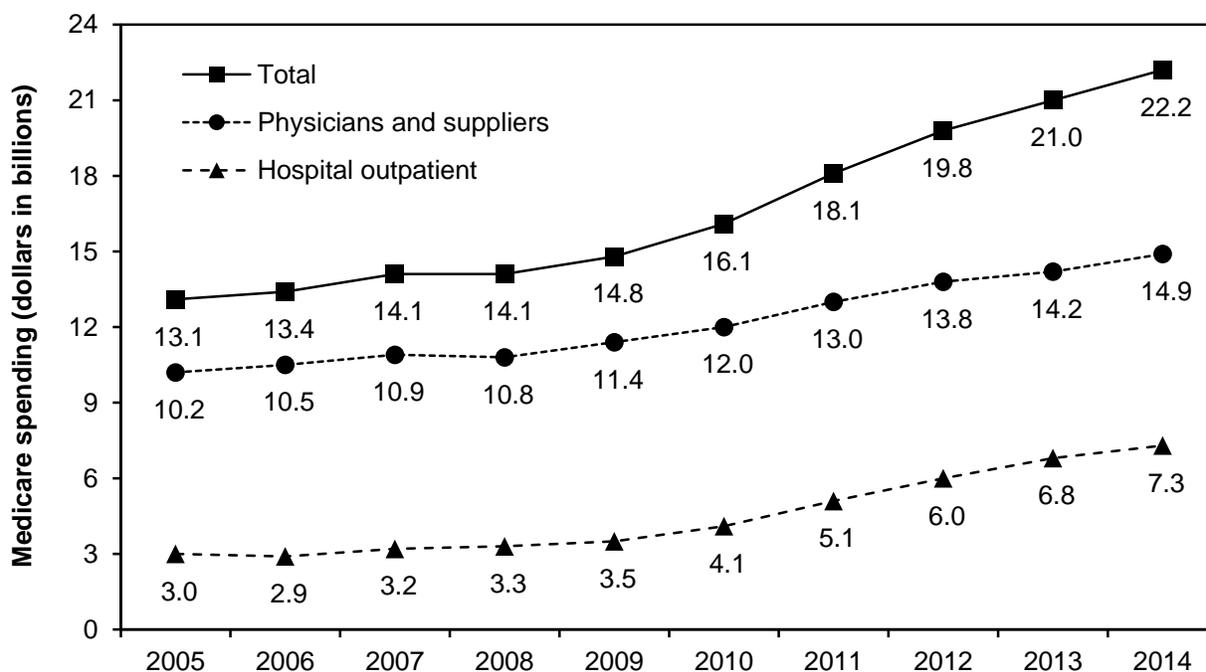


SECTION

10

Prescription drugs

Chart 10-1. Medicare spending for Part B drugs furnished by physicians, suppliers, and hospital outpatient departments



Note: Data include Part B–covered drugs furnished by physicians, suppliers, and hospital outpatient departments, and exclude those furnished by dialysis facilities. “Medicare spending” includes program payments and beneficiary cost sharing. Data reflect all Part B drugs regardless of whether they are paid based on the average sales price plus 6 percent or another payment formula. Hospital outpatient spending only reflects drugs that are separately paid in that year and excludes critical access hospitals and hospitals located in Maryland, Guam, Samoa, and Saipan. Components may not sum to total due to rounding.

Source: MedPAC analysis of Medicare claims data from CMS.

- Spending by the Medicare program and beneficiaries on Part B drugs totaled about \$22.2 billion in 2014, an increase of about 5.8 percent from 2013. Of this total, physicians and suppliers accounted for about two-thirds (\$14.9 billion) and hospital outpatient departments (HOPDs) about one-third (\$7.3 billion).
- Medicare’s average sales price payment system for drugs began in 2005. Between 2005 and 2014, total spending grew at an average annual rate of 6 percent. Spending growth was slower from 2005 to 2009 (about 3.1 percent per year on average) and was more rapid from 2009 to 2014 (about 8.4 percent per year on average).
- Part B drug spending has been growing more rapidly for HOPDs than for physicians and suppliers. Between 2009 and 2014, Part B drug spending grew at an average annual rate of about 16.1 percent for HOPDs and 5.6 percent for physicians and suppliers.
- Part B drug spending trends can be affected by year-to-year changes in Medicare policy concerning which drugs are separately paid and which are packaged into payment for other services under the hospital outpatient prospective payment system (OPPS). For example, in 2014, the OPPS expanded packaging to include certain drugs that previously had been separately paid. Part B drug spending for HOPDs grew about 7.8 percent between 2013 and 2014. However, if drugs that had a change in their status between 2013 and 2014 (from separately paid to packaged or vice versa) are excluded from the calculation, then HOPD Part B drug spending grew at a rate of 11.4 percent between 2013 and 2014 (data not shown).

Chart 10-2. Top 10 Part B drugs furnished by physicians, suppliers, and hospital outpatient departments (dollars in millions), 2013 and 2014

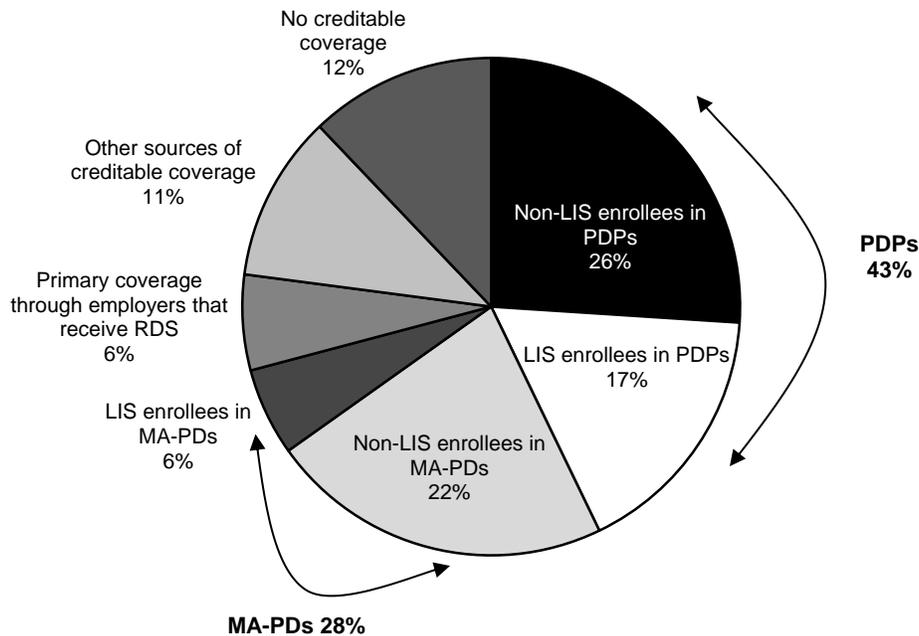
Part B drug	Total Part B drug spending		Physician and supplier Part B drug spending		Hospital outpatient Part B drug spending	
	2013	2014	2013	2014	2013	2014
Rituximab	\$1,507	\$1,503	\$859	\$830	\$648	\$673
Ranibizumab	1,353	1,332	1,303	1,284	51	48
Aflibercept	1,078	1,296	1,012	1,216	66	80
Infliximab	1,101	1,176	731	758	370	418
Pegfilgrastim	1,099	1,174	615	625	484	549
Bevacizumab	1,035	1,064	592	578	444	486
Denosumab	631	768	420	494	211	274
Trastuzumab	503	561	264	282	239	279
Pemetrexed	548	560	290	281	259	279
Bortezomib	450	472	275	276	175	196
Total spending, top 10 Part B drugs	9,305	9,905	6,359	6,623	2,946	3,281
Total spending, all Part B drugs	20,987	22,205	14,213	14,906	6,774	7,299

Note: The 10 drugs shown in the chart reflect the top 10 Part B drug billing codes with the highest Medicare expenditures in 2014. Data for 2013 are also shown for comparison. Data include Part B–covered drugs furnished by physicians, suppliers, and hospital outpatient departments but exclude those furnished by dialysis facilities. “Drug spending” includes Medicare program payments and beneficiary cost sharing. Data reflect all Part B drugs regardless of whether they are paid based on the average sales price plus 6 percent or another payment formula. Hospital outpatient spending only reflects drugs that are separately paid in that year and excludes critical access hospitals and hospitals located in Maryland, Guam, Samoa, and Saipan. Components may not sum to total due to rounding.

Source: MedPAC analysis of Medicare claims data from CMS.

- Medicare has more than 500 billing codes for Part B drugs, but spending is very concentrated. Medicare spending (including cost sharing) on the top 10 drugs, 9 of which were biologics, totaled nearly \$10 billion in 2014, about 45 percent of all Part B drug spending that year.
- Many of the top 10 drugs are used to treat cancer or its side effects (rituximab, pegfilgrastim, bevacizumab, pemetrexed, denosumab, trastuzumab, and bortezomib). Drugs used to treat age-related macular degeneration (ranibizumab, aflibercept, and bevacizumab) and rheumatoid arthritis (rituximab and infliximab) are also included in the top 10.
- Medicare spending on immune globulin (for which there are several products billed through separate billing codes) amounted to nearly \$1.1 billion in 2014 (data not shown).

Chart 10-3. In 2013, 88 percent of Medicare beneficiaries were enrolled in Part D plans or had other sources of creditable drug coverage



Note: LIS (low-income [drug] subsidy), PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]), RDS (retiree drug subsidy). "Creditable coverage" means the value of drug benefits is equal to or greater than that of the basic Part D benefit.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey Access to Care file 2013.

