up yielded a net financial benefit - was $842, or $70 per month (Winter et al., 2006).

the expected benefits of signing up are clearly larger for some than for others, and it is an empirical question whether those with greater expected benefits were more likely to sign up.

Two studies to date have addressed the question of who signed up for Part D and who did not. Heiss, McFadden, and Winter (2007) analyze data on 1,571 elderly Medicare beneficiaries who were interviewed in late 2005 and again in mid-2006. They find that in 2006, 68.1 percent were enrolled in Part D (including stand-alone Part D plans, MA-PDP, Medicaid, and those with private coverage from employers receiving a subsidy from Part D), 24.5 percent had "other creditable coverage," and only 7.4 percent had no coverage. They find that healthy individuals and those with lower demand for prescription drugs are less likely to enroll in Part D and less likely to have drug coverage from other sources, so that overall they are more likely to be without any drug coverage. Neuman et al. (2007) analyze data from a survey of 16,072 elderly non-institutionalized Medicare beneficiaries and find that in late 2006, about half were enrolled in Part D (including stand-alone Part D plans, MA-PDP plans, Medicaid dual eligibles, but [unlike Heiss, McFadden, and Winter 2007] *not* those with private coverage from employers receiving a subsidy from Part D). An additional thirty-one percent had employer coverage and another ten percent had other coverage, leaving 8.5 percent of their sample with no drug coverage. Like Heiss, McFadden, and Winter (2007), they find that individuals with higher demand for prescription drugs are more likely to enroll in Part D and less likely to lack coverage from any source. Thus, in spite of differences in the data and the definitions of different coverage categories, both studies suggest a reasonably consistent story line: Part D reached many Medicare beneficiaries, especially those most in need of coverage because of their high demand for prescription drugs.

One question that we do not address here is whether respondents who sign up for Part D choose the best plan for their needs. Davis et al. (2007) show that there may be considerable variation across plans in the costs beneficiaries will face, and Kling et al. (2008) document that beneficiaries are not necessarily even using all the information that is available to them to choose a plan. Additional research on the determinants of plan choice conditional on Part D participation will be very valuable. We choose to focus instead on the Part D take-up decision for two reasons. First, survey data are not well-suited to understanding plan choice; respondents cannot necessarily report accurately which plan they are in, especially since a single insurer may offer several different Part D plans with different benefits in a given market (e.g., "Humana Standard" and "Humana Complete").[6] Second, because the rules of the Part D program guarantee that all plans are at least as good in actuarial value as the standard plan, a beneficiary's specific choice of plan may be of less consequence for financial well-being than the decision of whether or not to enroll in the program at all. Accordingly, our focus is on program take-up rather than plan choice conditional on take-up.

4. Data.

Data for this study come from the Health and Retirement Study (HRS). The HRS is a longitudinal study that has been conducted since 1992. We use data primarily from the 2004 and 2006 waves of the study, with some additional information on prescription drug insurance coverage in 2002. Our main sample for analysis includes the 9,321 respondents with Medicare who completed core interviews in both 2004 and 2006 and were at least 65 years of age in 2004.

Defining respondents' prescription drug insurance coverage

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[6] CMS administrative data on plan enrollment for HRS respondents may be available in the future. As of January 2009, the status of this data linkage is uncertain.

Medicare beneficiaries can get prescription drug coverage from a number of different sources, and eliciting information on coverage in a household survey reflects this complexity. In the 2004 HRS, respondents had as many as three opportunities to provide information about insurance coverage for prescribed medicines:

- Respondents with Medicare or Medicaid insurance coverage are asked if they get these benefits through an HMO. If they do, they are asked whether the Medicare/Medicaid HMO covers prescription drugs.[7]

- For up to three private insurance plans, respondents report the source of the plan (own employer, spouse's employer, union, purchased directly from an insurance company, etc.), and whether or not the plan covers prescription drugs.

- In the section of the interview on use of medical care, all respondents are asked whether they regularly take any prescription medications. If they do, they are asked "Have the costs of your prescription medications been completely covered by health insurance, mostly covered, only partially covered, or not covered at all by insurance?" Respondents who do not regularly take any prescription drugs are asked whether they have insurance coverage that would cover the cost of drugs if they took any. All respondents are asked to provide the name of the plan that covers or would cover prescription drug expenses.

The 2006 HRS includes additional questions about Medicare Part D. Immediately after asking respondents about whether they have Medicare, before any of the questions listed above are asked, respondents are asked "Beginning in 2006, Part D of Medicare provides coverage for prescription drugs. Have you signed up for the new Medicare prescription drug coverage?" Other questions about Part D follow. Based on this information, we assign prescription drug

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[7] A few respondents in Medicare Advantage plans in 2006 report that they get benefits through Part D but not that their Medicare Advantage plan covers drugs. They are recoded as getting coverage through their Medicare Advantage plan.

coverage to respondents in the following hierarchical order (that is, if a respondent reports more than on of these types of coverage, s/he is assigned the first one in this list):

1. **Employer coverage** (including CHAMPUS/Tricare)

2. **Medicaid**

3. **Medicare Advantage**

4. **Part D** (2006 only)

5. **Medigap;** that is, private coverage purchased directly from an insurance company.

6. **Other** drug coverage; this category includes respondents who do not report any of the above types of prescription drug coverage but who report that their prescription drugs are or would be covered by insurance. This category includes respondents with state pharmacy assistant programs such as PACE in Pennsylvania and EPIC in New York.[8]

7. **No coverage** is assigned to respondents with none of the above types of coverage.

