

Spending Patterns for Prescription Drugs Under Medicare Part D

The centerpiece of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (Medicare Modernization Act) was the creation of Medicare Part D, a subsidized pharmaceutical benefit that went into effect in 2006.¹ That additional coverage—which provides outpatient prescription drug insurance to seniors and to people under age 65 with certain disabilities—constituted the most substantial expansion of the Medicare program since its inception in 1965. In 2010, the federal government spent \$62.0 billion on Part D, representing 12 percent of total federal spending for Medicare that year.²

Under Medicare Part D, all enrollees receive a subsidy for prescription drug insurance; an additional low-income subsidy (LIS) is available to enrollees with sufficiently low income and assets.³ (In this issue brief, Part D enrollees who receive the LIS benefit are referred to as LIS enrollees; all others are referred to as non-LIS enrollees.) Enrollees in Part D choose a prescription drug insurance plan from a number of competing private plan sponsors. Total spending on Part D drugs equals the sum of spending by all payers combined, including plan sponsors, beneficiaries, the federal government, and third-party payers; in this brief, it is measured on a per-beneficiary basis.⁴ In 2008—the most recent year for which data were available when the Congressional Budget Office (CBO) undertook this analysis—average spending for non-LIS enrollees was \$1,800.⁵ The amount of spending varied widely across enrollees in that category: for 7 percent, no spending occurred, whereas for 6 percent, the amount was at least

\$5,000. Enrollees who spent more tended to fill more prescriptions and more-expensive prescriptions. The federal government covered roughly 40 percent of non-LIS spending through premium subsidies, and beneficiaries covered most of the remainder through premium payments and out-of-pocket spending.

Average spending for LIS enrollees in 2008 was \$3,600, double the spending for non-LIS enrollees. A slightly larger share of LIS enrollees (9 percent) had no Part D spending, but a much greater share (23 percent) had spending of at least \$5,000. As with the non-LIS population, higher spending among LIS enrollees was driven by beneficiaries who filled more prescriptions and who filled more-expensive prescriptions. The higher spending among LIS beneficiaries most likely reflected that group's generally poorer health status and the more generous coverage available through the low-income subsidy. Because of that additional subsidy, the federal government covered 95 percent of LIS spending in 2008.

This issue brief reviews patterns of Medicare Part D utilization and spending among the non-LIS and LIS populations. Other important topics relating to Part D, such as the provision of public benefits by sponsors of private plans and competition among those sponsors, are beyond the scope of this analysis.

1. Title I of Public Law 108-173, 117 Stat. 2066, 2071–2176.

2. Department of Health and Human Services, Centers for Medicare and Medicaid Services, Office of the Actuary, *2011 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* (May 2011).

3. In addition, the Medicare Modernization Act created a subsidy for firms that offer outpatient prescription drug coverage for their retirees. The population that receives assistance through the retiree drug subsidy is excluded from this analysis.

4. That spending takes various forms: Plan sponsors' payments are financed by enrollees' premium payments and federal premium subsidies. Beneficiaries' out-of-pocket spending (beyond the premium payments to plan sponsors) consists of deductibles, coinsurance, and copayments. The federal government's spending (beyond the premium subsidies paid to plan sponsors) consists of cost-sharing subsidies. Third-party payers are entities other than a beneficiary (first party) or insurance plans (second party) that finance pharmaceutical spending.

5. Unless otherwise specified, all statistics stem from CBO's analysis of Part D claims data for calendar year 2008 and associated data files that describe beneficiary characteristics (such as demographic information).

The Medicare Part D Program

Before the creation of Part D, Medicare provided very limited coverage for the costs of outpatient prescription drugs.⁶ As a result, the three-quarters of Medicare beneficiaries who had such coverage in the late 1990s obtained it from other sources; the remainder paid directly for all of their prescription drugs.⁷ The patchwork of drug insurance options available at that time included public programs (such as Medicaid) and private insurance plans (such as employment-based plans for retirees and medigap plans that supplement Medicare). Whereas the poorest Medicare beneficiaries were often eligible for coverage under Medicaid, those with higher income were more likely to have employment-based plans or to purchase medigap policies. The “near poor”—those with incomes ranging from 100 percent to 200 percent of the federal poverty level—were disproportionately uninsured.

Anyone enrolled in traditional fee-for-service (FFS) Medicare (Parts A and B) or in Medicare Advantage (Part C) is eligible for prescription drug coverage under Part D. (Part A covers hospital insurance, and Part B covers physician visits and other outpatient services; those benefits are administered by the Centers for Medicare and Medicaid Services, or CMS. Part C combines the benefits provided under Parts A and B and is administered by private companies that contract with CMS.) The Medicare Part D benefit is similar to some parts of Medicare but different from others. As with Medicare Part B, people who enroll in Part D receive substantial federal subsidies, and people who do not enroll in Part D upon eligibility face higher premiums if they sign up late. Those features of the program provide a strong incentive for people to enroll upon becoming eligible.⁸ Part D differs from FFS Medicare in that beneficiaries choose a drug plan from among a number of competing private plans. In that respect, Part D is similar to Medicare Advantage (known as Medicare+Choice before the Medicare Modernization Act was passed in 2003), under

which enrollees choose among available private health plans for their Medicare benefits.

In the first six months after the program was implemented, 22.5 million Medicare beneficiaries, or 53 percent of the Medicare population, signed up for the Part D benefit.⁹ Many of those enrollees may have previously had prescription drug coverage through another source: By CBO’s estimates, in 1999, 16 percent of Medicare enrollees had prescription drug insurance through Medicaid and 14 percent had coverage through Medicare+Choice plans. CMS estimated that 10 percent of Medicare beneficiaries (approximately 4.4 million people) had no prescription drug coverage six months after Part D was implemented.¹⁰ The share of Medicare beneficiaries without prescription drug coverage remained 10 percent in 2010, although enrollment in Part D had reached 27.7 million beneficiaries, representing 60 percent of total Medicare enrollment.¹¹

On average, beneficiaries receive a federal subsidy of about three-quarters of the costs of the basic Part D benefit, and their own premium payments cover the remaining one-quarter of costs. LIS beneficiaries—about 40 percent of Part D enrollment—receive additional federal assistance that is based on their financial status. That additional benefit, which is determined on the basis of a sliding scale of income and assets, ranges from a partial subsidy of the beneficiary’s Part D premium and out-of-pocket expenses to a full subsidy that covers the entire premium and all of the beneficiary’s out-of-pocket expenses.

