



Changes in
HEALTH CARE
FINANCING &
ORGANIZATION

findings brief

A Sustainable Future?: The Role of Premium Subsidies in Medicare Prescription Drug Plans

The Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003 created outpatient prescription drug coverage for Medicare beneficiaries in the form of stand-alone prescription drug plans (PDPs) and regional preferred provider organizations (PPOs).^a Prior to their implementation, some researchers surmised that stand-alone prescription drug plans may be susceptible to adverse selection because the drug utilization of the elderly can be both costly and predictable.¹ Insofar as PDPs are a major feature of the MMA (accounting for 72 percent of drug plan enrollment in 2006)², the success or failure of these plans may serve as an indicator of the viability of the entire MMA drug benefit. Anticipating that high cost beneficiaries would enroll in PDPs and threaten their financial stability, Congress mandated premium subsidies to support these plans. It was unknown, however, whether these subsidies would provide enough stability to mitigate potential adverse selection associated with PDPs.³

In July 2004, HCFO funded research to provide early and timely information on entry, enrollment, and risk selection of

Medicare prescription drug plans and regional PPOs. The research team, led by Steven D. Pizer, Ph.D., assistant professor at the Boston University School of Public Health, includes Austin B. Frakt, Ph.D., health systems research scientist at Boston University, and Roger Feldman, Ph.D., Blue Cross Professor of Health Insurance at the University of Minnesota. Over 18-months, the team explored adverse selection in PDPs, the entrance of PPOs into regional markets where health maintenance organizations (HMOs) already exist, and the introduction of PDPs and PPOs in markets where HMOs did not have a presence.^b In order to predict the viability of these newly created Medicare products, the team built statistical models of market entry and enrollment for similar private products available to Medicare beneficiaries prior to MMA implementation. They used these models to simulate enrollment for the new plans in a variety of competitive situations.

Simulation models show that in general, PDPs will be stable, regardless of adverse selection, and that premium support of these programs will ensure viability. "Huge

a These newly created plans supplement health maintenance organizations (HMOs) which often provide prescription drug coverage and have existed in Medicare since 1982. Frakt, A.B. and S.D. Pizer "A First Look at the New Medicare Prescription Drug Plans." *Health Affairs*, Web Exclusive, May 23, 2006, pp. W252-61.

b The second component of this grant is described in Pizer S., et al. "Defective Design: Regional Competition in Medicare." *Health Affairs*, Web Exclusive W5-400, August 23, 2005, pp 399-411.



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numbers of people now rely on these plans for drug coverage,” Pizer said. “This study indicates that the most popular Medicare drug plans will be stable and reliable as long as Congress maintains the premium subsidies.”

Description of the Project

Pizer and colleagues used the Medicare Current Beneficiary Survey (MCBS) Cost and Use files from 1998-2001 to build a model of beneficiary choices and to predict market shares and risk selection for PDPs. Models were created using beneficiaries’ prior year drug expenditures and levels of additional prior spending that would be covered by plans currently available to beneficiaries. Several groups were excluded from analysis because of unusual circumstances or because they do not make their own insurance choices.^{c,d}

To examine beneficiary plan choices in 1998-2001, the researchers created “nests” that represent different plan types, such as Fee-For-Service, HMO, and Medigap. The simulation analysis modified these “nests” to accommodate plan types under the MMA, which include PDPs, and the combination of Medigap and PDP. Unlike actual beneficiaries’ choices, the model only accounted for one plan of each type in a region.^e For PDPs, three categories of benefits were defined based upon the existence of a deductible (low-benefit) and the coverage offered in the “doughnut hole”^f (no coverage is considered low-benefit, generic coverage is considered medium-benefit, and generic and brand coverage is considered high-benefit). The premium and benefits for each plan were adjusted for 2006 inflation.