In 2006, drug coverage obtained through Medicaid or through an MA plan *is* Part D coverage; in our analysis, we distinguish between these types of coverage and coverage that is obtained from a stand-alone Part D plan. We refer to coverage from stand-alone Part D plans as PDP, while Part D coverage through Medicare Advantage is referred to as MA-PDP and dual eligibles are referred to as having Medicaid.

Other variables

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[8] If an individual reports prescription drug coverage with no additional information on the source of the coverage *and* the individual reports medical insurance coverage from an employer, a privately purchased plan, or a Medicare Advantage plan, we assume that the drug coverage is from the same source as the person's medical coverage (employer, private purchase, or MA). In 2002 and 2004, this coding decision has a negligible effect on our results compared with keeping these observations in the "other" category. In 2002, when MA enrollees were not asked specifically about drug coverage through their MA plans, this coding decision accounts for all of the respondents in the "MA drug coverage" category. If we follow a similar strategy in 2004 and 2006 – that is, ignoring the information on MA drug coverage that was not collected in 2002 – the results are very similar to what we get when we use this additional information. Therefore, we are confident that our results are not driven by this method of assigning a source of drug coverage.

Prescription drug use in 2004: In the 2004 core survey, respondents are asked whether they take medication to treat high blood pressure, diabetes, heart conditions (heart attack, coronary heart disease, angina, congestive heart failure), stroke, or psychiatric conditions. Respondents who are not taking medication for any of the conditions on this list are asked whether they take any medication regularly for other unspecified condition(s). We use the number of conditions for which medications are taken (0-5) in 2004 as a measure of demand for prescription drugs.

Out-of-pocket prescription drug spending in 2004 and 2006: In both years, respondents report how much they typically spend out-of-pocket each month on prescription drugs.

Cognition: In the HRS core survey, interviewers read a list of ten words to respondents, who then recall as many words as they can. They are asked to recall the words immediately after hearing the list and also several minutes later. We use the sum of these from the 2006 survey, ranging from 0 to 20, as one indicator of cognitive ability. We also use respondents' scores on the "Serial Sevens" test, in which respondents are asked to count backward from 100 by sevens. The score is the number of correct subtractions (up to 4). Many respondents who have difficulty with these tasks refuse to complete them; we categorize those with missing data (about 15 percent for word recall and seven percent for Serial Sevens) into the lowest performance category on each of these cognitive tests. Much more detail on the HRS cognition measures is available in Ofstedal, Fisher, and Herzog (2005).

Health: Respondents report their own health status as excellent, very good, good, fair, or poor in every wave of the HRS core.

Income, assets, and LIS eligibility: The Low-Income Subsidy is available to beneficiaries with very limited economic resources, corresponding roughly to those with income below 150 percent

of the Federal Poverty level and very few assets other than a home.[9] We use detailed HRS data on income and assets from different sources to calculate "countable" income and assets according to the rules of the Low-Income Subsidy and to estimate subsidy eligibility.

Education: Respondents are classified into four groups based on their reported educational attainment at the baseline interview: less than high school, high school graduate, some college, college graduate or more.

Demographic variables: We also include race (white, black, other nonwhite), ethnicity (Hispanic, non-Hispanic), marital status, gender and age as explanatory variables in our analysis.

In the analysis that follows all estimates except for those reported as unweighted sample sizes are weighted using the 2006 respondent weights.

5. Results

A. Aggregate changes in drug coverage for seniors, 2002 - 2006

Table 1 shows the distribution of prescription drug insurance coverage among all elderly Medicare beneficiaries in 2002, 2004 and 2006. In 2002 and 2004, before the introduction of Part D, about forty percent of the elderly had employer-provided drug coverage and another seven or eight percent had coverage through Medicaid. MA plans provided drug coverage to 11 percent in 2002 and 14 percent in 2004; Medigap and other insurance of unknown source covered an additional 15 percent in each of these years. In all, these sources covered about three-quarters of the elderly, so that one quarter of the elderly had no drug coverage before Part D. With the introduction of Part D, there is a sharp drop in the fraction of the elderly who are without drug coverage; in 2006 only seven percent lack coverage. Twenty-four percent of the elderly have coverage through a stand-alone Part D plan in 2006. An additional 17 percent have

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[9] Detailed income and eligibility requirements are given in the Federal Register: "Social Security Administration; Medicare Part D Subsidies; Final Rule," Federal Register Vol. 70, No. 250 (Friday, December 30 2005), pp. 77664 – 77685.

Part D coverage through an MA plan and another 7 percent have it through Medicaid, so that in all, about half of elderly Medicare beneficiaries have Part D coverage in 2006.[10] Employer plans continue to cover 37 percent of the elderly, and Medigap and other plans of unknown source now cover about eight percent.

What are the individual transitions that underlie these aggregate changes? Table 2 shows a matrix of transitions in coverage from 2004 to 2006 for those who are 65 and older with Medicare in both years.[11] Focusing on individuals who had no drug coverage in 2004 – who faced the most straightforward decision about signing up for Part D - fully half of them are in stand-alone Part D plans in 2006, with another 9 percent covered through MA-PDP plans and another 3 percent through Medicaid. This suggests a central estimate of Part D take-up of about 60 percent among those who had no drug coverage in 2004. Another fifteen percent of this group had drug coverage in 2006 either through an employer-sponsored plan or a privately purchased plan, leaving 22 percent still without drug coverage in 2006.