Non-LIS Beneficiaries

Beneficiaries who enroll in the Part D benefit but do not receive the additional low-income subsidy represent about 60 percent of all Part D beneficiaries and about 25 percent of all federal spending on Part D. Non-LIS beneficiaries account for a much smaller share of federal spending because they spend less, on average, than do LIS beneficiaries, and because they generally cover a larger share of that spending through their own premiums and

6. Medicare Part B provided limited coverage of self-administered drugs, generally for the treatment of cancer and posttransplant immunosuppression.

7. Congressional Budget Office, *Issues in Designing a Prescription Drug Benefit for Medicare* (October 2002).

8. People who are eligible for Medicare but have another source of creditable coverage for pharmaceuticals, such as employment-based coverage, are exempt from the late-enrollment penalty. In 2008, CMS defined “creditable coverage” as benefits that covered at least 60 percent of an enrollee’s drug costs, on average, and that satisfied certain access and minimum benefit requirements.

9. Kaiser Family Foundation, “Medicare: The Medicare Prescription Drug Benefit,” *Kaiser Family Foundation Fact Sheet* (November 2006).

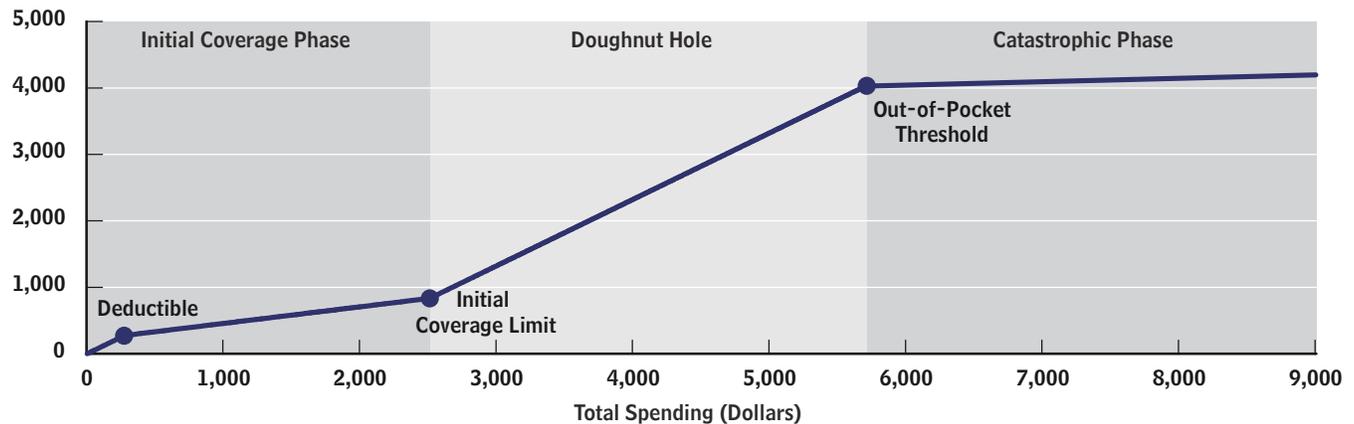
10. *Ibid.*

11. Kaiser Family Foundation, “Medicare: The Medicare Prescription Drug Benefit,” *Kaiser Family Foundation Fact Sheet* (October 2010).

Figure 1.

Out-of-Pocket Spending as a Function of Total Spending Under the Standard Part D Benefit, 2008

(Out-of-pocket spending, in dollars)



Source: Congressional Budget Office.

Note: "Total spending" refers to drug spending per beneficiary by all payers combined, including plan sponsors, beneficiaries, the federal government, and third-party payers. "Out-of-pocket spending" refers to payments made solely by beneficiaries.

out-of-pocket payments. The share of drug spending paid by non-LIS beneficiaries varies considerably across enrollees, however, depending on their total drug expenditures and the plans in which they enroll.

Part D Insurance Plans and the Standard Benefit

In general, Medicare Part D beneficiaries are entitled to a basic benefit plan—known as a defined standard plan. That plan consists of three phases of coverage:

- The **initial coverage phase**, which encompasses two narrower phases of spending:
 - The *deductible*, which is a fixed dollar amount the beneficiary must pay before the insurer begins to pay for covered pharmaceuticals.
 - Expenses the beneficiary incurs after the deductible has been paid and before the *initial coverage limit (ICL)* has been met. Beneficiaries are responsible for 25 percent of expenditures in this range.
- The **coverage gap**, which includes spending between the ICL and the *out-of-pocket threshold*. This phase of spending is also known as the *doughnut hole* because, until very recently, the beneficiary was responsible for all spending in that range. The recent health care legislation changed cost sharing in this coverage phase; its implications will be discussed below.
- The **catastrophic phase**, which refers to spending above the out-of-pocket threshold. Once the threshold has been met, beneficiaries are responsible for 5 percent of further drug spending.

Thus, the beneficiary's out-of-pocket spending depends on total spending for that beneficiary in a complicated way (see Figure 1). The Medicare Modernization Act set the initial Part D benefit parameters and directed CMS to index them to the growth in program spending. In 2008, the deductible was \$275, the ICL was \$2,510, and the out-of-pocket threshold was \$4,050. For those parameter values, total spending at the out-of-pocket threshold was \$5,726.25. The minimum out-of-pocket cost in the catastrophic phase was \$2.25 for a 30-day supply of a generic drug or preferred multisource brand drug (a brand-name drug with generic competitors that is listed on a preferred tier of a plan's formulary) and \$5.60 for any other brand-name drug.¹² Provisions of the Patient Protection and Affordable Care Act (PPACA, Public Law 111-148), as amended by the Health Care and Education Reconciliation Act of 2010 (the Reconciliation Act, Public Law 111-152), changed some of the parameters of the Part D

12. In 2011, the deductible is \$310, the initial coverage limit is \$2,840, and the out-of-pocket threshold is \$4,550. The minimum out-of-pocket costs in the catastrophic phase are \$2.50 for a 30-day supply of a generic or preferred multisource brand prescription and \$6.30 for a brand-name prescription.

benefit, primarily those affecting the doughnut hole. Those changes and their expected effect on Part D drug use will be described below.

