

Key Findings

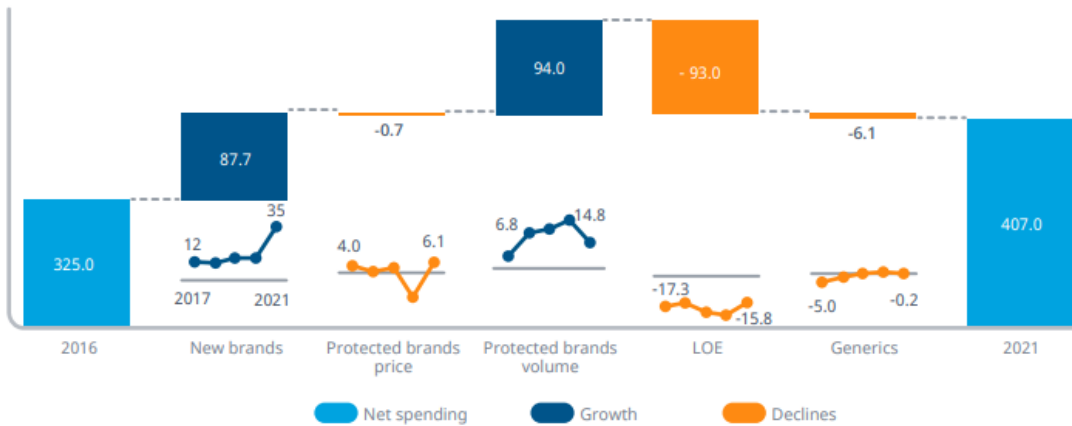
- Net prices for brand medicines increased 1.0% in 2021, below the rate of inflation for the fifth year in a row. Looking ahead, net price growth is projected to be 0% to -3% per year through 2026.
- Overall net spending on medicines (net manufacturer revenue) increased 12.1% in 2021, driven by the “unprecedented contribution” of the COVID-19 vaccine and treatments. Excluding spending on COVID-19 vaccines and treatment, spending on medicines increased just 4.9% in 2021.
- Excluding spending on COVID-19 vaccines and treatment, net per capita spending on medicines *declined* by 1% in 2021.
- Looking ahead, net spending growth is projected to return to pre-pandemic trends, increasing 1% to 4% per year, on average, through 2026.
- Brand medicine net prices are, on average, 49% lower than their list price.
- Savings from loss of exclusivity (LOE) totaled \$93 billion between 2016 and 2021, more than offsetting the \$87 billion spent on newly launched brand medicines over this period.

Full Summary

Medicine Spending

- Total net manufacturer revenue on medicines increased 12.1% in 2021, driven by the “unprecedented contribution” of the COVID-19 vaccine and treatments, reaching \$407 billion.
 - Excluding spending on COVID-19 vaccines and treatment, spending on medicines increased 4.9% in 2021.
- Total net manufacturer revenue on medicines is projected to increase 1-4% per year, on average, through 2026.
- Real per capita net medicine spending (net manufacturer revenue) grew by 5.8% in 2021 when factoring in COVID-19 spending.
 - Excluding spending on COVID-19 vaccines and treatment, real per capita net medicine spending would have *declined* by 1% in 2021.
 - Medicine spending per capita has increased just \$204 since 2011, a 1.8% compound annual growth rate, from \$1,028 to \$1,232.
- Total net spending on medicines increased by \$82 billion from 2016 to 2021, driven by new products and increased utilization
 - COVID-19 vaccines and treatments accounted for \$29 billion of this growth
 - Savings from loss of exclusivity (LOE) totaled \$93 billion between 2016 and 2021, more than offsetting the \$87 billion spent on newly launched brand medicines
 - Between 2016 and 2021, changes in brand medicine prices *reduced* total spending on medicines by \$700 million.