Drug expenditures were adjusted for insurance status (as those with insurance typically have more expenses than those without insurance) by inflating drug spending for those without drug coverage.^g

c Non-elderly, institutionalized, Medicare/Medicaid dual enrollees, and beneficiaries enrolled in employer-sponsored Medicare supplements were excluded from analysis.

d Exclusion of beneficiaries who were covered by employer-sponsored Medicare supplemental plans precludes simulation of those who switch from these plans to PDPs. Although many employers have suggested they will keep these plans in the near future, their potential long-term sustainability of is unknown, and could affect PDP enrollment.

e Limited plan choices in the simulation do not reflect the variety of options beneficiaries had during initial enrollment in 2006. It is not known what effect this variety had on PDP enrollment;

Key Terms

Adverse Selection - A tendency for utilization of health services in a population group to be higher than average. From an insurance perspective, adverse selection occurs when persons with poorer than average health status apply for, or continue, insurance coverage to a greater extent than do persons with average or better health expectations.

Favorable Selection - A tendency for utilization of health services in a population group to be lower than expected or estimated.

Fee-for-Service (FFS) - Method of billing for health services under which a physician or other practitioner charges separately for each patient encounter or service rendered; it is the method of billing used by the majority of U.S. physicians. Under a fee-for-service payment system, expenditures increase if the fees themselves increase, if more units of service are provided, or if more expensive services are substituted for less expensive ones.

Health Maintenance Organization (HMO) - An entity with four essential attributes: (1) an organized system providing health care in a geographic area, which accepts the responsibility to provide or otherwise assure the delivery of (2) an agreed upon set of basic and supplemental health maintenance and treatment services to (3) a voluntarily enrolled group of persons and (4) for which services the entity is reimbursed through a predetermined fixed, periodic prepayment made by, or on behalf of, each person or family unit enrolled. The payment is fixed without regard to the amounts of actual services provided to an individual enrollee.

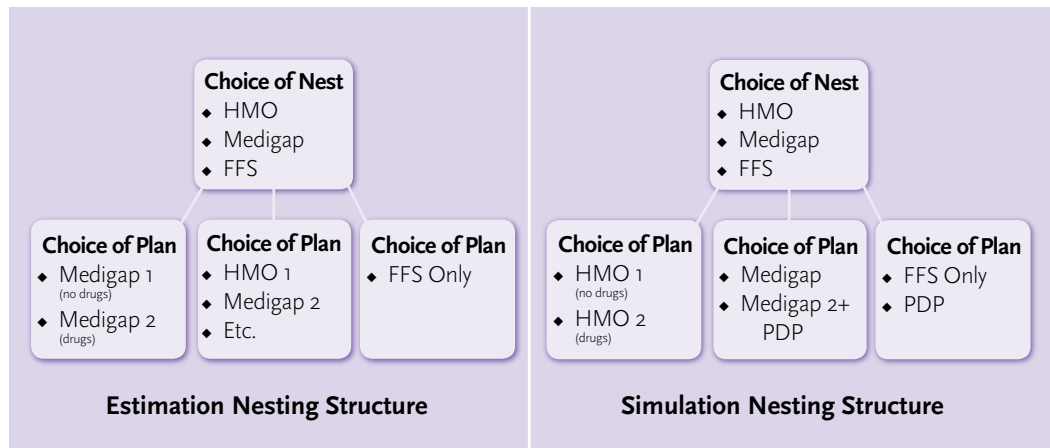
Medigap - A private health insurance policy offered to Medicare beneficiaries to cover expenses not paid by Medicare. Medigap policies are strictly regulated by Federal rules. Also known as Medicare supplemental insurance.

Figure 1 AcademyHealth. “Glossary of Terms Commonly Used in Health Care.” 2004 Edition. <http://www.academyhealth.org/publications/glossary.htm>

however, beneficiaries have expressed discontent with the overwhelming amount of choice. Snowbeck, C. “Medicare Offers More Drug Plan Choices.” *Pittsburgh Post-Gazette*. October 14, 2006.

f In the standard PDP, beneficiaries are responsible for 100 percent of drug expenses from \$2,250 \$5,100 before catastrophic coverage begins. This gap in coverage is commonly referred to as the “doughnut hole”.

g Additional details of the analysis and complete findings are currently under review at *Health Services Research*.



