

ACCESS, AFFORDABILITY, AND OUTCOMES

The Value of Managed Care Pharmacy

Facts and Figures About Prescription Drug Care and Coverage in the United States

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TABLE OF CONTENTS

I.	Introduction and Goals of This Report.....	page 4
II.	Overview of Managed Care and the Current State of Prescription Spending in the United States.....	page 5
	What is Managed Care?.....	page 5
	What is Managed Care Pharmacy?.....	page 8
	Why is Managed Care Pharmacy So Important?.....	page 10
III.	Key Statistics on Health Insurance and Prescription Drug Coverage in the United States.....	page 12
IV.	Comparison of Prescription Utilization and Average Out-of-Pocket (OOP) Spending on Prescription Drugs by the Insured Versus Uninsured/Cash-Paying Populations.....	page 14
V.	Examination of the Prevalence of Managed Care Pharmacy Tools and Their Impact on Health Care Costs and Patient Outcomes	page 17
	Prior Authorization	page 17
	Step Therapy.....	page 19
	Medication Therapy Management.....	page 20
	Drug Utilization Review	page 21
	Formulary Design and Management	page 21
VI.	Comparative Spending on Prescription Drugs by Fee-for-Service (FFS) Medicaid Versus Managed Medicaid...	page 25
VII.	Conclusion.....	page 29



I. INTRODUCTION AND GOALS OF THIS REPORT

We at the Academy of Managed Care Pharmacy (AMCP) set out to write this report to raise awareness of the existence, prevalence, and importance of managed care pharmacy. The health care sector touches the daily lives of millions of Americans. However, there is often confusion or a lack of understanding about why it operates the way it does. Managed care pharmacy — often working behind the scenes but having a profound impact on access to and affordability of prescription medications — is not immune to this challenge.

We recognized there was a need to define and explain the fundamental concepts underpinning managed care pharmacy. This report does that and more, exploring how professionals in this field work diligently to facilitate appropriate access to prescription treatments while remaining mindful of rising costs. It discusses key areas of focus such as:

- Pharmacy benefit design and implementation.
- Formulary and medication utilization management.
- Clinical programs.
- Quality and safety program management.
- Promoting affordability.

The report also highlights the most widely used managed care pharmacy tools: prior authorization, drug utilization, medication therapy management, and formulary design and management.

Moreover, we aimed to produce a resource that delves deeply into the challenges facing managed care pharmacy and the opportunities it can create. Throughout the following pages, we have tried to rely on the extensive and objective use of data and studies — just as our professionals do daily.

The overall result is a comprehensive document that we believe makes a persuasive and detailed case about the value of managed care pharmacy. In a world with a pressing need for affordable access to necessary prescription medications, millions of Americans are looking for balanced solutions. Managed care pharmacy does that, and this report shows how.

The health care sector touches the daily lives of millions of Americans.



II. OVERVIEW OF MANAGED CARE AND THE CURRENT STATE OF PRESCRIPTION SPENDING IN THE UNITED STATES

What is Managed Care?

Broadly speaking, managed care is “a health care delivery system organized to manage cost, utilization, and quality.”¹ Managed care plans seek to reduce costs while keeping quality high through the use of provider networks, prescription drug tiers, and other forms of utilization management.² Managed care is a structured approach to financing and delivering covered health care benefits designed to provide affordable access and cost-effectively improve the quality of care. A managed care organization, or MCO, is a generic term applied to a managed care plan. MCOs manage the cost and utilization of covered services and products to optimize patient care by efficiently using limited resources. Some of the largest MCOs in the United States include UnitedHealth Group, Anthem, Centene, Kaiser Permanente, and Humana.³

The roots of managed care can be traced back to two models of health care financing: prepaid medical groups and the early Blue Cross and Blue Shield plans.⁴ The Western Clinic in Tacoma, WA, founded in 1910, is often cited as the first “prepaid medical group,” which offered its members a broad range of medical services through its own providers in exchange for a fixed monthly payment.⁵ Later, in 1937, the Kaiser Construction Company began to finance medical care for its workers as it built an aqueduct in California.⁶ This organization later evolved into the Kaiser Permanente Health Plan, one of the largest health insurance providers in the United States. The early Blue Cross and Blue Shield plans paid for services provided by contracted physicians and hospitals that serviced Blues patients and other, unaffiliated

¹ “Managed Care,” Medicaid.gov (<https://www.medicaid.gov/medicaid/managed-care/index.html>, accessed June 5, 2023).

² “What is Managed Care?,” Cigna (<https://www.cigna.com/knowledge-center/what-is-managed-care>, accessed June 5, 2023).

³ “2022 Market Share Reports For the Top 125 Accident and Health Insurance Groups and Companies by State and Countrywide,” National Association of Insurance Commissioners (NAIC), 2022, p. 9 (<https://content.naic.org/sites/default/files/publication-msr-hb-accident-health.pdf>, accessed June 5, 2023).

⁴ Kongstvedt, Peter R., *Health Insurance and Managed Care: What They Are and How They Work*, Fifth Edition (Burlington, MA: Jones & Bartlett Learning, 2020), p. 2.

⁵ Kongstvedt, *Health Insurance and Managed Care*, p. 2.

⁶ Kongstvedt, *Health Insurance and Managed Care*, p. 3.

patients.⁷ Blue Cross plans paid for hospital services based on cost-based charge lists (the predecessor to today's hospital "chargemaster"), and Blue Shield plans paid for physician services based on payment rates for defined procedures (the predecessor to today's "usual and customary" pricing).⁸

Managed care has evolved significantly since the first "prepaid health plan" and now encompasses four primary plan types in the commercial and employer market: health maintenance organizations (HMOs), preferred provider organizations (PPOs), point of service (POS) organizations, and exclusive provider organizations (EPOs). Each plan is defined in **Table 1** below:

Managed care plans implement a variety of tools to ensure quality health care delivery at a more affordable cost. Some of the most common characteristics of managed care plans include the following:

- The use of limited provider networks, meaning plans contract with various physicians, medical professionals, labs, facilities, and pharmacies that together create a "provider network."¹³ Payment to these providers is negotiated by the plan and is typically less than their full charges.¹⁴
- Prior authorization, meaning the requirement that a provider obtain pre-approval by the health plan to ensure coverage of a certain procedure or prescription drug.¹⁵

Table 1: Types of Managed Care Plans

Type	Acronym	Definition
Health maintenance organizations	HMOs	Covers in-network providers only. May require the patient to choose a primary care provider (PCP) who is responsible for referrals to specialists. Generally, the cheapest option for patients but with the least degree of flexibility. ⁹
Preferred provider organizations	PPOs	Covers in-network and out-of-network providers. In-network specialty providers normally do not require a referral. Patients going out-of-network will incur a higher cost. ¹⁰
Point of service organizations	POS	POS organizations are a cross between HMOs and PPOs. They may still require a PCP, but patients can see out-of-network providers (at a higher cost) if they choose to. ¹¹
Exclusive provider organizations	EPOs	EPOs "allow patients to choose their in-network providers without the need for establishing a PCP and receiving referrals. However, all out-of-network expenses are not covered." ¹²

⁷ Kongstvedt, *Health Insurance and Managed Care*, p. 2.

⁸ Kongstvedt, *Health Insurance and Managed Care*, p. 4.

⁹ Joseph Heaton, Prasanna Tadi, "Managed Care Organization," StatPearls, March 6, 2023 (<https://www.ncbi.nlm.nih.gov/books/NBK557797/>, accessed June 6, 2023).

¹⁰ Heaton and Tadi, "Managed Care Organization."

¹¹ "What is Managed Care," Cigna.

¹² Heaton and Tadi, "Managed Care Organization."

¹³ Angelo P. Giardino, Orlando De Jesus, "Managed Care," StatPearls, Oct. 24, 2022 (<https://www.ncbi.nlm.nih.gov/books/NBK564410/>, accessed June 5, 2023). See also "What is Managed Care," Cigna.

¹⁴ Kongstvedt, *Health Insurance and Managed Care*, p. 280.

¹⁵ Kongstvedt, *Health Insurance and Managed Care*, p. 280. See also "What is Managed Care," Cigna.

- Financial incentives for patients to use in-network providers, meaning patients may have out-of-network coverage depending upon their plan type but will incur higher costs.¹⁶
- Use of prescription drug tiers, meaning plans will typically place generic medications and preferred brand medications in the lowest tiers, which have the lowest patient cost share.¹⁷

Not only are the vast majority of privately insured Americans enrolled in some form of managed care, it has also become the dominant form of Medicaid coverage and an increasingly prevalent option for Medicare beneficiaries.¹⁸ By contrast, Medicaid and Medicare beneficiaries who are not enrolled in a managed care plan obtain their coverage directly from the state or federal government under a fee-for-service (FFS) program. Under the FFS model, providers bill the government for services rendered and are paid based on the state or the Centers for Medicare and Medicaid Services' (CMS) fee schedule. In contrast, under Medicaid Managed Care or Medicare Advantage (Part C), private health plans engage in capitated models where they take on some financial risk for the beneficiaries they cover on behalf of the state or federal government, meaning they are paid a set amount each month by the government for each covered member in exchange for providing health care benefits. The private plans, in turn, contract with a network of providers that are typically reimbursed at a rate negotiated with the plan.

Under Medicaid, one of the main forms of managed care delivery is through comprehensive risk-based managed care whereby states pay MCOs a flat, capitated rate per

IN 2021,
85%
OF MEDICAID
BENEFICIARIES
WERE IN
SOME TYPE OF
MANAGED CARE

IN 2022,
45%
OF MEDICARE
BENEFICIARIES
WERE IN
MEDICARE
ADVANTAGE
PLANS

member per month in exchange for providing coverage to enrollees.¹⁹ The plans are then financially “at risk” for those members’ care. As of 2021, 85% of Medicaid beneficiaries are enrolled in some form of managed care, and 75% are enrolled in comprehensive managed care through MCOs.²⁰

Under Medicare, beneficiaries may obtain inpatient and outpatient medical benefits through Medicare Advantage plans rather than through the traditional FFS program (i.e., Parts A and B). Medicare Advantage plans offered by private insurers also typically include Part D (prescription drug) benefits.²¹ In 2022, 45% of Medicare beneficiaries were enrolled in Medicare Advantage plans, a figure that is expected to rise.²² Further, the Medicare Part D prescription drug benefit, broadly introduced in 2006, is *only* offered through private health plans as Medicare Advantage prescription drug plans (MA-PD plans) or as standalone prescription drug plans (PDPs).

¹⁶ Giardino and De Jesus, “Managed Care.”

¹⁷ “What is Managed Care,” Cigna.

¹⁸ “Managed Care,” Healthinsurance.org (<https://www.healthinsurance.org/glossary/managed-care/>, accessed June 6, 2023).

¹⁹ “Managed Care Overview,” Medicaid and CHIP Payment and Access Commission (MACPAC) (<https://www.macpac.gov/subtopic/managed-care-overview/>, accessed June 6, 2023).

²⁰ “Share of Medicaid Enrollees in Managed Care,” Medicaid.gov, July 21, 2023 (<https://data.medicare.gov/dataset/79692ea5-21e1-56bf-8149-97d437120c4b>, accessed Aug. 30, 2023).

²¹ “Understanding Medicare Advantage Plans,” CMS, July 2022, p. 4 (<https://www.medicare.gov/Pubs/pdf/12026-Understanding-Medicare-Advantage-Plans.pdf>, accessed June 6, 2023).

²² Faith Leonard, Gretchen Jacobson, Lauren A. Haynes, Sara R. Collins, “Traditional Medicare or Medicare Advantage: How Older Americans Choose and Why,” The Commonwealth Fund, Oct. 17, 2022 (<https://www.commonwealthfund.org/publications/issue-briefs/2022/oct/traditional-medicare-or-advantage-how-older-americans-choose>, accessed June 6, 2023).

What is Managed Care Pharmacy?

A critical component of health insurance coverage is the prescription drug benefit. In fact, the Centers for Disease Control and Prevention (CDC) estimates that 71.9% of physician office visits in 2019 involved drug therapy.²³ Managed care plans have developed specific tools geared at maintaining appropriate access to prescription drugs while containing rising costs. This practice is referred to as “managed care pharmacy.” AMCP defines managed care pharmacy as the application of “clinical and scientific evidence to support the appropriate use of medications to enhance patient and population health outcomes while optimizing use of limited health care resources.”²⁴ According to AMCP, managed care pharmacy professionals work across the following five key areas to achieve this goal:²⁵

1. Pharmacy Benefit Design and Implementation

- Ensuring access by defining where care is available.
- Determining which treatments are covered based on individual and population needs.

