NATIONAL INSTITUTE FOR
PUBLIC EMPLOYEE
HEALTH CARE POLICY

HOW PUBLIC SECTOR HEALTH CARE PURCHASERS ARE ADDRESSING RISING DRUG COSTS

National Institute for Public Employee Health Care Policy

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About the National Institute for Public Employee Health Care Policy

Over 13 percent of the American workforce is employed by public sector employers, and health care benefits are a crucial component of their compensation programs. Public sector purchasers serve tens of millions of employees and retirees who have spent decades serving in critical roles such as teachers, firefighters, and law enforcement across the country and have a fiduciary duty to offer high-quality, comprehensive benefits at an affordable cost.

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Executive Summary

The growing cost of drugs presents a challenge for public sector employers, who commonly provide generous health care benefits as part of their competitive compensation package. Through pooled purchasing organizations, employers in the public sector partner with pharmacy benefit managers (PBMs) to administer the pharmacy benefit and manage prescription spending. Exploration of public sector purchasers' relationships and contracting practices with PBMs and the impact on prescription spending can offer important insights for policymakers. To further that goal, we surveyed 19 public sector purchasers representing over 5 million retirees, employees, and their dependents from 15 states about their health care spending, details of their PBM contracts, and perceptions of provided services.

Key takeaways include:

- Most respondents reported satisfaction with their current PBMs.
- Respondents view PBMs and their services as essential in administering the pharmacy benefit and containing prescription drug costs for public sector employees and retirees.
- Public sector purchasers use a competitive bidding process for PBM contracting, with rebate savings cited as the most competitive feature of current PBM contracts.
- Respondents noted that 100 percent of rebate savings are used to reduce premiums and cost-sharing for their employees and retirees.
- All respondents reported using other PBM services (e.g., utilization management and quality improvement strategies) to help ensure appropriate drug use and reduce prescription costs.

Public sector purchasers work with PBMs to sustain affordability of prescription drugs for their employees and retirees using traditional and innovative approaches. The continued trend in prescription drug cost increases warrants innovative solutions and strategies to ensure that public sector employees and retirees continue to have access to effective therapies.

Public Sector Employers as Health Care Purchasers

Public sector employers play a large role in the U.S. labor market, employing more than 13 percent of the total workforce.[1] They include state and local organizations, ranging from local school districts and fire departments to state health departments. Public sector workers often receive lower wages compared to their private sector counterparts. As a result, for competitive recruitment and retention, public sector employers provide high-quality, comprehensive benefits to their employees and their families through active employment and retirement.[2] Health care coverage is one of the most expensive and important benefits public sector employers provide during working years and retirement. A 2022 employer survey showed that compared to their private sector counterparts, public sector workers have a lower annual contribution for health care coverage and are more likely to be offered retirement health care benefits.[3]

With high rates of health care cost growth, public sector employers face challenges in offering affordable health benefits to their workers and retirees. In particular, the increase in prices remains a significant concern for employers who provide pharmaceutical coverage as part of their benefits.[4] In the last 10 years, the United States has seen a rise in the rate of growth for prescription drug spending that outpaces spending growth in other developed countries.[5,6] Growth in per capita pharmaceutical spending is projected to outpace that in other areas of health spending, according to the Centers for Medicare and Medicaid Services.[7] The key drivers of the increase in the rate of spending growth include prices per prescription, a shift in the utilization of drugs from retail pharmacies to non-retail settings, growing use of physician-administered biologic drugs and higher utilization generally in the population due to rising rates of chronic conditions.[4,8]

Many public sector employers seek to increase their purchasing power for health care benefits through large public sector purchasing pools. Public sector purchasing pools represent multiple public sector employers and leverage their collective purchasing power to provide affordable health benefits to their members and are particularly useful in the case of prescription drugs.

To support retiree coverage for prescription drugs, public sector employers and purchasing pools rely on employer group waiver plans (EGWPs), an approach for eligible retirees under the Medicare Advantage program. Under those EGWP plans, purchasers can either elect to provide Medicare prescription drug benefits (Part D) as part of a Medicare Advantage plan or decide to purchase those Part D benefits separately. Under another approach, public sector employers

and purchasing pools may take advantage of retiree drug subsidies to lower their total pharmacy spending.[a]

The Role of Pharmacy Benefit Managers in Public Sector Health Care Purchasing

Most individual public sector purchasers and purchasing pools lack the leverage, expertise, and infrastructure to manage drug spending broadly and to negotiate pharmaceutical prices with manufacturers. Consequently, they typically contract with pharmacy benefit managers (PBMs) to help with claims processing and to get volume-based discounts on prescription drug purchases. PBMs also provide clinical services to public sector purchasers, including utilization management (e.g., prior authorization, step therapy, quantity limits, etc.) and quality improvement (e.g., medication therapy management).