- In 2013, more than three-quarters of Medicare beneficiaries either signed up for Part D plans or had prescription drug coverage through employer-sponsored plans under Medicare's RDS. (If an employer agrees to provide primary drug coverage to its retirees with a benefit value that is equal to or greater than that of Part D (called "creditable coverage"), Medicare provides the employer with a tax-free subsidy for 28 percent of each eligible individual's drug costs that fall within a specified range of spending.)
- The share of Medicare beneficiaries with primary coverage through employers that received the RDS (6 percent of beneficiaries) was substantially smaller than in 2012 (12 percent, data not shown) because of a shift of enrollees into Part D employer group waiver plans. That shift reflects changes made by the Patient Protection and Affordable Care Act of 2010 that increased the generosity of the Part D benefit by phasing out the coverage gap and by altering the tax treatment of drug expenses covered by the RDS.
- About 23 percent of Medicare beneficiaries received Part D's LIS in 2013. Of all LIS beneficiaries, about three-fourths of them (17 percent of all Medicare beneficiaries) were enrolled in stand-alone PDPs, and the remaining beneficiaries (6 percent) were in MA-PD plans.

(Chart continued next page)

Chart 10-3. In 2013, 88 percent of Medicare beneficiaries were enrolled in Part D plans or had other sources of creditable drug coverage (continued)

- Other enrollees in stand-alone PDPs accounted for 26 percent of all Medicare beneficiaries. Another 22 percent of non-LIS enrollees were in MA–PD plans.
- Eleven percent of Medicare beneficiaries had creditable drug coverage, but that coverage did not affect Medicare program spending. Examples of other sources of creditable coverage include the Federal Employees Health Benefits program, TRICARE, Department of Veterans Affairs, and employers not receiving the RDS.
- About 12 percent of Medicare beneficiaries had no drug coverage or coverage that was less generous than Part D’s defined standard benefit.

Chart 10-4. Changes in parameters of the Part D defined standard benefit over time

	2006	2014	2015	2016	Cumulative change 2006–2016
Deductible	\$250.00	\$310.00	\$320.00	\$360.00	44%
Initial coverage limit	2,250.00	2,850.00	2,960.00	3,310.00	47%
Annual out-of-pocket threshold	3,600.00	4,550.00	4,700.00	4,850.00	35%
Total covered drug spending at annual out-of-pocket threshold	5,100.00	6,690.77	7,061.76	7,515.22	47%
Minimum cost sharing above the annual out-of-pocket threshold					
Copay for generic/preferred multisource drugs	2.00	2.55	2.65	2.95	48%
Copay for other prescription drugs	5.00	6.35	6.60	7.40	48%

Note: Under Part D's defined standard benefit, the enrollee pays the deductible and then 25 percent of covered drug spending (75 percent paid by the plan) until total covered drug spending reaches the initial coverage limit (ICL). Before 2011, enrollees exceeding the ICL were responsible for 100 percent of covered drug spending up to the annual out-of-pocket threshold. Beginning in 2011, enrollees pay reduced cost sharing in the coverage gap. For 2011 and later years, the amount of total covered drug spending at the annual out-of-pocket threshold depends on the mix of brand and generic drugs filled during the coverage gap. The amounts shown are for individuals not receiving Part D's low-income subsidy who have no other source of supplemental coverage. Cost sharing paid by most sources of supplemental coverage does not count toward this threshold. Above the out-of-pocket limit, the enrollee pays 5 percent coinsurance or the copays shown above, whichever is greater.

Source: CMS Office of the Actuary.

- The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 specified a defined standard benefit structure for Part D. In 2016, the standard benefit has a \$360 deductible, 25 percent coinsurance on covered drugs until the enrollee reaches \$3,310 in total covered drug spending, and then a coverage gap until out-of-pocket spending reaches the annual threshold. Before 2011, enrollees were responsible for paying the full discounted price of covered drugs filled during the coverage gap. Because of changes made by the Patient Protection and Affordable Care Act of 2010, enrollees pay reduced cost sharing for drugs filled in the coverage gap. In 2016, the cost sharing for drugs filled during the gap phase is 45 percent for brand-name drugs and 58 percent for generic drugs. Enrollees with drug spending that exceeds the annual threshold pay the greater of \$2.95 to \$7.40 per prescription or 5 percent coinsurance.
- Most parameters of this defined standard benefit structure have changed over time at the same rate as the annual change in average total drug expenses of Medicare beneficiaries. The benefit parameters have generally increased over time, with the exception of 2014. The parameters have grown cumulatively by 35 percent to 48 percent between 2006, the year Part D began, and 2016.

(Chart continued next page)

Chart 10-4. Changes in parameters of the Part D defined standard benefit over time (continued)

- Within certain limits, sponsoring organizations may offer Part D plans that have the same actuarial value as the defined standard benefit but a different benefit structure, and most sponsoring organizations do offer such plans. For example, a plan may use tiered copayments rather than 25 percent coinsurance or have no deductible but use cost-sharing requirements that are equivalent to a rate higher than 25 percent. Defined standard benefit plans and plans that are actuarially equivalent to the defined standard benefit are both known as “basic benefits.”
- Once a sponsoring organization offers one plan with basic benefits within a prescription drug plan region, it may also offer a plan with enhanced benefits—basic and supplemental coverage combined.

Chart 10-5. Characteristics of Medicare PDPs

	2015				2016			
	Plans		Enrollees as of February 2015		Plans		Enrollees as of February 2016	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	1,001	100%	19.2	100%	886	100%	19.9	100%
Type of organization								
National	707	71	16.4	86	685	77	18.1	91
Other	294	29	2.8	14	201	23	1.8	9
Type of benefit								
Defined standard	0	0	0.0	0	0	0	0.0	0
Actuarially equivalent	454	45	10.6	55	438	49	11.6	58
Enhanced	547	55	8.6	45	448	51	8.4	42
Type of deductible								
Zero	420	42	9.3	49	290	33	9.8	49
Reduced	139	14	1.4	7	128	14	0.6	3
Defined standard*	442	44	8.5	44	468	53	9.6	48
Drugs covered in the gap								
Some coverage	261	26	2.0	10	199	22	2.5	12
None	740	74	17.2	90	687	78	17.5	88

Note: PDP (prescription drug plan). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. "National" data reflect the total number of plans for organizations with at least 1 PDP in each of the 34 PDP regions. Components may not sum to totals due to rounding. "Actuarially equivalent" includes both actuarially equivalent standard and basic alternative benefits. "Enhanced" refers to plans with basic plus supplemental coverage. *The defined standard benefit's deductible was \$320 in 2015 and \$360 in 2016.

Source: MedPAC analysis of CMS landscape, premium, and enrollment data.

- Between 2015 and 2016, the number of stand-alone PDPs decreased by 11 percent. Plan sponsors are offering 886 PDPs in 2016 compared with 1,001 in 2015.
- In 2016, 77 percent of all PDPs are offered by sponsoring organizations that have at least 1 PDP in each of the 34 PDP regions (shown as "national" organizations in the table). Plans offered by those national sponsors account for 91 percent of all PDP enrollment.
- For 2016, a smaller share of PDP offerings include enhanced benefits (basic plus supplemental coverage) than in 2015. The share of PDPs with actuarially equivalent benefits (having the same average value as the defined standard benefit but with alternative benefit designs) increased, and sponsors are offering no PDPs with the defined standard benefit in 2016. Actuarially equivalent plans continue to attract the largest share of PDP enrollees (58 percent), and the share of enrollees choosing to enroll in enhanced benefit plans decreased slightly from 45 percent to 42 percent between 2015 and 2016.
- A smaller share of PDPs includes gap coverage for some drugs (usually generics) in 2016 than in 2015, and the majority of PDP enrollees (88 percent) continue to enroll in plans that offer no additional benefits in the coverage gap. However, because of the changes made by the Patient Protection and Affordable Care Act of 2010, the Part D benefit now includes some coverage for medications filled during the gap phase. In addition, many PDP enrollees receive Part D's low-income subsidy, which effectively eliminates the coverage gap.

Chart 10-6. Characteristics of MA–PDs

	2015				2016			
	Plans		Enrollees as of February 2015		Plans		Enrollees as of February 2016	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Totals	1,608	100%	10.6	100%	1,682	100%	11.2	100%
Type of organization								
Local HMO	1,123	70	7.6	72	1,205	72	8.1	72
Local PPO	409	25	1.9	18	409	24	2.0	18
PFFS	50	3	0.2	2	38	2	0.2	1
Regional PPO	26	2	0.9	8	30	2	0.9	8
Type of benefit								
Defined standard	39	2	0.1	1	30	2	0.1	1
Actuarially equivalent	268	17	2.9	27	185	11	1.4	13
Enhanced	1,301	81	7.6	72	1,467	87	9.7	86
Type of deductible								
Zero	1,014	63	6.0	57	933	55	5.5	49
Reduced	337	21	3.4	32	483	29	4.2	37
Defined standard*	257	16	1.2	11	266	16	1.6	14
Drugs covered in the gap								
Some coverage	703	44	4.8	45	744	44	5.2	47
None	905	56	5.8	55	938	56	6.0	53

Note: MA–PD (Medicare Advantage–Prescription Drug [plan]), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). The MA–PD plans and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, demonstrations, and Part B–only plans. Components may not sum to totals due to rounding. “Actuarially equivalent” includes both actuarially equivalent standard and basic alternative benefits. “Enhanced” refers to plans with basic plus supplemental coverage. *The defined standard benefit’s deductible was \$320 in 2015 and \$360 in 2016.

Source: MedPAC analysis of CMS landscape, premium, and enrollment data.

- There are 5 percent more MA–PD plans in 2016 than in 2015. Sponsors are offering 1,682 MA–PD plans in 2016 compared with 1,608 the year before. HMOs remain the dominant kind of MA–PD plan, making up 72 percent of all (unweighted) offerings in 2016. The number of PFFS plans continues to decline, from 50 in 2015 to 38 in 2016. The number of drug plans offered by local PPOs remained the same at 409 plans, and the number of drug plans offered by regional PPOs increased from 26 plans to 30 plans between 2015 and 2016.
- A larger share of MA–PD plans than stand-alone prescription drug plans (PDPs) offer enhanced benefits (compare Chart 10-6 with Chart 10-5). In 2016, 51 percent of all PDPs have enhanced benefits compared with 87 percent of MA–PD plans. In 2016, enhanced MA–PD plans attracted 86 percent of total MA–PD enrollment.
- Fifty-five percent of MA–PD plans have no deductible in 2016. These plans attracted 49 percent of total MA–PD enrollees in 2016.
- MA–PD plans are more likely than PDPs to provide some additional benefits in the coverage gap. In 2016, about 44 percent of MA–PD plans include some gap coverage—the same as the year before. Those plans account for about 47 percent of MA–PD enrollment.

