Selective Contracting in Prescription Drugs: The Benefits of Pharmacy Networks

Joanna Shepherd
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ABSTRACT

Selective contracting in health care involves contractual arrangements among insurers and health care providers that give covered individuals a financial incentive to obtain health care from a limited panel of providers. Although selective contracting has been an important strategy of health insurance plans for decades, it has only recently expanded to prescription drug coverage. Drug plans now create pharmacy networks that channel customers to in-network pharmacies. Pharmacies compete to be part of the networks by offering discounts on the drugs they sell to covered customers and drug plans. Although networks can lower prescription drug costs for drug plans and consumers, opponents have argued that they also reduce access to care because consumers can only visit certain providers. In this Article, I use the principles of economic theory, the conclusions of previous empirical studies, the determinations of the FTC, and proprietary data I obtained from the largest pharmacy benefit manager in the United States to analyze both the claims in support of pharmacy networks and the arguments against them. I find that pharmacy networks significantly lower the cost of prescription drugs for drug plans and consumers. Moreover, pharmacy networks have almost no effect on most consumers’ access to pharmacies; the overwhelming majority of consumers live near retail pharmacies that are included in exclusive pharmacy networks.

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* Associate Professor of Law; Emory University School of Law.
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INTRODUCTION

Selective contracting in health care involves contractual arrangements among insurers and health care providers that give covered individuals a financial incentive to obtain health care from a limited panel of providers. Although insurance plans such as health maintenance organizations (HMOs) and preferred provider organizations (PPOs) have engaged in selective contracting for decades, only recently has the practice expanded to prescription drug plans. The drug plans form exclusive arrangements with retail pharmacies that promise to

1. Jill A. Marsteller et al., The Resurgence of Selective Contracting Restrictions, 22 J. HEALTH POL. POL’Y & L. 1133, 1134 (1997) (“The central premise behind selective contracting is that managed care organizations (MCOs) can provide high quality care at a lower cost than traditional indemnity insurance plans by limiting the number and balancing the types of providers that plan enrollees may visit.”).
2. Id. at 1136–37.
steer insured individuals to in-network pharmacies. The pharmacies, eager to be part of an exclusive network that will offer significant sales, compete aggressively to be included in the network by offering price discounts for filling prescriptions. As a result, selective contracting can lower the cost that both drug plans and consumers pay for prescription drugs.

Although pharmacy networks can reduce prescription drug costs for drug plans and consumers, these savings come at the expense of the retail pharmacies that must either offer price discounts to be part of exclusive networks or lose sales by not being included in the networks. As a result, pharmacy representatives have alleged various harms created by pharmacy networks. Some have argued that the networks reduce consumers’ access to care by limiting their choice of pharmacies. Others have suggested that smaller independent pharmacies may be excluded from networks. Responding to these arguments, many states and the federal government have enacted regulations that limit the ability of health


5. Cf. Michael A. Morrisey, Competition in Hospital and Health Insurance Markets: A Review and Research Agenda, 36 HEALTH SERVICES RES. 191, 192 (2001) (“The general theory is that managed care introduces price competition into health services markets. Such competition among hospitals, physicians, and other providers results in lower prices, or at least less rapidly increasing prices for services.”).

6. Id.

7. See Marsteller et al., supra note 1, at 1163.


10. Id. at 3.
insurers and/or prescription drug plans to contract selectively.11

In this Article, I use the principles of economic theory, the findings from previous empirical studies, the conclusions of the Federal Trade Commission (FTC), and a proprietary dataset to analyze both the claims in support of pharmacy networks and the arguments against them. I obtained data from Express Scripts Holding Company, the nation’s largest pharmacy benefit manager (PBM)12 that manages over one billion prescriptions each year for more than 100 million people.13 No prior study has ever reported or analyzed this data or similar data from another PBM to explore how pharmacy networks work in practice.14

I find that exclusive pharmacy networks reduce the prices for many drugs, leading to reductions in the overall spending on pharmaceuticals. When drug plans have the ability to exclude pharmacies from their network and steer patients elsewhere, pharmacies compete aggressively for selective contracts by offering price discounts for filling prescriptions.15 In general, more exclusive networks produce greater competition because they promise to channel more patients to network pharmacies.16 As a result, more exclusive networks generate even steeper price discounts.17 Indeed, data from Express Scripts confirm that clients that choose more exclusive network options pay less for the prescription drug costs of their covered individuals.18

14. Based on the Author’s review of the literature and industry reports.
15. Klick & Wright, supra note 11, at 2.
16. Id.
17. Id.
18. Express Scripts, Standard Network Data (July 17, 2013) (unpublished spreadsheet) (on file with author); infra Part IV.
I also determine that concerns about consumers’ access to care are largely unfounded. Competition among drug plans and PBMs compels them to offer plan sponsors the amount of accessibility that consumers prefer; drug plans and PBMs that did not offer the desired level of accessibility would lose out in the competitive market.\textsuperscript{19} Moreover, consumers do not appear to value accessibility as much as they do lower prices; when confronted with different plan options that vary in their degree of provider choice and price, most consumers choose the options that offer fewer provider choices and a lower price.\textsuperscript{20} Nevertheless, I conclude that pharmacy networks have almost no effect on most consumers’ access to pharmacies. Express Scripts’ data reveal that the overwhelming majority of consumers live near retail pharmacies that are included in exclusive pharmacy networks.\textsuperscript{21} In fact, the Express Scripts networks far exceed pharmacy convenience of access standards established by the Centers for Medicare and Medicaid Services (CMS).\textsuperscript{22} Thus, well-designed pharmacy networks provide customer convenience and lower the cost of healthcare.

