Questions for the Record from the Senate Committee on the Judiciary: "PBM Power Play: Examining Competition Issues in the Prescription Drug Supply Chain"

Responses from Neeraj Sood, PhD

Senator Booker:

1. **Pharmacy Benefit Managers (PBMs) are not the only contributor to high prices and lower quality of care in the healthcare markets. Increasing vertical integration in the health care industry also has allowed powerful market players to increase their profits often at the expense of patient care.**

   In a public comment from an OBGYN based in New Jersey, submitted to the Federal Trade Commission's 2024 request for information regarding consolidation in health care markets, the doctor wrote that private equity-backed models of practice pushed her out of her profession providing women's health care. She wrote that in her previous private equity-backed practice she "had little to no input [on] how [she] coordinated [her] schedule, patient visits[,] or time [she] was able to provide care." Additionally, "many of [her] patients received surprise bills and bills outside of the scope of their care." She "had little guidance to offer them . . ." and "[t]he billing department and HR department were superfluously staffed and often ineffective." Because of the "corporatization" of her practice, this New Jersey doctor was forced to leave the practice. And she said because of a non-compete clause in her employment agreement, she was barred from working at another practice for 12 months. This is unacceptable amidst our nation's ongoing doctor shortage, with patients having to wait months for care and follow up treatments.

   We tend to think doctors work for physician-owned practices or hospitals, but UnitedHealth Group's Optum Health subsidiary is now the largest employer of physicians in the country, with 90,000 physicians. Optum is also one of the Big Three PBMs controlling which drugs an insurance plan will cover. Additionally, United Health Group operates a data and analytics business, its own bank providing billions in health savings accounts, and owns surgery centers, hospice centers, home health agencies, pharmacies and more, up and down the health supply chain. When this complex large business is also denying patients' claims for procedures or medications, the question becomes: who benefits from the concentration of power within this one big business?

   a. **How does vertical integration in the health care industry harm patients, physicians, and independent pharmacies?**

Vertical integration in healthcare – or combining different players in the health care ecosystem under one corporate umbrella – harms patients, physicians and independent pharmacies by reducing competition and increasing costs for patients. First and foremost this integration creates fundamental conflicts of interest. For example, a PBM that owns pharmacies has strong incentives to prioritize its own pharmacies and disadvantage independent pharmacies, resulting in lower competition in the pharmacy market and restricted choice for patients, while a PBM that is vertically integrated with an insurer but also provides PBM services to other insurers has a strong incentive to disadvantage its insurer clients that compete with its parent insurer, again resulting in lower competition in the insurance market and higher premiums for consumers. Second, vertical integration reduces competition by deterring entry in healthcare markets. For example, new physicians might be reluctant to set up independent physician practices given that insurers will likely steer patients to their own physicians.

Third, as you note in the question, physicians employed by hospital systems or other corporate entities report reduced autonomy. Fourth, prior research suggests vertical integration between hospitals and physicians leads to higher prices for services. Fifth, vertical integration creates an opaque system where corporate entities can hide profits and limit choices for consumers.

Our research documents the scope of this consolidation in the Medicare Part D market. We found the market share of insurance companies owned by PBMs grew from approximately 30 percent to 80 percent between 2010 and 2018 in the Medicare Part D market, and simultaneously, premiums increased for non-vertically integrated insurers who receive PBM services from a rival plan, with these premium increases becoming more pronounced as standalone PBMs exited the market or were acquired by vertically-integrated PBMs. These findings demonstrate that vertically-integrated PBMs raise rivals' costs and increase premiums for Medicare beneficiaries, while our broader financial analysis shows these integrated entities earn excess returns of 5.9% compared to 3.6% for S&P 500 companies. For patients, this translates to restricted medication access—with drug restrictions rising from 31.9% to 44.4% in Medicare Part D—and higher out-of-pocket costs, as our insulin study revealed PBMs captured an increasing share of expenditures while negotiating lower manufacturer prices, creating a system where vertical integration has enabled consolidated firms to increase their financial returns by limiting competition, raising costs for public and private payers, and reducing the transparency and affordability of care for individuals.

b. In your work on "Disadvantaging Rivals: Vertical Integration in the Pharmaceutical Market," from the National Bureau of Economic Research, you detailed the harms of vertical consolidation between insurers and PBMs. Can you describe how insurer-PBM consolidation drives costs up generally?

