AMA
AMERICAN MEDICAL ASSOCIATION

ama-assn.org
t (312) 464-5000

December 17, 2018

VIA ELECTRONIC MAIL

Peter J Mucchetti,
Chief, Healthcare and Consumer Products Section
United States Department of Justice Antitrust Division
450 Fifth Street N.W.
Suite 4100
Washington, DC 20530

Re: Tunney Act Comments in *United States of America et. al. v. CVS Health Corporation and Aetna, Inc.*

Dear Mr. Mucchetti:

Attached please find comments and exhibits of the American Medical Association in *U.S. v. CVS Health Corporation and Aetna Inc.*, pursuant to Section 2(b) of the Antitrust Procedures and Penalties Act, 15 U.S.C. § 16 (Tunney Act).

Sincerely,

Henry S. Allen Jr.
Senior Attorney, Advocacy Resource Center
American Medical Association
(312) 464-4271
henry.allen@ama-assn.org

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, *et. al.*	)	
Plaintiffs,	)	
v.	)	Case 1: 11-CV-02340
	)	Judge: Richard J. Leon
CVS HEALTH CORPORATION	)	
and	)	
AETNA INC.	)	
Defendants.	)	

TUNNEY ACT COMMENTS OF THE
AMERICAN MEDICAL ASSOCIATION
ON THE PROPOSED FINAL JUDGEMENT

On behalf of the American Medical Association (AMA) and our physician and medical student members, thank you for considering our concerns regarding the proposed merger of CVS Health Corporation (CVS), the largest retail pharmacy chain and specialty pharmacy in the United States and one of the two largest pharmacy benefit managers (PBM), and Aetna Inc. (Aetna), one of the largest health insurers and individual PDP insurers.

The AMA commends the U.S. Department of Justice (DOJ) for recognizing the merger's anticompetitive effects in the individual Stand-alone Medicare Part D Prescription Drug Plan (individual PDP or PDP) markets that cover 25 million people nationally. However, the divestiture remedy negotiated here is fatally flawed because the proposed divestiture remedy cannot restore competition to pre-merger levels - the legal standard for an acceptable divestiture.

INTRODUCTION AND SUMMARY OF CONCLUSIONS

Aetna's agreement with WellCare Health Plans, Inc. (WellCare) to temporarily leave the individual PDP marketplace coupled with Aetna's sale of its individual PDP business to an existing competitor (WellCare) does not remedy the anticompetitive effects of this merger in the individual PDP market. Even with this divestiture, the evidence is that the merger of CVS and Aetna causes an *increase* in market concentration that under the DOJ's own Horizontal Merger Guidelines[1] (Guidelines) falls into the category of mergers and acquisitions that "potentially raise significant competitive concerns and often warrants scrutiny."

[1] U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines (August 19, 2010) accessible at https://www.justice.gov/atr/file/810276/download.

Moreover, the merger would eliminate the unique and important competition between Aetna and CVS in the individual PDP market. WellCare cannot substitute for the competition lost when Aetna temporarily exits the PDP market. The DOJ's complaint recites the close competition in the PDP market between CVS and Aetna. The DOJ acknowledges that Aetna's individual PDP business is among the fastest growing, that new Medicare enrollees choose Aetna plans at rates higher than their current market shares and that consumers have benefited from the CVS/Aetna intense rivalry.[2]

WellCare in contrast faces competitive barriers to success. Brand matters in health insurance markets and the divestiture merely allows for WellCare to use the Aetna brand until only December 2019. WellCare is also a much smaller insurer compared to Aetna which is a major player not only in the individual PDP market but also in other health insurance markets. Thus, WellCare cannot negotiate the same deep discounts on pharmacy and other inputs costs as Aetna can because of its size.

Further impeding WellCare's prospects is that CVS provides critical inputs to WellCare through its PBM and its retail pharmacies. The facts are that both the PBM and pharmacy markets are highly concentrated. CVS and Walgreens dominate local retail pharmacy markets. Caremark/CVS, Express Scripts and UnitedHealth Group's OptumRx account for at least 70% of the PBM market. Post-merger they will all be vertically integrated, likely forming a tight oligopoly in PBM markets and positioned to raise rivals' costs. Higher costs for WellCare translate to higher market share for CVS's PDPs and higher profits for CVS. For these reasons, it is unlikely that WellCare will be able to grow or maintain its market share in PDP markets. In the long run, most of the customers that WellCare gained, as a result of the proposed divestiture, are likely to go back to CVS/Aetna.

Because CVS is one of the largest PBMs, PDP insurers and retail pharmacy chains, its merger with Aetna, which is one of the largest health insurers and PDP insurers, raises a plethora of anticompetitive effects in a variety of markets including PDP, health insurance, pharmacy and PBM markets. These anticompetitive effects stem from both horizontal and vertical restraints imposed by this merger.

These anticompetitive effects were essentially litigated between AMA and CVS/Aetna before the California Department of Insurance (CDI) during a June 19 hearing this past summer.[3] California Insurance Commissioner Dave Jones, on behalf of the CDI, accepted the testimony and reports of prominent health economists, health policy and antitrust experts, as well as testimony and written submissions from AMA, the California Medical Association and CVS/Aetna. He then issued an opinion letter addressed to DOJ.[4] The opinion concluded that the proposed merger would significantly reduce competition in PDP and PBM markets, among other anticompetitive effects, and that divestiture would be an inadequate remedy. Most pertinently here, the CDI opinion concluded:

> Further, partial divestiture or other remedies traditionally used by the Department of Justice will not adequately protect consumers or address the adverse consequences of a merger of CVS and Aetna. Traditional methods to avoid market concentration will not address potential impacts on service quality, the power to charge excessive rates, or the creation of barriers to block a potential market participant with the resources to enter into new markets.[5]

---

[2] See DOJ Complaint in the matter of United States of America v. CVS Health Corporation and Aetna, Inc., (DOJ Complaint) at paragraph 31. The complaint is accessible at https://www.justice.gov/opa/press-release/file/1099831/download,

[3] The CDI is responsible for regulating the largest insurance market in the United States where insurers collect $310 billion annually in premiums from Californians and California businesses and the fourth largest insurance market in the world.

[4] See August 1, 2018, correspondence from Dave Jones, California Insurance Commissioner, State of California Department of Insurance to the DOJ (August 1, 2018 see Exhibit A)

[5] Id.

Also, the New York State Department of Financial Services (DFS), charged with regulating the second largest insured population in the United States, reviewed the merger in light of the DOJ's settlement and implicitly found it insufficient to protect the public. DFS noted that "the department does not have approval authority over the entire CVS/Aetna merger; such a determination is within the province of DOJ which has previously approved the transaction." [6] DFS observed that DOJ's remedy calls for Aetna to divest its Part D business to WellCare Health Plans, Inc., a firm that DFS tellingly notes, "uses CVS/Caremark as its pharmacy benefit manager."[7]

Responding to such non-remedied concerns in DOJ's proposed settlement and notwithstanding DFS's limited jurisdiction, DFS was able to negotiate a settlement with CVS that contains significant commitments to New York including among many others, a provision prohibiting CVS from offering preferential pricing to Aetna affiliated-health insurers; and a provision ensuring that participating provider networks for insured products maintain access to non-chain New York pharmacies for three years.[8] Even assuming, by way of argument, that DOJ's divestiture remedy had a chance of restoring the Part D market to even its premerger level of competition, the entire country should at least enjoy the competition benefits negotiated by the DFS.

In this Tunny Act proceeding, AMA is not asking the court to go beyond the DOJ complaint of an antitrust merger violation in the PDP market. However, vertical foreclosure concerns are discussed here because they are inextricably linked to deciding whether the divestiture remedy will work.[9] For the reasons discussed below, AMA has concluded that the proposed divestiture should *not* be approved because it will not restore competition to its pre-merger level in PDP markets. Moreover, it is doubtful that the parties could ever put forth a divestiture package that would reduce the merger's anticompetitive effects. When there is no remedy to preserve competition, the *Antitrust Division Policy Guide to Merger Remedies*, U.S. Department of Justice, Antitrust Division, June 2011 (Policy Guide) instructs the DOJ to block the merger.[10]

JUDICIAL REVIEW OF THE PROPOSED JUDGMENT UNDER THE TUNNEY ACT

Scope of Judicial Review and Judicial Discretion

The Tunney Act (the Act) states that "[b]efore entering any consent judgment proposed by the United States ..., the court shall determine that the entry of such judgment is in the public interest."[11] When making this determination, the court must consider the following factors:

> the competitive impact of such judgment, including termination of alleged violations, provisions for enforcement and modification, duration of relief sought, anticipated effects of alternative remedies actually considered, whether its terms are ambiguous, and any other competitive considerations bearing upon the adequacy of such judgment that the court deems necessary to a determination of whether the consent judgment is in the public interest; and the impact of entry of such judgment upon competition in the relevant market or markets, upon the public generally and individuals alleging specific

---

[6] Decision and Order In The Matter Of The Application By CVS Health Corporation and CVS Pharmacy, Inc. for approval to acquire control of Aetna health insurance Company of New York (November 26, 2018) at 2. See Exhibit B.

[7] Id. at 2.

[8] Id. at S Addendum.

[9] For additional discussions of the vertical issues that will undermine a divestiture remedy in the Part D market, see AMA's letter (and associated expert reports) of August 7, 2018, to Assistant Attorney General Delrahim, attached as Group Exhibit C; AMA letter (and associated expert reports) of October 5, 2018, to Peter Mucchetti, Chief, Healthcare and Consumer Products Section, Antitrust Division; attached as Group Exhibit D.

[10] Policy Guide, at 3. The Policy Guide is accessible athttps://www.justice.gov/sites/default/files/atr/legacy/2011/06/17/272350.pdf.

[11] 16 U.S.C. §15(e)(1).

> injury from the violations set forth in the complaint including consideration of the public benefit, if any, to be derived from a determination of the issues at trial.[12]

The scope of the court's public interest determination is limited to reviewing the proposed remedy in relationship to violations that the DOJ has alleged in its complaint.[13] Courts cannot look beyond the complaint in making the public interest determination unless the complaint is drafted so narrowly as to make a "mockery of judicial power."[14] "A close, logical nexus between the proposed remedy and the alleged violation—and the remedy should fit the violation and flow from the theory or theories of competitive harm."[15] Further, the DOJ is entitled to "broad discretion to settle with the defendant within the reaches of the public interest."[16]

However, although the scope of judicial review may be limited, "the procedure for the public interest determination is left to the discretion of the court."[17] The court may, for example, take testimony of government officials or experts; authorize participation in proceedings before the court by interested persons or agencies, including appearance amicus curiae, intervention as a party, examination of witnesses or documentary materials, or participation in any other [manner] and extent which serves the public interest as the court may deem appropriate; and take such other action in the public interest as the court may deem appropriate.[18] Further, while the government is entitled to discretion, the government has the burden to "provide a factual basis for concluding that the settlements are reasonably adequate remedies for the alleged harms." *United States v. SBC Commc'ns, Inc*., 489 F. Supp. 2d 1, 16 (D.D.C. 2007), *citing United States v. Microsoft Corp*., 56 F.3d 1448, 1460-61 (D.C. Cir. l 995).

Determination of "Public Interest"

Although the Act does not define when a proposed judgment is in the public interest, the DOJ has provided a definition. In its Policy Guide, the DOJ states that, "[t] he touchstone principle for the Division in analyzing remedies is that a successful merger remedy must effectively preserve competition in the relevant market."[19] The Policy Guide notes that, "[a] s the Supreme Court has stated, restoring competition is the 'key to the whole question of an antitrust remedy.'"[20] This definition is reiterated in a document recently published by the DOJ entitled, "*United States v. CVS and Aetna*, Questions and Answers for the General Public," where the DOJ states, "[t]he standard for an acceptable divestiture is that it restore competition to premerger levels."[21] Under the Policy Guide, the purchaser of the divested assets "should have the ability to compete effectively in the relevant market."[22] It further states that "in cases where there is no remedy to preserve competition, the DOJ will seek to block the merger."[23]

---

[12] Id.
[13] Antitrust Division Manual, Fifth Edition, U.S. Department of Justice, Antitrust Division (Antitrust Division Manual) at 53, https://www.justice.gov/atr/file/761166/download.
[14] Id. *quoting United States v. SBC Commc'ns, Inc*., 489 F. Supp. 2d 1, 15 (D.D.C. 2007).
[15] Policy Guide, at 4.
[16] Id. *quoting United States v. Microsoft Corp*., 56 F.3d 1448, 1461 (D.C. Cir. 1995).
[17] Id., at 53.
[18] 16 U.S.C. §15(f).
[19] Policy Guide, at 1.
[20] Id. at 3.
[21] United States v. CVS and Aetna Questions and Answers for the General Public, accessible at https://www.justice.gov/opa/press-release/file/1099806/download.
[22] Policy Guide, at 8.
[23] Policy Guide, at 3.

Application to the Consent Decree Regarding CVS's Proposed Acquisition of Aetna

The DOJ's complaint alleges that CVS's acquisition of Aetna will substantially lessen competition in the sale of individual PDPs in 16 Part D regions.[24] The DOJ has filed a Proposed Final Judgment which, if the court approves, will require Aetna to sell its PDP business to WellCare.[25] It is the court's task to determine if the proposed divestiture remedy is in the public interest, i.e., whether the divestiture will restore competition in the PDP market to levels that existed prior to the CVS/Aetna merger. The AMA is concerned that this divestiture remedy will not restore the level of competition that existed in the PDP business prior to a consummated CVS/Aetna merger. Further, because CVS provides critical inputs such as pharmacy and PBM services to WellCare, and other smaller health insurers, WellCare and these smaller plans will not have the ability to compete effectively with CVS in the PDP market.

THE INDIVIDUAL PDP MARKET AND THE CRUCIAL ROLE OF COMPETITION

During DOJ's merger review process, AMA expressed its concern that the merger is anticompetitive in the individual PDP markets that cover 25 million people nationally. The AMA commends DOJ for rightly concluding in its proposed settlement documents that these PDP markets are generally concentrated and hampered by the present lack of competition among private plan sponsors. Such competition, as DOJ observes, is necessary to keep annual bids - which form the basis for federal government subsidies and beneficiary premiums - low.[26] DOJ's conclusions are buttressed by a number of studies showing insurer pricing power in the PDP context. This insurer PDP market power enables an insurer to charge premiums above competitive levels and/or to degrade insurance quality.[27] More generally, the weight of the research on insurance markets indicates that more competing firms or less concentrated local markets lead to lower premiums.[28]

THE ANTICOMPETITIVE EFFECTS OF THE PROPOSED DIVESTITURE

The Divestiture of Aetna's Individual PDP Business Would Eliminate the Unique and Important Role of Competition between Aetna and CVS in the Individual PDP Market

In the concentrated and poorly performing market for PDPs, the merger, as the DOJ rightfully acknowledges, would eliminate the close competition between CVS and Aetna.[29] According to DOJ, CVS's and Aetna's PDPs are among the fastest growing PDPs, with new-to-Medicare enrollees choosing CVS and Aetna plans at rates higher than their current market shares."[30] The DOJ's complaint further alleges that CVS and Aetna have sought to win PDP customers from each other by competing on price and by improving the quality of their services and coverage. This competition, the DOJ alleges, has led the companies to improve drug formularies, offer more attractive pharmacy networks and create enhanced benefits for individuals:

---

[24] DOJ Complaint at 9-11.

[25] Proposed Final Judgment in the matter of United States of America v. CVS Health Corporation and Aetna, Inc., (Proposed Final Judgment) at 4-9. The Proposed Final Judgment is accessible at https://www.justice.gov/opa/press-release/file/1099841/download.

[26] See the DOJ's Competitive Impact Statement in the in the matter of United States of America v. CVS Health Corporation and Aetna, Inc., (Competitive Impact Statement) at 4, accessible at https://www.justice.gov/opa/press-release/file/1099846/download.

[27] Report of Northwestern University Professor Amanda Starc, PhD, (whose research. focuses on health economics and health insurance, particularly on issues involving pharmaceutical markets and regulation) at 7-8. See Group Exhibit C.

[28] Id. at 7

[29] DOJ Complaint at paragraph 31

[30] Id.

> For example, in recent years Aetna has made several changes to improve the coverage of its formulary and pharmacy networks to win business from CVS. This competition gave beneficiaries access to certain drugs at more affordable prices.[31]

The merger and divestiture would be terminating the intense and close CVS/Aetna competition that, as the DOJ acknowledges, has benefited consumers and the government.

Divestiture of Aetna's PDP Business to WellCare is Unlikely to Make WellCare as Formidable a Competitor as Aetna and therefore Unlikely to Fully Remedy the Anticompetitive Effects of the Merger[32]

Aetna is a formidable competitor for CVS in the individual PDP markets. Its ability to compete with CVS stems from the size and scale of its operations. First, as the DOJ notes, Aetna is the nation's third-largest health insurance company and fourth largest PDP insurer.[33] Its national presence and size make it a well-known brand. Second, Aetna's size both in the PDP market and in other health insurance markets likely allows it to obtain more competitive contracts with pharmacies and pharmaceutical manufacturers and thus allows it to compete more aggressively with CVS.[34] Since Aetna will leave the PDP market post-merger, for the divestiture to completely remedy the anticompetitive effects of the merger, the divestiture should make WellCare at least as formidable a competitor as Aetna. This is unlikely to happen as WellCare is not as well known a brand as Aetna and the divestiture allows WellCare to use the Aetna brand until only December 2019.

Aetna is a major player in the non-Part D insurance market and this gives it much greater negotiating power with pharmacies and manufacturers than WellCare. The divestiture does not make WellCare a company of the same size and scale as Aetna. It merely temporarily increases the size of WellCare's Part D operations. Therefore, the divestiture will not give WellCare the same negotiating or bargaining power with pharmacies and manufacturers as Aetna enjoys because of its size in both the Part D and non-Part D markets.

Finally, for plan year 2019, all key decisions regarding management of the Aetna's divested business to WellCare will be made by Aetna under an administrative services agreement. This will not enhance the ability of WellCare to compete with CVS.

Divestiture of Aetna's PDP Business Will Not Increase the Number of Firms Competing in PDP Markets and therefore Not Address the Anticompetitive Effects of a CVS/Aetna Merger

Aetna, CVS and WellCare currently participate in all 34 PDP regions/markets. If the CVS/Aetna merger were approved, then there would be one less firm or plan sponsor in the market. This reduction in number of firms competing in the market would change plan bids and consequently would increase premiums for the elderly and raise the costs of subsidizing these premiums for the government. The divestiture of Aetna's PDP business to WellCare does not change the number of competitors. Regardless of divestiture, there is one less plan sponsor after the merger and therefore, the divestiture does not remedy the anticompetitive effects of the merger. A Congressional Budget Office working paper and other research show that a reduction in number of firms or plan sponsors is associated with higher premiums for Medicare beneficiaries and higher costs for the government.[35]

---

[31] Id. at paragraph 33.

[32] See generally U.S.C. health economics Professorr Neeraj Sood, PhD, report (containing his qualifications) of December 12, 2018, Exhibit E.

[33] See DOJ Complaint at paragraph 16

[34] Id. at paragraphs 1-2

[35] Stocking, Andrew, James Baumgardner, Melinda Buntin, and Anna Cook. *Examining the number of competitors and the cost of Medicare Part D*. CBO Working Paper Series. 2014-04, 2014. See also, Starc Report, Group Exhibit C at 7-8.

The Merger and Divestiture Raise the Existing (Pre-Merger) Market Concentration to Levels Crossing the DOJ's Own Threshold of Concern

AMA has asked University of California Berkeley Professor Richard Scheffler, PhD, to furnish a report on the effect of Aetna divesting its PDP business to WellCare on PDP market concentration. [36] Dr. Scheffler measured PDP market concentration using the Herfindahl-Hirschman Index (HHI). The HHI has been used frequently as a measure of market concentration in merger cases brought by the DOJ and Federal Trade Commission (FTC) and is used in Guidelines, authored by these agencies.[37] The Centers for Medicare and Medicaid Services (CMS) created 34 PDP geographic regions. Professor Scheffler concludes, in agreement with the DOJ's complaint, that PDP constitutes a relevant product market and that the relevant geographic markets are the regions.

To address the impact of Aetna divesting its PDPs to WellCare on PDP market concentration, Professor Scheffler calculated 2018 PDP market concentration two ways: (1) assuming Aetna and WellCare have separate market shares (pre-merger HHI); and (2) assuming Aetna and WellCare have one combined market share (post-divestiture HHI). According to the Guidelines, mergers that would increase HHI by more than 100 points and result in post-merger HHIs between 1,500 and 2,500 "potentially raise significant competitive concerns and often warrant scrutiny."

Professor Scheffler concludes that seven PDP regions would satisfy these conditions in the context of Aetna divesting its PDPs to WellCare. These 7 PDP regions are (ranked from largest to smallest HHI change):

- Mississippi (Region 20) +230 HHI
- Arkansas (Region 19) +206 HHI
- Maine, New Hampshire (Region 1) +148 HHI
- Alabama, Tennessee (Region 12) +124 HHI
- Virginia (Region 7) +109 HHI
- Texas (Region 22) +109 HHI
- Louisiana (Region 21) +108 HHI

Thus, on its face, this divestiture does not meet the DOJ's own standard for an acceptable divestiture: that it restores competition to pre-merger levels.

The Loss of Competition Caused by The Divestiture Would Likely Be Permanent Given Barriers to Entry

According to the terms of the divestiture, WellCare is granted a license to use the Aetna brands for limited purposes such as transitioning to future branded PDPs and for only a limited period ending December 31, 2019. After the 2020 plan year, CVS/Aetna can once again offer PDPs under the Aetna brands.[38] Consequently, WellCare will soon be faced with surmounting a well-recognized barrier to entry in health insurance –brand. A DOJ study found that "brokers typically are reluctant to sell new health

[36] See Professor Scheffler's report of December 6, 2018, attached as Exhibit F. Richard Scheffler, PhD, is the Distinguished Professor of Health Economics and Public Policy at the School of Public Health and the Goldman School of Public Policy at the University of California, Berkeley. He holds the chair in Healthcare Markets and Consumer Welfare endowed by the Office of the Attorney General. for the State of California and is the founding director of the Nicholas C. Petris Center on Healthcare Markets and Consumer Welfare.
[37] See Guidelines.
[38] See Proposed Final Judgment at 7.

insurance plans, even if those plans have substantially reduced premiums, unless the plan has strong brand recognition or a good reputation in the geographic area where the broker operates."[39]

Neither entry nor expansion is likely to solve the competitive problems created by the divestiture.[40] The DOJ explains:

> Recent entrants into individual PDP markets have been largely unsuccessful, with many subsequently exiting the market or shrinking their geographic footprint. Effective entry into the sale of individual PDPs requires years of planning, millions of dollars, access to qualified personnel, and competitive contracts with retail pharmacies and pharmaceutical manufacturers, and companies must establish sufficient scale quickly to keep their plans costs down. Because of these barriers to entry, entry or expansion into the sale of individual PDPs is unlikely to be timely or sufficient to remedy the anticompetitive effects from this merger.[41]

The Purchase Price of the Divested Assets Suggests That They Are Unlikely to Stay Viable and Therefore Are Unlikely to Remedy the Harm Alleged in The Complaint[42]

University of Southern California Professor Neeraj Sood, PhD, has observed that the purchase price of Aetna's divested assets suggests that they are unlikely to stay viable. As noted in the complaint, Aetna has about 2.2 million customers in the PDP market. The average yearly premium paid by a Medicare beneficiary for a PDP is estimated to be about $500.[43] The federal government subsidizes premiums for Medicare beneficiaries and on average pays about 75% of the total premium paid to a plan sponsor. Therefore, Professor Sood estimates that Aetna receives approximately $2,000 ($500 paid by beneficiaries and $1500 paid by the government) in premiums per year from its 2.2 million customers. This translates to annual revenues of its PDP business of about $4.4 billion ($2,000 times 2.2 million).