Individuals who were without coverage in 2004 make up about half of those in stand-alone Part D plans in 2006; another twenty-five percent or so had Medigap or other coverage of unknown origin. The majority of Part D enrollees, then, appear to be those whom the program was intended to reach. At the same time, a significant minority of enrollees in stand-alone Part D plans (423 of 2,197, or about one-fifth) came from the group with employer coverage in 2004. Does this suggest that Part D may be crowding out employer-sponsored drug coverage for some individuals? Because the program was rolled out nationally at a single point in time, there is no obvious source of exogenous variation in the availability of Part D that would allow us to answer

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[10] Our results are in line with those of both Heiss, McFadden, and Winter (2007) and Neuman et al. (2007) above, in spite of numerous differences in data and variable definitions.
[11] This sample is slightly smaller than the one in Table 1, which includes all Medicare beneficiaries 65 and older in each year.

this question. But we can offer some suggestive evidence on the potential for crowd-out by comparing the 2004-2006 transition matrix in Table 2 with a similar one constructed for 2002-2004 (Table 3). Three-quarters (76.1) of those with employer-sponsored drug coverage in 2002 retained it in 2004; the comparable fraction between 2004 and 2006 was only slightly lower: 73.5 percent. The impact of Part D is evident in what happens to those who lose employer coverage, however; 11.5 percent of the total, or nearly half of those leaving employer plans between 2004 and 2006 end up in stand-alone Part D plans in 2006. The rates of transition to Medicare Advantage plans (about 7 percent) and Medicaid (1 percent) do not change between the two periods, but the fraction becoming uninsured is 6 percent in 2002-2004 and only 2.1 percent in 2004-2006. While this does not rule out the possibility that some individuals dropped employer drug coverage because of Part D, it suggests that most new Part D enrollees are coming from individuals who would have remained uninsured or purchased Medigap in the absence of Part D.

We also consider the flip side of this: that is, how many of the uninsured would have gained coverage even in the absence of Part D? Thirty-two percent of those without drug coverage in 2002 gained coverage by 2004; the comparable figure for the period 2004 to 2006 is 78 percent. This suggests that while some of the uninsured who took up Part D in 2006 would have gained coverage if Part D had not existed, most of them would not. Most strikingly, the fraction that moves from no coverage to employer coverage is virtually unchanged between the two periods: 8.4 percent in 2002-04 and 9.1 percent in 2004-06, suggesting very little crowd-out on this margin. In contrast, the fraction moving from no coverage to Medicaid is much smaller in the later period, as is the fraction remaining uninsured. The probability of moving from no drug coverage to coverage through a Medicare Advantage plan is higher in the second period (0.091 versus 0.053); this may be because the Part D benefits made Medicare Advantage coverage more

attractive to them or simply because the MA market was changing in other ways. Overall, these results offer strong circumstantial evidence that there was very little crowd-out associated with the introduction of Part D, and that individuals transitioning from employer coverage to Part D would likely have lost that coverage anyway.   This result is consistent with the results from a survey of employers (Gabel, Whitmore, and Pickreign 2008). The absence of an effect in the short term does not rule out the possibility of crowding out in the longer run, especially in an environment where employer-provided health insurance benefits for retirees are already declining (Weller, Wenger, and Gould 2004); indeed, some employers report that they do intend to drop coverage in the future (Gabel, Whitmore, and Pickreign 2008). The general equilibrium effect of Part D on markets for employer-sponsored retiree drug coverage remains a topic for future research.

The aggregate results presented in this section show that take-up of Part D was high, particularly among those who had no drug coverage in 2004. We turn next to understanding the individual-level determinants of the enrollment decision. We focus on the subgroup that had the most straightforward decision to make: those with no drug coverage in 2004. Before analyzing which characteristics predict take-up of Part D among this group, we consider how they differ from those who already had some drug coverage prior to Part D.

B. Who was uninsured before Part D? Individual characteristics by insurance status in 2004

Table 4 presents descriptive characteristics of the sample in 2004 by their insurance coverage in 2004. The uninsured are, on nearly every dimension examined, significantly different from those who have drug coverage. The starkest contrasts are with those who have employer coverage and those who have Medicaid. Compared with those who have employer-provided drug coverage, they are less likely to use drugs regularly (82 percent versus 89 percent) but spend

more out-of-pocket on drugs, with median monthly spending of $60 versus $30. In terms of health they are slightly more likely than those with employer coverage to be in fair or poor health (27 percent versus 23 percent); they are also slightly older, on average, and report more health conditions. They are less well-educated, perform slightly worse on cognitive tests, and have lower income and assets than the employer coverage group. In comparison with Medicaid dual eligibles, the uninsured are significantly healthier and less likely to use drugs, but still spend more out-of-pocket. They are better educated, perform better on cognitive tests, and, not surprisingly, have higher income and assets than those with Medicaid.

C. The determinants of program take-up among the uninsured

Next, we focus on the group without any drug coverage in 2004 (2,185 respondents) and look at their average characteristics in 2004 as a function of what drug coverage they have in 2006 (Table 5). The most interesting comparison is between those who are in stand-alone Part D plans and those who remained without coverage; these are also the two largest groups, making up almost three-quarters of this sample. Those who signed up are slightly younger and slightly more likely to be married than those who remained without coverage. The main difference, though, is that those who signed up are sicker, are more likely to use prescription drugs, and have higher out-of-pocket spending in 2004 than those who remained without coverage. In other words, there is adverse selection into Part D. This selection seems to occur almost entirely based on health status and use of prescription drugs, since other characteristics do not differ significantly between the two groups. In particular, those who did not sign up are similar to those who did in terms of cognitive ability, education, and eligibility for the Low-Income Subsidy.

Multivariate analyses confirm these results. Table 6 presents the results of linear probability models analyzing three different definitions of take-up.[12] The first (column 1) defines take-up as enrollment in a stand-alone Part D only; the second (column 2) includes also those who have Part D coverage through a Medicare Advantage plan as taking up; the third (column 3) further expands the definition of take-up to include those who have Part D through Medicaid. The fourth column reports results from a model with dependent variable equal to one if the respondent remained without drug coverage in 2006. The table reports the results of parsimonious analyses in which explanatory variables are specified linearly; we also estimated extended models in which explanatory variables were included as sets of dummies (for example, a dummy for health=poor, another for health=fair, etc.). In all cases these extended models yield the same basic intuition as the parsimonious analyses reported here, so we do not report the extended models in full, although we do mention their results below whenever they help illuminate the relationship between respondent characteristics and take-up.

