Congressional Budget Office
Nonpartisan Analysis for the U.S. Congress

How Research Is Used to Assess Policy Proposals at CBO

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For information about the institute, see https://siepr.stanford.edu.

CBO's Role in the Policymaking Process

What is CBO’s Purpose?

The agency was established under the Congressional Budget and Impoundment Control Act of 1974 to provide:

- Objective, nonpartisan, and timely analyses to assist the Congress in making decisions that affect the federal budget and the economy; and
- Information and cost estimates required as part of the Congressional budget process.

CBO offers an alternative to information provided by the Office of Management and Budget (OMB) in the executive branch.

What Information Does CBO Generally Provide to the Congress?

- **Baseline projections**—projections of federal spending and revenues under current law that help the Congress formulate its budget plan.
- **Cost estimates**—estimates of legislative proposals' effects on the federal budget that help the Congress stay within its budget plan.
- **Identification of federal mandates** (requirements that legislation imposes on state, local, or tribal governments or on private-sector entities) and estimates of their costs.
- **Scorekeeping information**, including estimates of the effects of proposed and enacted legislation on the major categories within the budget (appropriations, mandatory spending, and receipts).
- Estimates of the economic and budgetary effects of **policy options**.

What Does CBO Not Do?

- **Make policy recommendations.** CBO is strictly nonpartisan and makes no judgments about the merits of legislative proposals.
- **Write legislation.** Instead, CBO analyzes different proposals and options.
- **Implement programs or regulations or enforce budget rules.** The Budget Committees, agencies, and OMB are responsible for those roles.
- **Audit operations of government programs.** That is the role of the Government Accountability Office (GAO).

CBO’s Organization and Staffing

The agency employs about 275 full-time staff.

The Director is appointed jointly by the Speaker of the House and the President pro tempore of the Senate.

All staff are appointed by the Director, solely on the basis of professional competence, without regard to political affiliation.

80 percent of CBO’s professional staff hold advanced degrees in economics, public policy, public administration, or a related field.

What Does CBO Produce in an Average Year?

In a typical year, CBO publishes the following on its website, www.cbo.gov:

- About 80 reports, working papers, testimonies, and interactive tools; and
- About 700 cost estimates and related mandate statements.

The agency also fulfills thousands of requests for technical assistance each year.

How CBO Uses Research

How Does Research Inform CBO's Analyses?

CBO uses research to inform:

- Estimates of the effects of legislative proposals,
- Reports requested by Members of Congress, and
- Modeling methods.

CBO performs several forms of research:

- Empirical research,
- Descriptive analyses,
- Consultations with stakeholders and experts, and
- Syntheses of academic literature.

Examples of Recent Work

Four Examples

Research has informed CBO's analyses of these topics, among many others:

- The budgetary effects of relaxing or repealing Medicaid's institutions for mental diseases (IMD) exclusion,
- The effects of drug pricing policies on innovation,
- Trends in spending and prices for prescription drugs, and
- The offsetting effects of prescription drug use on Medicare's spending for medical services.

Budgetary Effects of Relaxing or Repealing the IMD Exclusion: Policy Description

Under a policy known as the institutions for mental diseases exclusion, the federal government does not make matching payments to states for expenditures for services provided to Medicaid enrollees ages 21 to 64 who are in IMDs, a type of inpatient facility.

Four exceptions to the exclusion make federal funding available for IMD stays:

