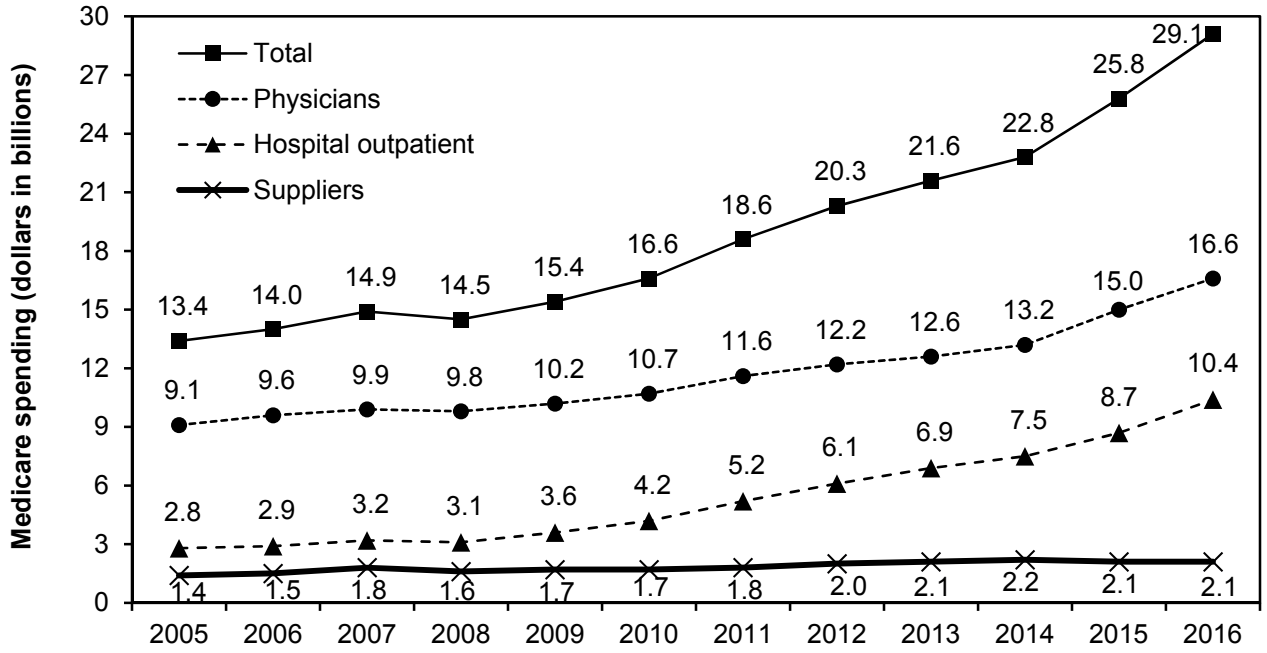
SECTION 10

Prescription drugs

Chart 10-1. Medicare spending for Part B drugs furnished by physicians, hospital outpatient departments, and suppliers, 2005–2016



Note: Data include Part B–covered drugs furnished by several provider types including physicians, suppliers, and hospital outpatient departments and exclude those furnished by critical access hospitals, Maryland hospitals, and dialysis facilities. "Medicare spending" includes program payments and beneficiary cost sharing. Data reflect all Part B drugs whether they were paid based on the average sales price plus 6 percent or another payment formula. Data exclude blood and blood products (other than clotting factor). Components may not sum to total due to rounding.

Source: MedPAC and Acumen LLC analysis of Medicare claims data.

- The Medicare program and beneficiaries spent about $29.1 billion on Part B drugs furnished by physicians, suppliers, and hospital outpatient departments (HOPDs) in 2016, an increase of about 12.9 percent from 2015.
- Medicare's average sales price (ASP) payment system for Part B drugs began in 2005. Between 2005 and 2016, total spending grew at an average annual rate of 7.4 percent. Spending growth was slower from 2005 to 2009 (about 3.7 percent per year on average) and more rapid from 2009 to 2016 (about 9.5 percent per year on average).
- Of total 2016 Part B drug spending, physicians accounted for 57 percent ($16.6 billion), HOPDs accounted for 36 percent ($10.4 billion), and suppliers accounted for 7 percent ($2.1 billion).
- Part B drug spending has been growing more rapidly for HOPDs than for physicians and suppliers. Between 2009 and 2016, Part B drug spending grew at an average annual rate of 16.5 percent for HOPDs, 7.3 percent for physicians, and 3.2 percent for suppliers.
- Not included in these data are critical access hospitals and Maryland hospitals, which are not paid under the ASP system, and end-stage renal disease facilities, which are paid for most Part B drugs through the dialysis bundled payment rate. Medicare and beneficiaries spent approximately $660 million in critical access hospitals and $360 million in Maryland hospitals for Part B drugs in 2016.

Chart 10-2. Change in Medicare payments and utilization for separately payable Part B drugs, 2009–2015

	2009	2015	Average annual growth 2009–2015
Total payments: All Part B drugs (in billions)	$13.2	$24.0	10.5%
Total payments: All Part B drugs excluding vaccines (in billions)	$13.0	$22.6	9.7
Number of beneficiaries using a Part B drug (in millions)	2.9	3.5	3.5
Average total payments per beneficiary who used a Part B drug	$4,504	$6,392	6.0
Average number of Part B drugs per beneficiary	1.41	1.37	–0.5
Average payment per Part B drug	$3,191	$4,676	6.6
Total payments: All Part B vaccines (in billions)	$0.2	$1.4	35.8
Number of beneficiaries using a Part B vaccine (in millions)	13.4	16.2	3.1
Average total payments per beneficiary who used a Part B vaccine	$16	$84	31.7
Average number of Part B vaccines per beneficiary	1.08	1.33	3.6
Average payment per Part B vaccine	$15	$63	27.2

Note: This analysis includes all Part B drugs paid the average sales price plus 6 percent (ASP + 6 percent) as well as the small group of Part B drugs that are paid based on the average wholesale price or reasonable cost or that are contractor priced. "Vaccines" refers to the three Part B–covered preventive vaccines: influenza, pneumococcal, and hepatitis B. Data include Part B drugs furnished by physicians, hospitals paid under the outpatient prospective payment system, and suppliers. Excluded from the analysis were any Part B drugs that were bundled or packaged in 2009 and/or 2015 (i.e., drugs that were packaged under the outpatient prospective payment system, regardless of the setting where they were furnished, and drugs furnished by dialysis facilities), drugs billed under not-otherwise-classified billing codes, blood and blood products (other than clotting factor), and data for critical access hospitals and Maryland hospitals. The average annual growth rates displayed in the table may differ slightly from the average annual growth rates calculated using the 2009 and 2015 values displayed in the table due to rounding.

Source: MedPAC analysis of Medicare claims data for physicians, hospital outpatient departments, and suppliers.

- Total payments by the Medicare program and beneficiaries for separately payable Part B drugs increased 10.5 percent per year, on average, between 2009 and 2015.
- Excluding the three Part B–covered preventive vaccines, Medicare spending on separately payable Part B drugs grew at an average rate of 9.7 percent per year between 2009 and 2015.
- The largest factor contributing to the growth in Part B drug spending (excluding vaccines) was the change in the price Medicare paid for drugs. Between 2009 and 2015, the average payment per drug increased by 6.6 percent per year. This increase in the average payment per drug reflects increases in the prices of existing drugs and shifts in the mix of drugs, including the adoption of new, higher priced drugs.

(Chart continued next page)

Chart 10-2. Change in Medicare payments and utilization for separately payable Part B drugs, 2009–2015 (continued)

- Growth in the number of beneficiaries using nonvaccine Part B drugs (about 3.5 percent per year on average) also contributed to increased spending. The number of Part B drugs received per user declined from about 1.41 in 2009 to 1.37 in 2015, which modestly offset spending growth.

- Medicare covers three preventive vaccines: influenza, pneumococcal, and—for beneficiaries at high or medium risk—hepatitis B. Although a relatively small share of total Part B drug spending, spending on Part B vaccines grew at an average rate of about 36 percent per year between 2009 and 2015.

- Increased spending on the pneumococcal vaccine Prevnar-13 accounts for a large portion of the growth in vaccine spending. Medicare Part B paid physicians and outpatient hospitals over $900 million for Prevnar-13 in 2015, up from about $100 million in 2014 (data not shown). A Centers for Disease Control and Prevention advisory committee recommended a one-time vaccination of Prevnar-13 for all adults ages 65 and older, which led to over 5 million beneficiaries receiving the vaccine in hospital outpatient departments and physician offices in 2015. Because Prevnar-13 has a higher price than other Part B–covered preventive vaccines, its increased use drove the substantial growth in the average payment per vaccine between 2009 and 2015.

Chart 10-3. Top 10 Part B drugs paid based on ASP, by type of provider (dollars in millions), 2015 and 2016

	Total Part B drug spending		Physician and supplier Part B drug spending		Hospital outpatient Part B drug spending	
	2015	2016	2015	2016	2015	2016
Aflibercept	$1,815	$2,211	$1,699	$2,073	$115	$138
Rituximab	1,567	1,671	824	842	744	829
Pegfilgrastim	1,263	1,378	650	682	613	696
Infliximab	1,249	1,343	791	834	458	509
Nivolumab	136*	1,224	N/A*	581	136*	642
Bevacizumab	1,122	1,118	585	562	537	555
Denosumab	919	1,089	583	684	336	404
Ranibizumab	1,151	1,045	1,107	1,006	43	39
Trastuzumab	648	706	313	335	335	371
Abatacept	454	588	315	408	139	180
Total spending, top 10 drugs in 2016	**10,329**	**12,373**	**6,866**	**8,009**	**3,462**	**4,363**
Total spending, all Part B drugs	**25,819**	**29,149**	**17,138**	**18,716**	**8,682**	**10,434**

Note: ASP (average sales price), N/A (not available). The 10 drugs shown in the chart reflect the Part B drug billing codes paid under the ASP methodology with the highest Medicare expenditures in 2016. Data for 2015 are shown for comparison. Data include Part B–covered drugs furnished by several provider types including physicians, suppliers, and hospital outpatient departments, but exclude those furnished by critical access hospitals, Maryland hospitals, and dialysis facilities. "Drug spending" includes Medicare program payments and beneficiary cost sharing. "Total spending, all Part B drugs" reflects all products, whether paid based on the ASP plus 6 percent or another method. Data exclude blood and blood products (other than clotting factor). All products are referred to using their chemical name. "Infliximab" refers to the reference biologic Remicade. Components may not sum to totals due to rounding.
*Estimated 2015 spending for nivolumab is underestimated for the hospital outpatient category and not available for the physician and supplier category because the product was billed in a not-otherwise-classified billing code for part of the year and all of the year, respectively.