Exhibit 22: Spending and growth at estimated net manufacturer prices 2015–2020, all channels, US\$Bn



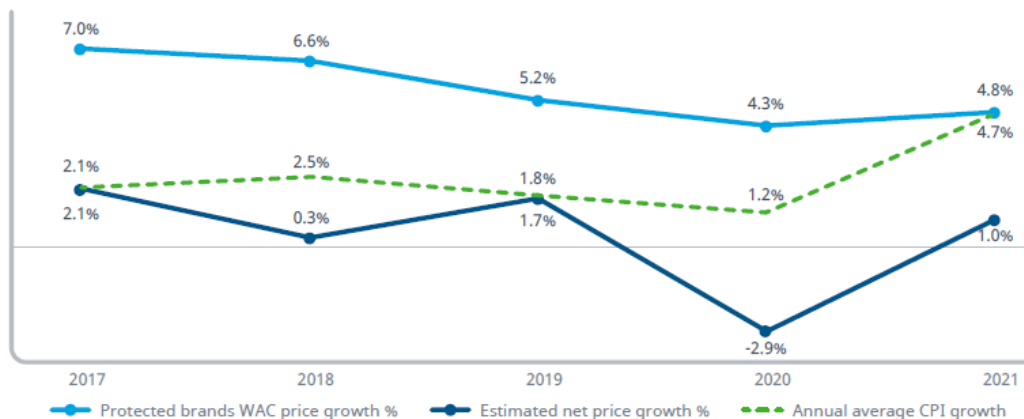
Source: IQVIA Institute, Mar 2022.

- Specialty medicines accounted for 55% of total medicine spending in 2021 but accounted for 3% of total prescription volume.

Medicine Prices

- Net prices for brand medicines increased 1.0% in 2021, below the rate of inflation for the fifth year in a row. Looking ahead, net price growth is projected to be 0% to -3% per year through 2026.
- Brand medicine net prices are, on average, 49% lower than their list price.
- List prices for brand medicines increased 4.8% in 2021, below the rate of inflation.

Exhibit 24: Wholesaler Acquisition Cost (WAC) growth and net price growth for protected brands

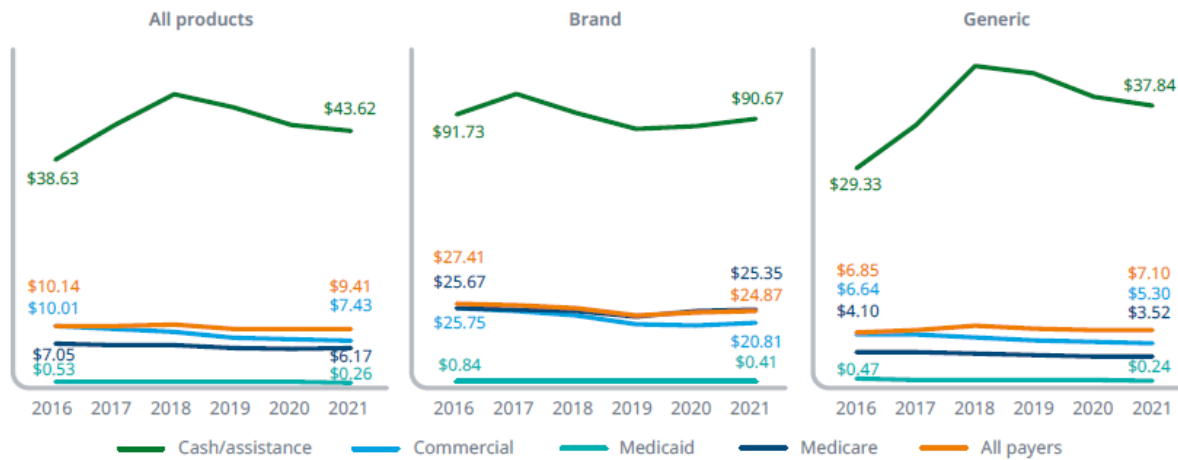


Source: IQVIA Institute, National Sales Perspectives, Dec 2021; Bureau of Labor Statistics, Annual Average Monthly CPI Growth, Dec 2021.