The Article proceeds as follows. Part I discusses the history of selective contracting in both medical services and prescription drug coverage. It also explains the three basic forms of pharmacy networks: open networks, narrow networks, and preferred networks. Part II discusses challenges to selective contracting in prescription drug coverage. Most states and the federal government have enacted various laws that undermine pharmacy networks. Moreover, pharmacy groups continue to pursue litigation that aims to restrict exclusive pharmacy networks. In Part III, I analyze both the claims that


\textsuperscript{20} See Nancy Dean Beaulieu, Quality Information and Consumer Health Plan Choices, 21 J. HEALTH ECON. 43, 60 (2002) (“[F]amilies seem to value the higher quality, lower price, smaller network combination offered by certain HMOs . . . .”); Letter from FTC to Lynch, supra note 19, at 5 (“Many employers offer a choice between higher cost, higher benefit plans, and lower cost, lower benefit plans, and many employees choose the latter.”).

\textsuperscript{21} See infra Part IV.

\textsuperscript{22} See infra Part IV.
selective contracting will generate cost savings for prescription
drugs and the arguments that exclusive networks reduce
consumers’ access to care. Part IV presents a case study from
Express Scripts Holding Company. I analyze Express Scripts’
data to describe various aspects of how pharmacy networks
work in practice: the exclusivity of the networks, the cost
savings generated by the networks, and consumers’ access to
care under the networks.

I. HISTORY OF SELECTIVE CONTRACTING
IN HEALTH CARE

Since the advent of managed care in the 1980s, insurance
companies have engaged in selective contracting to lower the
price of health services.23 Health insurers created plans such as
HMOs and PPOs that formed exclusive arrangements with
health care providers that narrowed insured patients’ choices of
providers for covered services.24 This selective contracting
created intense competition among physicians, hospitals, and
other health care providers as they competed for insurers’
contracts.25 To secure these contracts and the increased
business they represented, providers offered health services at
discounted prices.26

The competition that results from selective contracting in
health insurance is exactly what economic theory would
predict.27 When insurers have the ability to exclude providers
from their network and steer patients elsewhere, providers
have significant incentives to compete aggressively for selective
contracts.28 Obtaining an exclusive agreement with an insurer
offers the possibility of significant customers and sales.29
Health care providers compete for exclusive agreements by
offering attractive services and lower prices.30 Indeed, a

23. See Morrisey, supra note 5, at 192.
24. See Glenn A. Melnick et al., The Effects of Market Structure and
Bargaining Position on Hospital Prices, 11 J. HEALTH ECON. 217, 217–18
25. Morrisey, supra note 5, at 192.
26. Marsteller et al., supra note 1, at 1134.
27. Letter from FTC to Lynch, supra note 19, at 4.
28. Id.
29. Id.
30. Morrisey, supra note 5, at 192–93 ("The general theory is that
managed care introduces price competition into health services markets . . . .
These lower prices, by the mechanism of insurance market competition, are
substantial body of empirical research has shown that selective contracting by managed care plans such as HMOs and PPOs has lowered the prices that both insurers and patients pay for health care.\textsuperscript{31}

Selective contracting has now extended from medical services to prescription drug coverage.\textsuperscript{32} Just as physicians, hospitals, and other health care providers have competed to be part of exclusive networks of covered providers for over thirty years,\textsuperscript{33} pharmacies now compete to be included in exclusive networks of pharmacies.\textsuperscript{34} The justification of pharmacy networks is identical to the economic theory behind provider networks: exclusive arrangements between prescription drug plans and retail pharmacies promise to steer insured individuals to in-network pharmacies.\textsuperscript{35} The pharmacies, eager to be part of an exclusive network that will offer significant sales, compete aggressively to be included in the network by offering price discounts for filling prescriptions.\textsuperscript{36}

In practice, much of the negotiation with retail pharmacies about network inclusion and price discounts is handled by PBMs.\textsuperscript{37} PBMs contract with health plan sponsors to manage the prescription drug benefits of their members.\textsuperscript{38} To reduce prescription drug costs, PBMs assemble networks of retail pharmacies where the individuals covered by the prescription drug plan can fill prescriptions.\textsuperscript{39} The drug plans offer covered individuals significant financial incentives to fill prescriptions passed on to purchasers in the form of lower health insurance premiums . . . . Arguably, decisions as to who gets contracts now depend on services . . . and price.”); Letter from FTC to Lynch, \textit{supra} note 19, at 4.

\textsuperscript{31} Morrisey, \textit{supra} note 5, at 192.
\textsuperscript{32} See Klick & Wright, \textit{supra} note 11, at 2.
\textsuperscript{33} See \textit{supra} notes 23–31 and accompanying text.
\textsuperscript{34} Klick & Wright, \textit{supra} note 11, at 2.
\textsuperscript{35} See \textit{id}.
\textsuperscript{36} \textit{Id}.
\textsuperscript{37} \textit{Id}.
\textsuperscript{38} See, \textit{e.g.}, \textit{id}. (“PBMs facilitate agreements among pharmaceutical manufacturers, retail pharmacies, and health plan sponsors. They engage in selective contracting to create networks of these providers, which in turn participate in specified plans to distribute health care services and pharmaceutical drugs to patients who subscribe to the plans.” (citation omitted)).
at the network pharmacies; plans generally will not cover prescriptions filled at out-of-network pharmacies, and consumers often pay lower co-pays at preferred network pharmacies.\(^40\) And, because inclusion in a network generally leads to significant revenues for the pharmacies, pharmacies compete to be included in a PBM’s network by offering discounts to the PBM.\(^41\) Pursuant to contracts negotiated with plan sponsors, PBMs pass on these savings to reduce health plan costs and drug prices for consumers.\(^42\) Confirming the lower prices, an extensive FTC study of the PBM industry found that consumers covered by a PBM-administered drug plan pay significantly less for both brand name and generic drugs than do consumers without prescription drug insurance.\(^43\)

The attractiveness of any network to a provider—either health care provider or pharmacy—depends critically on its exclusivity.\(^44\) The fewer competitors that are included in the network, the more customers and sales a particular provider or pharmacy can expect to receive.\(^45\) In contrast, individual providers or pharmacies would have no reason to bid aggressively to be part of a network that included all of the competitors in an area; customers would continue to visit their usual provider or pharmacy because their insurance plan would not give them any incentive to visit a different one.\(^46\) PBMs and drug plans typically have a variety of networks that differ in their degree of exclusivity and, in turn, the prices that consumers and health plans pay for pharmaceuticals.\(^47\)