Part D insurance plans vary along two primary dimensions: benefit design and integration with other Medicare services. In 2008, fewer than 10 percent of non-LIS beneficiaries were enrolled in defined standard plans with the benefit design described above. One-third were enrolled in “actuarially equivalent” plans that were projected to cover the same percentage of drug expenditures. Many of those plans stipulated that, after beneficiaries had met the deductible, their out-of-pocket spending take the form of copayments (fixed-dollar amounts that depend on where the drug is placed on a plan’s formulary) rather than coinsurance (a fixed percentage of the drug’s price). Some of those plans offered a smaller deductible that was offset by higher cost sharing before the ICL was reached. The other 60 percent of non-LIS beneficiaries were enrolled in “enhanced” plans for which they paid a premium surcharge for supplemental benefits. Those additional benefits include some combination of the following: a reduced deductible, reduced cost sharing during the initial coverage phase, and coverage in the doughnut hole.

The degree to which stand-alone drug plans and Medicare Advantage (MA) drug plans are integrated with other Medicare services differs. Stand-alone plans are offered independently of any other insurance plan or service, whereas MA drug plans are part of broader MA plans that include medical—that is, physicians’ and hospital—services. In general, beneficiaries cannot choose Medicare Advantage for medical services and a stand-alone plan for pharmaceutical services, nor can they choose FFS Medicare for medical services and Medicare Advantage for pharmaceutical services.¹³ Furthermore, beneficiaries who choose to enroll in MA plans for both medical and pharmaceutical services cannot choose different plan sponsors for the two services. MA plans differ from stand-alone plans in an important way: The linkage between insuring medical and pharmaceutical expenditures in MA plans creates an incentive for those plans to manage overall expenditures rather than manage drug expenditures alone. Thus, an MA plan might offer lower cost sharing for maintenance prescriptions than for other types of prescriptions, which could reduce hospital expenditures,

whereas a stand-alone plan might offer similar levels of cost sharing for both maintenance and nonmaintenance prescriptions.¹⁴ Perhaps because of that difference, many MA plan sponsors encourage enrollment in enhanced plans by offering low premiums or by offering only an enhanced plan.¹⁵ In MA plans, the greater beneficiary expense for the enhanced plan is often offset by average medical service costs that are below a regional benchmark, and that difference is often applied to reducing the premiums for Parts B and D. It can also be used to increase plan generosity by covering additional services or reducing cost sharing.¹⁶

The premium for a Part D plan depends upon the cost of the chosen plan and the national average cost for all plans. In June of each year, plan sponsors submit bids to CMS that reflect the expected per-enrollee cost of providing benefits and anticipated administrative costs (including plan profits) for a representative set of beneficiaries in the following plan year. CMS calculates a base premium from the sponsors’ bids that is equal to 25.5 percent of the estimated average cost of the basic benefit; in 2008, the base premium was \$27.93 per month.¹⁷ The federal government subsidizes the remaining 74.5 percent. Plan premiums are calculated as the base premium plus the difference between that plan’s bid and the national average bid. (Plans that cost less than the national average have lower premiums than the base premium.) Enhanced plan bids are separated into basic and enhanced components because the federal government does not subsidize the enhanced portion of the benefit. Premiums for enhanced plans follow this same calculation for the basic portion of the bid, and the enhanced portion of the bid is added in total to the beneficiary share of the basic premium. In 2008, the average monthly premium for Part D beneficiaries was \$24.85.¹⁸ A key reason that this average premium is below the base premium is the ability of MA plan sponsors to subsidize the premiums for their Part D plans.

13. Some MA plans do not offer a corresponding prescription drug plan (referred to as an MA-PD); in those cases, enrollees may choose a stand-alone drug plan for their Part D benefit.

14. Maintenance drugs are prescribed for chronic conditions that require ongoing treatment.

15. See Medicare Payment Advisory Commission (MedPAC), *Report to the Congress: Medicare Payment Policy* (March 2011), p. 323.

16. See MedPAC, *Medicare Advantage Program Payment System* (October 2010).

17. See MedPAC, *Report to the Congress* (March 2011), p. 332.

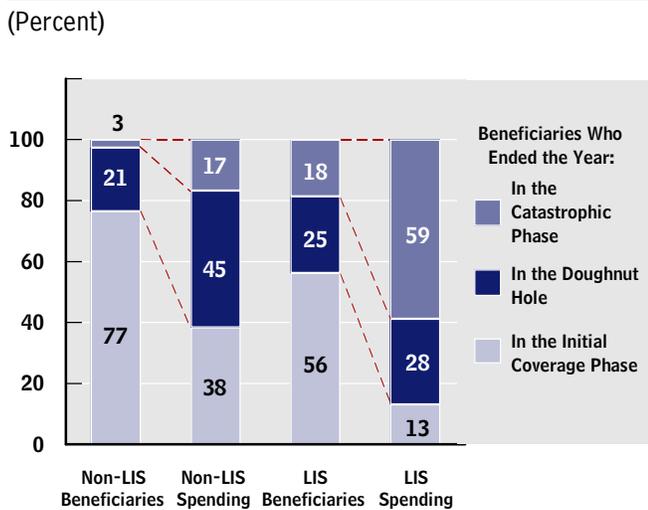
18. See MedPAC, *Report to the Congress: Medicare Payment Policy* (March 2009), p. 290.

Distribution of Spending Among Non-LIS Beneficiaries

In any given year, total spending on prescription drugs varies widely among beneficiaries. Total spending for over three-quarters of non-LIS beneficiaries was less than \$2,510 in 2008—that is, they did not reach the doughnut hole (see Figure 2). Their total spending represented 38 percent of spending for non-LIS beneficiaries that year. Nearly one-quarter of non-LIS beneficiaries ended the year in the doughnut hole; their total spending accounted for 45 percent of spending for all non-LIS beneficiaries. Three percent of beneficiaries exceeded \$4,050 in out-of-pocket expenditures and thus entered the catastrophic phase; their total spending represented 17 percent of all non-LIS spending.

Another way to categorize spending for pharmaceuticals under Part D is by the phase of coverage at the time expenses are incurred. That categorization differs from the categorization by total spending because beneficiaries who end up in the doughnut hole or catastrophic phase by the end of the year will have spent some time in earlier coverage phases. As a result, those beneficiaries will have faced different levels of cost sharing during the year.