Chart 10-7. Change in average Part D premiums, 2012–2016

	Average monthly premium weighted by enrollment					Cumulative change in weighted average premium, 2012–2016
	2012	2013	2014	2015	2016	
All plans						
Basic coverage	\$33	\$32	\$29	\$26	\$28	–15%
Enhanced coverage	26	28	30	33	33	30
Any coverage	30	30	29	30	31	4
PDPs						
Basic coverage	33	32	30	28	29	–11
Enhanced coverage	58	49	49	48	53	–9
Any coverage	38	39	38	37	39	4
MA–PDs, including SNPs						
Basic coverage	27	29	25	21	22	–19
Enhanced coverage	12	13	13	16	17	40
Any coverage	14	15	16	18	18	27
Base beneficiary premium	31.08	31.17	32.42	33.13	34.10	10

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), SNPs (special needs plans). All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA–PD plans exclude Part B–only plans, demonstrations, and 1876 cost plans. The MA–PD data reflect the portion of Medicare Advantage plans' total monthly premium attributable to Part D benefits for plans that offer Part D coverage. MA–PD premiums reflect rebate dollars that were used to offset Part D premium costs. The fact that average premiums for enhanced MA–PD plans are lower than for basic MA–PD plans could reflect several factors such as different plan sponsors, different counties of operation, and differences in the average health status of plan enrollees. Cumulative changes were calculated from unrounded data.

Source: MedPAC analysis of CMS landscape, plan report, and enrollment data.

- Between 2012 and 2016, the overall average premium paid by Part D enrollees has remained very stable at around \$30 per month. However, year-to-year changes have differed by the type of benefit (basic vs. enhanced coverage) and type of plan (PDP vs. MA–PD), and they generally have not corresponded to changes observed in the base beneficiary premium.
- Over the five-year period, the average enrollee premium for basic coverage in PDPs ranged between a high of \$33 per month in 2012 and a low of \$28 in 2015, decreasing by a cumulative 11 percent. The average enrollee premium for PDPs offering enhanced coverage has decreased from \$58 in 2012 to \$53 in 2016, a cumulative 9 percent decline.
- Between 2012 and 2016, the average premium paid by beneficiaries enrolled in MA–PD plans with basic coverage ranged between a high of \$29 per month in 2013 and a low of \$21 in 2015, decreasing by a cumulative 19 percent. The average premium paid by beneficiaries enrolled in MA–PD plans offering enhanced coverage has increased from \$12 in 2012 to \$17 in 2016, a cumulative 40 percent increase.

Chart 10-8. Fewer premium-free (for LIS enrollees) PDPs in 2016

PDP region	State(s)	Number of PDPs			Number of PDPs that have zero premium for LIS enrollees		
		2015*	2016*	Difference	2015*	2016*	Difference
1	ME, NH	28	27	-1	9	9	0
2	CT, MA, RI, VT	27	26	-1	5	6	1
3	NY	25	22	-3	8	7	-1
4	NJ	29	25	-4	10	8	-2
5	DC, DE, MD	27	24	-3	10	10	0
6	PA, WV	29	29	0	9	9	0
7	VA	31	28	-3	9	7	-2
8	NC	29	26	-3	8	5	-3
9	SC	31	27	-4	7	4	-3
10	GA	30	27	-3	8	5	-3
11	FL	27	22	-5	4	3	-1
12	AL, TN	30	27	-3	12	7	-5
13	MI	31	28	-3	10	7	-3
14	OH	31	27	-4	8	5	-3
15	IN, KY	31	28	-3	10	7	-3
16	WI	29	27	-2	8	7	-1
17	IL	33	28	-5	10	9	-1
18	MO	31	28	-3	6	4	-2
19	AR	29	26	-3	6	4	-2
20	MS	28	24	-4	9	6	-3
21	LA	28	25	-3	11	7	-4
22	TX	32	28	-4	10	7	-3
23	OK	31	27	-4	10	6	-4
24	KS	29	25	-4	7	4	-3
25	IA, MN, MT, ND, NE, SD, WY	30	26	-4	5	5	0
26	NM	31	27	-4	7	8	1
27	CO	30	26	-4	7	6	-1
28	AZ	30	26	-4	12	10	-2
29	NV	32	28	-4	4	4	0
30	OR, WA	30	26	-4	10	9	-1
31	ID, UT	31	28	-3	12	9	-3
32	CA	32	28	-4	6	6	0
33	HI	25	21	-4	9	2	-7
34	AK	24	19	-5	7	6	-1
	Total	1,001	886	-115	283	218	-65

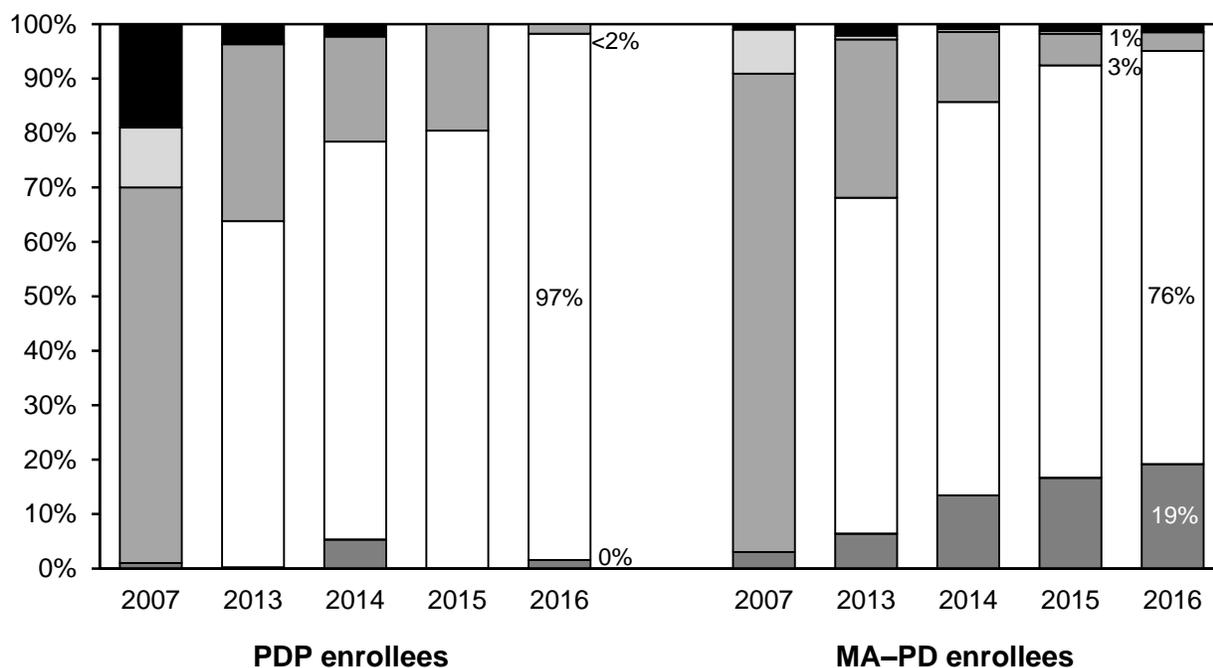
Note: LIS (low-income [drug] subsidy), PDP (prescription drug plan).

*The number of PDPs includes 27 plans in 2015 and 12 plans in 2016 that did not accept new enrollees because of CMS sanctions.

Source: MedPAC based on 2015 and 2016 PDP landscape file provided by CMS.

- The total number of stand-alone PDPs decreased by 11 percent, from 1,001 in 2015 to 886 in 2016. The median number of plans offered in PDP regions decreased to 27 plans from 30 in 2015 (data not shown). In 2016, AK has the fewest stand-alone PDPs, with 19; The PA–WV region has the most, with 29.
- In 2016, 218 PDPs qualified to be premium free to LIS enrollees. With the exception of HI, which has only two plans with no premium for LIS enrollees, and Florida, which has only three, at least four PDPs are available in any given region. However, 12 plans were not accepting new enrollees because of CMS sanctions, reducing the number of premium-free options to 206 PDPs.

Chart 10-9. In 2016, most Part D enrollees are in plans that use a five-tier formulary structure



Most formularies also include a specialty tier

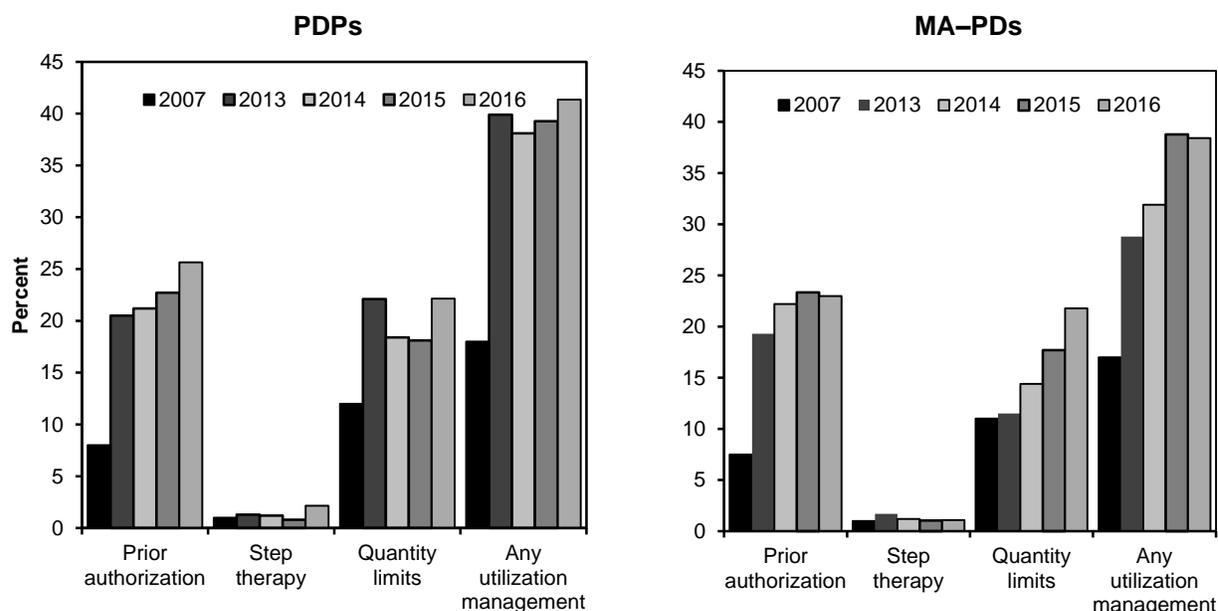
- 25% coinsurance
- Generic and brand-name tiers
- ▨ Generic, preferred brand, and nonpreferred brand-name tiers
- Two generic and two brand-name tiers
- Other tier structure

Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]). Calculations are weighted by enrollment. All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA-PDs exclude demonstration programs, special needs plans, and 1876 cost plans. Components may not sum to totals due to rounding. Over 97 percent of stand-alone PDPs and MA-PDs have a specialty tier in addition to the tiers listed above.