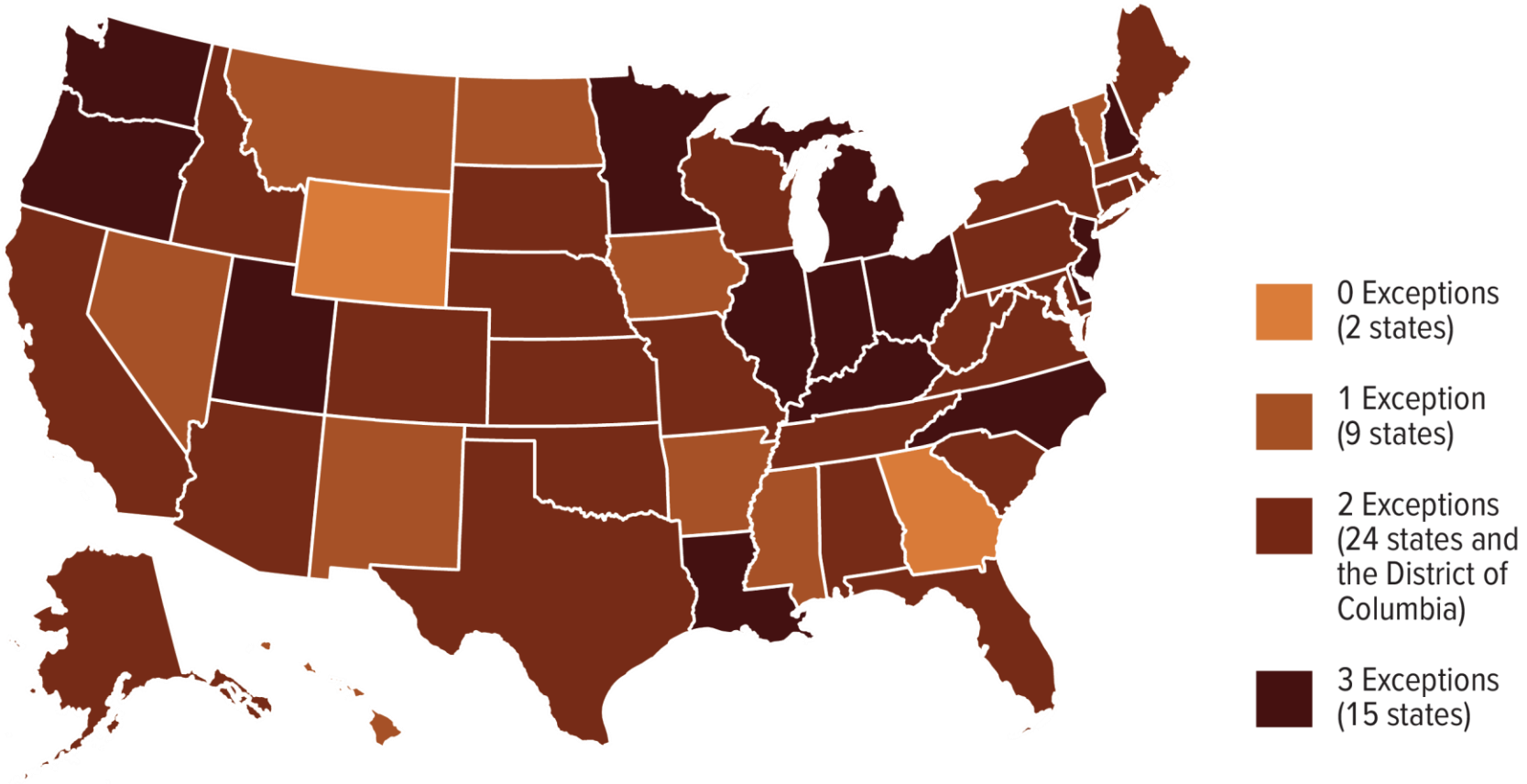
- Three permanent exceptions: section 1115 demonstration waivers under the Social Security Act, use of disproportionate share hospital payments, and Medicaid managed care “in-lieu-of” authority.
- One temporary exception: a state plan option allowing states to amend their Medicaid plan to receive federal matching funds for treating Medicaid enrollees ages 21 to 64 with a substance use disorder (SUD) in IMDs if certain criteria are met. The option expires on September 30, 2023.[1]

Lawmakers have expressed interest in learning about the impact that extending the expiring provision or repealing the exclusion would have.

1. The option was created by section 5052 of the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act (SUPPORT Act, Public Law 115-271).

Budgetary Effects of Relaxing or Repealing the IMD Exclusion: Policy Variation Under Current Law

Number of Exceptions



- 0 Exceptions (2 states)
- 1 Exception (9 states)
- 2 Exceptions (24 states and the District of Columbia)
- 3 Exceptions (15 states)

Exceptions are reported for calendar year 2022, except for the in-lieu-of service exception, which is reported for fiscal year 2020.

Budgetary Effects of Relaxing or Repealing the IMD Exclusion: Empirical Assessment

CBO estimated the effect of section 1115 waivers on Medicaid spending for SUD services and adjusted those estimates to reflect differences between the waiver and the policies under consideration, such as:

- Repeal of the IMD exclusion is more flexible than section 1115 waivers.
- Unmet treatment needs are greater for SUD care than for mental health care.

The agency accounted for developments expected to occur under current law:

- New policies would have less effect in states with section 1115 waivers.
- Additional states are expected to adopt waivers over the budget window.