2. Formulary and Medication Utilization Management

- Identifying which medications to include on the formulary.
- Applying drug management strategies and tools.
- Tracking new and developing medications.

3. Clinical Programs

- Managing coordinated care programs.
- Conducting drug utilization reviews.
- Implementing initiatives to address health disparities.
- Completing medication therapy management.

4. Quality and Safety Program Management

- Assessing and reporting on quality measures.
- Reporting Medicare Advantage and Medicare Part D Star Rating measures.
- Managing drug shortage and safety programs.

5. Promotion of Affordability

- Reducing risk for individuals, employers, and other public payers by managing overall cost.
- Protecting against misuse, overuse, and fraud.
- Promoting value-based care.

This report examines the prevalence and impact of some of the most widely used managed care pharmacy tools: prior authorization, step therapy, drug utilization review (DUR), medication therapy management (MTM), and formulary design and management. Next, we will define each of these concepts.

Prior Authorization

This is an administrative tool health plans or pharmacy benefit managers (PBMs) use that requires prescribers to receive pre-approval for certain drugs to qualify those drugs for coverage under the terms of the pharmacy benefit. Guidelines and administrative policies for prior authorization are developed by pharmacists and/or other qualified health professionals who are employed by or are under contract with a health plan or PBM.²⁶

Step Therapy

Step therapy requires the use of a clinically recognized first-line drug before approval of a more complex and often more expensive medication where the safety, effectiveness, and value has not been well established before a second-line drug is authorized. Step therapy requirements ensure that an established and cost-effective therapy is utilized

²³ “National Ambulatory Medical Care Survey: 2019 National Summary Tables,” CDC, p. 33, Table 20 (https://www.cdc.gov/nchs/data/ahcd/namcs_summary/2019-namcs-web-tables-508.pdf, accessed June 6, 2023).

²⁴ “What is Managed Care Pharmacy?,” AMCP (<https://www.amcp.org/about/managed-care-pharmacy>, accessed June 7, 2023).

²⁵ “What is Managed Care Pharmacy,” AMCP.

²⁶ “Managed Care Glossary,” AMCP (<https://www.amcp.org/about/managed-care-pharmacy-101/managed-care-glossary>, accessed June 7, 2023).

prior to progressing to other therapies. If the required therapeutic benefit is not achieved by the use of the first-line drug, the prescriber may request use of a second-line medication.²⁷ Step therapy programs apply coverage rules at the POS when a claim is adjudicated. If a claim is submitted for a second-line drug and the step therapy rule was not met, the claim is rejected, and a message is transmitted to the pharmacy indicating the patient should be treated with the first-line drug before coverage of the second-line drug can be authorized.²⁸

Drug Utilization Review (DUR)

This is an authorized, structured, ongoing review of health care provider prescribing, pharmacist dispensing, and patient medication use. Reviews are completed by clinical pharmacists at the PBM of a health plan. There are three forms of DUR: prospective (before dispensing), concurrent (at the time of prescription dispensing), and retrospective (after the therapy dispensing).²⁹

Though a DUR is used across payer types, the focus of this report will be on the DUR in Medicaid, where it is statutorily required for FFS and Managed Medicaid.

Medication Therapy Management (MTM)

According to the American Pharmacists Association (APhA), MTM is defined as “a distinct service or group of services that optimize therapeutic outcomes for individual patients. MTM services are independent of, but can occur in conjunction with, the provision of a medication product.”³⁰

The core elements of MTM are:

- **Medication Therapy Review (MTR):** A systematic process of collecting patient-specific information, assessing medication therapies to identify medication-related problems, developing a prioritized list of medication-related problems, and creating a plan to resolve them. The MTR can be comprehensive or targeted.³¹

As it relates to the Medicare Part D program, where MTM is a statutory requirement, the CMS defines comprehensive medication review (CMR) and targeted medication review (TMR) as follows:

- CMR is a real-time, interactive, person-to-person or telehealth review of a patient’s medications (including prescriptions, over-the-counter medications, herbal medicine, and dietary supplements). It is performed by a pharmacist or other qualified provider and must be offered at least once a year.³²
- TMR is used for ongoing monitoring and may be performed to address a specific or potential medication-related problem. TMRs are performed quarterly “to assess medication use, to monitor whether any unresolved issues need attention, to determine if new drug therapy problems have arisen, or to assess if the beneficiary has experienced a transition in care.”³³

²⁷ “Prior Authorization: What is Prior Authorization and Why is it an Essential Managed Care Tool?” AMCP (<https://www.amcp.org/about/managed-care-pharmacy-101/concepts-managed-care-pharmacy/prior-authorization>, accessed Aug. 10, 2023).

²⁸ “Managed Care Glossary,” AMCP.

²⁹ “Managed Care Glossary,” AMCP.

³⁰ “Medication Therapy Management (MTM),” APhA Foundation (<https://www.aphafoundation.org/medication-therapy-management>, accessed June 7, 2023).

³¹ “Managed Care Glossary,” AMCP.

³² “CY 2016 Medication Therapy Management Program Guidance and Submission Instructions,” CMS, April 7, 2015, pp. 7–8 (<https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/Memo-Contract-Year-2016-Medication-Therapy-Management-MTM-Program-Submission-v-040715.pdf>, accessed June 6, 2023).

³³ “Contract Year 2016 Medication Therapy Management Program Guidance and Submission Instructions,” CMS, pp. 11–12.

- **Personal Medication Record:** A comprehensive record of the patient's medications (prescription and nonprescription medications, herbal products, and other dietary supplements).³⁴
- **Medication-Related Action Plan:** A patient-centric document containing a list of actions for the patient to use in tracking progress for self-management.³⁵
- **Intervention and/or Referral:** The pharmacist provides consultative services and intervenes to address medication-related problems; when necessary, the pharmacist refers the patient to a physician or other health care professional.³⁶
- **Documentation and Follow-up:** MTM services are documented in a consistent manner, and a follow-up MTM visit is scheduled based on the patient's medication-related needs or after-care transition.³⁷

The focus of this report will be on MTM in the Medicare Part D program, where it is statutorily required.

Formulary Design and Management

AMCP defines formulary management as an integrated patient care process that enables physicians, pharmacists, and other health care professionals to work together to promote clinically sound, cost-effective care, and positive therapeutic outcomes. The formulary management process provides the managed health care system with the ability to objectively discriminate between superior and marginally effective drug products.³⁸

Many of the managed care pharmacy tools explained above are used by private health plans and in the government FFS program to promote cost-effective care. However, there are differences in how and to what extent these tools are used in the FFS program versus by MCOs.

Why is Managed Care Pharmacy So Important?

Prescription drug spending in the United States has risen drastically over the past few decades. According to data from the National Health Expenditure Accounts, prescription drug spending (net of rebates) increased from \$40 billion in 1990 to \$378 billion in 2021, an almost tenfold increase (**Figure 1**).³⁹ The period from 1980 until the mid-2000s saw an increase in prescription drug spending in per capita terms and as a share of total health expenditures.⁴⁰ This rise in spending was driven by the availability and utilization of new therapies as well as higher price tags on branded drugs.⁴¹ Thanks to the increasing availability of cheaper generic drugs, that spending growth moderated from the mid-2000s through 2018 except for 2013–2015 when there were sharp increases in spending driven by expensive Hepatitis C (Hep C) therapies.⁴²

³⁴ "Managed Care Glossary," AMCP.

³⁵ "Managed Care Glossary," AMCP.

³⁶ "Managed Care Glossary," AMCP.

³⁷ "Managed Care Glossary," AMCP.

³⁸ "Managed Care Glossary," AMCP.

³⁹ "Table O2 National Health Expenditures; Aggregate, Annual Percent Change, Percent Distribution and Per Capita Amounts, by Type of Expenditure," CMS National Health Expenditure Accounts (<https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical>, "NHE Tables ZIP," accessed June 7, 2023); "National Health Expenditure Accounts: Methodology Paper, 2021," CMS National Health Expenditure Accounts (<https://www.cms.gov/files/document/definitions-sources-and-methods.pdf>, accessed June 7, 2023). Per p. 13 of the methodology document, prescription drug expenditure estimates are net of rebates.

⁴⁰ "Prescription Drugs: Spending, Use, and Prices," Congressional Budget Office (CBO), January 2022 (<https://www.cbo.gov/publication/57772>, accessed June 7, 2023).

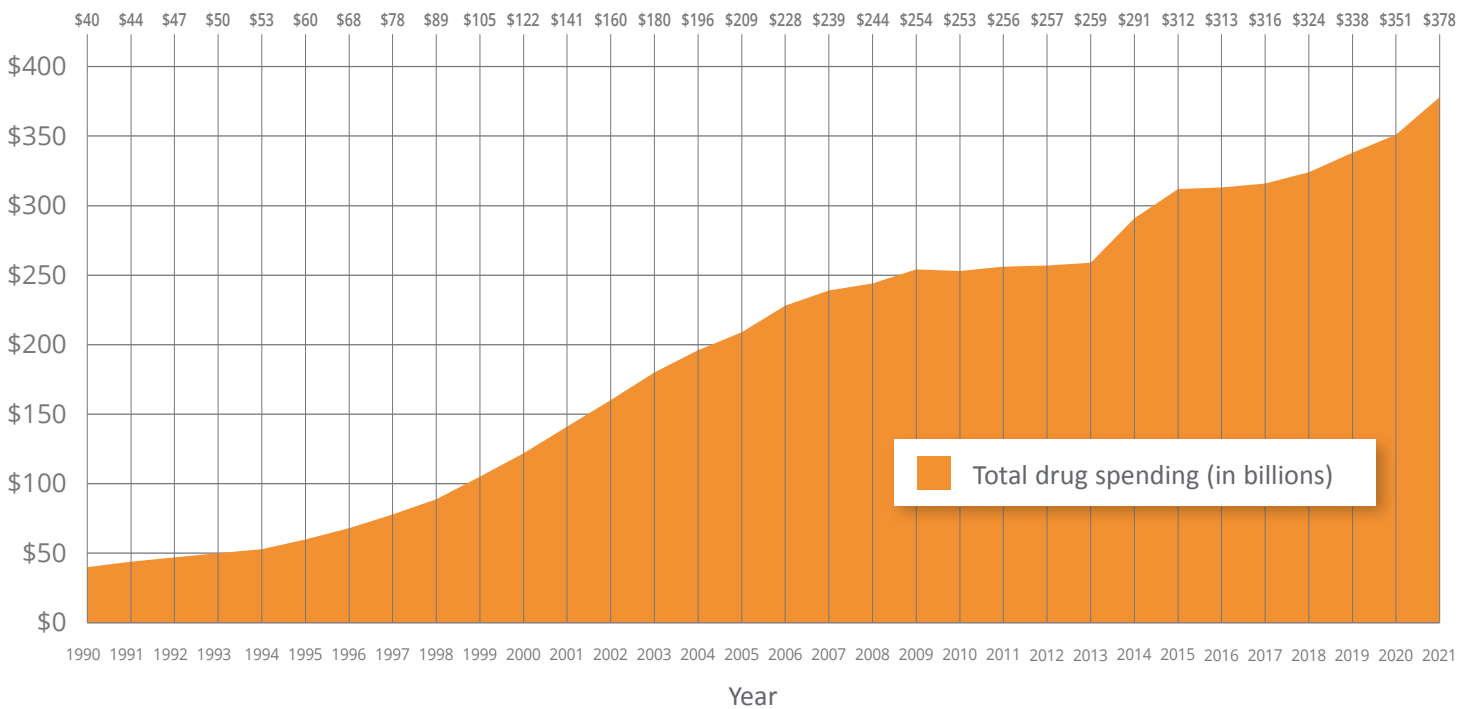
⁴¹ "Prescription Drugs: Spending, Use, and Prices," CBO.

⁴² "Prescription Drugs: Spending, Use, and Prices," CBO.