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40. See id. at 9.
41. Id. at 3–4.
42. See id. at 8–9; Letter from FTC to Lynch, supra note 19, at 4.
43. FED. TRADE COMM’N, supra note 39, at 36.
44. See id. at 5.
45. Id. (“Retail pharmacies generally will offer higher discounts to be in a more exclusive network, because each retail pharmacy will fill a larger percentage of prescriptions if fewer retail pharmacies are in the PBM’s network.”).
These pharmacy networks take three basic forms: (1) open networks; (2) preferred networks; and (3) narrow or "limited" networks. Many pharmacy networks are "open networks" that are open to any pharmacy that agrees to offer basic discounts to the prescription drug plan and its members. In addition, many plans create a "preferred network" within the broader open network. To be part of the preferred network, pharmacies offer steeper discounts than the non-preferred pharmacies in the open network. Prescription drug plans, in turn, steer their members to the preferred pharmacies through lower co-pays and cost-sharing. Finally, some pharmacy networks are "narrow" or "limited" networks. In contrast to a preferred network, which is a subset within a broader open network, a narrow network is a stand-alone network of a limited number of pharmacies. Prescription drug plans will generally not cover prescriptions filled outside of the narrow network. As a result, pharmacies offer significant discounts to be part of narrow networks that require customers to fill prescriptions at in-network pharmacies. Thus, while pharmacies may offer discounts to be part of any pharmacy network, in general, the more exclusive the network, the larger the cost savings for both drug plans and consumers.

II. CHALLENGES FOR PHARMACY NETWORKS

Exclusive pharmacy networks have generally been popular among drug plans and consumers, but controversial among

49. Id.
50. Id.
retail pharmacies. The networks lower prescription drug costs for drug plans and consumers, but these savings come at the expense of the retail pharmacies that must either offer price discounts to be part of exclusive networks or lose sales by not being included in the networks. As a result, pharmacy representatives have alleged various harms created by network pharmacies. Some pharmacy representatives have argued that the networks limit consumers’ access to their choice of pharmacies. Others have suggested that smaller and independent pharmacies may be the pharmacies excluded from networks. Consequently, many pharmacy groups have supported legislative efforts and pursued litigation to undermine pharmacy networks. In this Part, I discuss state and federal legislation and representative legal cases that aim to restrict exclusive pharmacy networks.

A. LEGISLATIVE EFFORTS

In response to arguments from health providers and retail pharmacy representatives, many states have enacted regulations that limit the ability of health insurers and/or prescription drug plans to contract selectively. These laws fall into two related categories. “Any-willing-provider” (AWP) laws require plans to accept into their network any provider (or pharmacy) that is willing to accept the plan’s terms and conditions. For example, if a pharmacy agrees to the terms a prescription drug plan pays the pharmacies in its network, the plan must accept the pharmacy and pay it the same rate it pays the other network pharmacies. “Freedom-of-choice” (FOC)

58. See Fed. Trade Comm’n, supra note 39, at 5 (discussing how pharmacies have to offer discounts in order to be part of exclusive networks); supra note 47 and accompanying text.
60. Nat’l Cmty. Pharmacists Ass’n, supra note 8.
61. Balto & Kovacs, supra note 9, at 1–2; Nat’l Cmty. Pharmacists Ass’n, supra note 8.
63. See, e.g., Statement of Slovin et al., supra note 3; Balto & Kovacs, supra note 9, at 1–2; Nat’l Cmty. Pharmacists Ass’n, supra note 8.
64. Marsteller et al., supra note 1, at 1134–35.
65. Vita, supra note 4, at 956.
66. Id. (“[A]ny-willing-provider’ (AWP) laws . . . compel managed care plans to accept into their networks any qualified provider who is willing to accept the plan’s terms and conditions . . . .”).
laws compel plans to reimburse providers (or pharmacies) for any service they provide, even if they are not in the plan’s network.67 Thus, under an FOC law, if a covered individual fills a prescription at a non-network pharmacy, the plan must pay the pharmacy the same rate that it would pay its network pharmacies. To the extent that the non-network pharmacy charges more than network pharmacies, the individual consumer must pay the difference.68 States have enacted AWP and FOC laws for decades, and most states now have some version of the laws in their insurance codes.69

The purpose of AWP and FOC laws is to force both health insurers and prescription drug plans to do business with all providers.70 Although large pharmacy chains have sometimes lobbied for AWP and FOC laws to guarantee that they are not excluded from any pharmacy network,71 most of the support for the laws has come from independent and community pharmacies.72 Proponents of the laws argue that managed care plans and PBMs force many independent community providers out of the market because they only allow larger providers and pharmacy chains into their networks.73 They assert that excluding these smaller providers will reduce the quality of health care because smaller community providers deliver more personal comprehensive care.74 Proponents also argue that excluding providers from exclusive networks will increase drug prices as competition is reduced in the prescription drug market.75

67. Id.
68. Klick & Wright, supra note 11, at 5.
69. Marsteller et al., supra note 1, at 1136.
70. Klick & Wright, supra note 11, at 5.
71. See Statement of Slovin et al., supra note 3.
73. Nat’l Cmty. Pharmacists Ass’n, supra note 8.
75. See BALTO & KOVACS, supra note 9, at 2–3.
AWP and FOC laws take various forms in different states. Some laws only apply to specific providers, such as pharmacists or optometrists, while other states’ laws apply to all health care providers. Similarly, whereas many laws cover arrangements made by any health or drug plan, other states’ laws cover only networks of health care providers formed by HMOs or PPOs or networks of pharmacies developed by PBMs.