Patient Out-of-pocket (OOP) Spending

- The average OOP cost per retail prescription was \$9.41 in 2021 (down from \$10.14 in 2016)
- The average OOP cost per brand retail prescription was \$24.87 in 2021 (down from \$27.41 in 2016)

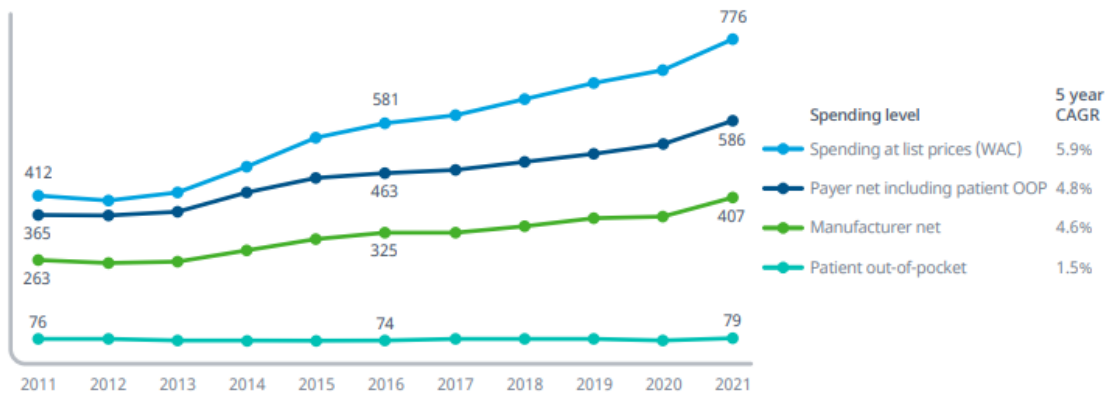
Exhibit 31: Average final out-of-pocket cost per retail prescription by product type and method of payment, 2016–2021



Source: IQVIA LAAD Sample Claims Data, Dec 2021.

- Across all patients, 29% had no annual medicine OOP costs, 8% reached annual OOP costs above \$500, and 2.1% paid more than \$1,500 OOP in 2021.
 - Among Medicare beneficiaries, 22% had no annual medicine OOP costs, 16% reached annual OOP costs above \$500, and 4% paid more than \$1,500 OOP.
 - Among commercially insured patients, 23% had no annual medicine OOP costs, 7.3% reached annual OOP costs above \$500, and 1.6% paid more than \$1,500 OOP.
- Over 92% of total prescriptions (brand and generic) had a final OOP cost below \$20 in 2021, while 0.9% (totaling 64 million prescriptions) had a final OOP cost above \$125.
- 73% of brand prescriptions had a final OOP cost below \$20 in 2021, while 4% had a final OOP cost above \$125.
- Coupons and debit cards provided by brand manufacturers totaled \$12 billion in 2021.
- Total patient OOP spending increased by an average of 1.5% per year over the past five years, slower than the growth rate of payer spending on medicines, manufacturer net revenue growth, and spending at list price.

Exhibit 17: Medicine spending at selected reporting levels, US\$Bn



Source: IQVIA Institute, Mar 2022; CMS National Health Expenditures (NHE), Dec 2020.