While spending on prescription drugs as a percentage of total health care spending has fallen slightly in recent years, it still accounted for 8.9% of total health care spending in 2021 (down from 10.2% in 2009).⁴³ In recent years, expensive specialty drugs have accounted for a higher share of net drug spending. Such drugs made up 55% of net spending in 2021 compared with 28% a decade earlier.⁴⁴ Further, drug spending in the United States is expected to grow in the coming years. IQVIA forecasts

growth of 1–4% (after discounts and rebates) from 2022 to 2026, driven by newly launched innovative products, including those in oncology, complex specialty drugs, or those with orphan status.⁴⁵ Though innovative therapies can deliver life-changing benefits to patients, they often come at a high price. For patients to have continued access to these critical but expensive therapies, managed care plans must have tools in place to ensure appropriate prescription drug use.

Figure 1: Total drug spending (in billions), 1990–2021



⁴³ "Table 02 National Health Expenditures," CMS. Calculated as "Prescription Drugs" divided by total "National Health Expenditures."
⁴⁴ "The Use of Medicines in the U.S. 2022," IQVIA Institute, April 21, 2022, p. 26 (<https://www.iqvia.com/insights/the-iqvia-institute/reports/the-use-of-medicines-in-the-us-2022>, accessed June 8, 2023).
⁴⁵ "The Use of Medicines in the U.S. 2022," IQVIA Institute, p. 47.

III. KEY STATISTICS ON HEALTH INSURANCE AND PRESCRIPTION DRUG COVERAGE IN THE UNITED STATES

In 2021, roughly 92% of the U.S. population was covered by some type of health insurance, whether public or private. See **Table 2** below for a breakdown of the population by type of coverage.

Table 2: Medical and Prescription Drug Coverage in the United States, 2021

	Medical Coverage		Prescription Coverage
	Number (In Thousands)	% of Total	% of Category
Total [1]	328,074		
Uninsured [1]	27,187	8.3%	0%
Any Health Plan [1]	300,887	91.7%	
Any Public [1]	117,095	35.7%	
Medicare [1]	60,226	18.4%	89% [4]
Traditional (FFS) [2]	34,270	10.4%	
Medicare Advantage (Part C) [2]	25,956	7.9%	
Medicaid [1]	61,940	18.9%	100% [5]
Traditional (FFS) [3]	9,106	2.8%	
Any type of Managed Care [3]	52,834	16.1%	
CHAMPVA and VA [1]	3,151	1.0%	100% [6]
Any Private [1]	216,366	66.0%	
Employer [1]	178,285	54.3%	98% [7]
Direct Purchase/Marketplace [1]	33,555	10.2%	100% [8]
Tricare [1]	8,299	2.5%	100% [9]

Table 2 continues on next page.

Notes/Sources:

- ¹ Katherine Keisler-Starkey, Lisa N. Bunch, "Health Insurance Coverage in the United States: 2021," Census, September 2022, p. 4, Table 1 (<https://www.census.gov/content/dam/Census/library/publications/2022/demo/p60-278.pdf>, accessed June 6, 2023). The estimates by type of coverage are not mutually exclusive; people can be covered by more than one type of health insurance during the year.
- ² "Medicare Monthly Enrollment," CMS, February 2023 (<https://data.cms.gov/summary-statistics-on-beneficiary-enrollment/medicare-and-medicare-reports/medicare-monthly-enrollment/>, accessed June 15, 2023). Limited to national data from 2021. FFS share is calculated as ORGNL_MDCR_BENES_TOT/BENES. Medicare Advantage share is calculated as MA_AND_OTH_BENES/TOT_BENES. The calculated shares are then applied to the total Medicare beneficiaries, per census.
- ³ "Share of Medicaid Enrollees in Managed Care," Medicaid.gov, July 21, 2023 (<https://data.medicare.gov/dataset/79692ea5-21e1-56bf-8149-97d437120c4b>, accessed Aug. 30, 2023). Includes individuals enrolled in comprehensive managed care programs as well as any type of managed care. Limited to national data from 2021. FFS share is calculated as Total Medicaid Enrollees minus the number of enrollees enrolled in any type of managed care, divided by total enrollees. The calculated shares are then applied to the total Medicaid beneficiaries, per Census.
- ⁴ "Report to the Congress: Medicare Payment Policy," MedPAC, March 2022, p. 466 (https://www.medpac.gov/wp-content/uploads/2022/03/Mar22_MedPAC_ReportToCongress_Ch13_SEC.pdf, accessed June 7, 2023). Reflects the total portion of Medicare beneficiaries in 2021 estimated to have prescription drug coverage, whether directly through Medicare Part D plans (97%) or through some other source (11%). MedPAC estimates that the remaining 11% either have no coverage or coverage less generous than Part D. For purposes of this table, all 11% is treated as no coverage.
- ⁵ "Prescription Drugs," Medicaid.gov (<https://www.medicare.gov/medicaid/prescription-drugs/index.html>, accessed June 7, 2023). Per Medicaid.gov, all states provide coverage for outpatient prescription drugs within their state Medicaid programs.
- ⁶ "Pharmacy Service," Benefits.gov (<https://www.benefits.gov/benefit/305>, accessed June 7, 2023). Per Benefits.gov, "VA's prescription benefit program is part of its comprehensive medical benefits package." For purposes of this table, this statement is interpreted to mean 100% coverage for prescriptions.
- ⁷ Gary Claxton, Matthew Rae, Emma Wager, Gregory Young, Heidi Whitmore, Jason Kerns, Greg Shmavonian, Anthony Damico, "Employer Health Benefits Annual Survey," Kaiser Family Foundation, October 2022, p. 144 (<https://files.kff.org/attachment/Report-Employer-Health-Benefits-2022-Annual-Survey.pdf>, accessed June 7, 2023). Per the Kaiser Family Foundation Employer Health Benefits Survey, in 2022, "Nearly all (98%) covered workers are at a firm that provides prescription drug coverage in its largest health plan." Note that for purposes of this table, we assume that 98% of individuals with employer-sponsored health insurance have prescription drug coverage. However, the actual portion may be lower if not all covered workers have selected the largest health plan and their selected plan does not include drug coverage.
- ⁸ "Marketplace Coverage and Prescriptions: What You Need to Know," Healthcare.gov, May 7 2020 (<https://www.healthcare.gov/blog/marketplace-coverage-prescription-drugs/>, accessed June 7, 2023). Per Healthcare.gov, "All marketplace plans cover prescription drugs." No data located for Direct Purchase, but it is assumed that all direct purchase plans cover prescriptions.
- ⁹ "Covered Services," Tricare.mil, May 2, 2023 (<https://www.tricare.mil/CoveredServices/Pharmacy/Drugs>, accessed June 7, 2023). Per Tricare.mil, "Tricare provides prescription drug coverage with most Tricare health plans." For purposes of this table, "most" is interpreted as 100%.

IV. COMPARISON OF PRESCRIPTION UTILIZATION AND AVERAGE OUT-OF-POCKET (OOP) SPENDING ON PRESCRIPTION DRUGS BY THE INSURED VERSUS UNINSURED/CASH-PAYING POPULATIONS

Though the focus of this report is on the tools utilized by managed care pharmacy professionals for patients with health insurance, health insurance plays a critical role more generally in terms of access to prescription drugs. Those with health insurance typically have a higher utilization of prescription drugs and lower out-of-pocket (OOP) spending than those who lack coverage.

According to IQVIA, patients paying cash for their prescriptions were dispensed an average of 8.2 prescriptions per year in 2021, the fewest of any patient group. By contrast, those with third-party insurance were dispensed 22.4 prescriptions, Medicare Part D beneficiaries were dispensed 31.7 prescriptions, and Medicaid beneficiaries were dispensed nine prescriptions, as shown in **Figure 2**.⁴⁶

Further, numerous studies have examined the impact of gaining insurance coverage on prescription utilization and consistently suggest that patients with insurance are dispensed more prescriptions than those without insurance. For example, researchers found increases in prescription drug use for those who gained private or Medicaid coverage through the Affordable Care Act (ACA). From 2013 to 2014, individuals who went from uninsured to Medicaid had an average of 13.3 more prescriptions filled and those going from uninsured to private had an average of four more prescriptions filled.⁴⁷ Another study found that Medicaid expansion through the ACA led to a 19% increase in Medicaid prescriptions or roughly nine additional prescriptions annually per newly eligible beneficiary.⁴⁸ Importantly, the largest increase in prescriptions were for those drugs

⁴⁶ "The Use of Medicines in the U.S. 2022," IQVIA Institute, p. 17. Reflects adjusted prescriptions (i.e., for days supply length). Cash-paying patients may include those with insurance who choose to pay cash for a particular prescription rather than utilize their insurance.

⁴⁷ Andrew W. Mulcahy, Christine Eibner, and Kenneth Finegold, "Gaining Coverage Through Medicaid Or Private Insurance Increased Prescription Use and Lowered Out-Of-Pocket Spending," *Health Affairs*, Volume 35, no. 9, September 2016, p. 1729 (<https://www.healthaffairs.org/doi/10.1377/hlthaff.2016.0091>, accessed June 7, 2023).

⁴⁸ Ausmita Ghosh, Kosali Simon, Benjamin D. Sommers, "The Effect of Health Insurance on Prescription Drug Use Among Low-Income Adults: Evidence from Recent Medicaid Expansions," *Journal of Health Economics*, Volume 63, January 2019, p. 66 (<https://doi.org/10.1016/j.jhealeco.2018.11.002>, accessed June 6, 2023).

Figure 2: Adjusted Dispensed Prescriptions per Enrollee by Method of Payment, IQVIA

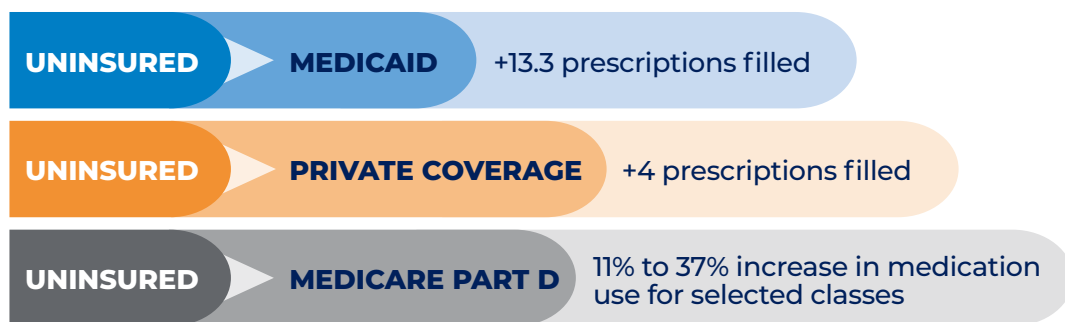


Source: IQVIA, “The Use of Medicines in the U.S. 2022,” Exhibit 12, p. 17.

treating chronic disease, such as diabetes and heart disease.⁴⁹ Lastly, researchers examined the change in prescription utilization for selected medication classes amongst seniors without prior drug benefits following their enrollment in Medicare Part D. The authors found that Medicare Part D was associated with increases in utilization of 22% for statins, 11% for clopidogrel, and 37% for proton pump inhibitors.⁵⁰

The uninsured also pay more out of pocket for their prescriptions, as demonstrated in **Figure 4**. According to IQVIA, cash-paying patients paid an average of \$43.62 per prescription in 2021, over five times more than any other patient group. The commercial, Medicare, and Medicaid averages paid per prescription were \$7.43, \$6.17, and \$0.26, respectively.⁵¹ This higher average OOP spending by the cash-paying/uninsured population also

Figure 3: Impact of Gaining Insurance Coverage on Prescription Utilization



Note: Figure 2 is compiled from various sources as referenced in the footnotes of the prior paragraph.

⁴⁹ Ghosh, Simon, and Sommers, “The Effect of Health Insurance on Prescription Drug Use Among Low-Income Adults,” p. 66.
⁵⁰ Sebastian Schneeweiss, Amanda R. Patrick, Alex Pedan, Laleh Varasteh, Raisa Levin, Nan Liu, and William H. Shrank, “The Effect Of Medicare Part D Coverage On Drug Use And Cost Sharing Among Seniors Without Prior Drug Benefits,” *Health Affairs*, Volume 28, No. Supplement 1, 2009, p. 311 (<https://doi.org/10.1377/hlthaff.28.2.w305>, accessed Aug. 30, 2023).
⁵¹ “The Use of Medicines in the U.S. 2022,” IQVIA Institute, p. 38. Prescription costs normalized to 30 days.