Figure 2.
Distribution of Part D Beneficiaries and Total Spending Across Coverage Phases, 2008



Source: Congressional Budget Office.

Notes: “Total spending” refers to drug spending per beneficiary by all payers combined, including plan sponsors, beneficiaries, the federal government, and third-party payers.

LIS = low-income subsidy.

Table 1.
Total Spending Across Coverage Phases, by LIS Status, 2008

(Percent)

Coverage Phase	Non-LIS	LIS
Initial	71	44
Doughnut Hole	21	28
Catastrophic	8	28

Source: Congressional Budget Office.

Notes: “Total spending” refers to drug spending per beneficiary by all payers combined, including plan sponsors, beneficiaries, the federal government, and third-party payers.

LIS = low-income subsidy.

Whereas some beneficiaries estimate their total expected drug spending for the year and make purchasing decisions accordingly, others make each purchasing decision individually and only complete the purchases that are considered worth the cost at the time. Beneficiaries with limited savings are more likely to fall in the second category, and their purchasing decisions may vary with the coverage phase. For example, while in the doughnut hole, they may attempt to stretch their supply of medication by splitting pills or by not adhering strictly to drug regimens.¹⁹

In 2008, 71 percent of total non-LIS spending occurred while beneficiaries were in the initial coverage phase (see Table 1). That amount included all spending for beneficiaries who did not reach the doughnut hole as well as spending in the initial coverage phase for those who did reach the doughnut hole. Beneficiaries paid out of pocket for an average of 29 percent of prescription drug spending in the initial coverage phase. That out-of-pocket percentage was greater than 25 percent because many beneficiaries were responsible for 100 percent of spending until they reached their deductible.

Twenty-one percent of total non-LIS spending in 2008 occurred while beneficiaries were in the doughnut hole. Of that spending, beneficiaries paid over 60 percent out of pocket. Supplemental coverage available through enhanced plans or offered by third-party payers (such as employment-based plans, which “wrap around” the Part D benefit by covering some of beneficiaries’ out-of-

19. MedPAC, *Experiences Obtaining Drugs Under Part D: Focus Groups with Beneficiaries, Physicians, and Pharmacists*, No. 08-4 (prepared by National Opinion Research Center, May 2008).

Table 2.**Utilization of the Part D Benefit and Average Prescription Prices, by Range of Total Spending, 2008**

Total Spending (Dollars)	Percentage of Beneficiaries	Number of Prescriptions Filled Per Month ^a	Average Prescription Price (Dollars) ^{a, b}	Average Generic Share of Prescriptions (Percent) ^c
Non-LIS Beneficiaries				
0	7.5	n.a.	n.a.	n.a.
0 to 500	23.1	1.5	22	83
500 to 1,500	27.4	3.2	36	70
1,500 to 2,500	18.3	4.4	49	62
2,500 to 3,500	11.8	5.2	57	58
3,500 to 4,500	4.9	6.2	63	56
4,500 to 5,500	2.6	7.0	70	54
5,500 or more	4.4	8.5	135	51
LIS Beneficiaries				
0	9.2	n.a.	n.a.	n.a.
0 to 500	15.9	1.4	24	83
500 to 1,500	17.8	3.3	40	72
1,500 to 2,500	13.2	4.5	50	65
2,500 to 3,500	10.2	5.5	59	62
3,500 to 4,500	7.7	6.4	67	59
4,500 to 5,500	5.8	7.1	74	57
5,500 or more	20.2	9.2	130	53

Source: Congressional Budget Office.

Notes: "Total spending" refers to drug spending per beneficiary by all payers combined, including plan sponsors, beneficiaries, the federal government, and third-party payers. Each range of spending includes amounts of spending from just above the lower end of the range to the upper end of the range.

LIS = low-income subsidy; n.a. = not applicable.

- a. Prescriptions with more than a 30-day supply are adjusted to equal the number and average price of a 30-day supply. Prescriptions with less than a 30-day supply are counted as a single prescription.
- b. Prescription prices include sales tax and dispensing fees paid to the pharmacy.
- c. Generic drugs are identified using the Medicaid classification system.

pocket costs) paid for the rest of those expenditures. The remaining 8 percent of total non-LIS spending in 2008 occurred in the catastrophic phase. Comparing that statistic with the share of spending attributable to those who entered the catastrophic phase (17 percent) reveals that spending in the catastrophic phase was nearly half of total spending for those beneficiaries—indicating its importance to that group. Beneficiaries paid out of pocket for an average of 5 percent of spending in that phase, which is equal to the share that they were responsible for under the standard benefit.

Drivers of Higher Spending Among Non-LIS Beneficiaries

Greater prescription drug spending is driven by two factors: the filling of a larger number of prescriptions and the filling of prescriptions for more-expensive drugs.

Both factors played a role in higher total spending per non-LIS beneficiary in 2008, but the number of prescriptions seems to have been a greater driver of higher expenditures than was the average price of a prescription. For example, compared with non-LIS beneficiaries for whom total spending was between zero and \$500, those with total spending between \$4,500 and \$5,500 filled nearly five times the number of prescriptions per month (see Table 2). The average prescription price in that category of spending was about three times more than the average price of a prescription filled by people with total spending between zero and \$500.

The average prescription price was substantially greater in the group with spending above \$5,500 than in all other groups, probably because beneficiaries with the highest spending are, in general, more likely to suffer from

chronic conditions (such as multiple sclerosis and rheumatoid arthritis) that require ongoing treatment with specialty drugs (such as biologics).²⁰ Those types of drugs are typically very expensive.²¹ One study found that 31 percent of beneficiaries without the low-income subsidy who used at least one specialty drug reached the out-of-pocket threshold.²² Given that only 3 percent of non-LIS beneficiaries reached the out-of-pocket threshold, that finding implies that those who used specialty drugs were at least 10 times as likely to reach the out-of-pocket threshold as those who did not use specialty drugs.

