HealthHIV ADVOCACY

Prescription Drug Affordability Boards (PDABs) and Upper Payment Limits (UPLs) Impact on Patients, Drug Pricing, and Innovation

EXECUTIVE SUMMARY

In recent years, policymakers have sought various legislative options to increase drug supply chain transparency and manage state and patient drug spending by enacting legislation implementing Prescription Drug Affordability Boards (PDABs), with or without upper payment limits (UPLs), as a mechanism to control state spending on drugs. State UPLs typically apply to purchases of, and payer reimbursements for, a prescription drug in the state including Medicaid.

Differences in the criteria PDABs use to select drugs and effectuate a UPL will introduce new complications in the prescription drug market. Stakeholders have raised concerns that added complexity and lack of transparency on UPLs could drive supply chain costs higher over time or exacerbate patient access concerns.[1] This would be particularly concerning for vital medications such as those to treat human immunodeficiency virus (HIV). The UPLs are also likely to have long-term effects on the prescription drug ecosystem, including provider access, copay assistance needs, patient assistance programs, and drug research and development (R&D).

As PDABs push forward UPLs, it is important to evaluate their impact on critical patient access, affordability of prescription drugs for patients, and provider treatment choices. States seeking to implement UPLs must further consider downstream consequences of UPLs and the value they bring while considering alternative approaches to reducing drug spending. As such, there are several alternative legislative and regulatory avenues that state policymakers could use to improve patient access, including ensuring that any rebates or price concessions provided by manufacturers to Pharmacy Benefit Managers (PBMs) are passed through to patients lowering their out-of-pocket costs or by ensuring manufacturer copay assistance intended to assist patients with paying for medications is counted towards their plan cost sharing requirements. Rebates are a complex part of the healthcare system and are typically provided as compensations from manufacturers to health plans and/or PBMs for prescription drugs. Rebates can affect all stakeholders in the drug supply chain (e.g., wholesalers, pharmacies, provider, and patients), drug costs, and payments.

1 Mello, Michelle. Barriers to Ensuring Access to Affordable Prescription Drugs. *Annual Reviews*. January 2020. Available at https://www.annualreviews.org/doi/10.1146/annurev-pharmtox-010919-023518.

KEY POINTS

Access:

- » UPLs, intended to limit reimbursement amounts for select drugs, will shape payer and PBM decision-making for plans' benefit design (e.g., formularies, patient cost sharing). This could include movement into non-preferred tiers, which could have a significant impact on patient access to lifesaving medications such as those for treatment of HIV.
- » Any benefit design changes that move drugs into non-preferred or specialty tiers and/or result in removal of a drug from a plan's formulary can increase costs to patients (e.g., increases in cost sharing and coinsurance amounts).
- » Changes to formularies and patient benefit design stemming from UPLs could prompt providers to adjust referral, prescribing, and acquisition patterns for UPL-selected drugs. This could lead to provider pressure to choose specific low-cost medications, not necessarily the product deemed best for the patient.
- » UPLs could negatively influence patient and provider treatment choices, as they may alter autonomous decision making of treatment pathways by modifying prescribing and supply chain incentives.

Affordability:

- » Certain medications like vaccines and HIV medications, already go through rigorous analysis on price setting to determine affordability. Examples of these analyses include the use of the ADAP Crisis Task Force (ACTF) which negotiates reduced drug prices on behalf state AIDS Drug Assistance Programs (ADAPs) and the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) evidence to recommendation (EtR) process.
- » Manufacturers may modify pricing and contracting strategies to reduce a drug's likelihood of being selected for a UPL (e.g., via changes in wholesale acquisition cost) to favor their non-UPL drugs in contracting to avoid lower payment; or to offset reduced payer reimbursement.