Source: MedPAC-sponsored analysis by NORC/Social and Scientific Systems analysis of formularies submitted to CMS.

- Most Part D enrollees choose plans that distinguish between preferred and nonpreferred brand-name drugs and preferred and nonpreferred generic drugs. In 2016, 97 percent of PDP enrollees are in plans that have two generic and two brand-name tiers, an increase from 80 percent in 2015. About 76 percent of MA-PD enrollees are in such plans in 2016, the same as in 2015.
- For enrollees in PDPs with two generic and two brand-name tiers, the median copay in 2016 is \$39 for a preferred brand-name drug and \$80 for a nonpreferred brand-name drug. The median copay for generic drugs is \$1 for preferred-tier drugs and \$4 for nonpreferred-tier drugs. For MA-PD enrollees, in 2016, the median copay is \$45 for a preferred brand, \$95 for a nonpreferred brand, and \$3 and \$10 for a generic drug on preferred and nonpreferred tiers, respectively. In 2016, some plans are offering a “value” tier with low or no copays.
- Most plans also use a specialty tier for drugs that have a negotiated price of \$600 per month or more. In 2016, median cost sharing for a specialty-tier drug is 29 percent among PDPs and 33 percent among MA-PD plans.

Chart 10-10. In 2016, PDPs and MA–PDs apply some utilization management to about 40 percent of listed drugs



Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Calculations are weighted by enrollment. All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA–PD plans exclude demonstration programs, special needs plans, and 1876 cost plans. Values reflect the share of listed chemical entities that are subject to utilization management, weighted by plan enrollment. “Prior authorization” means that the enrollee must get preapproval from the plan before coverage. “Step therapy” refers to a requirement that the enrollee try specified drugs before being prescribed other drugs in the same therapeutic category. “Quantity limits” means that plans limit the number of doses of a drug available to the enrollee in a given time period.

Source: MedPAC-sponsored analysis by NORC/Social and Scientific Systems of formularies submitted to CMS.

- The number of drugs listed on a plan’s formulary does not necessarily represent beneficiary access to medications. Plans’ processes for nonformulary exceptions, prior authorization (preapproval from plans before coverage), quantity limits (plan limitations on the number of doses of a particular drug covered in a given period), and step therapy requirements (enrollees must try specified drugs before being prescribed other drugs in the same therapeutic category) can affect access to certain drugs.
- In 2016, the average enrollee in a stand-alone PDP faces some form of utilization management for about 41 percent of drugs listed on a plan’s formulary, an increase from 39 percent in 2015. The average MA–PD enrollee faces some form of utilization management for 38 percent of drugs listed on a plan’s formulary, a slight decrease from 39 percent in 2015. Part D plans typically use quantity limits or prior authorization to manage enrollees’ prescription drug use.
- Among the drugs listed on plan formularies for stand-alone PDPs, the share that requires prior authorization increased from 23 percent in 2015 to 26 percent in 2016. Similarly, the share with quantity limits increased from 18 percent in 2015 to 22 percent in 2016. Among MA–PDs, the use of prior authorization remained steady, but use of quantity limits increased from 18 percent of listed drugs in 2015 to 22 percent in 2016. The share of drugs listed on plan formularies that require the use of step therapy remained very low for both stand-alone PDPs and MA–PDs.

Chart 10-11. Characteristics of Part D enrollees, 2013

	All Medicare	Part D	Plan type		Subsidy status	
			PDP	MA–PD	LIS	Non-LIS
Beneficiaries ^a (in millions)	55.1	37.8	24.2	13.7	12.4	25.4
Percent of all Medicare	100%	69%	44%	25%	22%	46%
Gender						
Male	45%	42%	42%	43%	40%	44%
Female	55	58	58	57	60	56
Race/ethnicity						
White, non-Hispanic	76	74	77	69	56	83
African American, non-Hispanic	10	11	11	11	20	7
Hispanic	9	10	7	14	16	7
Asian	3	3	3	3	5	2
Other	2	2	2	2	2	2
Age (years)^b						
<65	19	20	22	16	42	9
65–69	26	23	22	26	15	27
70–74	19	20	19	22	12	23
75–79	14	14	14	15	10	16
80+	22	23	23	21	19	24
Urbanicity^c						
Metropolitan	81	82	78	89	80	83
Micropolitan	10	10	12	7	11	10
Rural	8	8	10	4	9	7

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income [drug] subsidy). Percentages may not sum to 100 due to rounding.

^aFigures for Medicare and Part D include all beneficiaries with at least one month of enrollment in the respective program. A beneficiary is classified as LIS if that individual received Part D's LIS at some point during the year. For individuals who switch plan types during the year, classification into plan types is based on the greater number of months of enrollment.

^bAge as of July 2013.

^cUrbanicity is based on the Office of Management and Budget's core-based statistical areas as of February 2013. A metropolitan area contains a core urban area of 50,000 or more people, and a micropolitan area contains an urban core of at least 10,000 (but fewer than 50,000) people. About 1 percent of Medicare beneficiaries were excluded because of an unidentifiable core-based statistical area designation.

Source: MedPAC analysis of Medicare Part D denominator and Risk Adjustment System files from CMS.

- In 2013, 37.8 million Medicare beneficiaries (69 percent) enrolled in Part D at some point in the year. Most of them (24.2 million) were in stand-alone PDPs, with 13.7 million in MA–PD plans. Over 12 million enrollees received Part D's LIS.
- Compared with the overall Medicare population, Part D enrollees are more likely to be female and non-White. MA–PD enrollees are less likely to be disabled beneficiaries under age 65 and more likely to be Hispanic compared with PDP enrollees; LIS enrollees are more likely to be female, non-White, and disabled beneficiaries under age 65 compared with non-LIS enrollees.
- Patterns of enrollment by urbanicity for Part D enrollees were similar to the overall Medicare population: 82 percent in metropolitan areas, 10 percent in micropolitan areas, and the remaining 8 percent in rural areas.

Chart 10-12. Part D enrollment trends, 2007–2013

	2007	2010	2013	Average annual growth rate		
				2007–2010	2010–2013	2007–2013
Part D enrollment (in millions)*						
Total	26.1	29.7	37.8	4.4%	8.4%	6.4%
By plan type						
PDP	18.3	18.9	24.2	1.1	8.5	4.7
MA–PD	7.8	10.6	13.7	10.9	8.8	9.9
By subsidy status						
LIS	10.4	11.3	12.4	2.7	3.1	2.9
Non-LIS	15.7	18.4	25.4	5.5	11.4	8.4
By race/ethnicity						
White, non-Hispanic	19.4	22.0	28.1	4.3	8.5	6.4
African American, non-Hispanic	2.9	3.3	4.2	4.1	8.0	6.0
Hispanic	2.5	3.0	3.6	5.8	7.0	6.4
Other	1.3	1.4	1.9	3.9	10.6	7.2
By age (years)**						
<65	5.5	6.3	7.5	4.7	6.2	5.5
65–69	5.4	6.6	8.8	6.5	10.5	8.5
70–79	8.8	9.9	13.0	3.8	9.5	6.6
80+	6.4	7.1	8.5	3.2	6.5	4.8
Part D enrollment (in percent)						
Total	100%	100%	100%			
By plan type						
PDP	70	64	64			
MA–PD	30	36	36			
By subsidy status						
LIS	40	38	33			
Non-LIS	60	62	67			
By race/ethnicity						
White, non-Hispanic	74	74	74			
African American, non-Hispanic	11	11	11			
Hispanic	10	10	10			
Other	5	5	5			
By age (years)**						
<65	21	21	20			
65–69	21	22	23			
70–79	34	33	34			
80+	25	24	23			

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income [drug] subsidy). A beneficiary is classified as LIS if that individual received Part D's LIS at some point during the year. If a beneficiary was enrolled in both a PDP and an MA–PD plan during the year, that individual was classified into the type of plan with the greater number of months of enrollment. Numbers may not sum to totals due to rounding.

*Figures include all beneficiaries with at least one month of enrollment.

**Age figures are as of July of the respective year.

Source: MedPAC analysis of Medicare Part D denominator file from CMS.

(Chart continued next page)

Chart 10-12. Part D enrollment trends, 2007–2013 (continued)

- Part D enrollment grew faster between 2010 and 2013 (average annual growth rate (AAGR) of 8.4 percent) than between 2007 and 2010 (AAGR of 4.4 percent). Between 2010 and 2013, the largest growth in enrollment was observed for beneficiaries ages 65 to 69 (10.5 percent annually, on average), followed by beneficiaries ages 70 to 79 (9.5 percent annually, on average).
- While MA–PD plan enrollment grew faster between 2007 and 2010 (nearly 11 percent annually compared with about 1 percent annually, on average, for PDP plan enrollment), the growth rates were comparable between MA–PDs and PDPs between 2010 and 2013 (AAGR of 8.8 percent and 8.5 percent, respectively).
- The number of enrollees receiving the LIS grew modestly between 2007 and 2010 at 2.7 percent per year. Higher growth rates (3.1 percent) were observed between 2010 and 2013. The average annual growth in the number of non-LIS enrollees was also greater between 2010 and 2013 (11.4 percent) than it was between 2007 and 2010 (5.5 percent). Faster enrollment growth among non-LIS enrollees is partly attributable to the recent growth in employer group waiver plans that shifted beneficiaries into Part D plans from employer plans that had previously received Medicare’s retiree drug subsidy (RDS) (see Chart 10-3 for information on the RDS).