Source: MedPAC and Acumen LLC analysis of Medicare claims data.

- Part B drugs are billed under more than 700 billing codes, but spending is concentrated. Medicare spending (including cost sharing) on the top 10 drugs paid under the ASP system totaled about $12.4 billion in 2016, about 42 percent of all Part B drug spending that year.

- As of 2016, all of the top 10 Part B drugs are biologics. Many of these products are used to treat cancer or its side effects (rituximab, pegfilgrastim, nivolumab, bevacizumab, denosumab, and trastuzumab). Drugs used to treat age-related macular degeneration (ranibizumab, aflibercept, and bevacizumab) and rheumatoid arthritis (rituximab, infliximab, and abatacept) 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 more than $1.4 billion in 2016 (data not shown).

- Medicare Part B covers three preventive vaccines—influenza, pneumococcal, and for certain beneficiaries hepatitis B—and pays for them at a rate of 95 percent of the average wholesale price or reasonable cost. In 2016, Medicare Part B spent approximately $790 million on pneumococcal vaccine, $470 million on influenza vaccine, and $35 million on hepatitis B vaccine furnished by physicians, outpatient hospitals, suppliers, end-stage renal dialysis facilities, and certain other types of providers (data not shown).

Chart 10-4. Growth in ASP for the 20 highest expenditure Part B drugs, 2005–2018

Part B drug	Total Medicare payments in 2016 (in billions)	Average annual ASP growth 2005–2010	2010–2017	2017–2018	2005–2018	Earliest year of ASP data if not 2005
Aflibercept	$2.2	N/A	0.0%*	–0.9%	–0.2%*	2013
Rituximab	$1.7	5.0	5.5	7.2	5.4	
Pegfilgrastim	$1.4	0.8	8.2	7.9	5.3	
Infliximab	$1.3	2.0	4.9	4.4	3.8	
Nivolumab	$1.2	N/A	2.7*	2.8	2.8*	2016
Bevacizumab	$1.1	0.1	3.6	4.0	2.3	
Denosumab	$1.1	N/A	2.7*	7.5	3.5*	2012
Ranibizumab	$1.0	–0.2*	–0.9	1.7	–0.5*	2008
Trastuzumab	$0.7	4.1	5.5	6.5	5.1	
Abatacept	$0.6	1.4*	13.0	5.8	9.1*	2007
Pemetrexed	$0.6	4.5	3.4	3.9	3.9	
Bortezomib	$0.5	6.1	2.8	1.5	3.9	
Octreotide depot	$0.5	4.9	7.1	9.3	6.4	
Omalizumab	$0.4	4.6	7.7	8.0	6.5	
Pembrolizumab	$0.3	N/A	1.9*	2.8	2.3*	2016
Natalizumab	$0.3	6.6*	12.5	3.4	9.7*	2006
Gamunex-C and Gammaked	$0.3	7.0*	–0.5	11.7	2.2*	2008
Onabotulinum toxin A	$0.3	3.1	1.1	3.1	2.0	
Epoetin	$0.3	–2.1	3.7	–1.5	1.0	
Darbepoetin	$0.3	–4.4	4.5	1.3	0.7	
Consumer price index for urban consumers		2.6	1.6	2.1	2.0	

Note: ASP (average sales price), N/A (not applicable). Growth rates for ASP are calculated from first quarter to first quarter of each year. "Medicare payments" includes Medicare program payments and beneficiary cost sharing for these drugs furnished by physicians, suppliers, and hospital outpatient departments, but excludes those furnished by critical access hospitals, Maryland hospitals, and dialysis facilities. Vaccines paid 95 percent of the average wholesale price are also excluded. With the exception of Gamunex-C and Gammaked, all products are referred to using their chemical names. "Infliximab" refers to the reference biologic Remicade.
*Indicates that ASP payment rates were not available for the full period listed, and the average annual growth rate was calculated based on the earliest year that a first quarter payment rate was available.

Source: MedPAC analysis of CMS ASP pricing files and consumer price index for all urban consumers data from the Bureau of Labor Statistics and MedPAC and Acumen LLC analysis of Medicare claims data.

- Between 2017 and 2018, the ASP grew by more than 5 percent for 8 out of the 20 highest expenditure Part B drugs. For 15 of the top 20 Part B drugs, ASP increased faster than the consumer price index for urban consumers between 2017 and 2018.

- Twelve of the top 20 Part B drugs have been on the market since 2005 or earlier. Over the 13-year period from 2005 to 2018, 8 of these 12 products have experienced ASP growth of 3.8 percent per year or more. On a cumulative basis, each of these eight products' ASPs has grown 67 percent or more since 2005.

Chart 10-5. Trend in Medicare Part B payment rates for two reference biologics and their biosimilar products

	Medicare payment rate per 1 mcg		Medicare payment rate per 10 mg		
	Reference biologic	Biosimilar	Reference biologic	Biosimilars	
	Neupogen	Zarxio	Remicade	Inflectra	Renflexis
2010 Q1	$0.72	N/A	$58.64	N/A	N/A
2015 Q4	1.00	$0.97	78.76	N/A	N/A
2016 Q1	1.01	0.97	79.91	N/A	N/A
2016 Q2	1.01	0.97	81.60	N/A	N/A
2016 Q3	1.00	0.87	82.28	N/A	N/A
2016 Q4	1.00	0.83	82.87	N/A	N/A
2017 Q1	1.00	0.78	82.22	$100.31	N/A
2017 Q2	1.01	0.76	85.59	100.31	N/A
2017 Q3	1.01	0.73	85.74	80.19	$80.19
2017 Q4	1.01	0.72	87.15	78.72	78.72
2018 Q1	1.00	0.69	85.81	75.52	75.52
2018 Q2	1.02	0.68	83.29	69.71	70.38

Note: Q1 (first quarter), Q2 (second quarter), Q3 (third quarter), Q4 (fourth quarter), N/A (not available). A reference biologic is an originator drug product derived from a living organism. A biosimilar product is a follow-on product that is approved based on being highly similar to the reference biologic. Inflectra and Renflexis were paid in the same billing code through first quarter 2018 and consequently had the same payment rate. Beginning second quarter 2018, these products had separate billing codes.

Source: MedPAC analysis of payment rates from CMS ASP pricing files.

- A reference biologic is an originator drug product derived from a living organism. A biosimilar product is a follow-on product that is approved based on being highly similar to the reference biologic.

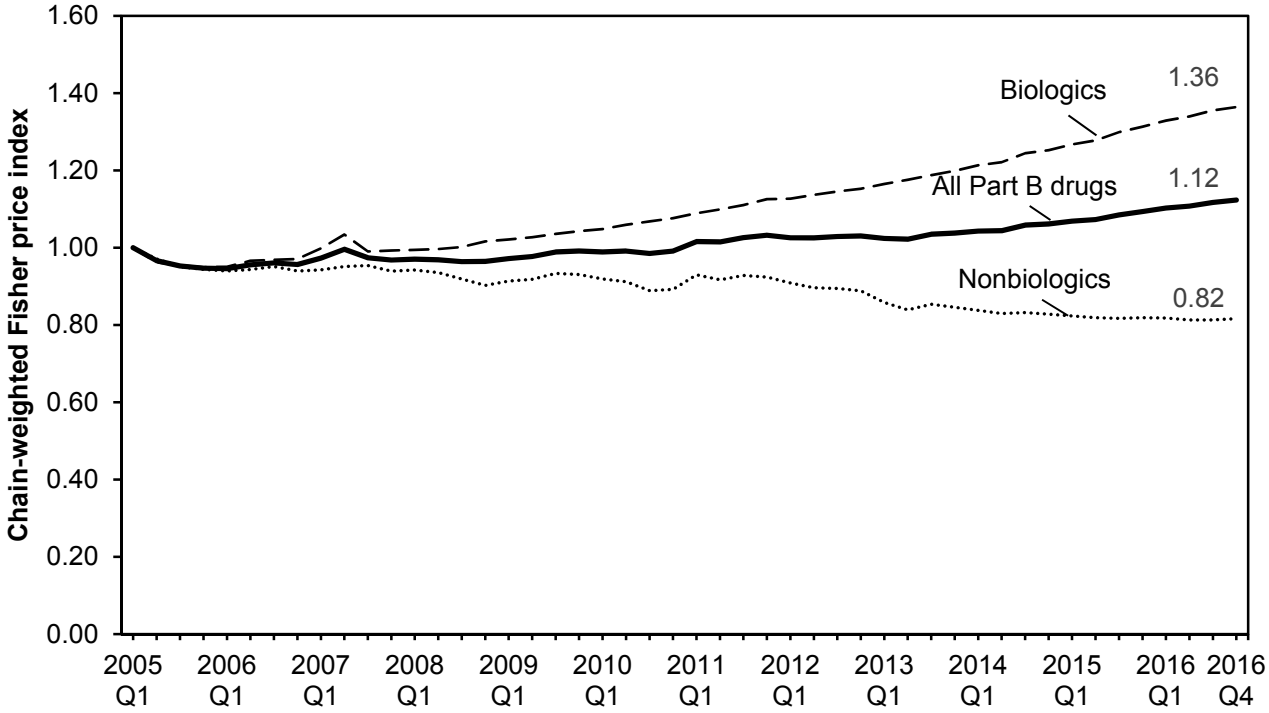
- Under Part B, Medicare pays for a reference biologic at 106 percent of its own average sales price (ASP). For biosimilars, Medicare pays 100 percent of the biosimilar's ASP plus 6 percent of the reference product's ASP.

- Medicare payment rates for biosimilars have generally been lower than those of the corresponding reference biologics due to biosimilars' lower ASP. In the second quarter of 2018, the biosimilar Zarxio's payment rate was 33 percent less than that of the reference product Neupogen. The biosimilars Inflectra and Renflexis had payment rates that were roughly 16 percent below the reference biologic Remicade's payment rate that quarter.

- Medicare paid more for the biosimilar Inflectra for the first two quarters it was on the market than for the reference biologic, Remicade. A new biosimilar is paid 106 percent of wholesale acquisition cost (a list price set by the manufacturer that does not reflect discounts) for the first two to three quarters on the market until ASP data are available.

- Despite lower prices for biosimilars, reference biologics' prices have not declined significantly. For example, the reference biologic Neupogen's payment rate has increased slightly since the biosimilar Zarxio launched in the fourth quarter of 2015. Following biosimilar entry by Inflectra, Remicade's payment rate initially increased. Although it fell in the first two quarters of 2018, Remicade's payment rate remains higher than it was in the first quarter of 2017, when Inflectra became available.