According to Aetna's Q3 2018 financial statement, its profits or earnings were about 8.6% of premiums.[44] Therefore, Aetna's PDP business should generate about $378 million in profits per year. If this business were to remain viable for multiple years the fair price of this asset would be multiple times the yearly profits or well over a billion dollars. However, the purchase price of Aetna's PDP business in the proposed divestiture is well below this fair price estimate. In its Q3 2018 financial statement Aetna notes "[t]he purchase price is not material to us." In response to a question posed by the court during a November 29, 2018 hearing in this matter, the DOJ stated that the purchase price of Aetna's divested PDP business was in the $50 to $100 million range. Why is an asset that generates approximately $4.4 billion in revenues and $378 million in profits per year being sold for $50 to $100 million range? One logical conclusion is that the parties do not expect the asset to be viable in the medium to long term. In contrast, for the nine months ending Q3 2018, Aetna's earnings were $3.4 billion and CVS is buying Aetna for $69 billion or more than 20 times earnings.

---

[39] Sharis A Pozen, Acting Assistant Attorney General, Department of Justice Antitrust Division, Competition and Healthcare: A Prescription for High Quality, Affordable Care (March 19, 2012) at 7.
[40] See DOJ Complaint at paragraph 37 and Competitive Impact Statement at 6.
[41] Competitive Impact Statement at 6.
[42] See generally, Sood Report at 5-6
[43] See https://www kff.org/medicare/issue-brief/medicare-part-d-a-first-look-at-prescription-drug-plans-in-2019/, accessed December 9, 2018.
[44] See http://investor.aetna.com/phoenix.zhtml?c=110617&p=irol-reportsother, accessed December 9, 2018.

CVS Provides Key Inputs to WellCare and other Smaller Insurers, Making them Weak Competitors of CVS/Aetna.

Although WellCare has purchased a small PBM - Meridian Rx - it depends on CVS for PBM services. Thus, the DOJ has had to acknowledge a major question confronting the merger and DOJ's proposed divestiture remedy: Can WellCare be expected to compete aggressively against the combined CVS/Aetna, given that CVS provides pharmacy benefit management services to WellCare?[45] DOJ provides a partial response: that Aetna purchases certain PBM services from CVS and has been able to compete aggressively.

DOJ's partial response omits the facts discussed above on the relative strengths of the companies. Also, and most especially missing from the DOJ discussion, is that unlike WellCare, Aetna "performs its core PBM functions." [46] While CVS performs certain PBM functions for Aetna under a 2010 agreement that expires in 2022, Aetna has said, "we retain our PBM and our ability to integrate medical care with clinical and pharmacy programs and actionable data."[47] Thus, two years into the CVS agreement, then FTC Commissioner Julie Brill found that Aetna was the PBM "Dominant Three's" (CVS/Caremark, Express Scripts and UnitedHealth Group's OptumRx) "nearest competitor."[48] [49]

CVS has the incentive and ability to disadvantage WellCare in the PDP market, thus making WellCare a weak competitor for CVS. Professors Sood and Northwestern University Professor Amanda Starc, PhD, have opined that a merged CVS/Aetna would have weaker incentives to control prescription drug costs and overall healthcare costs for health plans competing with Aetna. [50] Accordingly, CVS/Aetna would be unlikely to compete aggressively for PBM contracts serving CVS/Aetna competitors such as WellCare. The DOJ recognizes this risk, and has made an attempt to limit the damage occurring upon the divestiture of the assets. The Proposed Final Judgment provides that, "[divestiture] must be accomplished so as to satisfy the United States, in its sole discretion, after consultation with the Plaintiff States, that none of the terms of any agreement between an Acquirer and Defendants give Defendants the ability unreasonably to raise the Acquirer's costs, to lower the Acquirer's efficiency, or otherwise to interfere in the ability of the Acquirer to compete effectively."[51] Therefore, the DOJ recognizes the incentive for the Defendants (CVS/Aetna) to interfere in the ability of acquirer (WellCare) to compete with CVS. This concern is heightened given that CVS is the PBM for WellCare and a major player in the pharmacy market. As WellCare's PBM, CVS provides critical services to WellCare such as negotiating with manufacturers and pharmacies and it therefore, has the ability to increase costs and reduce efficiency for WellCare. CVS not only has the ability but also the incentive to disadvantage WellCare. It is unclear how and if the DOJ can ensure that this does not happen given that drug pricing suffers from lack of transparency and is characterized by price obfuscation.[52]

---

[45] DOJ Questions and Answers for the General Public at 4.

[46] See Aetna 2017 10K report at page 7, available online at http://investor.aetna.com/phoenix.zhtml?c=110617&p=irol-reportsAnnual.

[47] https://news.aetna.com/news-releases/aetna-awards-long-term-contract-to-cvs-caremark-to-provide-pbm-services/

[48] Dissenting statement of Commissioner Julie Brill concerning the proposed acquisition of Medco Health Solutions by Express Scripts (April 2, 2012), https://www.ftc.gov/sites/default/files/documents/public_statements/dissenting-statement-commissioner-julie-brill/120402medcobrillstatement.pdf.

[49] According to Adam Fein's Drug Channel Institutes Report, "Aetna controls medical and pharmacy policy, formulary design, pharmacy/medical benefit integration, rebate contracting and many other core PBM functions."[49] Drug Channels also reports Aetna's share of the PBM market as 4 percent.[49]

[50] See Starc Report at 10-11 (see Group Exhibit C); Sood Report at 9-10 (see Group Exhibit C) and Sood Response at 4-5 (see Group Exhibit C).

[51] Proposed Final Judgment at IV, F, 2

[52] See *infra* at 11 and accompanying footnotes

In a Highly Concentrated PBM Market Made Less Competitive by the Aetna/CVS Merger, PDPs Such as WellCare Lack Competitive Options for Contracting with PBMs That Are Not Owned by Rival Health Plans.

The national market for PBM services is highly concentrated. CVS/Caremark, Express Scripts and UnitedHealth Group's OptumRx, which collectively dominate the PBM market (the Dominant Three), account for at least 70 percent of the market.[53] Indeed, the PBM market is so highly concentrated that if CVS were allowed to acquire Aetna and its 4% of the PBM market,[54] the merger would, as explained below, raise significant competitive concerns in the PBM market, under the Guidelines.[55]

In the event of a CVS/Aetna merger, all suppliers of PBM services with the scale to drive deep discounts with pharmaceutical companies, e.g. CVS/Caremark, Express Scripts and UnitedHealth Group's OptumRx, would be vertically integrated into the PDP market. If this merger is not blocked, there would simply be no standalone PBM alternatives to CVS/Aetna that would possess the buying power necessary to drive deep drug discounts. Instead, the PBM "competitors" allegedly vying for WellCare's business chiefly would consist of CIGNA-Express Scripts and United Healthcare Group's OptumRx. These two behemoths and CVS/Aetna would form a tight oligopoly of vertically integrated health insurer/PBMs facing the same incentives of not bidding aggressively for contracts that would strengthen their health insurer rivals. Under these circumstances, tacit coordinated behavior of not competing aggressively for PBM customers competing with the insurance arms of the merged companies is likely. University of California, Hastings College of Law Professor Thomas Greaney,[56] a widely published scholar on antitrust in health care, explains:

> Vertical mergers may also impair competition when they enhance the ability and incentives to engage in horizontal coordination. As an example, the mergers currently under review — Express Scripts' announced plans to merge with Cigna and CVS's acquisition of Aetna — along with UnitedHeathcare's operation of a PBM would establish an oligopolistic market in health and pharmacy management with three of the

---

[53] CVS and Aetna have the first and seventh largest PBM market shares respectively. *See* "PBM Market Share, by Totally Equivalent Prescription Claims Managed, 2017", Drug Channels Institute, available at https://www.google.com/search?q=pbm+market+shares&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj-yZu2-. See, http://www.drugchannels net/2017/12/the-cvs-aetna-deal-five-industry-and.html, accessed May 22, 2018. See also https://www.google.com/search?biw=1536&bih=726&tbm=isch&sa=1&ei=4AYXW8GhB8b-jwSAraGYDA&q=pbm+market+shares+2018&oq=pbm+market+shares+2018&gs_l=img.3...6596.8649.0.9312.5.5.0.0.0.0.104.321.4j1.5.0....0...1c.1.64.img.0.1.103...0i30k1.0.e9ubyaYAS8#imgrc=xO .

[54] For antitrust purposes, self-supply is in the relevant market. See discussion at pages 8-9 of AMA's letter of August 7, 2018, to the Honorable Mark Delrahim. See Group Exhibit C.

[55] Utilizing the 2017 data on PBM market share by total equivalent prescription claims managed published by the Drugs Channel Institute, AMA has calculated the PBM market HHI as ranging from roughly 1823 (most conservative) to roughly 1830 points. Assuming CVS and Aetna shares are exactly 25% and 4% respectively, the AMA estimates that the merger would cause the HHI to increase by 200 points. Professor Neeraj Sood has done his own calculation and has concluded that the PBM HHI is roughly 1900 and that the merger of Aetna/CVS would increase HHI by roughly 200 points. See slide 3 of Professor Sood's September 18, 2018, DOJ slide presentation (see Exhibit G). The further lessening of competition created by the horizontal merger between CVS and Aetna in the PBM market has not been challenged by DOJ. It is notable, however, that a report by The Council of Economic Advisors concludes that the existing market structure allows PBMs "to exercise undue market power." Reforming Biopharmaceutical Pricing at Home and Abroad, The Council of Economic Advisers, February 2018, at 10. The report may be accessed at https://www.whitehouse.gov/wp-content/uploads/2017/11/CEA-Rx-White-Paper-Final2.pdf. The report recommends "policies to decrease concentration in the PBM market that can increase competition and further reduce the price of drugs paid by consumers." Id. Similar remarks have been expressed by U.S. Food and Drug Administration FDA Commissioner Scott Gottlieb, MD. See, e.g. Scott Gottlieb, Commissioner of Food and Drugs, "Capturing the Benefits of Competition for Patients", Speech before America's Health Insurance Plans National Health Policy Conference (March 7, 2018) ("Too often we see situations, where consolidated firms-the PBM's, the distributors, and the drugstores-team up with payors. They use their individual market power to effectively split some of the monopoly rents…")

[56] Professor Greaney's qualifications can be found at Group Exhibit C

> nation's largest health insurers owning the three largest pharmacy benefit management entities. Controlling by some estimates over 70% of the PBM market, and with only a very small portion of the market served by entities not integrated with a health insurer, the "Big Three" vertically integrated firms would have common incentives to weaken the competitive conditions of rival health insurers. For example, as one analysis put it, they could "act on shared incentive to withhold or weaken PBM bids to health plan rivals" that would "raise rivals' costs or lead to a diversion to sub-scale PBMs with higher costs and lower quality." Given cost advantages arising from their leverage in negotiating with pharmaceutical companies, the Big Three would face little threat from rival PBMs and have strong incentives and capacity to coordinate their strategies to disadvantage rival health insurers.[57]

Such coordinated conduct would also be difficult to detect given the fact that PBM "customers may not always be well placed to provide evidence regarding what is essentially opaque activity…."[58] A Council on Economic Advisors Report (CEA Report) observes that drug pricing suffers from a lack of transparency characterized by price obfuscation.[59] PBM customers have scant information about the rebates supposedly negotiated on their behalf because contracts between PBMs and drug manufacturers are claimed as trade secrets. [60] Not even large payers like Blue Cross or Walmart know the net prices of the drugs they are buying.[61] One expert has concluded that most of the increase in drug pricing can be attributed to rebates pocketed by PBMs.[62] In short, the strategy of raising rival costs is likely to work.

High Barriers to Entry into Highly Concentrated PBM Services Markets Will Deny WellCare Competitive Sources of PBM Services

The lost competition from the CVS/Aetna merger is likely to be permanent because barriers to entry prevent new entrants from restoring competitive pricing. One barrier is the scale required to negotiate favorable discounts from pharmaceutical manufacturers. PBM entrants need to attract insurer customers with competitive discounts from pharmaceutical firms. The magnitude of discounts that a PBM can negotiate with these firms, however, depends on the number of covered lives represented by the PBM, with the size of the discount rising with the size of the PBM. If Aetna, the country's third-largest insurer, exits the customer market by merging with a PBM then a new PBM market entrant's chances of gaining the covered lives necessary for negotiating discounts is diminished[63]

---

[57] Greaney, Thomas, "The New Health Care Merger Wave: Does the "Vertical, Good Quote Maxim Apply, Journal of Law, Medicine and Ethics (2018).

[58] Dissenting statement of Commissioner Julie Brill concerning the proposed acquisition of Medco Health Solutions Inc. by Express Scripts Inc. (April 2, 2012) at 5.

[59] Reforming Biopharmaceutical Pricing at Home and Abroad, The Council of Economic Advisers, February 2018, page 10. The CEA Report may be accessed at https://www.whitehouse.gov/wp-content/uploads/2017/11/CEA-Rx-White-Paper-Final2.pdf.

[60] Robin Feldman, "Perverse Incentives: Why Everyone Prefers High Drug Prices-Except For Those Who Pay the Bills," forthcoming Harv. J. on Legis., available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3162432) (PBM payment structure "minimizes the competitive pressure to reduce prices" and creates incentives "operating to drive prices higher"). See also, Fiona Scott Morton & Lysle T. Boller, "Enabling Competition in the Pharmaceutical Market," Hutchins Ctr. on Fiscal and Monetary Pol'y at Brookings (2017).

[61] Id.

[62] "Robert Goldberg, "Drug Costs Driven by Rebates," Center for Medicine in the Public Interest, http://bionj.org/wp-content/uploads/2015/11/drug-costs-driven-by-rebates.pdf.

[63] Starc report at 9 (see Group Exhibit C); Sood report at 2 (see Group Exhibit C).

Given the high barriers to entry into the PBM market, the degree of concentration has only increased over time. In 2013, the Dominant Three accounted for 67% of covered lives and in 2017, the market became more concentrated with the top three PBM's accounting for 73% of covered lives.[64] CVS/Caremark has been a top three PBM since 2013, if not longer, and its market share of covered lives has increased from 22% in 2013 to 25% in 2017[65]

As this market history of high barriers to entry shows, competition in the PBM market such as from WellCare's newly acquired small PBM (Meridian Rx) cannot ensure that a vertically integrated CVS/Aetna will not disadvantage Aetna competitors, including WellCare.

There Is a Significant Risk That CVS/Aetna Would Raise the Costs of Retail Pharmacy Inputs Available to Aetna Competitors

The merged firm may also foreclose smaller insurers, such as WellCare, from competing successfully with Aetna by denying access to CVS "must have" retail pharmacies, either entirely or by offering terms that are not competitive with those offered Aetna.[66] Professor Sood reasons that CVS/Aetna could leverage its must-have pharmacy network to disadvantage competing plans.[67] Health plans that do not have CVS in their pharmacy network will be less attractive to consumers, especially in markets where CVS has a dominant pharmacy market share. CVS/Aetna could exploit this fact by charging higher prices to health plans competing with CVS/Aetna. This effect, says Professor Starc, may be especially important in the market for generic drugs, which are generally competitive at the wholesale, but not the retail, level and represent a large fraction of total bills.[68] In recent years, prices for some generic molecules (even particularly old ones whose branded equivalents' patents expired decades ago) have increased substantially.

According to Professor Sood, if health plans refused to accept the high prices and do not include CVS/Aetna pharmacies in their network, they risk losing customers. If they accept the higher prices, then they face higher health care costs, which might result in higher premiums and lower market share for these health plans. This will result in less competition in the insurance market.[69]

DIVESTITURES ARE INEFFECTUAL IN RESTORING COMPETITION IN HEALTH INSURER MERGER CASES

Research has shown that divestitures often fail to restore competition in the marketplace.[70] In the area, of health insurance mergers, there have been only a few consent decrees.[71] The inadequacy of the divestiture remedy in health insurance merger cases is well illustrated by the retrospective studies of two of them--the United Health-Sierra and the Aetna-Prudential mergers. Those studies showed that the consolidations

---

[64] Sood response at 12 (see Group Exhibit C).
[65] Id.
[66] See discussion of Aetna's market power in retail pharmacy at 19-20 of AMA August 7 letter (see Group Exhibit C).
[67] Sood Report at 11 (see Group Exhibit C).
[68] Starc Report at 11 (see Group Exhibit C).
[69] Sood Report at 10 and Starc Report at 11 (see Group Exhibit C).
[70] John Kwoka, MERGERS, MERGER CONTROL, AND THE REMEDIES: A RETROSPECTIVE ANALYSIS OF US POLICY, MIT press (2015).
[71] Humana's acquisition of Arcadian Management Services in 2012; United Health Group's acquisition of Sierra Health in 2008; (3) United Health Group's Acquisition of PacificCare in 2006; and Aetna's acquisition of Prudential in 1999.

resulted in significant premium increases notwithstanding both cases were resolved by consent decrees requiring divestiture.[72]

CLAIMED EFFICIENCIES DO NOT JUSTIFY THIS MERGER

DOJ's press release accompanying its settlement with CVS/Aetna touts the possibility of merger-related efficiencies. However, the DOJ has not presented CVS/Aetna efficiency arguments in its Tunney Act pleadings. Thus, AMA will not discuss here the Aetna /CVS efficiency claims they raised before the California Department of Insurance (CDI). (AMA has discussed these efficiency claims within its August 7, 2018 letter to the DOJ. [73]) We note, however, that a case for redeeming merger efficiencies is a far cry from what both the CDI and the New York Department of Financial Services (DFS) found. According to the CDI, the merger parties provided "no reliable evidence" concerning claimed efficiencies. The DFS was even more blunt stating,

> Neither the applicants nor the domestic insurer,[74] in their written and oral testimony, provided any concrete analysis that the CVS/Aetna merger would result in specific reduced costs for New York consumers, or any business plan or study of asserted improved health outcomes to benefit New Yorkers. Likewise, the applicants did not set forth specific actions to be taken by CVS Health or Aetna Inc. post-transaction to accomplish the asserted benefits of this transaction in reducing costs to the New York consumer and improving New Yorkers health outcomes.

CONCLUSION

The nation has learned the hard way that overlooking consolidation in health insurance markets is costly. Studies of half of the consent decrees that have required divestiture have shown that these mergers result in higher insurance premiums. The divestiture in the instant case is especially flawed. It would raise the existing pre-merger market concentration to levels crossing the DOJ's own threshold of concern in markets where the loss of competition caused by the divestiture would likely be permanent given barriers to entry. It would eliminate the unique and important role of competition between Aetna and CVS in the individual PDP markets. WellCare is not the competitor that Aetna is in the PDP market. WellCare lacks Aetna's size, negotiating power with pharmacies and pharmaceutical manufacturers, and after the 2020 plan year, Aetna's brand.

Further, substantially dimming the divestiture's prospects of restoring competition post-merger is the vertical structure of the massive CVS/Aetna merger and its likely anticompetitive effects in input markets where WellCare and other smaller PDPs must turn for PBM services and retail pharmacy.

All of these competitive factors explain why the purchase price of the divested assets reflects that they are unlikely to stay viable and therefore, unlikely to remedy the harm alleged in the complaint.

---

[72] See Leemore Dafny et al, Paying a Premium on Your Premium? Consolidation in the US Health Insurance Industry 102 AM. ECON REV. 1161 (2012); José Guardado, PhD The Price Effects of a Large Merger of Health Insurers: A Case Study of United-Sierra, HEALTH MANAGEMENT, POLICY AND INNOVATION (2013).

[73] See AMA's letter of August 7, 2018 to the Honorable Makan Delrahim, at 23-29, Group Exhibit C

[74] The reference to applicants and to the domestic insurer are to CVS health Corporation /CVS pharmacy Inc. and to Aetna. See Decision and Order in The Matter of The Application by CVS Health Corporation and CVS Pharmacy, Inc. For Approval to Acquire Control of Aetna Health Insurance Company of New York (November 26, 2018).

Given this evidence, the AMA respectfully requests that the DOJ conclude that the proposed divestiture will not restore competition to pre-merger levels. As it is likely that there is no remedy to preserve the competition lost in the CVS/Aetna merger, AMA also respectfully asks the DOJ to block the merger.

Sincerely,

Henry S. Allen, MPA, JD
Senior Attorney, Advocacy Resource Center
American Medical Association
(312) 464-4271
henry.allen@ama-assn.org

Table of Exhibits to AMA's Tunney Act Comments

Exhibit A	2018-01-08-Correspondence from Dave Jones, California Insurance Commissioner, State of California Department of Insurance to the DOJ
Exhibit B	Decision and Order of the New York State Department of Financial Services in the matter of the application by CVS Health Corporation and CVS Pharmacy, Inc. for approval to acquire control of Aetna health insurance Company of New York (November 26, 2018) at 2
Group Exhibit C	AMA letter (and associated expert reports) of August 7, 2018, to Assistant Attorney General Delrahim
Group Exhibit D	AMA letter (and associated expert reports) of October 5, 2018, to Peter Mucchetti, Chief, Healthcare and Consumer Products Section, Antitrust Division
Exhibit E	Neeraj, Sood, PhD., "Does the Divestiture of Aetna's PDP Business to WellCare Remedy the Anticompetitive Effects of the Proposed Acquisition of Aetna?"
Exhibit F	Scheffler, Richard, M., PhD., and Arnold, Daniel, R., "Effect of Aetna Divesting its Standalone Medicare Part D Prescription Drug Plans (PDPs) to WellCare on PDP Market Concentration"
Exhibit G	Sood, Neerj, PhD., "Department of Justice Questions on CVS-Aetna Merger"

STATE OF CALIFORNIA Dave Jones, *Insurance Commissioner*

DEPARTMENT OF INSURANCE

EXECUTIVE OFFICE
300 CAPITOL MALL, SUITE 1700
SACRAMENTO, CA 95814
(916) 492-3500
(916) 445-5280 (FAX)
www.insurance.ca.gov

August 1, 2018

The Honorable Jeff Sessions
Attorney General of the United States
United States Department of Justice
950 Pennsylvania Avenue, N.W.
Washington, D.C. 20530-0001

Mr. Makan Delrahim
Assistant Attorney General
Antitrust Division
United States Department of Justice
950 Pennsylvania Avenue, N.W.
Washington, D.C. 20530-0001

RE: Proposed merger of CVS Health Corporation and Aetna, Inc.

Dear Attorney General Sessions and Assistant Attorney General Delrahim:

I am writing regarding the proposed acquisition of Aetna Inc. (Aetna) by CVS Health Pharmacy, Inc., a direct, wholly-owned subsidiary of CVS Health Corporation (CVS). The California Department of Insurance has evaluated the effect of this proposed merger on competition in the California health insurance market and on California consumers. This letter provides the results of that evaluation and includes evidence obtained during a hearing I held on this matter.

As California's Insurance Commissioner, I am responsible for regulating the largest insurance market in the United States where insurers collect $310 Billion annually in premiums from Californians and California businesses. California is now the fourth largest insurance market in the world. Increasing competition in California's insurance markets delivers important benefits to Californians. Mergers which decrease competition are not in the interest of Californians. Health insurers and managed care plans collect more than $122.9 billion in premium annually from Californians.[1] As Insurance Commissioner, I closely monitor changes and proposed changes in the insurance market, such as proposed health insurer mergers or acquisitions that might directly affect California and its businesses and residents. I also monitor and review regional, national, and international changes in the insurance markets which have collateral

[11] Josh Cothran, *The Private Insurance Market in California, 2013* (Cal. Health Care Found. Feb. 2015), http://www.chcf.org/publications/2015/02/data-viz-health-plans. The California Department of Insurance regulates indemnity, Exclusive Provider Organization (EPO), and Preferred Provider Organization (PPO) coverage in California. The California Department of Managed Health Care regulates managed care organizations (health care service plans, aka HMOs).

impacts on the California insurance market. The California Department of Insurance is routinely called upon for its expertise on national insurance market and regulatory issues.