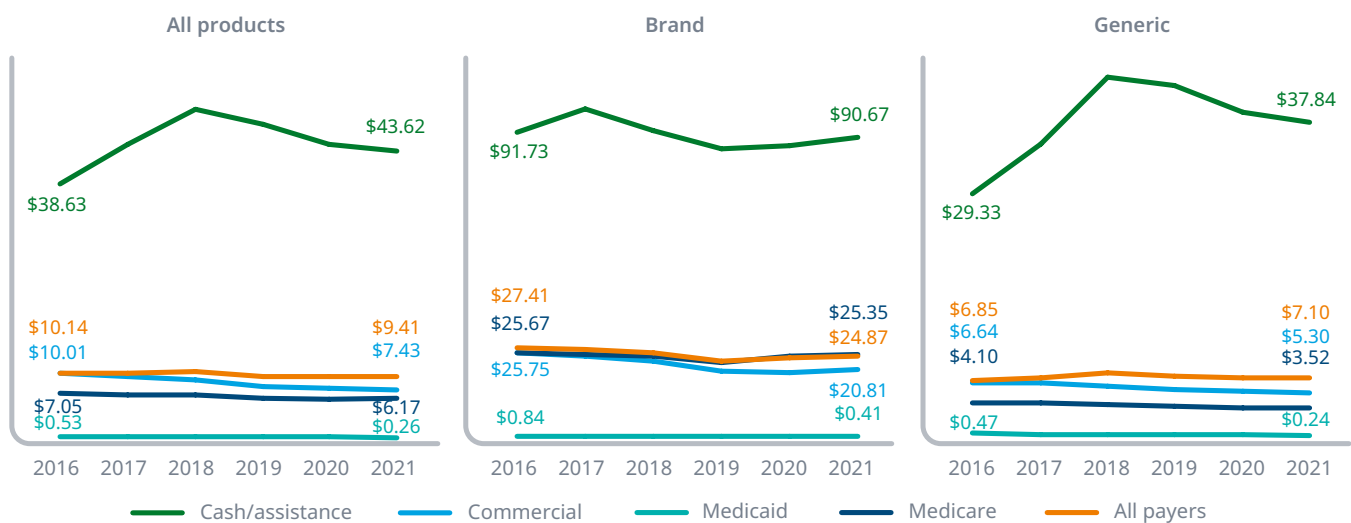
resulted in their disproportionate contribution to overall OOP spending. In 2020, patients paying cash accounted for 20% of total OOP drug spending despite contributing just 4% to prescription volume.⁵² In another study, researchers found that gaining Medicaid coverage led to \$205 less in annual OOP spending in 2014, and gaining private coverage led to an \$85 reduction compared with the prior year.⁵³ The same study that examined the impact of gaining Medicare Part D coverage on utilization also found a decrease of over 50% in patient OOP spending for the classes examined.⁵⁴

Higher OOP spending by the uninsured can lead to a lack of medication adherence. In fact, the CDC — through the National Health Interview Survey in 2017 — found that 33.6% of uninsured individuals did not take their

medication as prescribed to reduce their prescription drug costs. This is compared to 8.4% with private health insurance and 12.5% of those with Medicaid.⁵⁵ IQVIA Institute notes that cash-paying patients “have significantly higher costs for brand prescriptions with 12% having OOP costs greater than \$125,” which likely contributes to “higher abandonment of brands among these patients.”⁵⁶ Cash-paying patients have also been filling fewer prescriptions in recent years (9.2 adjusted prescriptions per cash patient in 2019 versus 8.2 in 2021).⁵⁷

The uninsured population’s disproportionate contribution to OOP spending on vital prescription medications and their lower utilization of prescription medication underscores the important role of health insurance in managing prescription drug affordability and patient access.

Figure 4: Average Final OOP Cost per Retail Prescription by Product Type and Method of Payment



Source: IQVIA Institute, “The Use of Medicines in the U.S. 2022,” Exhibit 31.

⁵² “The Use of Medicines in the U.S. 2022,” IQVIA Institute, p. 36.
⁵³ Mulcahy, Eibner, and Finegold, “Gaining Coverage Through Medicaid or Private Insurance Increased Prescription Use and Lowered Out-Of-Pocket Spending,” p. 1730.
⁵⁴ Schneeweiss et al., “The Effect Of Medicare Part D Coverage On Drug Use And Cost Sharing Among Seniors Without Prior Drug Benefits,” p. 311.
⁵⁵ Robin A. Cohen, Peter Boersma, Anjel Vahratian, “Strategies Used by Adults Aged 18-64 to Reduce Their Prescription Drug Costs, 2017,” CDC, March 2019 (<https://www.cdc.gov/nchs/products/databriefs/db333.htm>, accessed June 7, 2023).
⁵⁶ “The Use of Medicines in the U.S. 2022,” IQVIA Institute, p. 41.
⁵⁷ “The Use of Medicines in the U.S. 2022,” IQVIA Institute, p. 17.

V. EXAMINATION OF THE PREVALENCE OF MANAGED CARE PHARMACY TOOLS AND THEIR IMPACT ON HEALTH CARE COSTS AND PATIENT OUTCOMES

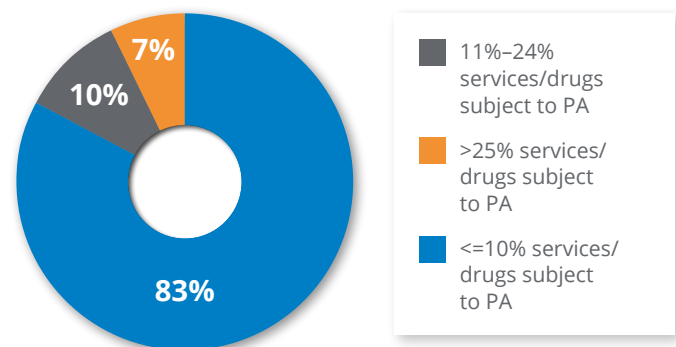
We will now explore the prevalence and impact of the managed care pharmacy tools defined in section 2.

Prior Authorization

Prior authorization for prescription drugs is a widely used tool in commercial insurance, Medicare, and Medicaid. A study by Avalere of commercial plan formularies in 2020 found that the prevalence of prior authorization for single-source brand drugs in the commercial market was above 40% for five therapeutic areas examined: multiple sclerosis (51%), rheumatoid arthritis (42.9%), chronic myeloid leukemia (52.0%), multiple myeloma (49.7%), and psoriasis (44.6%). The other therapeutic areas evaluated (depression, diabetes SGLT2, diabetes GLP1, cardiovascular, atypical antipsychotics, asthma/allergy corticosteroids, and HIV) had a prevalence of 11% or less.⁵⁸ Though certain therapeutic areas are commonly subject to prior authorization, most enrollees are in plans where a limited number of drugs are subject to prior authorization. America's Health Insurance

Plans (AHIP) found that 83% of commercial enrollees are in plans where fewer than 10% of drugs are subject to prior authorization as seen in **Figure 5**.⁵⁹

Figure 5: Portion of Commercial Enrollees by Percentage of Drugs Subject to Prior Authorization



Source: AHIP, "Key Results of Industry Survey on Prior Authorization," p. 10.

⁵⁸ Tiernan Meyer, Rebecca Yip, Yonatan Mengesha, Daymelis Santiesteban, Richard Hamilton, "Utilization Management Trends in the Commercial Market, 2014–2020," Avalere, Nov. 24, 2021, p. 7, Table 1 (<https://avalere.com/wp-content/uploads/2021/11/UM-Trends-in-the-Commercial-Market.pdf>, accessed June 7, 2023).

⁵⁹ "Key Results of Industry Survey on Prior Authorization," AHIP, p. 10 (<https://www.ahip.org/documents/Prior-Authorization-Survey-Results.pdf>, accessed June 7, 2023).

Amongst Medicare PDPs and MA-PD plans, 28% and 26% of drugs, respectively, were subject to prior authorization in 2021.⁶⁰ Evidence shows that prior authorization requirements have increased in Medicare Part D, from 8% in 2007 to 24% of covered drugs in 2019.⁶¹ Further, certain drug classes and more expensive medications are more likely to face prior authorization requirements. For example, in 2021, researchers found that 90.5% to 100% of Part D plans required prior authorization for covered psoriasis and psoriatic arthritis specialty medications.⁶² Those same researchers note that the median POS price for these drugs before rebates/discounts ranged from \$3,620 to \$23,493 for each fill.⁶³

According to the Kaiser Family Foundation (KFF), as of 2018, every state uses prior authorization in their Medicaid FFS drug programs, and at least 30 states apply the same medical necessity criteria to FFS and managed care for at least one drug.⁶⁴ No findings on the portion of drugs subject to prior authorization by Medicaid FFS or Medicaid Managed Care plans were identified as of the writing of this report. However, according to the KFF, though states may require prior authorization for any drug covered by Medicaid, they normally require it for expensive specialty drugs or for drugs not on the Preferred Drug List (PDL).⁶⁵

One of the main critiques of the prior authorization process is the time and effort required of providers and their staff to obtain authorizations. However, as noted above, only a subset of drugs is subject to prior authorization. In fact, in June of 2019, AMCP conducted a multistakeholder forum regarding step therapy and prior authorization. Participants of the forum aligned on the following characteristics of medications that warrant the use of these utilization management tools:⁶⁶

- Specific safety concerns, including certain drug interactions.
- Availability of more affordable alternatives.
- Potential for off-label use.
- Potential for misuse or abuse.
- Limited distribution or special handling requirements.
- Multiple indications across benefits (e.g., medical and cosmetic).

Further, there is a significant opportunity to reduce the administrative strain of the prior authorization process by moving more prior authorization requests to electronic form.

⁶⁰ "A Data Book: Health Care Spending and the Medicare Program," MedPAC, July 2021, p. 161, Chart 10-13 (https://www.medpac.gov/wp-content/uploads/2021/10/July2021_MedPAC_DataBook_Sec10_SEC.pdf, accessed June 7, 2023).

⁶¹ "Cornerstones of 'Fair' Drug Coverage: Appropriate Cost-Sharing and Utilization Management Policies for Pharmaceuticals," Institute for Clinical and Economic Review (ICER), Sept. 28, 2020, p. 11 (<https://icer.org/wp-content/uploads/2020/11/Cornerstones-of-Fair-Drug-Coverage--September-28-2020.pdf>, accessed June 7, 2023).

⁶² Sarah P. Pourali, Leonce Nshuti, and Stacie B. Dusetzina "Out-Of-Pocket Costs of Specialty Medications for Psoriasis and Psoriatic Arthritis Treatment in the Medicare Population," JAMA Network Dermatology, Volume 157, no. 10, September 15, 2021, p. 1239 (10.1001/jamadermatol.2021.3616, accessed June 7, 2023).

⁶³ Pourali, Nshuti, and Dusetzina "Out-Of-Pocket Costs of Specialty Medications for Psoriasis and Psoriatic Arthritis Treatment in the Medicare Population," p. 1240.

⁶⁴ Rachel Dolan, Marina Tian, "Management and Delivery of the Medicaid Pharmacy Benefit," Kaiser Family Foundation, December 2019, p. 2 (<https://www.kff.org/wp-content/uploads/2019/12/Management-and-Delivery-of-Pharmacy-Benefits-in-Medicaid.pdf>, accessed June 7, 2023); Kathleen Gifford, Eileen Ellis, Barbara Coulter Edwards, Aimee Lashbrook, Elizabeth Hinton, Larisa Antonisse, Robin Rudowitz, "States Focus on Quality and Outcomes Amid Waiver Changes: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2018 and 2019," Kaiser Family Foundation, October 2018, p.75 (<https://files.kff.org/attachment/Report-States-Focus-on-Quality-and-Outcomes-Amid-Waiver-Changes-Results-from-a-50-State-Medicaid-Budget-Survey-for-State-Fiscal-Years-2018-and-2019>, accessed June 7, 2023).

⁶⁵ Dolan and Tian, "Management and Delivery of the Medicaid Pharmacy Benefit," p. 2.