Currently, there is limited publicly available information on how public sector purchasers contract and work with PBMs to provide pharmaceutical benefits to their beneficiaries. To gain insights into PBM relationships, we surveyed several large purchasing organizations representing more than 5 million public sector retirees, employees, and their dependents. The respondents represent geographically diverse public sector employers, ranging from state universities to a broad coalition of local and state public agencies. The respondents spent over $8 billion on pharmacy benefits in 2022, representing a nearly 6 percent inflation-adjusted increase from 2021.

The survey consisted of ten questions about services received from PBMs, the nature of contracting, rebates received, and overall satisfaction. The section below describes the survey's main findings and provides context and insights into the broader challenges facing public employers in this area.

Findings From the Survey

MEDICAL AND PHARMACY SPENDING

All respondents provide pharmacy and medical benefits and cover those benefits under self-funded arrangements. Relative to total spending, their pharmacy benefit spending (based on data they provided) remained stable over the 5-year period— accounting for roughly a quarter of their overall spend (Figure 1). Most survey respondents indicated that they do not employ strategies to shift reimbursement of provider-administered drugs—a medical benefit—to the pharmacy benefit.

[a] Changes to the tax treatment of the retiree drug subsidies under the Affordable Care Act have made that approach a less attractive option.

From 2018 to 2022, the average annual increase in inflation-adjusted total health spending for these public sector respondents was approximately 2 percent. In contrast, the mean annual increase in pharmaceutical spending (not including rebates) from 2018 to 2022 among respondents was 5 percent. Within the pharmacy spending category, specialty drugs, on average, increased at 9 percent annually compared to non-specialty drugs, which increased at 3 percent annually. Pharmacy spending therefore is outpacing medical spending and spending on specialty pharmaceuticals has an outsized influence on pharmaceutical spending increases.

Pharmaceutical Spending as a Proportion of Total Health Care Spending

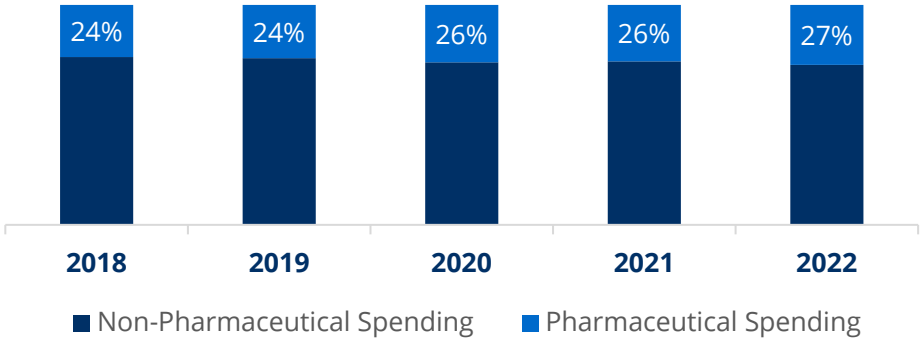

Figure 1 - Pharmaceutical spending as a proportion of total health care spending from 2018 to 2022 among survey respondents

CURRENT PBM RELATIONSHIPS

Figure 2 shows the duration of PBM relationships with public sector employers. Nearly half of the respondents (n=9) indicated that they have contracted with their current PBMs for approximately 5 years . Most of the remaining respondents have relationship lengths greater than 10 years (n=7), showing ongoing satisfaction with their PBMs. Still, most respondents noted that they re-evaluate their PBM contracts every 5 years, suggesting ongoing assessment of the value provided by a given PBM in meeting the needs of the employer's prescription drug benefit offering and the use of competitive bidding to make that evaluation. Overall, respondents note that they routinely engage in a competitive bidding process every 3 to 7 years.