Key Findings

In addition to determining whether premium subsidies would combat adverse selection in PDPs, the models also explored the effect of beneficiaries' characteristics on choice of plan and predicted market shares for each plan type.

Beneficiary Choices

Based on the models they constructed, Pizer and colleagues found that PDPs will attract significant enrollment from beneficiaries who did not previously have prescription drug coverage through retiree benefits or state Medicaid programs. When choosing between plan options, beneficiaries are more likely to select plans that have lower premiums and also cover more of their out-of-pocket expenses.

Certain personal characteristics are highly correlated with enrollment in drug plans. Those with chronic illnesses, such as hypertension, heart problems, cancer, diabetes, Alzheimer's disease and emphysema are more likely than healthy beneficiaries to enroll, as are beneficiaries with relatively high incomes. Among those less likely to enroll are whites, veterans, or those who are dependent on others for at least one activity of daily living. The close correlation between high cost conditions and enrollment in drug plans supports the theory that PDPs are likely to experience adverse selection.

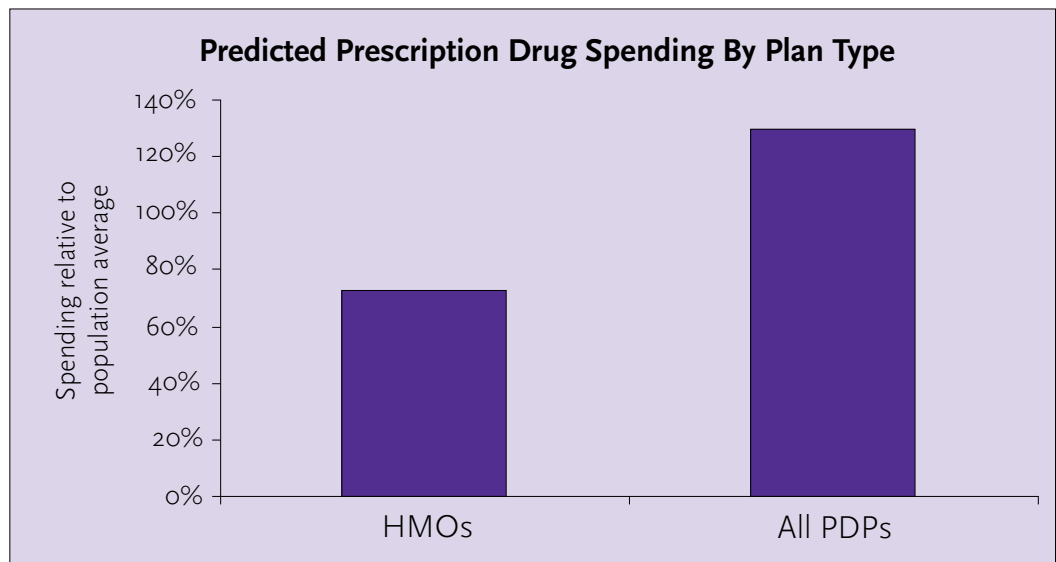
Like other plans with drug benefits, HMOs and Medigap plans attract enrollees with certain characteristics. Beneficiaries with col-

lege degrees or insurance coverage through a spouse are less likely to enroll in an HMO. Those with arthritis, cancer, and hypertension are more likely than those with other conditions to enroll in an HMO. Beneficiaries who have had a stroke, have diabetes, or consider themselves in fair or poor health are less likely to enroll in Medigap plans. In contrast, those with cancer, or those who had higher drug costs the prior year are more likely to purchase Medigap coverage.

These results are consistent with recently published work by Atherly, et al., who found that drug benefits undoubtedly attract Medicare beneficiaries with health problems.⁴ Additionally, these results confirm theories that beneficiaries with health problems and financial resources avoid HMOs. The anti-HMO sentiment is likely due to the fact that these beneficiaries have the resources to purchase less restrictive coverage, or because of their complex health care needs, they find HMO restrictions too burdensome.