Federal policymakers, to a limited extent, have also been persuaded by the arguments against selective contracting. Congress included an AWP provision in Medicare Part D that requires Part D drug plans to permit the participation of any pharmacy that meets the terms of the plan. Recently, “The Pharmacy Competition and Consumer Choice Act of 2011” proposed similar legislation on the national level. Although never enacted, the bill would have put in place a federal AWP law that would prohibit plans from “exclud[ing] an otherwise qualified pharmacist or pharmacy from participation in a particular network provided that the pharmacist or pharmacy . . . accepts the terms, conditions and reimbursement rates . . . .”

B. LITIGATION

Independent pharmacies have also filed numerous lawsuits to undermine the use of preferred and narrow networks. The claims generally name as defendant a state health department, a federal agency, or a drug plan that has established a pharmacy network.

Many pharmacy associations and independent pharmacies have brought cases against state health departments, arguing that independent pharmacies have been excluded from the

76. Marsteller et al., supra note 1, at 1134.
77. Klick & Wright, supra note 11, at 6.
78. Id. at 6–7.
network of pharmacies serving Medicaid patients. For example, the Florida Pharmacy Association and several independent Florida pharmacies have filed a lawsuit against the state’s Agency for Health Care Administration to force the state to include independent Florida pharmacies in the network of qualified Medicaid pharmacies. The claim argues that the Agency has entered into contracts with HMOs and other organizations that exclude independent and community Florida pharmacies from their Medicaid networks. The plaintiffs allege that, as a result, Medicaid patients can only fill prescriptions at pharmacies in the network that includes only CVS, Wal-Mart, and a select number of other pharmacies that are affiliated with other managed care organizations. The plaintiffs argue that exclusion of independent pharmacies from the Florida Medicaid State Health Plan is in violation of federal and state FOC requirements.

Other lawsuits have been aimed at the U.S. Department of Health and Human Services (HHS) and the CMS challenging the lawfulness of the establishment under Medicare Part D of preferred pharmacy networks. For example, Southwest Pharmacy Solutions, an organization representing more than 500 pharmacies in eight states, recently filed a claim arguing that the preferred networks exclude

83. Id. at 1–2.
84. See id. at 2, 12–14.
85. Id. at 14, exhibit E.
86. Id. at 16–20.
independent pharmacies, in violation of the Medicare Part D AWP provision.89

Other suits involve claims between independent pharmacies and insurers that utilize preferred pharmacy networks.90 For example, specialty pharmacy MedfusionRx recently filed suit against insurer Aetna Inc., claiming the insurer excluded the pharmacy from its retail pharmacy network.91 MedfusionRx alleged that Aetna removed the pharmacy from its retail network and instead moved it to a different network with higher fees and lower reimbursement rates.92 The pharmacy claimed that because of this change, many of its former customers were no longer allowed to fill prescriptions at the pharmacy.93 MedfusionRx argued that excluding the pharmacy from the retail network is in violation of Mississippi AWP laws.94

These and many other claims have had varying outcomes.95 Thus despite the widespread use of selective contracting in health care, the threat of litigation remains a challenge for drug plans utilizing preferred and narrow pharmacy networks.

III. ECONOMIC ANALYSIS OF SELECTIVE CONTRACTING IN PHARMACY NETWORKS

Exclusive pharmacy networks are premised on the idea that selective contracting will generate cost savings for consumers and drug plans.96 However, opponents argue that exclusive networks reduce consumers’ access to care because

89. Sw. Pharmacy Solutions, Inc., 718 F.3d at 439.
93. Bolado, supra note 91.
94. Id.
96. See supra notes 53–57 and accompanying text.
consumers can only visit certain providers.97 In this Part, I use the principles of economic theory, the findings from previous empirical studies, and the conclusions of the FTC to analyze both the claims in support of pharmacy networks and the arguments against them.

A. THE EFFECT OF PHARMACY NETWORKS ON DRUG SPENDING

Basic economic theory predicts the effect that selective contracting in pharmaceutical markets will have on drug prices and overall drug spending.98 Pharmacies will compete to be part of exclusive networks that will channel customers to network pharmacies.99 The more customer traffic directed towards pharmacies (which depends on both the number of covered customers and the exclusivity of the network), the more intensely pharmacies will compete to be part of the network.100 Pharmacies compete by offering discounts and other price concessions on the drugs they sell to covered customers and drug plans.101 Thus, economic theory predicts that exclusive pharmacy networks will lower the prices that consumers and plans pay for pharmaceuticals.

The basic premise behind selective contracting in pharmaceutical markets can be seen in countless other markets. Consider the market for hotel rooms: the quoted rate for a customer booking one room is typically significantly higher than the rate quoted to a company or association that is booking a block of 300 rooms for an upcoming event.102 The


98. See Letter from FTC to Lynch, supra note 19, at 4 (“An abundance of empirical evidence now exists demonstrating that, other things equal, selective contracting increases the intensity of competition among providers, which is manifested in lower prices paid by insurers to providers . . . . These findings conform to economic theory.”).

99. See supra Part I.

100. See supra Part I.

101. See supra Part I.

obvious reason for this price difference is that the hotel is willing to offer a price discount in order to secure 300 reservations from the company or association members. Network pharmacies are no different than hotels in this example; pharmacies are willing to offer price discounts to secure customers covered by the drug plan.\textsuperscript{103}

The FTC has repeatedly reinforced the economic theory behind pharmacy networks:

When insurers have a credible threat to exclude providers from their networks and channel patients elsewhere, providers have a powerful incentive to bid aggressively. Inclusion in a restricted panel offers the provider the prospect of substantially increased sales opportunities. Without such credible threats, however, providers have less incentive to bid aggressively, and even managed care organizations with large market shares may have less ability to obtain low prices.\textsuperscript{104}

The FTC has also explained how more exclusive networks generate even steeper price discounts.\textsuperscript{105} It has determined that health care providers compete more intensely to be part of a more restricted network: “HMOs, which have more limited panels than PPOs, induce more intense price competition among providers than would PPOs of equivalent size.”\textsuperscript{106} Similarly, the FTC has concluded that more restrictive pharmacy networks generate more intense competition: “The more exclusive the network, the larger the discount retail pharmacies will offer, believing that greater exclusivity is likely to bring them more customers.”\textsuperscript{107} Network exclusivity “ensure[s] that the network can direct a sufficient patient volume to its providers to justify price concessions.”\textsuperscript{108}

Moreover, the FTC has indicated that AWP and FOC laws restricting selective contracting hurt consumers by raising the prices of pharmaceuticals:

\begin{url}
http://m3.ithq.qc.ca/collection/00000144.pdf (discussing the rates of hotel rooms).
\end{url}

\textsuperscript{103} See supra note 36 and accompanying text.