Chart 10-13. Part D enrollment by region, 2013

PDP region	State(s)	Percent of Medicare enrollment		Percent of Part D enrollment			
		Part D	RDS	Plan type		Subsidy status	
				PDP	MA-PD	LIS	Non-LIS
1	ME, NH	63%	7%	82%	18%	42%	58%
2	CT, MA, RI, VT	67	11	71	29	39	61
3	NY	74	7	57	43	38	62
4	NJ	69	7	80	20	27	73
5	DE, DC, MD	55	10	86	14	36	64
6	PA, WV	72	6	57	43	30	70
7	VA	59	5	77	23	32	68
8	NC	71	5	74	26	34	66
9	SC	61	11	69	31	38	62
10	GA	68	5	63	37	38	62
11	FL	71	6	51	49	32	68
12	AL, TN	71	4	64	36	39	61
13	MI	74	7	78	22	27	73
14	OH	75	5	67	33	27	73
15	IN, KY	71	5	75	25	33	67
16	WI	67	6	62	38	27	73
17	IL	63	13	86	14	34	66
18	MO	70	5	67	33	30	70
19	AR	66	5	75	25	41	59
20	MS	69	2	83	17	49	51
21	LA	70	6	64	36	42	58
22	TX	67	6	68	32	38	62
23	OK	65	3	78	22	34	66
24	KS	68	3	83	17	26	74
25	IA, MN, MT, NE, ND, SD, WY	70	4	74	26	25	75
26	NM	67	4	58	42	36	64
27	CO	64	9	50	50	27	73
28	AZ	68	6	48	52	28	72
29	NV	64	6	52	48	26	74
30	OR, WA	64	7	54	46	29	71
31	ID, UT	63	6	54	46	25	75
32	CA	75	5	51	49	36	64
33	HI	70	2	37	63	27	73
34	AK	41	24	98	2	57	43
	Mean	69	6	64	36	33	67
	Minimum	41	2	37	2	25	43
	Maximum	75	24	98	63	57	75

Note: PDP (prescription drug plan), RDS (retiree drug subsidy), MA-PD (Medicare Advantage-Prescription Drug [plan]), LIS (low-income [drug] subsidy). Definition of regions is based on PDP regions used in Part D.

Source: MedPAC analysis of Part D enrollment data from CMS.

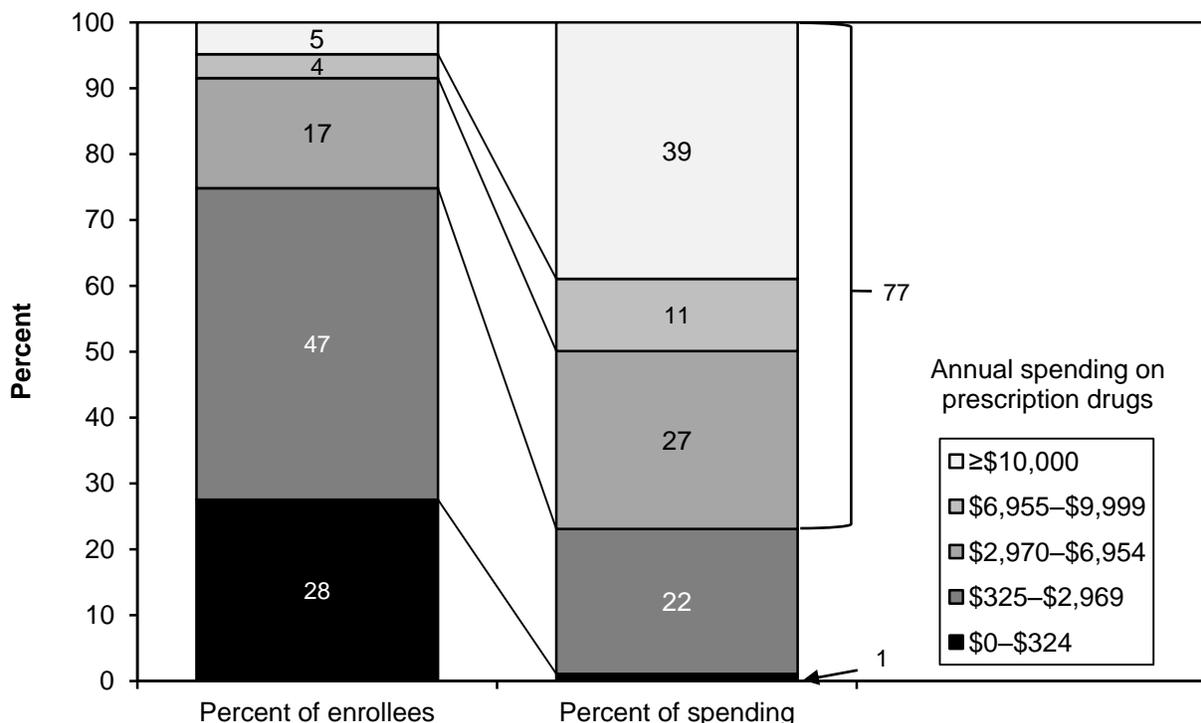
- Among Part D regions in 2013, all but three regions (Region 5 (DE, DC, MD), Region 7 (VA), and Region 34 (AK)) had over 60 percent of all Medicare beneficiaries enrolled in Part D. Beneficiaries were less likely to enroll in Part D in regions where employer-sponsored drug coverage continues to be available. For example, in Region 34, the share of Medicare beneficiaries enrolled in Part D was 41 percent, while the share of beneficiaries enrolled in employer-sponsored plans that received the RDS was 24 percent. In other regions (Region 5 and Region 7), many beneficiaries likely received their drug coverage through the Federal Employees Health Benefits Program, which does not receive the RDS.

(Chart continued next page)

Chart 10-13. Part D enrollment by region, 2013 (continued)

- In 2013, all regions except Region 34 experienced a decrease in the number of beneficiaries who received the RDS (data not shown). The shift was likely motivated by changes made by the Patient Protection and Affordable Care Act of 2010 that increased the generosity of Part D coverage and altered the tax treatment of drug expenses covered by the RDS.
- Wide variation was seen in the shares of Part D beneficiaries who enrolled in PDPs and MA–PD plans across PDP regions. The pattern of MA–PD enrollment is generally consistent with enrollment in Medicare Advantage plans.
- The share of Part D enrollees receiving the LIS ranged from 25 percent in Region 25 (IA, MN, MT, NE, ND, SD, and WY) and in Region 31 (ID and UT) to 57 percent in Region 34 (AK). In 20 of the 34 PDP regions, LIS enrollees accounted for 30 percent to 50 percent of enrollment. In one region (Region 34 (AK)), LIS enrollees accounted for more than half of Part D enrollment.

Chart 10-14. The majority of Part D spending was incurred by only one-quarter of all Part D enrollees, 2013



Note: “Spending” (gross) reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Annual spending cuts used for this analysis generally correspond to the parameters of the defined standard benefit. In 2013, an individual without Part D’s low-income subsidy or other sources of supplemental coverage would have reached the catastrophic phase of the benefit at \$6,954.52 in total drug spending, assuming that expenses for brand-name drugs accounted for 85.6 percent of total drug spending in the coverage gap. Components may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- Medicare Part D spending is concentrated in a subset of beneficiaries. In 2013, about 25 percent of Part D enrollees had annual spending of \$2,970 or more, at which point enrollees were responsible for a higher proportion of the cost of the drug until their spending reached \$6,955 under the defined standard benefit. These beneficiaries accounted for 77 percent of total Part D spending.
- The costliest 8 percent (shown as 9 percent in the chart due to rounding) of beneficiaries, those with drug spending above the catastrophic threshold under the defined standard benefit, accounted for 50 percent of total Part D spending. Sixty-five percent of beneficiaries with the highest spending received Part D’s low-income [drug] subsidy (see Chart 10-15). Spending on prescription drugs is less concentrated than Medicare Part A and Part B spending. In 2012, the costliest 5 percent of beneficiaries accounted for 41 percent of annual Medicare fee-for-service (FFS) spending, and the costliest quartile accounted for 83 percent of Medicare FFS spending.
- In 2013, the share of Part D spending accounted for by the costliest 5 percent of enrollees increased to 39 percent from 35 percent in 2012.

Chart 10-15. Characteristics of Part D enrollees, by spending levels, 2013

	Annual drug spending		
	<\$2,970	\$2,970–\$6,954	≥\$6,955
Sex			
Male	43%	40%	41%
Female	57	60	59
Race/ethnicity			
White, non-Hispanic	74	75	71
African American, non-Hispanic	11	11	14
Hispanic	10	9	10
Other	5	5	6
Age (years)			
<65	17	20	40
65–69	25	19	17
70–74	20	19	15
75–80	15	16	12
80+	23	26	17
LIS status*			
LIS	27	41	65
Non-LIS	73	59	35
Plan type**			
PDP	61	70	77
MA–PD	39	30	23

Note: LIS (low-income [drug] subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). “Spending” (gross) reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. A small number of beneficiaries were excluded from the analysis because of missing data. Percentages may not sum to 100 due to rounding.
 *A beneficiary was assigned LIS status if that individual received Part D’s LIS at some point during the year.
 **If a beneficiary was enrolled in both a PDP and an MA–PD plan during the year, that individual was classified in the type of plan with the greater number of months of enrollment.

Source: MedPAC analysis of Medicare Part D prescription drug event data and Part D denominator file from CMS.