Insurer-PBM consolidation drives up costs as a PBM that is vertically integrated with an insurer but also provides PBM services to other insurers has a strong incentive to disadvantage its insurer clients that compete with its parent insurer, resulting in lower competition in the insurance market and higher premiums for consumers. In examining the Medicare Part D market, we found that as PBM-insurer integration grew from approximately 30% to 80% market share between 2010-2018, premiums increased for non-vertically integrated insurers. This suggests that vertically-integrated PBMs raise rivals' costs and increase premiums for Medicare beneficiaries.

Our financial analysis reveals that insurers/PBMs/retailers have significantly higher excess returns compared to the S&P 500 (5.9% vs. 3.6%), indicating these entities extract economic rents well beyond what would be expected in a competitive marketplace. In the insulin market, for example, the share of expenditures captured by PBMs increased nearly threefold between 2014-2018, while manufacturers' net prices decreased by 33%. These findings demonstrate that PBMs are negotiating lower prices from manufacturers but have little to no competitive pressure to pass these savings on to patients or payers.

c. How are taxpayers affected when the federal government has outsourced the administration of public drug benefits to private insurers and PBMs?

My research has shown that more than 40% of what is spent on prescription drugs does not go to the manufacturers who develop these drugs, but instead flows to intermediaries such as insurers and PBMs. These entities often operate within vertically integrated systems that capture outsized profits—returns that far exceed those seen in a competitive marketplace. In public programs like Medicare Part D, these

dynamics drive up overall program costs. For example, we found that premiums for beneficiaries increased when PBMs were vertically integrated with rival insurers, raising costs not just for patients but also for taxpayers who subsidize these programs. Moreover, the rebate-driven business model of PBMs contributes to inflated list prices, which in turn elevates patient cost-sharing and overall spending. This system obscures the real cost of drugs and limits the ability of public programs to assess value effectively. In one study, we found that Medicare could have saved $2.6 billion in a single year on just 184 generic drugs if it had paid Costco cash prices rather than going through Part D plans. These inefficiencies represent a direct loss to taxpayers. In short, PBM involvement in the drug distribution system without appropriate oversight and transparency results in higher public expenditures, reduced accountability, and a system that often fails to pass savings on to those who need them most.

Senator Klobuchar

1. **We have seen significant consolidation across healthcare markets—from pharmaceuticals to hospitals. This mirrors trends we've seen across the economy, which is why Senator Grassley and I passed the Merger Filing Fee Modernization Act into law to infuse antitrust enforcers with needed resources to investigate and, when appropriate, block illegal mergers that could raise prices for patients and consumers.**
    a. **Why is it so important that antitrust enforcers have increased resources to stop anticompetitive mergers or conduct in health care markets?**

Strengthening antitrust enforcement in healthcare markets is essential. We've documented alarming concentration levels—just three PBMs control about 80% of the prescription market, with the top five controlling 93.6% of Medicare Part D. All PBM markets now exceed the Department of Justice's threshold for "highly concentrated" markets. This concentration enables excessive profits; our analysis shows insurers/PBMs/retailers earn significantly higher excess returns than the average S&P 500 company (5.9% vs. 3.6%). The potential for anticompetitive effects from vertical integration warrants close antitrust scrutiny, particularly practices that weaken standalone competitors, such as steering lucrative prescriptions to affiliated pharmacies or giving preferential treatment to affiliated plans. Consumer harm is escalating through increasingly restrictive formularies and utilization management policies. The complexity of healthcare markets—with opaque pricing mechanisms, complicated money flows, and numerous conflicts of interest—demands sophisticated enforcement capabilities and adequate staffing to identify and challenge anticompetitive practices. Without such resources, the problems we've identified will only worsen, leading to higher healthcare costs, reduced access, and further market distortions.

Senator Lee

a. The largest PBMs use spread pricing for pharmacy reimbursement. These PBMs retain a portion of rebates, which do not flow to the end consumers. Why do benefits brokers and consultants continue to advise plan sponsor payer clients to use PBMs which utilize this strategy?

PBMs that engage in spread pricing retain a portion of the difference between what they charge health plans and what they reimburse pharmacies. These retained revenues do not flow to consumers or plan sponsors but instead contribute to the PBMs' profits. Despite this, benefits brokers and consultants often continue to advise their payer clients to work with such PBMs due to a combination of market opacity and incentive misalignment.

First, the PBM market is highly concentrated, with just three PBMs—CVS/Caremark, Express Scripts, and OptumRx—controlling around 80% of the prescription drug market. This limited competition restricts the choices available to plan sponsors and brokers.

Second, there is significant information asymmetry: plan sponsors often do not have access to complete or transparent data regarding pharmacy claims, rebate arrangements, or actual drug costs. Without this

visibility, it is difficult for payers to evaluate whether they are receiving fair value or to compare PBM performance effectively.