The results in Table 6 show that the number of conditions for which the respondent was regularly taking medication in 2004 – a proxy for the demand for prescription drugs – is a highly significant predictor of take-up of Part D, using any of the three definitions. Individuals with high demand for drugs are also significantly less likely to be without coverage from any source. Age is also a significant determinant of take-up; like Haider, Jacknowitz, and Schoeni (2003), we find that the older elderly are less likely to take up benefits, and we also find that they are significantly more likely to lack drug coverage. We also find some evidence that more cognitively able individuals are more likely to take up Part D; those with higher Serial Sevens scores are more likely to sign up, holding other factors equal. The results of extended models entering the Serial Sevens score as a set of dummies shows that these effects are driven by higher

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[12] Estimating probit models yields similar results.

take-up among those with the highest possible score (four out of four correct). In spite of their higher rates of Part D take-up, those with better cognitive ability are not significantly less likely to be uninsured. On the contrary, there is some evidence that those with better memory scores are *more* likely to be uninsured (column 4).

In models not reported here, we also include an interaction between cognitive ability (either word recall or Serial Sevens score) and the number of conditions for which medication is taken. These interactions are consistently small and insignificant. This means that the effect of demand for prescription drugs on take-up of Part D is the same regardless of cognitive ability; in other words, economic considerations drove take-up for those with both high and low cognitive ability. This is perhaps the strongest evidence against the idea that confusion was a major factor preventing some beneficiaries from signing up for Part D. If confusion had caused significant problems, we would expect these effects to be greater for individuals with low cognitive ability, so that low-cognition individuals might have stayed out of the program even if they had high demand for prescription drugs. This is not what we find; on the contrary, demand for drugs trumps cognition as a determinant of take-up.

The regressions also show that holding other factors constant, unmarried men are significantly less likely to sign up for Part D and significantly more likely to be without coverage from any source. This result stands in contrast to the conclusion of Heiss, McFadden, and Winter (2006) who conclude based on bivariate results that widows and unmarried women are at risk of lacking coverage. We find that the problematic group is in fact unmarried men. Our result is consistent with other research showing the beneficial effects of marriage for men; perhaps one pathway through which marriage may improve men's health is that their wives help them sign up for Part

D. In any case, further attention to the challenges single men may face in taking advantage of Part D benefits is warranted.

Other factors – education, homeownership status, and income and assets – have no significant effect on take-up or on the probability of being uninsured in these multivariate models. In particular, there is no evidence that the cost of Part D prevented lower-income households from taking up coverage, in spite of concern over low take-up of the Low-Income Subsidy.

The results across columns one through three of Table 6 are consistent, suggesting that regardless of which definition of take-up is used, the determinants are more or less the same. The one striking exception is that the coefficient on the dummy variable for Hispanic is small and insignificant when the definition of take-up does not include Medicaid (columns 1 and 2), but large and significant when it does (column 3). This suggests that Hispanics are much more likely than non-Hispanics to become eligible for Part D through Medicaid, although they are no more likely to sign up for coverage through either stand-alone PDP or MA-PDP plans.

Overall, then, the multivariate results confirm the basic finding from the descriptive results that demand for prescription drugs – and therefore the expected benefit from the program – are some of the most important determinants of take-up of Part D. We find no gradient in take-up with respect to economic status, which suggests that affordability did not keep lower-income individuals out of the program. We also find that younger age and better cognitive status (holding health status constant) are associated with higher take-up, so we cannot rule out the possibility that confusion prevented some people from accessing benefits. We address this question further in the next section by analyzing respondents' stated reasons for not signing up for Part D.

D. Why do people say they didn't sign up?

Table 7 tabulates the reasons respondents gave for staying out of Part D. The sample includes respondents who were without drug coverage in both 2004 and 2006; results are presented overall as well as separately for those with and without regular use of medications in 2004. Options 1-6 in Table 7 were the multiple choice responses to the HRS survey question about why respondents did not enroll in Part D while responses 7A through 7E are based on text responses entered by interviewers when the respondent chose "other" from the multiple choice menu (which was in fact the modal choice). An undergraduate research assistant categorized these text responses into categories 7A through 7E, including those shown between the dotted lines in Table 7.

The largest single group (22 percent) is those who say they did not sign up because they take no medications. A substantial fraction (13 percent) report not having made a decision yet, which may reflect the fact that enrollment in Part D was open through May 15, 2006 and HRS interviews took place throughout 2006.[13] Twelve percent said they had not signed up because the Medicare plan was too expensive. Ten percent of these respondents report that they did not sign up for Part D because they already had good coverage, raising concern about measurement error in our drug coverage variable. Very few uninsured respondents say they did not know about the plan (less than one percent) or heard about it too late (2.2 percent). The "other" text responses suggest a wide range of reasons for not enrolling, some of which may reflect confusion (e.g., "forgot") while others reflect low demand for drugs (e.g., "no need for it"). Overall, however, there is very little evidence that most of those who did not sign up failed to do so as a result of confusion.

E. Who made mistakes?

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[13] Re-estimating all of the multivariate models using HRS interviews conducted in June 2006 and later reduces the sample by about half and yields results that are generally similar to the ones reported above.

