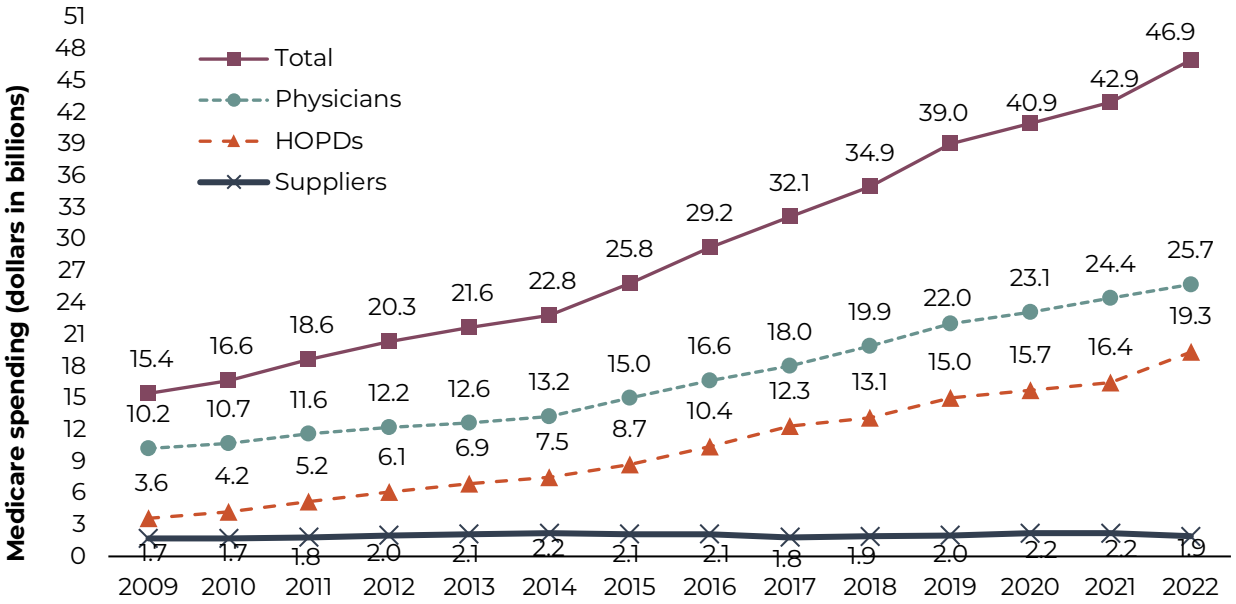
SECTION

10

Prescription drugs

Chart 10-1 Medicare spending for Part B drugs furnished by physicians, hospital outpatient departments, and suppliers, 2009–2022



Note: HOPD (hospital outpatient department). Data include Part B–covered drugs furnished by several provider types, including physicians, suppliers, and HOPDs, 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 or other methods. Data exclude blood and blood products (other than clotting factor). Dollar amounts are nominal, not adjusted for inflation. Components may not sum to totals due to rounding.

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

> Fee-for-service (FFS) Medicare and its beneficiaries spent nearly $47 billion on separately paid Part B drugs in 2022, with physician offices, HOPDs, and pharmacy suppliers accounting for 55 percent, 41 percent, and 4 percent of spending, respectively.

> Between 2009 and 2022, Part B drug spending grew 8.9 percent per year on average on a nominal basis. Over this period, spending grew more rapidly for HOPDs than for physicians and suppliers—at average annual rates of about 14 percent, 7 percent, and 1 percent, respectively.

> Between 2021 and 2022, FFS Part B drug spending increased 9.4 percent, with spending growing most rapidly (17.7 percent) in HOPDs, largely due to a change in payment rates for 340B hospitals.

> Medicare generally pays providers for Part B drugs based on the average sales price (ASP) plus 6 percent. Between 2018 and 2021, Medicare paid a reduced rate (ASP minus 22.5 percent) for hospitals participating in the 340B Drug Discount Program. In 2022, in response to a Supreme Court ruling, CMS increased the payment rate for 340B-acquired Part B drugs to ASP plus 6 percent. (CMS will make separate lump sum payments to 340B hospitals to compensate for reduced payments received in 2018 through 2021, but those amounts are not reflected in the chart).

> The data exclude Part B drugs furnished by critical access hospitals (CAHs) and Maryland hospitals, which are not paid under the general Part B drug ASP payment system. Medicare and beneficiaries spent about $1.3 billion in CAHs and $0.4 billion in Maryland hospitals for Part B drugs in 2022 (data not shown). Also, the data do not reflect Part B drugs paid as part of larger payment bundles (i.e., certain drugs furnished by HOPDs that are packaged into payment for other services and drugs furnished by dialysis facilities that are paid under the broader dialysis payment bundle).

Chart 10-2 Change in use of and Medicare payments for separately payable Part B drugs, 2009–2022

	2009	2022	Average annual growth 2009–2022
Total payments: Separately payable Part B drugs (in billions)	$11.5*	$43.5*	10.8%*
Total payments: All Part B drugs excluding vaccines (in billions)	$11.3	$42.1	10.7
Number of beneficiaries using a Part B drug (in millions)	2.4	3.7	3.2
Average number of Part B drugs per beneficiary	1.34	1.32	–0.1
Average annual payment per Part B drug per beneficiary	$3,422	$8,695	7.4
Total payments: Part B vaccines (in billions)	$0.2	$1.4	15.2
Number of beneficiaries using a Part B vaccine (in millions)	13.4	14.6	0.7
Average number of Part B vaccines per beneficiary	1.08	1.12	0.3
Average annual payment per Part B vaccine per beneficiary	$15	$83	14.1

Note: This analysis includes Part B drugs paid based on the average sales price as well as the small group of Part B drugs that are paid based on other methods. "Vaccines" refers to 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 and exclude data for critical access hospitals, Maryland hospitals, and dialysis facilities. Yearly figures presented in the table are rounded; the average annual growth rate was calculated using unrounded data. Dollar amounts are nominal, not adjusted for inflation.
*For purposes of this analysis, spending on separately payable Part B drugs excludes any drug that was bundled in 2009 or 2022 (i.e., drugs that were packaged under the outpatient prospective payment system in 2009 or 2022 were excluded from both years of the analysis, regardless of the setting in which the drug was administered), drugs billed under not-otherwise-classified billing codes, and blood and blood products (other than clotting factor). Without those exclusions, Part B drug spending was $15.4 billion in 2009 and $46.9 billion in 2022, as shown in Chart 10-1.

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 10.8 percent per year, on average, between 2009 and 2022 on a nominal basis.

> Medicare spending on separately payable Part B drugs excluding Part B–covered preventive vaccines grew at a similar rate (10.7 percent per year) between 2009 and 2022.

> Growth in the average price that Medicare Part B paid per drug was the largest factor contributing to increased spending for separately payable Part B drugs excluding vaccines between 2009 and 2022. During that period, the average annual payment per drug grew 7.4 percent per year on average, reflecting increases in the prices of existing drugs; the launch of new, higher-priced drugs; and shifts in the mix of drugs (data not shown). Growth in the number of beneficiaries using nonvaccine Part B drugs (about 3.2 percent per year on average) also contributed to increased spending. The number of Part B drugs received per user declined slightly.

> In 2022, Medicare and beneficiaries spent $1.4 billion on three Part B–covered preventive vaccines (influenza, pneumococcal, and hepatitis B) furnished by physicians, hospital outpatient departments, and pharmacy suppliers. Between 2009 and 2022, Part B vaccine spending grew 15 percent per year on average. Almost all of that growth was due to higher average payments per vaccine, which climbed at an average rate of 14 percent per year, reflecting higher launch prices for new influenza and pneumococcal vaccines and postlaunch price increases for vaccines. (Medicare Part B was not liable for the cost of COVID-19 vaccines purchased by the federal government.)

Chart 10-3 Top 20 Part B drugs, 2022

		2022			Percent change, 2021–2022		
		Total spending (billions)	Number of users	Average spending per user	Total spending	Number of users	Average spending per user
Keytruda	CA	4.9	67,400	$73,300	25%	7%	17%
Eylea	MD	3.5	341,300	10,400	4	9	–5
Prolia/Xgeva	CA SE, OS	2.0	655,200	3,100	12	4	8
Darzalex	CA	1.9	22,200	85,500	24	18	5
Opdivo	CA	1.9	27,200	68,200	18	6	11
Rituxan*	AR, CA, ID	1.0	60,500	17,300	–20	–7	–14
Orencia	AR	0.9	32,200	28,100	–9	1	–10
Lucentis*	MD	0.8	103,200	7,700	–24	–10	–15
Tecentriq	CA	0.8	12,900	60,300	19	2	17
Avastin*	CA, MD	0.7	180,100	3,900	–20	–6	–15
Ocrevus	MS	0.7	12,800	54,600	14	–1	15
Entyvio	ID	0.7	17,700	38,100	28	11	16
Gammagard	IMD, NE	0.6	21,900	28,900	25	17	7
Neulasta*	CA SE	0.6	81,800	7,700	–27	–4	–24
Remicade*	AR, ID	0.6	54,200	11,400	–4	1	–5
Soliris	AI	0.6	1,500	400,400	–4	–8	4
Imfinzi	CA	0.6	10.600	53,200	24	16	7
Fluzone HD	VA	0.5	8,000,300	67	13	5	7
Sandostatin	CA SE	0.5	9,200	49.700	6	–4	10
Zenith amniotic membrane	WC	0.5	4,100	111,800	**	**	**
Top 10 drugs		18.5					
Top 20 drugs		24.4					
All Part B drugs		46.9					

Note: CA (cancer), MD (macular degeneration and other eye disorders), SE (side effect), OS (osteoporosis), AR (arthritis), ID (inflammatory disorders), AI (autoimmune), MS (multiple sclerosis), IMD (immune deficiency), NE (neuropathy), VA (vaccine), HD (high-dose), WC (wound care). "Total drug spending" includes Medicare program payments and beneficiary cost sharing. The 20 drugs shown in the chart reflect the Part B drug billing codes with the highest Medicare expenditures in 2022. 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. Data exclude blood and blood products (other than clotting factor). Components do not always sum to totals due to rounding. Dollar amounts are nominal, not adjusted for inflation.
*For originator biologics that have biosimilar competitors, data in the table reflect both the originator biologic and biosimilars.
**Zenith amniotic membrane received its own billing code in the fourth quarter of 2021 and had very low utilization that quarter.

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

> Part B drugs are billed using over 900 billing codes, but spending is concentrated. In 2022, Medicare spending (including beneficiary cost sharing) on the top 10 products accounted for $18.5 billion, or 39 percent of total Part B drug spending. Spending on the top 20 products accounted for $24.4 billion, or about 52 percent of total Part B drug spending.

(Chart continued next page)

Chart 10-3 Top 20 Part B drugs, 2022 (continued)

> The top 20 Part B drugs are concentrated in certain therapeutic areas. Seven of the top 20 drugs treat cancer, and three treat cancer side effects. The top 20 also include 3 products for macular degeneration and 4 products for rheumatoid arthritis or other inflammatory disorders.

> Seventeen of the top 20 Part B products are biologics. One product (Sandostatin) is a nonbiologic drug, one (Fluzone HD) is a preventive vaccine, and one (Zenith amniotic membrane) is a skin substitute considered a human cells, tissues, or cellular and tissue–based product.

> Among the top 20 highest-expenditure Part B drugs in 2022, average total spending per user varied. Of seven products used to treat cancer (excluding Avastin, for which costs vary substantially depending on whether it is used for cancer or macular degeneration), average spending per user ranged from $53,000 to $86,000. Average spending per user ranged from $11,000 to $38,000 for four drugs used to treat rheumatoid arthritis and other inflammatory conditions, and from $8,000 to $10,000 for two drugs used to treat macular degeneration (excluding Avastin). Soliris, a product used to treat rare autoimmune conditions, had the highest average cost per user among the top 20, $400,000. A skin substitute product (Zenith amniotic membrane) had average spending per user of about $112,000.