Contract Length for Current PBM

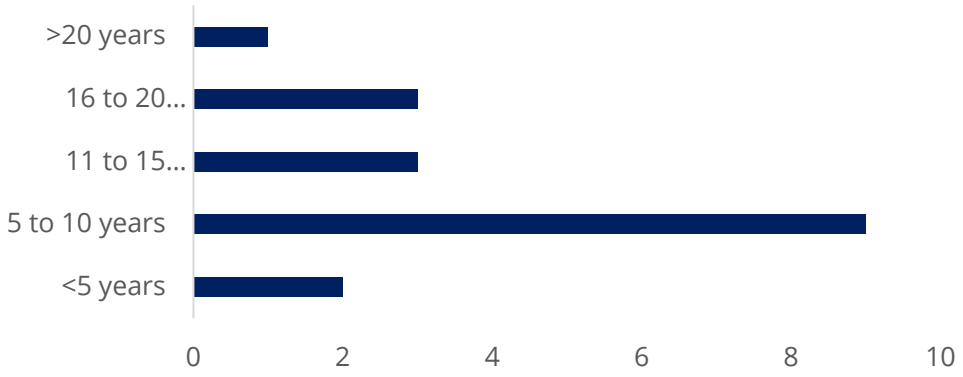

Figure 2 - Length of current PBM Contract

SERVICES RECEIVED

PBMs provide a variety of services, and purchasers depend on their contracting flexibility to design comprehensive benefits based on their members' needs. All respondents indicated that in addition to claims processing, they rely on their PBMs to maintain formularies, execute utilization management strategies (e.g., prior authorization), conduct drug utilization reviews, and negotiate and provide rebates. For over 90 percent of the respondents, PBMs also provide medication therapy management and help fulfill requirements for pharmacy and therapeutics committee meetings. Most respondents indicated that they would be unable to provide these services without contracting with a PBM. Only a single respondent indicated that they would be providing at least one of the current PBM-administered services themselves or through another channel within the next five years.

When asked which services they wish their PBMs would provide in the future, some respondents indicated that they would like their PBMs to leverage artificial intelligence and technology for improvement in member experience and care coordination.

Finally, some respondents indicated that they plan to expand their services received from their PBMs, either by taking advantage of the offering of medication therapy management or moving formulary and utilization management of drugs provided under the medical benefit to PBMs.

REBATES

Most of the respondents receive pass-through rebates from their PBMs with flat and stable administrative fees. This structure allows for all rebate savings to be passed on to the purchasers. Those with such contracts cited the desire for transparency as the primary reason for using that approach. Some respondents have traditional contracts that do not provide pass-through rebates, preferring that approach for expected higher aggregate savings compared to a contract with pass-through rebates.

All respondents use the full amount of rebate savings to lower beneficiaries' premiums and out-of-pocket costs. Minimizing premium increases for the pharmacy benefit is an essential component of health care and drug affordability for the public sector purchasers and contributes to better medical adherence. Evidence suggests that EGWP retiree beneficiaries have more stable out-of-pocket costs and that they may be more likely to adhere to chronic medications compared to their non-EGWP MA counterparts.[9]

SATISFACTION WITH PBM SERVICES

Most respondents from the survey indicated that they are satisfied with their PBMs in helping them ensure access to therapies while keeping cost growth down (Figure 3). In addition to the advantages of a competitive bidding process (routinely conducted every 3 to 7 years), public sector purchasers find manufacturer rebates provided by PBMs an offering that helps them lower enrollee cost-sharing and premiums. Consequently, rebates were ranked as the most competitive aspect of the PBM contract (Figure 4). Moreover, public sector purchasers use a variety of cost containment strategies provided by their PBMs, including formulary management, utilization management, and drug utilization reviews. These services help public sector employers in both lowering their pharmacy spending and ensuring that the employees are receiving guideline-directed and cost-effective therapies.

Reasons cited for dissatisfaction with PBMs included lack of innovative clinical and cost-management strategies (n=1) and inability to effectively control pharmacy spending (n=2), suggesting future areas of need for those public sector purchasers.

Some common reasons cited for satisfaction with PBMs included good value (n=3), and the ability to collaborate and provide customized solutions (n=3). Most respondents who were satisfied with their PBMs also cited the importance of PBMs in cost control and pharmacy claims adjudication.