Assistance:

- » As UPLs impact how payers and PBMs set benefit designs (e.g., by increasing coinsurance), there could be an increase in need for manufacturer copay assistance. In turn, this could increase use of copay adjustment programs, such as copay accumulators and maximizers, which also can alter how patients move through their plan benefits (e.g., reaching their maximum out-of-pocket).
- » Manufacturer copay assistance programs can help to improve patient adherence and outcomes. For example, one study found that patients taking HIV medication and used copay assistance saved 91% on their out-of-pocket costs on average.[2]

2 *The Patient Impact of Manufacturing Copay Assistance in an Era of Rising Out-of-Pocket Costs*. The University of Chicago. December 2021. Available at https://cpb-us-w2.wpmucdn.com/voices.uchicago.edu/dist/d/3128/files/2021/12/2021_12_15-Copay-Assistance-Final-Draft-Clean.pdf.

Overview

National health expenditure data, which is the official estimates of total healthcare spending in the United States (US), has increased to $4.5 trillion in 2022.[3] Spending grew at 4.1% in 2022, an increase from 3.2% in 2021.[4] While spending on prescription drugs accounts for ~9% of total healthcare costs, spending related to hospital expenditures (~30%) and physician and clinical services (~20%) account for a larger portion of total healthcare spending in the US. Prescription drugs have remained a flat portion of US spending since 2000 at 9% to 10% of total.[5] However, despite accounting for lower portion of overall health expenditures, drugs have become an area of focus for state lawmakers. Therefore, since the passage of the Patient Protection and Affordability Care Act (ACA) and the expansion of the individual market through state exchanges, legislation targeting drug expenditures has multiplied.[6]

Although the focus of PDABs is to independently review state spending on prescription drugs and develop options to lower spending to evaluate the drug supply chain,[7] the scope, standards, and capabilities of the boards vary from state to state. The majority of PDABs include advisory committees and boards that analyze and recommend ways to lower state spending on certain medications and are required to release reports on their findings.[8] PDABs often include health care providers, advocates, patient group representatives, and insurance professionals who either apply to join the PDAB or are appointed by their governor.[9] The varied backgrounds of these stakeholders and differing criteria for affordability determinations can yield differentiation in the weighting of drug selection criteria and execution of affordability reviews.

PDAB AND UPL DEVELOPMENT

In 2017, the National Academy for State Health Policy (NASHP) developed a model PDAB legislation containing an option that includes a UPL. NASHP's model legislation has been the basis for all enacted PDAB and UPL laws to date. This language was designed to give PDABs the ability to determine, using a state-established framework, whether a drug is "unaffordable" for state purchasers (e.g., state employee health plans and consumers).[10] [11] Through legislative text limiting the "payment" and/or "reimbursement" for drugs instead of definitive prices, the NASHP model attempts to circumvent previous legal barriers surrounding drug price setting. For example, in Maryland, the US Court of Appeals for the Fourth Circuit, ruled that the state's law prohibiting "price gouging" by generic pharmaceutical manufacturers was unconstitutional.[12] Furthermore, NASHP updated the model legislation in 2022 with an option to tie UPLs to reference-based pricing such as the Medicare maximum fair price (MFP) as initiated by the Inflation Reduction Act (IRA).[13]

Currently of the eight enacted PDABs, four contain UPL-setting authority (Colorado, Maryland, Minnesota, and Washington), and a fifth (Oregon) will decide whether to move forward with UPLs by September 2024.[14] The goal of establishing UPLs is to set a maximum amount for all purchases and payer reimbursements for a drug