Furthermore, brokers and consultants may have financial or contractual relationships with the PBMs they recommend. These relationships can create conflicts of interest that may not be disclosed to the plan sponsors they advise. Because of this lack of transparency and the concentration of market power, brokers may favor PBMs with whom they have established arrangements, even if those PBMs use spread pricing and retain rebates in ways that do not benefit end consumers. Ultimately, the structure of the market and the opacity of PBM operations undermine the ability of plan sponsors to make informed choices. This dynamic helps sustain the use of cost-inflating strategies like spread pricing and rebate retention, even when these practices run counter to the interests of patients and payers.

b. What alternatives exist to the spread pricing model that would better benefit consumers?

To better benefit consumers, we should require PBMs to act as fiduciaries to the health plans, employers, and public programs they serve. This would impose a legal obligation on PBMs to prioritize the interests of their clients. Currently, PBMs often charge health plans more than they reimburse pharmacies and retain rebates and fees from manufacturers—practices that lack transparency and do not benefit patients. A fiduciary standard would help correct these misaligned incentives and ensure PBMs are working to secure better value for their clients.

In addition to establishing a fiduciary responsibility, increasing transparency in the pharmaceutical supply chain is essential. The Department of Health and Human Services (HHS) should develop and publish public benchmarks for average drug prices at key transaction points. This would enable health plans and other payers to better evaluate PBM performance and promote competitive pressure in the market.

Finally, reforming the rebate system is critical. Patients should pay cost-sharing based on actual, post-rebate prices—not artificially inflated list prices. Our research shows that the current rebate system leads to higher list prices and out-of-pocket costs, especially for patients in high-deductible or coinsurance-based plans. By increasing transparency, mandating fiduciary duty, and reforming the rebate model, we can move toward a system where the financial benefits of negotiated discounts actually reach the consumers they are intended to help.

c. Benefits brokers and consultants receive compensation from the Big 3 PBMs when they recommend their products to clients. Does this practice increase the friction in the transaction and if so, would prohibiting PBMs from compensating benefits brokers who work for plan sponsor payers affect the competitive landscape between PBMs?

Although my research does not specifically address compensation from PBMs to benefits brokers, it is clear that any financial relationship that creates a conflict of interest between brokers and the plan sponsors they advise would increase friction in the transaction and undermine competition. The core issue is incentive misalignment—when intermediaries like PBMs or brokers are not legally or structurally required to act in the best interest of the plan sponsor or consumer, the system can be gamed to maximize profits rather than value. This is why I have recommended that PBMs be held to a fiduciary standard—to ensure they act in the best interest of their clients.

A similar logic applies to benefits consultants. If brokers are financially incentivized by PBMs to recommend certain plans, they may steer plan sponsors toward options that are less cost-effective or less transparent. This further entrenches the market dominance of the "Big 3" PBMs—CVS Caremark, Express Scripts, and OptumRx—who already control about 80% of the market. Prohibiting PBMs from compensating benefits brokers who work for plan sponsors could help reduce this friction. It would encourage brokers to provide more objective advice and allow smaller or more transparent PBMs to compete on a level playing field. In a market already characterized by high concentration and limited choice, such a policy could improve competition and reduce costs by increasing accountability and transparency in plan selection. In short, any step that reduces hidden incentives and aligns decision-makers with the interests of consumers and payers is likely to improve the functioning of the prescription drug market.

d. How has recent vertical integration between PBMs and insurers affected competition, pricing, and access to generics and biosimilars?

Our research demonstrates that PBMs significantly contribute to rising prescription drug list prices through their rebate negotiation model. Their rebate model—especially the percentage-based structure—encourages manufacturers to raise prices in order to secure favorable formulary placement. As a result, for every dollar a manufacturer pays in rebates to a PBM, list prices go up by about $1.17. This setup hurts patients, especially those with high-deductible plans or coinsurance, because they end up paying based on inflated list prices, not the lower, negotiated prices that are hidden and rarely passed down at the pharmacy counter.

The rebate system created by PBMs also affects access to generics and biosimilars. PBMs operating under rebate-driven business models often favor brand-name drugs that offer higher rebates over lower-cost generics or biosimilars, which offer little to no rebate incentive. As a result, lower-cost alternatives are excluded from preferred formulary positions or face greater restrictions, making it more difficult for patients to access these more affordable options. This practice not only increases overall costs but also undermines the competitive role that generics and biosimilars are supposed to play in lowering drug prices.