Budgetary Effects of Relaxing or Repealing the IMD Exclusion: Estimates

Millions of Dollars

	Total, 2023–2033
Permanently Extend the State Plan Option Available Under the SUPPORT Act	
SUD Stays of up to 30 Days per 12-Month Period in Facilities With More Than 16 Beds	535
SUD Stays of up to 60 Days per 12-Month Period in Facilities With More Than 16 Beds	560
SUD Stays of up to 30 Days per 12-Month Period in Facilities With 17 to 39 Beds	155
Eliminate the IMD Exclusion	
SUD Stays	7,710
Mental Health Stays	33,480
SUD Stays and Mental Health Stays	38,405

For more information, see Congressional Budget Office, *Budgetary Effects of Policies to Modify or Eliminate Medicaid's Institutions for Mental Diseases Exclusion* (April 2023), www.cbo.gov/publication/58962.

Effects of Drug Pricing Policies on Innovation: Overview

In the last five years, several legislative efforts have been made to reduce the prices paid for prescription drugs. Substantial interest surrounds policies—such as those that would reduce prices for drugs—that could have a major impact on the development of new drugs.

CBO developed a simulation model that is based on a stylized representation of the pharmaceutical decisionmaking process. The model simulates how manufacturers would respond to changes in expected revenues or development costs at each point in the drug development process. With it, CBO can estimate the impact that such changes would have on the number of drugs that would come to market in the future.

The agency adjusted elasticity estimates from the literature using an early version of the model to develop innovation estimates in 2019. As CBO refined the model, the agency began using it more directly to develop innovation estimates.

For a description of the model, see Christopher P. Adams, *CBO's Simulation Model of New Drug Development*, Working Paper 2021-09 (Congressional Budget Office, August 2021), www.cbo.gov/publication/57010.

Effects of Drug Pricing Policies on Innovation: Sample Policy

The first policy for which CBO estimated innovation effects was H.R. 3, The Elijah E. Cummings Lower Drug Costs Now Act (2019–2020), which included these provisions:

- Health and Human Services Secretary required to negotiate drug prices for Medicare Part D.
- Price would be available to all parties in the U.S.
- Prices of 25 drugs with highest Medicare spending would be negotiated first.

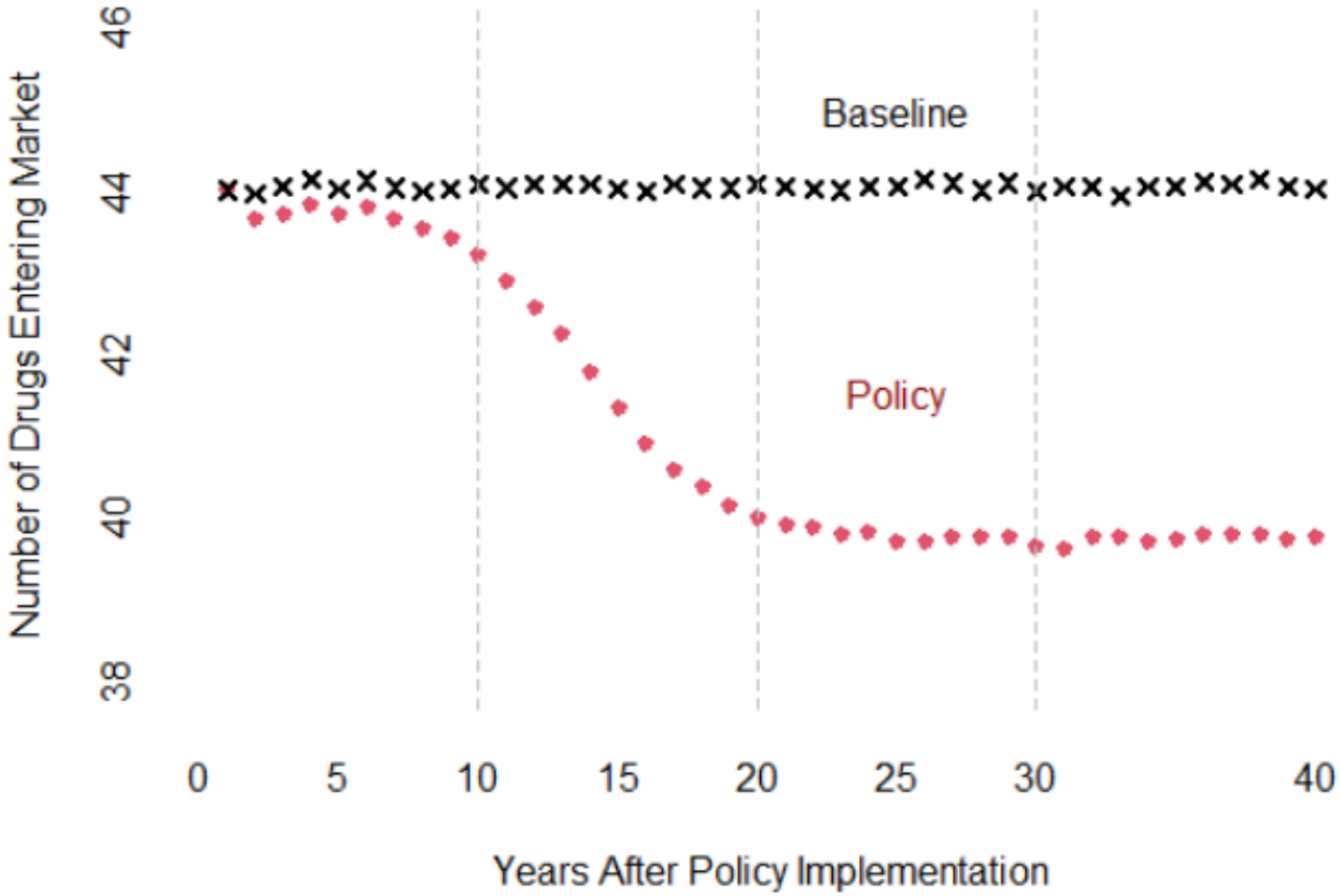
CBO estimated that new and expensive drugs would be priced at 80 percent of the price that would have been set under current law and that global revenues would be reduced by 19 percent.