The relationship between spending and the use of generic drugs is also noteworthy. Generics, which often are much less expensive than their brand-name counterparts, made up a smaller share of prescriptions for beneficiaries with greater total drug expenditures. On average, the retail price of a generic drug is 25 percent of the retail price of a brand-name drug of the same chemical makeup.²³ Thus, choosing brands over their generic counterparts could have played a role in higher spending. However, CBO recently found that the generic utilization rate among Part D beneficiaries was over 90 percent in 2007 when a generic option was available.²⁴ That statistic suggests that while brand usage was sometimes a matter of preference, it often reflected the lack of availability of equivalent generics. Although there may be additional room for switching to a generic alternative within the same therapeutic class when no direct generic substitute is available, such switches might not always be clinically indicated. Newer brand-name drugs tend to be more expensive and are less likely to face generic competition, and that is especially true for specialty drugs.

20. Biologics are derived from living organisms and generally are more complex and more expensive to produce than chemically based drugs.

21. CMS allows Part D plans to label drugs as specialty drugs if the monthly cost of those medications exceeds a set threshold. That threshold was \$600 in 2008.

22. Government Accountability Office, *Medicare Part D: Spending, Beneficiary Cost Sharing, and Cost-Containment Efforts for High-Cost Drugs Eligible for a Specialty Tier*, GAO-10-242 (January 29, 2010).

23. Congressional Budget Office, *Effects of Using Generic Drugs on Medicare's Prescription Drug Spending* (September 2010).

24. Ibid.

The Federal Contribution to Part D Spending for Non-LIS Beneficiaries

In 2008, the federal government paid for approximately 40 percent of total Part D spending for non-LIS beneficiaries. Premiums are set so that the federal government pays for 74.5 percent of the basic benefit, which itself covered 53 percent of spending by non-LIS enrollees. Applying the federal government's share of the basic benefit to that percentage provides a rough estimate of the federal share of non-LIS spending.²⁵ Nearly 85 percent of federal spending for the basic benefit funded the initial coverage phase portion of the benefit; the remainder funded the catastrophic portion.

Most of the remaining 60 percent of total Part D spending for non-LIS beneficiaries was paid by the beneficiaries through out-of-pocket spending and premium payments (which covered the beneficiary's share of the basic benefit and any enhanced coverage). Less than 2 percent of spending was covered by third-party payers, such as state pharmaceutical assistance programs and workers' compensation programs.

Implications of Recent Health Care Legislation for Non-LIS Beneficiaries

Various provisions of PPACA and the Reconciliation Act have a sizable impact on the Part D benefit for non-LIS enrollees.²⁶ Those new laws change the Part D program in two main ways. First, the prescription drug benefit gradually becomes much more generous over the next decade, primarily by reducing beneficiaries' payments in the doughnut hole. Starting in January 2011, manufacturers of brand-name drugs began covering 50 percent of the cost of such medications for beneficiaries in the doughnut hole.²⁷ The standard Part D benefit will gradually fill in the rest of the doughnut hole for both brand-name and generic drugs so that, by 2020, beneficiaries' cost sharing will be reduced to 25 percent of their drug spending between the initial coverage level and the out-of-pocket threshold.²⁸ At that point, plans will be

25. Because total spending is lower for non-LIS beneficiaries, that population accounts for a smaller share of total spending for the basic benefit than the LIS population. Since the 74.5 percent average is applied to total basic benefit spending, the federal government covers a slightly smaller share of basic benefit spending (69 percent) for the non-LIS population.

26. P.L. 111-148, 124 Stat. 119, and P.L. 111-152, 124 Stat. 1029, respectively.

27. Section 3301 of PPACA.

28. Section 1101 of the Reconciliation Act.

required to cover 75 percent of generic drug expenditures and 25 percent of brand-name drug expenditures incurred while beneficiaries are in the doughnut hole; another 50 percent of brand-name drug expenditures incurred in the doughnut hole will continue to be covered by manufacturers.²⁹ The additional generosity of the Part D benefit will increase the cost of the benefit in two ways: plan payments will increase for drugs purchased in the doughnut hole, and beneficiary utilization will increase because of lower out-of-pocket costs for drugs purchased in the doughnut hole.³⁰ Altogether, that additional generosity will raise beneficiaries' premiums by about 10 percent in 2019 relative to what would have occurred otherwise.³¹

The drug benefit will also become more generous because the out-of-pocket threshold will increase more slowly than will the other benefit parameters from 2014 through 2020, after which the threshold will return to what it would have been if its growth rate had not been slowed.³² That change will reduce the amount of money a beneficiary must spend before reaching the out-of-pocket threshold and entering the catastrophic phase. If the benefit parameters described in this section for the year 2020 had been applied to drug purchases in 2008, beneficiaries who ended the year in the doughnut hole and catastrophic phase would have saved an average of \$550 and \$2,150 in out-of-pocket expenditures, respectively.³³

The second change to the Part D program was to introduce income-based premiums (which are also used in

Medicare Part B) for individuals with income above \$85,000 and couples with a joint income above \$170,000, beginning in 2011. The additional premium ranges from \$12 per month for those whose income is just above the thresholds to nearly \$70 per month for individuals with income exceeding \$214,000 or couples with a joint income exceeding \$428,000.³⁴ Approximately 5 percent of beneficiaries will pay a higher premium because of this policy change. Some Part D beneficiaries may drop coverage, and future Medicare enrollees may forgo enrollment in Part D, because of the premium increase. However, because the premium remains heavily subsidized for most people, the income-based premium is unlikely to change enrollment decisions for most of the affected beneficiaries.

LIS Beneficiaries

In addition to the standard Part D benefit offered to all Medicare beneficiaries, the federal government provides an additional benefit—the low-income subsidy—to some beneficiaries. Eligibility for the low-income subsidy and the generosity of the subsidy depend on the beneficiary's income and assets. The most generous LIS benefit covers all premium payments and out-of-pocket expenses for beneficiaries enrolled in both Medicare and Medicaid—known as dual-eligibles—who reside in a long-term care facility. The least generous LIS benefit covers a small share of the Part D premium and subsidizes beneficiaries' out-of-pocket spending so that they pay 15 percent of total costs until they reach the catastrophic phase. Once those beneficiaries enter the catastrophic phase, they pay 5 percent of prescription costs, the same rate paid by enrollees without the low-income subsidy.³⁵ That benefit level applies to beneficiaries with income between 135 percent and 150 percent of the federal poverty level who are not enrolled in Medicaid and whose assets are below a given threshold.³⁶ The generosity of the LIS

29. Section 3301 of PPACA.

30. In addition, CBO expects that the various provisions of PPACA and the Reconciliation Act will push up the prices of certain prescription drugs and thereby make federal costs for the Part D benefit slightly higher. See Congressional Budget Office, *letter to the Honorable Paul Ryan about the effects on prescription drug prices of certain provisions of the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010* (November 4, 2010).