> Between 2021 and 2022, total spending increased for 13 of the top 20 Part B drugs and decreased for 7 drugs on a nominal basis. Five products experienced spending growth of more than 20 percent (Keytruda, Darzalex, Entyvio, Gammagard, and Imfinzi). In addition, Zenith amniotic membrane, which first received a billing code in the last quarter of 2021, had about $0.5 billion in spending in 2022. Among the products that experienced spending decreases in 2022, the most substantial decreases occurred among four products with biosimilar competition (Rituxan, Lucentis, Avastin, and Neulasta), ranging from 20 percent to 27 percent.

Chart 10-4 Growth in manufacturer prices for the 20 highest-expenditure Part B drugs, 2015–2024

	Average annual percentage change in average sales price 2015–2022	Percentage change in average sales price 2022–2023	Percentage change in average sales price 2023–2024
Keytruda	2.3%[c]	3.1%	3.4%
Eylea	–1.0	–1.9	–4.0
Prolia/Xgeva	5.4	8.8	9.2
Darzalex	4.0[d]	3.0	4.7
Opdivo	2.4[c]	2.6	3.6
Rituxan[a]	2.4	–4.5	–3.1
Orencia	4.3	–2.3	–0.8
Lucentis[a]	–3.6	–22.8	–20.9
Tecentriq	1.2[e]	1.5	5.2
Avastin[a]	0.0	4.3	4.7
Ocrevus	0.8[e]	1.3	0.2
Entyvio	3.8[c]	1.9	1.7
Gammagard	2.5	–2.4	–3.1
Neulasta[a]	–6.5	–25.7	–62.5
Remicade[a]	–9.2	–7.5	–7.7
Soliris	1.2	–0.8	–0.6
Imfinzi[f]	0.8	2.7	2.3
Fluzone HD[b]	10.1	7.2	4.9
Sandostatin	5.4	–0.4	2.5
Zenith amniotic membrane	N/A[g]	N/A[g]	N/A[g]
Consumer Price Index for All Urban Consumers	**2.7**	**6.4**	**3.1**

Note: N/A (not available). Growth rates are calculated for average sales price (ASP) from first quarter to first quarter of each year and for the Consumer Price Index for All Urban Consumers (CPI–U) from January to January of each year. For products that launched after 2015, the table displays average annual ASP growth between the earliest year that a first-quarter payment rate was available for the product and 2022. ASP at the billing-code level is calculated using the publicly available Part B drug payment rate data on CMS's website. Price growth is nominal, not adjusted for inflation.
[a]Indicates the product is an originator biologic that has experienced biosimilar entry. ASP trends are for the originator product only.
[b]For Fluzone HD, a preventive vaccine paid 95 percent of the average wholesale price, the table displays the percentage change in the actual payment rate rather than ASP.
[c]ASP growth from 2016 to 2022.
[d]ASP growth from 2017 to 2022.
[e]ASP growth from 2018 to 2022.
[f]ASP growth from 2020 to 2022.
[g]Zenith amniotic membrane received its own billing code in the fourth quarter of 2021 and did not have a published payment rate in January 2022 or January 2023.

Source: MedPAC analysis of CMS ASP payment rate files publicly available on the CMS website, CPI–U data from the Bureau of Labor Statistics, and MedPAC and Acumen LLC analysis of Medicare claims data.

(Chart continued next page)

Chart 10-4 Growth in manufacturer prices for the 20 highest-expenditure Part B drugs, 2015–2024 (continued)

> Medicare pays for most Part B drugs at a rate of 106 percent of the average sales price. ASP is the average price realized by the manufacturer for sales to most U.S. purchasers, net of rebates, discounts, and price concessions, with certain exceptions. For biologics, biosimilars, and brand-name drugs with no generic competitors, Medicare Part B pays each product an ASP-based rate under the product's own billing code, essentially paying whatever price the manufacturer establishes. For brand drugs with generic competitors, Medicare Part B assigns both the brand product and its generic equivalents to the same billing code and pays 106 percent of a volume-weighted ASP.

> Beginning January 1, 2023, manufacturers of Part B single-source drugs, biologics, and biosimilars are required to pay Medicare a quarterly rebate if their product's ASP grows faster than inflation. Beginning April 2023, for products that incur a rebate, beneficiary cost sharing is based on the lower, inflation-adjusted ASP. Certain types of products are excluded from the policy (e.g., low-cost drugs, preventive vaccines, drugs experiencing a shortage or supply chain disruption, and biosimilars meeting certain criteria). Whether a product incurs an inflation rebate is determined based on cumulative growth in the payment rate between a base period (generally from July 1, 2021) and a given quarter and how that compares to growth in the CPI–U over a specified period. Data on trends in ASP and CPI–U in this chart do not replicate the CMS rebate calculation.

> In the most recent year, among the top 20 highest-expenditure drugs, more products experienced a price increase than price decrease on a nominal basis. Prices increased for 11 products, with 7 of those products' prices increasing faster than the CPI–U between January 2023 and 2024.

> Since 2022, Prolia/Xgeva has experienced the greatest price growth among the 20 highest-expenditure Part B products, with its payment rate increasing about 9 percent each year between January 2022 and January 2024. Prolia/Xgeva was the only product among the top 20 that incurred an inflation rebate between the second quarter of 2023 and the first quarter of 2024 (as indicated by reduced beneficiary cost sharing based on the inflation-adjusted ASP) (data not shown). Across all Part B drugs, drugs in 51 Part B billing codes incurred an inflation rebate for one or more quarters over that period (data not shown).

> Between January 2023 and 2024, 8 of the top 20 products experienced a price decrease. Some of the price declines occurred among originator biologics facing biosimilar competition. Avastin, Neulasta, Lucentis, Remicade, and Rituxan all have biosimilar competitors. Prices for these originator biologics (except for Avastin) declined by 3 percent to 63 percent between 2023 and 2024. Originator Avastin's price increased about 4 percent in 2023 and 5 percent in 2024, despite facing biosimilar competition.

Chart 10-5 Top 10 Part B therapeutic classes of drugs, 2022

	Total Medicare payments in 2022 (in billions)	Percentage change in total Medicare payments 2021–2022
Antineoplastics	$18.5	11%
Ophthalmic agents	4.8	1
Endocrine agents	3.9	11
Hematological agents	3.4	–2
Analgesics, anti-inflammatories, or antipyretics	2.8	–4
Immune globulin agents	2.3	14
Skin substitutes	1.6	52
Respiratory therapy agents	1.5	–3
Vaccines	1.4	27
Neuromuscular and musculoskeletal therapy agents	1.4	3

Note: Therapeutic classes are ranked in order of 2022 total fee-for-service (FFS) Medicare spending. This analysis includes Part B drugs paid based on the average sales price as well as the small group of Part B drugs that are paid based on other methods. Drug spending includes Medicare program payments and beneficiary cost sharing. "Vaccines" includes both preventive vaccines (e.g., influenza) and other vaccines when used to treat an injury or direct exposure to a disease (e.g., hepatitis A).

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

> In 2022, 10 drug therapeutic classes accounted for roughly 90 percent of total FFS Medicare spending for Part B drugs (calculation based on total Part B spending of $46.9 billion reported in Chart 10-1).

> Total spending by therapeutic class was somewhat concentrated. In 2022, antineoplastics (products used to treat cancer) accounted for roughly 40 percent, and the top three classes—antineoplastics, ophthalmic agents, and endocrine agents—accounted for roughly 60 percent of total Medicare spending.

> Between 2021 and 2022, the growth in total spending for five therapeutic classes—antineoplastics, endocrine agents, immune globulin agents, skin substitutes, and vaccines—exceeded the average annual growth across all Part B products (which averaged 9 percent during this period on a nominal basis (shown in Chart 10-1).

> Total spending on separately payable skin substitutes has been growing rapidly. Between 2021 and 2022, Medicare spending on skin substitutes grew by 52 percent, from $1.0 billion to $1.6 billion. This therapeutic class increased in rank by total Medicare spending from 10th in 2021 to 7th in 2022. Preliminary claims data for calendar year 2023 (claims processed through week 20 of 2024) indicate that spending on skin substitutes exceeded $4 billion that year, more than double the prior year's level (data not shown). In 2023, Medicare spending on one skin substitute product (Dual Layer Impax Membrane) exceeded $1.4 billion based on preliminary data.

Chart 10-6 Trends in Medicare Part B payment rates for originator biologics and their biosimilar products

	First biosimilar entry	Percentage change in originator biologic's payment rate		Biosimilar's payment rate as a percentage of originator biologic's payment rate (2024 Q1)	Biosimilar market share (2023 Q3)
		In 10 years before biosimilar entry	Since biosimilar entry (through 2024 Q1)		
Neupogen and biosimilars	2015 Q3	71%	–1%	30%–55%	79%
Remicade and biosimilars	2016 Q4	54%	–61%	44%–98%	29%
Neulasta and biosimilars	2018 Q3	117%	–87%	123%–648%	44%
Procrit/Epogen and biosimilars	2018 Q4	35%	–28%	88%	44%
Avastin and biosimilars	2019 Q3	42%	–9%	29%–98%	80%
Herceptin and biosimilars	2019 Q3	69%	–25%	17%–55%	79%
Rituxan and biosimilars	2019 Q4	68%	–16%	26%–52%	63%
Lucentis and biosimilars	2022 Q3	–31%	–32%	100%–140%	34%

Note: Q1 (first quarter), Q3 (third quarter), Q4 (fourth quarter). An originator biologic is a drug product derived from a living organism. A biosimilar product is a follow-on product that is approved by the Food and Drug Administration (FDA) based on the product being highly similar to the originator biologic. The biosimilars included in the analysis are Granix, Nivestym, Releuko, and Zarxio for originator Neupogen; Inflectra, Renflexis, and Avsola for originator Remicade; Fulphila, Fylnetra, Nyvepria, Stimufend, Udenyca, and Ziextenzo for originator Neulasta; Retacrit for originator Procrit/Epogen; Alymsys, Mvasi, Vegzelma, and Zirabev for originator Avastin; Ontruzant, Herzuma, Ogivri, Trazimera, and Kanjinti for originator Herceptin; Truxima, Ruxience, and Riabni for originator Rituxan; and Byooviz and Cimerli for originator Lucentis. Although Granix is not a biosimilar in the U.S. (because it was approved under the standard FDA approval process for new biologics), we include it here because it was approved as a biosimilar to Neupogen in Europe and it functions as a competitor to Neupogen in the U.S. market. "First biosimilar entry date" reflects the earliest market date for a product approved by the FDA as a biosimilar to the originator biologic. Growth in payment rates is nominal, not adjusted for inflation.

Source: MedPAC analysis of ASP payment rate files publicly available on the CMS website and product market date information from CMS's database on drug products in the Medicaid Drug Rebate Program and Acumen LLC analysis of Medicare claims data.

> Under Part B, Medicare pays for an originator biologic at 106 percent of its own ASP. For biosimilars, Medicare pays 100 percent of the biosimilar's ASP plus 6 percent or 8 percent of the originator product's ASP. Per the Inflation Reduction Act of 2022, for five years beginning October 2022, existing biosimilars and new biosimilars receive an 8 percent add-on, as long as the biosimilar's ASP does not exceed the originator's ASP.

(Chart continued next page)

Chart 10-6 Trends in Medicare Part B payment rates for originator biologics and their biosimilar products (continued)

> Biosimilar entry has generated savings for Medicare. For the eight biologics that had biosimilars on the market in 2022, Medicare spending on Part B originator biologics and their biosimilars declined on a nominal basis by about 20 percent, from $5.4 billion in 2021 to $4.3. billion in 2022 (data not shown). Pricing patterns and biosimilar uptake vary across products.