3 Centers for Medicare and Medicaid Services (CMS). *National Health Expenditure Data.* 2023. Available at https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical
4 *Ibid.*
5 *Ibid.*
6 White and Case. *States Remain the Drivers of New Drug Pricing Legislation as Washington Weighs In.* Available at https://www.whitecase.com/insight-alert/states-remain-drivers-new-drug-pricing-legislation-washington-weighs.
7 The Commonwealth Fund. *Can State Prescription Drug Affordability Boards Address High-Cost Drug Prices?* October 2022. Available at https://www.commonwealthfund.org/blog/2022/can-state-prescription-drug-affordability-boards-address-high-cost-drug-prices.
8 NASHP. "Comparison of State Prescription Drug Affordability Board Legislation." 2021. Available at https://nashp.org/comparison-of-state-prescription-drug-affordability-board-legislation/.
9 The Commonwealth Fund. *Can State Prescription Drug Affordability Boards Address High-Cost Drug Prices?* Available at https://www.commonwealthfund.org/blog/2022/can-state-prescription-drug-affordability-boards-address-high-cost-drug-prices.
10 NASHP. "States Take Diverse Approaches to Drug Affordability Boards." Available at https://nashp.org/states-take-diverse-approaches-to-drug-affordability-boards/.
11 NASHP. An Act to Reduce the Cost of Prescription Drugs by Establishing a Prescription Drug Affordability Board. Available at https://eadn-wc03-6094147.nxedge.io/wp-content/uploads/2022/08/2022-PDAB-Model-Act_Form_080222.pdf.
12 *Association for Accessible Medicines v. Frosh;* Attorney General of the State of Maryland. US Court of Appeals for the Fourth Circuit. 2018. Available at https://www.ca4.uscourts.gov/opinions/172166.P.pdf.
13 NASHP. "An Act to Reduce Prescription Drug Costs Using Reference-Based Pricing." Available at https://nashp.org/an-act-to-reduce-prescription-drug-costs-using-reference-based-pricing/.
14 Oregon Senate Bill 192. (2023). Available at https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/SB192/Enrolled.

dispensed or administered to individuals in health plans regulated by the state, however, health plans that UPLs apply to vary by state (e.g., Maryland's application to state-employee health plans). There are state-regulated health plans which include ACA exchange plans, and fully insured group health plans. Self-insured plans operating under the Employee Retirement Income Security Act of 1974 (ERISA) are not under state UPL authority, but some states may allow them to opt-in. Further, how UPLs are implemented will affect how stakeholders (e.g., pharmacies, wholesalers) operate in the states, which could further alter individuals under ERISA plans. Other proposals currently pending (e.g., in Michigan) structure their UPL law to apply to pharmacy benefit managers (PBMs) or other third party-administrators that contract with ERISA plans, which may be an attempt to expand the reach of their laws beyond the state-regulated market. Finally, states can include Medicaid plans in the definition of state purchasers; however, Medicaid rates are already steeply discounted through the Medicaid Drug Rebate Program (MDRP).

PDAB statutes include eligibility parameters for a selection of drugs for affordability review and UPLs, such as year-over-year price increases or wholesale acquisition cost (WAC) costs above a specified threshold for brand, biosimilars, and generic drugs. For example, Maryland's PDAB seeks to evaluate brand-name drugs with a WAC greater than $30,000 per year, whereas the Washington PDAB seeks to evaluate brand-name drugs with a WAC greater than $60,000 a year.[15,16] An enacted bill Colorado's legislature in 2023 (HB 1225) will bring the threshold for eligibility of prescription products down to a WAC over $3,000 beginning in 2025.[17] Some PDAB rulemaking has sought to determine how broadly eligibility parameters can be applied, including to particular categories of products like vaccines and insulins in Oregon.[18] Notably, vaccines already go through a comprehensive affordability review as part of the CDC's ACIP EtR process.