Chart 10-6. Price indices for Medicare Part B drugs, 2005–2016

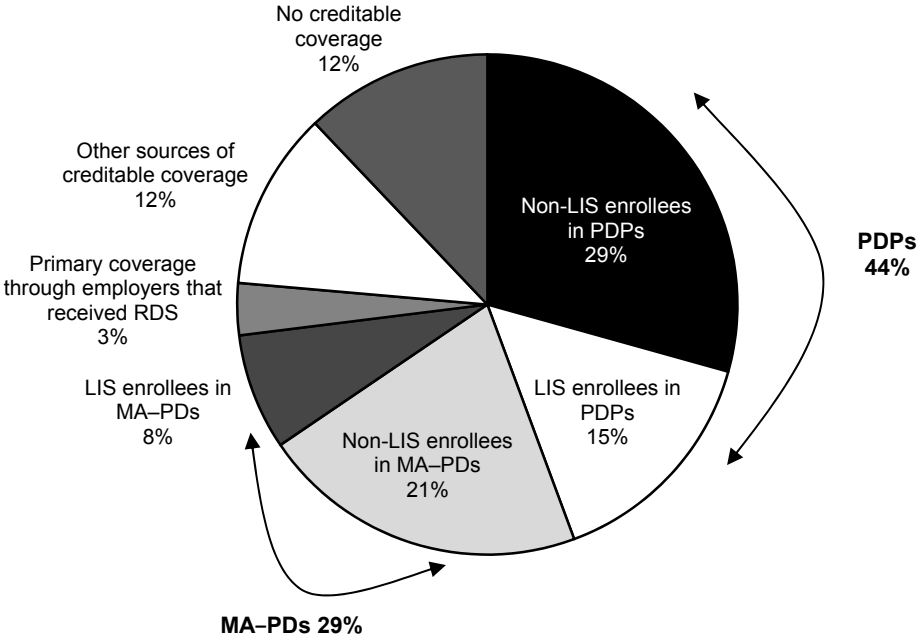


Note: Q1 (first quarter), Q4 (fourth quarter). The Part B price indices reflect growth in the average sales price of Part B–covered drugs over time, measured for individual drugs at the Healthcare Common Procedure Coding System billing code level. These measures of price growth reflect growth in the price of individual products but do not reflect changes in price due to the introduction of new products or the changes in the mix of products used. The Part B biologics price index numbers in this chart and in Chart 10-27 are different due to the different time periods of analysis.

Source: Acumen LLC analysis for MedPAC.

- The Part B price indices reflect growth in the average sales price (ASP) at the individual product level and do not reflect changes in price that occur as a result of shifts in the mix of drugs used or the introduction of new, higher priced drugs.
- Measured by the change in the ASP of individual Part B–covered drugs, the prices of Part B–covered drugs rose by an average of about 12 percent cumulatively between 2005 and 2016 (an index of 1.12).
- Underlying this overall trend in the price index are different patterns by type of product. The price index for Part B–covered biologics increased by 36 percent between 2005 and 2016 (an index of 1.36). In contrast, the price index for nonbiologics declined by 18 percent (an index of 0.82) over this period. The nonbiologic group includes single-source drugs and drugs with generic competition. The downward price trend for nonbiologics in part reflects patent expiration and generic entry for some of these products.

Chart 10-7. In 2016, 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 denominator file 2016.

- In 2016, 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 (3 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.

- Nearly 23 percent of Medicare beneficiaries received Part D's LIS in 2015. Of all LIS beneficiaries, two-thirds of them (15 percent of all Medicare beneficiaries) were enrolled in stand-alone PDPs, and the remaining beneficiaries (8 percent) were in MA–PD plans.

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Chart 10-7. In 2016, 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 29 percent of all Medicare beneficiaries. Another 21 percent of non-LIS enrollees were in MA–PD plans.

- Twelve 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.

- Another 12 percent of Medicare beneficiaries had no drug coverage or coverage that was less generous than Part D's defined standard benefit.

Chart 10-8. Changes in parameters of the Part D defined standard benefit over time

	2006	2016	2017	2018	Cumulative change 2006–2018
Deductible	$250.00	$360.00	$400.00	$405.00	62%
Initial coverage limit	2,250.00	3,310.00	3,700.00	3,750.00	67%
Annual out-of-pocket threshold	3,600.00	4,850.00	4,950.00	5,000.00	39%
Total covered drug spending at annual out-of-pocket threshold	5,100.00	7,515.22	8,071.16	8,417.60	65%
Minimum cost sharing above the annual out-of-pocket threshold					
Copay for generic/preferred multisource drugs	2.00	2.95	3.30	3.35	68%
Copay for other prescription drugs	5.00	7.40	8.25	8.35	67%

Note: Under Part D's defined standard benefit, the enrollee pays the deductible and then 25 percent of covered drug spending (75 percent is 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 depended on the mix of brand-name 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 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 respective copay 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 2018, the standard benefit has a $405 deductible, 25 percent coinsurance on covered drugs until the enrollee reaches $3,750 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 drugs filled during the coverage gap. Because of changes made by the Patient Protection and Affordable Care Act (PPACA) of 2010, enrollees pay reduced cost sharing for drugs filled in the coverage gap. In 2018, the cost sharing for drugs filled during the gap phase is about 35 percent for brand-name drugs and 44 percent for generic drugs. Enrollees with drug spending that exceeds the annual threshold pay the greater of $3.35 to $8.35 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 enrolled in Part D, with cumulative changes of more than 60 percent between 2006 and 2018. By comparison, Part D's annual out-of-pocket threshold grew by 39 percent over the same period, reflecting changes in PPACA that aimed to reduce the coverage gap.

(Chart continued next page)

Chart 10-8. 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.

- The Bipartisan Budget Act signed into law in 2018 closes Part D's coverage gap one year earlier than the previously scheduled 2020 time frame. In 2019, the standard benefit will include 25 percent cost sharing in the coverage-gap phase for brand-name drugs and 37 percent for generics. Under the law, manufacturers of brand-name drugs must provide a 70 percent discount in the coverage gap, and plan sponsors will only be responsible for covering 5 percent of the cost of brand-name drugs in that same phase of the benefit.

Chart 10-9. Characteristics of stand-alone Medicare PDPs

	2017				2018			
	Plans		Enrollees as of February 2017		Plans		Enrollees as of February 2018	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	746	100%	20.5	100%	782	100%	20.8	100%
Type of organization								
National	643	86	19.1	93	677	87	19.4	93
Other	103	14	1.5	7	105	13	1.4	7
Type of benefit								
Defined standard	0	0	0.0	0	0	0	0.0	0
Actuarially equivalent	359	48	12.2	59	361	46	12.4	60
Enhanced	387	52	8.4	41	421	54	8.4	40
Type of deductible								
Zero	280	38	9.7	47	291	37	9.4	45
Reduced	110	15	1.5	7	88	11	1.9	9
Defined standard*	356	48	9.4	46	403	52	9.5	46
Drugs covered in the gap								
Some coverage	208	28	2.9	14	274	35	5.0	24
None	538	72	17.6	86	508	65	15.8	76

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 $400 in 2017 and is $405 in 2018.

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

- Between 2017 and 2018, the number of stand-alone PDPs increased by nearly 5 percent. Plan sponsors are offering 782 PDPs in 2018 compared with 746 in 2017.
- In 2018, 87 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 93 percent of all PDP enrollment.
- For 2018, the share of PDP offerings that include enhanced benefits (basic plus supplemental coverage) is higher than the share in 2017. The share of PDPs with actuarially equivalent benefits (having the same average value as the defined standard benefit but with alternative benefit designs) declined slightly from 48 percent to 46 percent. Sponsors are offering no PDPs with the defined standard benefit in 2018. Actuarially equivalent plans continue to attract the largest share of PDP enrollees (60 percent), and the share of enrollees choosing to enroll in enhanced benefit plans remains fairly constant at 40 percent in 2018 compared with 41 percent in 2017.
- A larger share of PDPs includes gap coverage for some drugs (usually generics) in 2018 than in 2017, but in 2018, the majority of PDP enrollees (76 percent) continue to enroll in plans that offer no additional benefits in the coverage gap. 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 10-10. Characteristics of MA–PDs

	2017				2018			
	Plans		Enrollees as of February 2017		Plans		Enrollees as of February 2018	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Totals	1,734	100%	11.9	100%	2,003	100%	12.7	100%
Type of organization								
Local HMO	1,241	72	8.5	72	1,422	71	9.1	72
Local PPO	429	25	2.3	19	519	26	2.6	20
PFFS	32	2	0.1	1	30	1	0.1	1
Regional PPO	32	2	1.0	8	32	2	0.9	7
Type of benefit								
Defined standard	24	1	0.1	1	22	1	0.1	<0.5
Actuarially equivalent	148	9	1.3	11	101	5	0.5	4
Enhanced	1,562	90	10.5	89	1,880	94	12.1	96
Type of deductible								
Zero	852	49	5.5	46	908	45	5.4	43
Reduced	711	41	5.5	46	988	49	6.9	54
Defined standard*	171	10	1.0	8	107	5	0.4	3
Drugs covered in the gap								
Some coverage	914	53	6.3	53	703	35	4.7	37
None	820	47	5.6	47	1,300	65	8.0	63

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 $400 in 2017 and is $405 in 2018.

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

- There are almost 16 percent more MA–PD plans in 2018 than in 2017. Sponsors are offering 2,003 MA–PD plans in 2018 compared with 1,734 the year before. HMOs remain the dominant type of MA–PD plan, making up 71 percent of all (unweighted) offerings in 2018. The number of PFFS plans decreased slightly from 32 in 2017 to 30 in 2018. Between 2017 and 2018, the number of drug plans offered by local PPOs increased from 429 plans to 519 plans, and the number of drug plans offered by regional PPOs remained the same at 32 plans.

- A larger share of MA–PD plans than stand-alone prescription drug plans (PDPs) offer enhanced benefits (compare Chart 10-10 with Chart 10-9). In 2018, 54 percent of all PDPs have enhanced benefits compared with 94 percent of MA–PD plans. In 2018, enhanced MA–PD plans attracted 96 percent of total MA–PD enrollment.

- Forty-five percent of MA–PD plans have no deductible in 2018. These plans attracted 43 percent of total MA–PD enrollees in 2018.

- MA–PD plans and PDPs are equally likely to provide some additional benefits in the coverage gap. In 2018, about 35 percent of MA–PD plans include some gap coverage—much lower than the year before. Those plans account for 37 percent of MA–PD enrollment.