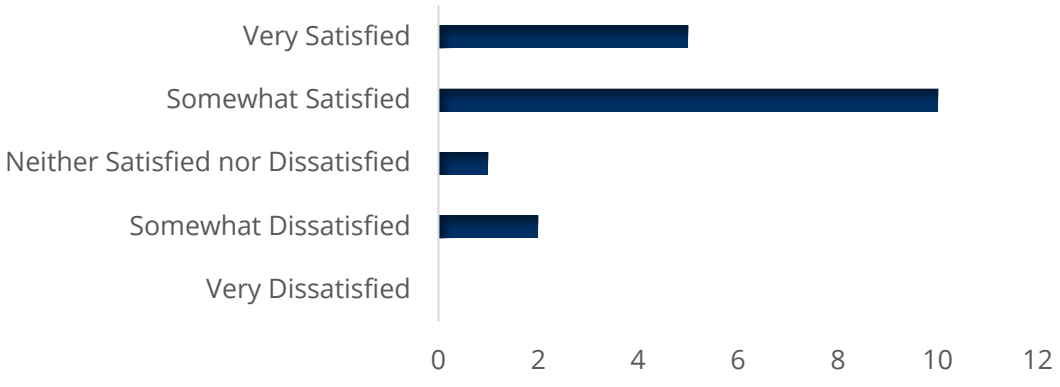

Figure 3 - Satisfaction with PBMs among public sector purchasers

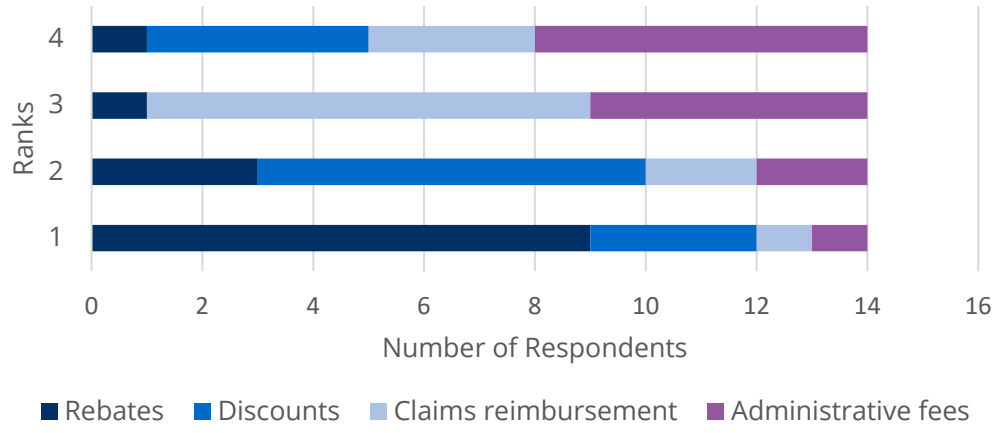

Figure 4 - Ranking Competitiveness of Services provided by PBMs. (1=most competitive, 4=least competitive).

Current Public Sector Purchasing Strategies to Reduce Drug Spending

Various solutions have been proposed and/or implemented to address rising pharmaceutical spending by public sector purchasers. Approaches have focused on collective interagency purchasing agreements and the use of reference pricing and innovative bidding strategies. The following are some examples of contracting and other strategies employed by public sector purchasers.

Contracting Strategies

COLLECTIVE PURCHASING

While Medicaid plans account for a considerable proportion of pharmaceutical spending for states, prescriptions for Medicaid enrollees are eligible for mandatory rebates, which help reduce overall prescription costs. Such mandatory rebates do not apply in the case of prescription drugs for state employees and retirees. However, states have an opportunity to collectively purchase pharmaceutical services from a single PBM across all state and local agencies and achieve higher levels of savings by creating alignment within their formularies and preferred drug lists. For example, Washington State leverages its purchasing power for multiple intrastate agencies, through the Washington Prescription Drug Program housed in the Washington Health Care Authority and participates in a joint purchasing consortium with Oregon, Nevada, and Connecticut called ArrayRx to reduce spending for services not covered under current health plans. The Washington program (a) offers significant support in running

ArrayRx and (b) provides pharmacy benefits for Medicaid, active state employees, retirees, public school employees and workers' compensation within the state. Having partnership with a single PBM for multiple state agencies and participation in ArrayRx provides leverage to Washington in contract negotiations with pharmaceutical manufacturers.