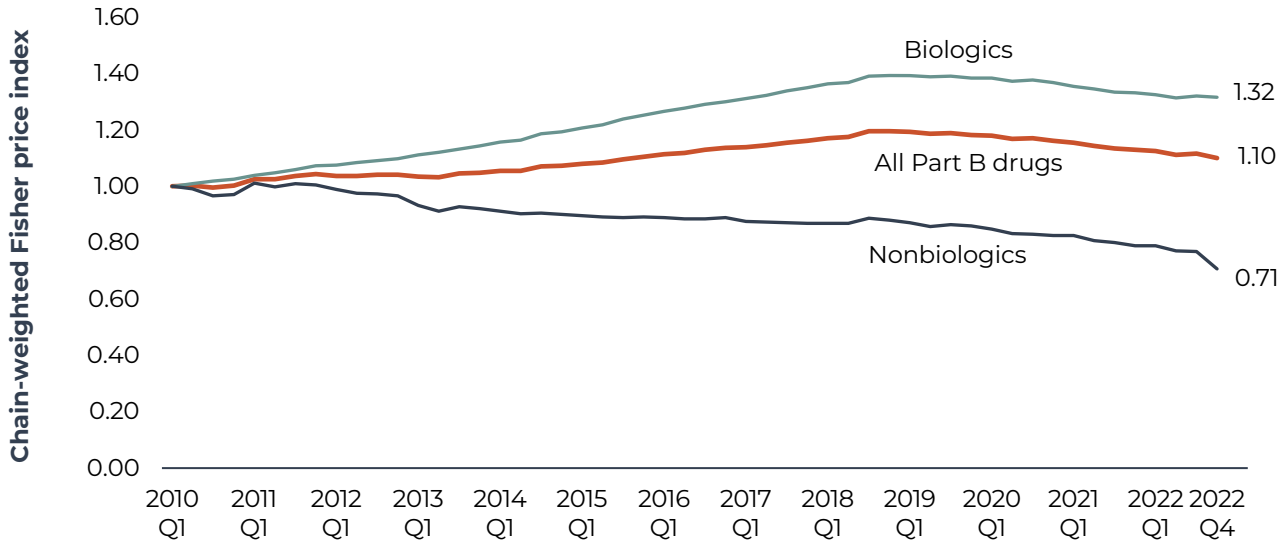
> For some products, biosimilars are priced substantially below originators, and biosimilar uptake has driven savings. For example, lower-price biosimilars now account for roughly 80 percent of the market share for Neupogen, Avastin, and Herceptin. These three originator products have reduced their prices only minimally or modestly (1 percent, 9 percent, and 25 percent, respectively) since biosimilar entry. Each of these products had at least one biosimilar on the market with a Medicare payment that was roughly 70 percent or 80 percent below the originator's payment rate.

> For other products, originator biologics have responded to biosimilar entry by lowering their prices, and savings have come from both the originator biologic and biosimilars. For example, the price of the originator Procrit/Epogen has fallen 28 percent since biosimilar entry. Medicare's payment rate for biosimilar Procrit/Epogen is 12 percent below the originator's payment rate as of the first quarter of 2024.

> In a few cases, originator biologics have reduced their prices by more than 50 percent in response to biosimilar entry. Originator Remicade's payment rate has declined 61 percent, and originator Neulasta's payment rate has declined 87 percent since biosimilar entry. As of the first quarter of 2024, Remicade had some biosimilar competitors on the market that were priced lower (as much as 56 percent below the originator's payment rate). In contrast, originator Neulasta had a lower Medicare payment rate than all of its biosimilar competitors as of the first quarter of 2024. Originators Remicade and Neulasta continue to retain the majority of market share as of the third quarter of 2024.

> Although biosimilar competition has resulted in reduced prices for originator biologics relative to the products' prices at the time of biosimilar entry, nearly all of these originator biologics experienced substantial price increases prior to biosimilar entry. With the exception of Lucentis, the originator biologics' cumulative growth in payment rates over the 10 years prior to biosimilar entry ranged from 35 percent to 117 percent. In contrast, Lucentis's payment rate declined 31 percent in the 10 years before biosimilar entry.

Chart 10-7 Postlaunch price indexes for Medicare Part B drugs, 2010–2022



Note: Q1 (first quarter), Q4 (fourth quarter). The price indexes are Fisher price indexes and reflect postlaunch price growth for individual Part B–covered drug products, measured in nominal terms (not adjusted for inflation). A product is defined as a Part B drug billing code (referred to as a Health Care Common Procedure Coding System billing code). Each Part B single-source drug, biologic, and biosimilar receives its own Part B drug billing code, while brand drugs with generic competitors are grouped together in the same billing code. The price index is different from the change in the aggregate average annual payment per Part B drug (Chart 10-2), which reflects changes in the prices of existing products, rising launch prices of new products, and shifts in utilization across products.

Source: Acumen LLC analysis for MedPAC.

> The Part B price indexes reflect growth in the Medicare payment rate (generally the average sales price (ASP) plus 6 percent) at the individual product level, which is a measure of average postlaunch price growth for Part B drugs. The price index is different from the change in the aggregate average annual payment per Part B drug (see Chart 10-2) which grew more than 7 percent per year on average between 2009 and 2022 and reflects a broader set of dynamics (including changes in the price of existing products, rising launch prices of new products compared with older products, and shifts in utilization across products).

> 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 10 percent cumulatively between 2010 and 2022 (index of 1.10) on a nominal basis. Since the third quarter of 2018 through the end of 2022, the overall price index for Part B drugs has declined from 1.20 to 1.10, driven by a decline in the biologics' price index, coupled with the continued decline in the nonbiologics' price index.

> The price index for biologics increased cumulatively by 32 percent (index of 1.32) between 2010 and 2022, reaching a high of just over 1.39 in the fourth quarter of 2018 and the first quarter of 2019 and declining to 1.32 by the fourth quarter of 2022. Pricing trends differ for biologics that face biosimilar competition and biologics that do not. Between the first quarter of 2019 and the fourth quarter of 2022, the price index declined for biologics with recent biosimilar entry by about 42 percent and increased for biologics without biosimilar competition by about 5 percent (data not shown).

> The price index for nonbiologics declined 29 percent (index of 0.71) between 2010 and 2022, which in part reflects patent expiration and generic entry for some of these products. The design of the ASP payment system spurs price competition among generics and their associated brand products by paying them the same rate under a combined billing code.

Chart 10-8 Part D enrollment by plan type, 2014–2023

	2014	2022	2023	Average annual growth rate 2014–2023
Total Medicare enrollment, in millions	56.9	68.1	69.5	2.2%
Part D enrollment, in millions				
Part D plans	40.0	53.1	55.7	3.8
Non-Medicare employer plans under the RDS*	2.8	1.1	0.9	–101.3
Total Part D	42.8	54.2	56.7	3.2
Share of Medicare enrollees with Part D	*75%*	*79%*	*82%*	
LIS enrollment				
PDP	9.2	6.2	6.3	–4.2
MA–PD	3.6	8.5	9.0	10.8
Total LIS	12.8	14.8	15.3	2.0
Share of LIS enrollees in MA–PD	*28%*	*58%*	*59%*	
Share of Part D plan enrollees with LIS	*32%*	*28%*	*27%*	
EGWPs (PDPs and MA–PDs), in millions	7.0	7.9	8.1	1.7
EGWP share of total Part D enrollment	*16%*	*15%*	*14%*	
Non-EGWP Part D plans, in millions				
PDP	20.1	20.2	20.7	0.4
MA–PD	13.0	25.0	26.9	8.4
Share of non-EGWP plan enrollees in MA–PD	*39%*	*55%*	*56%*	

Note: RDS (retiree drug subsidy), LIS (low-income subsidy), PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), EGWP (employer group waiver plan). 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 during the year, that individual was classified into the type of plan with the greater number of enrollment months. Not all components sum to their respective totals due to rounding. The average annual growth rate is calculated on unrounded numbers. Figures include all beneficiaries with at least one month of enrollment.
*Excludes federal government and military retirees covered by either the Federal Employees Health Benefit Program or the TRICARE for Life program.

Source: MedPAC analysis of common Medicare environment file from CMS.

> In 2023, 82 percent of Medicare beneficiaries were enrolled in Part D plans for at least one month during the year or had prescription drug coverage through employer-sponsored plans that received Medicare's RDS. That share is up from 75 percent in 2014.

> Between 2014 and 2023, the number of enrollees receiving the LIS grew modestly (2 percent per year, on average) compared with the number of non-LIS enrollees (about 4.4 percent per year, on average; data not shown). Faster enrollment growth among non-LIS enrollees has resulted in a decline in the share of Part D enrollees who receive the LIS. In 2023, 27 percent of Part D enrollees received the LIS, a decrease from 32 percent in 2014. Over 59 percent of LIS beneficiaries were in MA–PDs.

> Employer and union health plans continue to be important sources of drug coverage for Medicare beneficiaries under Part D. In 2023, 8.1 million Medicare beneficiaries (14 percent of Part D plan enrollees) were in plans (including PDPs and MA–PDs) set up by employers or unions for their retirees. Under these EGWPs, Medicare is the primary payer for basic drug benefits, and typically the employer offers wraparound coverage. Separately, 0.9 million Medicare beneficiaries were in plans offered by employers that receive Medicare's RDS. (If an employer remains the primary payer of creditable drug coverage for its retirees, 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.)

> In 2023, among non-EGWP plans, 26.9 million (56 percent) were in MA–PDs and 20.7 million (44 percent) were in stand-alone PDPs. Over the 2014 to 2023 period, enrollment in PDPs remained flat while enrollment in MA–PDs rose by an annual average of 8.4 percent.

Chart 10-9 Characteristics of Part D plan enrollees, 2023

	All Medicare	Part D plans	Plan type		Subsidy status	
			PDP	MA–PD	LIS	Non-LIS
Beneficiaries* (in millions)	69.5	55.7	25.0	30.7	15.3	40.4
Percent of all Medicare	100%	80%	36%	44%	22%	58%
Gender						
Male	46%	44%	44%	44%	42%	45%
Female	54	56	56	56	58	55
Race/ethnicity						
White, non-Hispanic	73	72	79	66	52	80
Black, non-Hispanic	11	11	7	14	20	7
Hispanic	9	9	6	12	17	6
Asian	4	4	3	4	7	3
Other	1	1	1	1	1	1
Age (years)**						
<65	13	14	13	14	34	6
65–69	27	25	24	26	23	26
70–74	23	23	23	23	16	26
75–79	17	17	17	17	11	20
80+	21	21	22	20	16	23

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). Components may not sum to totals due to rounding.
*Figures for "All Medicare" and "Part D plans" 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 enrollment months.
**Age as of July 2022.

Source: MedPAC analysis of the common Medicare environment file from CMS.

> In 2023, 55.7 million Medicare beneficiaries (80 percent) were enrolled in Part D plans at some point in the year. Less than half (25.0 million) were enrolled in stand-alone PDPs, and the rest were enrolled in MA–PDs (30.7 million). Just over 15 million enrollees received Part D's LIS.

> Demographic characteristics of Part D enrollees are generally similar to the overall Medicare population, though Part D enrollees are more likely to be female and less likely to fall in the 65–69 age bracket. MA–PD enrollees are more likely to be Hispanic or Black compared with PDP enrollees; LIS enrollees are more likely to be female, minority, and under age 65 (eligible for Medicare due to disability) compared with non-LIS enrollees.

Chart 10-10 Changes over time in the parameters of the Part D defined standard benefit, 2015–2024

	2015	2023	2024	Average annual change 2015–2024
Deductible	$320	$505	$545	6.1%
Initial coverage limit	2,960	4,660	5,030	6.1
Annual out-of-pocket threshold	4,700	7,400	8,000	6.1
Total covered drug spending at annual out-of-pocket threshold				
Enrollees eligible for manufacturers' coverage-gap discount	7,062	11,206	12,447	6.5
Other enrollees	6,680	10,516	11,477	6.2
Cost sharing for LIS beneficiaries:				
Copay for generic/preferred multisource drugs	2.65	4.15	4.50	6.1
Copay for other prescription drugs	6.60	10.35	11.20	6.1

Note: LIS (low-income subsidy). 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. The amounts shown of total covered drug spending at the annual out-of-pocket (OOP) threshold are for individuals who have no source of supplemental coverage and an average mix of brand and generic spending. Cost sharing paid by most sources of supplemental coverage does not count toward this threshold. Above the OOP limit, prior to 2024, non-LIS enrollees paid 5 percent coinsurance or copay amounts set in law, whichever was greater. Dollar amounts are nominal figures, not adjusted for inflation.

Source: CMS Office of the Actuary.