\textsuperscript{104} Letter from FTC to Lynch, supra note 19, at 4.

\textsuperscript{105} See id.

\textsuperscript{106} Id.


FTC staff have expressed concerns about potential anticompetitive effects and consumer harms associated with AWP and FOC laws before. These laws can make it more difficult for health insurers or PBMs to negotiate discounts from providers; if plans cannot give providers any assurance of favorable treatment or greater volume in exchange for lower prices, then the incentive for providers to bid aggressively for the plan’s business—to offer better rates—is undercut. AWP and FOC laws also can limit competition by restricting the ability of insurance companies to offer consumers different plans, with varying levels of choice. These restrictions on competition may result in insurance companies paying higher fees to providers, which, in turn, generally results in higher premiums, and may increase the number of people without coverage.  

Numerous empirical studies confirm that selective contracting reduces the price of health care services. 110 Many studies have investigated the impact of selective contracting by managed care plans on the prices of health care services. 111 In what is often regarded as one of the strongest studies of selective contracting by managed care plans, Melnick et al. examined the hospital transaction prices negotiated by a large California PPO. 112 They found that the PPO was able to negotiate lower prices for health care services by channeling more patients to the network hospital; the larger the share of the hospital’s business accounted for by the PPO, the greater the leverage the PPO had with the hospital. 113 The researchers also found that the PPO was able to negotiate lower prices for health services when there were more hospital competitors; in markets with more hospital competitors, the PPO is able to make a credible threat to channel its covered patients to another hospital. 114 Thus, selective contracting by managed

110. See, e.g., Morrisey, supra note 5, at 195–97.
111. See, e.g., id. at 191; cf. Vita, supra note 4, at 955–56 (finding that per capita health spending increased in states that passed stringent AWP or FOC laws); Klick & Wright, supra note 11, at 4 (describing studies finding that AWP and FOC laws lead to increased health care expenditures).
112. See Melnick et al., supra note 24, at 217 (examining the “prices obtained in different types of markets by the largest PPO in California”).
113. Id. at 229–30.
114. Id.
care plans results in lower prices as providers bid aggressively to be part of an exclusive network.\footnote{See id.}

Other studies have examined the impact of selective contracting in pharmacy networks on drug prices.\footnote{Visante, \textit{supra} note 48, at 6–10.} A recent empirical study by health care consulting firm Visante found that preferred and narrow networks lower prescription costs for consumers because pharmacies will offer discounts to be in the more exclusive networks.\footnote{See id. at 10.} Specifically, it found evidence that preferred networks lower prescription costs by an estimated 5% compared to open networks.\footnote{Id. at 14, 21.} Additionally, it found that pharmacies will offer the steepest discounts to be part of the most exclusive narrow networks.\footnote{See id. at 9–10.} Compared to open networks, narrow networks can lower prescription costs by an estimated 10%.\footnote{Id. at 14.}

Another recent analysis by the CMS examined Medicare Part D Prescription Drug Plans that have a preferred pharmacy network.\footnote{See \textit{CTRS. FOR MEDICARE \\ & MEDICAID SERVS.}, PART D CLAIMS ANALYSIS: NEGOTIATED PRICING BETWEEN PREFERRED AND NON-PREFERRED PHARMACY NETWORKS (2013), \textit{available at} https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/Downloads/PharmacyNetwork.pdf; \textit{see also} Adam Fein, \textit{New CMS Study: Preferred Pharmacy Networks Are Cheaper (Except When They're Not)}, \textit{DRUG CHANNELS} (July 11, 2013), http://www.drugchannels.net/2013/07/new-cms-study-preferred-pharmacy_11.html (discussing the CMS study about “preferred pharmacy networks in Medicare Part D Prescription Drug Plans (PDPs)”\textit{)}.} The CMS found that prescription drug costs were approximately 6% lower at preferred pharmacies compared to non-preferred pharmacies.\footnote{See Fein, \textit{supra} note 121.} Moreover, the more potential customers the plans can channel to the preferred pharmacies, the greater the savings.\footnote{See \textit{id.}} For the four largest Part D drug plans, preferred pharmacies offered prescription drug prices that were about 8% less than the prices offered by non-preferred pharmacies.\footnote{See \textit{id.}}

\begin{footnotesize}
\item 115. \textit{See id.}
\item 116. \textit{Visante, \textit{supra} note 48, at 6–10.}
\item 117. \textit{See id. at 10.}
\item 118. \textit{Id. at 14, 21.}
\item 119. \textit{See id. at 9–10.}
\item 120. \textit{Id. at 14.}
\item 122. \textit{See Fein, \textit{supra} note 121.}
\item 123. \textit{See \textit{id.}}
\item 124. \textit{See \textit{id.}} (“The four biggest plans, accounting for 93% of claims, had average savings of 8% at preferred pharmacies.”).
\end{footnotesize}
Other studies have empirically tested the impact of AWP or FOC laws that limit selective contracting on healthcare and pharmaceutical spending. One study found an increase in overall healthcare spending in states that passed stringent AWP laws. Another study examining pharmacy-specific AWP laws found increased pharmaceutical spending in states that passed AWP laws that limited exclusive pharmacy networks. In a recent study of the impact of AWP and FOC laws on healthcare spending, Professors Klick and Wright found that these laws are associated with an overall increase in healthcare spending of at least 3%. Moreover, they found that AWP and FOC laws increase pharmaceutical drug spending by 5.8%.