Chart 10-11. Change in average Part D premiums, 2014–2018

	Average monthly premium weighted by enrollment					Cumulative change in weighted average premium, 2014–2018
	2014	2015	2016	2017	2018	
All plans	**$29**	**$30**	**$31**	**$32**	**$32**	**8%**
Basic plans	29	26	28	30	30	5
Enhanced plans						
Basic benefits	24	27	27	27	26	7
Supplemental benefits	6	6	7	6	7	21
Total premium	30	33	33	33	33	10
All basic coverage	26	27	27	29	28	6
PDPs	**38**	**37**	**39**	**41**	**41**	**10**
Basic coverage	30	28	29	31	31	4
Enhanced coverage						
Basic benefits	39	39	41	43	42	8
Supplemental benefits	10	9	12	11	15	56
Total premium	49	48	53	54	57	17
All basic coverage	34	33	34	36	35	5
MA–PDs, including SNPs	**16**	**18**	**18**	**19**	**18**	**16**
Basic coverage	25	21	22	26	28	12
Enhanced coverage						
Basic benefits	11	14	15	16	15	33
Supplemental benefits	2	2	2	2	1	–35
Total premium	13	17	17	18	17	23
All basic coverage	14	17	16	18	17	21
MA–PD buy-down of basic premium	13	14	15	16	16	20
MA–PD buy-down of supplemental benefits	13	13	14	15	16	22
Base beneficiary premium	32.42	33.13	34.10	35.63	35.02	8

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), SNP (special needs plan). 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, as well as Part C 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 changes in enrollment among plan sponsors and 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, enrollment data, and bid data.

(Chart continued next page)

Chart 10-11. Change in average Part D premiums, 2014–2018 (continued)

- Part D enrollees can select between plans with basic or enhanced benefits (which combine basic and supplemental coverage). Medicare subsidizes 74.5 percent of the average cost of basic benefits; enrollees pay premiums for the remaining 25.5 percent and all of the cost of any supplemental benefits. (For more about how plan premiums are determined, see Part D *Payment Basics* at http://medpac.gov/docs/default-source/payment-basics/medpac_payment_basics_17_partd_final86a411adfa9c665e80adff00009edf9c.pdf?sfvrsn=0.)

- The overall average premium paid by enrollees for any type of Part D coverage grew slowly from $29 per month in 2014 to $32 per month in 2018. However, year-to-year changes have varied by type of benefit (basic vs. enhanced) and type of plan (PDP vs. MA−PD), and they have not necessarily corresponded to changes observed in the base beneficiary premium.

- Across all basic plans and the basic portion of enhanced plans, the average premium for basic benefits grew slowly from $26 in 2014 to $28 per month in 2018, a cumulative change of just 6 percent. This slow growth occurred despite very rapid growth in spending for Part D's catastrophic phase of the benefit (data not shown). In the catastrophic phase, Medicare subsidizes 80 percent of enrollees' drug spending, so most of the growth in catastrophic spending is not reflected in higher premiums. (For more information about Medicare's Part D spending, see Chapter 14 of the Commission's March 2018 report to the Congress at http://medpac.gov/docs/default-source/reports/mar18_medpac_ch14_sec.pdf?sfvrsn=0.)

- Over the five-year period, the average enrollee premium for basic coverage in PDPs ranged between a low of $28 in 2015 and a high of $31 per month in 2017 and 2018, increasing by a cumulative 5 percent from 2014 to 2018. Among enhanced plans offered by PDPs, the average enrollee premium has ranged between $48 in 2015 to $57 in 2018, increasing by a cumulative 17 percent from 2014 to 2018. Of the $57 average premium in 2018 among enhanced PDPs, $42 was for basic benefits, $15 for supplemental benefits. The portion of enhanced premiums attributable to supplemental benefits has grown more quickly than the portion for basic benefits.

- Between 2014 and 2018, the average Part D premium paid by beneficiaries enrolled in MA−PD plans with basic coverage ranged between a low of $21 in 2015 and a high of $28 per month in 2018, increasing by a cumulative 12 percent. The average premium paid by beneficiaries enrolled in MA−PD plans offering enhanced coverage has increased from $13 in 2014 to $17 in 2018, a cumulative 23 percent increase. MA−PD plan sponsors typically use a portion of Medicare's Part C (Medicare Advantage) payments to "buy down" the premiums that plan enrollees would otherwise have to pay for Part D basic premiums and supplemental benefits. Because of those Part C payment "rebates," in 2018, MA−PD enrollees avoided having to pay $16 per month in basic premiums and an additional $16 per month for supplemental coverage, on average.

Chart 10-12. More premium-free (for LIS enrollees) PDPs in 2018

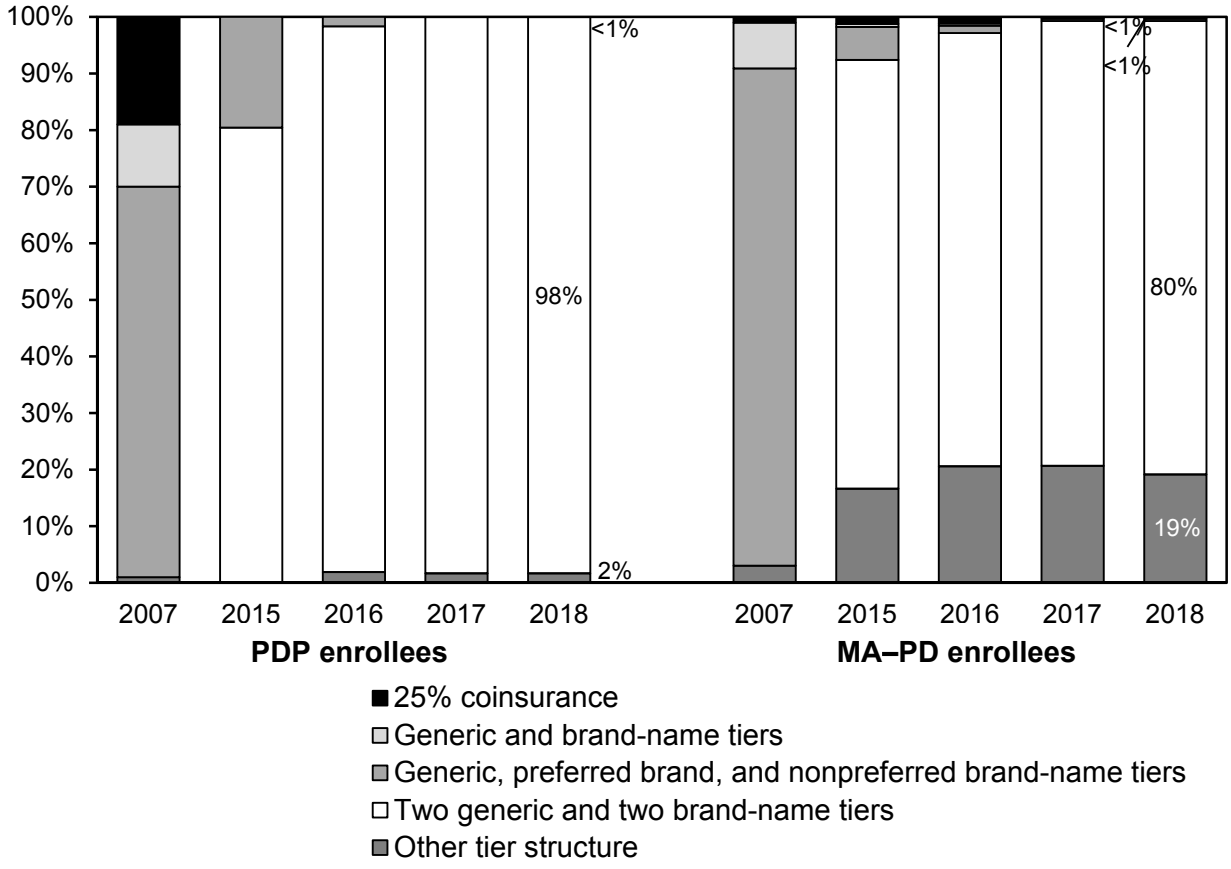
PDP region	State(s)	Number of PDPs			Number of PDPs that have zero premium for LIS enrollees		
		2017*	2018*	Difference	2017*	2018	Difference
1	ME, NH	23	24	1	8	7	–1
2	CT, MA, RI, VT	21	22	1	7	7	0
3	NY	19	20	1	8	8	0
4	NJ	21	22	1	8	7	–1
5	DC, DE, MD	20	21	1	10	10	0
6	PA, WV	24	26	2	9	9	0
7	VA	23	24	1	7	6	–1
8	NC	22	24	2	7	7	0
9	SC	21	22	1	6	4	–2
10	GA	23	24	1	4	5	1
11	FL	20	21	1	3	2	–1
12	AL, TN	24	25	1	7	6	–1
13	MI	23	24	1	8	9	1
14	OH	22	23	1	6	6	0
15	IN, KY	23	24	1	7	7	0
16	WI	24	25	1	7	8	1
17	IL	23	24	1	9	8	–1
18	MO	23	24	1	4	4	0
19	AR	22	23	1	5	4	–1
20	MS	19	20	1	7	6	–1
21	LA	20	21	1	7	6	–1
22	TX	23	24	1	6	7	1
23	OK	22	23	1	7	7	0
24	KS	22	23	1	5	4	–1
25	IA, MN, MT, ND, NE, SD, WY	22	23	1	6	5	–1
26	NM	23	24	1	9	7	–2
27	CO	23	24	1	7	6	–1
28	AZ	22	23	1	10	10	0
29	NV	23	24	1	4	3	–1
30	OR, WA	21	22	1	8	7	–1
31	ID, UT	24	25	1	9	8	–1
32	CA	24	25	1	6	5	–1
33	HI	19	20	1	5	4	–1
34	AK	18	19	1	5	7	2
	Total	746	782	36	231	216	–15

Note: LIS (low-income [drug] subsidy), PDP (prescription drug plan).
*These figures include 25 plans in 2017 and 2 in 2018 that did not accept new enrollees because of CMS sanctions.

Source: MedPAC based on 2017 and 2018 PDP landscape file provided by CMS.

- The total number of stand-alone PDPs increased by 5 percent, from 746 in 2017 to 782 in 2018. The median number of plans offered in PDP regions increased to 24 plans from 22 in 2017 (data not shown). In 2018, AK has the fewest stand-alone PDPs, with 19, and Region 6 (PA, WV) has the most, with 26.
- In 2018, 216 PDPs qualify as premium free to LIS enrollees. With the exception of FL, which has only two plans with no premium for LIS enrollees, at least three premium-free PDPs are available in any given region.