⁶⁶ "AMCP Partnership Forum: Optimizing Prior Authorization for Appropriate Medication Selection," *JMCP*, Volume 26, Issue 1, January 2020, p. 56, Table 1 (<https://doi.org/10.18553/jmcp.2020.26.1.55>, accessed June 7, 2023).

Step Therapy

Like prior authorization, step therapy is another form of utilization management. Its goal is to identify the most appropriate nexus of affordability, efficacy, and safety as the first line of medication therapy before moving to more costly treatments. If there is a reason a patient should not use the lowest tier of treatment, exception processes are in place to ensure the patient receives the appropriate care. The same Avalere study that examined prior authorization in the commercial market also evaluated the prevalence of step therapy. Step therapy prevalence exceeded 50% for only one therapeutic area (rheumatoid arthritis at 53.5%) but was near or above 20% for six others: multiple sclerosis (24.6%), chronic myeloid leukemia (19.2%), psoriasis (48.7%), depression (35.5%), diabetes SGLT2 (33.3%), diabetes GLP1 (22.8%).⁶⁷

Separately, researchers examined the use of step therapy for high-cost, specialty medications by 17 of the largest commercial health plans in the United States and found that 38.9% of drug coverage policies applied

step therapy.⁶⁸ The proportion of each plan's coverage policies that included step therapy, however, varied by plan, ranging from 20.6% to 57.5%.⁶⁹ The average number of steps was 1.5, with 66.6% of policies requiring a single step, 22.7% requiring two steps, 7.6% requiring three steps, and 3.1% requiring four or more steps.⁷⁰ The same study also evaluated whether the step therapy protocols applied by plans were consistent with treatment guidelines (such as those issued by national clinical organizations). Protocols were consistent with clinical guidelines 34% of the time, more stringent 55.6% of the time and less stringent 6.1% of the time.⁷¹

Other research, however, suggests that step therapy protocols are consistent with fair access criteria nearly all the time. The Institute for Clinical and Economic Review (ICER) used data from Managed Market Insights & Technology, LLC (MMIT), for 19 drugs across 18 formularies, including 15 of the largest commercial formularies, the formulary of the Veterans Administration (VA) and the formularies of the two largest state ACA exchange plans. These data were analyzed to determine concordance of step therapy protocols with ICER's fair access criteria. Concordance was found to be 98%.⁷²

The prevalence of step therapy in Medicare Part D is substantially lower than in the commercial market. According to the Medicare Payment Advisory Commission (MedPAC), just 1% of drugs in the standalone PDP and MA-PD plans were subject to step therapy.⁷³

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⁶⁷ Meyer et al., "Utilization Management Trends in the Commercial Market, 2014–2020," p. 7, Table 1.

⁶⁸ Kelly L. Lenahan, Donald E. Nichols, Rebecca M. Gertler, James D. Chambers, "Variation In Use and Content of Prescription Drug Step Therapy Protocols, Within and Across Health Plans," *Health Affairs*, Volume 40, no. 11, November 2021, p. 1749 (<https://doi.org/10.1377/hlthaff.2021.00822>, accessed June 7, 2023).

⁶⁹ Lenahan et al., "Variation in Use and Content of Prescription Drug Step Therapy Protocols," p. 1749.

⁷⁰ Lenahan et al., "Variation in Use and Content of Prescription Drug Step Therapy Protocols," pp. 1751–52.

⁷¹ Lenahan et al., "Variation in Use and Content of Prescription Drug Step Therapy Protocols," p. 1749.

⁷² "Assessment of Barriers to Fair Access," ICER, Jan. 17, 2023, p. 15, Table 10 (<https://icer.org/wp-content/uploads/2023/01/2022-Barriers-to-Fair-Access-Assessment-Final-Report-011723.pdf>, accessed June 7, 2023). The fair access criteria evaluated were as follows: 1) The first-step therapy is clinically appropriate for all or nearly all patients and does not pose a greater risk of any significant side effect or harm. 2) Patients will have a reasonable chance to meet their clinical goals with first-step therapy. 3) Failure of the first-step drug and the resulting delay in beginning the second-step agent will not lead to long-term harm for patients. 4) Patients are not required to retry a first-line drug with which they have previously had adverse side effects or an inadequate response at a reasonable dose and duration. See p. 12.

⁷³ "A Data Book: Health Care Spending and the Medicare Program," MedPAC, p. 161.

In 2019, 45 out of 50 states reported using step therapy in their Medicaid programs.⁷⁴ No data quantifying the percentage of drugs or protocols subject to step therapy, however, were identified for Medicaid as of the time of writing of this report.

Medication Therapy Management

Pursuant to 42 CFR § 423.153(d), all Part D plan sponsors (whether standalone PDP or MA-PD) must establish MTM programs that meet certain minimum standards, which are offered on an “opt-out” basis to beneficiaries meeting specific criteria, such as the presence of multiple chronic conditions, the use of multiple Part D-covered drugs, and the likelihood of incurring high drug expenditures.⁷⁵ TMRs are to be performed quarterly and CMRs annually. No similar requirement exists for Medicaid⁷⁷ or the commercial market and, therefore, this report will focus on MTM in Medicare Part D. However, evidence exists of the clinical and financial benefits of MTM for commercial and Medicaid patients as well.⁷⁸

According to BRG’s analysis, approximately four million beneficiaries were enrolled in MTM programs as of 2019 or 8% of total Part D enrollees that year.⁷⁹ Not everyone enrolled, however, receives MTM services. CMS’ 2023 Star Ratings indicate that 54% of standalone PDP MTM enrollees and 83% of MA-PD MTM enrollees received a CMR.⁸⁰

Various studies support the benefits of MTM services, which can include reductions in cost of care and hospital utilization, a decrease in adverse drug events, and an improvement in medication adherence. For example, a 2010 retrospective analysis of standalone PDP and MA-PD plan beneficiaries participating in MTM programs found meaningfully higher medication adherence rates for beneficiaries with congestive heart failure (11–40% higher), chronic obstructive pulmonary disease (11–26% higher), and diabetes (15–35% higher) as compared to non-participating beneficiaries.⁸¹

In an MTM intervention that targeted Part D beneficiaries with diabetes or coronary artery disease who were not taking statins but could benefit from doing so, participants had roughly 65% greater uptake of statins compared with the control group. The study’s authors estimated this increased uptake could result in avoidance of one major cardiovascular event and \$12,323 in event-associated costs for every 220 beneficiaries.⁸²

Further, researchers at Humana found that receipt of MTM services targeted at resolution of medication-related problems through TMR or through a combination of TMR and CMR were associated with reductions in overall health care utilization (i.e., inpatient admissions and/or emergency department (ED) visits) and increases in medication adherence. In 2014 and 2015, there were 55.2

⁷⁴ Kathleen Gifford, Anne Winter, Linda Wiant, Rachel Dolan, Marina Tian, Rachel Garfield, “How State Medicaid Programs are Managing Prescription Drug Costs,” Kaiser Family Foundation, April 2020, p. 12, Table 3 (<https://files.kff.org/attachment/How-State-Medicaid-Programs-are-Managing-Prescription-Drug-Costs.pdf>, accessed June 7, 2023).

⁷⁵ 42 CFR § 423.153(d) (<https://www.govinfo.gov/content/pkg/CFR-2012-title42-vol3/pdf/CFR-2012-title42-vol3-sec423-153.pdf>, accessed Aug. 30, 2023); Ryan Beringer, Bingyan Fan, Daekun Heo, Josh Oh, Lois Olinger, Kristy Piccinini, Dimitra Politi, Yuchen Qian, Kamila Saldanha, Edward Sung, Anqi Wang, David Wright, Lucy Yao, Willow Burns, Susan Hassell, Angelina Lee, Lauren Mercincavage, Kevin Neipp, Jennifer Nooney, Shannon Reefer, Natalie Teixeira Bailey, “Evaluation of the Part D Enhanced Medication Therapy Management (MTM) Model: Fifth Evaluation Report,” CMS, February 2023, p. 2 (<https://innovation.cms.gov/data-and-reports/2023/mtm-fifth-evalrept>, accessed June 7, 2023).

⁷⁶ “Contract Year 2016 Medication Therapy Management Program Guidance and Submission Instructions,” CMS, pp. 3, 7.

⁷⁷ In fact, as of 2019, only nine of 49 responding states reported paying pharmacists to provide MTM services in the FFS Medicaid program. See Gifford et al., “How State Medicaid Programs are Managing Prescription Drug Costs,” p. 23.

⁷⁸ See, for example, “Pharmacist-Provided Medication Therapy Management in Medicaid,” CDC, May 2021, p. 2 (https://www.cdc.gov/dhds/docs/MTM_in_Medicaid-508.pdf, accessed June 8, 2023).

⁷⁹ Reflects the count of beneficiaries in the 2019 “Part D Medication Therapy Management Data File” (~4M). Total beneficiaries reflects the number of beneficiaries with more than zero months of Part D coverage, based on the 2019 “Master Beneficiary Summary File Base”.

⁸⁰ “2023 Medicare Advantage and Part D Star Ratings,” CMS (<https://www.cms.gov/newsroom/fact-sheets/2023-medicare-advantage-and-part-d-star-ratings>, accessed June 8, 2023). No equivalent data reported for TMRs.

⁸¹ “Evidence Supporting Enhanced Medication Therapy Management,” CMS, p. 1 (<https://innovation.cms.gov/files/x/mtm-evidencebase.pdf>, accessed June 8, 2023).

⁸² “Evidence Supporting Enhanced Medication Therapy Management,” CMS, p. 3.

and 30.8 fewer inpatient admissions per 1,000 individuals, respectively, for patients receiving TMR interventions. In 2015, there were significant reductions in ED visits for participants receiving TMR-only interventions (26.1 fewer ED visits per 1,000 individuals) or TMR/CMR interventions (12.0 fewer ED visits per 1,000 individuals). In both years, researchers found that a larger percentage of MTM participants (0.4% for oral diabetes medications; 7.7% for antihypertensives; 3.0% for statins) had greater improvements in medication adherence.⁸³

From 2017 to 2021, CMS ran an “enhanced” Part D MTM pilot program, which included increased flexibility and payment incentives for participating PDP sponsors. The enhanced program did *not* result in total medical expenditure cost savings or improvements in medication use for enrolled participants.⁸⁴ The pilot was not offered to MA-PD plan sponsors. However, the result suggests there is still room to improve the design and delivery of MTM services in the Part D program to achieve even greater patient impact.

Drug Utilization Review

Since 1993, section 1927(g) of the Social Security Act has required each state to develop a Medicaid DUR program. DUR is not statutorily required in the Medicare or commercial markets, so this paper focuses on DUR in Medicaid where it is defined as “structured, ongoing review of health care provider prescribing, pharmacist

dispensing, and patient use of medication. DUR involves a comprehensive review of patients’ prescription and medication data and dispensing to help ensure appropriate medication decision-making and positive patient outcomes. Potentially inappropriate prescriptions, unexpected and potentially troublesome patterns, data outliers, and other issues can be identified when reviewing prescriptions through prospective DUR or retrospective DUR activities.”⁸⁵

According to CMS, state FFS programs saved an average of \$57 million in 2017 through prospective DUR, and \$1.46 million through retrospective review⁸⁶ although there is no uniform standard for how states measure this savings. The same data are *not* available for Managed Medicaid programs.

As of the time of writing of this report, no data have been identified for Medicaid that measure the impact of DUR on patient outcomes.

Formulary Design and Management

A formulary is a list of drugs covered by a particular prescription drug benefit plan. The formulary development process is complex and evidence-based and involves input from three key groups.⁸⁷ The first is the internal clinical review team, which is composed of physicians, pharmacists, and other health care professionals employed by the health plan. The clinical review team collects and synthesizes information about

⁸³ Erin Ferries, Joseph T. Dye, Benjamin Hall, Lilian Ndehi, Phil Schwab, Jamieson Vaccaro, “Comparison of Medication Therapy Management Services and Their Effects on Health Care Utilization and Medication Adherence,” *JMCP*, Volume 25, Issue 6, June 2019, p. 688 (<https://www.jmcp.org/doi/full/10.18553/jmcp.2019.25.6.688>, accessed June 8, 2023).

⁸⁴ Beringer et al., “Evaluation of the Part D Enhanced Medication Therapy Management (MTM) Model: Fifth Evaluation Report,” p. xi.