- In 2013, Part D enrollees with annual drug spending between \$2,970 and \$6,954 and those with spending at or above \$6,955 were more likely to be female than enrollees with annual spending below \$2,970 (60 percent and 59 percent, respectively, compared with 57 percent).
- Part D enrollees with annual spending at or above \$6,955 were more likely to be non-White; disabled, under age 65; and receiving the LIS compared with those with annual spending below \$2,970.
- Most Part D enrollees with spending at or above \$6,955 were enrolled in stand-alone PDPs (77 percent) compared with MA–PD plans (23 percent). In contrast, beneficiaries with annual spending below \$2,970 were more likely to be in MA–PDs compared with those with higher annual spending (39 percent compared with 23 percent). This finding reflects the fact that most LIS enrollees are more costly on average and are in PDPs.

Chart 10-16. Part D spending and use per enrollee, 2013

	Part D	Plan type		LIS status	
		PDP	MA–PD	LIS	Non-LIS
Total gross spending (billions)*	\$103.7	\$74.8	\$28.9	\$51.6	\$52.1
Total number of prescriptions (millions)	1,910	1,262	647	747	1,163
Average spending per prescription	\$54	\$59	\$45	\$69	\$45
Per enrollee per month					
Total spending	\$242	\$275	\$185	\$377	\$179
Out-of-pocket spending	32	33	30	7	44
Manufacturer gap discount	6	7	5	N/A	9
Plan liability	149	166	117	227	112
Low-income cost-sharing subsidy	46	57	27	143	N/A
Number of prescriptions	4.5	4.6	4.1	5.4	4.0

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income [drug] subsidy), N/A (not applicable). “Total gross spending” reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Part D prescription drug event (PDE) records are classified into plan types based on the contract identification on each record. For purposes of classifying the PDE records by LIS status, monthly LIS eligibility information in Part D’s denominator file was used. Estimates are sensitive to the method used to classify PDE records to each plan type and LIS status. “Out-of-pocket spending” includes all payments that count toward the annual out-of-pocket (OOP) spending threshold. “Plan liability” includes plan payments for drugs covered by both basic and supplemental (enhanced) benefits. In addition to the major categories shown in the chart, total spending includes amounts paid by other relatively minor payers such as group health plans, workers’ compensation, and charities. “Number of prescriptions” is standardized to a 30-day supply.
*Total gross spending includes over \$2.7 million in manufacturer discounts for brand-name drugs filled by non-LIS enrollees during the coverage gap.

Source: MedPAC analysis of Medicare Part D PDE data and denominator file from CMS.

- In 2013, gross spending on drugs for the Part D program totaled \$103.7 billion, with about 72 percent (\$74.8 billion) accounted for by Medicare beneficiaries enrolled in stand-alone PDPs. Part D enrollees receiving the LIS accounted for about 50 percent (\$51.6 billion) of the total. Manufacturer discounts for brand-name drugs filled by non-LIS enrollees while they were in the coverage gap accounted for 2.6 percent of the total, or about 5 percent of the gross spending by non-LIS enrollees (data not shown).
- The number of prescriptions filled by Part D enrollees totaled 1.910 billion, with about two-thirds (1.262 billion) accounted for by PDP enrollees. The 33 percent of enrollees who received the LIS accounted for about 39 percent (0.747 billion) of the total number of prescriptions filled.
- In 2013, Part D enrollees filled 4.5 prescriptions at \$242 per month on average, an increase from \$235 per month (for 4.3 prescriptions) in 2012 (2012 data not shown). The average monthly plan liability for PDP enrollees (\$166) was considerably higher than that of MA–PD enrollees (\$117), while average monthly OOP spending was similar for enrollees in both types of plans (\$33 vs. \$30, respectively). The average monthly low-income cost-sharing subsidy was much higher for PDP enrollees (\$57) compared with MA–PD enrollees (\$27).
- Average monthly spending per enrollee for an LIS enrollee (\$377) was more than double that of a non-LIS enrollee (\$179), while the average number of prescriptions filled per month by an LIS enrollee was 5.4 compared with 4.0 for a non-LIS enrollee. LIS enrollees had much lower OOP spending, on average, than non-LIS enrollees (\$7 vs. \$44). Part D’s LIS pays for most of the cost sharing for LIS enrollees, averaging \$143 per month in 2013.

Chart 10-17. Trends in Part D spending and use per enrollee, 2007–2013

	Average spending and number of prescriptions						Average annual growth rate, 2007–2013	
	2007	2009	2010	2011	2012	2013	Number	Percent
Average spending								
All Part D	\$212	\$228	\$231	\$239	\$235	\$242	\$5	2.2%
By LIS status								
LIS	301	339	348	364	362	377	13	3.8
Non-LIS	156	163	163	167	167	179	4	2.3
By plan type								
PDP	239	260	265	274	270	275	6	2.4
MA–PD	151	169	172	178	178	185	6	3.5
Average number of prescriptions*								
All Part D	3.9	4.1	4.2	4.3	4.3	4.5	0.1	2.2%
By LIS status								
LIS	4.6	5.0	5.1	5.1	5.2	5.4	0.1	2.9
Non-LIS	3.4	3.6	3.7	3.8	3.8	4.0	0.1	2.7
By plan type								
PDP	4.1	4.4	4.4	4.5	4.5	4.6	0.1	2.0
MA–PD	3.4	3.7	3.8	3.9	4.0	4.1	0.1	3.2

Note: LIS (low-income [drug] subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). “Spending” (gross) reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Part D prescription drug event (PDE) records are classified into plan types based on the contract identification on each record. For purposes of classifying the PDE records by LIS status, monthly LIS eligibility information in Part D’s denominator file was used. Estimates are sensitive to the method used to classify PDE records to each plan type and LIS status. Numbers may not sum to totals due to rounding.
*Number of prescriptions is standardized to a 30-day supply.

Source: MedPAC analysis of Medicare Part D PDE data and denominator file from CMS.

- Between 2007 and 2013, the average per capita spending for Part D–covered drugs grew at an average annual rate of 2.2 percent, or by about 14 percent cumulatively. Growth in average per capita spending has fluctuated over the years, ranging from a negative 1.5 percent growth between 2011 and 2012 to a growth of over 4 percent during the first few years of the program.
- Spending for non-LIS enrollees remained relatively flat compared with LIS enrollees (average annual growth rate of 2.3 percent compared with 3.8 percent) during the 2007 to 2013 period, resulting in a larger difference in per capita spending between the two groups—from \$145 in 2007 to nearly \$200 per member per month in 2013. The growth in the number of prescriptions filled by LIS and non-LIS enrollees was comparable during this period.
- The growth in per capita drug spending among MA–PD enrollees exceeded that of PDP enrollees during the 2007 to 2013 period (3.5 percent compared with 2.4 percent), but the average growth was the same for both PDP and MA–PD enrollees in terms of the dollar increase (\$6), and the average per capita spending for MA–PD enrollees continued to be below that of PDP enrollees by about \$90.

Chart 10-18. Top 15 therapeutic classes of drugs covered under Part D, by spending and volume, 2013

Top 15 therapeutic classes by spending			Top 15 therapeutic classes by volume		
	Dollars			Prescriptions	
	Billions	Percent		Millions	Percent
Diabetic therapy	\$11.0	10.6%	Antihypertensive therapy agents	197.3	10.3%
Asthma/COPD therapy agents	7.6	7.3	Antihyperlipidemics	190.2	10.0
Antihyperlipidemics	7.5	7.2	Beta adrenergic blockers	119.5	6.3
Antipsychotics	5.8	5.5	Diabetic therapy agents	117.2	6.1
Antihypertensive therapy agents	5.6	5.4	Antidepressants	107.2	5.6
Peptic ulcer therapy	4.4	4.2	Peptic ulcer therapy	97.2	5.1
Antivirals	4.3	4.1	Diuretics	96.4	5.0
Antidepressants	3.8	3.7	Analgesics (narcotic)	82.6	4.3
Analgesics (narcotic)	3.5	3.4	Calcium channel blockers	82.3	4.3
Analgesic (anti-inflammatory/antipyretic, non-narcotic)	3.5	3.4	Thyroid therapy	70.6	3.7
Anticonvulsant	3.2	3.1	Anticonvulsant	66.0	3.5
Antineoplastic enzyme inhibitors	2.6	2.5	Asthma/COPD therapy agents	51.3	2.7
Cognitive disorder therapy (antidementia)	2.5	2.4	Antibacterial agents	50.0	2.6
Calcium and bone metabolism regulators	2.0	1.9	Antianxiety agents	35.2	1.8
Anticoagulants	1.9	1.8	Analgesic (anti-inflammatory/antipyretic, non-narcotic)	34.8	1.8
Subtotal, top 15 classes	69.1	66.6	Subtotal, top 15 classes	1,397.9	73.2
Total, all classes	103.7	100.0	Total, all classes	1,909.6	100.0

Note: COPD (chronic obstructive pulmonary disease). "Spending" (gross) reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. "Volume" is the number of prescriptions, standardized to a 30-day supply. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System 1.0. Components may not sum to totals due to rounding.