In 2016, I reviewed three proposed health insurance mergers, two of which I concluded were anti-competitive. The first merger, that of Centene and Health Net, involved a company focused on government contracts (Centene) acquiring a struggling company active in the commercial market (Health Net). I approved that acquisition after imposing stringent requirements on the combined entity to remain in the commercial market as a strengthened, viable competitor. The second proposed merger, that of Anthem and Cigna, I concluded was anti-competitive under the U.S. Department of Justice (DOJ) and Federal Trade Commission (FTC) Anti-Trust Guidelines. After an extensive legal and evidentiary hearing I formally requested that the DOJ bring an action to block the Anthem-Cigna merger.[2] The DOJ filed an action and obtained a federal district court order blocking that merger. I also concluded, after an extensive legal and evidentiary hearing, that the third proposed merger, that of Aetna and Humana, was anti-competitive and would reduce consumer choice, reduce the quality of healthcare in California, and was likely to result in increased prices. I formally requested that the DOJ sue to block the Aetna-Humana merger.[3] The DOJ sued to block this merger and obtained a federal district court order blocking the merger, which was consistent with the findings I had made regarding the anti-competitive impacts of this merger.

The three mergers of health insurers in 2016 involved horizontal mergers -- they were mergers involving competitors in the same industry. In contrast the proposed CVS-Aetna merger is predominantly a vertical merger, involving entities that do not largely directly compete with each other: a health insurer and a pharmacy benefit manager (PBM) / retail pharmacy chain which operate at different points in the health insurance and pharmaceutical supply chain or service. Vertical mergers (also called “non-horizontal” mergers) can raise competition concerns however, because if a seller owns their supplier, they may erect barriers that also make it difficult for other sellers to use that supplier. This is especially problematic if that supplier has dominant market power, which is the case here with CVS. Although this merger is predominantly a vertical one, this merger also has horizontal impacts.

The proposed CVS-Aetna merger raises a number of competitive concerns for California health insurance and healthcare consumers. CVS has a dominant footprint as a retail pharmacy chain. It also dominates the market for PBM services through its subsidiary, CVS-Caremark. As a PBM, CVS-Caremark acts as an intermediary in the drug distribution chain by negotiating prices with drug companies, and receiving rebates from them, while also establishing networks and formularies for insurers. Consolidating the retail and PBM services of CVS with a major health insurer may have an adverse effect on the ability of other health insurers to access these

---

[2] See Letter of Insurance Commissioner Dave Jones to Attorney General Loretta Lynch dated June 16, 2016 containing detailed findings of fact and law regarding anti-competitive impact of Anthem-Cigna merger, http://cdicms.insurance.ca.gov/0400-news/0100-press-releases/2016/upload/LetterUSDOJAnthem-Cigna06-16-16.pdf

[3] See Letter of Insurance Commissioner Dave Jones to Attorney General Loretta Lynch dated June 23, 2016 containing detailed findings of fact and law regarding anti-competitive impact of Aetna-Humana merger. http://www.insurance.ca.gov/01-consumers/110-health/60-resources/upload/Aetna-Humana-Letter-to-US-DOJ-Final-835am-signed.pdf

suppliers, hindering their ability to compete in, or enter, the California insurance market. Such anti-competitive impacts could hurt California consumers.

My Department does not have direct approval authority over this proposed acquisition because the transaction does not involve a California domestic or commercially domiciled insurance company. However, the transaction does involve an Aetna subsidiary, Aetna Life Insurance Company, which is licensed by the California Department of Insurance to sell health insurance in California, and provides coverage to more than a million Californians.

This merger poses immediate competitive concerns in California and nationwide, based on an evaluation of regional markets using the factors recited in the DOJ *Non-Horizontal Merger Guidelines*, revised April 18, 1997.[4] Similarly, the merger poses competitive concerns in the Medicare Part D market when reviewed using the factors recited in the U.S. DOJ and Federal Trade Commission's (FTC's) *Horizontal Merger Guidelines*.[5] Additionally, another significant concern is that the proposed merger of Aetna and CVS removes Aetna as a potential competitor from an already concentrated PBM market. In an era where the largest insurers increase barriers to entry by consolidating market power, the loss of a PBM entrant with the resources and expertise needed to expand into a heavily consolidated market would be a substantial loss for Californians as well as nationally.

The proposed CVS-Aetna merger would combine the country's third largest health insurer by market value with one of the country's largest PBM / pharmacy chains at a time when the national market for PBM services is already highly concentrated. In addition to removing Aetna as an important potential competitor from the PBM marketplace, the enhanced market power of a merged CVS and Aetna will have an anticompetitive effect on both California's PBM and health insurance markets, as well as an anticompetitive impact on the retail pharmacy market. The combined entity will also be able to increase barriers to other entities seeking entry into the PBM market, increase costs, decrease the quality of care provided to its members, and reduce competition in the retail pharmacy market. Accordingly, in light of the anti-competitive impacts of the proposed merger, and the fact that the alleged benefits could be achieved through other arrangements, such as contracting, I conclude that the proposed merger of CVS and Aetna is anti-competitive and recommend that the United States Department of Justice challenge this transaction.

I. BACKGROUND: THE CVS-AETNA MERGER HEARING

I held a public hearing regarding the proposed merger on June 19, 2018. The hearing transcript, reports of expert witnesses, and comments submitted by the companies and members of the

---

[4] U.S. Dep't of Justice *Non-Horizontal Merger Guidelines*,(originally issued as part of "U.S. Department of Justice Merger Guidelines, June 14, 1984") [hereinafter *Non-Horizontal Merger Guidelines*], *available at* https://www.justice.gov/sites/default/files/atr/legacy/2006/05/18/2614.pdf.

[5] U.S. Dep't of Justice & Fed. Trade Comm'n, *Horizontal Merger Guidelines* (Aug. 19, 2010) [hereinafter *Horizontal Merger Guidelines*], *available at* https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf.

public are available on the website of the California Department of Insurance.[6] Thomas M. Moriarty, Executive Vice President, Chief Policy and External Affairs Officer, and General Counsel, testified for CVS, and Kristen Miranda, California Market President and West Region Head, testified for Aetna. Expert witnesses offered analyses of the competitive impact of the proposed mergers. Representatives of consumers, medical providers, and community organizations also testified. I also received written public comment. Further, my Department and I reviewed multiple studies and published articles regarding the impact of health insurance mergers, and the CVS and Aetna merger in particular.

II. THERE IS SUBSTANTIAL EVIDENCE THAT THE MERGER WOULD IMPAIR COMPETITION BY INCREASING MARKET CONCENTRATION AND ENHANCING CVS/AETNA'S MARKET SHARE AND MARKET POWER IN THE PBM MARKET, THEREBY ERECTING BARRIERS TO NEW ENTRANTS.

The PBM market, like the rest of the health insurance market in California and nationally, already suffers from a high degree of market concentration and limited competition. Approximately 70% of all prescriptions are filled by one of three PBM firms: Express Scripts, Caremark (owned by CVS), and OptumRx (owned by UnitedHealth).[7] It is difficult for new entities to enter and compete in the PBM market. This difficulty is amplified in a large market like California. The concentrated nature of the PBM market, the lack of a strong regulatory scheme, and the opaqueness of PBM contracts, puts consumers and direct purchasers of PBM services at a severe disadvantage.

A. The CVS-Aetna merger will eliminate Aetna as a potential entrant into the already highly condensed and competitive PBM market.

By acquiring Aetna, CVS prevents Aetna from entering the PBM market as a separate competitor. Aetna has stated publicly that it had considered entering the PBM marketplace prior to agreeing to be purchased by CVS.[8] Aetna, as one of the nation's largest health insurers, could develop its own in-house PBM. In fact, Aetna currently undertakes numerous important PBM services in-house, including rebate contracting with drug manufacturers for most of its commercial clients, as well as formulary development.[9]

---

[6] California Department of Insurance (CDI) Hearing transcript and materials are available at: http://www.insurance.ca.gov/01-consumers/110-health/60-resources/Aetna-CVS-Merger-Information.cfm.

[7] Amanda Starc, Associate Professor of Strategy, Kellogg School of Management, Northwestern University, *Comments on Selected Issues RE: the Proposed Mergers of Aetna and CVS*, May 15, 2018 (rev. July 3, 2018) ("Starc Report"), at 9; *citing* Fein, Adam, *The 2017 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers*, (2017) Pembroke Consulting, Inc. and Drug Channels Institute.

[8] Thomas Sabatino, *Testimony*, House Judiciary Committee, Subcommittee on Regulatory Reform, Commercial and Antitrust Law, February 27, 2018 at 40:01 of recorded testimony available here: https://judiciary.house.gov/hearing/competition-pharmaceutical-supply-chain-proposed-merger-cvs-health-aetna/.

[9] CVS Aetna Supplemental Submission to CDI July 16, 2018, http://www.insurance.ca.gov/01-consumers/110-health/60-resources/upload/CVS-Aetna-Supplemental-Submission-to-CDI-July-16-2018.pdf.

Aetna's financial statements to the SEC state that it performs the following PBM services for Aetna's pharmacy customers, including: product development, commercial formulary management, pharmacy rebate contracting and administration, sales and account management and precertification programs.[10] This demonstrates an existing proficiency and level of experience providing significant PBM services. If Aetna were to enter the PBM market and offer PBM services to others, it would provide meaningful additional competition in the PBM market.[11]

The *Non-Horizontal Merger Guidelines* point out that "the non-horizontal merger of a firm already in the market… with a potential entrant… to the market may adversely affect competition in the market."[12] Removal of a potential competitor from the market may have the effect of "harm to 'perceived potential competition.'"[13] The removal of Aetna as a potential PBM entrant eliminates a potential large competitor that would have reduced concentration in the market. When there is more competition in the market, prices tend to decrease and consumers can benefit from not only lower prescription drug prices, but, potentially, lower premiums as well if health insurers pass on drug cost savings to insureds. Additionally, in order for a PBM to be successful, it needs covered lives to negotiate volume discounts with drug manufacturers. Removal of Aetna, the third largest health insurer in the nation with more than 23 million covered lives, from the PBM market restricts the opportunities for new as well as existing PBM competitors in the market. Further, as Aetna provides its own key PBM functions in-house, given its market share in the insurance market it is also already a significant participant in the PBM market as a self-supplier; thus, the proposed merger with CVS has horizontal merger implications in the PBM market, as well.

B. Evidence Demonstrates that the Merger Would Put Other Health Insurers at a Competitive Disadvantage

CVS currently provides PBM services to 94 million plan beneficiaries nationally, of which 22 million are Aetna subscribers.[14] Additionally, many of the largest PBM competitors are also owned by health insurers, such as OptumRx which has merged with UnitedHealthcare, and Cigna, which has initiated a merger with Express Scripts.

The PBM market's lack of competition and the merger of CVS-Aetna is likely to put other insurers that do not own a PBM at a disadvantage. Post-merger, as a PBM, CVS will have less incentive to keep down the cost of prescription drugs and other health care costs for other health insurers competing with Aetna. PBMs garner profits through rebates with pharmaceutical manufactures. The PBM retains a portion of these rebates and passes a portion of the remaining rebate back to the health insurer, which allows the insurer to potentially lower premium rates.

---

[10] Sood Report at 9; Aetna 10-k Report (Dec. 31, 2017), at 7, available at http://www.aetna.com/investors-aetna/assets/documents/2017/4q17-form-10k.pdf (SEC 10-k Report).
[11] Starc Report, *supra* at 12.
[12] *Non-Horizontal Merger Guidelines*, *supra* at 1. https://www.justice.gov/sites/default/files/atr/legacy/2006/05/18/2614.pdf.
[13] Id.
[14] Sood Report at 10.

Post-merger, when acting in its capacity as a PBM, CVS would have less of an incentive to pass these rebates to contracted health insurers that may be in competition with Aetna. Consumers insured with those competitors could face higher premiums as a result.

The risk that CVS would have less of an incentive to pass on rebates or provide services to competing health insurers increases the risk of "vertical foreclosure." Vertical foreclosure occurs when a newly integrated distributor stops selling products to a downstream firm's rivals, or increases the rival's costs, such as if CVS refuses to contract with health insurers or increases the cost of prescription drugs to other health insurers.[15] Vertical foreclosure increases antitrust concerns because a rival health insurer could be excluded from the market or forced to pay higher costs. Such risks are increased in a concentrated market like the current PBM market where an insurer has only two other large PBM firms to choose from, one of which is already owned by another health insurer (OptumRX – UnitedHealth).

Professor Neeraj Sood[16] analyzed whether CVS-Aetna would have a financial incentive to place competing health insurers that contract with the combined entity's PBM at a disadvantage, and risk losing those PBM customers, in order to gain insurance customers. Professor Sood found that if CVS-Aetna, post-merger, lost a PBM customer it would equate to approximately $23 in lost profits. However, a gain by CVS-Aetna of a health insurance consumer would result in approximately $323 in profits. This results in a single insurance consumer being as valuable as fourteen PBM consumers, thus providing a strong incentive for CVS-Aetna to disadvantage competing health insurers in its PBM practices.[17]

The PBM market is largely unregulated, resulting in an opaque pricing and rebate structure that gives both the pharmaceutical manufacturer and the PBM incentives to allow higher prices and higher rebates, therefore increasing the risk of vertical foreclosure. Although CVS states that it currently passes along more than 90 percent of its overall rebates to clients, they provided no evidence of anything that would prohibit them from changing this practice post-merger.[18]

C. The CVS-Aetna merger will result in a need for two-level entry into the PBM and health insurance market.

The CVS-Aetna merger will make it much more difficult to enter the PBM market unless the PBM is able to simultaneously enter, or is already in, the health insurance market. The *Non-Horizontal Guidelines* note that this "need for simultaneous entry to the secondary market gives rise to substantial incremental difficulty as compared to entry into the primary market alone."[19] The cost for such entrance, including the process of building a provider network and securing sufficient covered lives, is extremely high and likely to create a bar to those smaller entities that previously may have been able to enter the PBM market only. Expert witnesses at the June 19,

---

[15] Starc Report at 10.
[16] Neeraj Sood, Ph.D., Professor of Public Policy, Sol Price School of Public Policy, University of Southern California.
[17] Sood Report at 11-12.
[18] CVS-Aetna July 3, 2018 letter at 2.
[19] *Non-Horizontal Merger Guidelines, supra* at 27.

2018 hearing stated that new entrants to the PBM market would be required to have the capabilities to be a payer and PBM in order to compete in the PBM market after the CVS-Aetna merger.[20] This additional burden on entry into the PBM market will only further stifle competition. [21]

Additionally, in Aetna's SEC 10-K Report, it states that "other suppliers also provide certain [PBM] services" to Aetna.[22] If, post-merger, Aetna transfers this business to CVS it will only further diminish the ability of new entrants to enter the PBM market if the opportunity to bid and contract to provide these services is removed from the market.

D. The CVS-Aetna merger will harm independent retail pharmacies.

Much like the PBM market, the pharmacy markets nationally are "uncompetitive or highly concentrated."[23] In their supplemental letter, CVS Health argued that their pharmacy share "in California is 21.3% and nationally is 16.2%."[24] While significant itself, this nationwide and California market share obscures the market dominance of CVS in specific regions. In filings with the Securities and Exchange Commission, CVS Health states "[w]e currently operate in 98 of the top 100 United State drugstore markets and hold the number one or number two market share in 93 of those markets."[25] In 14 of the country's largest metro-areas, CVS and Walgreens, together, control 50 to 75 percent of the drugstore market.[26] Research suggests that drug prices consumers pay at pharmacies in a single local market may vary widely for the same product, but that drug prices found at independent pharmacies and online discount websites were lower on average than prices at chain drug stores, such as CVS.[27] Consumers, then, are arguably better served when there is not only a competitive market, but when that market includes independent pharmacies and online discount websites to fill prescriptions in addition to large retail pharmacies. The CVS-Aetna merger will only serve to increase CVS's dominance in the pharmacy market and will likely increase overall prescription drug prices for consumers.[28]

In addition, CVS-Aetna could disadvantage other retail pharmacies by creating cost-sharing structures that incentivize insureds to seek services from CVS over their competitors. During our hearing, representatives from Aetna stated that they "certainly don't have any plans to modify cost sharing for CVS versus non-CVS retail pharmacies"[29] to accomplish this. However,

---

[20] Starc Report, *supra* at 11; Sood report, *supra* at 16.
[21] Report of Professor Thomas L. Greaney, University of California Hastings College of Law, June 19, 2018 at 6, http://www.insurance.ca.gov/01-consumers/110-health/60-resources/upload/Greaney-Statement-to-CA-Department-of-Insurance-6-19-18.pdf
[22] SEC 10-k Report, *supra* at 7.
[23] Sood Report, *supra* at 13.
[24] CVS Aetna Supplemental Submission to CDI July 3, 2018, at 3 http://www.insurance.ca.gov/01-consumers/110-health/60-resources/upload/CVS-Aetna-Supplemental-Submission-to-CDI-July-3-2018.PDF.
[25] SEC 10-k Report, *supra* at 6.
[26] Sood Report, *supra* at 13
[27] Sood Report, *supra* at 6.
[28] Sood Report, *supra* at 14.
[29] Testimony of Kristen Miranda, California Market President & West Region Head, Aetna, CDI Transcript, *supra*, at 63:15-20.

this vague response is far less than a binding affirmative commitment not to engage in anticompetitive behavior which could drive small, independent pharmacies out of business or result in CVS purchasing them, thus further concentrating the retail pharmacy market. Similarly, in addition to cost-sharing, the combined entity could engage in other anticompetitive conduct, such as giving preferential display to CVS pharmacies in price-comparison websites, or by Aetna providing preference to CVS pharmacies in network designs.[30]

E. The Market Dominance of CVS in Specialty Pharmacy, in Combination with Aetna, Would Provide Market Power That Promotes Anti-Competitive Practices That Negatively Affect Patient Care

CVS Specialty, a subsidiary of CVS Health, is the largest specialty pharmacy in the nation.[31] Three of the largest specialty pharmacies, owned by CVS Health, Walgreens Boots Alliance, and Express Scripts, account for 60% of all specialty prescription revenues.[32] CVS has a 25% specialty prescription market share by revenues.[33] Specialty pharmacies are a source of medications for patients with complex, serious conditions, such as cancer, cystic fibrosis, and HIV/AIDS; certain of these drugs (such as chemotherapy drugs) may, however, also be available from a treating physician.[34] Specialty pharmacies are a significant source of revenue growth.[35] Because of the highly attractive potential for increased revenues, the combined CVS-Aetna entity will have strong incentives to steer insured persons, through such mechanisms as using preferential cost-sharing arrangements, towards CVS Specialty for specialty drugs, and financially penalize consumers for obtaining the specialty drug from their treating physician. This financial penalty fragments care by removing the oversight of the treating physician, which impairs monitoring of the course of treatment. This is of particular significance for chemotherapy treatments.[36]

III. THE MERGER WILL HAVE HORIZONTAL ANTICOMPETITIVE IMPACTS ON THE MEDICARE PART D MARKET.

A. *Analysis of HHI Demonstrates that the Merger Would Significantly Increase Concentration in the Medicare Part D Market.*

Although the merger has been described as a vertical merger and the preceding analysis focuses on the potential anti-competitive impacts of the vertical merger, the CVS-Aetna merger also presents horizontal merger implications. Both CVS and Aetna participate in the Medicare Part D (Part D) prescription drug plan market. In 2018, 25 million people nationally and 2.3 million in

---

[30] Sood report, *supra* at 13-14
[31] CVS Health 2017 Annual Report, at 10: http://investors.cvshealth.com/~/media/Files/C/CVS-IR-v3/reports/cvs-ar-2017.pdf.
[32] Starc report, *supra* at 10.
[33] "The Top 15 Specialty Pharmacies of 2017: PBMs and Payers Still Dominate" Drug Channels, March 13, 2018, https://www.drugchannels.net/2018/03/the-top-15-specialty-pharmacies-of-2017 html.
[34] Starc Repot, *supra* at 13.
[35] Testimony of Barbara McAneny, M.D., CDI Transcript, *supra*, at 180:15-16.
[36] Id. at 181:22-25.

California are covered under a Part D prescription drug plan.[37] Nationally, Aetna has a 9% market share among Part D plans while CVS Health has a 24% market share, with even greater overlap in some geographic markets. Economic evidence suggests that increasing the market concentration and reducing competition for Part D plans will likely result in higher premiums.[38] In some states, the combined Part D market share of CVS and Aetna is even greater-- in Connecticut, CVS has a 30.1 percent share of Part D enrollees and Aetna's share is 7.6 percent in that state.

Professor Richard M. Scheffler of the U.C. Berkeley School of Public Health analyzed the 34 Part D regions for overlap in the standalone prescription drug plans (PDP) that provide coverage to Medicare recipients (distinguished from Medicare Advantage Prescription Drug Plans (MAPDP)). Dr. Scheffler used the Herfindahl-Hirschman Index (HHI) to measure the PDP market concentration, in accordance with the *Horizontal Merger Guidelines.* To determine the HHI, Dr. Scheffler calculated market concentration using two different assumptions 1) premerger HHI, with CVS and Aetna operating as separate firms; and 2) post-merger HHI, where CVS and Aetna operate as a single firm. Additionally, market concentration measures from 2009 to 2017 were calculated to show the trend in the PDP market.

Professor Scheffler concluded that the CVS/Aetna post-merger HHIs and HHI increases would result in determinations of "presumed likely to enhance market power" or "potentially raise significant competitive concerns and often warrant scrutiny" in a large number of counties for each of these markets, as defined in the *Horizontal Merger Guidelines*, as follows:

1. Market Concentration Trends and Post-Merger HHI:

    a. The national PDP market would become moderately concentrated (HHI of between 1,500 and 2,500) with an HHI increase over 400, and thus the merger would "potentially raise significant competitive concerns and often warrant scrutiny."

    b. The California PDP market would become moderately concentrated (HHI of between 1,500 and 2,500) with an HHI increase 434 points, and thus the merger would "potentially raise significant competitive concerns and often warrant scrutiny."

These HHI and HHI increase levels, together with relatively high entry barriers, increase the oligopolistic nature of these markets and raise a reasonable probability of coordinated anticompetitive conduct by market participants.

CVS and Aetna representatives, both at our June 19th hearing and in a supplemental submission, assert that there is ample competition in the Part D market, because the PDP market also competes with MAPDP. I find this assertion unpersuasive and not supported by the weight of evidence. Instead, I agree with the court in *United States v. Aetna Inc.*, 240 F.Supp.3d 1, 20, 42

[37] AMA report, *supra* at 2.
[38] Starc report, *supra* at 3.

(D.D.C. 2017), that there is very little consumer movement between MAPDP and PDP plans in response to price increases. Other studies have also shown that most Medicare enrollees tend to stick with their original plan of choice, even when they are faced with relatively large premium increases.[39] It is true that there are ten competitors in the PDP market in California, but this merger would result in just three competitors controlling 83% of the market,[40] a significant concentration of the market with likely anti-competitive impacts.

IV. CVS AND AETNA HAVE PROVIDED NO RELIABLE EVIDENCE DISPROVING THE LIKELY HARMS FROM THE MERGER, OR INDICATING THAT THE ASSERTED EFFICIENCIES OR CONSUMER BENEFITS WOULD COUNTERACT THE HARM TO COMPETITION

A. The Companies Have Neither Provided Reliable Evidence of Claimed Efficiencies, Nor Reliable Evidence that Efficiency Savings Will Be Passed on to Consumers.

The *Horizontal Merger Guidelines* note that "[e]fficiency claims will not be considered if they are vague, speculative, or otherwise cannot be verified by reasonable means" or if the efficiencies could be achieved unilaterally or by collaborative means short of a merger.[41] When the parties fail to present persuasive evidence about a merger's benefits, such as actual efficiencies, one can infer that evidence is lacking.