Chart 10-13. In 2018, most Part D enrollees are in plans that use a five-tier formulary structure

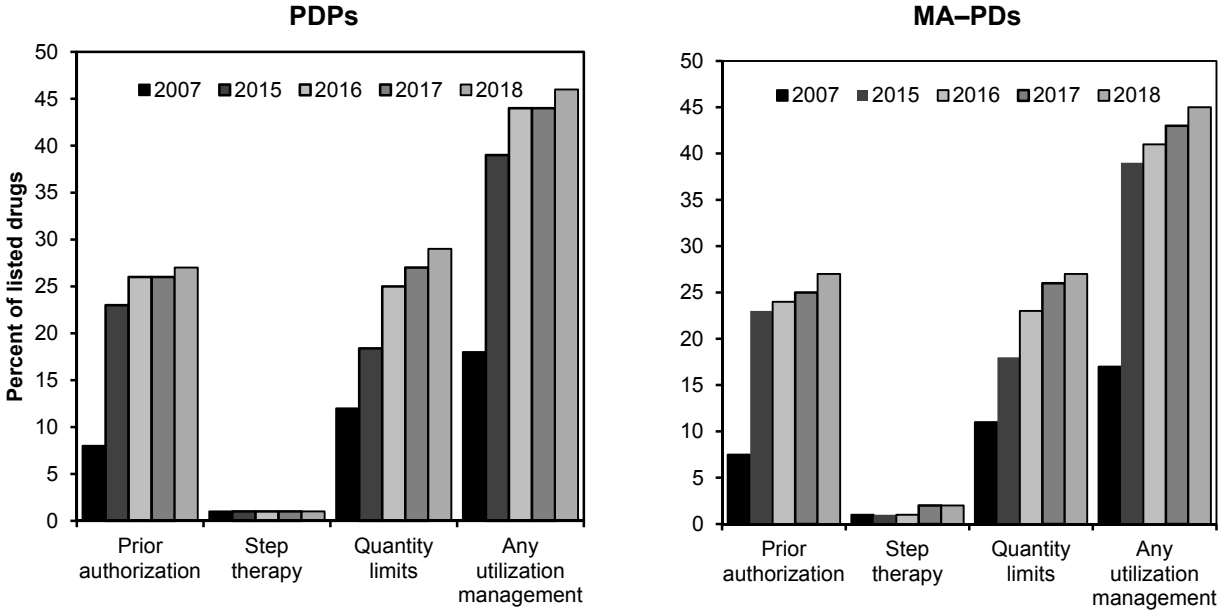


Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Calculations are weighted by enrollment. All calculations exclude employer-only groups and plans offered in U.S. territories. In addition, MA–PDs exclude demonstration programs, special needs plans, and 1876 cost plans. Components may not sum to totals due to rounding. Over 99 percent of stand-alone PDPs and MA−PDs have a specialty tier in addition to the tiers listed above. The algorithm used to classify formularies was modified beginning with 2016 data but does not materially affect results.

Source: MedPAC 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 2018, nearly all PDP enrollees continue to enroll in plans with a five-tier structure: two generic and two brand-name tiers plus a specialty tier. Eighty percent of MA–PD enrollees are in such plans in 2018, a slight increase from 79 percent in 2017.
- For enrollees in PDPs with a five-tier structure, the median copay in 2018 is $37 for a preferred brand-name drug and 40 percent coinsurance for a nonpreferred brand-name drug (data not shown). The median copay for generic drugs is $1 for generic drugs on the lower tier and $6 for the higher tier. For MA–PD enrollees, in 2018, the median copay is $47 for a preferred brand and $99 for a nonpreferred brand, and $2 and $10 for a generic drug on the two generic tiers, respectively.
- Most plans also use a specialty tier for drugs that have a negotiated price of $670 per month or more. In 2018, median cost sharing for a specialty-tier drug is 27 percent among PDPs and 30 percent among MA–PD plans (data not shown).

Chart 10-14. In 2018, PDPs and MA–PDs apply some utilization management to more than 45 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. The algorithm used to classify formularies was modified beginning with 2016 data but does not materially affect results.

Source: MedPAC analysis of formularies submitted to CMS.

- In addition to the number of drugs listed on a plan's formulary, plans' processes for nonformulary exceptions and use of utilization management tools—prior authorization (preapproval for coverage), quantity limits (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 2018, the average enrollee in a stand-alone PDP faces some form of utilization management for about 46 percent of drugs listed on a plan's formulary, an increase from 44 percent in 2017. The average MA–PD enrollee faces some form of utilization management for 45 percent of drugs listed on a plan's formulary, an increase from 43 percent in 2017. 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 in 2018 increased to 27 percent from 26 percent in 2017. The share with quantity limits increased from 27 percent in 2017 to 29 percent in 2018. Among MA–PDs, both the use of prior authorization and the use of quantity limits increased between 2017 and 2018, from 25 percent to 27 percent for prior authorization and from 26 percent to 27 percent for quantity limits. The share of drugs listed on plan formularies that requires the use of step therapy remained very low for both stand-alone PDPs and MA–PDs.

Chart 10-15. Characteristics of Part D enrollees, 2015

	All Medicare	Part D	Plan type		Subsidy status	
			PDP	MA–PD	LIS	Non-LIS
Beneficiaries[a] (in millions)	58.2	41.9	25.8	16.1	13.1	28.8
Percent of all Medicare	100%	72%	44%	28%	23%	49%
Gender						
Male	46%	43%	42%	43%	40%	44%
Female	54	57	58	57	60	56
Race/ethnicity						
White, non-Hispanic	75	74	78	67	55	82
African American, non-Hispanic	10	11	10	12	20	7
Hispanic	9	10	6	15	16	7
Asian	3	3	3	4	6	2
Other	3	2	2	2	2	2
Age (years)[b]						
<65	18	19	21	16	42	8
65–69	27	25	24	26	17	28
70–74	20	20	19	22	13	24
75–79	14	15	14	15	10	17
80+	21	22	22	21	19	23
Urbanicity[c]						
Metropolitan	81	82	78	89	81	83
Micropolitan	10	10	12	7	11	10
Rural	7	7	9	4	8	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.
[a]Figures for "All Medicare" and "Part D" include all beneficiaries with at least one month of enrollment in the respective program. A beneficiary was classified as "LIS" if that individual received Part D's LIS at some point during the year. For individuals who switched plan types during the year, classification into plan types was based on the greater number of months of enrollment.
[b]Age as of July 2015.
[c]Urbanicity is based on the Office of Management and Budget's core-based statistical areas as of July 2015. 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 file from CMS.

- In 2015, nearly 42 million Medicare beneficiaries (72 percent) were enrolled in Part D at some point in the year. Most of them (25.8 million) were in stand-alone PDPs, with 16.1 million in MA–PD plans. About 13 million enrollees received Part D's LIS.
- Compared with the overall Medicare population, Part D enrollees are more likely to be female and minority. 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, minority, 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 7 percent in rural areas. (About 1 percent of Medicare beneficiaries were excluded because of an unidentifiable core-based statistical area designation.)

Chart 10-16. Part D enrollment trends, 2007–2015

	2007	2010	2015	Average annual growth rate 2007–2010	2010–2015	2007–2015
Part D enrollment (in millions)*						
Total	26.1	29.7	41.9	4.4%	7.1%	6.1%
By plan type						
PDP	18.3	18.9	25.8	1.1	6.4	4.3
MA–PD	7.8	10.6	16.1	10.9	8.7	9.5
By subsidy status						
LIS	10.4	11.3	13.1	2.7	3.0	2.9
Non-LIS	15.7	18.4	28.8	5.5	9.3	7.9
By race/ethnicity						
White, non-Hispanic	19.4	22.0	30.9	4.3	7.0	6.0
African American, non-Hispanic	2.9	3.3	4.6	4.1	6.7	5.7
Hispanic	2.5	3.0	4.1	5.8	6.4	6.2
Other	1.3	1.4	2.3	3.9	10.3	7.8
By age (years)**						
<65	5.5	6.3	7.9	4.7	4.8	4.8
65–69	5.4	6.6	10.3	6.5	9.4	8.3
70–79	8.8	9.9	14.6	3.8	8.1	6.5
80+	6.4	7.1	9.1	3.2	5.2	4.4
Part D enrollment (in percent)						
Total	100%	100%	100%			
By plan type						
PDP	70	64	62			
MA–PD	30	36	38			
By subsidy status						
LIS	40	38	31			
Non-LIS	60	62	69			
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	19			
65–69	21	22	25			
70–79	34	33	35			
80+	25	24	22			

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income [drug] subsidy). A beneficiary was 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 10-16. Part D enrollment trends, 2007–2015 (continued)

- Part D enrollment grew faster between 2010 and 2015 (average annual growth rate (AAGR) of 7.1 percent) than between 2007 and 2010 (AAGR of 4.4 percent). Between 2010 and 2015, the largest growth in enrollment was observed for beneficiaries ages 65 to 69 (9.4 percent annually, on average), followed by beneficiaries ages 70 to 79 (8.1 percent annually, on average).

- While MA–PD plan enrollment grew faster than PDP enrollment between 2007 and 2010 (nearly 11 percent annually compared with about 1 percent annually, on average, respectively), the growth rates were more comparable between MA–PDs and PDPs between 2010 and 2015 (AAGR of 8.7 percent and 6.4 percent, respectively).

- The number of enrollees receiving the LIS grew modestly between 2007 and 2010 at 2.7 percent per year. Higher growth rates (3.0 percent on average) were observed between 2010 and 2015. The AAGR in the number of non-LIS enrollees was also greater between 2010 and 2015 (9.3 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 10-7 for information on the RDS).