> In 2024, Part D's defined standard benefit has a $545 deductible, 25 percent coinsurance on covered drugs until the enrollee reaches $5,030 in total covered drug spending, and then a coverage gap until OOP spending reaches the annual threshold. (The total dollar amount of drug spending at which a beneficiary reaches the OOP threshold varies from person to person, depending on the mix of brand-name and generic prescriptions filled. CMS estimates that in 2024, a person who does not receive Part D's LIS and has no supplemental coverage would, on average, reach the threshold at $12,447 in total drug spending.) Most enrollees pay about 25 percent cost sharing for brand or generic prescriptions filled in the coverage gap. Beneficiaries who do not receive the LIS are eligible for a 70 percent manufacturers' discount on brand prescriptions in the gap phase. Enrollees with drug spending that exceeds the annual threshold no longer pay any cost sharing in the catastrophic phase; plan sponsors are now responsible for covering costs previously borne by beneficiaries. CMS updates most parameters of this defined standard benefit structure each year by the annual change in average total drug expenses of Medicare beneficiaries enrolled in Part D.

> Within certain limits, sponsors may offer Part D plans that have the same actuarial value as the defined standard benefit but a different benefit structure. 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 (see Chart 10-16). 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 up to two plans with enhanced benefits—basic and supplemental coverage combined.

> Several changes to Part D's benefit design are underway as a result of enactment of the Budget Reconciliation Act of 2022. (See the Commission's March 2024 report for more details.) In 2025, Medicare will implement a redesign of the Part D benefit that will cap enrollees' OOP spending at $2,000, increase plan liability, and reduce Medicare's reinsurance subsidy. The OOP cap will be updated annually in the same manner as other Part D parameters.

Chart 10-11 Characteristics of stand-alone Medicare PDPs, 2023–2024

	2023				2024			
	Plans		Enrollees as of February 2023		Plans		Enrollees as of February 2024	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	804	100%	18.5	100%	709	100%	18.1	100%
Type of benefit								
Defined standard	0	0	0.0	0	0	0	0.0	0
Actuarially equivalent	305	38	7.9	43	266	38	7.0	39
Enhanced	499	62	10.6	57	443	62	11.0	61
Type of deductible								
Zero	133	17	2.6	14	103	15	2.3	13
Reduced	110	14	2.0	11	200	28	3.6	20
Defined standard*	561	70	13.9	75	406	57	12.2	67
Some formulary tiers not subject to a deductible	423	53	9.3	50	360	51	9.0	50

Note: PDP (prescription drug plan). The PDPs and enrollment described here exclude employer-only plans and plans offered in U.S. territories. "Actuarially equivalent" includes both actuarially equivalent standard and basic alternative benefits. "Enhanced" refers to plans with basic plus supplemental coverage. Not all components sum to their respective totals or to 100 percent due to rounding.
*The defined standard benefit's deductible was $505 in 2023 and is $545 in 2024. Count of plans for 2024 includes some that have been sanctioned and terminated by CMS, making them no longer eligible for new enrollment or LIS autoenrollment.

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

> Plan sponsors are offering 709 stand-alone PDPs to fee-for-service enrollees in 2024 compared with 804 in 2023—a decrease of 12 percent. Total enrollment in PDPs declined by 2.3 percent to 18.1 million beneficiaries in 2024 from 18.5 million in 2023 as enrollees shifted to MA–PDs (see Chart 10-8).

> For 2024, 62 percent of PDP offerings include enhanced benefits (basic plus supplemental coverage); this share has remained steady since 2019 (2019 data not shown). Enhanced plans have further increased their share of enrollment, reaching 61 percent in 2024.

> In 2024, the share of enrollees in plans with either no or a reduced deductible climbed to one-third, up from one-fourth in 2023, as the share of plans (and enrollees in such plans) with a defined standard benefit fell from 75 percent to 67 percent. Conversely, in 2024, the share of plans designating certain formulary tiers not subject to the deductible fell to 51 percent from 53 percent in 2023. If, for example, a PDP used such a designation for preferred generic drugs, an enrollee would pay just the plan's cost sharing for that tier rather than the full cost of the prescription up to the amount of the deductible. In 2024, 50 percent of PDP enrollees were in such plans, down from 63 percent in 2022 (data not shown).

Chart 10-12 Characteristics of general MA–PDs, 2023–2024

	2023				2024			
	Plans		Enrollees as of February 2023		Plans		Enrollees as of February 2024	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	3,540	100%	18.9	100%	3,511	100%	19.7	100%
Type of organization								
Local HMO	2,086	59	11.7	62	1,998	57	11.8	60
Local PPO	1,404	40	6.8	36	1,467	42	7.6	39
PFFS	17	0	0.0	0	14	0	0.0	0
Regional PPO	33	1	0.3	2	32	1	0.3	1
Type of benefit								
Defined standard	14	<0.5	0.0	<0.5	18	1	0.0	<0.5
Actuarially equivalent	57	2	0.1	1	54	2	0.1	1
Enhanced	3,469	98	18.7	99	3,439	98	19.5	99
Type of deductible								
Zero	2,337	66	14.3	76	2,300	66	15.2	77
Reduced	1,045	30	4.2	22	1,017	29	4.0	20
Defined standard*	158	4	0.3	2	194	4	0.5	3
Some formulary tiers not subject to a deductible	1,154	33	4.4	23	1,161	33	4.4	22

Note: MA–PD (Medicare Advantage–Prescription Drug [plan]), HMO (health maintenance organization), PPO (preferred provider organization), PFFS (private fee-for-service). The MA–PDs and enrollment described here exclude employer-only plans, plans offered in U.S. territories, 1876 cost plans, special needs plans, 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 $505 in 2023 and is $545 in 2024.

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

> Sponsors are offering 3,511 MA–PDs in 2024 compared with 3,540 in 2023 (1 percent fewer plans). The vast majority of MA sponsors offer MA–PDs that combine medical benefits with prescription drug benefits under Part D. Despite the slight reduction in the number of plans, enrollment in MA–PDs grew 3.9 percent from 18.9 million in 2023 to 19.7 million in 2024.

> For the first time since 2011, the number of drug plans offered by HMOs decreased modestly from 2,086 in 2023 to 1,998 in 2024, though HMO drug plans remain the dominant type of MA–PD, making up 57 percent of all offerings. Local PPOs continue to grow in popularity, with enrollment growing nearly 12 percent in 2024 to 7.6 million enrollees, up from 6.8 million in 2023.

> In 2024, 98 percent of MA–PDs have enhanced benefits compared with 62 percent of PDPs (see Chart 10-11). In 2024, those MA–PDs enrolled 99 percent of all MA–PD beneficiaries.

> Sixty-six percent of MA–PDs have no deductible for their Part D benefits in 2024, and those plans attracted more than three-fourths of all MA–PD enrollees, far more than the 15 percent of PDPs covering 13 percent of enrollees in such plans (see Chart 10-11). In addition, 22 percent of MA–PD enrollees are in plans that designate certain cost-sharing tiers of their formularies that are not subject to a deductible.

Chart 10-13 Characteristics of SNPs, 2023–2024

	2023				2024			
	Plans		Enrollees as of February 2023		Plans		Enrollees as of February 2024	
	Number	Percent	Number (in millions)	Percent	Number	Percent	Number (in millions)	Percent
Total	1,254	100%	5.3	100%	1,311	100%	6.3	100%
Type of SNP								
Chronic condition	300	24	0.4	8	310	24	0.6	10
Dual eligible	765	61	4.7	90	828	63	5.6	88
Institutionalized	189	15	0.1	2	173	13	0.1	2
Type of benefit								
Defined standard	644	51	3.6	68	852	65	5.1	81
Actuarially equivalent	25	2	0.1	1	7	1	<0.5	<0.5
Enhanced	585	47	1.6	31	452	34	1.2	19
Type of deductible								
Zero	296	24	0.4	7	272	21	0.5	8
Reduced	57	5	0.2	4	47	4	0.1	2
Defined standard*	901	72	4.7	89	992	76	5.7	90
Some formulary tiers not subject to a deductible	130	10	0.4	8	111	8	0.5	7

Note: SNP (special needs plan). The plans and enrollment described here exclude plans offered in U.S. territories. 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 $505 in 2023 and is $545 in 2024.

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

> The number of SNPs (MA–PDs designed for certain groups of beneficiaries) has grown rapidly in recent years, though that growth slowed to 5 percent in 2024, after years of double-digit growth (data not shown). Growth in SNP enrollment slowed as well: SNP enrollment grew 13.6 percent in 2024 (from 5.3 million in 2023 to 6.3 million)—down from 29 percent growth in 2023.

> SNPs for individuals who are dually eligible for Medicare and Medicaid (D–SNPs) are the most popular type. In 2024, 63 percent of SNPs were D–SNPs, and they enrolled 88 percent of all SNP enrollees. The number of SNPs for individuals who have certain chronic conditions continued to grow slightly, reaching 310 in 2024; these SNPs enroll 10 percent of SNP enrollees. The number of SNPs for institutionalized beneficiaries decreased slightly to 173 in 2024 and continued to enroll 2 percent of all SNP enrollees.

> Compared with PDPs and MA–PDs, SNPs are much more likely to offer a defined standard benefit, with nearly two-thirds of SNPs now offering such coverage. In 2024, these plans enrolled 81 percent of SNP beneficiaries. There was a continued decline in the number of SNPs providing enhanced coverage in 2024, and enrollment in such plans fell to 19 percent of all SNP enrollees.

> Dually eligible beneficiaries automatically receive Part D's low-income subsidy, which means that most recipients pay nominal copayments while the subsidy pays the remainder of their plan's cost sharing. Thus, D–SNPs more frequently use Part D's defined standard benefit design and are less likely to have some formulary tiers that are not subject to a deductible.

Chart 10-14 Change in average Part D premiums, 2015–2024

	2015	2023	2024	Cumulative change in weighted average premium, 2015–2024
Base beneficiary premium	33.13	32.74	34.70	1.57
All plans	$30	$26	$27	–$3
Basic plans	26	35	41	15
Enhanced plans				
Basic benefits	27	13	14	–13
Supplemental benefits	6	9	7	1
Total premium	33	22	21	–12
All basic coverage	27	19	22	–7
PDPs	37	41	43	6
Basic plans	28	36	44	16
Enhanced plans				
Basic benefits	39	19	23	–16
Supplemental benefits	9	25	19	10
Total premium	48	44	42	–6
All basic coverage	33	26	31	–2
MA–PDs, including SNPs	18	15	15	–3
Basic plans	21	32	37	16
Enhanced plans				
Basic benefits	14	10	9	–5
Supplemental benefits	2	1	1	–1
Total premium	17	11	10	–7
All basic coverage	17	14	15	–2
Average MA–PD buy-down of basic premium	14	23	20	7
Average MA–PD buy-down of supplemental benefits	13	31	27	14

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–PDs 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 plans are lower than for basic plans could reflect several factors such as changes in enrollment among plan sponsors and differences in the average health status of plan enrollees. "All basic coverage" is a weighted average of the premiums for basic plans and the portion of premiums attributed to basic benefits in enhanced plans, for each respective plan type, or across all plan types in the case of the data presented under "all plans." Cumulative changes were calculated from unrounded data. Components may not sum to totals due to rounding. Dollar amounts are nominal figures, not adjusted for inflation.

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

> Part D enrollees can select between plans with basic or enhanced benefits (the latter combine basic and supplemental coverage). Medicare aims to subsidize 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 https://www.medpac.gov/wp-content/uploads/2022/10/MedPAC_Payment_Basics_23_PartD_FINAL_SEC.pdf.)

(Chart continued next page)

Chart 10-14 Change in average Part D premiums, 2015–2024 (continued)

> The overall average premium paid by enrollees for any type of Part D coverage increased slightly in 2024 from 2023, rounding up to $27 per month from less than $26 per month. Over the period from 2015 to 2024, year-to-year changes in average premiums have varied by type of benefit (premiums for basic plans have grown while premiums for enhanced plans have declined) and type of plan (PDP premium components have changed at slower rates than those for MA–PDs). The base beneficiary premium (BBP), a share of the nationwide average bid for basic Part D benefits, has fluctuated slightly over the years and is now 5 percent higher than it was in 2015, on a nominal basis. Beginning in 2024, a provision included in the Budget Reconciliation Act of 2022 limits the annual increase in the BBP to no more than 6 percent, and the Medicare program covers any cost beyond that limit through a higher subsidy; without this cap, the BBP would have been $39.35 per month in 2024. (For more information, see the Commission's 2024 March report to Congress at https://www.medpac.gov/wp-content/uploads/2024/03/Mar24_Ch11_MedPAC_Report_To_Congress_SEC.pdf.)