In testimony at our hearing, CVS asserted that the proposed acquisition would result in $750 million dollars of savings from reduced marketing, as well as general and administrative expenses. At the hearing, I asked representatives of both CVS and Aetna for greater detail on how these savings would be generated and what percentage of these savings would be passed on to consumers. They were unable to provide an estimate.[42]

> Commissioner Jones: Let me ask specifically, will the entirety of the $750 million be allocated to reductions in premium or decreases in the rate of increase of premium for the merged entity?
>
> Mr. Moriarty *[Executive Vice President, Chief Policy and External Affairs Officer, General Counsel, CVS Health]*: I can't say, Commissioner, what percentage will. There will certainly be some. There obviously are investments that need to be made in systems and other programs to drive these longer term, and you'll see a component of that reinvested into the business as well to improve the services and develop better programs as we go forward.

---

[39] *To Switch or Not to Switch: Are Medicare Beneficiaries Switching Drug Plans To Save Money?* October 10, 2013, Kaiser Family Foundation, available at: https://www.kff.org/medicare/issue-brief/to-switch-or-not-to-switch-are-medicare-beneficiaries-switching-drug-plans-to-save-money/.
[40] Based on April 2018 CMS plan enrollment data.
[41] *Horizontal Merger Guidelines*, *supra*, at 30.
[42] CDI Hearing Transcript, 13:12-4, 16-19, 50:13-51:1, 51:14-51:19

> …
>
> Commissioner Jones: Can Aetna give me any estimate of the portion of the $750 million a year that can be allocated to premium reductions or decreases in the increase in premium?
>
> Mr. Wingle *[Vice President for Operations, Product, and Technology, Aetna.]*: I don't have that information available at this time.

Similarly, in the two supplemental responses provided by the companies after the hearing, the companies were unable to quantify the estimated premium reduction anticipated as a result of the alleged efficiencies resulting from the merger.[43] This alleged benefit should be considered speculative in any weighing of benefits against anticompetitive impacts.

Professor Sood noted that "[p]ost-merger CVS would have a stronger incentive to control prescription drug costs… and overall health care costs for Aetna."[44] This is in comparison to the current assumption that, as a PBM, CVS does not have as strong an incentive to negotiate greater savings on behalf of health insurers. Post-merger "CVS would have reduced incentives to engage in practices that increase rebates at the cost of increasing spending on prescription drugs for Aetna."[45] However, as Professor Sood points out, the estimated savings and increased efficiencies touted by CVS-Aetna only occur if Aetna is not already providing its own core PBM services including strategic decisions on formulary design and price negotiations with pharmaceutical companies.[46] Currently, it appears that Aetna already performs its own core PBM services including product development, formulary management, pharmacy rebate contracting and administration, sales and account management, and precertification programs. As Aetna already performs its core PBM functions, the potential efficiencies from merging with the PBM arm of CVS would be minimal."[47]

Additionally, Professor Lawton Burns[48] and others noted that healthcare related mergers, including non-horizontal mergers, result in price increases, not price decreases.[49] An increase in market power does not necessarily result in savings being passed on to consumers.

B. Neither CVS nor Aetna Have Provided Reliable Evidence that Quality Will Improve

At our hearing, CVS and Aetna's representatives only spoke in generalities about quality improvement. As noted above, academic experts on health insurer mergers find that in an

---

[43] CVS-Aetna Supplemental Submissions to CDI on July 3, 2018, at 2-3, July 16, 2018, *supra.*
[44] Sood Report, *supra* at 8.
[45] Sood Report, *supra* at 8.
[46] Sood Report, *supra* at 9.
[47] Sood Report *supra* at 9.
[48] Lawton Burns, Ph.D., MBA, James Joo-Jin Kim Professor, Department of Health Care Management, The Wharton School, University of Pennsylvania.
[49] Burns Report, *supra* at 7.

oligopsony, quality usually decreases when there are so few competitors that they lack an incentive to compete to attract or retain customers by improving quality.

C. The CVS-Aetna merger will not benefit consumers

PBMs act as intermediaries between drug manufacturers, employers, and health insurers. PBMs earn profits by selling prescription drugs at a markup to self-insured employers and health insurers. Arguably, the CVS-Aetna merger could drive down prescription drug costs because CVS would have an incentive to negotiate lower drug prices on behalf of Aetna, which could assist Aetna in lowering premiums. However, problematically, CVS and Aetna representatives would not commit to lowering premiums. Instead, they cite only to the "synergies" created by the merger which will result in cost savings to Aetna insureds, invoking the UnitedHealth – OptumRx merger as an example. CVS and Aetna state that UnitedHealth – OptumRx merger created "overall savings of $11-16 per member per month" and CVS expects that their merger would "yield hundreds of millions of dollars in medical cost savings, which could be passed on to consumers in the form of lower health premiums."[50] However, despite these savings, CVS-Aetna continues to refuse to commit to pass these savings on to consumers in the form of reduced premiums.

The "synergies" cited by CVS as benefiting consumers include: improving chronic care management, shifting care to lower-cost and more convenient sites, earlier and more effective medical interventions, and increased medication adherence. CVS relies on these methods as potential cost savings to consumers, by reducing the cost of site of care (by, for example, offering MinuteClinic visits rather than a doctor or urgent care visit) as well as number of occurrences (lower copays if visits are reduced). While such cost reductions may occur, it is more likely to affect a smaller number of high-frequency users. A reduction in premiums (that Aetna and CVS will not commit to) would help Aetna consumers across the spectrum. Further, as detailed in the testimony and report of Professor Burns, the purported benefits of the proposed merger's focus on clinics based in retail pharmacies do not outweigh the risks of fragmentation of care, reduction in care coordination by primary care providers, and avoidance of underserved populations, including persons with complex, chronic conditions.[51] The asserted benefits and efficiencies, if any, of a combination of clinic-pharmacy-and-insurer arise from a level of integration that can be obtained through contracting, without triggering the competitive concerns arising from this merger.

D. Divestitures Will Not Fully Restore Competition or Adequately Protect Californians.

As to the horizontal aspects of this merger, divestiture of some portion of either or both companies or undertakings as to rates, quality, or investments will not remedy or sufficiently mitigate the anticompetitive impacts and results of this merger.[52] Further, once a merger is completed and consumers and competitors begin to experience the negative impact of the

---

[50] CVS-Aetna Supplemental Submission to CDI, July 3, 2018, *supra* at 3 (emphasis added).
[51] Burns Report, *supra* at 8-22.
[52] *Horizontal Merger Guidelines*, *supra*, section 10.

merger, it will be too late to effectively mitigate these adverse outcomes. The law requires that any remedies fully restore competition. The necessary divestitures in the markets would be close to impossible to accomplish given the number and scale of the impacted areas. Additionally, divestiture to a company with an already significant market share would not remedy the competitive situation, and divestiture to a new entrant would likely fail in short order. A retrospective analysis of mergers indicates that even smaller divestitures fail to achieve the desired pro-competitive goals.[53]

V. REGULATORY EXPERIENCE WITH AETNA URGES CAUTION

In testimony during the hearing, CVS and Aetna represented that the combined entity would implement safeguards that will prevent anticompetitive conduct after the merger. However, my Department's regulatory experience with Aetna Life Insurance Company is instructive, in that compliance with legal requirements cannot be assumed to occur in the absence of oversight. For example, the Department's most recent publicly available market conduct examination of Aetna Life Insurance Company indicated a persisting trend of likely violations[54] relating to Aetna's claims handling procedures and practices. This exam found numerous alleged violations, including improper representation of pertinent facts and policy provisions to claimants, incorrect denials, unsatisfactory settlements, failure to inform the insured of the right to independent medical review, and failure to conduct fair investigation of claims. The exam also found violations related to claims handling, including but not limited to failure to conduct a thorough investigation, and failure to provide clear reasons for denial of claims.[55]

Similarly, in recent years, Aetna Life Insurance Company's proposed prescription drug formularies, compared with those of other insurers, have been among the most restrictive in terms of coverage, with Aetna Life Insurance Company placing drugs vital to treating chronic conditions on high-cost tiers and subjecting insureds to excessive utilization management, and raising significant concerns regarding discriminatory formulary and plan designs that would discourage the enrollment of consumers with certain health conditions. My Department found that over half of the covered drugs for the treatment of opioid dependence, and opioid reversal agents, were placed on inappropriately high cost tiers in Aetna Life Insurance Company's proposed formularies. Similar inappropriate placement, as well as inappropriate prior authorization and specialty pharmacy restrictions, were seen for drugs used in HIV treatment. Resolution of these instances of inappropriate placement required regulatory intervention by my Department.

---

[53] John Kwoka, Merger Control, and Remedies: A Retrospective Analysis of U.S. Policy (MIT Press 2015).

[54] Department examiners determined these violations based on a review of documentation provided in the course of performing market conduct examinations. The violations, however, are technically "alleged violations" because they have not undergone a formal administrative or judicial process.

[55] Further caution in the review of this merger is merited as this month another state insurance regulator issued an order of penalty against the CVS Caremark PBM operation, with a fine of over $1.5 million, for repeated violations related to claim denials. http://insurance.ky.gov/Documents/CVS%20Caremark%20Order%20-%20Press%20Release.pdf

Many of the concerns regarding anticompetitive conduct, such as information exchange, price differentials, and consumer steering, would be difficult to unwind after such a merger goes forward. Therefore, my Department's regulatory experience with one of the entities should be considered to be cautionary: promises of legal compliance are not necessarily self-executing.

VI. CONCLUSION

The proposed merger of CVS and Aetna will significantly reduce competition in the PBM and Medicare Part D markets, affecting millions of health care consumers throughout the country. Applying the analysis typically used by the United States Department of Justice and the Federal Trade Commission, the merger will substantially enhance market concentration and power in these markets. A merger of this size and type, according to experts on health insurer and health care mergers, will likely lead to increased prices and decreased quality.

Further, partial divestiture or other remedies traditionally used by the Department of Justice will not adequately protect consumers or address the adverse consequences of a merger of CVS and Aetna. Traditional methods to avoid market concentration will not address potential impacts on service quality, the power to charge excessive rates, or the creation of barriers to block a potential market participant with the resources to enter into new markets.

Finally, the CVS-Aetna merger will eliminate Aetna as an important potential competitor in the PBM market. In the present health insurance and health care markets, it is impossible to create *de novo* a PBM competitor with the strength, experience, and provider relationships that Aetna has established. Loss of Aetna as a potential competitor in the PBM market is an irreplaceable loss of competition because of the extraordinary concentration of the PBM market and high barriers to entry. If there are any other entities considering entry into the PBM market, they will now have to enter the market in conjunction with a health insurer. Single entry PBMs will no longer be feasible to compete with these behemoths.

For these reasons, I conclude that the proposed merger of CVS and Aetna will have anti-competitive effects and not be in the interest of consumers or health insurance and healthcare markets in California and nationally. The CVS and Aetna merger will harm Californians and our health insurance market, and is likely to increase drug prices for consumers rather than reduce them. The CVS and Aetna merger will harm consumers in markets across the United States. Accordingly, I request that the United States Department of Justice sue to block the CVS-Aetna merger.

Sincerely,

DAVE JONES
California Insurance Commissioner

In the Matter of the Application by CVS Health Corporation and CVS Pharmacy, Inc. for Approval to Acquire Control of Aetna Health Insurance Company of New York	**DECISION AND ORDER**

BACKGROUND

On January 18, 2018, the New York State Department of Financial Services (the "Department") received an application by CVS Health Corporation ("CVS Health"), a Delaware corporation, for approval from the New York State Superintendent of Financial Services (the "Superintendent"), pursuant to New York Insurance Law (the "Insurance Law") § 1506, to acquire control of Aetna Health Insurance Company of New York (the "Domestic Insurer"), a New York domestic stock accident and health insurance company (the "Proposed Acquisition of Control"). On March 9, 2018, the Department received an amended and restated application seeking approval of the Proposed Acquisition of Control, which, among other things, added CVS Pharmacy, Inc., a Rhode Island corporation, as an applicant (together with CVS Health, the "Applicants").

The Department has thoroughly examined the Proposed Acquisition of Control and has engaged in ongoing communications with the Applicants in order to obtain additional information and seek an understanding of the terms and asserted benefits of the proposed transaction to the People of the State of New York. As part of its review, the Department has regularly communicated its questions and concerns regarding the Proposed Application of Control to the Applicants and the Domestic Insurer. On numerous occasions, the Department has requested additional documents and explanations from the Applicants and the Domestic Insurer with regard to various aspects of the proposed transaction. The Department has received supplemental documents, amendments, and explanations from the Applicants, and the Domestic Insurer or its ultimate parent, Aetna Inc., in response to the Department's requests (these supplemental materials, together with the original application and the amended and restated application, the "Application"). In addition, the Department has met with the Applicants, the Domestic Insurer and their counsel on numerous occasions, during which meetings the Department has posed questions, and the Applicants and the Domestic Insurer have made representations, on a range of issues related to the Proposed Acquisition of Control.

By letter dated September 17, 2018, the Superintendent provided comments to the Connecticut Insurance Department in connection with its review of the acquisition by CVS Health of Aetna Life Insurance Company ("ALIC"), an insurer domiciled in Connecticut and licensed by the Department. Concerns the Superintendent raised in her letter included (1) the effects on competition in various markets, specifically over the potential unfair competitive advantage that Aetna Inc. may gain, the level of concentration in the pharmacy benefit manager ("PBM") market, and an increase in the concentration of the Medicare Part D market;

and (2) the potential harm to consumers from increased premiums and drug prices and data privacy lapses, particularly given that the Applicants have made no commitment to lower premiums or pass on savings to consumers.

On September 21, 2018, the Department noticed a public hearing on the Proposed Acquisition of Control, pursuant to Financial Services Law §§ 304-a, 305 and 306, and Insurance Law § 1506 (the "Hearing").

On October 10, 2018, the United States Department of Justice ("DOJ") announced that its Antitrust Division had reached a settlement (the "DOJ Settlement") with CVS Health and Aetna Inc. (the Domestic Insurer's ultimate parent) regarding CVS Health's acquisitions of Aetna Inc. subsidiaries throughout the country (collectively, "the CVS/Aetna Merger"). Pursuant to the DOJ Settlement, Aetna Inc. entered into an agreement on September 26, 2018 to sell its individual Medicare Part D prescription drug plan business to a subsidiary of WellCare Health Plans, Inc. (the "Divestiture") effective 11:59 p.m. on December 31, 2018.[1] However, the DOJ Settlement did not address competitive or consumer effects of the transaction with respect to the remainder of Aetna Inc.'s business or with CVS Health's subsidiary PBM, CVS Caremark, or the PBM and retail pharmacy markets.

It is important to note the specific application before the Department for determination today. The Department does not have approval authority over the entire CVS/Aetna Merger; such a determination is within the province of DOJ which has previously approved the transaction. Rather, for the Department's consideration, the Applicants presently seek to acquire control of Aetna Health Insurance Company of New York, which is domiciled in the State of New York, and whose ultimate parent is Aetna Inc. The overwhelming majority of insurance business written by Aetna in New York is written by ALIC, a Connecticut domiciled insurance company; the Connecticut Insurance Department has previously approved the change of control application for ALIC. ALIC and other Aetna Inc. affiliates hold foreign insurer licenses from DFS to write insurance in New York subject to annual renewal of such licenses pursuant to Insurance Law § 1103(b) and to examination by the Department pursuant to Insurance Law § 309 and other provisions. These foreign insurer licenses are not currently up for renewal, and therefore are not being addressed in this Decision and Order.[2]

As set forth below, the Department has carefully and thoroughly examined the entire record of information before the Department, including all of the comments of the public, both at the public hearing held before the Department and in written comments received, the representations made by the Applicants and other relevant parties, and the requirements of the Insurance Law and Financial Services Law. As described in detail below, as a result of this review and given the specifics of the Application before the Department, the Superintendent has determined that the interests of the People of the State of New York are best served by approving the Proposed Application of Control with the conditions set forth in the substantial commitments that the

---

[1] Notably, WellCare Health Plans, Inc. uses CVS Caremark as its pharmacy benefit manager.

[2] Going forward, ALIC, as with any other insurance company writing insurance business in New York, whether as a domiciliary or foreign licensed insurer, is subject to DFS regulation. In addition, under New York's holding company statutes, DFS will have full authority post-merger to audit and examine all companies under the holding company structure, including CVS Caremark and CVS Pharmacy.

Department has obtained from the Applicants that are in the Addendum attached to this Decision and Order (the "Commitments"), along with the Department's ongoing regulatory oversight.

THE PUBLIC HEARING

On October 18, 2018, the Department held its Hearing. The Department heard from all persons who asked to be heard regarding the Proposed Acquisition of Control. At the Hearing, 13 witnesses testified. After testimony from the representatives of the Applicants and the Domestic Insurer, the following individuals testified: Assemblymember Richard Gottfried, Chair of the Assembly Committee on Health; a representative of Consumers Union; the Immediate Past President of the Medical Society of the State of New York; two Representatives of the Pharmacists Society of the State of New York; a representative of Healthcare for Rural New York; a representative of the AIDS Healthcare Foundation; a representative of Consumer Action; a representative of the Center for Independence of the Disabled in New York; the owner of an independent pharmacy; and a representative of the Business Council of New York State (the "Business Council").

The Applicants presented two witnesses at the Hearing in support of the Proposed Acquisition of Control, one from CVS Health and one from Aetna Inc. These witnesses, in their oral and written testimony, asserted that the Proposed Acquisition of Control should be approved because, among other things, it would result in reduced costs and improved health outcomes for consumers. Specifically, Elizabeth Ferguson, Deputy General Counsel and Senior Vice President of CVS Health, testified, "The [CVS/Aetna Merger] will benefit consumers in New York and result in a meaningful cost savings and other consumer benefits." In their testimony, the witnesses made promises with regard to greater access to healthcare, data privacy, and cost savings. Aetna Inc.'s representative at the Hearing, Steve Logan, President of the New York and New Jersey Market, characterized the CVS/Aetna Merger as "one of the most promising healthcare developments[.]" Mr. Logan further testified that Aetna Inc.'s goal in the CVS/Aetna Merger is to "grow our New York footprint and remain committed to New York."

Neither the Applicants nor the Domestic Insurer, in their written and oral testimony, provided any concrete analysis that the CVS/Aetna Merger would result in specific reduced costs for New York consumers, or any business plan or study of the asserted improved health outcomes to benefit New Yorkers. Likewise, the Applicants did not set forth specific actions to be taken by CVS Health or Aetna Inc. post-transaction to accomplish the asserted benefits of the transaction in reducing costs to the New York consumer and improving New Yorkers' health outcomes.

Following the testimony of the Applicants and the Domestic Insurer, all but one witness who testified at the Hearing urged the Department to reject the Proposed Acquisition of Control. The 10 witnesses who testified in opposition to the transaction expressed a range of concerns about the overall CVS/Aetna Merger. These concerns included both vertical and horizontal competitive issues, PBM practices, lack of any specific business plans by CVS Health

or Aetna Inc. to demonstrate that any promised benefits would materialize, and concerns for data privacy and security.

Several witnesses raised concerns that the CVS/Aetna Merger would give the combined entity greater power in the health insurance, PBM, and retail pharmacy markets. Some witnesses testified that current PBM practices raise significant concerns, including lack of transparency and the ability to offer what were characterized take-it-or-leave-it style contracts, particularly to small pharmacies. Witnesses testified that PBMs manage formularies and design benefits to favor their own affiliated pharmacies, raising the concern that the increased power to prefer affiliated pharmacies may reduce competition and allow PBMs to dictate healthcare delivery. Witnesses also expressed concern that the merger would reduce any incentive of Aetna Inc. as owner of health insurers to control PBM costs or address PBM business practices for the benefit of the consumer.

Further, certain witnesses raised significant concerns about data protection. They expressed concerns about firewall policies and the sharing of data between CVS Caremark and CVS Pharmacy, Inc., and now with Aetna Inc.

Witnesses also pointed out that the Applicants have not specified how they plan to provide cost savings and improved health outcomes. They referred to New York state actions to improve health outcomes and indicated that these efforts should be further supported and required careful planning and effective tailoring to the various communities in the state.

The Department accepted Public Comments both before the Hearing and for a period of five business days after the Hearing. The Department has received 83 written comments from interested parties, the overwhelming majority of whom expressed concerns with the CVS/Aetna Merger. In addition to the witnesses who testified at the Hearing, the persons that submitted comments represented a range of interests, and included: Assemblymember James Skoufis, chair of the Task Force on People with Disabilities; the Healthcare Association of New York State; the Greater New York Hospital Association; the Hispanic Federation; the National Urban Fellows; the Arts & Business Council of New York; the Asian American Business Development Center; owners of independent pharmacies; individual health care providers; and individual consumers. Many of these comments relayed personal and professional experiences bearing upon the CVS/Aetna Merger.

In total, 75 of the 83 Public Comments expressed opposition to the CVS/Aetna Merger and echoed the concerns witnesses raised in their testimony at the Hearing. Only eight comments were received from writers who support approval.

On October 25, 2018, the record of the Hearing was closed.

APPLICABLE LEGAL STANDARDS

The Application was filed pursuant to Insurance Law § 1506 and 11 NYCRR § 80-1.6 of Insurance Regulation 52. Insurance Law § 1506(a) provides:

No person, other than an authorized insurer, shall acquire control of any domestic insurer, whether by purchase of its securities or otherwise, unless:

(1) it gives twenty days' written notice to the insurer, or such shorter period of notice as the superintendent permits, of its intention to acquire control, provided that the notice shall include an agreement by the person seeking to acquire control that the person will provide the annual report specified in section one thousand five hundred three of this article for so long as control exits; and
(2) it receives the superintendent's prior approval.

Because the Applicants are not "authorized insurers" within the meaning of Insurance Law § 107(a)(10), the Applicants cannot acquire control of the Domestic Insurer without the Superintendent's prior approval.

Insurance Law § 1506(b) directs that "the [S]uperintendent shall disapprove [an] acquisition [of control] if [s]he determines, after notice and an opportunity to be heard, that such action is reasonably necessary to protect the interests of the people of this state." Section 1506(b) further guides the Superintendent's inquiry into whether to disapprove of an acquisition by providing an exclusive list of factors to be considered. Those factors are:

(1) the financial condition of the acquiring person and the insurer;
(2) the trustworthiness of the acquiring person or any of its officers or directors;
(3) a plan for the proper and effective conduct of the insurer's operations;
(4) the source of the funds or assets for the acquisition;
(5) the fairness of any exchange of shares, assets, cash or other consideration for the shares or assets to be received;
(6) whether the effect of the acquisition may be substantially to lessen competition in any line of commerce in insurance or to tend to create a monopoly therein; and
(7) whether the acquisition is likely to be hazardous or prejudicial to the insurer's policyholders or shareholders.

Insurance Regulation 52 (11 NYCRR Part 80) lists information that an applicant must furnish to the Superintendent when applying for approval of an acquisition of control. The required information includes the identity and background of the applicant; financial statements for the applicant; a description of the nature, source, and amount of consideration to be used in effectuating the acquisition; and a description of the applicant's objectives in acquiring control. *See* 11 NYCRR § 80-1.6.

Financial Services Law § 301(c) provides that the Superintendent has "the power to protect users of financial products and services," including health insurance. Financial Services Law § 201(b) further directs that the Superintendent "shall take such actions as the [S]uperintendent believes necessary to":

(1) foster the growth of the financial industry in New York and spur state economic development through judicious regulation and vigilant supervision;

(2) ensure the continued solvency, safety, soundness and prudent conduct of the providers of financial products and services;
(3) ensure fair, timely and equitable fulfillment of the financial obligations of such providers;
(4) protect users of financial products and services from financially impaired or insolvent providers of such services;
(5) encourage high standards of honesty, transparency, fair business practices and public responsibility;
(6) eliminate financial fraud, other criminal abuse and unethical conduct in the industry; and
(7) educate and protect users of financial products and services and ensure that users are provided with timely and understandable information to make responsible decisions about financial products and services.