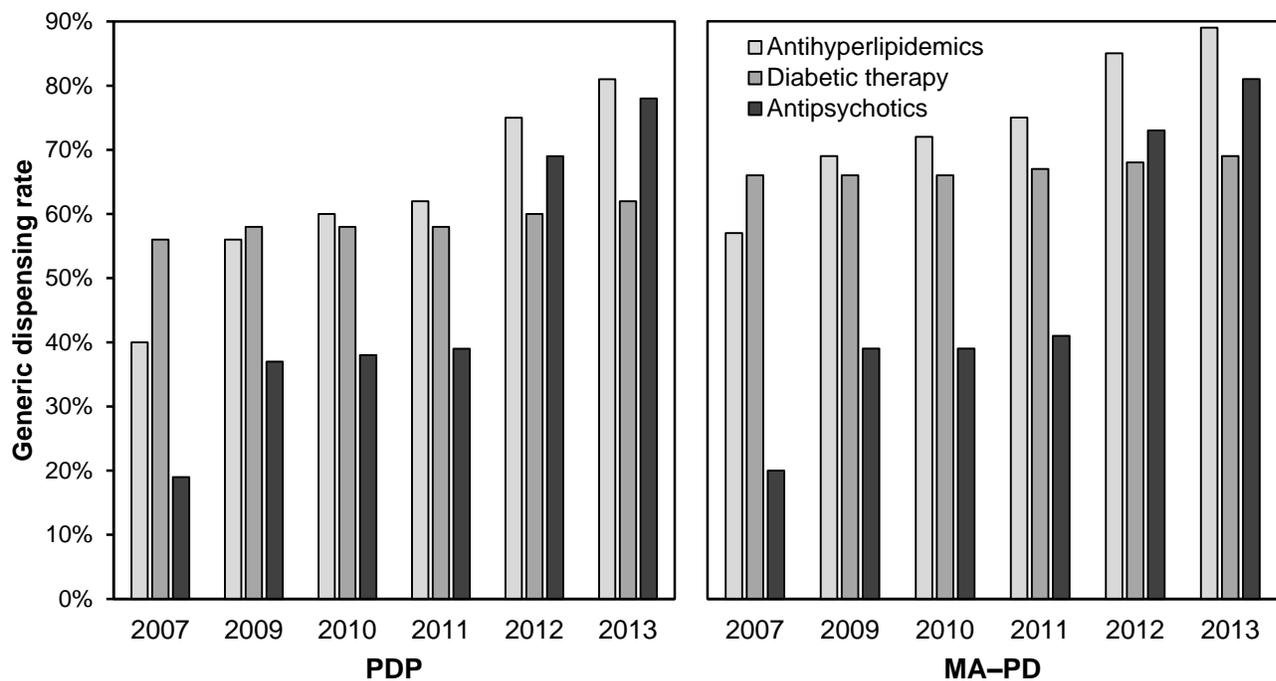
Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- The list of the top 15 therapeutic classes has been stable since 2007, with the majority of therapeutic classes on the list appearing every year. In 2013, spending on prescription drugs covered by Part D plans totaled \$103.7 billion. The top 15 therapeutic classes by spending accounted for about two-thirds of the total. About 1.9 billion prescriptions were dispensed in 2013, with the top 15 therapeutic classes by volume accounting for about 73 percent of the total.
- In 2013, spending on drugs to treat diabetes totaled \$11 billion, an increase of about 26 percent from \$8.7 billion in 2012, while the number of prescriptions filled totaled 117.2 million, an increase of about 14 percent from 102.6 million in 2012 (2012 data not shown). Over 10 percent of the growth in spending on drugs to treat diabetes was due to the increase in the average price per standardized 30-day prescription.
- Antianxiety agents appeared on the top 15 list by volume for the first time since 2007. The number of prescriptions for antianxiety agents totaled 35.2 million in 2013 (up from 8.5 million in 2012) (2012 data not shown). The increase in the use of antianxiety agents reflects the addition of benzodiazepines to the list of Part D–covered drugs beginning in 2013.

Chart 10-18. Top 15 therapeutic classes of drugs covered under Part D, by spending and volume, 2013 (continued)

- Nine therapeutic classes are among the top 15 in both spending and volume. Central nervous system agents (antipsychotics, anticonvulsants, and antidepressants) and cardiovascular agents (antihyperlipidemics and antihypertensive therapy agents) dominate the list by spending, each accounting for slightly less than one-fifth of spending, while cardiovascular agents (antihyperlipidemics, antihypertensive therapy agents, beta-adrenergic blockers, calcium channel blockers, and diuretics) dominate the list by volume, accounting for about 50 percent of the prescriptions in the top 15 therapeutic classes.

Chart 10-19. Generic dispensing rate for selected therapeutic classes, by plan type, 2007–2013

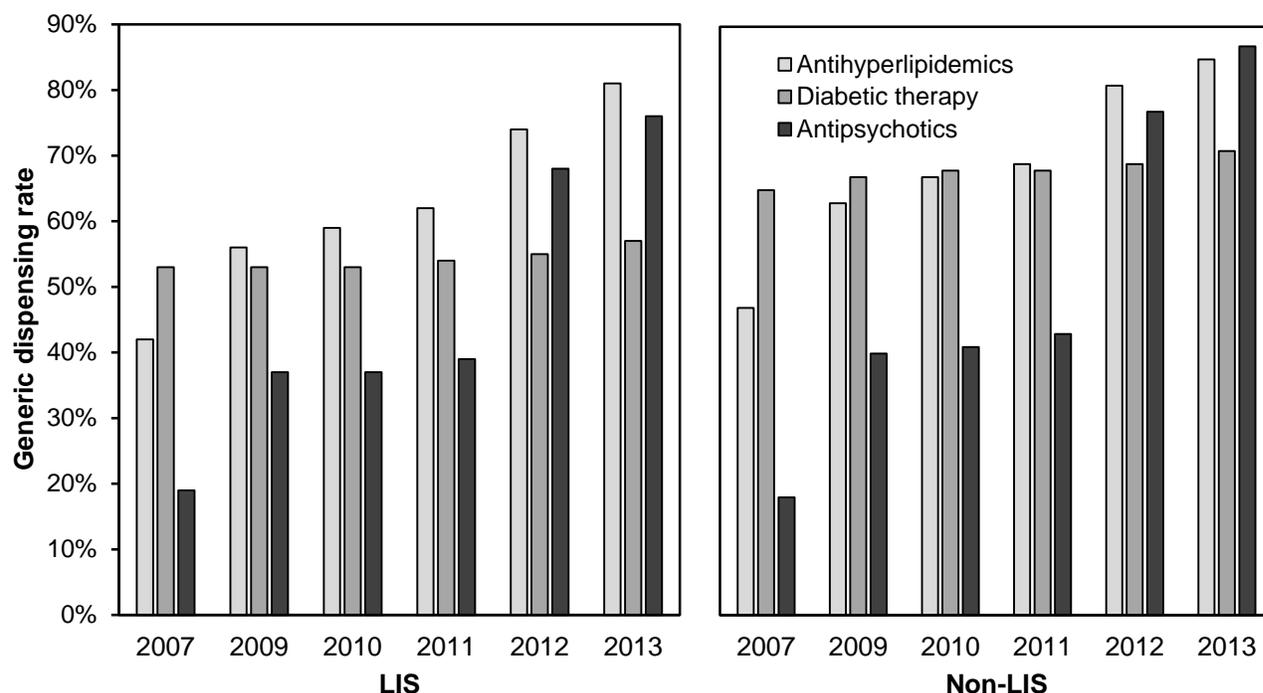


Note: PDP (prescription drug plan), MA-PD (Medicare Advantage-Prescription Drug [plan]). Prescriptions are standardized to a 30-day supply. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System 1.0. "Generic dispensing rate" is defined as the proportion of generic prescriptions dispensed within a therapeutic class. Part D prescription drug event records are classified as PDP or MA-PD records based on the contract identification on each record.

Source: MedPAC analysis of Medicare Part D prescription drug event data from CMS.

- The share of prescriptions that are for generic drugs (generic dispensing rate, or GDR) has increased steadily over the years, from 61 percent in 2007 to 84 percent in 2013 across all therapeutic classes (data not shown).
- The GDR in a given class depends, in large part, on the availability of generic drugs in the class. For example, the GDR for antipsychotics was among the lowest within the top 15 therapeutic classes until some of the key drugs came off patent and generic versions became available in 2011 and 2012. Other factors such as prescribing behavior and patients' medication needs and/or preferences can also affect the GDR.
- Between 2007 and 2013, GDRs for PDP enrollees were generally lower than those of MA-PD enrollees for most of the top 15 therapeutic classes. For example, GDRs for diabetic therapy among the MA-PD enrollees exceeded that of PDP enrollees by between 7 percentage points and 10 percentage points during this period. The difference in GDRs for antihyperlipidemics between MA-PD enrollees and PDP enrollees decreased during this period (from 17 percentage points in 2007 to about 8 percentage points in 2013), but antihyperlipidemics are still one of the classes with the largest difference in GDRs between PDPs and MA-PDs. Some of the difference in GDRs reflects the fact that, relative to MA-PDs, PDPs have a higher proportion of LIS enrollees, who are less likely to take a generic medication in a given therapeutic class (see Chart 10-20).

Chart 10-20. Generic dispensing rate for selected therapeutic classes, by LIS status, 2007–2013



Note: LIS (low-income [drug] subsidy). Prescriptions are standardized to a 30-day supply. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System 1.0. “Generic dispensing rate” is defined as the proportion of generic prescriptions dispensed within a therapeutic class. Part D prescription drug event (PDE) records are classified as LIS or non-LIS records based on monthly LIS eligibility information in Part D’s denominator file. Estimates are sensitive to the method used to classify PDE records as LIS or non-LIS.

Source: MedPAC analysis of Medicare Part D prescription drug event data and Part D denominator file from CMS.

- Between 2007 and 2013, the share of prescriptions that are for generic drugs (generic dispensing rate, or GDR) has increased for both LIS and non-LIS enrollees. However, LIS enrollees have had a GDR consistently 4 percentage points to 5 percentage points lower than non-LIS enrollees in most of years after 2007.
- The difference in GDRs for antihyperlipidemics between LIS and non-LIS enrollees remained stable at around 7 percentage points to 8 percentage points for most of the years between 2007 to 2012, and decreased to 4 percentage points in 2013.
- Other notable differences in GDRs between LIS and non-LIS enrollees include a large and persistent difference of around 14 percentage points to 15 percentage points for diabetic therapy and a 9 percentage point and 11 percentage point difference in GDRs observed in 2012 and 2013, respectively, for antipsychotics (compared with a difference of less than 4 percentage points before 2012) after generic versions became available for some of the key drugs in the class. Multiple factors likely contribute to the difference in GDRs.