> Across all basic plans and the basic portion of enhanced plans, the average premium for basic benefits fell from $27 in 2015 to $22 per month in 2024, a cumulative decline of 19 percent (a decrease of $7). This decline 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. (For more information about Medicare's Part D spending, see Chapter 11 of the Commission's March 2024 report to the Congress.)

> Between 2015 and 2024, the average premium for a basic plan in a PDP increased by nearly $16, though half of that increase occurred in the past year alone. The average enrollee premium for enhanced plans offered by PDPs, by contrast, declined from $44 in 2023 to $42 in 2024. Of the $42 average premium in 2023 among enhanced PDPs, $19 was for basic benefits and $23 was for supplemental benefits. For the first time in the past decade, the portion of enhanced premiums attributable to supplemental benefits declined in 2024 and the portion for basic benefits grew.

> From 2015 to 2024, the average premium for a basic plan in an MA–PD increased by $16 (or 77 percent), from $21 in 2015 to $37 per month in 2024. Most MA–PD enrollees, however, are in enhanced plans, where the average premium is down to $10 in 2024, a decrease of $7 since 2015. MA–PD 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 2024, MA–PD enrollees avoided having to pay $20 per month in basic premiums and an additional $27 per month for supplemental coverage, on average.

Chart 10-15 Part D benchmarks for LIS premiums and number of qualifying PDPs, by region

Region	State(s)	2015		2024		Cumulative change, 2015–2024	
		Benchmark amount	Number of PDPs	Benchmark amount	Number of PDPs	Benchmark amount	Number of PDPs
1	ME, NH	$30	9	$36	4	$6	–5
2	CT, MA, RI, VT	30	5	44	3	14	–2
3	NY	37	8	49	2	12	–6
4	NJ	38	10	46	2	8	–8
5	DC, DE, MD	31	10	41	4	10	–6
6	PA, WV	34	9	40	5	6	–4
7	VA	29	9	38	5	9	–4
8	NC	29	8	47	3	18	–5
9	SC	29	7	46	3	17	–4
10	GA	26	8	44	3	18	–5
11	FL	26	4	38	2	12	–2
12	AL, TN	30	12	41	5	11	–7
13	MI	31	10	36	5	5	–5
14	OH	29	8	41	2	12	–6
15	IN, KY	32	10	42	3	10	–7
16	WI	35	8	48	7	13	–1
17	IL	28	10	33	2	5	–8
18	MO	28	6	44	2	16	–4
19	AR	25	6	36	4	11	–2
20	MS	29	9	40	4	11	–5
21	LA	31	11	46	6	15	–5
22	TX	27	10	28	2	1	–8
23	OK	30	10	42	4	12	–6
24	KS	30	7	43	4	13	–3
25	IA, MN, MT, ND, NE, SD, WY	30	5	42	5	12	0
26	NM	21	7	36	5	15	–2
27	CO	29	7	47	4	18	–3
28	AZ	33	12	43	4	10	–8
29	NV	24	4	32	2	8	–2
30	OR, WA	34	10	41	4	7	–6
31	ID, UT	40	12	44	5	4	–7
32	CA	29	6	41	3	12	–3
33	HI	28	9	41	4	13	–5
34	AK	33	7	39	4	6	–3

Note: LIS (low-income subsidy), PDP (prescription drug plan). All calculations exclude plans offered in U.S. territories. Cumulative changes calculated from unrounded data.

Source: MedPAC analysis of CMS benchmark amounts and plan report data.

(Chart continued next page)

Chart 10-15 Part D benchmarks for LIS premiums and number of qualifying PDPs, by region (continued)

> Part D's LIS covers most premiums and cost sharing for enrollees with low incomes and assets. The LIS's coverage of premiums has a dollar limit, known as the benchmark, that encourages beneficiaries to enroll in lower-cost PDPs. Beneficiaries who enroll in plans with premiums that are less than the benchmark do not pay a premium; those who enroll in plans with higher premiums pay the difference. The PDPs for which LIS beneficiaries do not pay a premium are known as benchmark plans. When LIS beneficiaries do not select a PDP, Medicare automatically enrolls them in benchmark plans.

> The LIS benchmark equals the average premium for basic coverage in a region. CMS calculates it using a weighted average of both PDP and MA–PD premiums. For plans that offer enhanced coverage, CMS uses the portion of the plan's premium that reflects the cost of basic coverage only. For MA–PDs, CMS uses the amount of the premium for basic coverage before the plan sponsor has used any Part C (Medicare Advantage) rebates to reduce or eliminate the premium. The weight for each plan equals its share of LIS enrollment. CMS calculates separate benchmarks for each Part D region and updates them annually.

> In 2024, the lowest benchmark premium was $28, in Region 22 (Texas), for the fifth year in a row. Region 3 (New York) had the highest benchmark premium in 2024 at $49 per month.

> The average benchmark premium across regions (not weighted by numbers of enrollees) has risen slowly over the years, from $30 per month in 2015 to $41 in 2024 (on a nominal basis), an increase of 36 percent over 10 years (data not shown). This change contrasts with the average overall premium across all plans, weighted by enrollment, which decreased by 10 percent over the same period (see Chart 10-14).

> In 2015, the average number of benchmark plans in a region was eight; by 2024, that figure had dropped to four, a decline of 50 percent (data not shown). The number of benchmark plans has declined in every region over the past decade except Region 25 (Iowa, Minnesota, Montana, North Dakota, Nebraska, South Dakota, and Wyoming), which has the same number of plans (five) in 2024 as it did in 2015. The maximum number of benchmark plans in any region in 2024 is 7, compared with 12 in 2015.

Chart 10-16 In 2024, enrollees typically pay $0 for generic drugs listed on the lowest tier

	Benchmark PDP enrollees	PDP enrollees	MA–PD enrollees
5-tier formulary structure* (in percent)	100%	100%	99%
Drugs on formulary as percentage of all Part D drugs**	68%	73%	75%
Median cost-sharing amounts			
Tier 1: Generic drugs	$0	$0	$0
Tier 2: Other generic drugs	$5	$5	$5
Tier 3: Preferred brand-name drugs	21%	22%	$47
Tier 4: Nonpreferred drugs	41%	48%	$100
Tier 5: Specialty-tier drugs	25%	25%	33%
Drugs with utilization management requirement (in percent)			
Prior authorization	32%	32%	28%
Step therapy	0	0	1
Quantity limits	39	42	44
Any utilization management	50	54	55

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]). Figures exclude employer-only groups, plans under CMS sanction (or terminated plans), and plans offered in U.S. territories. In addition, MA–PDs in this table exclude demonstration programs, special needs plans, and 1876 cost plans. "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.
*Includes formularies with an additional (sixth) tier for certain types of drugs (e.g., vaccines).
**Number of all Part D drugs is based on the counts of unique chemical entities listed on CMS's formulary reference file for the 2024 benefit year.

Source: MedPAC analysis of formularies submitted to CMS.

> In 2024, most Part D enrollees chose plans that have a five-tier structure: two generic, one preferred brand-name tier, one nonpreferred drug tier (which may include both brand-name and generic drugs), plus a specialty tier.

> The number of drugs listed on a plan's formulary affects a beneficiary's access to medications. In 2024, on average, PDP enrollees have access to 73 percent of all Part D–covered products, compared with 75 percent among MA–PD enrollees. That share was lower (68 percent) for beneficiaries enrolled in benchmark plans—basic PDPs for which enrollees with the low-income subsidy do not have to pay a premium.

> The median copay in 2024 is $0 for a generic drug on a lower tier and $5 for other generic drugs. Benchmark plans have formularies that are similar to other PDPs, with somewhat lower cost-sharing amounts for brand-name drugs. For 2024, most PDPs are using coinsurance (a percentage of the total payment) for preferred brand-name drugs and nonpreferred drug tiers, while most MA–PDs continue to use copayments (a fixed dollar amount per prescription). Both PDPs and MA–PDs use coinsurance (with median coinsurance rates of 25 percent and 33 percent, respectively) for specialty-tier drugs.

> 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 being required to try specified drugs before being prescribed other drugs in the same therapeutic category)—can affect access to certain drugs. In 2024, both PDPs and MA–PDs typically use some form of utilization management for more than half of drugs listed on a plan's formulary.

Chart 10-17 Components of Part D spending growth, 2014–2022

	2014	2022	Average annual growth 2014–2022
Total gross spending (in billions)	$121.4	$240.5	8.9%
High-cost beneficiaries	64.6	153.2	11.4%
Lower-cost beneficiaries	56.7	87.3	5.5%
Number of beneficiaries using a Part D drug (in millions)	37.1	49.2	3.6%
High-cost beneficiaries	3.4	4.3	2.8%
Lower-cost beneficiaries	33.7	44.9	3.6%
Amount per beneficiary who used Part D drugs			
Gross drug spending per year	$3,267	$4,891	5.2%
Average price per 30-day prescription	$60	$86	4.5%
Number of 30-day prescriptions	54.5	57.2	0.6%
Amount per high-cost beneficiary who used Part D drugs			
Gross drug spending per year	$18,845	$35,856	8.4%
Average price per 30-day prescription	$166	$310	8.2%
Number of 30-day prescriptions per month	9.6	9.8	0.2%
Amount per lower-cost beneficiary who used Part D drugs			
Gross drug spending per year	$1,683	$1,944	1.8%
Average price per 30-day prescription	$35	$38	1.0%
Number of 30-day prescriptions per month	4.2	4.5	0.7%

Note: "High-cost beneficiaries" refers to individuals who incur 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, including the adoption of new, higher-priced drugs. Dollar amounts are nominal figures, not adjusted for inflation. Components may not sum to totals due to rounding.

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

> Between 2014 and 2022, gross spending on drugs under the Part D program, on a nominal basis, grew by an annual average rate of 8.9 percent. The annual growth in spending was considerably higher (11.4 percent) among high-cost beneficiaries (individuals who incurred spending high enough to reach the catastrophic phase of the benefit) than among lower-cost beneficiaries (5.5 percent).

> During the 2014 through 2022 period, the number of high-cost beneficiaries grew more slowly (2.8 percent) compared with lower-cost beneficiaries (3.6 percent). The slower growth in the number of high-cost beneficiaries reflects the 25 percent increase in the out-of-pocket (OOP) threshold between 2019 and 2020. (For more information about the impact of the increase in the OOP threshold in 2020, see Chapter 13 of the Commission's March 2022 report to the Congress at https://www.medpac.gov/wp-content/uploads/2022/03/Mar22_MedPAC_ReportToCongress_Ch13_SEC.pdf.)

> The average price per 30-day prescription covered under Part D rose from $60 in 2014 to $86 in 2022. Overall, growth in price per prescription accounted for most (4.5 percentage points) of the 5.2 percent average annual growth in spending per beneficiary. Growth in prices per prescription reflects increases in the prices of existing drugs and changes in the mix of drugs.

> The average annual growth rate in overall spending per beneficiary reflects two distinct patterns of price and spending growth—one for high-cost beneficiaries and another for lower-cost beneficiaries. Among high-cost beneficiaries, annual growth in prices (8.2 percent) accounted for nearly all of the spending growth (8.4 percent) during this period. In contrast, among lower-cost beneficiaries, the increase in the number of prescriptions (0.7 percent) accounted for about 40 percent of the spending growth (1.8 percent).

Chart 10-18 Part D spending and use per enrollee, 2022

	Part D	Plan type		LIS status	
		PDP	MA–PD	LIS	Non-LIS
Total gross spending (billions)*	$240.5	$118.8	$121.7	$114.1	$126.4
Above OOP threshold (billions)	103.5	52.5	51.0	60.1	43.4
Share above OOP threshold	*43%*	*44%*	*42%*	*53%*	*34%*
Total number of prescriptions (billions)	2.8	1.3	1.5	0.9	1.9
Average spending per prescription	$86	$93	$80	$121	$68
Share of beneficiaries with no drug use	6%	6%	6%	8%	6%
Per enrollee per month					
Total spending	$398	$423	$377	$697	$287
OOP spending	31	40	23	4	40
Manufacturer gap discount	27	33	22	N/A	37
Plan liability	264	273	256	476	185
Low-income cost-sharing subsidy	58	54	62	215	N/A
Number of prescriptions	4.7	4.6	4.7	5.8	4.2

Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income 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. "Plan liability" includes plan payments for drugs covered by both basic and supplemental (enhanced) benefits. "Number of prescriptions" is standardized to a 30-day supply. Components may not sum to totals due to rounding.
*"Total gross spending" includes $16.4 billion in manufacturer discounts for brand-name drugs and biologics filled by non-LIS enrollees during the coverage gap.