⁸⁵ “Medicaid Program; Establishing Minimum Standards in Medicaid State Drug Utilization Review (DUR) and Supporting Value-Based Purchasing (VBP) for Drugs Covered in Medicaid, Revising Medicaid Drug Rebate and Third Party Liability (TPL) Requirements,” CMS, Dec. 18, 2020, p. 255 (<https://www.cms.gov/files/document/122120-cms-2482-f-medicaid-dur-ofr-master-webposting-508.pdf>, accessed June 8, 2023).

⁸⁶ “Medicaid Drug Utilization Review State Comparison/Summary Report FFY 2017 Annual Report,” CMS, October 2018, p. 25 (<https://www.medicaid.gov/medicaid/prescription-drugs/downloads/drug-utilization-review/2017-dur-summary-report.pdf>, accessed June 8th, 2023). CMS continues to report DUR savings by state in its “Drug Utilization Review Annual Reports.” However, the most recent data (from 2021) are no longer summarized in the national report and are only available in each state’s individual report. See “Drug Utilization Review Annual Report,” Medicaid.gov, Jan. 17, 2023 (<https://www.medicaid.gov/medicaid/prescription-drugs/drug-utilization-review/drug-utilization-review-annual-report/index.html>, accessed June 8, 2023).

⁸⁷ Sara Linnerooth, Ben Penley, Griffin Sauvageau, Jane Ha, Amy Beal, Jennifer Craven, Ellen Feeney, Patty Taddei-Allen, Norrie Thomas, John Watkins, Tasmina Hydery, “Methodology for conducting a comprehensive product review in managed care,” *JMCP*, Volume 29, Issue 3, March 2023, p. 238 (<https://doi.org/10.18553/jmcp.2023.29.3.237>, accessed June 8, 2023).

the products under review and shares that information with the second group, the Pharmacy and Therapeutics (P&T) committee. The P&T committee — also composed of physicians, pharmacists, and other health care professionals — reviews the information provided by the clinical review team and votes to approve or deny recommendations for inclusion or exclusion of a product from the plan's formulary. The final group is the value committee, tasked with evaluating the cost-effectiveness of a therapy and with negotiating its cost. The value committee is an internal team of health care professionals, data analysts, and other stakeholders whose role is to ensure a balance between medication access and cost. Health plans will routinely implement a firewall between these three teams to limit business influences on clinical decision making.⁸⁸

There are two types of formularies: open and closed. In an open formulary, nearly all legally prescribed drugs are covered, but cost sharing may be substantially higher for drugs not listed on the formulary.⁸⁹ In a closed formulary, there is no coverage at all for non-formulary drugs unless the physician requests an exception.⁹⁰ A formulary is typically organized by therapeutic class, and drugs within the same therapeutic class are placed on tiers, with the lowest tier having the lowest patient cost share (usually low-cost generics) and the highest tier having the highest patient cost share (usually high-cost specialty brand drugs).⁹¹

The number of tiers will vary by plan. According to Kaiser's Employer Health Benefits Survey, 90% of covered workers were in a plan with tiered cost sharing for prescription drugs, and 84% were in a plan with three or more formulary tiers in 2022.⁹² For those in a plan with three or more tiers, the average copayment (copay) for drugs in tier 1 was \$11, for tier 2 was \$37, for tier 3 was \$67 and for tier 4 was \$116.⁹³

In the Part D program, larger plans typically use five tiers: preferred generic, other generic, preferred brand, non-preferred brand, and a specialty tier.⁹⁴ In 2021, for PDPs that were available nationwide, median generic copays were zero for preferred generics and \$5 for other generics.⁹⁵ Of the top 10 PDPs with the largest enrollment, preferred brand drugs were generally subject to a \$40 copay and a median coinsurance rate of 40% for non-preferred drugs although cost sharing varied widely across plans.⁹⁶ Drugs on the specialty tier were normally subject to a 25% coinsurance.⁹⁷ In 2022, the CMS began allowing plan sponsors to use two specialty tiers (a preferred and non-preferred tier) with higher cost-share on the non-preferred specialty tier.⁹⁸

Formularies do not apply in the traditional sense to Medicaid. Because of the structure of the Medicaid Drug Rebate Program (MDRP), Medicaid operates on an essentially open formulary, meaning nearly all FDA-approved drugs of manufacturers participating in the

⁸⁸ Linnerooth et al., "Methodology for Conducting a Comprehensive Product Review in Managed Care," p. 238.

⁸⁹ Kongstvedt, *Health Insurance and Managed Care*, p. 145.

⁹⁰ Kongstvedt, *Health Insurance and Managed Care*, p. 145.

⁹¹ "What is a Tiered Formulary and What Does it Mean for Me," United Healthcare (<https://www.uhc.com/news-articles/medicare-articles/what-is-a-tiered-formulary-and-what-does-it-mean-for-me>, accessed June 8th, 2023).

⁹² Gary Claxton, Mathew Rae, Emma Wager, Gregory Young, Heidi Whitmore, Jason Kerns, Greg Shmavonian, Anthony Damico, "Employer Health Benefits 2022 Annual Survey," Kaiser Family Foundation, October 2022, p. 144 (<https://files.kff.org/attachment/Report-Employer-Health-Benefits-2022-Annual-Survey.pdf>, accessed June 8th, 2023).

⁹³ Claxton et al., "Employer Health Benefits 2022 Annual Survey," p. 146.

⁹⁴ "Report to Congress: Medicare Payment Policy," MEDPAC, March 2022, p. 480 (https://www.medpac.gov/wp-content/uploads/2022/03/Mar22-MedPAC_ReportToCongress_v3_SEC.pdf, accessed June 8th, 2023).

⁹⁵ "Report to Congress: Medicare Payment Policy," MEDPAC, p. 481.

⁹⁶ "Report to Congress: Medicare Payment Policy," MEDPAC, p. 481.

⁹⁷ "Report to Congress: Medicare Payment Policy," MEDPAC, p. 481.

⁹⁸ "Report to Congress: Medicare Payment Policy," MEDPAC, p. 477.

MDRP are covered by Medicaid.⁹⁹ Further, because cost sharing for Medicaid beneficiaries with income at or below 150% of the federal poverty level is limited to nominal amounts,¹⁰⁰ Medicaid's ability to use copays to steer patients to the most cost-effective therapies is more limited as compared to commercial and Medicare plans. Instead, states use a PDL, which is a list of outpatient prescription drugs states encourage providers to prescribe over other available alternatives. Though a PDL is not a closed formulary, states use incentives to encourage prescribing from the PDL, such as requiring prior authorization or higher copays for drugs not on the PDL.¹⁰¹ According to the KFF, as of 2019, 46 states used a PDL in their FFS programs and some states required Managed Medicaid plans to use the FFS PDL (i.e., they utilize a "uniform" PDL). Nine states used a uniform PDL for all drug classes and seven used it for some drug classes.¹⁰²

Increasing generic utilization is one of the most effective tools for reducing drug costs, and formulary design is key to achieving high generic utilization. The Association for Accessible Medicines (AAM) estimates that generic and biosimilar drugs generated \$373 billion in savings in 2021 across the commercial, Medicare Part D, Medicaid, and cash payer classes.¹⁰³ Plans encourage patients to fill generic by assigning these drugs the lowest cost-share on their formularies. Plans, typically through a PBM, also encourage pharmacies to fill generic whenever possible using maximum allowable cost (MAC) lists. A MAC list is a list of multiple source drug products subject to a

specified reimbursement limit.¹⁰⁴ PBMs use MAC lists to ensure all drugs of the same product form and strength (i.e., interchangeable products) are reimbursed at the same rate regardless of the manufacturer's list price, thus encouraging pharmacies to purchase the lowest cost generic available to them and to dispense generic whenever possible. This, in turn, ensures consumers and health plans do not overpay for generic drugs or for brand drugs with a generic available.

Generic utilization, however, varies widely by payer type. Cash patients have the highest share of generic utilization, at 97% in 2020, likely reflecting the cost sensitivity of this population and the mix of drugs they can reasonably afford without insurance. In 2020,¹⁰⁵ commercial plans experienced 90.5% generic utilization with Medicare Part D at 89.5%. In Medicaid, managed care plans achieved higher generic utilization than FFS plans (92.5% versus 89.5%).¹⁰⁶

Generics are not the only component of a well-designed formulary. For drug classes with no generics available, plans may place drugs with the lowest net cost in a more preferred tier. The lowest net cost could be driven by a combination of lower list price and/or higher manufacturer rebates. In the commercial and Medicare Part D space, PBMs typically negotiate with drug manufacturers for rebates on behalf of their health plan clients. In exchange for offering more favorable rebates, a manufacturer's drug is typically

⁹⁹ Rachel Dolan, "Understanding the Medicaid Prescription Drug Rebate Program," Kaiser Family Foundation, Nov. 12, 2019 (<https://www.kff.org/medicaid/issue-brief/understanding-the-medicaid-prescription-drug-rebate-program/>, accessed June 8, 2023).

¹⁰⁰ "Cost Sharing," Medicaid.gov (<https://www.medicaid.gov/medicaid/cost-sharing/index.html>, accessed June 8, 2023).

¹⁰¹ Dolan and Tian, "Management and Delivery of the Medicaid Pharmacy Benefit," p. 2.

¹⁰² "State Medicaid Preferred Drug Lists," Kaiser Family Foundation, July 1, 2019 (<https://www.kff.org/other/state-indicator/medicaid-preferred-drug-lists/>, accessed June 8, 2023). Another 18 states did not have a uniform PDL, two did not respond, and for 15 states, this question was not applicable because the states do not have comprehensive capitated managed care or have carved out the pharmacy benefit.

¹⁰³ "The U.S. Generic & Biosimilar Medicines Savings Report," Association for Accessible Medicines, September 2022, p. 3 (<https://accessiblemeds.org/sites/default/files/2022-09/AAM-2022-Generic-Biosimilar-Medicines-Savings-Report.pdf>, accessed June 8, 2023).

¹⁰⁴ "Managed Care Glossary," AMCP.

¹⁰⁵ "The Use of Medicines in the U.S.," IQVIA Institute, May 27, 2021, p. 25 (<https://www.iqvia.com/insights/the-iqvia-institute/reports/the-use-of-medicines-in-the-us>, accessed June 8, 2023).

¹⁰⁶ "The Use of Medicines in the U.S.," IQVIA Institute, p. 25.

placed on a more preferred tier with lower patient cost share, thus encouraging higher utilization of that drug over alternatives.¹⁰⁷

A well-designed formulary — one that encourages generic utilization and utilization of the most cost-effective brands where no generic is available — can achieve significant cost-savings. In a 2021 study, researchers examined the cost savings achieved by two large, self-insured employers that modified their formularies to reduce wasteful prescription drug spending. Two hundred and ninety-three potentially wasteful drugs were identified, 95% of which (279) were excluded from the original formulary and replaced with less expensive alternatives and 5% of which (~15) became subject to prior authorization or step therapy.¹⁰⁸ After these formulary changes were made, annual spending per member per month after rebates across all drugs on each employer's formulary decreased by 9% for one employer and 15% for the other.¹⁰⁹ The 279 drugs ultimately removed from formulary fell into three categories: (1) multisource drugs [76] (i.e., the wasteful product is a brand with a generic available), (2) me-too products [118] (i.e., the wasteful drug has minimal differences compared with a cheaper alternative but no major difference in clinical effectiveness) and (3) same-class drugs [85] (i.e., the wasteful product has a cheaper alternative within the same therapeutic class).¹¹⁰

A 2018 report from the Department of Health and Human Services (HHS) examined dispensing of brand name drugs in Part D where generics were available. HHS found that more than 600 brand name drugs were paid for by Part D plans in 2016 despite the availability of a generic. Had full substitution of multiple source brands (i.e., those with an available generic) occurred, HHS estimates that the Part D program would have saved \$2.8 billion in 2016 although the analysis does not account for rebates.¹¹¹ HHS' findings suggest further opportunities to maximize generic utilization in Part D through more effective formulary design and incentive alignment.