31. For more information, see Congressional Budget Office, "Comparison of Projected Medicare Part D Premiums Under Current Law and Under Reconciliation Legislation Combined with H.R. 3590 as Passed by the Senate" (March 19, 2010).

32. From 2014 to 2015, the growth rate of the out-of-pocket threshold will be 0.25 percentage points below the growth rate of Part D expenses. From 2016 to 2019, the out-of-pocket threshold will be indexed to the consumer price index for all urban consumers plus 2 percentage points, which will most likely be lower than the growth of Part D expenses. See section 1101 of the Reconciliation Act.

33. This calculation does not account for any increase in prescription drug spending that would have resulted from reduced out-of-pocket spending.

34. Married beneficiaries who file separately reach this maximum additional payment when their individual income is greater than \$129,000.

35. The cost-sharing subsidy counts as out-of-pocket spending; thus, LIS beneficiaries reach the out-of-pocket threshold at the same level of total spending as non-LIS beneficiaries in their same plan.

36. In 2008, the federal poverty level was \$10,400 for a single person and \$14,000 for a couple. The asset threshold was \$11,990 for a single person and \$23,970 for a couple.

benefit ranges between those two benefit levels for the remaining LIS population, although most of the variation is in the degree of cost sharing: 98 percent of LIS beneficiaries received the full premium subsidy in 2008.³⁷ Because of those additional subsidies, the differences among plan types experienced by the non-LIS population are greatly muted for the LIS population.

Whereas many LIS enrollees were automatically enrolled in the LIS program, others actively applied for LIS enrollment. Automatic enrollees include dual-eligibles and Medicare beneficiaries who are already enrolled in a Medicare Savings Program or in Social Security's Supplemental Security Income program.³⁸ Because these individuals have previously met certain state income and asset tests, CMS automatically enrolls them in a Part D plan with a premium below their region's benchmark for the LIS program. (The benchmarks are based on averages of premiums for basic plans in the region, weighted by LIS enrollment per plan.) Other Medicare beneficiaries who apply for the LIS benefit must show that they meet the program's income and asset tests.³⁹ CMS randomly assigns those LIS beneficiaries to a benchmark Part D plan if they do not choose one. In 2008, 7.9 million beneficiaries were automatically enrolled in the LIS program, and 1.5 million were enrolled after applying.⁴⁰

Beneficiaries for whom CMS chooses plans may switch plans if, for example, they prefer the formulary of covered drugs under another plan. However, if the chosen plan's premium is greater than the LIS benchmark premium, the beneficiary is responsible for paying the difference. Evidence suggests that LIS beneficiaries are unlikely to opt out of the plans in which they have been enrolled by CMS.⁴¹ The LIS benefit does not pay for the additional premiums charged by enhanced plans. However, LIS benefits are more generous than enhanced benefits,

making enrollment in enhanced plans less attractive to LIS beneficiaries.

Distribution of Spending Among LIS Beneficiaries

LIS beneficiaries were more evenly distributed among the Part D coverage phases in 2008 than were non-LIS beneficiaries. Just over half of LIS beneficiaries did not reach the doughnut hole, and total spending for them was 13 percent of spending for all LIS beneficiaries (see Figure 2 on page 5). One-quarter finished the year in the doughnut hole and accounted for 28 percent of all LIS spending. Nearly one-fifth reached the catastrophic phase and accounted for 59 percent of all LIS spending.

Spending by coverage phase at the time of expenditure was also more evenly distributed among LIS beneficiaries than among non-LIS beneficiaries (see Table 1 on page 5). Only 44 percent of total spending for LIS beneficiaries occurred in the initial coverage phase (in contrast with the 71 percent of total spending for non-LIS beneficiaries while in the same phase). Twenty-eight percent of total spending for LIS enrollees occurred in both the doughnut hole and the catastrophic phases (in contrast with the 21 percent and 8 percent shares, respectively, for non-LIS beneficiaries in the same phases). Because of the cost-sharing subsidies available to LIS enrollees, however, their out-of-pocket share of spending varied little as they moved between coverage phases.

Many LIS beneficiaries who surpassed the out-of-pocket threshold spent a substantial amount once they entered the catastrophic phase. As was the case with spending for non-LIS beneficiaries who reached the catastrophic phase, half of the spending for LIS beneficiaries who reached the catastrophic phase was beyond the out-of-pocket threshold.

Drivers of Higher Spending Among LIS Beneficiaries

Like non-LIS enrollees, LIS enrollees with higher total spending on prescription drugs filled more prescriptions

37. Department of Health and Human Services, *2011 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*.

38. Medicare Savings Programs are administered by Medicaid; they are designed to help Medicare beneficiaries who have limited income and few other resources pay for their premiums and cost sharing for Parts A and B of Medicare.