Chart 10-17. Part D enrollment by region, 2015

PDP region	State(s)	Percent of Medicare enrollment		Percent of Part D enrollment			
				Plan type		Subsidy status	
		Part D	RDS	PDP	MA–PD	LIS	Non-LIS
1	ME, NH	67%	3%	79%	21%	36%	64%
2	CT, MA, RI, VT	71	7	70	30	38	62
3	NY	77	5	55	45	37	63
4	NJ	72	5	83	17	26	74
5	DE, DC, MD	62	5	87	13	33	67
6	PA, WV	75	4	58	42	29	71
7	VA	63	3	74	26	30	70
8	NC	73	4	62	38	32	68
9	SC	71	2	70	30	32	68
10	GA	72	3	58	42	36	64
11	FL	74	4	49	51	31	69
12	AL, TN	73	3	61	39	36	64
13	MI	78	4	75	25	26	74
14	OH	77	4	64	36	26	74
15	IN, KY	73	4	73	27	32	68
16	WI	70	3	59	41	26	74
17	IL	70	7	74	26	31	69
18	MO	74	3	64	36	28	72
19	AR	69	4	74	26	39	61
20	MS	71	2	81	19	46	54
21	LA	73	5	60	40	40	60
22	TX	69	4	64	36	35	65
23	OK	66	2	78	22	32	68
24	KS	70	2	83	17	24	76
25	IA, MN, MT, NE, ND, SD, WY	73	3	74	26	23	77
26	NM	70	3	57	43	38	62
27	CO	71	3	52	48	25	75
28	AZ	72	3	49	51	28	72
29	NV	67	4	52	48	26	74
30	OR, WA	67	6	53	47	28	72
31	ID, UT	68	3	55	45	23	77
32	CA	77	3	49	51	36	64
33	HI	71	2	37	63	26	74
34	AK	41	24	98	2	54	46
	Mean	72	4	62	38	31	69
	Minimum	41	2	37	2	23	46
	Maximum	78	24	98	63	54	77

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 2015, all but one region (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 continued 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 10-17. Part D enrollment by region, 2015 (continued)

- In 2015, all regions except Region 34 experienced a decrease in the number of beneficiaries who received the RDS (data not shown). In some of the regions, the decreases in RDS recipients were accompanied by larger than average increases in Part D enrollment (e.g., Region 1, Region 2, Region 5, and Region 31). The continued trend is 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 23 percent in Region 25 (IA, MN, MT, NE, ND, SD, and WY) to 54 percent in Region 34 (AK). In 19 of the 34 PDP regions, LIS enrollees accounted for 30 percent to 50 percent of enrollment.

Chart 10-18. Components of Part D spending growth

	2009	2015	Average annual growth 2009–2015
Total gross spending (in billions)	**$73.7**	**$137.7**	**10.9%**
High-cost beneficiaries	29.2	78.9	18.0%
Lower cost beneficiaries	44.6	58.5	4.6%
Number of beneficiaries using a Part D drug (in millions)	**26.5**	**38.9**	**6.6%**
High-cost beneficiaries	2.4	3.6	7.4%
Lower cost beneficiaries	24.1	35.3	6.5%
Amount per beneficiary who used Part D drugs			
Gross drug spending per year	$2,781	$3,531	4.1%
Average price per 30-day prescription	$55	$65	2.7%
Number of 30-day prescriptions	50.4	54.5	1.3%
Amount per high-cost beneficiary who used Part D drugs			
Gross drug spending per year	$12,294	$21,642	9.9%
Average price per 30-day prescription	$110	$193	9.8%
Number of 30-day prescriptions	111.4	112.1	0.1%
Amount per lower cost beneficiary who used Part D drugs			
Gross drug spending per year	$1,846	$1,658	–1.8%
Average price per 30-day prescription	$42	$34	–3.2%
Number of 30-day prescriptions	44.5	48.5	1.5%

Note: "High-cost beneficiaries" refers to individuals who incurred spending high enough to reach the catastrophic phase of the benefit. "Gross spending" reflects payments to pharmacies from all payers, including beneficiary cost sharing, but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Changes in the average price per prescription reflect both price inflation and changes in the mix of drugs used. Components may not sum to totals due to rounding.

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

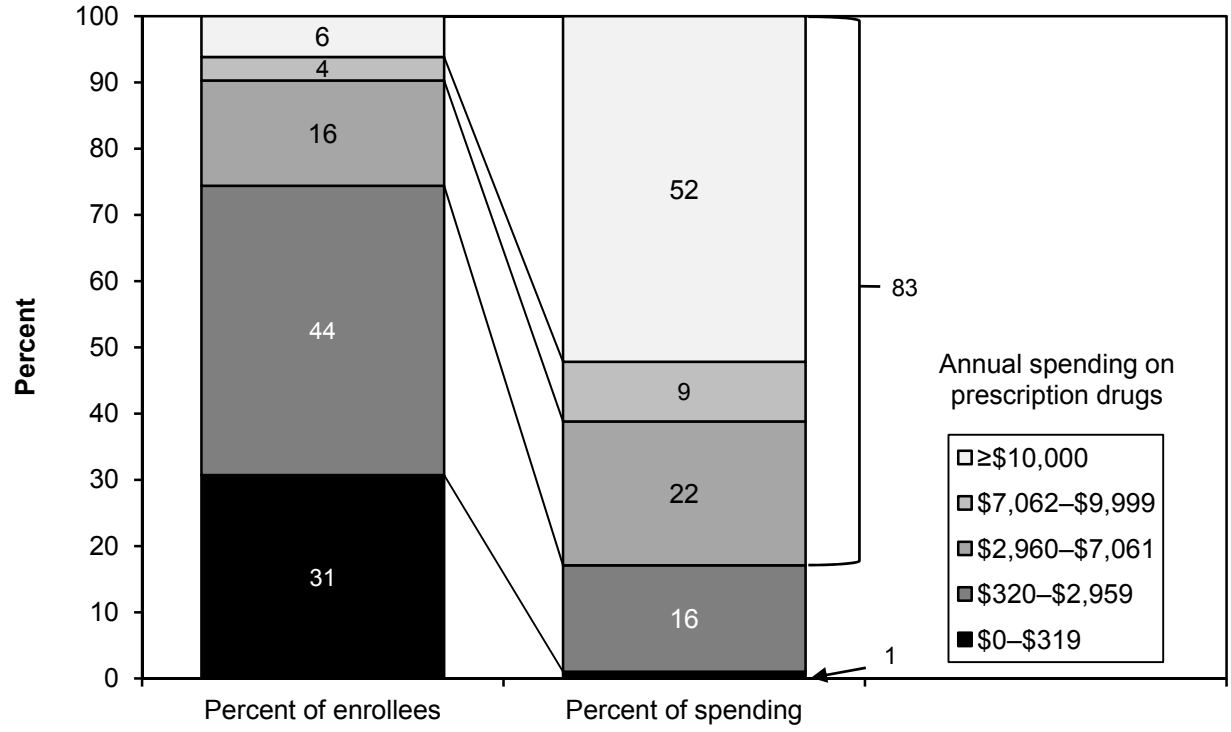
- Between 2009 and 2015, gross spending on drugs under the Part D program grew by an annual average rate of 10.9 percent. The annual growth in spending was considerably higher (18.0 percent) among high-cost beneficiaries (individuals who incurred spending high enough to reach the catastrophic phase of the benefit) compared with less than 5 percent for lower cost beneficiaries.

- During the 2009 through 2015 period, the number of beneficiaries who used Part D drugs grew by an annual average rate of 6.6 percent, with faster growth observed among high-cost beneficiaries (7.4 percent) than lower cost beneficiaries (6.5 percent).

- Overall, between 2009 and 2015, the growth in prices per 30-day prescription accounted for nearly two-thirds (2.7 percent) of the 4.1 percent average annual growth in spending per beneficiary among beneficiaries who used Part D drugs.

- The average annual growth rate in overall spending per beneficiary reflects two distinct patterns of price and spending growth for high-cost beneficiaries and lower cost beneficiaries. Among high-cost beneficiaries, annual growth in prices (9.8 percent) accounted for nearly all of the spending growth (9.9 percent) during this period. In contrast, among lower cost beneficiaries, the average annual decrease in prices (–3.2 percent) resulted in an overall decrease in spending (–1.8 percent annually), despite an increase in the number of prescriptions filled during the same period.

Chart 10-19. The majority of Part D spending was incurred by slightly over one-quarter of all Part D enrollees, 2015



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 categories used for this analysis generally correspond to the parameters of the defined standard benefit. In 2015, 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 $7,061.76 in total drug spending, assuming that expenses for brand-name drugs accounted for 85.9 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 2015, about 26 percent of Part D enrollees had annual spending of $2,960 or more (at which point enrollees were responsible for a higher proportion of the cost of the drugs until their spending reached $7,061.76 under the defined standard benefit). These beneficiaries accounted for 83 percent of total Part D spending.

- The costliest 10 percent of beneficiaries, those with drug spending above the catastrophic threshold under the defined standard benefit, accounted for 61 percent of total Part D spending. Sixty-one percent of beneficiaries with the highest spending received Part D's low-income [drug] subsidy (data not shown; see Chart 10-20). Spending on prescription drugs is less concentrated than Medicare Part A and Part B spending. In 2013, the costliest 5 percent of beneficiaries accounted for 42 percent of annual Medicare fee-for-service (FFS) spending, and the costliest quartile accounted for 84 percent of Medicare FFS spending (see Chart 1-11).

- In 2015, the share of Part D enrollees with annual gross spending at or above $10,000 remained unchanged from 2014 at 6 percent. Those costliest 6 percent of enrollees accounted for 52 percent of spending in 2015, up from 46 percent in 2014 (2014 data not shown).

Chart 10-20. Characteristics of Part D enrollees, by spending levels, 2015

	Annual drug spending		
	<$2,960	$2,960–$7,061	≥$7,062
Sex			
Male	43%	41%	43%
Female	57	59	57
Race/ethnicity			
White, non-Hispanic	74	75	70
African American, non-Hispanic	11	11	14
Hispanic	10	9	11
Other	6	5	6
Age (years)			
<65	17	19	37
65–69	26	20	18
70–74	21	20	16
75–80	15	16	12
80+	22	25	17
LIS status*			
LIS	26	38	61
Non-LIS	74	62	39
Plan type**			
PDP	59	66	72
MA–PD	41	34	28

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 2015, Part D enrollees with annual spending at or above $7,062 were more likely to be minority, disabled and under age 65, and receiving the LIS compared with those with annual spending below $2,960.

- Part D enrollees entered the catastrophic phase of the benefit at about $7,062 in total drug spending in 2015. While LIS enrollees are more likely to reach the catastrophic phase of the benefit, their share has been declining, from more than three-quarters in 2010 and earlier years to 65 percent in 2013 (not shown in chart) and 61 percent in 2015. This decline reflects more rapid growth in enrollment of individuals who do not receive the LIS as well as the growth in average prices of drugs taken by those individuals.

- The majority of Part D enrollees with spending at or above $7,062 were enrolled in stand-alone PDPs (72 percent). In contrast, beneficiaries with annual spending below $2,960 were more likely to be in MA–PDs compared with those with higher annual spending (41 percent compared with 28 percent). This contrast reflects the facts that LIS enrollees are more costly on average and are more likely to be in PDPs.