Thus, the empirical findings support the economic theory behind selective contracting in pharmaceutical markets. As pharmacies compete to be part of exclusive pharmacy networks, they reduce prices for many drugs, which reduces spending costs associated with pharmaceuticals. Laws that limit exclusive networks restrict the ability of PBMs and drug plans to negotiate discounts with pharmacies. These laws lead to increases in spending on pharmaceuticals.

B. THE EFFECT OF PHARMACY NETWORKS ON CUSTOMER ACCESS

Opponents of pharmacy networks also allege that selective contracting reduces consumers’ access to care because consumers can only visit specific network pharmacies. They argue that PBMs or drug plans that severely limit the number of pharmacies in their network may impose a cost on consumers that have to travel significant distances to reach a

125. See Vita, supra note 4, at 955.
126. Id.
127. See Durrance, supra note 46, at 409.
128. Klick & Wright, supra note 11, at 11.
129. Id. at 13.
130. For a discussion of the economic theory behind selective contracting, see supra notes 98–101 and accompanying text.
131. E.g., Letter from FTC to Lynch, supra note 19, at 4.
132. See id. at 1.
133. Id. at 6.
134. Cf. Letter from Balto to Cuomo, supra note 97, at 3 (“Consumers want choice and availability of numerous alternative pharmacies.”).
network pharmacy.135 However, there are several reasons to believe that exclusive pharmacy networks do not create access to care problems.136 First, drug plans and PBMs compete intensely for contracts with health plan sponsors and consumers.137 A drug plan or PBM that did not offer the accessibility that consumers wanted in their pharmacy network would lose business to other competitors that provided more accessibility.138 Thus, competition among drug plans and PBMs compels them to offer the amount of accessibility that consumers prefer.139

The FTC has determined that competitive forces ensure that restricted networks will not significantly limit consumers’ access to pharmacies:

Limitations on choice are unlikely to be so severe that consumers’ access to pharmacy services is inadequate. Just as competitive forces encourage pharmacies to offer their best price and service combination to a payer to gain access to its subscribers, competition also encourages payers (and employers) to establish pharmacy service arrangements that offer the level of accessibility that subscribers prefer.140

Indeed, empirical evidence confirms that competitive networks offer many choices and do not restrict consumers’ access to pharmacies. In its own empirical examination, the FTC concluded that “[m]ost PBMs contract with 90 percent of the retail pharmacies,” and nearly all of the retail chain pharmacies in the regions that they serve.141 In fact, in the next section I show that the largest PBM includes over 93% of retail pharmacies in its network.142 Moreover, evidence suggests that consumers do not value accessibility as much as

135. Morrisey, supra note 5, at 201 (“If managed care means selective contracting . . . the implication is that subscribers may be traveling further for care as managed care plans range further afield seeking lower prices.”).
137. See FED. TRADE COMM’N, supra, note 107, ch. 7, at 15.
138. See Letter from FTC to Lynch, supra note 19, at 5 (discussing how different customers will want different things and how “competition also encourages payers . . . to establish pharmacy service arrangements that offer the level of accessibility that subscribers prefer”).
139. Id.
140. Id.
141. FED. TRADE COMM’N, supra note 107, ch. 7, at 12.
142. See infra Part IV.
they do lower prices. 143 PBMs and drug plans typically offer different networks of pharmacies that vary in their degree of exclusivity and, in turn, the prices that consumers pay for pharmaceuticals. 144 Consumers that value expanded accessibility and choice of pharmacy can choose broader networks, while consumers that prioritize lower drug prices over expansive accessibility can choose narrow or preferred networks. 145 Empirical evidence shows that, when confronted with different plan options that vary in their degree of provider choice and price, most consumers choose the options that offer fewer provider choices but at a lower price. 146

The FTC has reiterated that many consumers prefer lower prices over increased accessibility:

Not all consumers . . . will necessarily desire such broad access if this expanded access is costly. Many employers offer a choice between higher cost, higher benefit plans, and lower cost, lower benefit plans, and many employees choose the latter. Consumer preference for such programs presumably means that, in at least some consumers’ view, the advantages of lower premiums and/or lower out-of-pocket costs outweigh the disadvantages of limiting the choice of provider. 147

Thus, competition among drug plans and PBMs compels them to offer the amount of accessibility that consumers prefer; drug plans and PBMs that did not offer the desired level of accessibility would lose out in the competitive market. 148

Indeed, empirical evidence indicates that pharmacy networks have almost no effect on most consumers’ access to pharmacies; the overwhelming majority of consumers live near retail pharmacies that are included in exclusive pharmacy networks. 149 Moreover, most consumers prefer more exclusive

144. See Letter from FTC to Kilgore, supra note 47, at 5–6.
145. See, e.g., Visante, supra note 48, at 4.
146. See, e.g., Beaulieu, supra note 20, at 60; Dennis P. Scanlon et al., The Impact of Health Plan Report Cards on Managed Care Enrollment, 21 J. HEALTH ECON. 19, 36 (2002); Mathews, supra note 143.
147. Letter from FTC to Lynch, supra note 19, at 5 (citation omitted).
148. See id.
149. See infra note 183 and accompanying text.
networks that restrict access to some pharmacies but provide pharmaceuticals at lower prices.150

IV. CASE STUDY: PHARMACY NETWORKS OF EXPRESS SCRIPTS

To confirm the predictions of economic theory, the conclusions of previous empirical studies, and the assertions of the FTC, I obtained proprietary data from Express Scripts,151 the largest PBM in the United States.152 No prior study has ever reported or analyzed this data or similar data from another PBM to explore how pharmacy networks work in practice.153 In this section, I explain what the data reveals about the exclusivity of pharmacy networks, the cost savings generated by the networks, and consumers’ access to care under the networks.