ANALYSIS

The Scale of the Merger

The CVS/Aetna Merger is a significant financial transaction that could have a significant impact on the future of health insurance and health care delivery. The overall CVS/Aetna Merger will cost CVS Health approximately $69 billion, and when the assumption of Aetna Inc.'s debt is added to that figure, the total value of the overall Merger is $77 billion. The cash amount of the consideration is $4.1 billion, while $44.8 billion will be financed in new debt, including in the form of senior notes and term loans. New equity will also be issued to finance the transaction in an amount totaling approximately $21 billion.

In 2017, CVS Health reported net revenues of $184.8 billion. In the first six months of 2018, CVS Health reported net revenues of $92.4 billion. In New York alone, CVS Health, or its subsidiaries, own 573 retail pharmacies, a specialty pharmacy, 24 "MinuteClinics," 4 Coram Infusion Facilities, 6 long term care "OmniCare" facilities, and a pharmaceutical distribution center.

In 2017, Aetna Inc. reported total revenues of $60.5 billion. In the first six months of 2018, Aetna Inc. reported total revenues of $30.9 billion. In 2017, Aetna Inc. companies, including the Domestic Insurer, wrote approximately $3.5 billion in direct premiums for New York alone. In the first half of 2018, Aetna Inc. companies, including the Domestic Insurer, have reported approximately $2 billion in New York direct premiums.

Consideration of the Insurance Law § 1506(b) Factors

When viewed from a market competition and consumer standpoint, the overall CVS/Aetna Merger raises important issues. In considering this transaction and in obtaining the attached Commitments, the Department has considered all the factors enumerated in New York's Insurance Law, and discusses each below.

Financial Condition

The CVS/Aetna Merger involves a considerable amount of debt – over $40 billion – that the Applicants would be assuming to finance this transaction. The Department has expressed its concern that this increased debt may create pressure on Aetna Inc. to raise premiums in New York or to take other actions that negatively impact New York consumers. CVS Health has represented to the Department that it – and only it – will bear the responsibility for the debt used to finance the transaction, and that it will use CVS Health's revenues from other business operations, as well as what otherwise would be dividends and share repurchases, to pay down the debt.

The Department seeks to ensure that New Yorkers will not pay to finance this acquisition, in insurance premiums or otherwise. The Applicants have made certain representations about their overall financial stability, but those representations alone do not address fully the impact of the assumed debt on the companies' dedication to pro-consumer investments and reduction in premiums. Accordingly, in the Commitments set forth in the Addendum, the Applicants have agreed to certain requirements to ensure that insurance premiums are not utilized to pay down the debt assumed by this transaction, that the company uses income from other operations to reduce its leverage in a relatively short period of time, and certain dividend and restrictions and risk-based-capital requirements subject to the Superintendent's approval.

Trustworthiness

A preliminary review of the biographical affidavits of the officers and directors of the Applicants that were submitted with the Application did not reveal any issues regarding the backgrounds of such individuals that would indicate untrustworthiness. The biographical affidavits have been forwarded to the Department's Albany office for further investigation. The Department has been furnished with a commitment that the Applicants will promptly replace any present and/or future principal officer or director of the Applicants or the Domestic Insurer that the Department has deemed to be untrustworthy upon conclusion of its investigation. Under the Insurance Law, the Department can always seek removal of an officer or director if its investigation reveals untrustworthiness.

Plan of Operations

The Applicants claim that the CVS/Aetna Merger will result in operational synergies and that the combined companies will achieve substantial cost savings. In her testimony at the Hearing, the CVS Health witness testified that the CVS/Aetna Merger would "benefit consumers in New York and result in meaningful cost savings and other consumer benefits and, importantly, will inject much-needed change and innovation into a broken system." However, CVS Health did not provide detail to support these broad claims. In response to questioning at the Hearing regarding a concrete plan in place to accomplish the goals the Applicants set forth in support of the Proposed Acquisition of Control, Ms. Ferguson responded, "There isn't one right now." Accordingly, the Commitments include requirements of post-transaction reporting to the Department with respect to the claimed reduced costs and improved health outcomes, commitments assuring that benefits fairly reach all New York communities, and public service commitments, including financial

commitments, for health insurance education and enrollment and health care transformation measures.

The Applicants must also address the concerns with the relationship that would result among Aetna Inc., on the one hand, and one of the largest PBMs in the country, CVS Caremark, on the other hand. The Department is particularly concerned about data privacy and cybersecurity. CVS Health, through its PBM subsidiary, currently has access to drug claims data, patient electronic medical records, and other member information from insurers that use its PBM services and that presently compete with the Domestic Insurer and its affiliates. The Applicants must ensure that the transaction will not compromise consumers' data by committing to strong safeguards to protect and prevent the inappropriate sharing of consumers' data. A data breach could have devastating consequences for consumers, and could further have material financial and operational impacts on Aetna Inc. Accordingly, the Commitments include substantial commitments to the Department's cybersecurity requirements, as well as the commitment to an independent audit of the companies' firewall policies and protections.

Source of Funds

As discussed above, the Department has raised concerns about the amount of debt the Applicants will be assuming to finance this transaction and the need to repay the debt from sources of funds other than insurance premiums and drug prices. As already noted, the Department has required the Applicants to provide enforceable Commitments, set forth in the attached, that New Yorkers will not pay to finance this acquisition, in insurance premiums, drug prices or otherwise.

Fairness of Consideration

According to the Application, the nature and amount of the consideration for the CVS/Aetna Merger were determined by arm's length negotiations among the parties. The Department's review has not raised any concerns with the consideration to be paid from the perspective of the fairness of the purchase price for the stock of Aetna Inc.

Effect on Competition

The CVS/Aetna Merger would have significant impacts on competition in various ways. First, through the proposed transaction, Aetna Inc. plans may create structures, network designs, or other incentives for their insureds to use services offered by the Applicants over those of their competitors. This could increase CVS Health's market share in the retail pharmacy industry, and potentially lead to a reduction in competition that could result in the loss of small businesses and/or higher drug prices passed on to consumers, including New York policyholders of other insurance companies regulated by the Department.

Second, the inverse may also occur, creating additional market concentration in the health insurance market. Given the relative size and prevalence of the Applicants' pharmacies throughout the State, this would represent a potential increase in the already considerable New York market share of Aetna Inc. companies. The Department has also raised its substantial concerns that Aetna

policies written to New Yorkers are primarily written out of a company that is domiciled in another state.

Third, pharmaceutical costs represent the single largest driver of premium increases today. Today, the top three PBMs control 70% of the business in this highly opaque industry. CVS Caremark is one of the three PBMs with this dominant market power, and the CVS/Aetna Merger would further concentrate its market power by removing Aetna Inc. as a potential competitor in the PBM market. Moreover, CVS Caremark, as a PBM, would have the power to offer Aetna Inc. companies larger rebates or reduced fees than offered to other insurers. This would give Aetna Inc. an artificial competitive advantage that would draw policyholders away from other insurers and create an even larger market share for the enterprise. As a result, small and regionally-based carriers, without an affiliated PBM, would be disadvantaged, thereby harming markets and consumers.

Fourth, PBMs repeatedly are criticized for their lack of transparency and oversight. Without commitments to address these concerns, CVS Caremark, with Aetna Inc. in the same affiliate chain of companies, could create the risk of increased costs of pharmaceuticals and insurance premiums paid by New York consumers.

Accordingly, the attached Commitments include substantial measures related to Aetna Inc.'s commitment to New York policyholders, agreements that Aetna will not receive preferential pricing from CVS Caremark and addressing independent pharmacies, required reporting to the Department regarding pharmaceutical rebates, and commitments to PBM transparency.

Potential Hazard or Prejudice to Policyholders

A number of the foregoing concerns also are relevant to the evaluation of the final statutory factor relating to potential hazards or prejudice to policyholders. These concerns include the transaction's impact on premiums; impact on pharmaceutical costs; impact on PBM pricing and transparency; impact on data privacy and cybersecurity; and impact on the Domestic Insurer and its affiliates with respect to the pressure to repay debt used to finance the transaction.

Without a proper and effective plan to ensure that promised cost savings for policyholders are actually realized, the merger would be prejudicial to policyholders. Without greater transparency and oversight, PBMs' pricing models could result in higher medical-claims-related costs, potentially increasing premiums. As already noted, cybersecurity is a growing threat and institutions must commit to strong protections. Moreover, the Applicants have a substantial retail pharmacy operation that is present in many communities across New York State. The Applicants have claimed that the transaction will benefit consumers who will be able to use CVS Pharmacy stores to obtain better access to certain health care services.

Accordingly, to address these concerns, the Department has required the Applicants to commit to implementing their stated objectives across New York State, in a manner that serves New York's communities fairly and equitably, including those communities most in need of affordable health care services, as well as the uninsured. As set forth above, the conditions set

forth in the Addendum also include reporting obligations, measures to address competition and cost concerns, data privacy protections and public service financial commitments.

Weighing of Insurance Law § 1506(b) Factors

As set forth above, an evaluation of the New York Insurance Law factors requires certain commitments in order for approval of the Proposed Application of Control to be justified. In evaluating this transaction, the Department is mindful of the concerns raised by hospital, medical, pharmacy and consumer groups and individuals. The Department has evaluated the transaction based upon the nature of the Application that is before the Department, recognizing that the Department does not have an application before it with respect to the overall CVS/Aetna Merger nor for the proposed change of control of the Aetna Inc. insurance companies that write substantial business in the State of New York.

The Department is committed to ensuring that New Yorkers have quality, affordable health care and a competitive insurance market that protects consumers. Given the discussion above, the Department believes that disapproving the Proposed Acquisition of Control is unlikely to provide any tangible benefits to the People of this State. Accordingly, the Department has engaged in substantial discussions with both CVS Health and Aetna Inc. to address the concerns set forth above and in the public comments received. These concerns include the level of debt assumed in the transaction and the impact of such assumed debt on premiums and other costs; post-transaction oversight of the promises being made by the Applicants with respect to claims of reduced costs and improved health outcomes; commitments to New Yorkers' health care needs and reducing the number of uninsured New Yorkers; Aetna Inc.'s commitment to the State of New York and New York policyholders; data privacy and cybersecurity protections; and the lack of transparency and practices of PBMs.

The Department has determined that obtaining commitments from CVS Health and Aetna Inc. to address these concerns better serves the People of the State of New York than would disapproval of the Application that is before the Department. Accordingly, as conditions to approval, and as set forth in the discussion above, the Department has required the Applicants to make significant commitments to the Department that address each of the Insurance Law factors that might otherwise weigh against approval. Those Commitments, signed by both CVS Health and Aetna Inc., are conditions to the Department's approval and are attached in the Addendum and fully incorporated into this Decision and Order.

The Department notes that it has a range of regulatory tools to ensure the realization of the promises that have been made by the Applicants in seeking the Department's approval and to ensure the continued protection of New York consumers. The promises made to the Department throughout the application process, as well as in the Commitments incorporated and attached as the Addendum to this Decision and Order, are subject to review and enforcement by the Department to ensure compliance and otherwise to protect the public.

In addition, under New York's holding company statute, the Department has the broad authority to conduct examinations of entities within a holding company, here to now include CVS entities. Insurance Law § 1504(b) provides that "[e]very holding company and every controlled

person within a holding company system shall be subject to examination by order of the superintendent if the superintendent has cause to believe that the operations of such persons may materially affect the operations, management or financial condition of any controlled insurer within the system, including by posing enterprise risk to the insurer[.]" Accordingly, under existing law, the Department has the power to examine any entity owned by a holding company, where it has cause to believe such entity can affect the operations, management or financial condition of any insurer licensed in New York. As a result of the CVS/Aetna Merger, CVS Health and CVS Pharmacy will become holding companies subject to examination by the Department. In addition, CVS Caremark, as a controlled person in the CVS Health holding company that, as set forth above, will be in a position to materially affect the operations, management or financial condition of multiple New York licensed insurers, including ALIC, will also be subject to examination by the Department.

The Department's powers also include, but are not limited to, the power to examine any licensed insurer pursuant to Insurance Law § 309, including any Aetna insurer writing business in the State of New York such as ALIC; the power to seek special reports from any licensed insurer about any matter related to its transactions or condition or any matter connected therewith pursuant to Insurance Law § 308; the power to suspend or revoke an insurer's license under Insurance Law § 1104; the power to impose fines on a holding company or any entity within a holding company for violating the holding company act or for doing or causing to be done anything for an insurer that would violate the Insurance Law under Insurance Law §§ 1509-10; and the broad powers under the Financial Services Law to subpoena any provider of financial services or products, conduct investigations and take other necessary actions to protect consumers in New York State.

The Department will use these regulatory tools to review the past and future conduct of Aetna Inc. and its relevant subsidiaries, CVS Health, CVS Pharmacy, and CVS Caremark. The Department will take any actions necessary to ensure that the representations made in the course of this approval were accurate and that the parties keep all commitments made to the Department, as the Department relied on the representations and commitments in granting this approval.

Finally, the Department has previously advocated for state legislation to require that all PBMs operating in the State of New York must obtain a license from DFS and be examined and regulated by DFS. While the Department will have full powers to examine CVS Health entities under New York's holding company statutes, the Department's proposed legislation to license PBMs is a necessary additional step. The Department notes that at the Hearing, as well as in the course of negotiating the Commitments, the Applicants committed that CVS Health and its subsidiaries will take no action to oppose such legislation.

ORDER

WHEREAS, the Department has reviewed the complete record before the Department, which includes the Application; representations made by the Applicants and Aetna Inc. and its subsidiaries in the course of the Department's extensive review of the Application; the record of the Hearing, including all testimony given and comments received; and the opinions of the expert staff of the Department; and

WHEREAS, upon that record, the relevant provisions of the Insurance Law and Financial Services Law, the parameters of the specific application before the Department, the Commitments made by CVS Health and Aetna Inc. as set forth in the Addendum, and the Department's regulatory and enforcement powers over future matters regarding CVS Health and Aetna Inc., the Superintendent has found that disapproval of the Proposed Acquisition of Control is not necessary to protect the interests of the People of this State;

NOW, THEREFORE, I, Maria T. Vullo, Superintendent of Financial Services of the State of New York, having found that disapproval is not necessary to protect the interests of the People of New York, based upon the Application and documents and testimony furnished in connection therewith and in reliance upon the commitments and representations made to the Department, and the Department's regulatory authority under the New York Insurance Law with respect to all controlled persons within a holding company of all insurers, domestic or foreign, licensed in New York, and the Department's authority under the Financial Services Law, do hereby **APPROVE** the Proposed Acquisition of Control, subject to the Commitments set forth in the Addendum.

Dated: November 26, 2018

SO ORDERED:

Maria T. Vullo
Superintendent of Financial Services

Addendum

CVS-Aetna: Conditions for DFS Approval

CVS Health Corporation, Aetna Inc. and their subsidiaries agree to the following commitments:

Financial Condition

1. **No New York Funds for Acquisition.** Upon consummation of the Proposed Acquisition of Control, the Applicants shall: (a) *Assets*: not dispose of or otherwise use assets of the Domestic Insurer or Aetna Life Insurance Company (ALIC) or any other insurance subsidiaries of the Applicants that are licensed to transact comprehensive health insurance business in New York, and all insurance affiliates of the Domestic Insurer licensed to transact insurance business in New York including any managed care organizations certified in New York (collectively "Foreign NY Insurers") for the purpose of repaying any debt incurred to finance the Proposed Acquisition, use no part of the assets of the Domestic Insurer or Foreign NY Insurers to pay, reimburse, or otherwise fund both the cash financing portion of the Proposed Acquisition of Control and the substantial debt related to the financing of the CVS/Aetna Merger except as approved by the relevant agency with regulatory authority; (b) *Costs*: not pass onto the Domestic Insurer, Foreign NY Insurers or New York insureds any acquisition costs or other consideration, including without limitation executive compensation paid to or accrued for the benefit of any executive officers of the Applicants or Aetna in connection with, or triggered by, the CVS/Aetna Merger; (c) *Rates*: not seek premium rate increases applicable to New York insureds that are intended to be used, or are used, to pay for the cost of the Proposed Acquisition of Control. Applicants represent and warrant that premiums and cost-sharing obligations payable (including copayments and deductibles) by New York insureds for products offered by the Domestic Insurer and Foreign NY Insurers shall not increase as a result of costs incurred in financing, analyzing and/or consummating the Proposed Acquisition of Control ("Acquisition Costs"). (Such Acquisition Costs include, but are not limited to, attorneys' and investment bankers' fees, travel expenses, due diligence expenses, and expenses related to current or future acquisitions by the Applicants.); (d) *No Dividends:* cause the Domestic Insurer to refrain from declaring and/or paying any dividends (ordinary or extraordinary), without the express prior approval of the Superintendent for a period of three years from the consummation of the Proposed Acquisition of Control.

2. **Prompt De-Lever.** The Applicants have represented in the Application that the combined entity will de-lever quickly to an adjusted debt to adjusted EBITDA ratio of approximately 3.75x through disciplined financial policies. As such, upon the consummation of the CVS/Aetna Merger, the Applicants will provide to the Department semi-annual reports on the status of the plans to de-lever with regards to the debt financing obligations. Such semi-annual reports shall be submitted to the Department as a separate document and shall include the current leverage ratio.

3. **Maintain RBC.** Applicants shall cause the Domestic Insurer, to maintain a minimum Risk Based Capital (RBC) level of 300% at all times. Beginning five years following the

consummation of the Proposed Acquisition, the Applicants may ask the Department to revise the 300% requirement, and if so requested, the Department will consider the request in good faith.

Plan of Operation

4. **Document Synergies.** The Applicants have represented in the Application that certain synergies will be achieved as a result of the CVS/Aetna Merger. As such, the Applicants shall provide to the Department annual reports for three years documenting details of the progress toward achieving such estimated synergies annually (i.e., cost savings in terms of premium reductions, out of pocket costs savings to the consumer, etc.), specific to the Domestic Insurer, and the New York business of Foreign NY Insurers.

Commitment to New York Insureds

5. **Maintain Products, Services Area, Networks.** The Applicants agree that the Domestic Insurer and Foreign NY Insurers shall, for a period of three years from consummation of the Proposed Acquisition of Control (a) continue to offer their current products, if any, throughout their current service area in New York, except to the extent that changes to such products or service areas are otherwise approved by the Department; and (b) use reasonable efforts to maintain their current networks of providers, including pharmacies, without material changes, except to the extent such changes are otherwise approved by the Department. Nothing herein shall preclude the Domestic Insurer or Foreign NY Insurers from offering new products with different networks.

6. **New York Business.** Within two years from the consummation of the CVS/Aetna merger, the Applicants shall offer, through an existing or new insurer domiciled in New York, one or more new products available to the small and large group markets. Applicants will make good faith efforts to develop and fully market such products in New York, including but not limited to offering any such product with a producer commission structure similar to comparable group products, as well as engaging in comparable advertising and sales efforts.

7. **No Material Change to Business.**

(a) Upon the consummation of the CVS/Aetna Merger, the Applicants shall refrain from the following actions: (i) liquidating the Domestic Insurer; (ii) selling any material portion of the assets of the Domestic Insurer; (iii) merging the Domestic Insurer with any other person or persons; or (iv) making any other material change with regard to business, corporate structure, management or general plan of operations of the Domestic Insurer, all without the express prior approval of the Superintendent.

(b) Except to the extent authorized or required by a regulatory authority with applicable jurisdiction, upon the consummation of the CVS/Aetna Merger, the Applicants shall refrain from the following actions: (i) liquidating any Foreign NY Insurer; (ii) selling any material portion of the assets of any Foreign NY Insurer; or (iii) merging any Foreign NY Insurer with any other person or persons.

Commitment to New York's Improved Health Outcomes

8. **Care Improvements.** The Applicants shall roll out throughout New York State, and in scale that is reflective of New York State's market share of Applicants' business, the enhanced care model as presented as part of the Application – such as improved readmission prevention, emergency room avoidance, and drug adherence at CVS pharmacies or other locations to the extent that New York State statutes and regulations are amended or otherwise deemed to permit innovative pharmacy solutions. Applicants shall also provide an annual report for a period of three years from consummation of the Proposed Acquisition of Control, detailing quality metrics applied and measured at CVS pharmacies or other locations along with additional details indicating improved health outcomes.

9. **Public Service.** The Applicants agree to pay $40 million over three years to New York State, subject to a plan approved by the Superintendent of Financial Services and the Director of the Division of the Budget. Such plan shall include, but not be limited to: (i) funds paid to organizations to support health insurance education and enrollment activities; and (ii) funds to strengthen New York health care transformation activities, which may include payments to the New York State Health Care Transformation Fund.

   The Applicants shall further make available, at no charge, reasonable access to CVS's New York retail stores, in compliance with CVS's existing operating procedures, for such funded community-based organizations to engage in health insurance education and enrollment activities.

Data Privacy

10. **Firewalls and Data Use.** No later than one year following the date of the CVS/Aetna merger, the Applicants shall submit to the Department a copy of an audit conducted by an independent big four accounting firm to assess that Aetna employees have not accessed the Confidential Information in violation of the firewall policies submitted to the Department pursuant to this condition.

    The Applicants shall submit to the Department a copy of the firewall policies creating appropriate functional separation between Aetna employees and Caremark and CVS pharmacy information concerning individual pricing and rates paid by other health plans and clients for PBM and retail pharmacy services ("Confidential Information"). Following the submission of such policies, the Department shall provide the Applicants with comments on such policy. In addition, the Applicants shall submit to the Department a copy of the firewall training taken by CVS and Aetna employees regarding the firewall policies.

11. **Adherence to New York Cybersecurity Regulation.** The Domestic Insurer, ALIC and Caremark Rx, L.L.C. shall adhere to New York's cyber-security regulations (23 NYCRR Part 500) and have submitted and will submit the required annual certificates of compliance to the Department.

Competition

12. **No Preferential Pricing.** CVS Health and its subsidiaries agree not to provide pricing to any Aetna-affiliated health insurer licensed in New York, including any managed care organization certified in New York, that takes into account the fact that the health insurer is Aetna-affiliated.

13. **Independent Pharmacies.** For a period of three years from consummation of the Proposed Acquisition of Control, the Domestic Insurer, and every Foreign NY Insurer, shall ensure that participating provider networks for insured products maintain access to non-chain New York pharmacies. Such access shall be comparable on an aggregated statewide basis to the ratio of non-chain pharmacies at the time of consummation of the proposed Acquisition of Control. Nothing in this condition suggests the Department will review specific contract negotiations between Applicants and individual non-chain pharmacies. The Domestic Insurer and Foreign NY Insurers shall annually report to the Department the percentage of non-chain New York pharmacies in their New York pharmacy networks.

Pharmaceutical Costs

14. **Pharmacy Rebates to Policyholders.** The Applicants shall provide to the Department an annual report describing all pharmacy rebates received by or credited to the Domestic Insurer, as well as those pharmacy rebates received or credited to any Foreign NY Insurer in connection with New York business insured or administered by such affiliates. The report shall include at a minimum, by line of business, the volume of rebates returned to employers or insureds, the volume of rebates credited at the point of sale, and the volume of rebates retained by the insurer. Nothing herein shall preclude Applicants from asserting that such reports are exempt from disclosure pursuant to the provisions of the Public Officers Law.

11/23/2018

CVS Health Corporation — Date

By: Thomas S. Moffatt
Vice President Assistant Secretary
Assistant General Counsel

Aetna Inc. — Date

By:

Competition

12. **No Preferential Pricing**. CVS Health and its subsidiaries agree not to provide pricing to any Aetna-affiliated health insurer licensed in New York, including any managed care organization certified in New York, that takes into account the fact that the health insurer is Aetna-affiliated.