The multivariate results suggest that an individual's use of prescription drugs in 2004 was one of the most important determinants of take-up. That is, people who used a lot of drugs signed up for Part D, suggesting relatively few ex-ante mistakes in program take-up. But what about ex-post mistakes; how many of those who remained uninsured had high out-of-pocket drug spending in 2006? And were ex-post mistakes systematically related to other characteristics, such as cognitive ability? We focus on individuals who were without drug coverage in both 2004 and 2006 and see how many of them made short-run mistakes by not signing up in the sense that their drug spending in 2006 was greater than $70/month. This is a narrower definition of "mistake" than the one implied by the analysis of Heiss, McFadden, and Winter (2007), who argue that taking up Part D is intertemporally optimal for everyone, so that anyone who remained uninsured was making a mistake. Still, it is interesting to see whose short-term bet paid off.

Table 8 presents these results. Thirty percent of those who remained uninsured had drug spending in 2006 that exceeded $70/month and would have been immediately better off had they signed up for Part D. Almost all of these ex-post mistakes were also ex-ante mistakes in the sense that the individuals making them already regularly took at least some medications in 2004 (result not reported in the table). Moreover, a multivariate analysis (not reported here) confirms that there is no systematic relationship between cognitive ability, education, or economic status and the probability of making an ex-post mistake, lending further support to the idea that confusion was not a major obstacle to enrollment in Part D.

E. The impact of Part D on coverage gradients with respect to race and education

Finally, we ask what impact Part D had on gradients in drug coverage among senior citizens with respect to education, income, and race/ethnicity. Table 9 shows gradients in drug coverage in 2004 and 2006. The results for education and income are similar; in particular, in 2004

Medicaid covered a significantly higher fraction of lower-skill and lower-income individuals, but this was not enough to offset their lower rates of other coverage. As a result, before Part D, individuals in the highest education or income category were significantly less likely to lack coverage than their less-advantaged counterparts. After Part D, rates of lacking coverage dropped for all groups. Coverage gains were larger for low SES groups, so that there is no longer a significant differential between the most advantaged and less-advantaged groups. In other words, Part D erased the SES gradient in drug coverage.[14]

The story about racial gradients is quite different. Higher rates of Medicaid coverage for minorities in 2004 more than offset their relatively lower rates of other coverage, so that racial and ethnic minorities were actually *less* likely than non-Hispanic whites to lack drug coverage before Part D. This remains true in 2006; take-up of Part D was high for all racial and ethnic groups, so that the probability of being uninsured dropped across the board, and rates of uninsurance remain lower for racial and ethnic minorities than for non-Hispanic whites.[15]

6. Discussion and conclusion

Our results suggest that take-up of Part D was indeed high compared to other public programs: about sixty percent in the target population of those without any drug coverage. We find very little (admittedly circumstantial) evidence that this high take-up was associated with significant crowding out of private coverage. Take-up appears to reflect rational economic choices by beneficiaries; the most important determinant of take-up among this group was the demand for prescription drugs. Most of those who remained uninsured appear to have made a

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[14] At first glance this seems inconsistent with the results reported above showing that there is no differential take-up of Part D with respect to education. In fact the higher take-up of Part D by those with less education is among those who previously had some insurance coverage, rather than those who were previously uninsured.

[15] An important lesson from this analysis is that it is misleading to consider the impact of Part D on different racial and ethnic or SES groups without taking into account the very important role of Medicaid (see, for example, Gellad et al., 2006).

rational choice in the sense that their prescription drug spending in 2006 remains low. The most common reason for remaining uninsured that respondents themselves offer is that they do not take medications. Thus, the bulk of the evidence suggests that beneficiaries made rational economic decisions about whether or not to take up Part D.

We also find no evidence that cost concerns prevented respondents from taking up coverage, in spite of widespread concern about low take-up of the Low-Income Subsidy for Part D. Respondents are unlikely to report cost concerns, and there is no evidence of lower take-up among those with low incomes, assets, or education. We also find that Part D erased gradients in the lack of drug coverage with respect to socioeconomic status among the elderly.

At the same time, we find some suggestive evidence that individuals with better cognitive ability may have been more likely to take up Part D benefits. In particular, older beneficiaries are less likely to sign up (holding health and other characteristics constant), and those with higher scores on the Serial Sevens test were significantly more likely than those with lower cognitive scores to sign up. We also find that single men are less likely to sign up and more likely to be without coverage. These results suggest that additional outreach to vulnerable populations might be targeted to the very old, the cognitively impaired, and single men.

A number of interesting questions remain. We conclude that beneficiaries generally made good decisions about whether or not to sign up for Part D, but as already noted this does not mean that they made optimal decisions about which Part D plan to choose. The apparent economic rationality governing the take-up decision may mask rampant confusion at the level of plan choice, and understanding the determinants of plan choice remains an interesting area for future research. Another high priority is to understand the impact of these dramatic changes in insurance coverage on other outcomes. Several studies using pharmacy claims data have

suggested that Part D increased the use of prescription drugs by the elderly (Lichtenberg and Sun 2007; Yin et al. 2008). A full evaluation of the impact of Part D must include an evaluation of how these changes affect the health and financial security of the elderly as well.