VALUE-BASED PURCHASING

Some public sector purchasers have shown significant interest in shifting their pharmaceutical reimbursement approach to one based on the value of the drug, reflecting broader and successful efforts in management of medical benefits. For example, the California Public Employees' Retirement System (CalPERS) participated in drafting a report from the Institute of Cost Effectiveness Research to advise on key steps to implement such a model.[10] Despite significant interest in shifting to value-based reimbursement, few other examples exist of such contracts implemented by public sector purchasers, partly because of the difficulty in operationalizing such contracts.

REVERSE AUCTIONS FOR PBM CONTRACTS

A reverse auction is a competitive procurement process where suppliers anonymously start a bidding process with the highest bid first and compete against each other by lowering their prices. Although commonly used for contractor selection in the public sector, reverse auctions have historically not been part of PBM selection. Notably, New Jersey became the first state to use an online reverse auctioning process to obtain the lowest price for pharmacy benefits for public sector employees. The state estimates this will reduce pharmacy costs for state and municipal governments, which could result in a premium reduction for school district employees, a reverse trend from preceding years. Since the state's experiment in 2017, several states have adopted the process.[11]

Other Strategies

REFERENCE PRICING

Referencing pricing is a way to implement tiered pricing of health services, where within category cost-sharing is lowest for the least expensive, but similarly effective options. Health plan enrollees can choose more expensive options, but with greater cost sharing. The Reta Trust, a public sector purchaser of health insurance for 55 Catholic organizations, implemented reference pricing within their formulary benefit design and realized $1.34 million lower spending in a single benefit year, while successfully driving utilization towards reference drugs.[12]

Reference pricing strategies may also be combined with efforts to include less expensive over-the-counter therapies in formularies to reduce overall spending in high-spend categories. The Arkansas State Employee Benefit Division started covering over the counter omeprazole in its formulary with low copayment and provided increased reimbursement to pharmacies in the

form of dispensing fees for dispensing the over-the-counter version.[13] This effort successfully shifted utilization of omeprazole from the prescription formulation to an over-the-counter product and resulted in estimated annual savings of $30 per enrollee.[14]

SUBSCRIPTION PURCHASING AGREEMENTS

States may face a significant burden for treatment of certain diseases, especially when such diseases have high prevalence and/or have expensive therapeutic options. State specific initiatives for subscription models for hepatitis C therapies have shown success in states like Washington, which has been successful in securing subscription agreements across multiple state agencies.[15] Such a strategy could be leveraged by collective action of multiple public sector purchasers for acute or chronic diseases with very expensive therapies. Those subscription purchasing agreements, when combined with value-based contracting designs, promise to help reduce future costs for ultra-expensive therapies that are likely to pose substantial cost-related burdens on public sector employers.

INCENTIVES FOR PRESCRIPTION OBTAINMENT FROM FOREIGN PHARMACIES

In 2018, a Utah public sector purchaser, the Public Employees Health Program (PEHP), created an incentive program for their enrollees to obtain high-cost drugs from Mexico. The plan provided transportation to Mexico and a $500 incentive to members who elected to pursue the pharmacy tourism option.[16] However, broader use of this approach raises concerns about the quality control of the products obtained in other countries and questions exist about the ability to scale the benefits of such programs.

Tackling Future Challenges with Rising Drug Costs

The survey asked respondents if they are considering any major changes to address the increasing cost of specialty drugs for their plans. Most respondents indicated that they are partnering with their PBMs or third parties to leverage copay maximizers and are also considering copay accumulator programs. Interest was high in ways to engage members in real time to make sure that they are adherent to and benefiting from their specialty drugs. Others expressed interest in finding ways to establish fair value of high-cost drugs and develop innovative reimbursement mechanisms.

The following are potential strategies public sector employers may take in the future to help minimize increases in drug costs and the extent to which they may rely on PBMs to help them adopt those strategies.