CVS Caremark, one of the nation's largest PBMs, estimates that clients who are aligned to its template formularies as opposed to a formulary without exclusions will save \$4.3 billion in 2023.¹¹² According to the company, CVS Caremark reviews its formularies quarterly to identify "hyperinflated" drugs (i.e., expensive drugs that have readily available, clinically appropriate, and more cost-effective alternatives). CVS Caremark estimates that its hyperinflation strategies, which include removing certain drugs from formulary, saved clients \$629.9M in 2020.¹¹³ Express Scripts, another major PBM, projected a savings of \$3.2 billion in 2019 for plans aligned to its National Preferred Formulary, which also excludes certain medications that have lower-cost alternatives.¹¹⁴

¹⁰⁷ Medicaid rebates operate differently. The MDRP sets out a statutory formula for calculating brand and generic rebates through which Medicaid is ensured the lowest net price available. Further, 47 states and the District of Columbia participate in supplemental rebate agreements (SRAs) whereby they receive additional rebates from manufacturers over and above what is federally required. Statutory and supplemental rebates are paid on FFS and managed care utilization. See "Medicaid Pharmacy Supplemental Rebate Agreements (SRA)," Medicaid.gov, June 2022 (<https://www.medicaid.gov/medicaid-chip-program-information/by-topics/prescription-drugs/downloads/xxxsupplemental-rebates-chart-current-qtr.pdf>, accessed June 8, 2023).

¹⁰⁸ Mariana P. Socal, Ge Bai, Thomas Cordeiro, et al, "Association Between Waste-Free Formularies and Prescription Drug Spending Among Self-insured Employers," JAMA Network Open, Volume 4, no. 10, Oct. 28, 2021, p. 2. (<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785573>, accessed June 8, 2023). Note that the numbers in brackets exclude 14 potentially wasteful drugs that were placed under prior authorization or step therapy rather than being excluded from formulary altogether.

¹⁰⁹ Socal et al., "Association Between Waste-Free Formularies and Prescription Drug Spending Among Self-Insured Employers," p. 2.

¹¹⁰ Socal et al., "Association Between Waste-Free Formularies and Prescription Drug Spending Among Self-Insured Employers," p. 2.

¹¹¹ "Savings Available Under Full Generic Substitution of Multiple Source Brand Drugs in Medicare Part D," HHS, July 23, 2018, p. 3 (<https://aspe.hhs.gov/sites/default/files/private/pdf/259326/DP-Multisource-Brands-in-Part-D.pdf>, accessed June 8, 2023).

¹¹² "Formulary Management: Helping Lower Client Cost While Ensuring Members Have Access to Clinically Appropriate Medications," CVS Health (<https://payorsolutions.cvshealth.com/programs-and-services/cost-management/formulary-management>, accessed June 8, 2023).

¹¹³ "Eliminating Wasteful Spend on Hyperinflated Drugs: Mitigating the cost impact of overpriced medications," CVS Health, June 17, 2021 (<https://payorsolutions.cvshealth.com/insights/eliminating-wasteful-spend-on-hyperinflated-drugs>, accessed June 8, 2023).

¹¹⁴ "Adding Value: National Preferred Formulary Generates Savings for Plans and Patients," Express Scripts, October 2019, pp. 2-3 (<https://corporate-site-labs-dev.s3.amazonaws.com/2019-10/The%20NPF%20-%20Adding%20Value.pdf>, accessed Aug. 16, 2023).



VI. COMPARATIVE SPENDING ON PRESCRIPTION DRUGS BY FEE-FOR-SERVICE (FFS) MEDICAID VERSUS MANAGED MEDICAID

To demonstrate the savings that can be generated by effective use of managed care pharmacy tools, we compared spending by FFS Medicaid versus Managed Medicaid for the Hep C class of drugs. Hepatitis C anti-viral therapies first came to market in 2013 and were a game-changer in terms of their curative ability and their price tag. In 2013, Sovaldi, manufactured by Gilead, cost \$84,000 for a typical 12-week course of treatment.¹¹⁵ The Hep C class of drugs would evolve in the decade following Sovaldi's launch, with lower cost branded and then authorized generic options becoming available. The State Drug Utilization Data (SDUD) maintained by CMS provides an opportunity to compare average pre-rebate spending for Hep C therapies by FFS and Managed Medicaid plans from 2013 to 2022.

During that time, FFS Medicaid and Managed Medicaid paid pharmacies a total of \$7.3 billion and \$11.7 billion for Hep C drugs, respectively. However, given the significantly higher Managed Medicaid utilization, these total spending figures are not comparable. Rather, we examine the average yearly per unit spending by the two programs¹¹⁶ and find that between 2017 and 2021, Managed Medicaid achieved a markedly lower blended per unit reimbursement (i.e., weighted average across all drugs in the class) compared to FFS. This per-unit savings translates into \$1.42 billion in total pre-rebate savings achieved by Managed Medicaid from 2017 to 2021 and, stated in the inverse, \$780 million in unrealized pre-rebate savings by the FFS program. Our analysis relies on the SDUD data, which do not include information on rebates.

¹¹⁵ Richard Knox, "\$1,000 Pill For Hepatitis C Spurs Debate Over Drug Prices," NPR, Dec. 30, 2013 (<https://www.npr.org/sections/health-shots/2013/12/30/256885858/1-000-pill-for-hepatitis-c-spurs-debate-over-drug-prices>, accessed June 8, 2023).

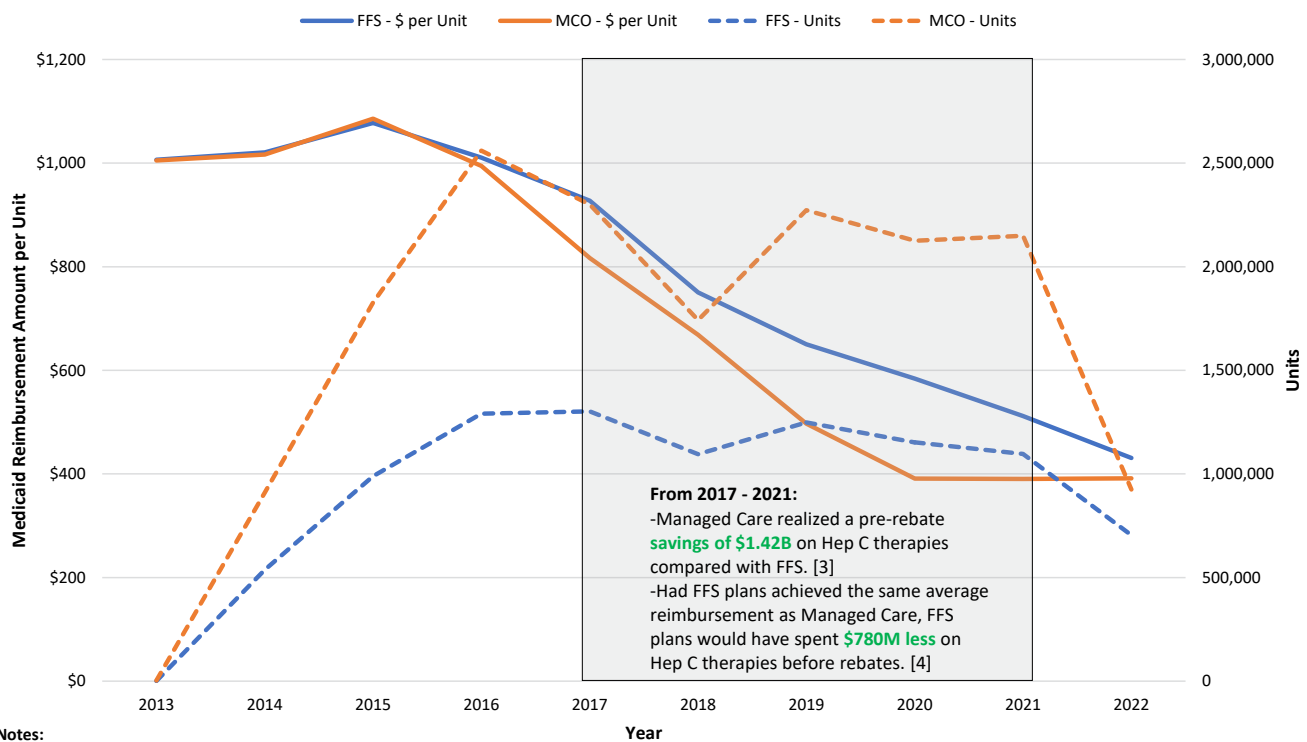
¹¹⁶ Per-unit rather than per-prescription spending is used because the typical dosing for Hep C therapies is one tablet per day. Therefore, per unit is the most directly comparable metric because it avoids the impact of differences in average units per prescription by each program on per-prescription spending. Mavyret's dosing is an exception where three tablets are taken daily and each tablet is represented as a single unit in SDUD. Mavyret is normalized in our analysis to the other Hep C therapies by dividing total units by three (i.e., one "unit" of Mavyret in our analysis is actually three tablets).

Therefore, our findings reflect pre-rebate savings only. While rebates will offset a significant portion of gross spending, studies have shown that managed Medicaid plans still achieve lower net costs (i.e., post rebate costs) than FFS plans, as discussed later in this section.¹¹⁷

As can be seen in **Figure 6**, Medicaid reimbursement per unit for the Hep C class of drugs decreased substantially from 2015 to 2020 for FFS and Managed Medicaid. However, the rate of that decline was more significant for Managed Medicaid in most years between the 2016 and 2020.

The decline in average reimbursement experienced by both programs was driven by the availability of lower cost alternatives to Sovaldi and Harvoni, such as Zepatier, Mavyret and sofosbuvir-velpatasvir (the authorized generic of Epclusa). Changes in the share of the different Hep C therapies used by FFS versus Managed Medicaid, along with their average per unit reimbursement, can be seen in **Figure 7**.

Figure 6: Average Medicaid Reimbursement Amount per Unit, HCV Antivirals [1] [2]

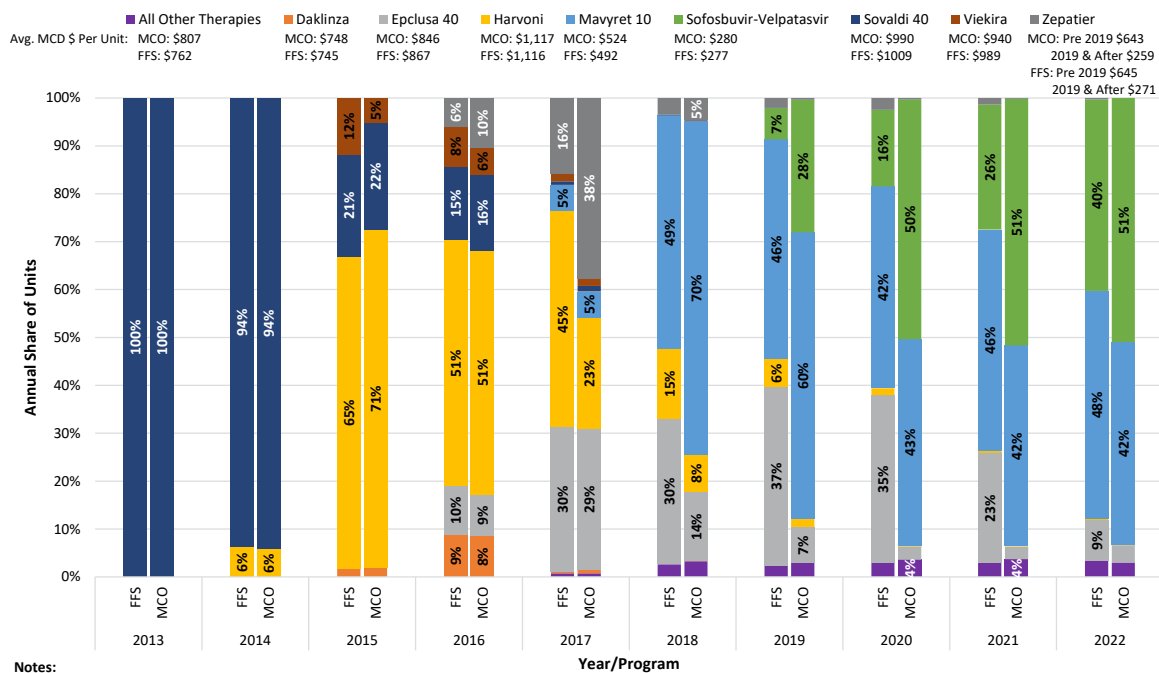


Notes:

- [1] Sourced to State Drug Utilization Data available from CMS. 2022 is through Q3. Because Mavyret's dosing is for 3 tablets daily whereas other HCV therapies are one tablet or one package of tablets daily, Mavyret's units are divided by 3 to normalize to other therapies. MCO refers to managed care organization.
- [2] HCV Antivirals identified as NDCs in the SDUD data that are associated with the MediSpan AHFS Level 06 indicator "HCV Antivirals".
- [3] Reflects the difference in average yearly reimbursement per unit between FFS and MCO, multiplied by the number of MCO units reimbursed.
- [4] Reflects the difference in average yearly reimbursement per unit between FFS and MCO, multiplied by the number of FFS units reimbursed.