Express Scripts manages more than one billion prescriptions each year for more than one hundred million people.154 The company’s clients include “managed care organizations, health insurers, third-party administrators, employers, union-sponsored benefit plans, workers’ compensation plans and government health programs.”155 Express Scripts acts as an intermediary between its clients, covered individuals, pharmaceutical manufacturers, and retail pharmacies.156 Like other PBMs, Express Scripts incorporates several practices that reduce the costs associated with prescription drug spending: establishing networks of local pharmacies where members can obtain medication based on their pharmacy benefit design; developing drug formularies

150. See Mathews, supra note 143 (“[T]he focus on price . . . is a constant. Consulting firm Booz & Co.’s pretend exchanges showed that premiums were the most important factor in plan selection . . . .”).
151. See Express Scripts, supra note 18.
153. Based on the Author’s review of the literature and industry reports.
and negotiating discounts and rebates from drug manufacturers; providing access to mail order pharmacies;\textsuperscript{157} evaluating prescribing patterns to ensure consumers obtain appropriate drugs for the lowest price;\textsuperscript{158} and processing claims for their health plan sponsor clients.\textsuperscript{159}

Express Scripts has provided data about the pharmacy networks it has developed for its clients. Express Scripts provided only aggregate data about the percentage of pharmacies included in the different networks, the proximity of network pharmacies to covered individuals, and cost savings among the different networks.\textsuperscript{160} The data included no identifying variables because of the confidential nature of individual client contracts.\textsuperscript{161} The Express Scripts data is current as of July 17, 2013.\textsuperscript{162}

Express Scripts offers various network options to its clients.\textsuperscript{163} Although some clients require a customized network to meet their specific needs and population of covered individuals, many clients choose from Express Scripts’ standard network options.\textsuperscript{164} The options vary in how many pharmacies are included in a network, and in turn, in the cost savings they generate for clients.\textsuperscript{165} There are approximately 70,000 retail pharmacies in the United States.\textsuperscript{166} Express Scripts’ broad network option includes over 93% of all retail pharmacies, while their standard narrow network option includes approximately 81% of all retail pharmacies in the network.\textsuperscript{167} Table 1 reports the percentage of pharmacies

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
Network Option & Percentage of Pharmacies Included \tabularnewline
\hline
Express Scripts’ broad network option & 93% \tabularnewline
Express Scripts’ standard narrow network option & 81% \tabularnewline
\hline
\end{tabular}
\caption{Percentage of Pharmacies Included in Different Network Options}
\end{table}

\textsuperscript{157}. \textit{Fed. Trade Comm’n}, supra note 39, at i.
\textsuperscript{158}. \textit{E.g.}, \textit{id.} at 7–10.
\textsuperscript{159}. \textit{E.g.}, \textit{id.} at 2 n.3.
\textsuperscript{160}. Express Scripts, \textit{supra} note 18.
\textsuperscript{161}. \textit{Id.}
\textsuperscript{162}. \textit{Id.}
\textsuperscript{164}. \textit{See Form 10-K, supra} note 155, at 6; Express Scripts, \textit{supra} note 18. This observation is also based on the Author’s discussion with representatives of Express Scripts.
\textsuperscript{165}. \textit{See Services, supra} note 163; Express Scripts, \textit{supra} note 18.
\textsuperscript{167}. Express Scripts, \textit{supra} note 18. The primary difference between the two network options is that the standard narrow network excludes one large
included in Express Scripts’ standard networks in urban areas, suburban areas, and rural areas.\footnote{168}

Table 1: Percentage of Pharmacies Included in Express Scripts’ Standard Network Options

<table>
<thead>
<tr>
<th></th>
<th>% of Total Urban Pharmacies</th>
<th>% of Total Suburban Pharmacies</th>
<th>% of Total Rural Pharmacies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Broad Network</td>
<td>92.1%</td>
<td>94.1%</td>
<td>94.9%</td>
</tr>
<tr>
<td>Standard Narrow Network\footnote{169}</td>
<td>77.1%</td>
<td>78.5%</td>
<td>85.0%</td>
</tr>
</tbody>
</table>

As basic economic theory would predict, Express Scripts generates greater savings for clients who choose more exclusive network options. Pharmacies compete to be part of Express Scripts’ exclusive networks by offering discounts and other price concessions for prescription drugs.\footnote{170} As a result, Express

national retail chain pharmacy. \textit{Id.} When this large chain is disregarded, the narrow network still includes 92\% of all other retail pharmacies in the network. \textit{Id.}

\footnote{168} \textit{Id.}

\footnote{169} If the large national chain is disregarded, the percentage of pharmacies included in Express Scripts’ standard narrow network rises substantially, as illustrated by the table below. \textit{Id.}

<table>
<thead>
<tr>
<th></th>
<th>% of Total Urban Pharmacies</th>
<th>% of Total Suburban Pharmacies</th>
<th>% of Total Rural Pharmacies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Narrow Network (excluding a national chain not included in the Narrow Network)</td>
<td>90.3%</td>
<td>92.6%</td>
<td>94.0%</td>
</tr>
</tbody>
</table>

\footnote{170} \textit{Id.; see EXPRESS SCRIPTS, 2013 ANNUAL REPORT 13 (2013), available at http://phx.corporate-ir.net/phoenix.zhtml?c=69641&p=irol-reportsAnnual (“We believe the primary competitive factors in the industry include the ability to contract with retail pharmacies to ensure our retail pharmacy networks meet the needs of our clients and their members, the ability to negotiate discounts on prescription drugs with drug manufacturers, the ability to navigate the complexities of governmental reimbursed business, including Medicare Part D, Medicaid and the Public Exchanges, the ability to manage\ldots”)}
Scripts’ clients who use more exclusive networks pay less when prescriptions are filled at in-network pharmacies.\textsuperscript{171} Although exact cost savings depend on both the specific prescription drugs covered by the clients’ drug plan and the pharmacies included in the network, in general, clients choosing the standard narrow network pay approximately 1\% less for prescription drugs than they would pay if they chose the broad network offering.\textsuperscript{172}