Modeled policy specifications:

- A reduction in revenues for the top quintile of the revenue distribution, increasing from 15 percent to 25 percent over the quintile.
- An increase of 200 basis points in financing costs associated with removing an estimated $900 billion from the industry.
- Additional variant: an increase of $10 billion in National Institutes of Health funding over 10 years.

See Chris Adams, Congressional Budget Office, “CBO's Model of New Drug Development” (presentation to the Dartmouth Institute for Health Policy & Clinical Practice, January 2022), www.cbo.gov/publication/57450.

Impact of Negotiation on Number of New Drugs Entering the Market

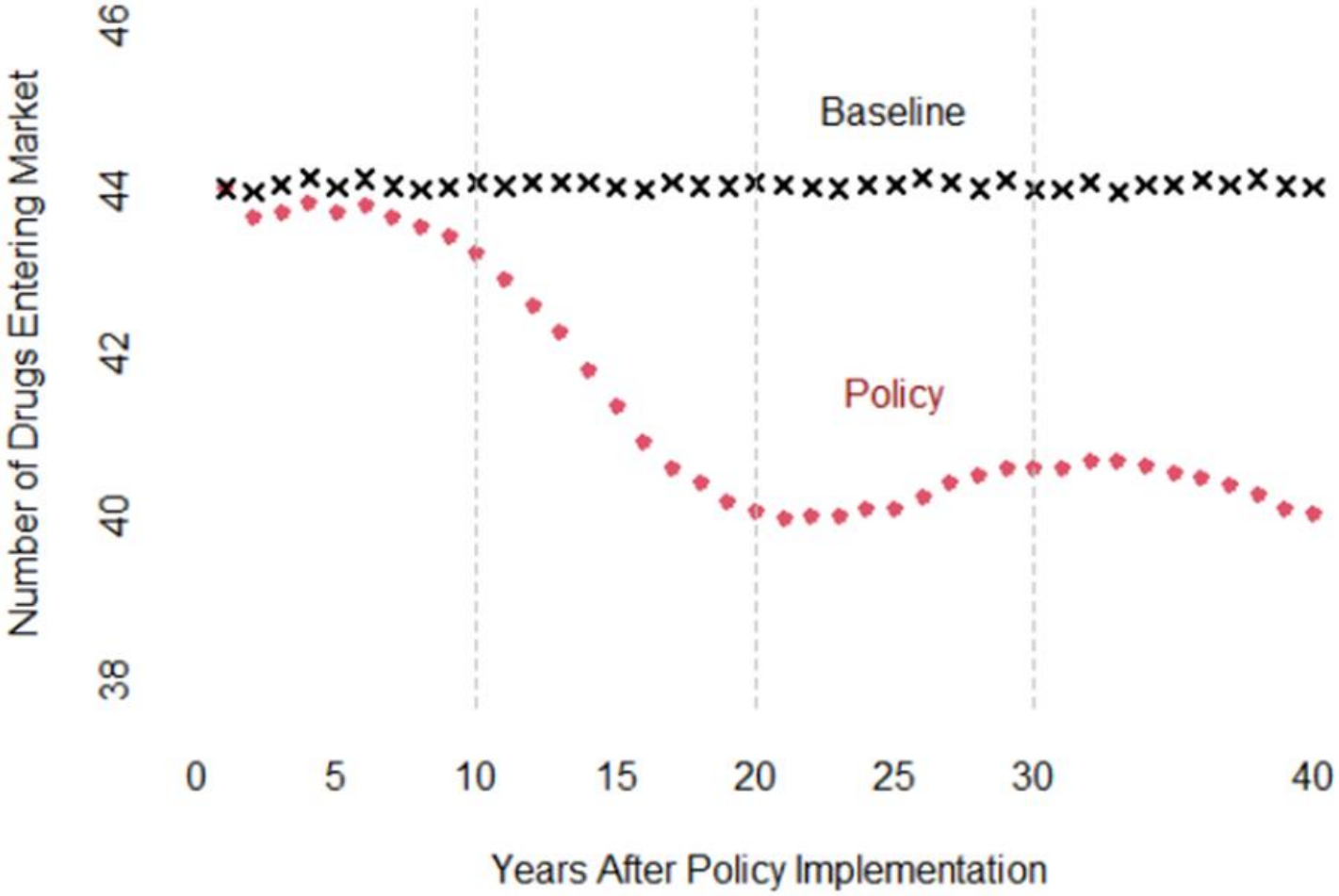


The policy is implemented in year zero, but the full difference is not reached until after year 20. The policy is associated with a long-run reduction of 10 percent in the number of new drugs.

The number of new drugs in year zero is set at the average for 2015 to 2019.

See Chris Adams, Congressional Budget Office, “CBO's Model of New Drug Development” (presentation to the Dartmouth Institute for Health Policy & Clinical Practice, January 2022), www.cbo.gov/publication/57450.