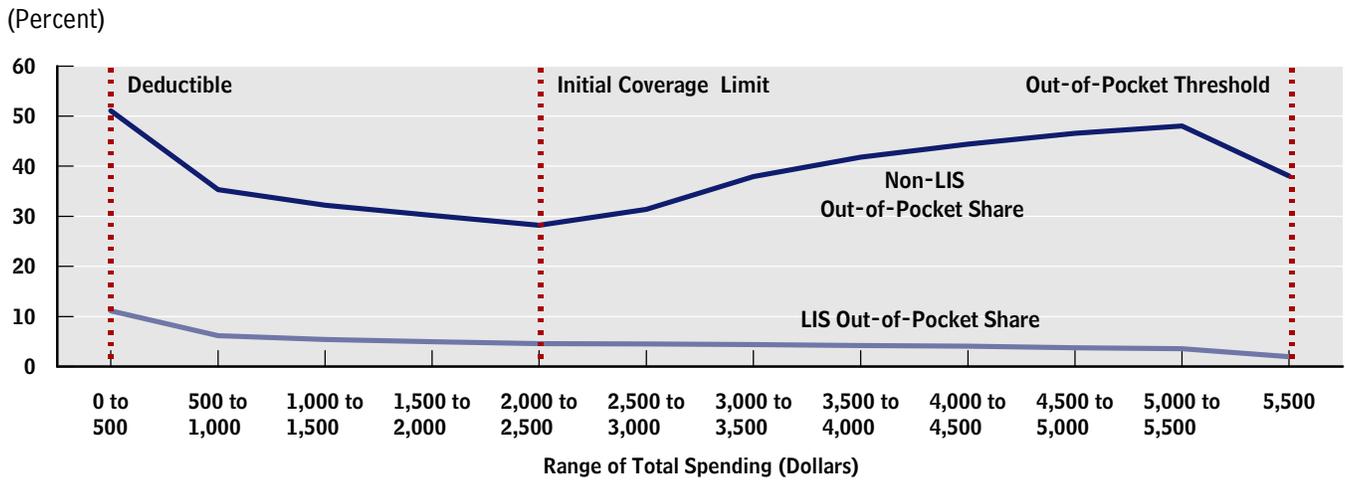
39. Kaiser Family Foundation, "Medicare: The Medicare Prescription Drug Benefit," *Kaiser Family Foundation Fact Sheet* (February 2008).

40. Ibid.

41. Research has shown that LIS beneficiaries were unlikely to choose a new plan after CMS reassigned them to a new Part D plan because their previously assigned plan no longer held benchmark status. See Grecia Marrufo and others, *Evaluation of the Medicare Demonstration to Transition Enrollment of Low Income Subsidy Beneficiaries* (report submitted by Acumen, LLC, to the Centers for Medicare and Medicaid Services, June 2009).

Figure 3.

Out-of-Pocket Spending as a Share of Total Spending, by LIS Status, 2008



Source: Congressional Budget Office.

Notes: “Total spending” refers to drug spending per beneficiary by all payers combined, including plan sponsors, beneficiaries, the federal government, and third-party payers. “Out-of-pocket spending” refers to payments made solely by beneficiaries. Each range of spending includes amounts of spending from just above the lower end of the range to the upper end of the range.

The vertical lines indicate the spending range in which each labeled point in the benefit design occurs.

LIS = low-income subsidy.

and filled more-expensive prescriptions. The number of prescriptions and the average price per prescription were similar for both groups of beneficiaries within each range of spending (see Table 2 on page 6). However, LIS beneficiaries were more likely to fall into the higher-spending ranges. For instance, total spending was greater than \$5,500 for 20 percent of LIS beneficiaries, whereas only 4 percent of non-LIS beneficiaries had total spending greater than that amount.

The Federal Contribution to Spending for LIS Beneficiaries

The federal government paid for approximately 95 percent of Part D prescription drug spending for LIS beneficiaries in 2008.⁴² That large share is attributable to two features of the Part D program: First, the federal government pays for nearly all of LIS beneficiaries’ premiums for the basic benefit, which covered 56 percent of spending for LIS enrollees in 2008. Second, the federal

government subsidizes most of LIS beneficiaries’ out-of-pocket spending, which represented 40 percent of LIS expenditures. Overall, 43 percent of federal spending for LIS beneficiaries funded expenditures in the initial coverage phase, and the remaining federal spending was split between the doughnut hole and the catastrophic phase.

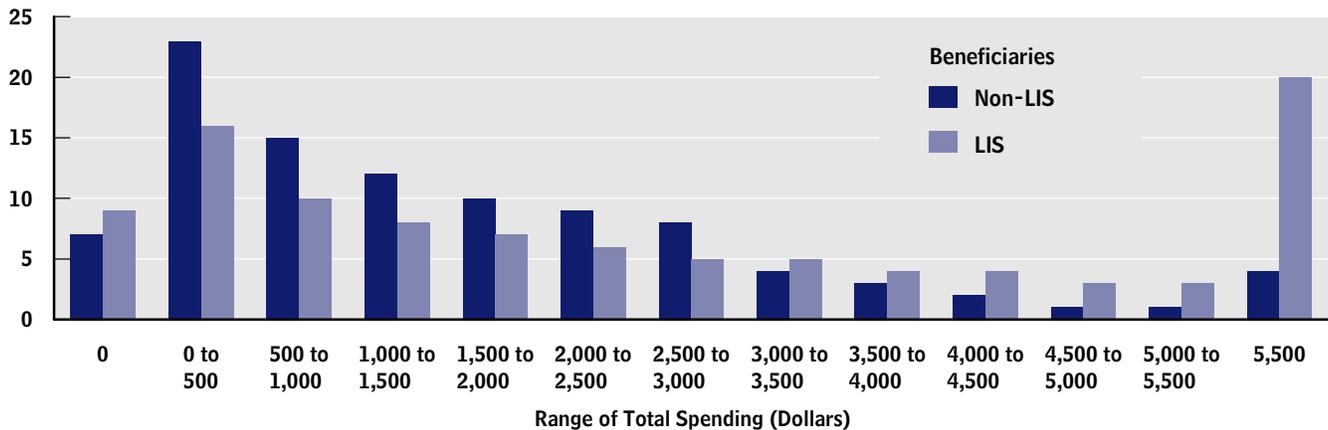
Comparing Non-LIS and LIS Beneficiaries

Beneficiaries who receive the low-income subsidy in Medicare Part D differ in various ways from those who do not. To begin with, the relationship between total Part D spending and out-of-pocket spending is quite different for the two populations. Among non-LIS beneficiaries in 2008, out-of-pocket spending as a share of total spending varied greatly across spending levels (see Figure 3). Beneficiaries with low total spending paid a large share out of pocket because the deductible accounted for most of their spending. The out-of-pocket share was smaller for beneficiaries with greater total spending—up to the ICL—because the deductible represented a smaller share of total spending. The out-of-pocket share rose for beneficiaries for whom total spending exceeded the ICL because spending in the doughnut hole was largely out of pocket. Beneficiaries

42. Because the Medicaid program paid for pharmaceutical expenditures for dual-eligibles before Part D was implemented, a provision of the Medicare Modernization Act requires states to reimburse the federal government for a portion of those expenditures. Those reimbursements are included in CBO’s estimates of federal Part D spending.

Figure 4.**Distribution of Part D Beneficiaries Across Ranges of Total Spending, by LIS Status, 2008**

(Percent)



Source: Congressional Budget Office.