Chart 10-21. Drug spending and use and the characteristics of beneficiaries filling the most prescriptions, 2013

	Beneficiaries in the top 5 percent*		All Part D
		As a percent of Part D	
Number of beneficiaries (in millions)	1.8	5%	37.8
Aggregate spending and use			
Gross spending (in billions)	\$19.7	19	\$103.7
Number of prescriptions (in millions)	264	19	1,372
Average spending per prescription	\$75		\$76
Per enrollee per year			
Gross spending	\$11,149		\$2,906
Out-of-pocket spending	\$487		\$387
Number of prescriptions	149		38
Demographic characteristics			
Percent female	66%		58%
Percent White	72		74
Percent LIS	78		33
Percent PDP	76		64

Note: LIS (low-income [drug] subsidy), PDP (prescription drug plan). "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. "Out-of-pocket spending" includes all payments that count toward the annual out-of-pocket spending threshold. "Number of prescriptions" is based on counts of prescription drug events (PDEs) (not standardized to a 30-day supply).

*"Beneficiaries in the top 5 percent" is based on the volume of prescriptions filled by those who filled at least one prescription in 2013. Because roughly 7 percent of Part D enrollees did not fill any prescriptions for a Part D-covered drug in 2013, the "top 5 percent" translates to about 4.7 percent of all Part D enrollees. The figures reported in the table include claims for over 200 beneficiaries who did not have a record of Part D enrollment in the denominator file and claims that were missing beneficiary identification information. These claims accounted for about 34,000 prescriptions at a gross cost of over \$2 million.

Source: MedPAC analysis of Medicare Part D PDE data and denominator file from CMS.

- In 2013, Part D enrollees in the top 5 percent (1.8 million), based on the number of prescriptions filled, accounted for \$19.7 billion in gross spending (19 percent of total gross spending) for drugs covered under the Part D program. The number of prescriptions filled by enrollees in the top 5 percent totaled 264 million, or 19 percent of all prescriptions filled under the Part D program.
- In 2013, Part D enrollees in the top 5 percent each filled a total of 149 prescriptions at a gross cost of \$11,149, on average, compared with an average of 38 prescriptions each at a gross cost of \$2,906 for all Part D enrollees. Compared with the difference in gross spending and the number of prescriptions filled, the difference in beneficiary out-of-pocket spending between enrollees in the top 5 percent and all Part D enrollees was much smaller (\$487 compared with \$387).
- Compared with the overall Part D population, enrollees in the top 5 percent were more likely to be female and non-White. Nearly 80 percent of the enrollees in the top 5 percent received the low-income subsidy compared with 33 percent for all Part D enrollees, and 76 percent were enrolled in a stand-alone prescription drug plan compared with 64 percent for all Part D enrollees.

Chart 10-22. Part D spending and use, 2013

	Part D	Plan type	
		PDP	MA–PD
Total gross spending (billions)	\$103.6	\$72.3	\$28.6
Total number of prescriptions (millions)	1,368	900	440
Average cost per prescription	\$76	\$80	\$65
Total gross spending by specialty			
Primary care providers*	\$60.3	\$41.5	\$17.5
Specialty and other providers	\$43.3	\$30.8	\$11.2
Total number of prescriptions by specialty			
Primary care providers*	974.0	639.4	319.8
Specialty and other providers	394.2	260.7	119.8
Average cost per prescription			
Primary care providers*	\$61.95	\$64.96	\$54.58
Specialty and other providers	\$109.79	\$117.97	\$93.20

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). “Gross spending” reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Part D prescription drug event (PDE) records are classified into plan types based on the contract identification on each record. Numbers may not sum to totals due to lack of information about plan type for some observations. “Number of prescriptions” is a count of prescription drug events and is not adjusted for the size (number of days’ supply) of the prescriptions. As such, they are not comparable with the 2013 prescription counts shown in Chart 10-16 through Chart 10-21.

*The definition of “primary care” used here is based on the definition used for the Primary Care Incentive Payment Program and includes practitioners who have a primary Medicare specialty designation of family practice, internal medicine, pediatrics, geriatrics, nurse practitioner and clinical nurse specialist, or physician assistant.

Source: MedPAC analysis of Medicare Part D prescriber-level public use file from CMS.

- In 2013, gross spending on drugs for the Part D program totaled \$103.6 billion, with about 70 percent (\$72.3 billion) accounted for by Medicare beneficiaries enrolled in PDPs, according to CMS’s Part D claims data summarized at the prescriber level. The number of prescriptions (not adjusted for the number of days’ supply) filled by Part D enrollees totaled about 1.37 billion, with about two-thirds (900 million) accounted for by PDP enrollees. The cost per prescription dispensed averaged \$76 across all Part D enrollees. The average cost per prescription is higher among PDP enrollees (\$80) compared with that of MA–PD enrollees (\$65).
- Prescriptions written by primary care providers accounted for about 58 percent (\$60.3 billion) of the gross spending and 71 percent (974 million) of prescriptions dispensed under the Part D program. The shares of spending and prescriptions written by primary care providers were lower in PDPs (about 57 percent of gross spending and about 71 percent of prescriptions) than in MA–PDs (about 61 percent of gross spending and about 73 percent of prescriptions).
- The average cost per prescription dispensed was lower among primary care providers (about \$62) compared with specialty and other providers (about \$110). The cost per prescription dispensed for PDP enrollees was higher than that of MA–PD enrollees regardless of the provider type (primary care vs. specialty and others).

Chart 10-23. Part D patterns of prescribing by provider type, 2013

	Part D	Provider type	
		Primary care*	Specialty/others
Number of individual prescribers (thousands)	1,043	420	623
Percent of all individual prescribers		40%	60%
Average beneficiary (patient) count	143	184	115
Average per beneficiary			
Gross spending	\$592	\$690	\$523
Number of prescriptions	6.7	9.8	4.5
Prescribers in the top 1 percent based on number of prescriptions filled per beneficiary			
Number of individual prescribers	9,054	7,490	1,564
Percent of all individual prescribers		83%	17%
Total gross spending (billions)	\$8.0	\$6.8	\$1.2
Percent of total gross spending	8%	11%	3%
Total number of prescriptions (millions)	131	115	16
Percent of all prescriptions filled	10%	12%	4%
Average per beneficiary			
Gross spending	\$3,344	\$3,049	\$4,753
Number of prescriptions	44	44	45

Note: "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Numbers may not sum to totals due to rounding. "Number of prescriptions" is a count of prescription drug events and is not adjusted for the size (number of days' supply) of the prescriptions. As such, they are not comparable to the 2013 prescription counts shown in Chart 10-16 through Chart 10-21.

*The definition of "primary care" used here is based on the definition used for the Primary Care Incentive Payment Program and includes practitioners who have a primary Medicare specialty designation of family practice, internal medicine, pediatrics, geriatrics, nurse practitioner and clinical nurse specialist, or physician assistant.

Source: MedPAC analysis of Medicare Part D prescriber-level public use file from CMS.

- In 2013, about 1 million individual providers wrote prescriptions for Medicare beneficiaries that were filled under Part D. Of those, about 40 percent were primary care providers and 60 percent were specialty or other types of providers.
- The average count of (Medicare-only) beneficiaries (patients) was higher among primary care providers compared with specialty and other types of providers—184 beneficiaries versus 115 beneficiaries.

(Chart continued next page)

Chart 10-23. Part D patterns of prescribing by provider type, 2013 (continued)

- On a per beneficiary basis, average gross spending for Part D prescriptions was higher for prescriptions written by primary care providers (\$690) compared with the average for specialty and other providers (\$523). Primary care providers also wrote more prescriptions per beneficiary, on average, than specialty and other providers: 9.8 compared with 4.5.
- More than 9,000 prescribers were among the top 1 percent of all prescribers, as ranked by the average number of Part D prescriptions filled per beneficiary in 2013. Of those prescribers, 83 percent were primary care providers and 17 percent were specialty and other providers.
- The top 1 percent of prescribers accounted for 8 percent of total gross spending and 10 percent of all prescriptions filled. Among primary care prescribers, results were more concentrated: The top 1 percent of prescribers accounted for 11 percent of gross spending and 12 percent of all prescriptions.
- Among the prescriptions that were written by prescribers in the top 1 percent of all prescribers in 2013, per beneficiary Part D spending averaged more than \$3,000 for a total of 44 to 45 prescriptions filled.

Chart 10-24. Part D patterns of prescribing for selected specialties, 2013

	Number of individual Part D prescribers (thousands)	Share of all Part D prescribers (percent)	Average per beneficiary	
			Gross spending (in dollars)	Number of prescriptions
All Part D	1,042.6	100%	\$592	6.7
All specialty/others	622.6	60	523	4.5
Selected specialties:				
Cardiology	22.7	4	597	9.3
Psychiatry	25.9	4	1,417	13.4
Neurology	13.1	2	2,213	7.9
Nephrology	7.9	1	1,315	10.0
Infectious disease	4.9	1	4,515	10.1
Endocrinology	5.3	1	1,460	8.9

Note: "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing), but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. "Number of prescriptions" is a count of prescription drug events and is not adjusted for the size (number of days' supply) of the prescriptions. As such, they are not comparable with the 2013 prescription counts shown in Chart 10-16 through Chart 10-21.

Source: MedPAC analysis of Medicare Part D prescriber-level public use file from CMS.

- Cardiologists and psychiatrists were among the most numerous types of specialty care prescribers, each making up 4 percent of all individual Part D prescribers in 2013. An additional 2 percent of all Part D prescribers had a neurology specialty.
- Cardiologists wrote an average of 9.3 prescriptions per beneficiary for a combined \$597 in average gross spending. That average number of prescriptions is considerably higher than the overall Part D average of 6.7 per beneficiary. However, average gross spending per beneficiary was about the same for cardiologists as for all Part D prescribers: \$597 compared with \$592, which reflects the widespread availability of generic cardiology medications.
- By comparison, other specialties had much higher Part D gross spending per beneficiary. Infectious disease specialists had the highest spending per beneficiary at \$4,515, followed by neurologists at \$2,213. Psychiatrists had the highest average number of prescriptions filled per beneficiary, at 13.4 compared with the overall average of 6.7.