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Table 1
Prescription drug coverage for elderly Medicare beneficiaries: 2002, 2004 and 2006
Source: Health and Retirement Study

				Source of drug coverage					Sample
Year	Employer	Medicaid	MA-PDP	Stand-alone Part D	Medigap	Other	None	Total	n
2002	0.403	0.073	0.109	-	0.086	0.071	0.258	1.000	10,562
2004	0.398	0.077	0.143	-	0.083	0.061	0.238	1.000	10,697
2006	0.374	0.072	0.170	0.239	0.036	0.039	0.071	1.000	10,940

Table 2
Prescription drug coverage for elderly Medicare beneficiaries in 2004 and 2006
Row percents and cell counts
Source: Health and Retirement Study

2004:	Prescription drug insurance coverage in 2006:							
	Employer	Medicaid	Medicare Advantage	PDP	Medigap	Other	None	Total
Employer	0.735 [2,731]	0.010 [48]	0.070 [242]	0.115 [423]	0.014 [52]	0.037 [130]	0.021 [86]	1.000 [3,712]
Medicaid	0.034 [26]	0.695 [602]	0.051 [48]	0.162 [118]	0.008 [6]	0.032 [26]	0.018 [18]	1.000 [844]
MA	0.129 [156]	0.027 [44]	0.734 [898]	0.049 [69]	0.024 [27]	0.019 [24]	0.018 [21]	1.000 [1,239]
Medigap	0.128 [91]	0.027 [24]	0.113 [81]	0.476 [332]	0.159 [109]	0.034 [26]	0.063 [45]	1.000 [708]
Other	0.283 [169]	0.103 [85]	0.090 [53]	0.280 [180]	0.027 [16]	0.145 [86]	0.073 [44]	1.000 [633]
None	0.091 [192]	0.029 [92]	0.091 [198]	0.497 [1,075]	0.043 [90]	0.030 [77]	0.218 [461]	1.000 [2,185]
Total	0.370 [3,365]	0.073 [895]	0.172 [1,520]	0.239 [2,197]	0.035 [300]	0.039 [369]	0.073 [675]	1.000 [9,321]

Notes: table entries are weighted row percent
[unweighted cell counts]

Table 3
Prescription drug coverage for elderly Medicare beneficiaries in 2002 and 2004
Row percents and cell counts
Source: Health and Retirement Study

2002:	Prescription drug insurance coverage in 2004:						
	Employer	Medicaid	Medicare Advantage	Medigap	Other	None	Total
Employer	0.761 [2,735]	0.010 [47]	0.075 [264]	0.045 [156]	0.048 [177]	0.061 [225]	1.000 [3,604]
Medicaid	0.032 [25]	0.776 [607]	0.039 [29]	0.012 [8]	0.077 [62]	0.065 [50]	1.000 [781]
MA	0.121 [121]	0.044 [50]	0.662 [656]	0.043 [44]	0.046 [53]	0.085 [85]	1.000 [1,009]
Medigap	0.142 [117]	0.031 [26]	0.163 [109]	0.358 [256]	0.059 [47]	0.246 [181]	1.000 [736]
Other	0.390 [244]	0.128 [102]	0.063 [42]	0.064 [43]	0.199 [145]	0.156 [111]	1.000 [687]
None	0.084 [186]	0.037 [102]	0.053 [123]	0.099 [198]	0.051 [133]	0.675 [1,558]	1.000 [2,300]
Total	0.383 [3,428]	0.085 [934]	0.139 [1,223]	0.085 [705]	0.062 [617]	0.245 [2,210]	1.000 [9,117]

Notes: table entries are weighted row percent
[unweighted cell counts]

Table 4
Respondent characteristics in 2004 by prescription drug insurance coverage in 2004
Source: Health and Retirement Study

	Prescription drug coverage in 2004					
	Employer	Medicaid	Medicare Advantage	Medigap	Other	None (*base*)
Rx use and health:						
Any regular Rx use?	0.888**	0.906**	0.866**	0.888**	0.869**	0.821
Conditions with Rx if > 0	1.4**	1.7**	1.4	1.4*	1.6**	1.3
Monthly out-of-pocket Rx spending:						
Median	$30*	$0**	$30**	$60	$25**	$60
Spending >$70?	0.260**	0.109**	0.262**	0.443*	0.299**	0.489
Fair/poor health	0.228**	0.589**	0.242	0.266	0.395**	0.269
Conditions	2.2**	2.9**	2.1	2.3**	2.5**	2.1
Age	73.8**	74.5**	73.9**	75.2	75.5	75.3
Other characteristics:						
Female	0.528**	0.726**	0.564**	0.631	0.611	0.609
Married	0.633**	0.244**	0.587*	0.489**	0.369**	0.545
White, non-Hispanic	0.908*	0.486**	0.844**	0.938**	0.718**	0.890
Black, non-Hispanic	0.056	0.217**	0.056	0.032**	0.182**	0.063
Other race, non-Hispanic	0.017*	0.041**	0.020**	0.016	0.025*	0.010
Hispanic (any race)	0.018**	0.255**	0.079**	0.014*	0.075**	0.037
Education < HS	0.180**	0.661**	0.236	0.247	0.435**	0.265
Education = HS	0.370	0.238**	0.369	0.392	0.322**	0.386
Some college	0.198	0.067**	0.206	0.181	0.131**	0.192
College+	0.253**	0.034**	0.189*	0.179	0.111*	0.158
Word recall (0 - 20)	8.6**	6.1**	8.4**	8.2	6.8**	8.0
"Serial sevens" score (0 - 4)	2.7**	1.3**	2.5	2.5	1.9**	2.5
Homeowner	0.858**	0.418**	0.843	0.797	0.696**	0.826
Subsidy eligible? (2005 income)	0.139**	0.722**	0.198**	0.227	0.373**	0.242
Median income (2005)	30,960**	9,954**	24,456	21,403	16,504**	23,120
Median assets (2005)	38,999**	0**	18,100**	22,300**	2,499**	21,500
Row percent	0.409	0.072	0.140	0.084	0.060	0.234
Sample n	3,712	844	1,239	708	633	2,185

*Indicates difference from mean/median for base group with p<0.05; **p<0.10.