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

> In 2022, gross spending on drugs for the Part D program totaled $240.5 billion, with just under half ($118.8 billion) accounted for by Medicare beneficiaries enrolled in stand-alone PDPs. Part D enrollees receiving the LIS accounted for about 47 percent ($114.1 billion) of the total.

> Overall, 43 percent of gross spending was incurred after a beneficiary reached the annual OOP threshold ($7,050 in 2021). That share was higher among those who received the LIS (53 percent) compared with other enrollees (34 percent).

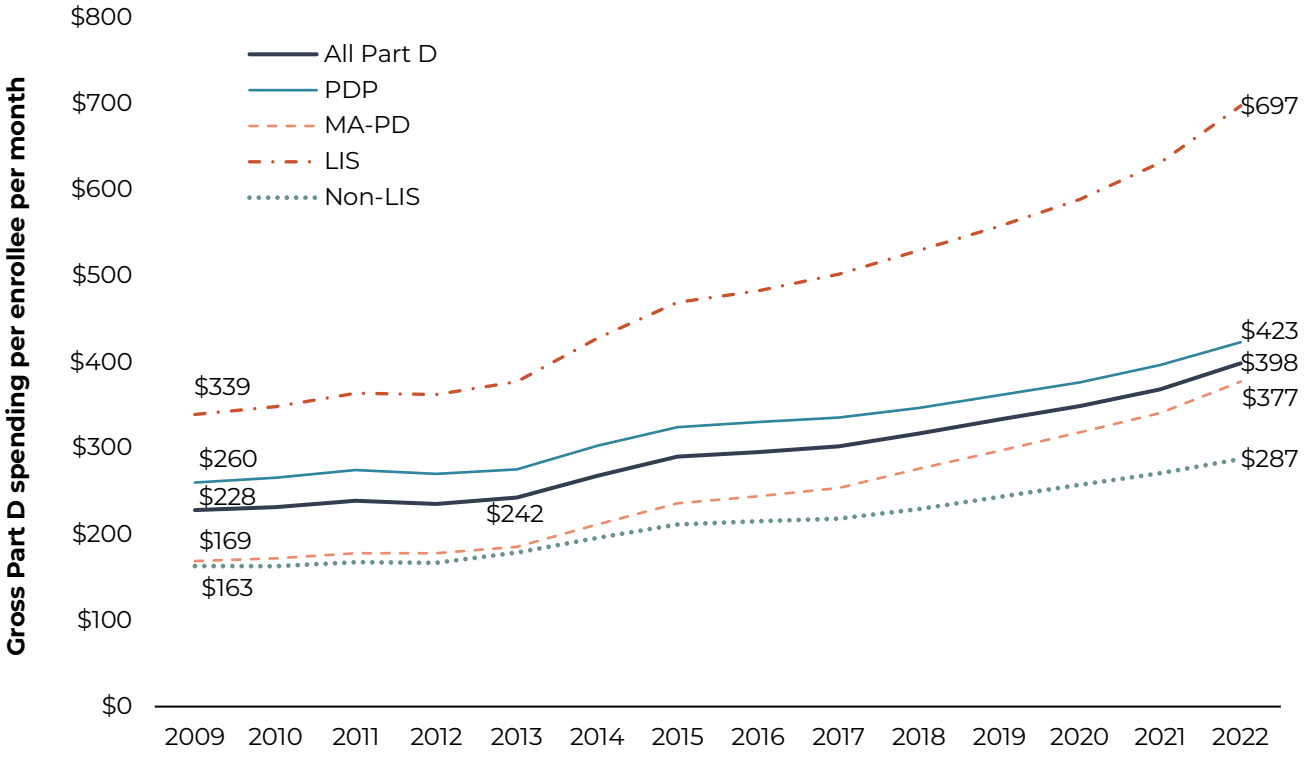
> The number of prescriptions filled by Part D enrollees totaled 2.8 billion, with 46 percent (1.28 billion) accounted for by PDP enrollees. The 27 percent of enrollees who received the LIS accounted for about 34 percent (945 million) of the total number of prescriptions filled. Overall, 6 percent of Part D enrollees did not fill any prescriptions during the year.

> In 2022, Part D enrollees filled 4.7 prescriptions at $398 per month on average, an increase from $368 per month (for 4.6 prescriptions) in 2021 (2021 data not shown). The average monthly plan liability for PDP enrollees ($273) was higher than that of MA–PD enrollees ($256). The average monthly OOP spending for enrollees was also higher in PDPs ($40) than in MA–PDs ($23). Medicare's average monthly low-income cost-sharing subsidy was higher for MA–PD enrollees ($62) than for PDP enrollees ($54).

> Average monthly spending per LIS enrollee ($697) was more than double that of a non-LIS enrollee ($287), and the average number of prescriptions filled per month by an LIS enrollee was 5.8 compared with 4.2 for a non-LIS enrollee. LIS enrollees had much lower monthly OOP spending, on average, than non-LIS enrollees ($4 vs. $40, respectively). Part D's LIS pays for most of the cost sharing for LIS enrollees, averaging $215 per month in 2022.

> Manufacturer discounts for brand-name drugs filled by non-LIS enrollees while they were in the coverage gap accounted for, on average, 6.8 percent of the total gross spending, or nearly 13 percent of the average gross spending by non-LIS enrollees.

Chart 10-19 Trends in Part D spending and use per enrollee per month, 2009–2022



Note: PDP (prescription drug plan), MA–PD (Medicare Advantage–Prescription Drug [plan]), LIS (low-income subsidy). "Spending" (gross) reflects payments from all payers, including beneficiaries (cost sharing) but does not include rebates and fees from manufacturers and pharmacies that are not reflected in prices at the pharmacies. Dollar amounts are nominal figures, not adjusted for inflation.

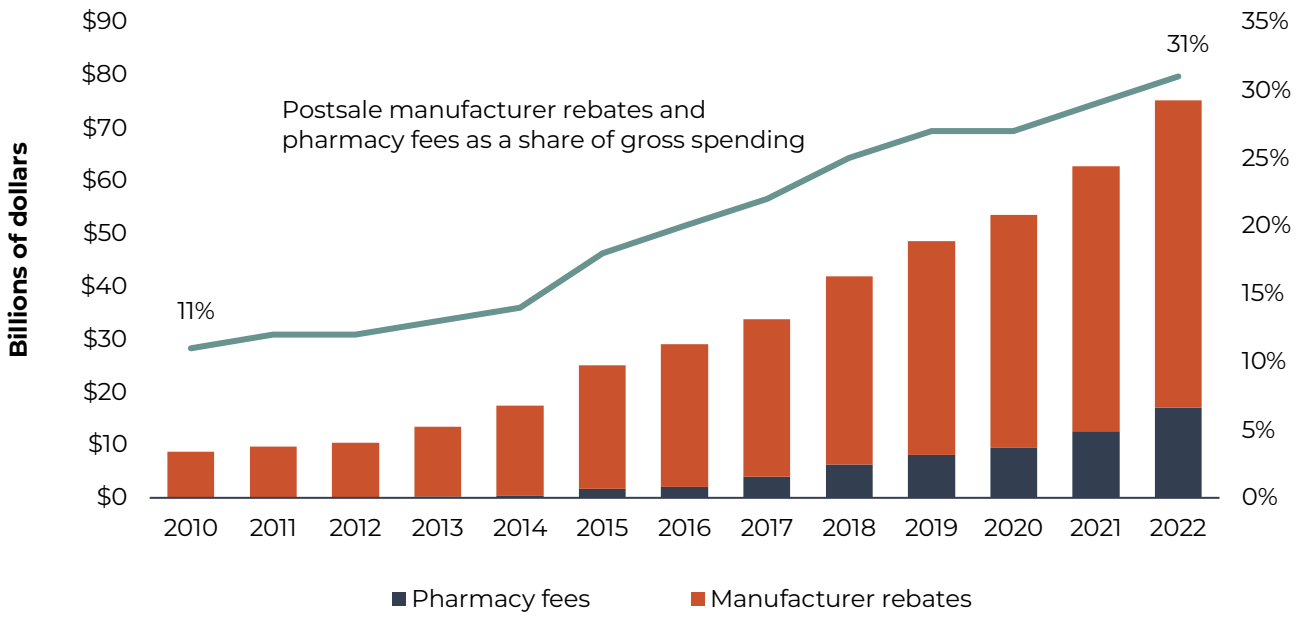
Source: MedPAC analysis of Medicare Part D prescription drug event data and Part D denominator file from CMS.

> Between 2009 and 2022, average per capita spending per month for Part D–covered drugs grew from $228 to $398 on a nominal basis, an average growth rate of 4.4 percent annually, or about 75 percent cumulatively. The rate of growth in average per capita spending more than doubled after 2013, in part reflecting the introduction of new hepatitis C treatments in 2014 and other new expensive therapies in subsequent years.

> Between 2009 and 2022, monthly per capita spending for LIS enrollees grew faster than that for non-LIS enrollees, increasing from $339 to $697 (cumulative growth of over 105 percent) compared with an increase from $163 to $287 for non-LIS enrollees (cumulative growth of about 76 percent). The number of prescriptions filled by both LIS and non-LIS enrollees grew by about 16 percent and 17 percent, respectively, during this period (data not shown).

> The growth in monthly per capita drug spending among MA–PD enrollees exceeded that of PDP enrollees during the 2009 to 2022 period (annual average growth of 6.4 percent and 3.8 percent, respectively). The average per capita spending for MA–PD enrollees continued to be lower than that of PDP enrollees (by $46 per month in 2022); however, that difference has been declining since 2014.

Chart 10-20 Postsale manufacturer rebates and pharmacy fees expanded rapidly in Part D, 2010–2022



Note: CMS uses the term "direct and indirect remuneration" (DIR) to refer to all postsale rebates and fees that plan sponsors and their pharmacy benefit managers negotiate with drug manufacturers and pharmacies that lower the prices of drugs covered under Part D. "Gross spending" includes enrollee cost sharing and plan (and any other) payments to the pharmacy at the point of sale for both brand and generic prescriptions. Pharmacy fees consist of net postsale payments from pharmacies to plan sponsors and their pharmacy benefit managers.

Source: MedPAC analysis of prescription drug event data and DIR data.

> The final amounts that Part D plans pay for their enrollees' prescriptions are often lower than prices at the pharmacy because plan sponsors and their pharmacy benefit managers (PBMs) negotiate postsale rebates and fees from drug manufacturers and pharmacies; CMS refers to those amounts as direct and indirect remuneration (DIR). Medicare keeps a portion of DIR to offset some of its reinsurance subsidies to plans. While large rebates help to constrain premium increases, using rebates primarily to lower premiums also means that beneficiaries who use such drugs (or the Medicare program, in the case of Part D's low-income subsidy (LIS) enrollees) sometimes pay cost sharing that is a significant portion of—and may even be higher than—the drug's cost to the plan. For enrollees without the LIS, high cost sharing can affect whether they fill their prescriptions.

> Between 2010 and 2022, DIR ballooned from $8.6 billion to $75.3 billion. With manufacturer rebates accounting for roughly 24 percent of gross Part D spending in 2022 and pharmacy DIR another 7 percent, total DIR equaled about 31 percent, up from 11 percent in 2010.

> Multiple factors have contributed to growth in manufacturer rebates. For certain classes of drugs that lack of generic competition but have considerable rivalry among competing brands, manufacturers have chosen to raise gross prices and compete using postsale rebates. Due to Part D's unusual benefit design and its emphasis on premium competition, sponsors have had incentives to try to maximize rebates and keep premiums low. Vertically integrated insurers with their own PBMs and specialty and mail-order pharmacies have large market shares of enrollment and dispensing, which tend to provide those plan sponsors with greater bargaining leverage for postsale price concessions from both manufacturers and pharmacies.