13. **Independent Pharmacies**. For a period of three years from consummation of the Proposed Acquisition of Control, the Domestic Insurer, and every Foreign NY Insurer, shall ensure that participating provider networks for insured products maintain access to non-chain New York pharmacies. Such access shall be comparable on an aggregated statewide basis to the ratio of non-chain pharmacies at the time of consummation of the proposed Acquisition of Control. Nothing in this condition suggests the Department will review specific contract negotiations between Applicants and individual non-chain pharmacies. The Domestic Insurer and Foreign NY Insurers shall annually report to the Department the percentage of non-chain New York pharmacies in their New York pharmacy networks.

Pharmaceutical Costs

14. **Pharmacy Rebates to Policyholders.** The Applicants shall provide to the Department an annual report describing all pharmacy rebates received by or credited to the Domestic Insurer, as well as those pharmacy rebates received or credited to any Foreign NY Insurer in connection with New York business insured or administered by such affiliates. The report shall include at a minimum, by line of business, the volume of rebates returned to employers or insureds, the volume of rebates credited at the point of sale, and the volume of rebates retained by the insurer. Nothing herein shall preclude Applicants from asserting that such reports are exempt from disclosure pursuant to the provisions of the Public Officers Law.

CVS Health Corporation
By:

Date

Aetna Inc.
By: Edward C. Lee
Assistant Corporate Secretary

November 23, 2018
Date

Table of Exhibits to Group Exhibit C

Exhibit A	Burns, Lawton R., Ph.D., MBA, "Limits on Consumer Benefits from Proposed Merger of Aetna Inc. into CVS Health Corporation"
Exhibit B	Scheffler, Richard M., Ph. D., "The Impact of CVS's Acquisition of Aetna on Medicare Part D Stand-Alone Prescription Drug Plan (PDP) Market Concentration"
Exhibit C	Starc, Amanda, Ph.D., "Comments on Selected Issues re: The Proposed Mergers of Aetna and CVS"
Exhibit D	Neeraj, Sood, Ph.D., "Potential Effects of the Proposed CVS Acquisition of Aetna on Competition and Consumer Welfare"
Exhibit E	MSA-Level Markets Where Aetna is the First or Second Largest Health Insurer, 2016
Exhibit F	CVS-Aetna Supplemental Submission to CDI (July 3, 2018)
Exhibit G	Burns, Lawton R., Ph.D., MBA, Response to Aetna Supplemental Submission, July 9, 2018
Exhibit H	Neeraj, Sood, Ph.D., Letter Response to Aetna Supplemental Submission (July-20-2018)
Exhibit I	Greaney, Thomas, J.D., "Statement for the Investigatory Hearing on the Merger of Aetna and CVS", California Department of Insurance (June 19, 2018)
Exhibit J	American Antitrust Institute Response to CVS-Aetna to CID
Exhibit K	American Medical Association, Letter to The Honorable Makan Delrahm, August 7, 2018

Limits on Consumer Benefits from Proposed Merger of Aetna Inc. into CVS Health Corporation

Lawton Robert Burns, Ph.D., MBA
The James Joo-Jin Kim Professor
Department of Health Care Management
Director – Wharton Center for Health Management & Economics
Co-Director – Roy & Diana Vagelos Program in Life Sciences & Management
The Wharton School
University of Pennsylvania
3641 Locust Walk
Philadelphia, PA 19104
215-898-3711
burnsL@wharton.upenn.edu

June 26, 2018

I thank the American Medical Association for support of this research contained in this document. These comments reflect my views and opinions and not those of the AMA.

I. Introduction

I am the James Joo-Jin Kim Professor at the Wharton School of the University of Pennsylvania, where I am a Professor in the Department of Management and the Department of Health Care Management. I am also the Director of the Wharton Center for Health Management & Economics, and Co-Director of the Roy and Diana Vagelos Program in Life Sciences and Management at the University of Pennsylvania. In these roles, I teach courses on the U.S. healthcare system and the industrial organization of healthcare. These courses cover the entire value chain of health care, including:

- providers such as hospitals, physicians, pharmacies, retail clinics, etc.
- managed care organizations, insurers, and pharmacy benefit managers who contract with and reimburse providers for their services
- employers, individuals, and governmental bodies who ultimately pay for these services, and
- manufacturers of pharmaceutical and medical products who supply the technologies that providers utilize in patient care.

I have worked closely with both the Federal Trade Commission and the Department of Justice in prior antitrust cases that assess the competitive harms from mergers in the healthcare industry. In such cases, I am asked to evaluate whether the mergers provide any offsetting, compensating benefits for lowering healthcare costs and/or improving healthcare quality in the event they are found anticompetitive. This report discusses whether any such benefits may exist in the proposed merger of Aetna Inc. into CVS Health Corporation. My conclusion is that they do not exist.

II. The Merger: Exercise in Vertical Integration

In December 2017, CVS Health and Aetna announced their intention to merge. CVS Health describes itself as a "integrated pharmacy health care company". It is comprised (as of March 2018) of several businesses: (1) a large chain of 9,847 CVS retail pharmacies; (2) a large pharmacy benefit manager (PBM), Caremark, with 90 million members; (3) a chain of 1,111 retail clinics (MinuteClinic) that reside within some of its pharmacies; and (4) a staff of 4,000 of nursing professionals working in the retail clinics and home healthcare. For its part, Aetna is a large health insurer that provides coverage

to 22.2 million enrollees across several customer segments (e.g., commercial, Medicare Advantage, Medicaid) and product lines.

CVS Health executives describe their organization as the "integration" of a pharmacy benefit manager (PBM), a pharmacy, and a retail provider. With the proposed merger of Aetna, the new company will further integrate vertically to include an insurer. According to a CVS Health statement, the merger will confer several benefits, particularly by "integrating more closely the work of doctors, pharmacists, and other health care professionals and health benefits companies to create a platform that is easier to use and less expensive for consumers".[1] In so doing, "the combined company [will serve] as America's front door to quality health care". Thus, at a general level, the merger will tackle the three thorniest problems bedeviling the U.S. healthcare system: cost, quality, and access. These three issues are often referred to as "the iron triangle of healthcare".[2]

According to the announcement, the vertical merger will also serve many specific aims. These include:

- Combine CVS Health's clinical capabilities with Aetna's analytics
- Connect Aetna's provider network with CVS Health's community access model
- Remake the consumer health care experience
- Improve understanding of patients' health goals
- Guide patients through the healthcare system
- Put the consumer at the center of healthcare delivery and empower them
- Avoid unnecessary hospital re-admissions & emergency department visits
- Help members achieve their best health
- Complement the care provided by patients' physicians
- Help meet the health needs of members with chronic conditions
- Use analytics together with broader patient information to reduce cost of care
- Provide face-to-face counseling to patients between doctor visits
- Provide remote monitoring of patients' health status indicators

[1] CVS Health. 2017. "CVS Health to Acquire Aetna," CVS Health Press Release. December 3rd.
[2] William Kissick. 1994. *Medicine's Dilemmas*. New Haven, CT: Yale University Press.

A similar set of aims were enunciated by the general counsel for both CVS Health and Aetna in testimony before the House Judiciary Committee's Subcommittee on Regulatory Reform, Commercial and Antitrust Law in late February 2018.[3] [4]

These general and specific goals are to be achieved through the merger of two companies that offer community healthcare services and insurance coverage, respectively. The merger will result in a vertically-integrated system that combines providers (pharmacies, pharmacists, nurse practitioners), a PBM, and a health plan.[5] [6] Executives involved in such mergers rarely, if ever, evaluate their combination in the light of academic theory or the empirical evidence base. Such is the case here, as I discuss below.

III. Evidence Base on Vertical Integration in the Literature

A. Corporate Literature

The rationale for vertical integration has been described in depth.[7] [8] [9] Initially, vertical integration served to link up the stages of production for a given product (raw materials, production, distribution). More recently, vertical integration sought to combine and then apply intangible assets to the manufacture and distribution of many goods that are not necessarily linked as stages of a common production process. There are several rationales for engaging in such strategic combinations. One goal is to reduce "transactions costs" (e.g., contracting) and "agency costs" (e.g., performance monitoring) between the merging firms. Another goal is to pool complementary assets to achieve "economies of scope" and lower costs by using the same intangible assets in the production of multiple goods and services.

---

[3] Thomas Sabatino. 2018. *Statement*. House Judiciary Committee, Subcommittee on Regulatory Reform, Commercial and Antitrust Law. February 27th.
[4] Thomas Moriarty. 2018. *Statement*. House Judiciary Committee, Subcommittee on Regulatory Reform, Commercial and Antitrust Law. February 27th.
[5] Dean Ungar, Alan Murray, Scott Robinson et al. 2018. *Vertical Integration: Short-term Credit Pain, Long-term Credit* Gain. Moody's Investors Service. April 5th.
[6] Leemore Dafny. 2018. "Health Care Industry Consolidation: What is Happening, Why it Matters, and What Public Agencies Might Want to Do About It," Testimony before the House Committee on Energy and Commerce, Subcommittee on Oversight and Investigations. (February 14).
[7] Alfred Chandler. 1962. *Strategy and Structure*. Cambridge, MA: MIT Press.
[8] Alfred Chandler. 1969. "The Structure of American Industry in the Twentieth Century: A Historical Overview," *Business History Review* 43(3): 255-298.
[9] Alfred Chandler, 1977. *The Visible Hand: The Managerial Revolution in American Business*. Boston, MA: Harvard University Press.

Despite the long-term interest in vertical integration, there remains no consistent evidence in the corporate literature that vertical integration reduces firm costs or improves product quality. Favorable outcomes depicted in one prior literature review[10] are not replicated in more recent empirical investigations.[11] [12] This suggests there is no *prima facie* evidence for consumer welfare benefits flowing from strategies of vertical integration. Indeed, the integration decision rests on a complex calculus that few firms make accurately, let alone understand, in the face of changing technology and demand.[13]

B. Healthcare Literature

Several reviews of the literature on vertical integration in healthcare have been published or presented in the last five years.[14] [15] [16] [17] [18] Most reviews deal with the integration of different types of providers. When reviewing the evidence, it is important to distinguish the providers involved in the vertical integration.

Reviews of the literature on *vertical integration of physicians with hospitals* are quite consistent in their conclusions regarding the impact on price and costs. In general,

---

[10] Francine Lafontaine & Margaret Slade. 2007. "Vertical Integration and Firm Boundaries: The Evidence," *Journal of Economic Literature* XLV (September): 629-685.

[11] Dongli Zhang. 2013. "The Revival of Vertical Integration: Strategic Choice and Performance Influences," *Journal of Management and Strategy* 4(1): 1-14.

[12] Hsiu-Ling Li & Ming-Je Tang. 2010. "Vertical Integration and Innovative Performance: The Effects of External Knowledge Sourcing Modes," *Technovation* 30: 401-410.

[13] John Stuckey & David White. 1993. "When and When Not to Vertically Integrate," *McKinsey Quarterly* (August). David Besanko, David Dranove, & Mark Shanley. 2004. *Economics of Strategy*. Third edition. Hoboken, NJ: Wiley & Sons.

[14] Lawton R. Burns, Jeff Goldsmith, and Aditi Sen. "Horizontal and Vertical Integration of Physicians: A Tale of Two Tails." In *Annual Review of Health Care Management: Revisiting the Evolution of Health Systems Organization. Advances in Health Care Management*, Volume 15: 39-117. (Emerald Group Publishing). 2013.

[15] Jeff Goldsmith, Lawton R. Burns, Aditi Sen, and Trevor Goldsmith. *Integrated Delivery Networks: In Search of Benefits and Market Effects*. (Washington, D.C.: National Academy of Social Insurance, 2015).

[16] Brady Post, Tom Buchmueller, & Andrew Ryan. 2017. "Vertical Integration of Hospitals and Physicians: Economic Theory and Empirical Evidence on Spending and Quality," *Medical Care Research & Review* (August). http://journals.sagepub.com/doi/10.1177/1077558717727834.

[17] Lawton R. Burns and Mark V. Pauly. "Transformation of the Healthcare Industry: Curb Your Enthusiasm?" *Milbank Quarterly*. (March 2018) 96(1): 57-109.

[18] Rachel Machta, Kristin Maurer, David Jones et al. 2018. A Systematic Review of Vertical Integration and Quality of Care, Efficiency, and Patient-Centered Outcomes, *Health Care Management Review* 45(1). doi: 10.1097/HMR.0000000000000197.

integration is associated with higher prices, higher costs, higher utilization of the hospital, and increased market power over insurers. It is also associated with lower productivity and possibly lower quality and higher hospital re-admissions. The evidence regarding quality is mixed.

Some reviews deal with the *vertical integration of multiple providers (and perhaps payers as well)* in accountable care organizations (ACOs) and coordinated care organizations (CCOs). The evidence here suggests some improvements in some quality metrics but a general failure to save money. Others deal with *hospital integration with post-acute care (PAC) sites* such as home health agencies and skilled nursing facilities. The recent evidence shows that such vertical integration increases overall Medicare spending in some settings but not in others; higher quality and lower costs are not achieved.[19]

Finally, some reviews deal with the *vertical integration of insurers and providers,* or providers' assumption of insurance risk in risk-based contracts. The evidence shows that adding insurance functions by a provider organization increases spending but does not improve quality, patient safety, or patient satisfaction.[20] It also does not lower charges per admission or length of stay and may lead to a deterioration in the provider's financial performance.[21] Adding provider functions to an insurer may lead to higher insurance premiums.[22]

These results seriously question whether the integration of these different segments (physician care, hospital care, insurance) produce any consumer welfare benefits. The literature on horizontal integration of each of these segments suggests limited economies

---

[19] R. Tamara Konetzka, Elizabeth Stuart, & Rachel Werner. 2018. "The Effect of Integration of Hospitals and Post-Acute Care Providers on Medicare Payment and Patient Outcomes," *Journal of Health Economics*. https://doi.org/10.1016/j.jhealeco.2018.01.005.

[20] Jeff Goldsmith, Lawton R. Burns, Aditi Sen, and Trevor Goldsmith. *Integrated Delivery Networks: In Search of Benefits and Market Effects*. (Washington, D.C.: National Academy of Social Insurance, 2015).

[21] Lawton Burns, Gilbert Gimm, & Sean Nicholson. 2005. "The Financial Performance of Integrated Health Organizations (IHOs)." *Journal of Healthcare Management* 50(3): 191-213.

[22] Austin Frakt, Steven Pizer, & Roger Feldman. 2013. "Plan–Provider Integration, Premiums, and Quality in the Medicare Advantage Market," *Health Services Research* 48(6): 1996-2013.

of scale in combining firms within that segment. The literature on vertical integration reviewed above suggests limited economies of scope in combining firms across these segments. That is, there appear to be few or no scope economies within physician groups, hospitals, and health plans that diversify into one another's segment. It is therefore difficult to see why there might be scope economies in health care organizations that link all of these components together.

This begs the question: can there really be synergies in linking together insurers and providers when each has achieved no synergies in their own integration efforts? Can the whole really be greater than the sum of its constituent parts? The literature suggests that physician care, hospital services, and health plan operations are very different business lines, with few assets and capabilities that can be shared across them to leverage savings and efficiencies. As a result, there may be little opportunity to reduce the average costs of each business as they become integrated with one another.

Overall, reviews of vertical integration in healthcare suggest that tighter forms of integration foster higher prices, and integration of firms with higher market share pre-merger exert more anticompetitive effects. There is also some evidence of consumer harm caused by vertical integration: patients of physicians who are employed by hospitals get referred to hospitals of higher cost and lower quality - - the opposite of "value" healthcare.[23]

C. Implications for Aetna – CVS Merger

Thus, when one examines the proposed merger of CVS Health and Aetna, one cannot rely on either the research literature or historical precedents to justify the combination. Instead, one must examine the specific claims for the merger's benefits and the ability of the merged entity's businesses to deliver on such benefits.

[23] Erin Brown & Jaime King, 2016. "The Double-Edged Sword of Health Care Integration: Consolidation and Cost Control," *Indiana Law Journal* 92(1): Article 2.

Considering the theoretic rationales for vertical integration, only two are referenced in either CVS Health's or Aetna's public statements: pooling complementary assets and leveraging existing capabilities. Both are general claims without much specification of what is to combined or how it will be leveraged. Other than the analytics capability of Aetna (discussed below), there is no real discussion or documentation that these two rationales hold. More importantly, there is no mention in their statements about production efficiencies; indeed, as researchers have noted, such efficiencies may be limited in industries that are more labor-intensive than capital-intensive.[24] Both industries involved in the CVS Health - Aetna merger (retail pharmacies, healthcare insurance) are labor intensive; not surprisingly, there is little evidence that scale economies exist.

The disconnect between the rationales offered by CVS/Aetna and academic theory/research, while troubling, is nothing new. Such disjunctions have long existed, stemming as far back as providers' efforts to horizontally and vertically integrate in the early 1990s.[25] These disjunctions are troubling not only because they diverge from academic theory but also because, as witnessed by prior integration efforts in healthcare, they may portend strategic failures by integration to deliver on promised outcomes.

IV. Retail Clinics' Inability to Deliver Promised Benefits

A. Overblown Expectations of Retail Clinics

Much of the supposed benefit of the proposed merger rests on CVS Health's network of retail clinics. CVS Health operates roughly 1,100 MinuteClinics in some of its pharmacies. Following the merger, these retail clinics will become mini-health centers or health hubs that expand access to lower-cost healthcare services and improve care convenience. Some liken them to new "community health centers". Some analysts assert that much of the U.S. population lives within 10-15 minutes of a pharmacy (or within 3 miles of a CVS pharmacy).[26] As a result, patients will have faster access to lower-level

[24] Alfred Chandler. 1990. *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge, MA: Harvard University Press.
[25] Lawton Burns & Mark Pauly. 2002. "Integrated Delivery Networks (IDNs): A Detour on the Road to Integrated Healthcare?" *Health Affairs* 21(4): 128-143.
[26] David Larsen. Leerink Partners. As quoted in Zachary Tracer. 2017. "CVS's $68 Billion Bid to Bring One-Stop Shopping to Health Care," *Bloomberg*. (December 7th). Available online at:

care that can increase earlier management of illness and reduce unnecessary use of hospital emergency rooms. In this fashion, retail clinics will solve "the iron triangle" of healthcare by simultaneously improving access, improving outcomes, and lowering costs.

Retail clinics can also purportedly improve the following: (1) coordination of care by fostering partnerships between patients, their physicians, and their local pharmacists; (2) patient compliance with their treatment plans (particularly drug prescriptions) and thereby reduce complications; (3) management of the patient's health across the care continuum; (4) wellness promotion in these new community centers by combining the efforts of the local pharmacist with a nutritionist and a nurse practitioner (in MinuteClinic); (5) the patient's experience of care and health status; (6) consumer spend of the monies in their health savings accounts (HSAs); and (7) the appeal of healthcare to consumers. All of these efforts will promote "population health" and help to achieve the "triple aim".[27]

Pronouncements like this have long fueled exaggerated expectations for retail clinics and their ability to transform the healthcare industry. Such expectations began in with Clayton Christensen et al.'s futuristic view of retail clinics as a disruptive innovation.[28] [29] This helped to propel a rapid rise in the number of clinics that, in turn, led consultants to forecast growth in the sector to 2,225 clinics by 2017 and 2,857 clinics by 2021.[30] Based on such expectations, the enhanced retail clinic represented a "silver bullet" that could "cure" all U.S. healthcare ills. The sections below critically evaluate this promise.

---

https://www.bloomberg.com/news/articles/2017-12-07/cvs-s-68-billion-bid-to-bring-one-stop-shopping-to-health-care.

[27] Donald Berwick, Thomas Nolan, & John Whittington, 2008. "The Triple Aim: Care, Health and Cost," *Health Affairs* 27(3): 759-769.

[28] Clayton Christensen, Richard Bohmer, & John Kenagy. 2000. "Will Disruptive Innovations Cure Health Care?" *Harvard Business Review* (September-October): 102-112.

[29] Clayton Christensen, Jerome Grossman, & Jason Hwang. 2009. *The Innovator's Prescription: A Disruptive Solution for Health Care*. New York:McGraw-Hill.

[30] Kalorama Information. 2017. *Retail Clinics 2017*. New York: Kalorama (May).

B. The Hype of Transformation

Company executives and analysts alike characterize the proposed merger as a "transformation" of how healthcare is delivered. This transformation encompasses several theorized benefits and advantages: coordination of care, early management of patient ailments, increased compliance with treatment plans and medication therapy management (MTM), improved management of the continuum of the patient's health, management of chronic illness, enhanced consumer experience, improvement in people's health status, and management of population health.

A recent analysis of the supposed transformation of the U.S. healthcare industry reveals that such claims are over-blown in two respects: transformation is neither happening quickly nor exerting the desired impacts on the iron triangle that futurists predict.[31] At present, transformation remains wishful thinking than reality. In particular, the hoped-for movement to value-based contracting and risk payments - - both of which may be needed to achieve the goals of the proposed merger - - has not happened. Most providers are still paid predominantly on a fee-for-service basis. Hence, getting to payments based on a "total cost of care", which will be helpful to manage the substitution of pharmacy for medical benefits, will take a long time. Moreover, the proposed merger will be hard pressed to reengineer patient care-seeking and provider care delivery on a national scale. It is not clear to anyone that patients view their local pharmacy as a "health hub" or their local pharmacist as a substitute for a primary care physician. Researchers have recently questioned the transformative force of retail clinics.[32] [33]

C. The Hype of Retail Clinic Growth

The anticipated rapid expansion in the retail clinic sector is unwarranted. First, trend data over the past three years indicate that growth in the total number of retail clinics has stalled between 2015-2018. Retail clinics reached a plateau below 2,000 sites by 2015

[31] Lawton R. Burns & Mark V. Pauly. 2018. "Transformation of the Health Care Industry: Curb Your Enthusiasm?" *Milbank Quarterly* 96(1): 57-109.
[32] Christine Cassel. 2018. "Can Retail Clinics Transform Health Care?" *JAMA* (April 12th).
[33] Jon Christianson. 2017. "Retail Clinics Are Still Here. Now What?" *American Journal of Managed Care* (May 2nd). Available online at: https://conciergemedicinetoday.org/2017/05/02/retail-clinics-are-still-here-now-what-ajmc-medica-research-institute-2/.

with a slight decline by 2018.[34] The trend holds for both CVS Health, which operates roughly half of all such clinics, and Walgreens which operates roughly one-fifth. Indeed, Walgreens has shifted its strategy away from in-house clinics to partnerships with local health systems that own and operate the clinics inside Walgreens - - effectively moving away from a vertically-integrated model to a strategic alliance model. Other retail clinic chains have also stopped their expansion. Thus, retail clinics are not a booming industry, contrary to the hype generated by many consultants. Even one of the early advocates of retail clinics and colleagues of Christensen has admitted this.[35]

The stall in retail clinic capacity suggests that the upward trend in retail clinic visits may have likewise plateaued since 2015. At present, retail clinics may supply as little as 1-2% of all primary care in the U.S., down from an estimated 5% or less estimated a few years ago.[36] [37]

D. Low Profitability of Retail Clinics

Retail clinics may have failed to spread because they are often unprofitable, losing $41,000 annually on average.[38] Retail clinics are reportedly unprofitable until they reach a critical mass, after which they earn a small margin. The clinics are a high fixed-cost business using labor, space, and some technology. They can cost $50,000 to $250,000 to build out, can typically see 10-30 patients per day, and may generate revenues upwards of $500,000 per year. Profits of $200,000+ reported for "best-in-class" clinics rest on an "ambitious volume of 30 visits/day".

---

[34] Adam Fein. 2018. "As CVS-Aetna Looms, Retail Pharmacy Clinic Growth Stalls," *DrugChannels*. March 6th. Available online at: http://www.drugchannels.net/2018/03/as-cvs-aetna-looms-retail-pharmacy.html.