Effects of Drug Pricing Policies on Innovation: Model Results for Sample Negotiation Policy With Additional NIH Funding



The additional NIH funding temporarily increases the number of new drugs.

The estimate of the response to additional NIH funding is based on the elasticity estimate of 0.45 from Blume-Kohout (2012).[2]

NIH funding is assumed to go back to baseline amount after 10 years.

2. Margaret E. Blume-Kohout, "Does Targeted, Disease-Specific Public Research Funding Influence Pharmaceutical Innovation?," *Journal of Policy Analysis and Management*, vol. 31, no. 3 (Summer 2012), pp. 641–660, https://doi.org/10.1002/pam.21640.

Trends in Spending and Prices for Prescription Drugs

Nationwide spending on prescription drugs increased more than tenfold in real terms from 1980 to 2018.

From 2009 to 2018, spending on prescription drugs rose from $74 billion to $120 billion in 2018 dollars in the Medicare Part D program and from $18 billion to $32 billion in Medicaid.

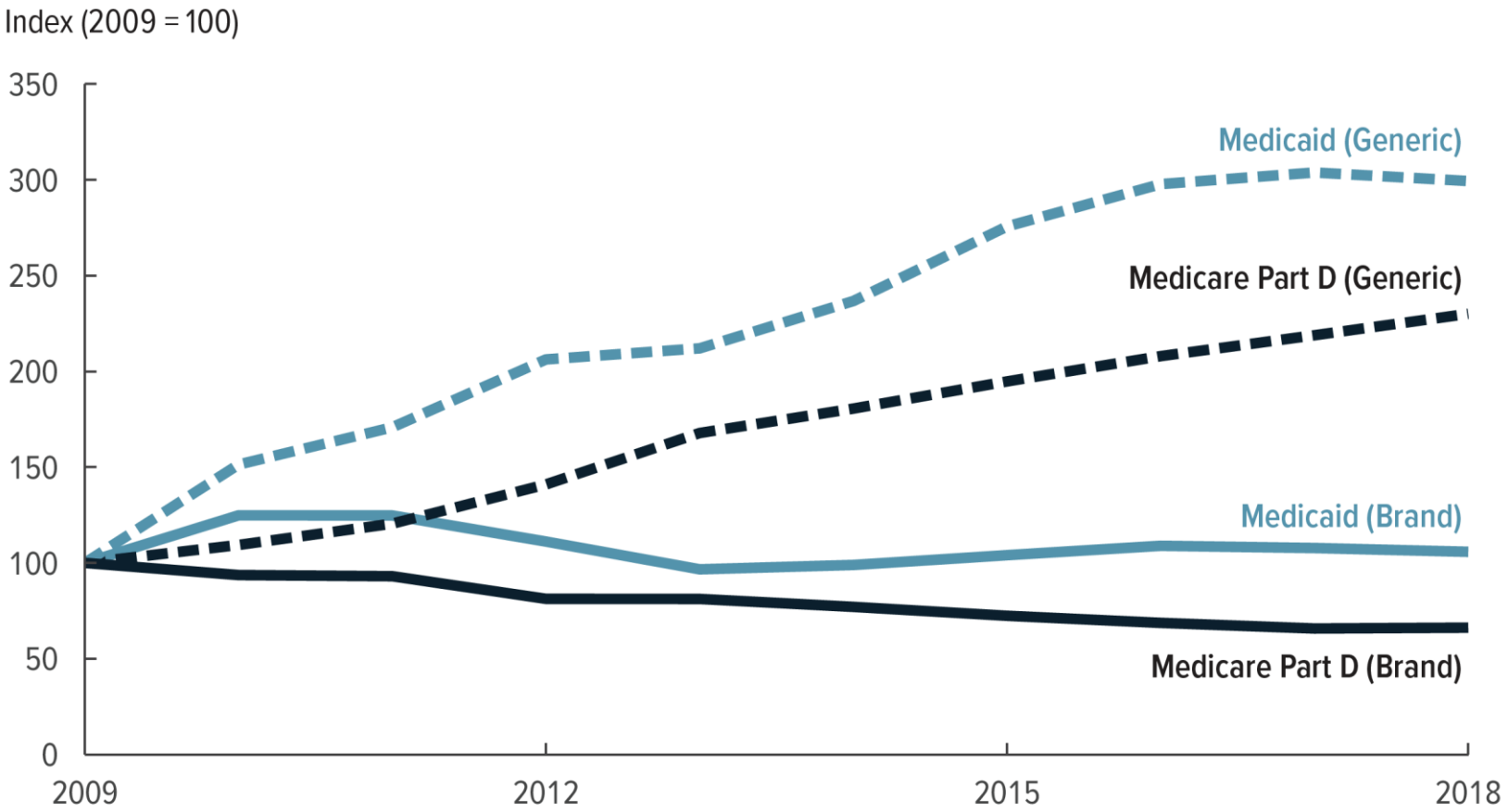
Per-enrollee spending in Medicare Part D averaged about $2,700 per year over that period, while per-enrollee spending in Medicaid increased from $445 to $530.