Chart 10-21 Incidence of Part D spending by type of product, 2022

			Share of gross spending paid					
			Medicare (at risk)			Pharmaceutical manufacturers		
	Total gross spending	Part D plans (at risk)	Reinsurance	Low-income subsidy	Beneficiary cost sharing	Coverage gap discount	Postsale rebates and discounts	Pharmacy fees
Brand-name drugs	$148.6	13%	26%	14%	6%	8%	27%	7%
Biologics	49.6	6	30	12	4	8	33	7
Generic drugs	40.2	38	11	21	20	N/A	<1	9
All products covered under Part D*	240.5	15	24	15	8	7	24	7

Note: "Total gross spending" reflects payment from all payers, including beneficiaries (through cost sharing) before accounting for postsale rebates, discounts, and fees from pharmacies and manufacturers. "Biologics" includes spending for insulins.
*Includes some products that could not be classified as one of the three drug types shown (e.g., nondrug products such as syringes used for insulins).

Source: MedPAC analysis of prescription drug event data and direct and indirect remuneration data.

> In 2022, just over 80 percent of total gross Part D spending was for brand-name drugs ($148.6 billion, or 62 percent) or biologics ($49.6 billion, or 21 percent). Generic drugs accounted for about 17 percent ($40.2 billion) of gross spending.

> The incidence of Part D spending varied by drug type, with Medicare's reinsurance accounting for a larger share of spending for brand-name drugs and biologics compared with generic drugs. For example, plans were at risk for 6 percent of spending on biologics (including biosimilars), while Medicare covered 30 percent via Part D's reinsurance. In contrast, for generic drugs, Medicare's reinsurance accounted for 11 percent of gross spending compared with 38 percent for plans. Medicare's low-income subsidy, on average, accounted for a higher share of gross spending for generic drugs (21 percent) compared with brand-name drugs (14 percent) or biologics (12 percent).

> On average, beneficiaries' cost sharing accounted for 20 percent of gross spending for generic drugs compared with 6 percent for brand-name drugs and 4 percent for biologics. Cost sharing as a share of gross spending tends to be lower for brand-name drugs and biologics because these products are more likely to be filled in the catastrophic phase of the benefit, where a lower coinsurance rate applies (5 percent of gross prices at the pharmacy before January 1, 2024) than for other phases of the benefit (typically averaging 25 percent of gross prices at the pharmacy). (See Chart 10-10 for changes in benefit parameters.) However, because prices of brand-name drugs and biologics are much higher than those of generic drugs, the lower coinsurance rate could still result in substantially higher cost-sharing liability than for generic drugs.

> Coverage-gap discounts and postsale rebates and fees paid by pharmaceutical manufacturers accounted for 7 percent and 24 percent of gross spending, respectively, across all Part D–covered products. Nearly all of those payments were for brand-name drugs and biologics. Pharmacy fees accounted for the remaining 7 percent of gross spending. On average, pharmacy fees accounted for a higher share of gross spending for generic drugs (9 percent) than for brand-name drugs and biologics (7 percent).

Chart 10-22 Top 15 therapeutic classes of drugs covered under Part D, by spending, 2022

	Gross spending		Negotiated rebates as a share of gross spending	Coverage-gap discount (billions)
	Billions	Percent		
Diabetic therapy	$46.9	19.5%	≥50%	$6.2
Antineoplastics	32.1	13.4	<10%	0.9
Anticoagulants	21.7	9.0	40% to 49%	3.5
Asthma/COPD therapy agents	16.6	6.9	40% to 49%	1.4
Disease-modifying anti-rheumatoid drugs	11.9	4.9	20% to 29%	0.4
Antipsychotics (neuroleptics)	8.4	3.5	10% to 19%	0.1
Antiretrovirals	7.9	3.3	<10%	0.2
Antihypertensive therapy agents	7.6	3.2	10% to 19%	0.5
Ophthalmic agents	5.9	2.5	30% to 39%	0.4
Antihyperlipidemics	5.4	2.3	10% to 19%	0.3
Dermatological (antipsoriatics)	5.2	2.2	10% to 19%	0.1
Anticonvulsants	4.1	1.7	<10%	0.1
Multiple sclerosis agents	3.9	1.6	10% to 19%	0.1
Antidepressants	3.0	1.3	<10%	0.1
Urinary incontinence treatment agents	3.0	1.3	40% to 49%	0.3
Subtotal, top 15 drug classes	183.9	76.5	28%	14.6
Total, all drug classes	240.5	100.0	24%	16.4

Note: COPD (chronic obstructive pulmonary disease). "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing) for both brand and generic drugs but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System. Components may not sum to totals due to rounding.

Source: MedPAC analysis of Medicare Part D prescription drug event and direct and indirect remuneration data from CMS.

> In 2022, the top 15 therapeutic classes by spending accounted for nearly 77 percent of the $240.5 billion spent on prescription drugs covered by Part D plans.

> In 2022, total manufacturer rebates as a share of gross spending ranged from less than 10 percent to more than 50 percent. Some of that variation reflects the degree of competition within each therapeutic class. Overall, rebates for the top 15 classes averaged 28 percent of gross spending, higher than the average of 24 percent for all Part D spending. Rebates were the highest (greater than or equal to 50 percent) for diabetic therapies, which accounted for more than 19 percent of total gross spending in Part D.

> In addition to negotiated rebates, manufacturers must provide discounts for brand-name drugs and biologics filled by non-LIS enrollees when they fill prescriptions in the coverage-gap phase of the benefit. In 2022, these top 15 classes accounted for 89 percent ($14.6 billion) of all coverage-gap discounts. Diabetic therapies alone accounted for 38 percent of all coverage-gap discounts.

Chart 10-23 Despite high generic use, brand-name drugs accounted for the majority of spending in the top 15 therapeutic classes by spending, 2022

	Prescriptions*		Generic dispensing rate	Brand share of gross spending	LIS share of prescriptions
	Millions	Percent			
Diabetic therapy	202.5	7.2%	60%	98%	31%
Antineoplastics	15.5	0.6	86	94	22
Anticoagulants	56.3	2.0	22	99	27
Asthma/COPD therapy agents	84.1	3.0	56	91	43
Disease modifying anti-rheumatoid drugs	2.9	0.1	34	100	49
Antipsychotics (neuroleptics)	35.0	1.2	90	81	69
Antiretrovirals	3.1	0.1	18	98	68
Antihypertensive therapy agents	286.4	10.2	98	67	18
Ophthalmic agents	61.7	2.2	82	77	26
Antihyperlipidemics	327.7	11.7	98	46	18
Dermatological (antipsoriatics)	0.8	<0.1	28	99	54
Anticonvulsants	107.1	3.8	98	44	45
Multiple sclerosis agents	0.7	<0.1	37	91	58
Antidepressants	182.4	6.5	99	26	32
Urinary incontinence treatment agents	20.5	0.7	71	84	36
Subtotal, top 15 drug classes	1,386.9	49.4	85	90	28
Total, all drug classes	2,809.6	100.0	90	82	27

Note: COPD (chronic obstructive pulmonary disease), LIS (low-income subsidy). "Gross spending" reflects payments from all payers, including beneficiaries (cost sharing) for both brand and generic drugs but does not include rebates and discounts from pharmacies and manufacturers that are not reflected in prices at the pharmacies. Therapeutic classification is based on the First DataBank Enhanced Therapeutic Classification System. Components may not sum to totals due to rounding.
*Prescriptions are standardized to a 30-day supply.

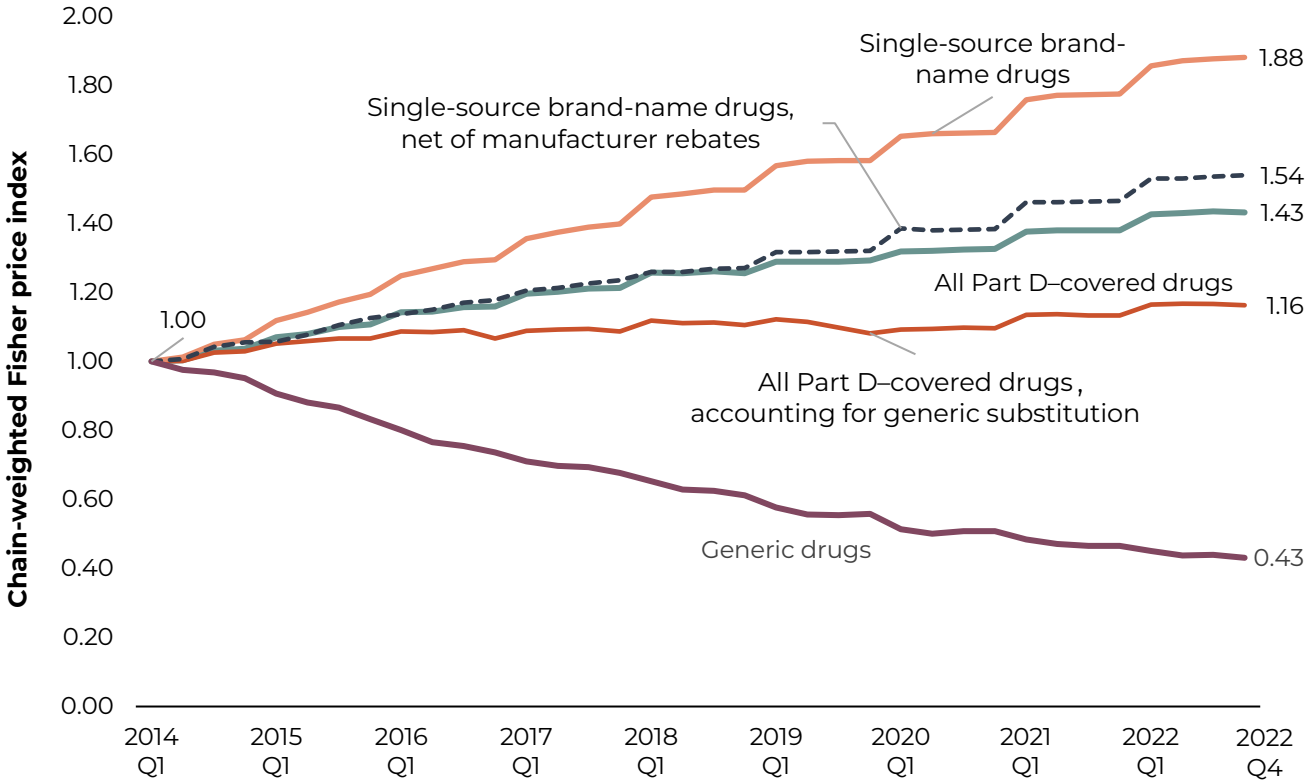
Source: MedPAC analysis of Medicare Part D prescription drug event and direct and indirect remuneration data from CMS.

> Prescriptions filled in the top 15 therapeutic classes by spending in 2022 (from Chart 10-22) totaled 1.39 billion prescriptions, accounting for nearly half of all prescriptions filled under Part D. While 85 percent of these prescriptions were for generic drugs, brand-name products accounted for 90 percent of the gross spending for these products in 2022.

> In 2022, LIS beneficiaries filled 28 percent of total prescriptions for products in these 15 classes, roughly equal to their share of prescriptions among all Part D drugs (27 percent). Nevertheless, LIS enrollees accounted for a disproportionate share of prescriptions in a few classes such as antipsychotics (69 percent) and antiretrovirals (68 percent).

> Even when generic drugs are widely used by Part D beneficiaries, for some therapeutic classes, brand-name drugs may still account for the vast majority of spending. For example, in 2022, generic drugs accounted for 86 percent of prescriptions for antineoplastics, but brand-name drugs accounted for 94 percent of gross spending for that class.

Chart 10-24 Postlaunch price growth for Part D–covered drugs, 2014–2022



Note: Q1 (first quarter), Q4 (fourth quarter). Unless otherwise noted, Part D indexes reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies, with the exception of the index for single-source brand-name drugs, net of manufacturer rebates. The price indexes are Fisher price indexes and reflect percentage changes in the average price of Part D–covered drugs measured at the product level in nominal terms, not adjusted for inflation. A product is defined at the individual national drug code (NDC) level with the exception of the index accounting for generic substitution, which groups NDCs with the same active ingredient(s), dosage form, route of administration, and strength. Indexes do not reflect the effects of launch prices of new products or changes in average price levels resulting from a shift in utilization across products. The price index is different from the change in the average price of drugs covered under Part D (Chart 10-17), which reflects changes in the prices of existing products, the effects of launch prices of new products, and shifts in utilization across products.