Market Shares

The researchers determined that modest differences in benefits will not dramatically affect the division of market share among plan types. When the simulated PDP has limited benefits, 13 percent were in FFS, 19 percent were in Medigap plans without drug coverage, 29 percent were in Medigap plans with a PDP, and 16 percent were in a stand-alone PDP only. Simulations showed generous benefit PDPs resulted in similar market shares.



These results show that a majority of beneficiaries enrolling in PDPs are likely to have previously had Medigap coverage.^h This is probably due to the highly subsidized premiums (at least 74.5 percent of the premium for all beneficiaries) in PDPs coupled with the fact that Medigap purchasers typically did not choose drug coverage (because of high premiums) despite having substantial medication utilization. The Medicare Web site offers beneficiaries assistance in deciding whether to keep current Medigap prescription drug coverage, or to switch to a PDP, noting that “unlike Medigap, most of the cost of Medicare drug coverage is paid by Medicare, and will never run out if you have unexpected drug costs.”⁵ The site also reminds beneficiaries that enrollment after the May 15, 2006 deadline (if previously eligible for Medicare) results in a late-enrollment penalty.⁶ The enrollment penalty was not accounted for in the simulation models; however, it will likely increase the number of people who enroll in PDPs.

Selection

In the baseline data, selection in both FFS only and Medigap was adverse, although more so when looking at non-drug expenditures than at drug spending alone. Selection into HMOs, however, was favorable for both drug and non-

drug expenditures. In the simulation, adverse selection occurred for non-drug expenditures for Medigap and Medigap with a PDP; for drug expenditures, Medigap with a PDP and PDP only had adverse selection. Not surprisingly, selection for all PDPs was severely adverse by drug spending. Enrollment was relatively stable when the simulation was adjusted for adverse selection by increasing premiums for a low-benefit plan, although market share for PDPs fell slightly and selection became slightly more adverse. Additionally, the simulation for the high-benefit PDP resulted in slightly lower market share, but selection was significantly more adverse.

Policy Implications

The newly elected Democratic Congress has indicated that overhauling Medicare Part D is a priority.⁷ Results of this analysis show that premium support for PDPs should be continued, as it provides valuable stability to combat the inevitable adverse selection into stand-alone plans. This is important because if adverse selection is not mitigated by premium subsidies, plans will have to limit benefits, increase premiums, or withdraw from low-performing markets, limiting access for some beneficiaries. Moreover, PDPs provide drug benefits to large numbers of beneficiaries in areas where there is no HMO presence.

^h According to simulation, beneficiaries who previously had Medigap coverage will make up 30 percent of PDP enrollees. Beneficiaries previously covered only by FFS will make up 11 percent. Former HMO enrollees will make up four percent of PDP enrollees.

ⁱ The MMA outlined that beneficiaries must have prescription drug coverage that is at least as good as the standard benefit under Part D (referred to as credible coverage) to avoid late enrollment penalties. Henry J. Kaiser Family Foundation. “Medicare Fact Sheet: The Medicare Prescription Drug Benefit.” November 2006. Also see <http://www.kff.org/medicare/upload/7044-05.pdf>. Accessed November 13, 2006.

This research offers a unique view of the Medicare landscape by exploring whether PDP enrollees were previously uninsured for prescription drugs, or if they are switching from other prescription drug coverage. This information can help plan potential refinements to regulations on previous or “credible” coverage for beneficiaries.¹ Continued data analysis of enrollment will be required to determine whether the late-enrollment penalty affected enrollment choices of the previously uncovered.

Some policymakers have also expressed an interest in reducing payments to Medicare HMOs.⁸ The results of this study confirm prior research indicating that HMOs have favorable selection.⁹ Furthermore, the introduction of PDPs to the market will not substantially change this selection pattern.

It is important to remember that these findings are merely forecasts using data from pre- MMA implementation. Analysis of actual enrollment figures and choices will provide additional policy guidance moving forward.

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Endnotes

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- 9 Mello, M. M. et al., “Understanding Biased Selection in Medicare HMOs,” *Health Services Research* 38(3), (2003): 10 pp. 961-92.