Following selection of eligible drugs, state PDABs conduct affordability reviews to determine if a product is deemed "unaffordable" for state consumers. PDABs consider a variety of criteria when selecting drugs for affordability review and UPLs, such as by parameters using WAC, which is an estimate of a manufacturer's list price for a product prior to discounts and rebates, therapeutic alternatives, and drug shortage lists.[19] Currently, PDABs offer only limited opportunities for stakeholders, including patients, caregivers, and providers feedback on prescription drug selection. However, these affordability reviews and ultimately UPLs could have unintended consequences on access to certain drugs, including HIV drugs, due to this variability of criteria that states could prioritize. As such, HIV drugs have already been a target for affordability review, with Colorado and Oregon selecting Genvoya® and Oregon also selecting Triumeq® for their lists of considered products.[20] These are the only two states that have selected a set of drugs to undergo affordability review as of March 2024. The full list of drugs selected in Colorado and Oregon is highlighted in Table 1 below. To date, Colorado's PDAB has only found Enbrel® to be unaffordable to individuals in the state and will begin the UPL process. Trikafta® and Genvoya® were found affordable through reviews conducted in late 2023 and early 2024. In its review of Genvoya®, the PDAB found the drug to be affordable to state residents in part due to its patient assistance program offerings, lowering overall patient out-of-pocket costs.

Finally, the processes used to select drugs to review and set UPLs will be implemented through rulemaking conducted by the PDAB. States are currently at various points in implementation. To date, no states have considered significant planning processes related to UPL effectuation plans, despite moving forward with affordability reviews of selected drugs.[21] Differences in the criteria states use to select drugs, set UPLs, and

15 NASHP. "Comparison of State Prescription Drug Affordability Review Initiatives." Available at https://nashp.org/comparison-of-state-prescription-drug-affordability-review-initiatives/.
16 NASHP. "Q&A on NASHP's Model Act to Reduce the Cost of Prescription Drugs by Establishing a Prescription Drug Affordability Board." Available at https://nashp.org/qa-on-nashps-model-act-to-reduce-the-cost-of-prescription-drugs-by-establishing-a-prescription-drug-affordability-board/.
17 Colorado House Bill 1225. (2023). Available at https://leg.colorado.gov/sites/default/files/2023a_1225_signed.pdf.
18 Oregon Trade Regulation. ORS 646A.693-697. (2022). Available at https://www.oregonlegislature.gov/bills_laws/ors/ors646a.html.
19 Avalere. "States Turn to Drug Price Boards to Reduce Spending." 2023. Available at https://avalere.com/insights/states-turn-to-drug-price-boards-to-reduce-spending.
20 Prescription Drug Data. Oregon PDAB. December 2023. Available at https://dfr.oregon.gov/pdab/Documents/2023-PDAB-Subset-Drug-List-v3.0.xlsx.
21 NASHP. "Comparison of State Prescription Drug Affordability Review Initiatives." Available at https://nashp.org/comparison-of-state-prescription-drug-affordability-review-initiatives/.

ultimately effectuate a UPL, add significant complexity into the prescription drug market. Stakeholders have raised concerns that added complexity and lack of transparency could drive supply chain costs higher over time or exacerbate access concerns.[22]

Table 1: Drugs Selected for Evaluation in Oregon and Colorado

Oregon[23]	Colorado[24]
» Cosentyx® – Psoriasis	» Trikafta® – Cystic Fibrosis*
» Entyvio® – Crohn's Disease	» Genvoya® – HIV*
» Genvoya® - HIV	» Cosentyx® - Psoriasis
» Inflectra® - Psoriasis	» Stelara® - Psoriasis
» Ocrevus® – Multiple Sclerosis	» Enbrel®** - Rheumatoid Arthritis
» Rybelsus® - Diabetes	
» Shingrix® - Shingles	
» Skyrizi® - Psoriasis	
» Tremfya® - Psoriasis	
» Triumeq® - HIV	
» Trulicity® - Diabetes	
» Vyvanse® – Attention-deficit / hyperactivity disorder (ADHD)	

* Drugs were found to be affordable for Colorado consumers and no UPL was applied.

MFP AND UPL INTERSECTION

While state and federal efforts share common interests including reducing the cost of prescription drugs, they differ in several ways, raising questions for stakeholders on the long-term effects of these varied approaches.