Table 5
How much selection into Part D was there?
Respondent characteristics in 2004 by prescription drug insurance coverage in 2006
Sample = respondents with no prescription drug coverage in 2004
Source: Health and Retirement Study

				Prescription drug coverage in 2006			
	Employer	Medicaid	Medicare Advantage	PDP (*base*)	Medigap	Other	None
Rx use and health:							
Any regular Rx use?	0.844	0.773	0.783[**]	0.869	0.807	0.854	0.721[**]
Conditions with Rx if > 0	1.3	1.3	1.4	1.4	1.3	1.3	1.2[**]
Monthly out-of-pocket Rx spending:							
Median	$50[**]	$65[**]	$60[**]	$100	$50[**]	$60[**]	$32[**]
Spending >$70?	0.402[**]	0.490	0.485[*]	0.582	0.449[*]	0.472	0.323[**]
Fair/poor health	0.228	0.503[**]	0.212[*]	0.295	0.313	0.349	0.200[**]
Conditions	2.2	2.2	2.2	2.2	2.0	2.1	1.8[**]
Age	76.4[**]	74.9	75.2	74.9	75.4	77.4[**]	75.6
Other characteristics:							
Female	0.511[**]	0.613	0.609	0.633	0.611	0.664	0.588
Married	0.551	0.259[**]	0.594	0.568	0.550	0.429[*]	0.521
White, non-Hispanic	0.937	0.569[**]	0.874	0.896	0.940	0.707[**]	0.921
Black, non-Hispanic	0.047	0.188[**]	0.062	0.061	0.031	0.192[**]	0.047
Other race, non-Hispanic	0.000	0.008	0.014	0.008	0.010	0.020	0.014
Hispanic (any race)	0.017	0.236[**]	0.050	0.035	0.019	0.080	0.018
Education < HS	0.216	0.528[**]	0.200	0.257	0.306	0.396	0.269
Education = HS	0.408	0.305	0.440	0.390	0.331	0.308	0.378
Some college	0.189	0.082[*]	0.202	0.198	0.215	0.149	0.189
College+	0.187	0.085	0.157	0.155	0.149	0.147	0.164

Word recall (0 - 20)	7.8	6.2**	7.9	8.1	7.3	6.7**	8.4
"Serial sevens" score (0 - 4)	2.4	1.9**	2.5	2.6	1.9**	1.7**	2.5
Homeowner	0.794	0.595**	0.835	0.836	0.836	0.696**	0.858
Subsidy eligible? (2005)	0.162**	0.610**	0.291	0.229	0.214	0.306	0.231
Median income (2005)	$26,080	$10,994**	$20,760	$23,796	$22,259	$20,100	$22,656
Median assets (2005)	$38,500**	$114**	$12,500**	$25,000	$27,229	$1,500**	$29,500
Row percent	0.091	0.029	0.091	0.497	0.043	0.030	0.218
Sample n	192	92	198	1,075	90	77	461

[*]Indicates difference from mean/median for base group with $p<0.05$; [**]$p<0.10$.

Table 6
Table 6
Multivariate determinants of Part D take-up and of lacking coverage
Sample = respondents with no prescription drug coverage in 2004
Source: Health and Retirement Study

	Dependent variable:			
	=1 if stand-alone Part D	= 1 if stand alone Part D or PDP-MA	= 1 if stand alone Part D, PDP-MA, or Medicaid	= 1 if no drug coverage
	(1)	(2)	(3)	(4)
Age	-0.005	-0.005	-0.005	0.003
	(0.002)**	(0.002)**	(0.002)**	(0.001)*
Race = Black non-Hispanic	0.003	0.021	0.067	-0.051
	(0.047)	(0.046)	(0.046)	(0.039)
Race = Other non-Hispanic	-0.064	-0.009	-0.029	0.114
	(0.111)	(0.109)	(0.108)	(0.092)
Hispanic (any race)	-0.024	0.031	0.176	-0.122
	(0.060)	(0.059)	(0.058)**	(0.049)*
Single female	0.124	0.117	0.107	-0.063
	(0.039)**	(0.038)**	(0.038)**	(0.032)
Married female	0.147	0.167	0.135	-0.085
	(0.041)**	(0.040)**	(0.040)**	(0.034)*
Married male	0.104	0.113	0.079	-0.069
	(0.040)**	(0.039)**	(0.039)*	(0.033)*
Self-rated health (5 = poor)	0.021	0.017	0.024	-0.025
	(0.011)	(0.011)	(0.011)*	(0.009)**
Number of conditions with Rx	0.086	0.090	0.082	-0.079
	(0.016)**	(0.015)**	(0.015)**	(0.013)**
Word recall score	-0.003	-0.005	-0.007	0.006
	(0.003)	(0.003)	(0.003)*	(0.003)*
Serial sevens score	0.025	0.027	0.029	-0.005
	(0.008)**	(0.008)**	(0.008)**	(0.007)
Education = High school	0.002	0.042	0.032	-0.040
	(0.029)	(0.029)	(0.028)	(0.024)
Education = Some college	0.019	0.053	0.036	-0.053
	(0.035)	(0.034)	(0.034)	(0.029)
Education ≥ College	0.008	0.036	0.029	-0.060
	(0.037)	(0.037)	(0.036)	(0.031)
Homeowner	0.019	0.022	-0.009	0.043
	(0.030)	(0.029)	(0.029)	(0.025)

Countable income	-0.000	-0.001	-0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Countable assets	0.000	0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.541	0.606	0.746	0.165
	(0.156)**	(0.153)**	(0.151)**	(0.128)
Observations	2080	2080	2080	2080
R-squared	0.04	0.04	0.04	0.04

Standard errors in parentheses

* significant at 5%; ** significant at 1%

Table 7
Why do respondents without drug coverage say they did not take up Part D?
Sample = respondents with no prescription drug coverage in 2004 and 2006
Source: Health and Retirement Study