¹¹⁷ The SDUD data reflect rates reimbursed to pharmacies, and therefore, our analysis does not include statutory or supplemental rebates or additional rebates that managed care plans may negotiate directly with manufacturers. The potential impact of this limitation is discussed later in this section.

Figure 7: Market Share by Product, HCV Antivirals [1] [2] [3]



Notes:
 [1] Sourced to State Drug Utilization Data available from CMS. 2022 is through Q3. Market share calculated based on each product's share of total units reimbursed. Because Mavyret's dosing is for 3 tablets daily whereas other HCV therapies are one tablet or one package of tablets daily, Mavyret's units are divided by 3 to normalize to other therapies. MCO refers to managed care organization.
 [2] "All Other Therapies" includes VOSEVI 400; Ledipasvir; HARVONI Or; HARVONI, T; EPLCLUSA 20; MAVYRET OR; and Epclusa, O.
 [3] HCV Antivirals identified as NDCs in the SDUD data that are associated with the Medispan AHFS Level 06 indicator "HCV Antivirals".

As seen in **Figure 6**, Managed Medicaid's average reimbursement per unit for Hep C is similar to FFS from 2013 to 2016 and then becomes significantly lower starting in 2017 and lasting through 2021. The average rates begin to converge again in 2022. Managed Medicaid's lower rate from 2017 to 2021 is driven by a more successful shift in utilization to lower-cost alternatives:

- In 2017, 38% of Managed Medicaid utilization is on Zepatier (with an average Medicaid reimbursement amount of ~\$645 per unit in 2017) compared with only 16% of FFS (with much of the remaining FFS utilization on Harvoni, with an average reimbursement of ~\$1,100 per unit).
- In 2018, 70% of Managed Medicaid utilization is on Mavyret (\$600 per unit) compared with 49% of FFS. The remaining FFS utilization is across Harvoni (~\$1,100 per unit) and across Epclusa at \$865 per unit).

- In 2019, not only does Managed Medicaid successfully shift more utilization to generic sofosbuvir-velpatasvir (28% of Managed Medicaid at \$277 per unit versus only 7% of FFS), its Mavyret share remains above that of FFS (60% versus 46%, respectively). Epclusa (more expensive), on the other hand, accounts for 37% of FFS versus only 7% of Managed Medicaid volume.
- In 2020, Managed Medicaid's sofosbuvir-velpatasvir share further increases to 50% of units with a corresponding decline in Mavyret. However, we observe a similar shift for FFS: more sofosbuvir-velpatasvir and less Mavyret. Because FFS Medicaid's Epclusa share remains relatively unchanged at 35% in 2020 (whereas Managed Medicaid has 93% of its utilization on lower-priced sofosbuvir-velpatasvir and Mavyret), Managed Medicaid's average reimbursement per unit for this year remains below FFS.
- In 2021, the average rates converge a bit more, but Managed Medicaid is still below FFS largely due to persistent FFS utilization of Epclusa (at 23%).

- In 2022, the average reimbursement rates converge further. Managed Medicaid's product mix and average reimbursement is steady from 2020 to 2022, and FFS continues to drive more utilization to lower gross cost products. In 2022, there is a notable decline in Eplusa's share of FFS utilization (down to 9%).

Though the SDUD data do not reflect information on PDLs, patient cost share, step therapy, or prior authorization, it is reasonable to conclude the significant pre-rebate savings obtained by Managed Medicaid plans is due, in large part, to these plans' ability to use many of the tools discussed above in this report to more quickly and effectively steer patients to lower-priced, clinically appropriate options.

Though our analysis examines pre-rebate savings only,¹¹⁸ our conclusion that managed care plans achieve cost savings is consistent with a Menges Group analysis for AHIP, which does incorporate rebates and which found that Medicaid managed care plans' net costs per prescription were 27% lower than FFS Medicaid, yielding \$6.5 billion in savings in federal fiscal year 2018 alone.¹¹⁹

Another study by the Menges Group found that "MCOs are achieving much more favorable initial (pre rebate) costs per prescription due to their management of the mix of drugs — particularly a much higher reliance on use of generic medications" and even though "larger rebates in the FFS setting close much of this initial gap," managed care plans are still achieving considerable net savings relative to FFS.¹²⁰ Just as BRG's analysis found with the Hep C class of drugs, the Menges Group also found a higher generic dispensing rate by Medicaid managed care across all therapeutic classes: 88% versus 84% for FFS in 2018.¹²¹ IQVIA's analysis also supports Managed Medicaid's higher generic dispensing rate (92.5% versus 89.5% in 2020), which IQVIA also attributes, at least in part, to differences in "plan designs and incentives."¹²² We acknowledge the possibility that under certain circumstances FFS plans could achieve lower net costs (i.e., post-rebate costs) than managed care plans for this class of drugs.¹²³ However, this possibility does not detract from our finding that managed care plans more successfully steered Hep C drug utilization to products with lower gross prices, including brands and generics.

¹¹⁸ Rebates are confidential to each manufacturer.

¹¹⁹ "The Value of Medicaid Managed Care: Making Prescription Drugs Affordable for States and Taxpayers," AHIP, February 2020, p. 2 (https://ahiporg-production.s3.amazonaws.com/documents/AHIP-MMCRsearch_RxDrugs.pdf, accessed June 8, 2023). The federal fiscal year runs from October to September.

¹²⁰ "Medicaid Prescription Drug Benefit Management: Performance Comparison Across Different State Policy Approaches," The Menges Group, March 2022, p. 2 (https://themengesgroup.com/wp-content/uploads/2022/06/menges_group_rx_paper_march_2022.pdf, accessed June 8, 2023).

¹²¹ "The Value of Medicaid Managed Care," AHIP, p. 5.

¹²² "The Use of Medicines in the U.S.," IQVIA Institute, p. 25.

¹²³ This could arise if the Medicaid unit rebate amount (URA) or supplemental rebate amount (SRA) on a product that FFS utilizes more heavily than managed care is sufficiently high, meaning that it results in a lower net cost than a product that managed care more heavily utilizes (and which contributed to managed care's lower gross cost). Such a URA could occur if there is a low best price or a high additional rebate amount (i.e., inflation rebate). SRAs are not statutorily required but states may negotiate with manufacturers for supplemental rebates.



VII. CONCLUSION

Managed care pharmacy tools play an important role in improving clinical outcomes, ensuring the appropriate use of medications, and containing rising costs. Through MTM and DUR, pharmacists can discover and help resolve medication-related issues or identify patients who would benefit from adding (or removing) certain medications from their drug regimens. Such interventions can help reduce adverse events or unnecessary hospitalizations, which are an undesired clinical outcome and a contributor to avoidable health care spending.

Prior authorization and step therapy seek to achieve evidence-based use of medications and to avoid unnecessarily costly medication when appropriate alternatives exist. Though opportunities exist to reduce

the administrative burden of these protocols on clinical staff, these opportunities remain an important tool in containing rising drug spending. Similarly, a well-designed formulary also plays a key role in providing patients with access to appropriate medications while encouraging utilization of cost-effective products.

Prescription drug spending in the United States is forecasted to grow in the coming years. This growth will be driven by the emergence of innovative, potentially life-changing therapies, but many of those will come with a high cost. Managed care pharmacy's role is to ensure those costs are reasonably contained while ensuring patients can access critical therapies. Managed care pharmacy tools play a key role in achieving the balance between access and cost.

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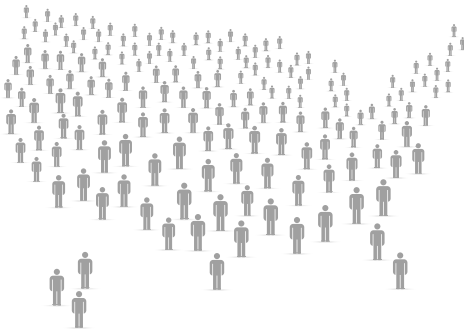
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Southern	25%
Western	30%
International	<1%



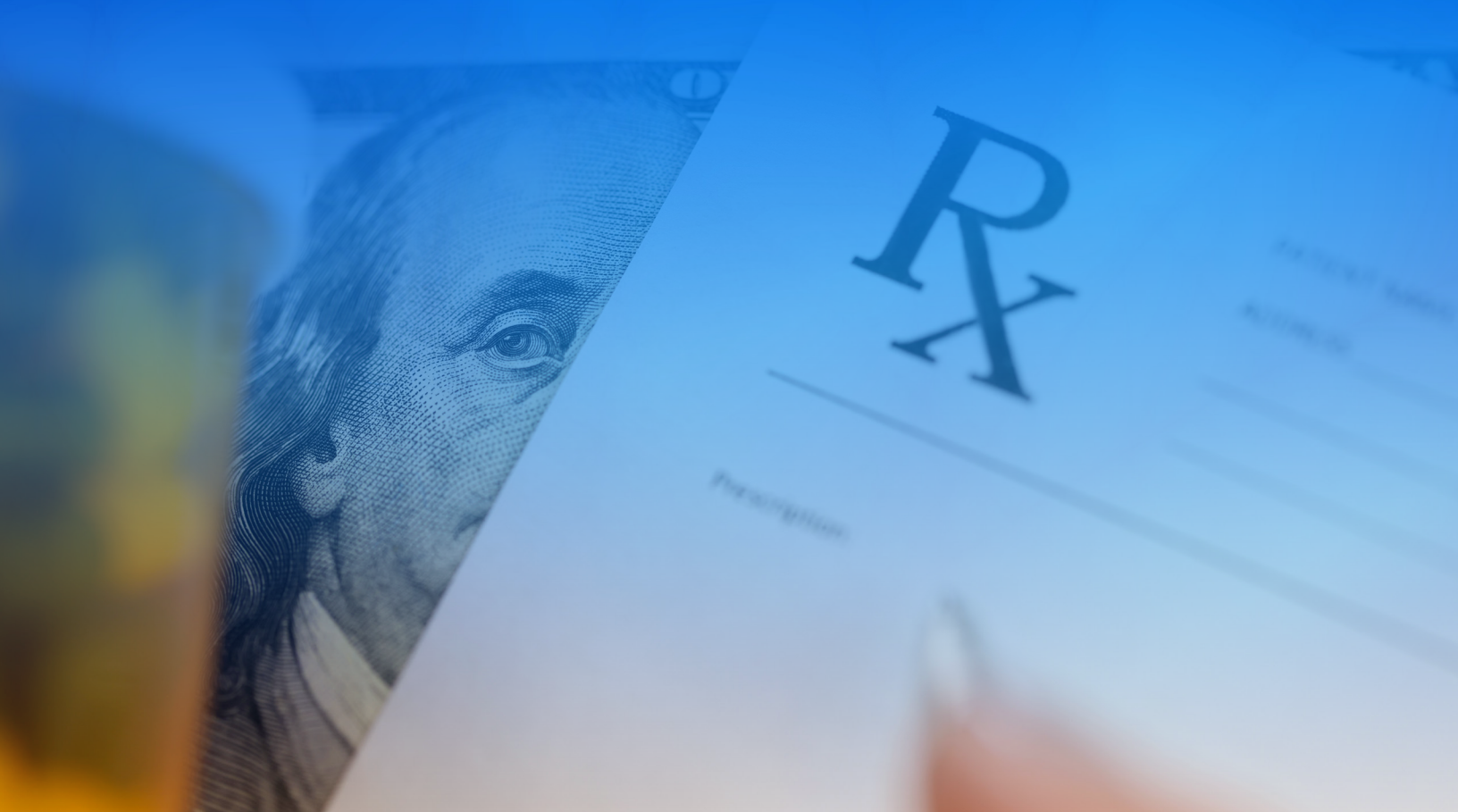
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