In the fall of 2023, the US Department of Health and Human Services (HHS) secured agreements from drug manufacturers to begin price negotiations for ten selected drugs in Medicare under the IRA. While the negotiations program is still under litigation, the MFP for each selected drug could affect UPL setting in states, like Minnesota, which has enacted laws that tie UPLs to Medicare negotiated rates. The Congressional Budget Office (CBO) estimated that there could be a reduction in new therapies coming to market over the next 30 years as a result of Medicare negotiation, which could be exacerbated by state UPL setting.[25] While certain categories of drugs are excluded from MFP selection (due to generic or biosimilar competition, orphan drugs, etc.), states take different approaches.[26] For example, Oregon has excluded drugs selected for affordability

22 Mello Michelle. Barriers to Ensuring Access to Affordable Prescription Drugs. *Annual Reviews*. January 2020. Available at https://www.annualreviews.org/doi/10.1146/annurev-pharmtox-010919-023518.
23 Prescription Drug Data. Oregon PDAB. December 2023. Available at https://dfr.oregon.gov/pdab/Documents/2023-PDAB-Subset-Drug-List-v3.0.xlsx.
24 Prescription Drugs Selected for Affordability Review. Colorado Department of Regulatory Agencies. Available at https://doi.colorado.gov/insurance-products/health-insurance/prescription-drug-affordability-review-board.
25 *TIME*. What to Know About Drug Price Negotiations That Could Save U.S. Taxpayers Billions. August 2023. Available at https://time.com/6308892/drug-price-negotiations/.
26 *Explaining the Prescription Drug Provisions in the Inflation Reduction Act.* KFF. Available at https://www.kff.org/medicare/issue-brief/explaining-the-prescription-drug-provisions-in-the-inflation-reduction-act/.

review if they overlap with those selected for MFP.[27]

Neither the IRA nor state UPL laws expressly prohibit plan and manufacturer negotiation alongside MFP or PDAB deliberation. As such, in states where MFPs and UPLs are set are likely to impact rebate negotiation and influence future market access dynamics, including for medicines not directly affected but in the same therapeutic classes. Additionally, state policymakers could require patient cost sharing to be calculated based on the UPL price in future lawmaking, as federal law requires for products with an MFP. An increase in rebating pressure on manufacturers could have long-term impacts on how products are priced and influence patient access and health outcomes if products are no longer available to patients.

Notably, resource utilization will be high between state UPLs and federal Medicare drug pricing negotiation, due to lack of understanding of supply chain impacts by PDABs. However, while CMS seeks to implement a Medicare Part D transaction facilitator, who will furnish transactions and services in the drug supply chain, to ensure integrity of program, state effectuation of a UPL will likely be more difficult due to current supply chain operations and contractual arrangements. In some states, there will be some overlap and/or duplication of drugs selected for MFP and state UPL setting. For the drugs subject to price setting, their therapeutic competitors will likely face market disruption as payers encounter incentives to leverage MFP/UPL for greater discounts from competitors.

EVIDENCE AND VALUE INITIATIVES

Both the IRA and PDABs have weighed the use of comparative effectiveness (e.g., clinical or cost-based) metrics in their assessments of affordability. The difference in approaches for the use of these clinical or cost-based tools may lead state PDABs to differing conclusions on value of each product assessed, which could make formulary negotiations ever more challenging and introduce access barriers that vary state to state in the long term.

For example, some state PDABs have used quality adjusted life years (QALYs), often cited by the Institute for Clinical and Economic Review (ICER), as a tool to guide drug pricing decisions and patient access.[28] Many argue that the QALY methodology is a discriminatory metric as it uses a subjective threshold to measure a "quality" year of health.[29] For chronic conditions like HIV, the full value of treatment will not be fairly evaluated if QALYs are used. For this reason, the ACA specifically prohibits QALYs from being used as a metric for comparative effectiveness in setting MFPs Similarly, under Colorado's PDAB statute, the use of QALY measures was banned; however, in other states, such as Maryland, QALYs are still being assessed.[30]

POTENTIAL IMPACT OF PDABS AND UPL SETTING ON PATIENTS

While policymakers have intended for UPLs to reduce state spending on prescription drugs and increase patient affordability, UPLs could have broader unintended effects on patient access and affordability, including impacts on plan benefit design, pricing across markets, provider reimbursement, and the supply chain.