[35] Jason Hwang & Ateev Mehrotra. 2013. "Why Retail Clinics Failed to Transform Health Care," *Harvard Business Review* (December 25). Available online at: https://hbr.org/2013/12/why-retail-clinics-failed-to-transform-health-care. Accessed on June 10, 2018.

[36] Blue Cross & Blue Shield. 2017. *Retail Clinic Visits Increase Despite Use Lagging Among Individually Insured Americans*. Available online at: https://www.bcbs.com/sites/default/files/file-attachments/health-of-america-report/BCBS.HealthOfAmericaReport.Retail.pdf.

[37] Rand Corporation. 2016. *The Evolving Role of Retail Clinics*. Available online at: https://www.rand.org/pubs/research_briefs/RB9491-2 html. Accessed on June 10, 2018.

[38] Jordan Stone. 2013-2014. *Profit from Convenient Primary Care*. Health Care Advisory Board. Available online at: https://www.advisory.com/-/media/Advisory-com/Research/HCAB/Events/Webconference/2014/Profit-from-Convenient-Primary-Care-052914.pdf.

E. False Hopes in Cross-Selling

The low profitability of clinics may result from an inability to "cross-sell". Retail clinics hope that they can drive business around customer health and wellness, in addition to filling prescriptions and buying consumer products. Despite the promise, senior pharmacy chain executives acknowledge limits on their ability to cross-sell the front-end and back-end of the store: "health and beauty aids" (HABA) and minor acute care services in the retail clinic. Most customers visit pharmacies for one side of the business but not the other (at least on the same visit). This threatens the business model of retail clinics, which must compete on the metric of "revenue per square foot" against the higher-margin HABA products.

Two other considerations call this CVS strategy into question. First, analysts suggest that MinuteClinic generates less than 1% of CVS retail pharmacy dispensing revenues.[39] Thus, there is little evidence that such cross-selling is working. Second, any genuine interest of CVS Health and its MinuteClinics in population health should temper its enthusiasm to cross-sell drugs to its clinic patients.

F. Stalled Growth of Retail Pharmacy

Over the last three years, growth in MinuteClinics has stalled because growth in CVS Health pharmacies has stalled.[40] Some of this is likely internal; some is likely external. CVS undertook two mergers during 2015 - - with Omnicare and Target - - which focused its attention on internal integration issues. Externally, retail pharmacy is a mature industry with revenue growth of only 1-2% annually and more players vying for these revenues. Retail pharmacies face mounting competition from mass merchandisers (e.g. discount stores, supercenters and warehouse clubs), mail-order prescription providers, online pharmacies, convenience stores, wholesalers (e.g. Costco) and other health clinics (e.g., urgent care centers). There is some speculation that the retail pharmacy market

[39] Adam Fein. 2017. "Retail Clinic Check Up: CVS Retrenches, Walgreens Outsources, Kroger Expands," *Drug Channels*. February 16th. Available online at: http://www.drugchannels net/2017/02/retail-clinic-check-up-cvs-retrenches html.

[40] https://retail-index.emarketer.com/company/data/5374f24e4d4afd2bb444662b/5374f2784d4afd824cc158f1/lfy/false/cvs-real-estate.

suffers from excess capacity and that consolidation is likely, due to falling drug reimbursement rates, mandatory mail-order plans, the growth of generic drugs, and the growth of narrow networks. Drug volumes and general margins in retail pharmacies (including CVS Health) remain stagnant at best.[41]

G. Financial Losses at CVS Health

Compounding (or exacerbating) this stagnation in CVS stores has been CVS' financial losses. CVS suffered a near 20% drop in its stock price in 2016 and a 17% drop in net income (YOY) in the first quarter of 2017. CVS has been hampered by falling revenues from its retail pharmacy business as a percentage of total revenues from 2010-2017. Most of the decline is traced to competitive actions taken by Walgreens to win over two contracts (Prime Therapeutics in August 2016, TriCare in September 2016) that steered enrollees away from CVS pharmacies.

H. The Merger's Defensive Nature

The above evidence points to a major problem with the proposed CVS Health – Aetna merger: it is a defensive strategy in nature for both parties. *For CVS*, the merger comes on the heels of rumors in May 2017 that Amazon would enter the pharmacy distribution business, a move threatening both retail pharmacy and mail-order pharmacy businesses. Many suspected that CVS Health moved on this deal to counter Amazon's entry; in hindsight, this rumored entry did not occur.

The proposed merger is defensive in another sense as well. As noted above, CVS Health has been facing declining performance over the past few years, in part due to a loss of pharmacy customers to Walgreens. In 2014, Walgreens Boots Alliance formed a strategic alliance with Prime Therapeutics, the PBM serving Blue Cross / Blue Shield (BCBS) plans in several states. As a result of this alliance, BCBS members were steered away from other pharmacies (including CVS) to Walgreens as their national preferred pharmacy network. This network will expand upon Walgreens' completion of its acquisition of 1,932 Rite-Aid pharmacies in 2018.

[41] David Larsen & Matt Dellelo. 2017. *HCIT & Distribution*. Leerink. (December 18).

For Aetna, as well, the merger is a defensive move to counter growth challenges. Much of the growth in managed care enrollment has occurred in three market segments: Medicare Advantage (MA), Medicaid, and (until recent years) the state health insurance exchanges. Aetna had lower market share in the more profitable MA market and sought to correct that weakness through its proposed 2016 merger with Humana. The Department of Justice successfully blocked this merger in early 2017 on grounds that it was anti-competitive. Thus, Aetna was looking for growth in all the wrong places.

Aetna also watched as the Optum Health subsidiary of its major competitor, UnitedHealthcare, successfully merged with a large provider (DaVita Medical Group). The deal added significant physician capacity to Optum's burgeoning provider network (30,000 physicians, both employed and affiliated) serving its MA plans. It also augmented its large ambulatory care business. United already operates 250 urgent care centers (MedExpress) and a chain of surgery centers; the DaVita acquisition added capacity to both. Aetna is thus looking to respond to the growing provider presence of a major competitor.

I. Retail Clinics' Failure to Serve the Underserved

The retail clinics failed to expand care to under-served markets (e.g., the poor, rural residents). This was deliberate. The clinics were disproportionately located in urban areas and, within those areas, in higher-income neighborhoods. Retail clinics targeted more affluent people who could pay cash for the clinic's services or who had insurance (that later covered these services). The clinics did not target the poor or those without a physician - - ironically, those who utilized a hospital emergency department (ED) as their primary source of care. This is perhaps why the entrance of a retail clinic fails to reduce ED utilization for low-acuity conditions.[42]

[42] Grant Martsolf, Kathryn Fingar, Rosanna Coffey et al. 2017. "Association Between the Opening of Retail Clinics and Low-Acuity Emergency Department Visits," *Annals of Emergency Medicine* 69(4): 397-403.

A related explanation is retail clinics' reluctance to accept Medicaid patients. Research suggests that only 60% of retail clinics accept Medicaid.[43] This is consistent with the disproportionate location of these clinics in more affluent neighborhoods. As a result, any impact on retail clinic volume via expanded health insurance coverage through the Affordable Care Act (half through Medicaid, half through the state exchanges) may have been blunted.

J. Retail Clinics' Likely Inability to Address Chronic Illness

The retail clinics' focus on the younger, healthier population means they are not well positioned to address chronic illness in the broader population. In the Medicare population, the top 20% of patients have five or more chronic conditions. This patient segment accounts for two-thirds to three-quarters of healthcare expenses in the Medicare population (those 65+ years of age, and the disabled). This segment is often labeled as "the polychronics" - - i.e., those taking medications for five or more chronic illnesses.

MinuteClinics do not currently target this population. Moreover, the needs of this population may not be well addressed by the nurse practitioners (NPs) and physician assistants (PAs) who staff these clinics. In 2002, the Centers for Medicare and Medicaid Services (CMS) funded fifteen clinical trials for elderly populations under the Medicare Coordinated Care Demonstration. Evaluators concluded that care coordination alone "holds little promise of reducing total Medicare expenditures for beneficiaries with chronic illness".[44] Similar conclusions have been reached by health policy researchers.[45]

While not reducing costs, the Demonstration showed that care coordination programs can sometimes be cost-effective. A particular configuration of healthcare services and providers is needed to deliver and coordinate cost-effective care to this population.[46] [47]

---

[43] Martsolf et al. 2017. "Association Between the Opening of Retail Clinics and Low-Acuity Emergency Department Visits."

[44] Deborah Peikes, A. Chen, J. Schore, and Randall Brown. 2009. "Effects of Care Coordination on Hospitalization, Quality of Care, and Health Care Expenditures Among Medicare Beneficiaries," *JAMA* 301(6): 613-618.

[45] J. Michael McWilliams. 2016. "Cost Containment and the Tale of Care Coordination," *New England Journal of Medicine* 375(23): 2218-2220.

[46] Peikes et al. 2009. "Effects of Care Coordination on Hospitalization, Quality of Care, and Health Care

This configuration includes intensive, monthly, face-to-face communications between several pairs of individuals: physician & nurse, provider & patient, and provider & family. It also requires successful behavioral change on the part of the patient to build adherence to medication regimes and self-care behaviors. Such infrastructure may be lacking in a small retail pharmacy setting.

The challenge of care coordination is not to be taken lightly. Medicare fee-for-service beneficiaries see an average of two primary care providers and five specialists across four sites of care annually. A physician treating 257 Medicare patients would have to deal with up to 229 other physicians practicing in 117 care sites.[48] [49] Care is thus dispersed across multiple practitioners in multiple specialties practicing in multiple sites. To paraphrase the saying popularized by Hillary Clinton, it "takes a village" to coordinate care. However, it may not be easy to coordinate such a large village. It is not clear how MinuteClinics using NPs or PAs will address, let alone, improve this situation.

K. Retail Clinics' Likely Inability to Succeed in Wellness & Prevention Programs

One touted advantage of the proposed merger is a focus on wellness and disease prevention. The theory underlying such programs rests on the following assumptions:

- employers/providers who offer wellness screening will attract those at risk
- those at risk will respond to incentives offered and change their behavior
- such behavioral change will be sustained over time, when incentives are removed
- those at risk will participate in disease management programs to sustain the gains and that such programs will help to improve compliance

There are several critical flaws or hazards with such approaches. First, it is not cost-effective to screen everyone. Second, screening programs usually elicit only low participation rates. Third, those who do participate and engage in health risk assessments

---

Expenditures Among Medicare Beneficiaries."

[47] Randall Brown. 2013. *Lessons for ACOs and Medical Homes on Care Coordination for High-Need Beneficiaries.* Presentation at AcademyHealth Annual Research Meeting (Baltimore, MD: June).

[48] Hongmai Pham, D. Schrag, A.S. O'Mally, B. Wu, and P, B. Bach. 2007. "Care Patterns in Medicare and their Implications for Pay for Performance. *NEJM*, 356: 1130-1139.

[49] Hongmai Pham, A.S. O'Malley, P.B. Bach, C. Salontz-Martinez, and D. Schrag. 2009. "Primary Care Physicians' Links to Other Physicians Through Medicare Patients: The Scope of Care Coordination," *Annals of Internal Medicine* 150:236-242.

tend to be healthier than those who do not. Fourth, research on behavioral economics shows that only a small percentage of people who are exposed to the incentives change their behaviors and only do so as long as the economic incentives are provided. Moreover, there is considerable variation across patients in how responsive they are to incentives: those who care about their health do not need incentives, while those who care less about their health are not responsive to incentives. Incentives may thus be wasted on both groups. They are also usually so small that they fail to move the needle. Fifth, the chronically ill population (where the real costs are incurred) that is expensive to treat has five or more conditions that need to be jointly managed. Sixth, patients are often not engaged in their own care: patients are too busy with other matters and are not excited by wellness programs. Moreover, patient adherence to therapy may not be the major issue to target. Not surprisingly, the track record of wellness and prevention efforts is mixed at best. [50] [51] [52]

L. Retail Clinics' Likely Inability to Perform Medication Therapy Management

Another touted advantage of the proposed merger is its focus on "medication therapy management" (MTM). MTM and its variants can encompass generic substitution, drug interactions, drug reconciliation, medication adherence programs, annual comprehensive medication review, and targeted medication reviews. Such programs are often voluntary, however. This means that patients can opt out of these programs anytime.

Contrary to popular belief, the major problems in current drug therapy may not be patient adherence. Rather, two big problems are failure to prescribe additional prescriptions that are needed (e.g., controllers for asthmatics, beta blockers for hypertensives) and the tendency to prescribe dosages that are too low (e.g., for patients with diabetes and

[50] Gautam Gowrisankaran, Karen Norberg, & Steven Kymes. 2013. "A Hospital System's Wellness Program Linked to Health Plan Enrollment Cut Hospitalizations but Not Overall Costs," *Health Affairs* 32(3): 477-485.
[51] Robin Soler, Kimberly Weeks, Sima Razi et al. 2010. "A Systematic Review of Selected Interventions for Worksite Health Promotion," *American Journal of Preventive Medicine*. 38(2): s237-262.
[52] Soeren Mattke, Hangsheng Liu, John Caloyeras, et al. 2013. *Workplace Wellness Programs Study: Final Report* (Santa Monica: Rand Corporation).

hyperlipidemia). [53] This likely results from physicians (a) electing to use non-medication therapeutic approaches, and (b) dosing the medications they do prescribe too low to control the patient's condition. Hence, the problem may not lie in adverse drug reactions, drug-drug interactions, and compliance problems, but rather in the under-use of effective pharmaceutical therapies by physicians.[54]

For sophisticated MTM programs to work, pharmacists need to work closely with physicians and patients, and perhaps as an extension of the physician's practice between office visits. It is important that the patient understands, agrees with, and actively participates in the care process and treatment regimen.[55] This can be facilitated by frequent interactions with the pharmacist that occur between physician office visits, and involvement of the patient's family in care coaching sessions at the pharmacy. One problem for CVS Health and its retail clinics is that anywhere from one-half to two-thirds of retail clinic patients have no primary care physician (PCP). Some patients who do have a PCP and then visit a retail clinic abandon their PCP.

M. <u>The Merger's Questionable Ability to Achieve Substitution Effects</u>

One of the touted advantages of the proposed merger is the combination of CVS Health's coverage of the drug benefit (through its Caremark PBM) with Aetna's coverage of the medical benefit. In this manner, there is the opportunity to coordinate the two benefits and seek substitution of less costly pharmaceutical therapy for more costly hospital and physician care. There is some empirical evidence for such substitution effects, although not all economists are convinced.[56] [57] [58] [59] [60] [61]

---

[53] Djenane de Oliveira, Amanda Brummel, & David Miller. 2010. "Medication Therapy Management: 10 Years of Experience in a Large Integrated Health Care System," *Journal of Managed Care Pharmacy* 16(3): 185-195.

[54] P.J. O'Connor, J. Sperl-Hillen, P. Johnson et al. 2005. "Clinical Inertia and Outpatient Medical Errors," *Advances in Patient Safety* 2:293- 308.

[55] Brian Issets, Amanda Brunnel, Djenane de Oliveira et al. 2012. "Managing Drug-related Morbidity and Mortality in the Patient-centered Medical Home," *Medical Care* 50(11): 997-1001.

[56] Craig Garthwaite and Mark Duggan. 2011. "Empirical Evidence on the Value of Pharmaceuticals," Chapter 15. In Patricia Danzon and Sean Nicholson (Eds.), Oxford *Handbook of the Economics of the BioPharmaceutical Industry*. (Oxford, University Press).

[57] J. Michael McWilliams, Alan Zaslavsky, & Haiden Huskamp. 2011. "Implementation of Medicare Part D and Nondrug Medical Spending for Elderly Adults with Limited Prior Drug Coverage," *Journal of American Medical Association* 36(4): 402-409.

Coordination of benefits is the presumed goal of insurers who offer an in-house PBM. It is important to note, however, that roughly half of U.S. insurers insource their own PBM, while the other half outsource the PBM function. Based on a "survivorship principle", the market has not clearly selected one model over the other. It is also not clear how far these substitution effects extend. It may be the case that patients who have high medical costs are also those that have high pharmacy costs. Moreover, it is unclear whether prior evidence will hold going forward as specialty pharmaceuticals increasingly comprise a large share of spending on drugs.

Some considerations may temper our expectations regarding these substitution effects. First, they do not automatically happen at the health plan level, but instead rely on providers' decision-making at the point of care. Second, there may be little incentive to pursue such savings in the absence of global risk claims and payment. As recently reported, most providers are still paid predominantly fee-for-service.[62] Third, such programs will be difficult to implement in the face of shortages among both PCPs (and other primary care providers, covered below) and their lack of knowledge regarding the drugs prescribed by the specialist colleagues to whom they refer their patients.

N. Challenges of Supply and Demand for Retail Clinic Staff

The strategy to transform the retail clinics into community health hubs may fail for other reasons. The growth of retail clinics partly depends on the supply of practitioners needed

[58] M. Christopher Roebuck, Joshua Liberman, Marin Gemmill-Toyama et al. 2011. "Medication Adherence Leads to Lower Health Care Use And Costs Despite Increased Drug Spending," *Health Affairs* 30(1): 90-91.
[59] Martin Gaynor, Jian Li, and William Vogt. 2006. "Is Drug Coverage a Free Lunch? Cross-Price Elasticities and the Design of Prescription Drug Benefits," NBER Working Paper Series. Working Paper 12758.
[60] Frank Lichtenberg. 1996. "The Effect of Pharmaceutical Use and Innovation on Hospitalization and Mortality", Working Paper No. 5418, National Bureau of Economic Research, Cambridge, MA.
[61] Terry McInnis. (2012). *Pharmacist – The Most Transformative Force in Healthcare or The Demise of a Profession?* Available online at: http://www.bluethorninc.com/Articles.html. Accessed on June 10, 2018.
[62] Burns & Pauly. "Transformation of the Health Care Industry. 2018.

to staff them and state laws that allow them to practice there. Both have proved problematic.[63] [64]

Retail clinics are typically staffed by nurse practitioners (NPs) and physician assistants (PAs). There is wide variation in NP supply across states; less than half of NPs work in primary care. Unlike the retail clinics and primary care physicians, NPs and PAs are more likely to work in rural areas. Another issue is state-level nursing scope-of-practice regulations. In some states, NPs are permitted to provide care independently; other states do not permit NPs to practice without collaborating with, or being supervised by, a physician. Many of these states require written practice protocols, and they sometimes restrict the number of NPs with whom a physician may collaborate. Still other states allow NPs to practice independently but permit them to prescribe medicines only if they are collaborating with or supervised by a physician.[65] Reforms in such state regulations are necessary to increase demand for NP and PA care, which might then allow retail clinics to grow further.[66]

O. Retail Clinics' Failure to Disrupt

Retail clinics were not transformative. Contrary to Clayton Christensen's theory, they were also not disruptive.[67] Instead of targeting those market segments that have been neglected (e.g., the poor, the rural, the uninsured, those in poor health) with a more affordable product offering, they cherry-picked patients. Not only did they target wealthier neighborhoods, they also attracted patients who were disproportionately younger adults, females, and those without any chronic conditions.[68] This was not "the

[63] Robert Martiniano, Sherry Chorost, & Jean Moore. 2016. *Health Care Employment Projections, 2014-2024*. Rensselear, NY: Center for Health Workforce Studies. School of Public Health.
[64] Julie Sochalski. 2016. "Nursing and the Health Care Workforce." Presentation to the Wharton School. September 29.
[65] Joanne Spetz, Stephen Parente, Robert Town et al. 2013. "Scope of Practice Laws for Nurse Practitioners Limit Cost Savings that can be Achieved in Retail Clinics," *Health Affairs* 32(11): 1977-1984.
[66] J. Margo Brooks Carthon, Therese Sammarco, Darcy Pancir et al. 2017. "Growth in Retail-based Clinics after Nurse Practitioner Scope of Practice Reform," *Nursing Outlook* 65: 195-201.
[67] Christensen et al. 2000. "Will Disruptive Innovations Cure Health Care?"
[68] J. Scott Ashwood, Rachel Reid, Claude Setodji et al. 2011. "Trends in Retail Clinic Use Among the Commercially Insured," *American Journal of Managed Care* 17(11): e443-e448.

low end of the market" who were "less-demanding customers".[69] For such patients (many of whom are Millennials), convenience served as the strongest predictor of retail clinic use.

Moreover, disruption is not always positive.[70] When asked if retail clinics were helping or hurting primary care, only 22% of physicians responded favorably; by contrast, 36% felt retail clinics were hurting primary care. Overall, 79% of respondents said that market disruption fragmented the physician-patient relationship, 47% stated it fostered inaccurate medical information, 47% said it resulted in less coordinated care, and 33% felt it increased the overall cost of care.

Three recent studies buttress these physician perceptions. First, retail clinics add to patient demand rather than substitute for other types of utilization; as a result, the presence of retail clinics adds to total health spending. Much of retail clinic utilization (estimated at 58%) would not otherwise occur.[71] Second, analyses of primary care physicians suggest that the shift to retail clinics and other convenient care sites harms the physician-patient relationship and the benefits of such encounters (e.g., trust, empathy, information exchange, compliance, emotional bonding, reassurance and anxiety reduction).[72] Third, a recently completed study shows that the loss of continuity in seeing one's primary care physician - - as often happens when patients seek care from a retail clinic and do not return - - leads to higher utilization of specialists and higher healthcare spending.[73]

---

[69] Christensen et al. 2000. "Will Disruptive Innovations Cure Health Care?"
[70] Amy Compton-Phillips. 2016. "Care Redesign Survey: In the Push for Convenient Care, Protect the Patient-Doctor Relationship," NEJM Catalyst (July 14th). Available online at: https://catalyst nejm.org/care-redesign-report-push-convenient-care-protect-patient-doctor-relationship/.
[71] J. Scott Ashwood, Martin Gaynor, Claude Setodji et al. 2016. "Retail Clinic Visits for Low-Acuity Conditions Increase Utilization and Spending," *Health Affairs* 35(3): 449-455.
[72] Timothy Hoff. 2018. *Next in Line*: *Lowered Care Expectations in the Age of Retail- and Value-Based Health*. Oxford, UK: Oxford University Press.
[73] Stephen Schwab. 2018. *The Effects of Disruptions to the Patient-Physician Relationship*. Doctoral Dissertation. Department of Health Care Management, The Wharton School.

P. Revenge of the Incumbent Providers

The expectation that incumbent providers would ignore the upstart retail clinics and let them flourish - - which was part of Christensen's theory - - was totally inaccurate. Research long ago showed that none of the innovations initially identified by Christensen as "disruptive" (retail clinics, single specialty hospitals, ambulatory surgery centers) really disrupted the healthcare industry.[74] Hospital chains opened their own retail clinics and partnered with others in strategic alliance; hospitals also opened their own specialty-focused centers of excellence to combat free-standing single specialty hospitals; and hospitals have increasingly acquired physician-owned ambulatory surgery centers or sponsored their own. Regulatory and reimbursement factors also played a strong role in facilitating hospital ascendance in the latter two areas. Instead of disruption, incumbent providers played strong defense against new entrants, often coopting them to become members of their systems.

Q. False Allure of Community Health Centers

The proposed merger relies on a re-tooling of the retail clinic into a community health center (or neighborhood hub). This will purportedly serve as a new way to access healthcare services and increase the population's access to convenient, low-cost care. Such a vision embraces the 1960s' vision of community health centers (CHCs) and community mental health clinics (CMHCs) as the basis for healthcare delivery. Unfortunately for their advocates, these centers never became mainstream delivery sites that attracted insured patients. Instead, they served as sites of care for the poor and the mentally ill. They were poorly funded by local government and never achieved their promise. The same CHC fate has been observed in countries like India and China.[75] [76]

[74] Lawton R. Burns, Guy David, & Lorens Helmchen. 2011. "Strategic Responses by Providers to Specialty Hospitals, Ambulatory Surgery Centers, and Retail Clinics." *Population Health Management* 14(2): 69-77.
[75] Lawton R. Burns. 2014. *India's Healthcare Industry: Innovation in Delivery, Financing, and Manufacturing*. New Delhi: Cambridge University Press.
[76] Lawton R. Burns and Gordon G. Liu. 2017. *China's Healthcare System and Reform*. Cambridge, UK: Cambridge University Press.