INCREASED PRICE TRANSPARENCY WITH REAL-TIME BENEFIT TOOLS

Many health systems now have access to real-time benefit tools as part of their electronic health records. Effective January 2023, Part D sponsors were required to provide patient access to those tools. Although currently required in only Medicare Part D, availability of lower-priced alternatives to patients and their prescribers can be helpful in selecting low-cost effective treatments.[17]

PBMs have a unique opportunity to present enrollees with a user-friendly interface to inform them about potentially lower-cost options and encourage a discussion about out-of-pocket costs with their prescribers. While out-of-pocket costs are considered an important factor by clinicians, evidence suggests that conversations about costs are rare, and clinicians are often unaware of their patients' cost-sharing obligations.[18] Recent data also suggest that most clinicians are not engaging with the real-time benefit function in their electronic health record.[19]

COORDINATION OF UTILIZATION MANAGEMENT STRATEGIES BETWEEN MEDICAL AND PHARMACY BENEFITS

The fastest growth in pharmaceutical spending has been for physician-administered drugs, which are typically reimbursed based on average sales price.[20] High list prices for many physician-administered biologics yield greater reimbursement for practices, creating an incentive for providers to choose more expensive drugs. To curb the spending for physician-administered drugs, employer purchasers are looking to shift some drugs to the pharmacy benefit to ensure stricter utilization management and to decouple practice-based reimbursement. Considerations in this area focus on ensuring coordination between medical and pharmacy benefits, including utilization management and step-therapy requirements.

VALUE-BASED CONTRACTING

There are many highly effective, but expensive therapies in the drug development pipeline. Most of these therapies are for orphan diseases and many are potentially curative gene therapies. Employer purchasers see the need to move more aggressively towards value-based contracting approaches to handle the coming cost pressures. Such value-based contracts—also called outcomes-based pricing— present opportunities for states to form joint contracts for public sector employees, as well as Medicaid enrollees, and potentially realize savings for a larger population pool. As most states do not have extensive experience in value-based contracting for pharmaceutical products, partnerships with experienced PBMs may provide an avenue to implement such contracts statewide. Considerations for the future include how to align outcomes-based pricing with policies under the Medicaid program that require states to get the best price on the market.

FOREIGN IMPORTATION PROGRAM

The United States has higher list prices for branded drugs compared to other industrialized countries, which, has led to advocacy for the importation of drugs from abroad at lower list prices.[21] The Department of Health and Human Services (HHS) finalized a rule in 2022, which allows states to import select drugs for distribution to pharmacies.[22] In 2019, Colorado passed legislation mandating the state to operate a program importing drugs from Canada, from manufacturers and prescription drugs that have been approved by the US Food and Drug Administration (FDA).[23] The approach may not offer a long-term solution for all public sector purchasers, however. Notably, evidence from the European Union on parallel trade of pharmaceuticals has resulted in significant shortages in countries with lower prices.[24]

INCREASE SUPPLY OF SELECT PHARMACEUTICALS THROUGH PARTNERSHIP WITH MANUFACTURERS

Shortages of critical, injectable drugs raise substantial challenges for health systems, resulting in high costs and more frequent medical errors.[25–27] Recent drug shortages of mostly generic drugs resulted from disruptions in production and supply of drugs. To address these concerns, a group of fifty health systems founded a nonprofit generic pharmaceutical manufacturing company—CivicaRx.[28] This company identified the most critical drugs necessary for production, and contracted with existing manufacturers with marketing and production rights to help fill existing gaps in manufacturing.[29] CivicaRx's manufacturing capabilities make it an attractive partner in helping reduce costs for payers. In March 2023, California became the first state to forge such a partnership by creating CalRx, a partnership between the state and CivicaRx.[28] The state invested $50 million in CalRx to produce biosimilar insulin products to help reduce state spending for state entities (MediCal, CalPERS and California Correctional Health Care Services). In addition to recent steps by insulin manufacturers to reduce the list prices, CalRx expects to save 50 percent or more per vial of insulin used through CalRx. The success of this model will partly depend on CivicaRx's ability to produce biosimilars and obtain interchangeability status with the FDA, meaning manufacturers must conduct additional studies to gain interchangeability status for biosimilars. Many state laws also allow pharmacies to substitute a reference biologic with an interchangeable biosimilar. The success of California's program could pave the way for other states who continue facing high costs for pharmaceutical products with generic or biosimilar alternatives.

EVIDENCE DISSEMINATION

While public sector purchasers have moved forward with innovative programs to reduce increases in pharmaceutical spending, the evidence base about the outcomes of such strategies is still evolving. Collaborative efforts to pilot, assess, and share information about approaches to reduce prescription drug spending will be important for public sector employers.