ACCESS

Patient access to prescription drugs, especially for patients with chronic conditions like HIV, are highly contingent on plan benefit designs. UPLs, intended to limit reimbursement amounts for select drugs, will likely shape payer and PBM decision-making for plans' benefit design (e.g., formularies, patient cost sharing). These types of formulary redesigns could also result in increased patient cost sharing, as products with UPLs are moved across tiers due to changes in plan contracting and rebating across both UPL drugs and competitive

27 OR Prescription Drug Affordability Review Board. *Prescription Drug Data Subset List.* December 2023. Available at https://dfr.oregon.gov/pdab/Pages/data.aspx.

28 Brookings Institute. *Threats to Medicare's New Drug Negotiation Power.* (2023). Available at https://www.brookings.edu/articles/threats-to-medicares-new-drug-negotiation-power/.

29 *Quality-Adjusted Life Years and the Devaluation of Life with Disability.* National Council on Disability (2019). Available at https://ncd.gov/sites/default/files/NCD_Quality_Adjusted_Life_Report_508.pdf.

30 *Value in the States Principles.* MD Prescription Drug Affordability Review Board. (2023). Available at https://pdab.maryland.gov/documents/regulations/Arthritis_foundation_comments.pdf.

products. This could include movement into non-preferred tiers on a plan formulary, which may impact accessibility. For example, payers may opt to "prefer" products not subject to a UPL for several reasons, including the availability of rebates (i.e., discounts) on non-UPL products. Additionally, if a competitor product without a UPL is rebated lower or at par with a UPL drug, a payer may opt to apply utilization management to that drug or place it on a less-preferred formulary tier. Depending on a patient's previous cost-sharing and benefit design, these changes may improve or worsen access to a product that a patient may need.

Any benefit design changes that move drugs into non-preferred or specialty tiers and/or result in removal of a drug from a plan's formulary can increase costs to patients (i.e., requires paying for the drug entirely or increases in cost sharing amounts).

- Should plans shift preferred access to non-UPL products, patients could experience higher out-of-pocket costs and, likely, more utilization management techniques applied to their products such as step therapy and prior authorizations.
- Patients may be forced to shift their drugs to less effective options due to formulary constraints. Increases in utilization management on products with higher cost sharing can negatively impact patient health outcomes through treatment delays, prescription abandonment, and non-adherence.[31]

Changes to formularies and patient benefit design stemming from UPLs could prompt providers to adjust referral, prescribing, and acquisition patterns for selected drugs. For example, if a reimbursement rate is lowered due to UPL, this will place downward pressure on average sales price (ASP), which is the metric for how physician-administered products are weighted and paid for. This could lead to provider pressure to choose specific medications which may not necessarily be the product deemed best for the patient.

Further, UPLs could alter the traditional provider "buy and bill" system of reimbursement which could lead to provider consolidation and referrals to larger entities and practices. Limiting reimbursement will apply pressure on providers to manage costs more closely, which may incentivize providers to stop administering or carrying certain products. Therefore, while the impact of UPLs on pharmacy reimbursement and contracting remains unknown, it could be negatively impacted by decreased administrative fees and/or reimbursement.[32]

AFFORDABILITY

There are already significant implemented discounts and negotiated prices in place for certain drugs, including HIV drugs, which may be negatively altered UPLs. For example, the acquired immunodeficiency syndrome (AIDS) Drug Assistance Program (ADAP) coordinators and the ADAP Crisis Task Force (ACTF) negotiate to reduce HIV drug treatment prices across states. The ACTF negotiated an average discount of more than 50% off WAC for antiretroviral drugs, while simultaneously minimizing the need for formulary restrictions, prior authorization requirements, and delays in product availability. [33] UPLs could undermine the discounts and rebates already in place, which could interrupt how patients are accessing their HIV drugs for little to no cost under ADAPs.