		Regular Rx use in 2004?		
		No	Yes	Total
Sample n		133	312	445
(1)	Already have good coverage	0.073	0.117	0.105
(2)	Didn't know it was available	0.010	0.002	0.004
(3)	Heard about it too late	0.030	0.019	0.022
(4)	Medicare plan too expensive	0.074	0.135	0.118
(5)	Medicare plan too restrictive	0.007	0.010	0.009
(6)	Haven't made a decision yet	0.112	0.144	0.135
(7A)	Other: No text provided	0.000	0.031	0.022
(7B)	Other: Text = no medications	0.412	0.147	0.222
(7C)	Other: Text = other coverage	0.082	0.020	0.037
(7D)	Other: Text = confusion	0.097	0.126	0.118
(7E)	Other: Text = other	0.104	0.249	0.208
Detail of "other" text responses (n):				
	Can't afford it	1	1	2
	Enrolling now	0	4	4
	Family didn't allow it	1	2	3
	Foreign medications	0	2	2
	Forgot	0	3	3
	Free medications	0	5	5
	Intends to	0	2	2
	Does not like government	2	1	3
	Ineligible	0	9	9
	Miscellaneous	0	2	2
	No benefit	0	7	7
	No information received	1	1	2
	No need for it	4	4	8
	No reason, just didn't	1	9	10
	Prefers natural herbs	3	0	3
	Not worth it/a rip-off	1	13	14
	Skeptical	1	12	13
	Still deciding	0	3	3
	Subtotal (n)	15	80	95
Total (fraction)		1.000	1.000	1.000

Table 8
Mistakes were made, but not that many:
The probability of having out-of-pocket prescription drug spending >$70/month in 2006
Sample = respondents with no prescription drug coverage in 2004 and 2006
Source: Health and Retirement Study

Total	0.295				
Age			Word recall score		
67	0.148		0 – 5	0.316	
68 - 70	0.192		6 – 8	0.391	
71 - 75	0.280		9 – 10	0.257	
76 - 80	0.345		11+	0.229	
81+	0.347				
			Serial Sevens score		
Race/ethnicity			0	0.403	
White non-Hispanic	0.295		1	0.314	
Black non-Hispanic	0.302		2	0.232	
Other non-Hispanic	0.156		3	0.360	
Hispanic	0.403		4	0.225	
Single Male	0.309		Education		
Single Female	0.271		< High school	0.347	
Married Male	0.234		= High school	0.255	
Married Female	0.390		Some college	0.400	
			College or more	0.182	
Self-reported health					
Excellent	0.157		Housing tenure		
Very good	0.223		Renter	0.323	
Good	0.323		Homeowner	0.291	
Fair	0.419				
Poor	0.657		Income quartile		
			Lowest	0.277	
Number of conditions with medication			Lower middle	0.347	
0	0.065		Upper middle	0.252	
1	0.336		Highest	0.301	
2	0.598				
>=3	0.742		Sample n	461	

Table 9
How did Part D affect coverage gradients with respect to education and race/ethnicity?
Source: Health and Retirement Study

	Source of Prescription Drug Coverage						
	Employer	Medicaid	MA	PDP	Medigap	Other	None
By education, 2004:							
< High School	0.280**	0.180**	0.127	-	0.079	0.099**	0.236**
= High School	0.417**	0.047**	0.144	-	0.090	0.053**	0.249**
Some college	0.443**	0.026	0.160	-	0.083	0.043	0.245**
≥ College (ref. group)	0.541	0.013	0.140	-	0.078	0.035	0.193
By education, 2006:							
< High School	0.248**	0.182**	0.152	0.256**	0.035	0.054**	0.074
= High School	0.388**	0.045**	0.179	0.243*	0.035	0.035	0.076
Some college	0.402**	0.030	0.193*	0.235	0.033	0.030	0.077
≥ College (ref. group)	0.475	0.016	0.167	0.211	0.036	0.032	0.063
By income quartile, 2004:							
Lowest quartile	0.288**	0.192**	0.120*	-	0.080	0.089**	0.231**
Lower-middle	0.335**	0.069**	0.159	-	0.104**	0.073**	0.261**
Upper-middle	0.449**	0.023	0.143	-	0.084*	0.047	0.254**
Highest (ref. group)	0.547	0.017	0.144	-	0.067	0.035	0.191
By income quartile, 2006:							
Lowest quartile	0.261**	0.196**	0.144	0.239	0.034	0.051**	0.076
Lower-middle	0.310**	0.068**	0.198**	0.267**	0.040*	0.040	0.077
Upper-middle	0.420**	0.025	0.187*	0.226	0.036	0.030	0.076
Highest (ref. group)	0.474	0.016	0.159	0.224	0.029	0.035	0.063
By race/ethnicity, 2004:							
Black	0.307**	0.208**	0.107*	-	0.035**	0.146**	0.197**
Other non- Hispanic	0.394	0.164**	0.161	-	0.074	0.082	0.126**
Hispanic (any race)	0.143**	0.356**	0.219**	-	0.023**	0.088**	0.170**

White (ref. group)	0.434	0.041	0.140	-	0.092	0.050	0.243
By race/ethnicity, 2006:							
Black	0.286**	0.200**	0.135*	0.230	0.020*	0.076*	0.054*
Other non-Hispanic	0.299*	0.217**	0.159	0.188	0.009*	0.062	0.066
Hispanic (any race)	0.120**	0.377**	0.251**	0.163**	0.016*	0.045	0.028**
White (ref. group)	0.394	0.040	0.171	0.245	0.037	0.034	0.078

[*]Different from reference group with $p < 0.05$; [**]different from reference group with $p < 0.01$.