Moreover, some of Express Scripts’ clients choose an option that includes a preferred set of pharmacies within a pharmacy network.\textsuperscript{173} Under these preferred network plans, covered individuals can fill prescriptions at any pharmacy within the network, but they will pay less (through lower co-pays) at the preferred pharmacies within that network.\textsuperscript{174} Because the preferred network is more exclusive than even the narrow network, Express Scripts’ clients that choose this option save approximately 4.5\% of prescription drug costs compared to clients that choose only the broadest retail network.\textsuperscript{175} Table 2 summarizes the average savings that Express Scripts’ clients achieve for the different network options.\textsuperscript{176}

Table 2: Cost Savings for Various Pharmacy Networks Offered by Express Scripts

<table>
<thead>
<tr>
<th></th>
<th>Savings compared to Standard Broad Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Broad Network</td>
<td>—</td>
</tr>
<tr>
<td>Standard Narrow Network</td>
<td>approximately 1%</td>
</tr>
<tr>
<td>Preferred Network Option</td>
<td>approximately 4.5%</td>
</tr>
</tbody>
</table>

Finally, to address concerns that more exclusive networks reduce consumers’ access to care because they can only visit

\textsuperscript{171} Express Scripts, supra note 18.
\textsuperscript{172} Id.
\textsuperscript{173} Id.
\textsuperscript{174} Id.
\textsuperscript{175} Id.
\textsuperscript{176} Id.
specific network pharmacies, I obtained Express Scripts’ data on the distance between network pharmacies and covered individuals. The CMS has established access standards that ensure pharmacy networks have a sufficient number of retail pharmacies so patients have convenient access to drugs.\(^{177}\) The CMS has established that “convenient access” implies that individuals living in an urban area live within two miles of a network pharmacy, individuals living in a suburban area live within five miles of a network pharmacy, and individuals living in a rural area live within fifteen miles of a network pharmacy.\(^{178}\) The CMS requires that networks provide the defined convenient access to pharmacies for 90% of their urban and suburban covered individuals and 70% of their rural covered individuals.\(^{179}\)

Table 3 reports the percentage of individuals covered under Express Scripts’ standard broad network and standard narrow network that have convenient access to network pharmacies, as defined by the CMS.\(^{180}\) Although the narrow network offers convenient access to slightly less of the covered population, both of Express Scripts’ networks far exceed the CMS requirements for convenient access.\(^{181}\) Regardless of whether they live in urban, suburban, or rural areas, over 98% of the individuals covered under Express Scripts’ networks have convenient access to network pharmacies.\(^{182}\)


\(^{178}\) Id.

\(^{179}\) Id.

\(^{180}\) See Express Scripts, supra note 18.

\(^{181}\) Compare id. (reporting convenient access to pharmacies for over 98% of covered individuals in all cases), with Memorandum from Cynthia Tudor, supra note 177 (requiring convenient access for 90% of urban and suburban covered individuals and 70% of rural covered individuals).

\(^{182}\) Express Scripts, supra note 18.
Table 3: Percentage of Covered Individuals with “Convenient Access” to Network Pharmacies

<table>
<thead>
<tr>
<th></th>
<th>Individuals Living in Urban Areas</th>
<th>Individuals Living in Suburban Areas</th>
<th>Individuals Living in Rural Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS requirement for convenient access</td>
<td>90%</td>
<td>90%</td>
<td>70%</td>
</tr>
<tr>
<td>Express Scripts’ Standard Broad Network</td>
<td>98.9%</td>
<td>99.7%</td>
<td>98.1%</td>
</tr>
<tr>
<td>Express Scripts’ Standard Narrow Network</td>
<td>98.5%</td>
<td>99.6%</td>
<td>98.0%</td>
</tr>
</tbody>
</table>

Thus, data from Express Scripts, the nation’s largest PBM, reveals that exclusive pharmacy networks operate exactly as economic theory would predict. Pharmacies compete to be part of exclusive networks that will bring them more customers by offering discounts for prescription drugs. As a result, Express Scripts’ customers that choose more exclusive network options pay less for the prescription drug costs of their covered individuals.183 Moreover, concerns about access to care are largely unfounded: far more individuals covered under Express Scripts’ networks have convenient access to network pharmacies than would be required under governmental standards.184 This result demonstrates how the intense competition among PBMs for sophisticated clients ensures that PBMs will offer the accessibility that consumers want in their pharmacy networks. Thus, well-designed pharmacy networks can more than satisfy customer convenience and lower the cost of healthcare.

CONCLUSION

All available evidence suggests that the benefits of pharmacy networks clearly exceed the costs. Using the

183. See supra notes 170–76 and accompanying text.
184. See supra Table 3.
principles of economic theory, the conclusions of previous empirical studies, the determinations of the FTC, and proprietary data from the largest pharmacy benefit manager in the United States, I find that pharmacy networks significantly lower the cost of prescription drugs for drug plans and consumers. When drug plans have the ability to exclude pharmacies from their network and steer patients elsewhere, pharmacies compete aggressively for selective contracts by offering price discounts for filling prescriptions. In general, more exclusive networks produce greater competition because they promise to channel more patients to network pharmacies. As a result, more exclusive networks generate even steeper price discounts.

However, because these cost savings come at the expense of both the pharmacies that must offer price discounts to be part of exclusive networks and the pharmacies that are excluded, pharmacy networks are unpopular among retail pharmacies. As a result, pharmacy representatives have alleged various harms created by network pharmacies. Their primary argument is that networks reduce consumers’ access to care by limiting their choice of pharmacies. Responding to these arguments, many states and the federal government have enacted regulations that limit the ability of health insurers and/or prescription drug plans to contract selectively.

Further, I find that concerns about consumers’ access to care are largely unfounded. Competition among drug plans and PBMs compels them to offer the amount of accessibility that consumers prefer; drug plans and PBMs that did not offer the desired level of accessibility would lose out in the competitive market. As a result, the overwhelming majority of consumers live near retail pharmacies that are included in exclusive pharmacy networks.

The conclusions of this analysis are critical for policymakers considering further limitations on selective contracting in healthcare. Well-designed pharmacy networks provide customer convenience and lower the cost of prescription drugs. It would be reckless for states to enact regulations that would undo these cost savings and increase prescription drug prices in our current state of ever-increasing healthcare costs.