A primary purpose of establishing PDABs with UPLs is to create purchase limits and payer reimbursement limits to safeguard states from excessive drug spend.[34] However, UPLs influence on state spending, which is narrowly defined as expenditures on pharmaceutical products, may be relatively small during the first few years of implementation. Early (e.g., pre-2027) savings from UPLs are unlikely to approach the scale of those projected by the CBO for the IRA's Medicare negotiation provision due to smaller patient volume and other

31 Ismail WW, Witry MJ, Urmie JM. The association between cost sharing, prior authorization, and specialty drug utilization: A systematic review. *J Manag Care Spec Pharm.* 2023.
32 Opposition Testimony: CO SB 21-175 to Establish a Prescription Drug Affordability Review Board. Available at https://betterhealthcareco.org/wp-content/uploads/2021/04/SB175-Dr.-Kelly-Greene-Testimony.pdf.
33 NASTAD.org. ADAP Crisis Task Force. December 2022. Available at https://nastad.org/sites/default/files/2022-12/PDF-ACTF-Fact-Sheet-December-2022.pdf.
34 CO HB23-1225. CO General Assembly. 2023. Available at https://leg.colorado.gov/bills/hb23-1225.

policy differences.[35] Medicaid expenditures by the state are already heavily discounted through rebates from manufacturers.

ASSISTANCE

Patient access and affordability of certain products can be improved by the availability of patient copay assistance from manufacturers or charitable foundations. Manufacturer copay assistance programs can help to improve patient adherence and outcomes. For example, one study found that patients taking HIV medication and used copay assistance saved 91% on their out-of-pocket costs on average.[36] Moving forward, these programs may play a heightened role in states with UPLs. Copay assistance is designed to help patients with their cost sharing requirements (e.g., deductibles, copays and other out-of-pocket costs).[37] Manufacturer copay assistance decreased patient costs by nearly $19 billion in 2022 and nearly $80 billion over the last 5 years.[38] As UPLs impact payers and PBMs benefit designs (e.g., by increasing coinsurance), there could be an increased need for manufacturer copay assistance for both UPL and competitor class products.

However, if drugs are shifted to higher formulary tiers following UPL setting, manufacturers could reassess or alter eligibility considerations for their copay assistance programs and/or free drug/patient assistance programs (PAPs) as a result of plans reducing patient access. As patients' out of pocket costs increase, payers may expand their use of copay adjustment programs, such as copay accumulators and maximizers, increasing the patient cost-burden. Copay accumulators are a feature or program applied by a health plan or PBM, whereby a manufacturer or other third-party source, the copay assistance provided to patients does not count toward the patient's annual cost sharing limits such as the deductible and out-of-pocket maximum. Copay maximizers set patient cost sharing amounts to be the maximum amount of manufacturer copay assistance offered. These lead to "surprise" copays for patients. One study conducted an analysis with a sample of commercially insured patient population and found that copay accumulator and maximizer exposure was significantly higher among non-White patents, leading to the identification of broader racial and ethnic disparities in regards to access of prescription drugs.[39] Furthermore, employers could choose not to provide coverage for higher cost drugs and implement alternative funding programs, putting pressure on manufacturer free drug foundations intended for uninsured or underinsured populations.

IMPACT ON SCIENTIFIC INNOVATION

As manufacturers evaluate the therapeutic areas likely to be subjected to UPLs, they may reassess investment in R&D for new therapies or biosimilar competitors. Manufacturers may be unable to recoup R&D costs if their realized prices for selected drugs are capped in some states.[40] As a result of the IRA, some companies have already suspended development of treatments for rare diseases, which may also impact the development of traditionally higher-cost innovative drugs such as those for HIV.[41]

If these negotiations were to take place prior to a biosimilar entering the market, the MFP may be set low enough that it deters biosimilar market entry in general. As a result, this could reduce biosimilar launches and negate competition,[42] which may in turn influence manufacturer investment decisions in high value therapeutic