Future of Pharmaceutical Purchasing by Public Sector Employers

The challenge of rising drug prices will require innovative solutions by public sector purchasers and the PBM partners they contract with. In addition to traditional utilization management services, rebates and transparency in their contracts, public sector purchasers desire higher enrollee engagement to reduce overall pharmaceutical spending. Public sector purchasers have substantial concerns about the budgetary implications of the advent of newer, highly effective cell and gene therapies and orphan drugs. Those purchasers face significant exposure to risks associated with reimbursement for any such drugs that are billed on the pharmacy side. Capabilities to formulate and implement value-based contracts, as well as offering innovative solutions to proactively reduce total health care spending will be highly sought-after services by public sector purchasers.

References

1. Bureau of Labor Statistics. Occupational Employment and Wages in State and Local Government: Spotlight on Statistics: U.S. Bureau of Labor Statistics [Internet]. [cited 2023 Jul 28]. Available from: https://www.bls.gov/spotlight/2021/occupational-employment-and-wages-in-state-and-local-government/home.htm
2. Munnell AH, Aubrey J-P, Hurwitz J, Quinby L. Comparing Compensation: State-Local versus Private Sector Workers [Internet]. [cited 2023 Jun 29]. Available from: https://crr.bc.edu/wp-content/uploads/2011/09/slp_20-508.pdf
3. Claxton G, Rae M, Wager E, Young G, Whitmore H, Kearns J, et al. Employer Health Benefits Survey - 2022 Annual Survey [Internet]. Kaiser Family Foundation; 2022 [cited 2023 Jul 27]. Available from: https://www.kff.org/health-costs/report/2022-employer-health-benefits-survey/
4. Hamel L, Lopes L, Kirzinger A, Sparks G, Kearney A, Stokes M, et al. Public Opinion on Prescription Drugs and Their Prices | KFF [Internet]. 2022 [cited 2023 Jul 28]. Available from: https://www.kff.org/health-costs/poll-finding/public-opinion-on-prescription-drugs-and-their-prices/
5. Kurani N, Cotliar D, Cox C. How do prescription drug costs in the United States compare to other countries? - Peterson-KFF Health System Tracker [Internet]. 2022 [cited 2023 Jul 25]. Available from: https://www.healthsystemtracker.org/chart-collection/how-do-prescription-drug-costs-in-the-united-states-compare-to-other-countries/
6. Parasrampuria S, Murphy S. Trends in Prescription Drug Spending, 2016-2021. Office of Science & Data Policy, U.S. Department of Health & Human Services; 2022 Sep.
7. Cuckler GA, Sisko AM, Poisal JA, Keehan SP, Smith SD, Madison AJ, et al. National Health Expenditure Projections, 2017-26: Despite Uncertainty, Fundamentals Primarily Drive Spending Growth. Health Aff (Millwood). 2018 Mar;37(3):482–92.
8. Congressional Budget Office. Prescription Drugs: Spending, Use, and Prices [Internet]. 2022 [cited 2023 Oct 20]. Available from: https://www.cbo.gov/publication/57772
9. Trish E, Kaiser K, Joyce G. Association of Out-of-Pocket Spending with Insulin Adherence in Medicare Part D. JAMA Netw Open. 2021 Jan 4;4(1): e2033988.
10. Seider M, Edmond SK, Pearson SD. Applying the results of comparative effectiveness research to control drug costs: policy options for California. Institute for Clinical and Economic Review; 2023 Mar.
11. Winegarden W, Ph. How New Hampshire can save tens of millions of dollars a year on prescription drugs for state employees [Internet]. [cited 2023 Aug 16]. Available from: https://jbartlett.org/wp-content/uploads/JBC-Reverse-Auction-For-PBM-services-Study-Winegarden.pdf
12. Robinson JC, Whaley CM, Brown TT. Association of Reference Pricing with Drug Selection and Spending. N Engl J Med. 2017 Aug 17;377(7):658–65.
13. Harris BN, West DS, Johnson J, Hong SH, Stowe CD. Effects on the cost and utilization of proton pump inhibitors from adding over-the counter omeprazole to drug benefit coverage in a state employee health plan. J Manag Care Pharm. 2004;10(5):449–55.