Those values reflect two opposing trends: increasing prices for brand-name drugs and increased use of generic drugs.

Descriptive analyses inform CBO's baseline projections and cost estimates and enable the agency to answer questions from the Congress.[3]

3. For example, greater-than-expected use of generic drugs was cited as one key reason for the difference between 2010 projections of spending on the Medicare program for the 2010–2019 period and actual spending over that period. See Congressional Budget Office, letter to the Honorable Sheldon Whitehouse about CBO's projections of federal health care spending (March 17, 2023), www.cbo.gov/publication/58997.

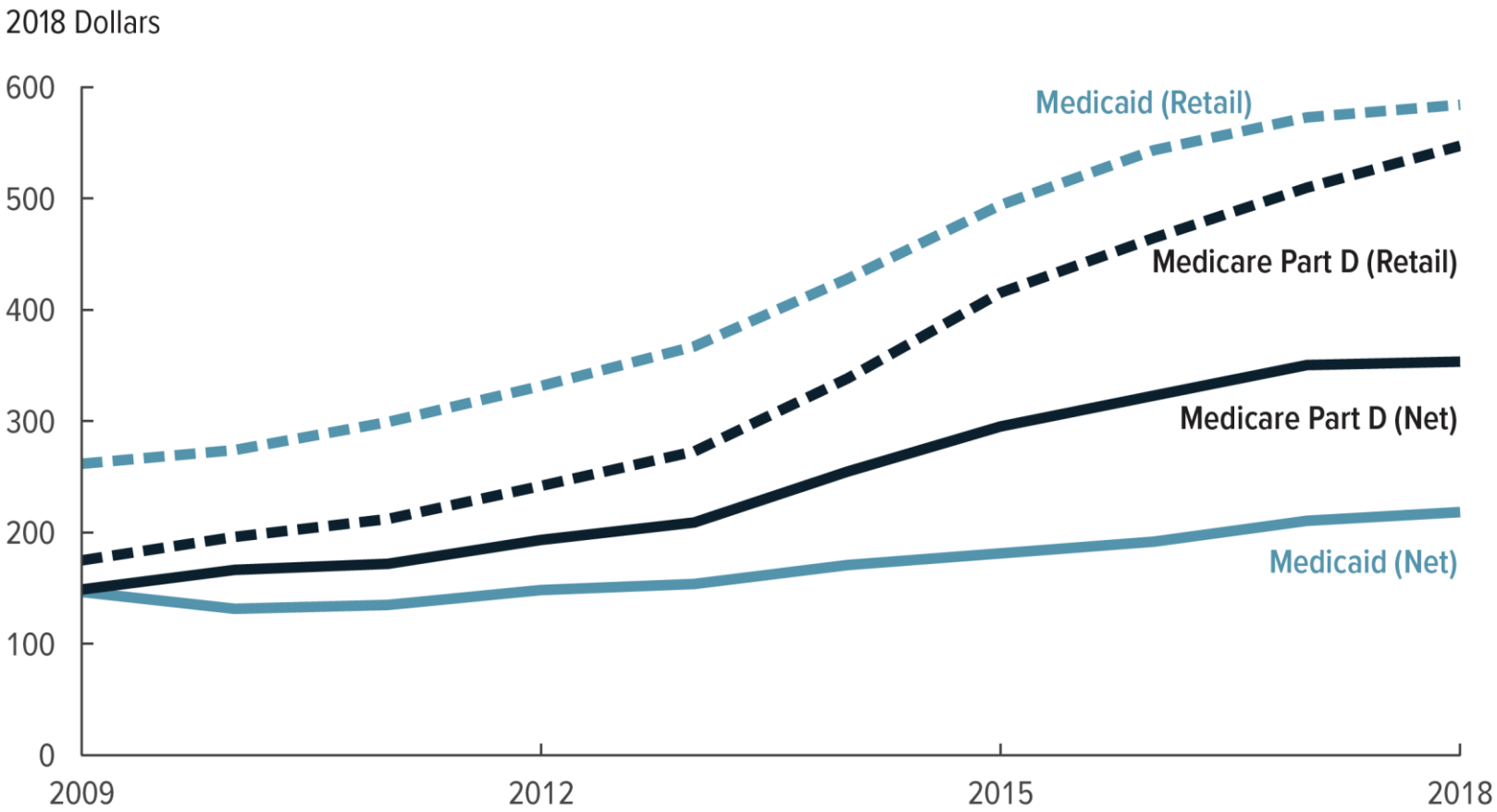
Use of Prescription Drugs in Medicare and Medicaid