Chart 10-21. Part D spending and use per enrollee, 2015

	Part D	Plan type		LIS status	
		PDP	MA–PD	LIS	Non-LIS
Total gross spending (billions)*	$137.4	$93.8	$43.6	$67.8	$69.6
Total number of prescriptions (millions)	2,119	1,336	783	792	1,328
Average spending per prescription	$65	$70	$56	$86	$52
Per enrollee per month					
Total spending	$290	$324	$236	$469	$211
OOP spending	33	35	30	6	45
Manufacturer gap discount	12	14	9	N/A	18
Plan liability	183	201	153	310	127
Low-income cost-sharing subsidy	47	55	34	153	N/A
Other**	15	19	9	<1	22
Number of prescriptions	4.5	4.6	4.2	5.5	4.0

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income [drug] subsidy), OOP (out-of-pocket), 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. Total spending does not necessarily equal the sum of OOP spending, manufacturer gap discount, plan liability, and low-income cost-sharing subsidy because other smaller sources of payment are not shown. 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. "OOP spending" includes all payments (other than manufacturer gap discount) that count toward the annual 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 about $5.8 billion in manufacturer discounts for brand-name drugs filled by non-LIS enrollees during the coverage gap.
**"Other" amount includes payments by patient assistance organizations and third-party payers other than Part D plans that reduce the patient cost-sharing liability.

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

- In 2015, gross spending on drugs for the Part D program totaled $137.4 billion, with more than two-thirds ($93.8 billion) accounted for by Medicare beneficiaries enrolled in stand-alone PDPs. Part D enrollees receiving the LIS accounted for nearly 50 percent ($67.8 billion) of the total. Manufacturer discounts for brand-name drugs filled by non-LIS enrollees while they were in the coverage gap accounted for 4.2 percent of the total, or 8.3 percent of the gross spending by non-LIS enrollees (data not shown).

- The number of prescriptions filled by Part D enrollees totaled over 2.1 billion, with over 60 percent (more than 1.3 billion) accounted for by PDP enrollees. The 31 percent of enrollees who received the LIS accounted for about 37 percent (792 million) of the total number of prescriptions filled.

- In 2015, Part D enrollees filled 4.5 prescriptions at $290 per month on average, an increase from $268 per month (for 4.5 prescriptions) in 2014 (2014 data not shown). The average monthly plan liability for PDP enrollees ($201) was considerably higher than that of MA–PD enrollees ($153), while the difference in average monthly OOP spending was smaller between the two types of plans ($35 vs. $30, respectively). The average monthly low-income cost-sharing subsidy was much higher for PDP enrollees ($55) compared with MA–PD enrollees ($34).

- Average monthly spending per LIS enrollee ($469) was more than double that of a non-LIS enrollee ($211), while the average number of prescriptions filled per month by an LIS enrollee was 5.5 compared with 4.0 for a non-LIS enrollee. LIS enrollees had much lower OOP spending, on average, than non-LIS enrollees ($6 vs. $45, respectively). Part D's LIS pays for most of the cost sharing for LIS enrollees, averaging $153 per month in 2015.

Chart 10-22. Trends in Part D spending and use per enrollee, 2007–2015

	Average spending and number of prescriptions						Average annual growth rate, 2007–2015	
	2007	2011	2012	2013	2014	2015	Number	Percent
Average spending per month								
All Part D	$212	$239	$235	$242	$268	$290	$10	4.0%
By LIS status								
LIS	301	364	362	377	427	469	21	5.7
Non-LIS	156	167	167	179	196	211	7	3.9
By plan type								
PDP	239	274	270	275	303	324	11	3.9
MA−PD	151	178	178	185	211	236	11	5.7
Average number of prescriptions per month*								
All Part D	3.9	4.3	4.3	4.5	4.5	4.5	0.1	1.7
By LIS status								
LIS	4.6	5.1	5.2	5.4	5.5	5.5	0.1	2.2
Non-LIS	3.4	3.8	3.8	4.0	4.0	4.0	0.1	2.1
By plan type								
PDP	4.1	4.5	4.5	4.6	4.6	4.6	0.1	1.4
MA−PD	3.4	3.9	4.0	4.1	4.2	4.2	0.1	2.6

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.
*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 2015, average per capita spending for Part D–covered drugs grew at an average annual rate of 4 percent, or by over 36 percent cumulatively. Growth in average per capita spending has fluctuated over the years, ranging from –1.5 percent between 2011 and 2012 to nearly 11 percent between 2013 and 2014.

- Spending growth for non-LIS enrollees was lower than that for LIS enrollees (average annual growth rate of 3.9 percent compared with 5.7 percent) during the 2007 to 2015 period. 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 2015 period (5.7 percent compared with 3.9 percent), but the average growth was the same for both PDP and MA−PD enrollees in terms of the dollar increase ($11), and the average per capita spending for MA−PD enrollees continued to be below that of PDP enrollees by about $90.

Chart 10-23. Top 15 therapeutic classes of drugs covered under Part D, by spending and volume, 2015

Top 15 therapeutic classes by spending	Dollars		Top 15 therapeutic classes by volume	Prescriptions	
	Billions	Percent		Millions	Percent
Diabetic therapy	$17.5	12.7%	Antihypertensive therapy agents	219.4	10.4%
Antivirals	13.6	9.9	Antihyperlipidemics	213.9	10.1
Asthma/COPD therapy agents	9.0	6.6	Diabetic therapy	135.4	6.4
Antihyperlipidemics	7.8	5.6	Beta-adrenergic blockers	132.4	6.2
Antipsychotics	6.2	4.5	Antidepressants	124.4	5.9
Antineoplastic enzyme inhibitors	5.0	3.7	Peptic ulcer therapy	109.4	5.2
Antihypertensive therapy agents	4.9	3.6	Diuretics	103.4	4.9
Analgesic (anti-inflammatory/ antipyretic, non-narcotic)	4.7	3.4	Calcium channel blockers	92.4	4.4
Anticonvulsant	4.4	3.2	Thyroid therapy	82.3	3.9
Analgesics (narcotic)	4.2	3.1	Analgesics (narcotic)	82.0	3.9
Peptic ulcer therapy	4.0	2.9	Anticonvulsant	79.2	3.7
Anticoagulants	3.7	2.7	Asthma/COPD therapy agents	58.3	2.8
Antidepressants	2.6	1.9	Antibacterial agents	54.8	2.6
Cognitive disorder therapy (antidementia)	2.6	1.9	Antianxiety agents	39.0	1.8
Antineoplastic (immunomodulators)	2.5	1.8	Analgesic (anti-inflammatory/ antipyretic, non-narcotic)	38.9	1.8
Subtotal, top 15 classes	92.6	67.4	Subtotal, top 15 classes	1,565.3	73.9
Total, all classes	137.4	100.0	Total, all classes	2,119.2	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.

- In 2015, the top 15 therapeutic classes by spending accounted for slightly over two-thirds of the $137.4 billion spent on prescription drugs covered by Part D plans. The top 15 therapeutic classes by volume accounted for nearly three-quarters of the roughly 2.1 billion prescriptions dispensed in 2015.
- While many of the same therapeutic classes on the top-15 list appear year after year, the ranking has changed from time to time. For example, market entries of new hepatitis C therapies more than doubled Part D spending on antivirals between 2013 and 2014 (data not shown). In 2015, antivirals accounted for $13.6 billion, up from $4.3 billion in 2013. The growth in spending for drugs to treat cancer has resulted in two classes of antineoplastic therapies (enzyme inhibitors and immunomodulators) appearing on the top-15 list for the first time in 2015, compared with just one class between 2012 and 2014 and none before 2012.
- In 2015, spending on drugs to treat diabetes totaled $17.5 billion, an increase of about 24 percent from $14.1 billion in 2014 (2014 data not shown), continuing the double-digit growth trend we have observed during the last few years. The number of prescriptions filled for diabetic therapy totaled 135.4 million, an increase of 7.4 percent from 126.1 million in 2014 (2014 data not shown).

(Chart continued next page)

Chart 10-23. Top 15 therapeutic classes of drugs covered under Part D, by spending and volume, 2015 (continued)

- Antianxiety agents appeared on the top-15 list by volume for the first time in 2013. The number of prescriptions for antianxiety agents totaled 39 million in 2015, an increase of about 11 percent from 35.2 million in 2013 (2013 data not shown). Before 2013, the use of antianxiety drugs was relatively low (8.5 million in 2012; data not shown). The increase in the use of antianxiety agents since 2012 reflects the addition of benzodiazepines to the list of Part D–covered drugs beginning in 2013.

- Nine therapeutic classes are among the top 15 in both spending and volume. Diabetic therapy dominates the list by spending, accounting for more than 19 percent of spending for the top 15 therapeutic classes, followed by central nervous system agents (antipsychotics, anticonvulsants, and antidepressants) and cardiovascular agents (antihyperlipidemics and antihypertensive therapy agents), each accounting for about 14 percent of spending. 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 10-24. Part D patterns of prescribing by provider type, 2015

	Part D	Provider type	
		Primary care*	Specialty/others
Number of individual prescribers (thousands)	1,102	462	640
Percent of all individual prescribers		42%	58%
Average beneficiary (patient) count	153	195	122
Average per beneficiary			
Gross spending	$723	$771	$687
Number of prescriptions	6.3	8.9	4.3
Top 1 percent of prescribers based on number of prescriptions filled per beneficiary			
Number of individual prescribers	9,680	7,940	1,740
Percent of all individual prescribers		82%	18%
Total gross spending (billions)	$9.3	$7.9	$1.4
Percent of total gross spending (by column)	7%	11%	2%
Total number of prescriptions (millions)	138	121	17
Percent of all prescriptions filled	10%	12%	4%
Average per beneficiary			
Gross spending	$3,764	$3,424	$5,319
Number of prescriptions	43	43	43

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 with the 2015 prescription counts shown in Chart 10-18 and Chart 10-21 through Chart 10-23.
*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 2015, about 1.1 million individual providers wrote prescriptions for Medicare beneficiaries that were filled under Part D. Of those, about 42 percent were primary care providers and 58 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—195 beneficiaries versus 122 beneficiaries.

(Chart continued next page)

Chart 10-24. Part D patterns of prescribing by provider type, 2015 (continued)

- On a per beneficiary basis, average gross spending for Part D prescriptions was higher for prescriptions written by primary care providers ($771) compared with the average for specialty and other providers ($687). Primary care providers also wrote more prescriptions per beneficiary, on average, than specialty and other providers: 8.9 compared with 4.3.

- Nearly 9,700 prescribers were among the top 1 percent of all prescribers, as ranked by the average number of Part D prescriptions filled per beneficiary in 2015. Of those prescribers, 82 percent were primary care providers and 18 percent were specialty and other providers.

- The top 1 percent of prescribers accounted for 7 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 2015, per beneficiary Part D spending averaged $3,764 for 43 prescriptions filled.