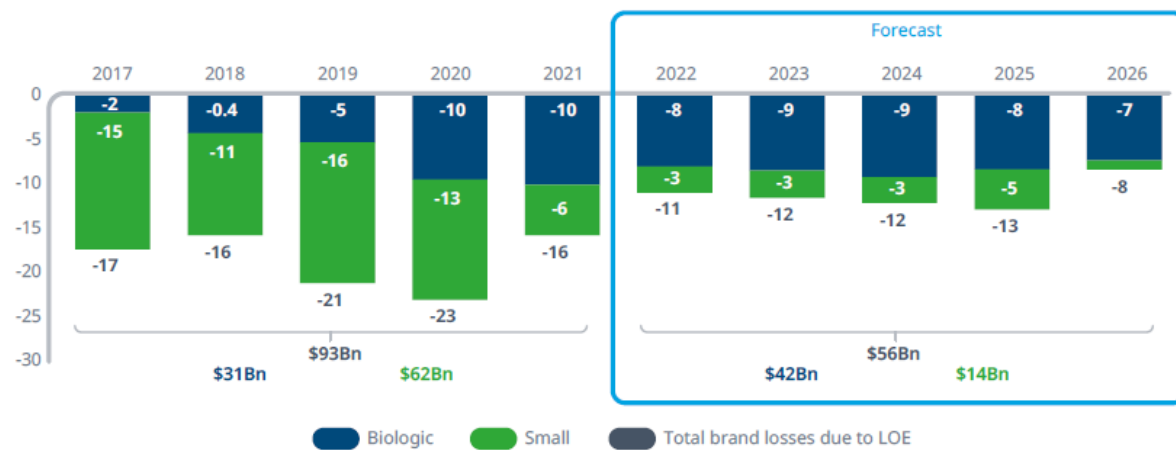
Abandonment

- Patients starting a new therapy abandoned 81 million prescriptions in total at the pharmacy in 2021.
- 61% of patients did not fill their new prescription when OOP costs exceeded \$250, while just 7% of patients abandoned their prescriptions when OOP costs were less than \$10.
- Abandonment of medicines to treat chronic conditions resulted in 5.3 billion fewer patient days of therapy in 2021.

Market Dynamics

- There were 72 novel active substances (NAS) launched in 2021, including emergency use authorizations (EUA) for COVID-19.
- Over the next five years, a projected 250–275 NAS will enter the market but are anticipated to represent an average 6–7% of brand spending compared to 11% in the past five years.
- LOE reduced net spending on brand medicines by \$93 billion over the past five years, with a \$62 billion savings from small molecules and \$31 billion savings from biologics
- LOE is expected to lower brand spending by \$56 billion from 2022 to 2026, with \$41.6 billion from reduced spending on biologics.

Exhibit 42: U.S. impact of brand losses of exclusivity 2017–2026, US\$Bn



Source: IQVIA Market Prognosis, Sep 2021; IQVIA Institute, Mar 2022.

Medicine Use

- Medicine utilization, measured by days of therapy, grew by 3.3% in 2021
- In total, dispensed prescriptions increased by an average of 2.1% per year over the past five years, driven mainly by the aging population.
- Retail drugs currently represent 86% of medicine use (by days of therapy), with non-retail accounting for the remaining 14%.

Condition Specific Findings

- Oncology
 - Oncology spending is projected to exceed \$113 billion by 2026, with annual growth slowing to 9% due to competitive pressure from biosimilars
 - Net prices for brand oncology products are, on average, 7% lower than the list price.
- Cell, Gene, or RNA Therapies
 - There are currently 33 cell, gene or RNA-based therapies launched globally to-date, with 18 currently marketed in the U.S.
 - An additional 55–65 new therapies are expected to launch globally by 2026
 - “Even considering the large numbers of these products, they will not be more than 20% of all new drugs expected to be launched in the next five years and less than 10% of the spending on new drugs in the same period.”
 - Spending on these treatments is projected to reach \$11 billion by 2026, estimates range under different assumptions (\$7 to \$20 billion).
- Diabetes
 - Net prices for brand diabetes products are, on average, 78% lower than the list price.
 - Total OOP costs paid by patients with insulin prescriptions amounted to \$1.27 billion in 2021
 - 44% of this total is from the 20% of prescriptions that cost patients more than \$35
 - Insulin OOP costs have declined by \$500 million since 2018

- If insulin OOP costs were capped at \$35, patient spending would have been further decline by \$555 million.
 - Net spending (manufacturer revenue) on diabetes medicines is projected to decline 12% through 2026, while list prices are estimated to grow 10-13% annually
- Autoimmune
 - Net prices for brand autoimmune products are, on average, 49% lower than the list price.
 - Net spending on autoimmune disorder treatments is expected to exceed \$70 billion by 2026, slowing after 2022 due to key biosimilars