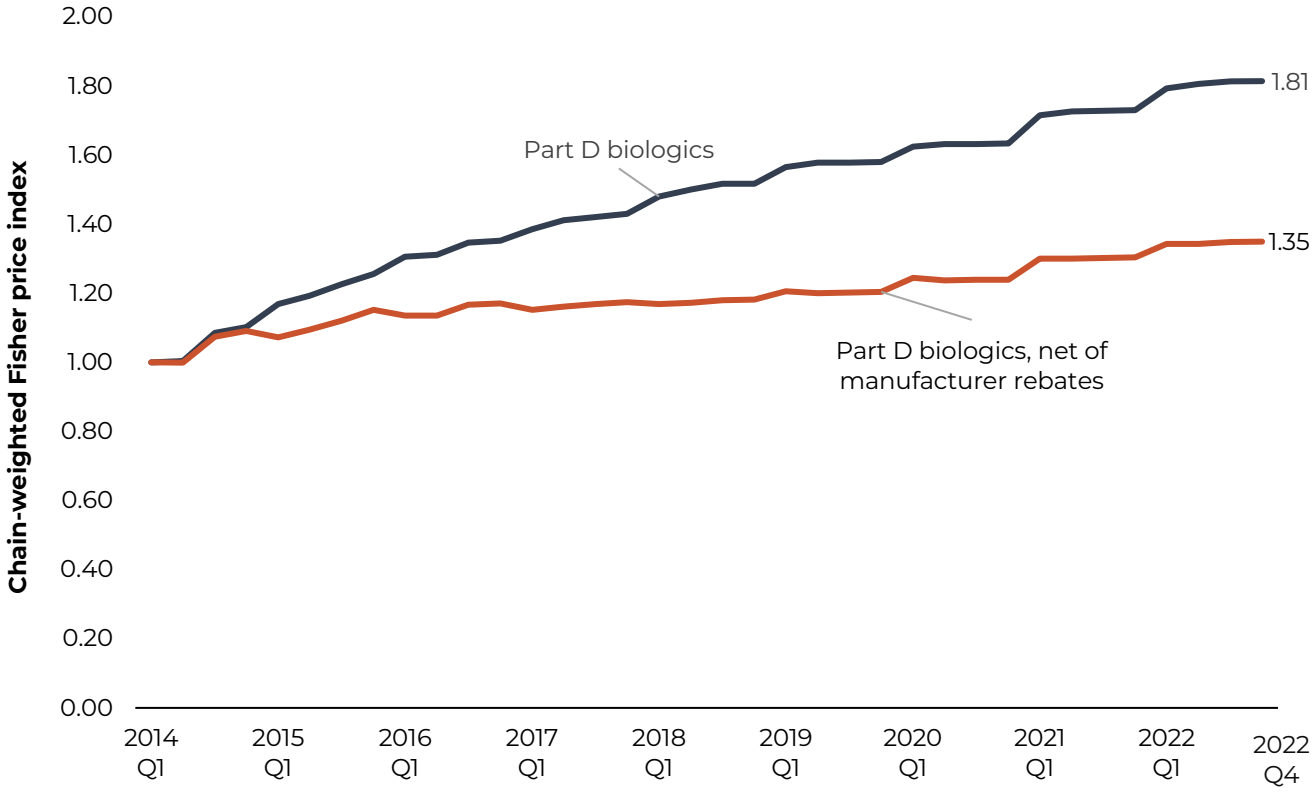
Source: Acumen LLC analysis for MedPAC.

> Measured by individual national drug codes, prices of drugs and biologics covered under Part D rose 43 percent cumulatively between 2014 and 2022 on a nominal basis (an index of 1.43). (Prices reflect total amounts paid to pharmacies and do not reflect retrospective rebates or discounts from manufacturers and pharmacies.)

> Overall, between 2014 and 2022, prices of generic drugs covered under Part D decreased to 43 percent of the average price observed at the beginning of 2014. As a result, when measured by a price index that takes generic substitution into account, Part D prices have remained relatively flat during this period, with cumulative increase in prices at the end of 2022 at 16 percent above the prices at the beginning of 2014 (an index of 1.16). New and increased generic competition for selected therapeutic classes, such as anticonvulsants, antineoplastics, and drugs for multiple sclerosis, played a key role in slowing the growth in overall Part D prices during this period.

> Between 2014 and 2022, prices for all single-source, brand-name drugs (drugs with no generic substitutes) grew by a cumulative 88 percent (an index value of 1.88), compared with 54 percent (an index value of 1.54) for prices net of manufacturer rebates.

Chart 10-25 Postlaunch price growth for biologics covered under Part D, 2014–2022



Note: Q1 (first quarter), Q4 (fourth quarter). The price indexes are Fisher price indexes and reflect percentage changes in the average price of Part D–covered biologic products measured at the product level in nominal terms, not adjusted for inflation. A product is defined at the individual national drug code (NDC) level with the exception of the index accounting for substitution with biosimilar products, which groups NDCs with the same active ingredient(s), dosage form, route of administration, and strength. Indexes do not reflect the effects of launch prices of new products or changes in average price levels resulting from shift in utilization across products. Biologics include insulins.

Source: Acumen LLC analysis for MedPAC.

> Measured by individual national drug codes, prices of biologics (without retrospective rebates, fees, or discounts) covered under Part D rose 81 percent cumulatively between 2014 and 2022 on a nominal basis (an index of 1.81). This increase is similar to the growth in prices for all single-source drugs and biologics (88 percent, or an index value of 1.88). (See Chart 10-24 for index measuring prices of all single-source drugs and biologics.)

> In comparison, between 2014 and 2022, prices of biologics net of retrospective rebates and discounts from manufacturers grew by a cumulative 35 percent (an index value of 1.35). The effect of manufacturer rebates on the prices of biologics was greater than that for all single-source drugs and biologics, which grew by a cumulative 54 percent (an index value of 1.54) for prices net of manufacturer rebates. (See Chart 10-24 for index measuring prices of all single-source drugs (including biologics) net of manufacturer rebates.)

> The prices of biologics are highly influenced by the prices of insulins. In 2022, insulins accounted for about 30 percent of total gross spending on biologics. Insulins and other antidiabetic therapies had some of the highest rebates, totaling more than 50 percent of gross spending for therapies in that class (see Chart 10-22).

Chart 10-26 Part B and Part D spending on products with a biosimilar pipeline, 2022

Brand name	Earliest biosimilar launch date (expected)	Number of biosimilars: Approved	Number of biosimilars: In pipeline	2022: Part B spending on originator product (millions)	2022: Part D spending on originator product (millions)	2022: Total Part B and Part D spending on biosimilars (millions)
Products with an approved biosimilar on the market						
Neupogen[a]	2015	4	1–3	$14.6	$11.2	$82.3
Remicade	2016	5	1–3	440.4	102.6	650.0
Procrit/Epogen	2018	1	1–3	57.1	144.6	106.2
Neulasta	2018	6	1–3	342.8	70.4	309.2
Humalog[a]	2018	2	4–6	**	1,744.8	205.5
Humalog Mix (75/25)[a]	2019	1		**	322.9	13.0
Rituxan	2019	3	1–3	581.3	46.1	487.3
Avastin	2019	5	4–6	253.4	14.0	464.5
Herceptin	2019	5	1–3	155.8	6.4	235.1
Lantus[ab]	2020	4	4–6	–	3,707.1	731.8
Novolog[a]	2020	1	7+	–	2,370.4	78.5
Novolog Mix (50/50)[a]	2020	1	1–3	–	434.9	12.1
Lucentis[b]	2022	2	1–3	795.4	5.4	1.1
Tresiba[a]	2022	1		–	1,697.3	0.3
Humira[b]	2023	14	4–6	–	5,426.4	–
Subtotal		*55*		*2,640.9*	*16,104.3*	*3,377.0*
Products with a biosimilar approved but not yet on the market						
Enbrel	(2028)	2	1–3	0.3	2,655.1	–
Stelara[b]	(2025)	2	7+	74.3	2,339.1	–
Actemra		2	1–3	344.4	254.2	–
Tysabri		1	1–3	206.5	45.8	–
Prolia/Xgeva[b]		2	7+	2,006.3	585.3	–
Subtotal		9		*2,631.8*	*5,879.4*	
Products with a biosimilar in development but none approved						
Toujeo			1–3	–	861.8	–
Soliris			1–3	619.1	266.3	–
Cimzia			1–3	431.7	251.1	–
Simponi			1–3	374.6	193.7	–
Xolair			4–6	420.5	208.2	–
Eylea			7+	3,544.0	68.3	–
Perjeta			1–3	318.1	9.5	
Opdivo			1–3	1,852.4	43.8	
Keytruda			1–3	4,943.9	91.1	
Entyvio			1–3	675.4	76.0	
Cosentyx			1–3	151.8	1,029.7	
Subtotal				*13,331.6*	*3,099.7*	–
Total		64	96	18,604.3	25,083.4	3,377.0

(Chart continued next page)

Chart 10-26 Part B and Part D spending on products with a biosimilar pipeline (continued)

Note: Products in this analysis include those approved or known to be in development as of April 2024.
[a]Authorized generics (AG), unbranded products, and follow-on products are included as biosimilars for purposes of this analysis. For a list of biosimilars currently on the market and available under Part B, refer to Chart 10-6 Others included in this analysis are, for Avastin: Avzivi; for Enbrel: Erelzi, Eticovo; for Humalog: Admelog, insulin lispro AG; for Humalog Mix (75/25): insulin lispro-protamine mix AG; for Humira: Abrilada (INT), Amjevita (2), Cyltezo (INT), Hadlima, Hadlima CF, Hulio, adalimumab-fkjp, Hyrimoz, adalimumab-adaz, Idacio, Simlandi (INT), Yuflyma, Yusimry; for Lantus: Basaglar, Semglee (INT), Rezvoglar, unbranded Lantus; for Novolog: insulin aspart AG; for Novolog Mix (50/50): insulin aspart protamine AG; for Remicade: Ixifi and infliximab AG; for Tresiba: unbranded Tresiba.
[b]At least one biosimilar for this reference product has been designated by the Food and Drug Administration as interchangeable (INT).
**Not able to distinguish spending on Humalog from other insulin lispro products in Part B.

Source: Part B spending based on MedPAC and Acumen LLC analysis of Medicare claims data, Part D spending based on MedPAC analysis of CMS Drug Spending Dashboard, Food and Drug Administration Purple Book, and U.S. Biosimilar Report from Cencora.

> The first biosimilar product licensed under the Public Health Service Act was launched in the U.S. in 2015. As of April 2024, the Food and Drug Administration (FDA) had approved 64 biological products to compete with innovator biologics (including biosimilars, follow-on products, authorized generics, and unbranded versions of reference products). Also as of April 2024, another 96 biosimilars were in development.

> Given that generic dispensing rates have plateaued since 2017 at roughly 90 percent, it is likely that any significant savings on drug spending in the future will come from the successful launch and adoption of biosimilars rather than increased use of traditional generic drugs. This chart shows the level of spending on biological products for which biosimilars have entered or may soon enter the market and offer competition.

> In 2022, Medicare spent $18,745.2 million ($2,640.9 million in Part B and $16,104.3 million in Part D) on originator drugs for which biosimilars are now available; this total includes spending on Lucentis and Humira, though their biosimilars did not become available in the U.S. market until June 2022 and January 2023, respectively.

> Medicare spent another $2,631.8 million in Part B and $5,879.4 million in Part D on drugs for which the FDA has approved biosimilars but manufacturers have not yet launched their products on the market.

> Spending on products for which biosimilars are in development but none are yet approved equaled $16,431.3 million ($13,331.6 million in Part B and $3,099.7 million in Part D). In 2022, these products combined accounted for 6 percent of all gross Medicare spending for separately payable drugs in Part B and Part D.

> In 2022, $3,377.0 million was spent on biosimilars; 63 percent ($2,141.5 million) of that spending (data not shown) occurred in Part B. With more biosimilars for top-selling Part D drugs launching recently (including Humira in 2023), this share is likely to shift somewhat; however, the current biosimilar pipeline still favors drugs predominantly covered under Part B.