14. Johnson JT, Neill KK, Davis DA. Five-year examination of utilization and drug cost outcomes associated with benefit design changes including reference pricing for proton pump inhibitors in a state employee health plan. J Manag Care Pharm. 2011 Apr;17(3):200–12.
15. Dunn A. AbbVie wins hep C contract with Washington state in latest “Netflix” deal | BioPharma Dive [Internet]. 2019 [cited 2023 Sep 27]. Available from: https://www.biopharmadive.com/news/abbvie-wins-hep-c-contract-with-washington-state/553576/
16. The Center for Biosimilars. Utah to Pay Public Employees to Fill Prescriptions for High-Cost Drugs in Mexico [Internet]. 2018 [cited 2023 Sep 27]. Available from: https://www.centerforbiosimilars.com/view/utah-to-pay-public-employees-to-fill-prescriptions-for-highcost-drugs-in-mexico
17. Centers for Medicare and Medicaid Services. Federal Register: Medicare and Medicaid Programs; Contract Year 2022 Policy and Technical Changes to the Medicare Advantage Program, Medicare Prescription Drug Benefit Program, Medicaid Program, Medicare Cost Plan Program, and Programs of All-Inclusive Care for the Elderly [Internet]. Federal Register Website. 2021 [cited 2021 Feb 6]. Available from: https://www.federalregister.gov/documents/2021/01/19/2021-00538/medicare-and-medicaid-programs-contract-year-2022-policy-and-technical-changes-to-the-medicare
18. Sloan CE, Millo L, Gutterman S, Ubel PA. Accuracy of Physician Estimates of Out-of-Pocket Costs for Medication Filling. JAMA Netw Open. 2021 Nov 1;4(11): e2133188.
19. Sinaiko AD, Sloan CE, Soto MJ, Zhao O, Lin C-T, Goss FR. Clinician response to patient medication prices displayed in the electronic health record. JAMA Intern Med. 2023 Sep 5;
20. Dusetzina SB, Huskamp HA, Qin X, Keating NL. Prescription Drug Spending in Fee-for-Service Medicare, 2008-2019. JAMA. 2022 Oct 18;328(15):1515–22.
21. Mulcahy A, Whaley C, Gizaw M, Schwam D, Edenfield N, Becerra-Ornelas A. U.S. prescription drug prices are 2.5 times those in other OECD countries. RAND Corporation; 2021.
22. Federal Register: Importation of Prescription Drugs Final Rule Questions and Answers; Guidance for Industry: Small Entity Compliance Guide; Availability [Internet]. [cited 2023 Sep 26]. Available from: https://www.federalregister.gov/documents/2022/05/26/2022-11276/importation-of-prescription-drugs-final-rule-questions-and-answers-guidance-for-industry-small
23. Colorado State Assembly. Senate Bill 19-005. 2019 [cited 2023 Sep 27]; Available from: https://leg.colorado.gov/sites/default/files/2019a_005_signed.pdf
24. Kanavos P, Costa i Font J, Merkur S, Gemmill M. The economic impact of pharmaceutical parallel trade in European Union. 2004 Jan 1 [cited 2023 Sep 27]; Available from: https://www.lse.ac.uk/business/consulting/assets/documents/the-economic-impact-of-pharmaceutical-parallel-trade-in-european-union-member-states.pdf
25. Griffith MM, Gross AE, Sutton SH, Bolon MK, Esterly JS, Patel JA, et al. The impact of anti-infective drug shortages on hospitals in the United States: trends and causes. Clin Infect Dis. 2012 Mar 1;54(5):684–91.
26. Fox ER, Sweet BV, Jensen V. Drug shortages: a complex health care crisis. Mayo Clin Proc. 2014 Mar;89(3):361–73.
27. Kaakeh R, Sweet BV, Reilly C, Bush C, DeLoach S, Higgins B, et al. Impact of drug shortages on U.S. health systems. Am J Health Syst Pharm. 2011 Oct 1;68(19):1811–9.
28. Feldman R. Calrx biosimilar insulin: california’s initiative to enter the insulin market. JAMA Intern Med. 2023 Oct 1;183(10):1043–4.
29. National Academy of State Health Policy. How States Can Join Civica Rx and Blue Cross Blue Shield’s Partnership for an Affordable, Sustainable Supply of Generics [Internet]. 2020 [cited 2023 Nov 17]. Available from: https://nashp.org/how-states-can-join-civica-rx-and-blue-cross-blue-shields-partnership-for-an-affordable-sustainable-supply-of-generics/

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