Although the use of generic drugs grew over the 2009–2018 period, the use of brand-name drugs did not. Two factors account for that difference: Generic equivalents for a growing number of brand-name drugs became widely available, and insurers increasingly steered patients toward generic drugs.

Congressional Budget Office, *Prescription Drugs: Spending, Use, and Prices* (January 2022), www.cbo.gov/publication/57050.

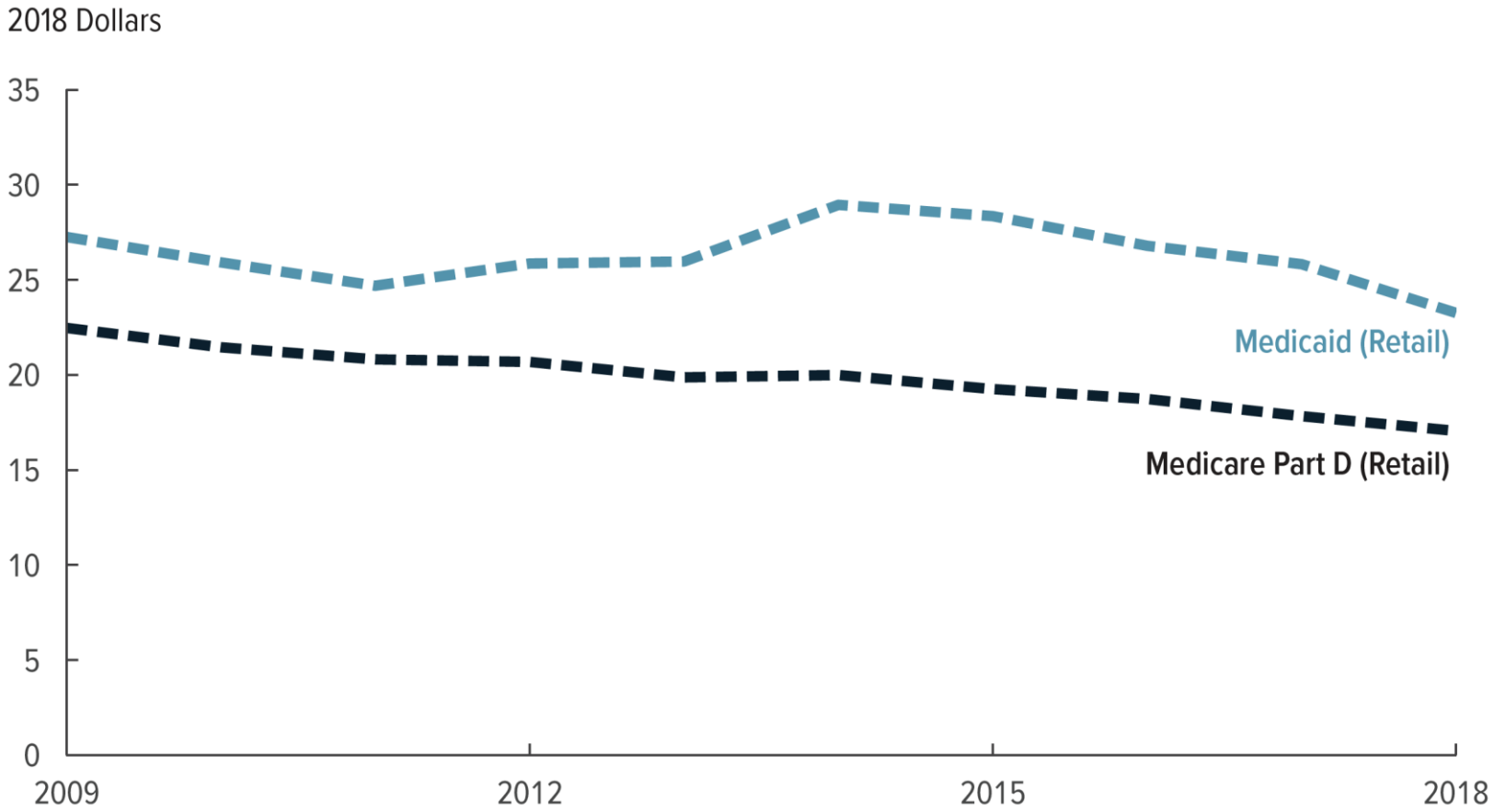
Prices for Brand-Name Prescription Drugs in Medicare and Medicaid