Chart 10-25. Part D patterns of prescribing for selected specialties, 2015

	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	1,102.2	100%	$723	6.3
All specialty/others	640.0	58	687	4.3
Selected specialties:				
Psychiatry	25.7	4	1,373	13.3
Cardiology	20.8	3	686	8.8
Ophthalmology	19.7	3	414	4.1
Psychiatry & neurology	13.9	2	1,243	11.0
Neurology	13.4	2	2,800	7.7
Gastroenterology	13.1	2	2,559	3.8
Urology	10.7	2	404	4.0
Pulmonary disease	9.2	1	2,297	7.0
Nephrology	8.3	1	1,610	9.3
Hematology & oncology	8.1	1	6,041	6.3
Endocrinology	5.6	1	1,996	8.5
Infectious disease	5.1	1	6,687	9.6
Rheumatology	4.6	1	2,584	8.3
Medical oncology	3.0	<0.5	5,570	5.9

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 2015 prescription counts shown in Chart 10-18 and Chart 10-21 through Chart 10-23.

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

- Of specialty care prescribers, psychiatrists were among the most numerous, making up 4 percent of all Part D prescribers in 2015. Cardiologists, ophthalmologists, psychiatrist/neurologists, neurologists, gastroenterologists, and urologists each made up another 2 percent to 3 percent of Part D prescribers.

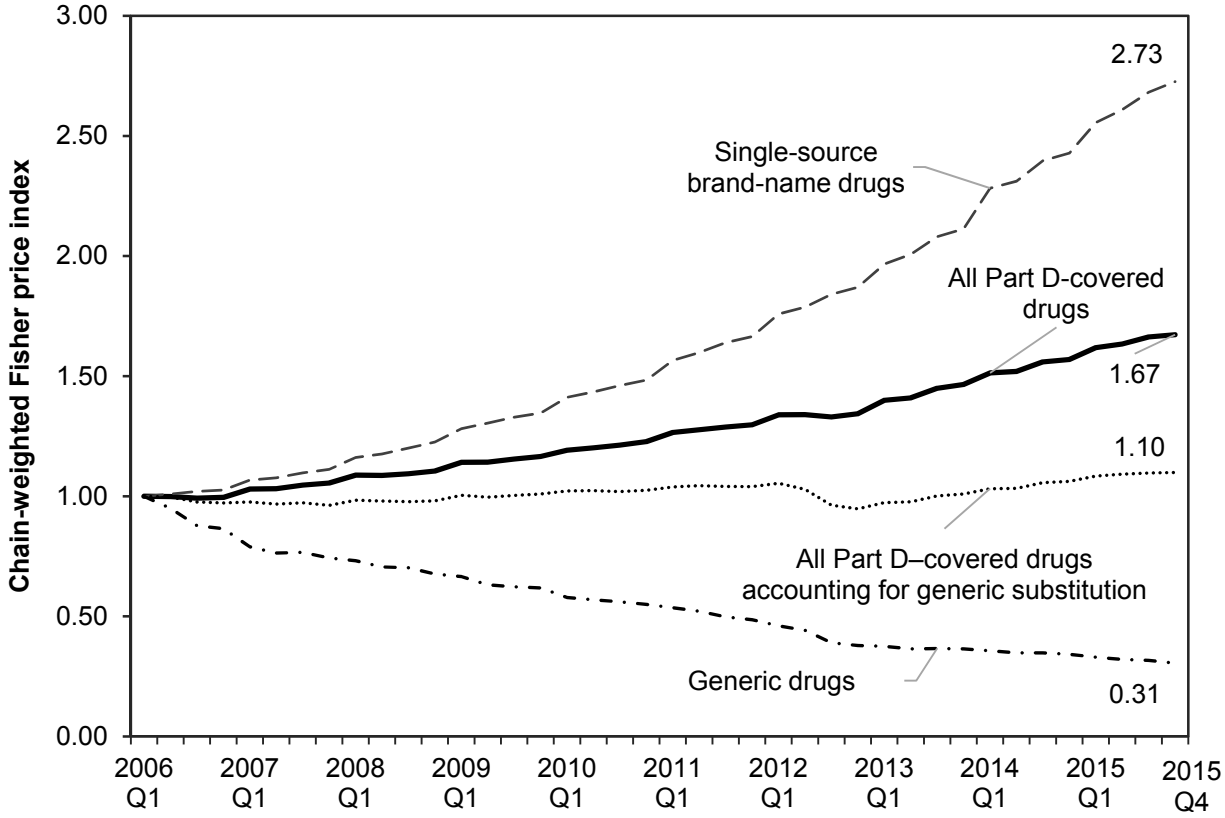
- Psychiatrists wrote an average of 13.3 prescriptions per beneficiary, with an average of $1,373 in gross spending per patient. Those are higher than the overall Part D averages of 6.3 prescriptions and $723 in average gross spending per beneficiary. Other specialties with comparatively high average gross spending per beneficiary include psychiatry/neurology, neurology, gastroenterology, pulmonary disease, nephrology, hematology/oncology, endocrinology, infectious disease, rheumatology, and medical oncology.

(Chart continued next page)

Chart 10-25. Part D patterns of prescribing for selected specialties, 2015 (continued)

- Other specialties such as ophthalmology and urology had lower average gross spending per beneficiary. Cardiologists had average gross spending per beneficiary similar to that of all Part D specialty prescribers ($686 vs. $687, respectively), but wrote an average of 8.8 prescriptions per beneficiary—considerably more than the average of 4.3 per beneficiary for all Part D specialty prescribers. This distinction reflects the widespread availability of generic cardiology medications.

Chart 10-26. Price growth for Part D–covered drugs, 2006–2015



Note: Part D indexes reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies. These measures of price growth reflect growth in the price of individual products, but do not reflect changes in price due to the introduction of new products or the changes in the mix of products used.

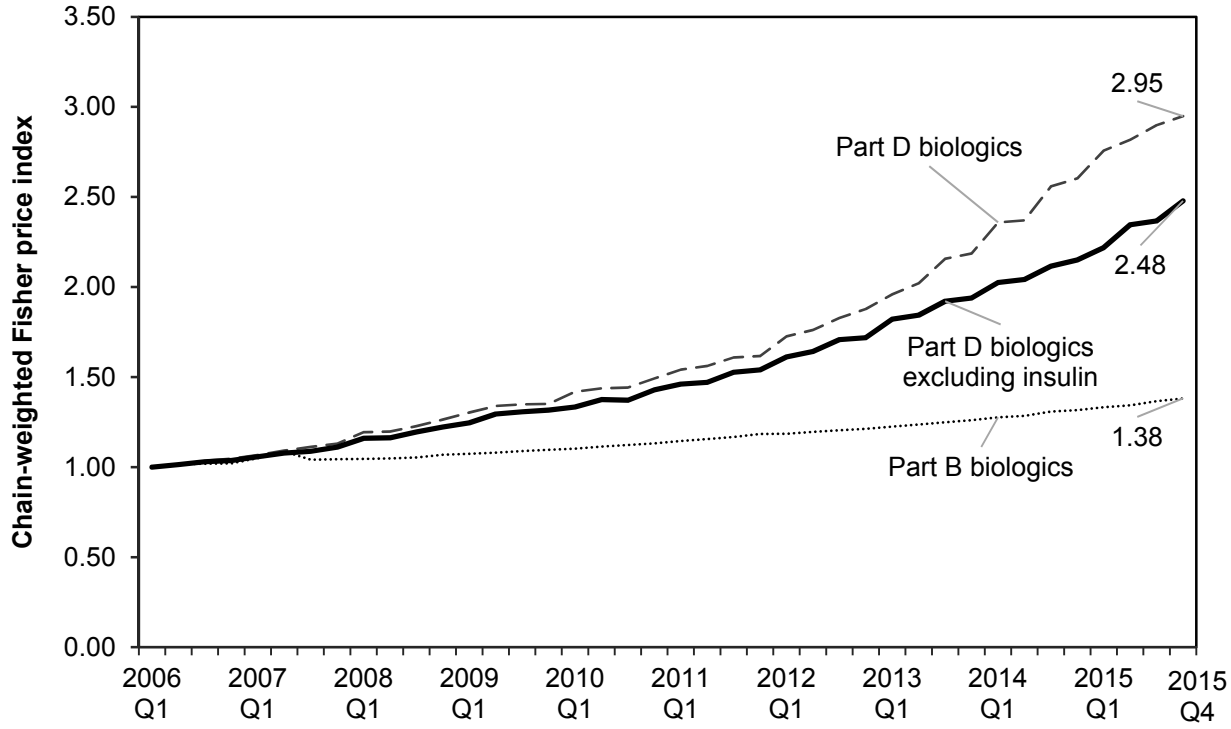
Source: Acumen LLC analysis for MedPAC.

- Measured by individual national drug codes, prices of drugs and biologics covered under Part D rose 67 percent cumulatively between 2006 and 2015 (an index of 1.67) (prices reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies).

- As measured by a price index that takes generic substitution into account, Part D prices increased by just 10 percent cumulatively over the nine-year period. Before 2013, increased generic use kept overall prices stable by offsetting increases in prices of brand-name drugs. From 2013 to 2015, however, the introduction of new generics slowed, and prices for brand-name drugs grew more rapidly—as reflected by an uptick in the price index.

- Overall, between 2006 and 2015, prices of generic drugs covered under Part D decreased to 31 percent of the average price observed at the beginning of 2006. In comparison, prices of single-source, brand-name drugs (drugs with no generic substitutes) grew by a cumulative 173 percent during the same period.

Chart 10-27. Comparison of price growth for Part B and Part D biologics, 2006–2015



Note: Part D indexes reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies. The Part B index reflects growth in the average sales price of Part B–covered biologics over time, measured for individual biologics at the Healthcare Common Procedure Coding System billing code level. These measures of price growth reflect growth in the price of individual products but do not reflect changes in price due to the introduction of new products or the changes in the mix of products used. The Part B biologics price index numbers in this chart and in Chart 10-6 are different due to the different time periods of analysis.

Source: Acumen LLC analysis for MedPAC.

- Measured by the change in the average sales price of individual Part B–covered biologics, the prices of Part B–covered biologics rose by an average of 38 percent cumulatively between 2006 and 2015 (an index of 1.38). Measured by individual national drug codes, prices of biologics covered under Part D rose 195 percent cumulatively during the same period (an index of 2.95) (prices reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies).

- Prices of noninsulin biologics covered under Part D grew less rapidly (by an average of 148 percent cumulatively) compared with the growth in prices of all Part D biologics (a cumulative 195 percent) during the same period.

- These measures of price growth reflect growth in price at the individual product level and do not reflect changes in price that occur as a result of shifts in the mix of biologics used or the introduction of new, higher priced biologics.

- Currently, biologics that may be covered under either Part B or Part D are limited to a subset of drugs within therapeutic classes such as therapies to treat inflammatory conditions (e.g., rheumatoid arthritis) and certain types of cancer.