Notes: "Total spending" refers to drug spending per beneficiary by all payers combined, including plan sponsors, beneficiaries, the federal government, and third-party payers. Each range of spending includes amounts of spending from just above the lower end of the range to equal to the upper end of the range.

LIS = low-income subsidy.

who surpassed the out-of-pocket threshold paid for a smaller share of their total spending, although they spent a substantial amount to reach the catastrophic phase. In 2008, average out-of-pocket spending among non-LIS beneficiaries who reached the catastrophic phase was \$4,000.

LIS beneficiaries do not experience the same variation in their out-of-pocket share of spending. Their out-of-pocket share is much lower than that of non-LIS beneficiaries and mostly flat across total spending levels. Among LIS beneficiaries in 2008, there was a slight negative relationship between total spending and the out-of-pocket share of that spending. That pattern probably arose because LIS beneficiaries with higher expenditures were more likely to be enrolled in a more generous category of the LIS benefit, in which a greater share of out-of-pocket expenditures was subsidized.

Another significant difference between the two categories of enrollees lies in the distribution of beneficiaries across spending levels. LIS beneficiaries are much more likely than non-LIS beneficiaries to fall into higher-spending categories and less likely to fall into lower-spending categories (see Figure 4). For example, only 24 percent of non-LIS beneficiaries exceeded \$2,500 in total spending

in 2008, but 44 percent of LIS beneficiaries exceeded that spending level (see Table 3). Similarly, only 6 percent of non-LIS beneficiaries exceeded \$5,000 in total spending, whereas 23 percent of LIS beneficiaries exceeded that amount.

Yet another distinction between the two groups of enrollees is that LIS beneficiaries constituted 40 percent of Part D enrollment in 2008 but accounted for 55 percent of total prescription drug expenditures that year. At \$3,600, the average per capita expenditures for those beneficiaries were twice as large as the expenditures for their counterparts (\$1,800). That difference is probably partly attributable to the difference in generosity of the two benefits. The out-of-pocket share of spending is much lower for LIS beneficiaries than for non-LIS beneficiaries. In addition, many LIS beneficiaries pay the same amount out of pocket for all brand-name drugs, regardless of the drugs' price or whether the drugs have preferred status. Moreover, MedPAC found that generic dispensing rates were lower for LIS beneficiaries for several therapeutic classes.⁴³

43. Shinobu Suzuki, "MedPAC Analysis of Factors Affecting LIS Use of Prescription Drugs" (presented at the Centers for Medicare and Medicaid Services Part D Data Symposium, Baltimore, Md., March 18, 2010).

Table 3.

Shares of Part D Beneficiaries and Spending in Two Higher Ranges of Total Spending, 2008

(Percent)

	Greater Than \$2,500	Greater Than \$5,000
Non-LIS		
Beneficiaries	24	6
Spending	62	28
LIS		
Beneficiaries	44	23
Spending	87	66

Source: Congressional Budget Office.

Notes: "Total spending" refers to drug spending per beneficiary by all payers combined, including plan sponsors, beneficiaries, the federal government, and third-party payers.

LIS = low-income subsidy.

Average spending in the two groups also differs in part because LIS beneficiaries tend to be sicker than non-LIS beneficiaries. That tendency is suggested by three types of statistics: the original reason for Medicare eligibility; risk scores; and the presence of chronic disease. CBO found that, in 2008, 85 percent of non-LIS beneficiaries became eligible for Medicare because they turned 65, and the remaining 15 percent became eligible before turning 65 by successfully applying for the Social Security Disability Insurance (SSDI) program.⁴⁴ By contrast, half of LIS beneficiaries became eligible for Medicare by qualifying

for SSDI, suggesting that a larger share of that group had poorer health status.

Further, in calculating payments to Part D plans, CMS develops risk scores to ensure that plans are compensated for enrolling sicker beneficiaries. Those risk scores reflect differences in medical disabilities, previous diagnoses, and demographics, and they are designed to predict differences in expected drug utilization. In 2008, risk scores indicated that LIS beneficiaries would probably have 15 percent greater drug expenditures than non-LIS beneficiaries.⁴⁵ Moreover, research has shown that the risk-adjustment methodology being used in 2008 overpredicted costs for low-spending enrollees and under-predicted costs for high-spending enrollees, which has led CMS to update its risk-adjustment methodology more recently.⁴⁶

Lastly, LIS beneficiaries have a higher prevalence of chronic conditions and comorbidities (additional diseases and conditions) than do non-LIS beneficiaries. One study on the prevalence of chronic conditions among dual-eligibles (two-thirds of the LIS population) found that 63 percent of dual-eligibles had multiple chronic physical conditions. By contrast, 53 percent of other Medicare beneficiaries fell into that category.⁴⁷ More strikingly, 20 percent of dual-eligibles had multiple mental or cognitive conditions; only 5 percent of other Medicare beneficiaries did so. Some of those conditions, such as depression and schizophrenia, require very expensive drug regimens. Likewise, 38 percent of dual-eligibles had both a mental or cognitive condition and a chronic physical condition compared with 17 percent of other Medicare beneficiaries. Differences in the prevalence of chronic conditions among the two populations are strong indicators of differences in the need for medical and pharmaceutical services.

44. Individuals with end-stage renal disease are also eligible for Medicare within three months of their first dialysis treatment.

45. Beneficiaries without the low-income subsidy had an average risk score of 1.025, and LIS beneficiaries had an average risk score of 1.181. To reflect the fact that the risk adjustment methodology imperfectly predicts utilization for those populations, CMS further adjusts these risk scores for beneficiaries who have the LIS benefit or are institutionalized. See MedPAC, *A Data Book: Health Care Spending and the Medicare Program* (June 2010).

46. John Hsu and others, "Distributing \$800 Billion: An Early Assessment of Medicare Part D Risk Adjustment," *Health Affairs*, vol. 28, no. 1 (January 2009), pp. 215–225.

47. Judy Kasper, Molly O'Malley Watts, and Barbara Lyons, *Chronic Disease and Co-Morbidity Among Dual Eligibles: Implications for Patterns of Medicaid and Medicare Service Use and Spending*, Kaiser Commission on Medicaid and the Uninsured, Issue Paper No. 8081 (July 2010).

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