Growth in prices for brand-name drugs from 2009 to 2018 was the result of a combination of factors: higher average prices for drugs entering the market than for drugs already on the market and year-over-year price growth for drugs after they entered the market.

Congressional Budget Office, *Prescription Drugs: Spending, Use, and Prices* (January 2022), www.cbo.gov/publication/57050.

Prices for Generic Prescription Drugs in Medicare and Medicaid



Unlike prices for brand-name drugs, average prices for generic drugs have fallen over time. Generic drugs often face direct competition because several companies can manufacture the same drug. Increased competition for a drug is associated with lower prices.

Congressional Budget Office, *Prescription Drugs: Spending, Use, and Prices* (January 2022), www.cbo.gov/publication/57050.

Offsetting Effects of Prescription Drug Use on Medicare's Spending for Medical Services

Use of prescription drugs affect a person's health and need for medical services. As a result, policies that affect Medicare beneficiaries' use of prescription drugs probably affect federal spending on their medical services.

Before 2012, CBO found insufficient evidence of an offsetting effect of prescription drug use on spending for medical services. For example, CBO did not include an offsetting impact on medical spending in 2003 when estimating the budgetary effect of the law that created Medicare's prescription drug benefit.

As more analyses demonstrated a link between changes in prescription drug use and changes in the use of and spending for medical services, CBO synthesized that research and developed a parameter to represent that relationship for the Medicare population.

CBO concluded that a 1 percent increase in prescription drug use by Medicare enrollees would cause their medical spending to fall by roughly one-fifth of one percent and that a 1 percent decrease in prescription drug use would increase medical spending by roughly one-fifth of one percent.

See Congressional Budget Office, *Offsetting Effects of Prescription Drug Use on Medicare's Spending for Medical Services* (November 2012), www.cbo.gov/publication/43741.

Additional Examples of Publications Informed by Research

Emissions of Carbon Dioxide in the Electric Power Sector (December 2022)

Emissions of Carbon Dioxide in the Transportation Sector (December 2022)

CBO's Current View of the Economy in 2023 and 2024 and the Budgetary Implications (November 2022)

The Distribution of Household Income, 2019 (November 2022)

CBO's Use of the Income and Payroll Tax Offset in Its Budget Projections and Cost Estimates (October 2022)

Work Requirements and Work Supports for Recipients of Means-Tested Benefits (June 2022)

"How Increasing the Federal Minimum Wage Could Affect Employment and Family Income" (interactive tool, April 2021)

Opportunities at CBO

For . . .

PhDs: economist, visiting scholar

MAs and MSs: analyst

BAs and BSs: assistant analyst

Internships for graduate students:

- CBO recruits annually starting in January.
- 2023 summer internships are filled.

Applicable fields include economics, public policy, public administration, public finance, and mathematics (with background in economics).

Connecting With CBO

www.cbo.gov

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Careers@cbo.gov

Apply online for full-time and summer internship opportunities.

Register for job alerts at www.cbo.gov/careers.

Questions?