35 *Estimated Budgetary Effects of H.R. 5376, the Inflation Reduction Act of 2022.* Congressional Budget Office. Available at https://www.cbo.gov/publication/58366.
36 *The Patient Impact of Manufacturing Copay Assistance in an Era of Rising Out-of-Pocket Costs.* The University of Chicago. December 2021. Available at https://cpb-us-w2.wpmucdn.com/voices.uchicago.edu/dist/d/3128/files/2021/12/2021_12_15-Copay-Assistance-Final-Draft-Clean.pdf.
37 PhRMA. Patient Assistance. Available at https://www.phrma.org/patient-assistance/patient-assistance.
38 IQVIA. *The Use of Medicines in the US*. 2023. Available at https://www.iqvia.com/insights/the-iqvia-institute/reports-and-publications/reports/the-use-of-medicines-in-the-us-2023.
39 Ingham, M. Assessment of racial and ethnic inequities in copay card utilization and enrollment in copay adjustment programs. *JMCP*. August 2023. Available at https://www.jmcp.org/doi/full/10.18553/jmcp.2023.23021.
40 Inflation Reduction Act's Unintended Consequences. *PhRMA*. Available at https://phrma.org/Inflation-Reduction-Act.
41 The Inflation Reduction Act is Already Killing Potential Cures. *The Wall Street Journal*. Available at https://www.wsj.com/articles/the-inflation-reduction-act-killing-potential-cures-pharmaceutical-companies-treatment-patients-drugs-prescriptions-ira-manufacturers-11667508291.
42 *AJMC*. Opinion: The Inflation Reduction Act is a Step Backward for Biosimilar Competition. 2022. Available at https://www.centerforbiosimilars.com/view/opinion-the-inflation-reduction-act-is-a-step-backward-for-biosimilar-competition.

areas that are likely to be subject to price limits such as UPLs.[43] Additionally, UPLs could reduce incentives to invest in high-cost conditions since UPLs target early-lifecycle products.

Finally, the federal Medicare negotiation program targets late-stage lifecycle products in contrast to state UPLs that could allow for earlier lifecycle product targeting. This disconnect could lead to unpredictability and variation in the therapeutic areas subjected to price setting and cause a broader set of products to be subject to price setting overall.

THE FUTURE OF PDABS AND UPLS

As PDABs push forward UPLs, it remains important to evaluate their impact on critical patient access and affordability of prescription drugs. To date, state policymakers' efforts to improve drug price transparency and lower costs have been stifled by lack of long-term considerations of patient access and value initiatives, including those that promote prevention. These UPL efforts, coupled with a lack of intersections of how the drug supply chain operates across state-regulated markets, Medicaid, and ERISA-plans, may further deteriorate affordability for patients in states. Additionally, UPLs may negatively influence patient and provider treatment choices, as they modify treatment pathways by altering prescribing and supply chain incentives. Further, there are several other legislative avenues that state policymakers could use to improve patient access, such as by ensuring any rebates retained by PBMs and manufacturer copay assistance intended to benefit patients are passed through to patients at point of sale.

States' fragmented approaches to criteria used for affordability review, the definition of value, and the effectuation of UPLs may not deliver the intended outcomes in patient access and affordability and further complicate drug pricing. States seeking to implement UPLs must further consider downstream consequences of UPLs and the value they bring to patient access, drug pricing, and innovation while considering alternative approaches to reducing drug spending.

43 *The Wall Street Journal*. The Inflation Reduction Act is Already Killing Potential Cures. November 2022. Available at https://www.wsj.com/articles/the-inflation-reduction-act-killing-potential-cures-pharmaceutical-companies-treatment-patients-drugs-prescriptions-ira-manufacturers-11667508291.

Funding for this research was provided by GSK. While GSK has provided content review, HealthHIV determined the final editorial.