R. Mismatch in Capacity Between CVS Health & Aetna

Historical case evidence shows that vertical integration fails when there is a mismatch in the capacity of the merging, upstream and downstream entities. There is an enormous mismatch in capacity between CVS Health's chain of pharmacies (N = 9,847) and its chain of retail clinics (N = 1,111 as of March 2018). This means that as few as 11% of CVS pharmacies have such a clinic inside the store. While 70% of the U.S. population may reportedly live within three miles of a CVS pharmacy (according to Leerink), they may not live anywhere near a MinuteClinic. Thus, to deliver on the promised merger benefits above, CVS would need to embark on a massive expansion of its retail clinics and trust that they would be utilized. Such demand may not be present, given the stalled growth in the total number of retail clinics. This capacity mismatch in the components of CVS Health (pharmacies and retail clinics) will hamper the vertical integration effort.

There may also be a mismatch in the geographical location of the merged entities' operations. Only a fraction of CVS Health pharmacies has a retail clinic, and these tend to be disproportionately located in wealthier neighborhoods. It is not clear whether these clinic locations overlap with the geographic location of Aetna's enrollees, who are expected to be directed to CVS pharmacies and hopefully use its pharmacists and MinuteClinics. A preliminary analysis of available data indicate that Aetna has high enrollment in some states (e.g., Alaska, Arizona, West Virginia) where CVS has no retail clinics; in other high enrollment states, CVS has very few such clinics. To the degree that the geographic overlap is low, there is little synergy likely between these businesses (at least in the short-term until the mismatch in capacity issues are addressed).

S. Retail Clinics' Limited Impact on the Iron Triangle

Academic evidence on retail clinics suggests their ability to impact the iron triangle (access, cost) is limited. With regard to access, retail clinics treat patients that are not necessarily treated by other providers. The vast majority of retail clinic patients (60%+) have no primary care physician, partly reflecting the fact they are also much younger in age than other patients. Retail clinics are almost exclusively located in urban areas; 13% of clinics are located in underserved areas (health professional shortage areas) where 21%

of the U.S. population resides. Moreover, despite the claims for convenience, retail clinics do not uniformly enjoy customer praise. An analysis of social media reveals that Walmart's retail clinics achieve higher positive evaluations than do CVS' MinuteClinics. 41% of users posted negative comments on MinuteClinics; 38% reported long wait times, suggesting the stores be relabeled as "HourClinic". Customers of both complained about the level of medical expertise, with some claiming they had been misdiagnosed.[77]

With regard to costs, because retail clinic patients typically lack a primary care physician, there is no substitution of retail clinics for other types of utilization. Instead, as noted above, retail clinics increase overall spending by increasing overall utilization.[78] Moreover, it is not likely that the vertical integration of three businesses - - retail pharmacy & clinic, health insurer, and PBM - - can redefine the healthcare system. The latter two businesses (insurer, PBM) are intermediaries in the broader health system; the first is a bit player in the provider sector of the health system. None of them include physicians, who control (directly or indirectly) 85-90% of all healthcare spending. Physicians are not only key to controlling healthcare costs, they are also critical to payer success in Medicare Advantage contracting, quality improvement, and documentation.

T. Overblown Expectations of Analytics

One of Aetna's major contributions to this merger is its analytics capability. In recent testimony, Aetna Counsel Thomas Sabatino stated that his company's "analytics team can identify members who are at high-risk for developing health complications and share that information with providers to help them prevent catastrophic health events before they happen". This capability of "predictive modelling" has been under development by insurers since the early 2000s. Such efforts are subject to the same limitations as efforts to promote wellness (noted above). They rely not only on identifying the high-risk but also on their ability to (a) contact and alert them, (b) activate them to seek care, and (c) change their behavior to prevent further complications. The problem here is that those at highest risk are

[77] Stace Aversa. 2013. "Comparing Social Sentiment on Convenient Care Clinics: How Convenient Are They?" Crimson Hexagon. (September 9th).

[78] Ateev Mehrotra. *Impact of Retail Clinics on Quality & Costs.* Available online at: https://static1.squarespace.com/static/573a188740261dc86d93cf71/t/5888be7bebbd1af0a2f9ba63/1485356671639/Ateev+Mehrotra.pdf.

among the least activated in their own health; they may also be least able to take corrective action. It is not clear how Aetna's linkage to a chain of pharmacies (some of which have retail clinics) will ameliorate this situation.

One should remind oneself of the previous hype surrounding the introduction of electronic medical records (EMRs) and its supposed ability to tackle quality and cost problems simultaneously. Nearly two decades after their introduction, there is no evidence for cost reduction and only scattered evidence for quality improvement.[79] A more recent illustration of such overblown expectations is IBM's aggressive promotion of its Watson supercomputer as a revolution in precision medicine and cancer care. Analysts suspect that IBM marketed the product to providers without any evidence base in order to bolster flagging revenues.[80]

V. Conclusion

The proposed merger between CVS Health and Aetna is unlikely to yield the long list of benefits advanced by executives from both companies. The documentation on how these benefits are to be achieved is lacking; their evidence base in the scientific literature is questionable; and the implementation challenges are enormous. This paper suggests that any effort to achieve such benefits through the use of retail clinics and analytics is unlikely to succeed. More generally, the strategies of vertical integration and diversification that underlie the merger lack a firm evidence base for any consumer benefits.

Stuart Robert Brown 12/7/18

[79] Leila Agha. 2014. "The Effects of Health Information Technology on the Costs and Quality of Medical Care," *Journal of Health Economics* 34: 19-30.
[80] Casey Ross. 2017. "IBM Pitched its Watson Supercomputer as a Revolution in Cancer Care. It's Nowhere Close," *Stat* (September 5th).

The Impact of CVS's Acquisition of Aetna on Medicare Part D Stand-Alone Prescription Drug Plan (PDP) Market Concentration

Richard M. Scheffler[*†]

May 29, 2018

Executive Summary

The proposed merger of CVS and Aetna will have important and significant impacts on the concentration of the Medicare Part D stand-alone prescription drug plan (PDP) market. My analysis shows that in 10 of the 34 PDP regional markets, the merger should be "presumed to be likely to enhance market power" according to the U.S. Department of Justice and Federal Trade Commission's (DOJ/FTC) *Horizontal Merger Guidelines*. In an additional 20 of the 34 PDP regional markets, the merger will "potentially raise significant competitive concerns and often warranty scrutiny" according the DOJ/FTC *Horizontal Merger Guidelines*. This latter competitive concern was found for California and it is in my opinion that this merger would raise PDP premiums.

[*] Distinguished Professor of Health Economics and Public Policy and Director of the Nicholas C. Petris Center on Health Care Markets and Consumer Welfare (http://petris.org/), School of Public Health and Goldman School of Public Policy, University of California, Berkeley. Email: rscheff@berkeley.edu
[†] I thank the American Medical Association for supporting my work in preparing this report. This report reflects my views and opinions, not necessarily the views of the American Medical Association.

Introduction

On February 28, 2018, representatives of CVS and Aetna spoke before the House Judiciary Regulatory Reform, Commercial and Antitrust Law Subcommittee. The hearing came on the heels of concerns raised by the American Medical Association that the merger would reduce competition among pharmacy benefit managers, local health insurance markets, and local retail pharmacy markets.[1] Consumer groups have also raised concern about the merger's potential to harm consumers.[2] Both horizontal and vertical theories of harm have been discussed in relation to CVS's proposed acquisition of Aetna. This memo focuses on the horizontal overlap between CVS and Aetna in the Medicare Part D stand-alone prescription drug plan (PDP) market.

The Medicare Part D Stand-Alone Prescription Drug Plan (PDP) Market

In 2018, 43 million of the 60 million people with Medicare have prescription drug coverage under a Medicare Part D plan.[3] Of the 43 million, 25 million (58%) are covered under a stand-alone prescription drug plan (PDP) while the remaining 18 million are enrolled in Medicare Advantage prescription drug plans (MA-PDs).[3] The market concentration analysis in this memo focuses exclusively on the PDP market. Five plan sponsors accounted for 83% of PDP enrollment in 2018: CVS Health (24%, 6 million enrollees), UnitedHealth (21%, 5.3 million enrollees), Humana (20%, 4.9 million enrollees), Express Scripts (10%, 2.4 million enrollees), and Aetna (9%, 2.1 million enrollees).[4]

How Part D Premiums Are Determined

Part D plan sponsors compete on premiums to attract enrollees, but do not set premiums directly.[5] Plan sponsors submit bids to the Centers for Medicare & Medicaid Services (CMS) that represent their revenue requirements (including administrative costs and profit) for

---

[1] American Medical Association. "Statement of the American Medical Association to the U.S. House of Representatives Committee on the Judiciary Subcommittee on Regulatory Reform, Commercial and Antitrust Law Re: Competition in the Pharmaceutical Supply Chain: The Proposed Merger of CVS Health and Aetna." February 27, 2018. Available from: https://searchlf.ama-assn.org/undefined/documentDownload?uri=%2Funstructured%2Fbinary%2Fletter%2FLETTERS%2F2018-2-27-AMA-Statement-for-the-Record-CVS-Aetna%2520Merger-House-Judiciary-Committee.pdf

[2] See e.g. Consumers Union. "Statement of Dena Mendelsohn Senior Attorney Consumers Union to the Department of Managed Health Care on the Proposed Acquisition of Aetna, Inc. by CVS Health Corporation" May 7, 2018. Available from: http://consumersunion.org/wp-content/uploads/2018/05/Consumers-Union-written-testimony-to-DMHC-re-CVS-Aetna.pdf

[3] Cubanski, Juliette, Anthony Damico, and Tricia Neuman. "Medicare Part D in 2018: The Latest on Enrollment, Premiums, and Cost Sharing." San Francisco, CA: Kaiser Family Foundation. May 17, 2018. Available from: https://www.kff.org/medicare/issue-brief/medicare-part-d-in-2018-the-latest-on-enrollment-premiums-and-cost-sharing/

[4] Author's analysis of the CMS's April 2018 Part D monthly enrollment file. Sum of the individual insurer percentages is 84% instead of 83% due to rounding. Data available from: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Monthly-Enrollment-by-Contract-Plan-State-County html

[5] This section relies heavily on the description of how premiums are determined in MedPAC. "The Medicare prescription drug program (Part D): Status report." Ch. 14 in *Report to the Congress: Medicare Payment Policy*. Washington, DC: MedPAC. March 2018. Available from: http://www.medpac.gov/docs/default-source/reports/mar18_medpac_ch14_sec.pdf?sfvrsn=0

delivering basic benefits to an enrollee of average health. CMS then calculates a nationwide enrollment-weighted average among all the bid submissions. The monthly premium an enrollee pays for a plan is a subsidized base premium ($35.02 in 2018) plus (or minus) any difference between his plan's bid and the nationwide average bid. If an enrollee picks a plan that contains supplemental coverage, the enrollee pays the full price of the additional coverage.

Part D's bidding process also determines the maximum premium amount Medicare will pay on behalf of low-income subsidy (LIS) enrollees.[6] The amount is calculated separately for each of the 34 Part D geographic regions as the average premium among plans with basic benefits, weighted by each plan's LIS enrollment in the previous year. 25 of the 34 Part D geographic regions are a single state. The remaining 9 regions are comprised of multiple states (see Table 1 for a list of the 34 Part D geographic regions). The formula used for the LIS program ensures that at least one stand-alone PDP in each region is available to LIS enrollees at no premium. In 2018, over 12 million (28%) of Part D enrollees (PDP plus MA-PD enrollees) received premium and cost-sharing assistance through the Part D LIS program.[3]

[6] In 2018, enrollees can have up to $18,210 in yearly income ($24,690 for a married couple) and up to $14,100 in resources ($28,150 for a married couple) and still qualify for a low income-subsidy. See https://www.medicare.gov/your-medicare-costs/help-paying-costs/save-on-drug-costs/save-on-drug-costs.html for details.

Table 1. Medicare Part D Geographic Regions

PDP Region #	States
1	Maine, New Hampshire
2	Connecticut, Massachusetts, Rhode Island, Vermont
3	New York
4	New Jersey
5	District of Columbia, Delaware, Maryland
6	Pennsylvania, West Virginia
7	Virginia
8	North Carolina
9	South Carolina
10	Georgia
11	Florida
12	Alabama, Tennessee
13	Michigan
14	Ohio
15	Kentucky, Indiana
16	Wisconsin
17	Illinois
18	Missouri
19	Arkansas
20	Mississippi
21	Louisiana
22	Texas
23	Oklahoma
24	Kansas
25	Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wyoming
26	New Mexico
27	Colorado
28	Arizona
29	Nevada
30	Oregon, Washington
31	Idaho, Utah
32	California
33	Hawaii
34	Alaska

Source: Q1 Group LLC. "2018 Medicare Part D Prescription Drug Plans: Overview of CMS Region" Available from: https://q1medicare.com/PartD-Medicare-PartD-Overview-byRegion.php

The importance of the 34 Part D regions in the determination of the maximum premium amount Medicare will pay on behalf of LIS enrollees, plus the fact that plan sponsors must offer a plan in at least one entire region (and cannot pick and choose which geographies within a region it offers plans),[7] makes Part D regions the geographic level at which antitrust authorities are likely to examine CVS and Aetna for overlap in the PDP market. Hence, Part D region-level PDP market concentration is analyzed in what follows.

Measuring Market Concentration

I used the Herfindahl-Hirschman Index (HHI) to measure PDP market concentration. HHI has been used frequently as a measure of market concentration in merger cases brought by the Antitrust Division of the US Department of Justice (DOJ) and Federal Trade Commission (FTC) and is used in *Horizontal Merger Guidelines*, authored by these agencies.[8] HHI is calculated by taking the market share of each firm, squaring it, and summing the results. HHI values range from zero to 10,000. For example, if a market included two firms, one with 60 percent market share and the other with 40 percent market share, the HHI would be 5,200 (or $60^2 + 40^2$). The *Horizontal Merger Guidelines* considers markets in which the HHI is between 1,500 and 2,500 points to be moderately concentrated, and markets with an HHI in excess of 2,500 points to be highly concentrated. Market shares in each of the 34 Medicare Part D regions were calculated based on plan sponsor PDP enrollment.

To address the impact of a CVS/Aetna merger on PDP market concentration, 2018 market concentration was calculated two ways: (1) assuming CVS and Aetna were separate firms (pre-merger HHI) and (2) assuming CVS and Aetna were a single firm (post-merger HHI). Market concentration measures from 2009 to 2017 were also calculated to show the trend in PDP market concentration.

In the context of mergers, the DOJ/FTC Guidelines assign the highest concern and scrutiny to mergers that would increase the HHI in a market by over 200 points and leave the market with an HHI of over 2,500. Other HHI changes and levels trigger different degrees of concern and scrutiny (see Table 2 for details). Markets that trigger moderate and high concern (according to Table 2) are highlighted in the analysis that follows.

[7] Event Driven. "AET/CVS: Part D Overlap and Potential Divesture Analysis." February 9, 2018.
[8] U.S. Department of Justice and Federal Trade Commission. "Horizontal Merger Guidelines." Washington, DC: DOJ/FTC. August 19, 2010. Available from: https://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf

Table 2. Level of Concern and Scrutiny Based on HHI Change and Resulting HHI Level

		HHI Level		
		< 1,500	1,500 to 2,500	>2,500
HHI Change	<100	Low	Low	Low
	100 to 200	Low	Moderate	Moderate
	>200	Low	Moderate	High

Low: "Unlikely to have adverse competitive effects and ordinarily require no further analysis"
Moderate: "Potentially raise significant competitive concerns and often warrant scrutiny"
High: "Presumed to be likely to enhance market power"

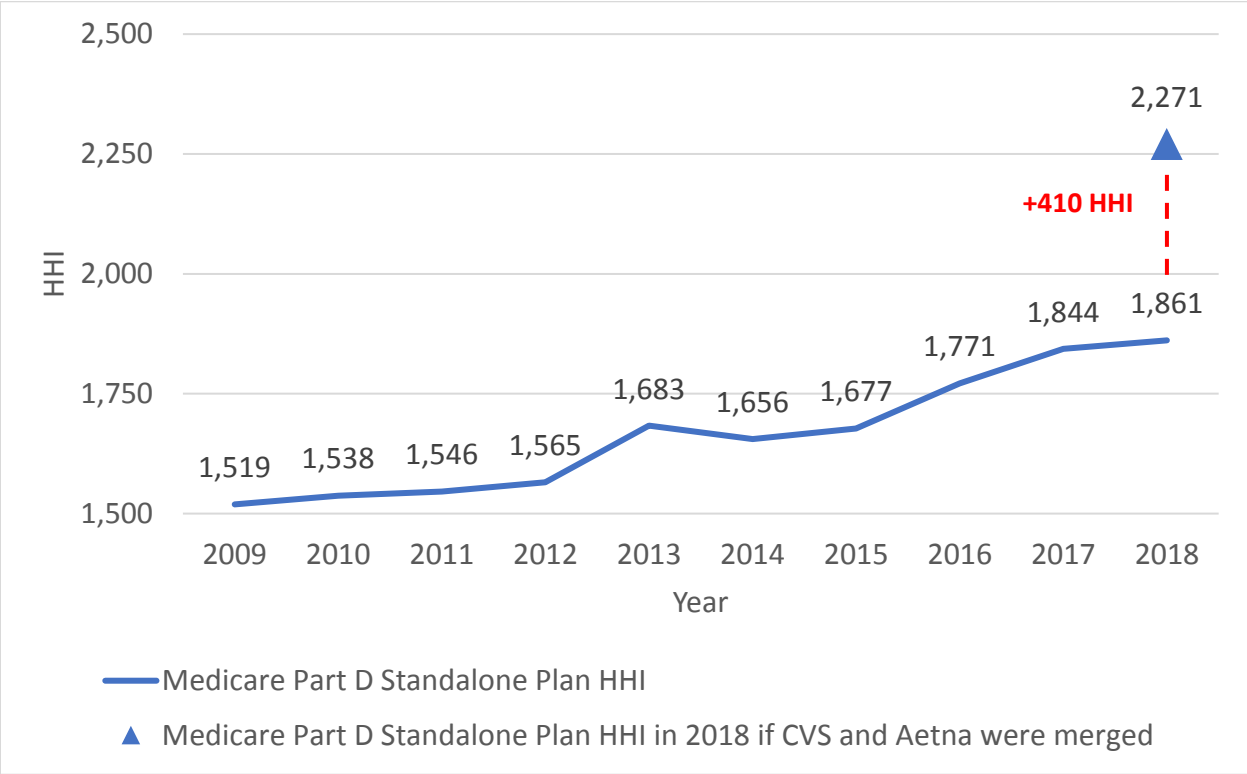
Source: Author's analysis of U.S. Department of Justice and Federal Trade Commission's 2010 Horizontal Merger Guidelines (pg. 19).
Note: HHI=Herfindahl-Hirschman Index.

Market Concentration Trends and Post-Merger HHI

Table 3 shows the average PDP market HHI (weighted by PDP enrollment) from 2009-2018. In 2009, PDP market HHI was 1,519 – just above the DOJ/FTC 1,500 threshold for a moderately concentrated market. By 2018, PDP market HHI had increased to 1,861 – an increase of 342 HHI (23% increase).

The triangle labeled HHI=2,271 in Table 3 represents PDP market HHI in 2018 if CVS and Aetna are treated as a single firm in HHI calculations. If CVS and Aetna were a single firm, average PDP market HHI would be 410 points higher in 2018 than it currently is (2,271 vs. 1,871, 22% increase). Mergers that lead to an HHI change of over 200 points and a resulting HHI of between 1,500 and 2,500 "potentially raise significant competitive concerns and often warrant scrutiny" according to the DOJ/FTC Guidelines (see Table 2).

Table 3. Average Part D Region-Level PDP Market Concentration (Weighted by PDP Enrollment), 2009-2018.



Source: Author's analysis of April 2018 enrollment data published by CMS (https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Monthly-Enrollment-by-Contract-Plan-State-County.html)
Notes: PDP=stand-alone prescription drug plan. HHI=Herfindahl-Hirschman Index. The HHIs shown in the figure are a weighted-average of the HHIs of Medicare Part D's 34 regions (weighted by PDP enrollment).

Table 4 shows how pre-merger and post-merger HHIs for each of the 34 Part D regions. Market concentration in region 33 (Hawaii) would increase the most as a result CVS's acquisition of Aetna (1,364 HHI increase, from 4,898 to 6,263). Overall, 30 Part D regions would experience an HHI increase of over 200 points as a result of CVS's acquisition of Aetna. Of these 30 regions, 10 would have a post-merger of greater than 2,500. Mergers that increase in HHI by over 200 points and result in a post-merger HHI of over 2,500 are "presumed to be likely to enhance market power" according to the DOJ/FTC Guidelines (see Table 2). The post-merger HHIs of the other 20 regions that would experience increases of 200 HHI would all be in the 1,500 to 2,500 range, and thus the merger would trigger moderate concern in these regions according to Table 2. California, with a post-merger HHI of 2,441 and an increase of 434 HHI, is one of the 20 regions.

Table 4. PDP Market Concentration, 2018 (by PDP Region)

PDP Region #	States	2018 HHI	2018 Post-Merger HHI	HHI Change
33	Hawaii	4,898	6,263	1,364
19	Arkansas	1,984	2,844	861
10	Georgia	1,977	2,772	794
20	Mississippi	2,006	2,722	716
18	Missouri	2,015	2,645	630
24	Kansas	2,045	2,669	624
8	North Carolina	1,700	2,249	549
22	Texas	1,769	2,299	530
23	Oklahoma	1,996	2,468	471
15	Kentucky, Indiana	1,647	2,107	460
21	Louisiana	1,717	2,175	458
9	South Carolina	1,687	2,144	456
5	District of Columbia, Delaware, Maryland	1,797	2,250	453
32	California	2,007	2,441	434
3	New York	1,844	2,273	429
14	Ohio	1,755	2,181	426
2	Connecticut, Massachusetts, Rhode Island, Vermont	1,610	2,029	419
7	Virginia	1,606	2,004	398
6	Pennsylvania, West Virginia	1,702	2,095	394
12	Alabama, Tennessee	1,602	1,986	384
26	New Mexico	1,717	2,087	370
16	Wisconsin	1,588	1,947	358
11	Florida	2,292	2,628	336
27	Colorado	2,256	2,582	325
25	Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wyoming	2,145	2,466	321
17	Illinois	1,547	1,839	292
28	Arizona	1,866	2,149	283
29	Nevada	2,383	2,638	255
4	New Jersey	2,320	2,551	231
31	Idaho, Utah	1,836	2,053	217
30	Oregon, Washington	1,614	1,814	199
13	Michigan	1,795	1,957	162
1	Maine, New Hampshire	1,546	1,691	145
34	Alaska	2,715	2,740	26
	AVERAGE (weighted by PDP enrollment)	**1,861**	**2,271**	**410**

Source: Author's analysis of April 2018 enrollment data published by CMS (https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Monthly-Enrollment-by-Contract-Plan-State-County.html)
Notes: PDP=stand-alone prescription drug plan. HHI=Herfindahl-Hirschman Index. 2018 HHI treats CVS and Aetna as separate firms. 2018 Post-Merger HHI assumes CVS and Aetna are a single firm in HHI calculations.

The Impact of Market Power on Part D Premiums

A number of studies have associated increases in market concentration with increases in health insurance premiums.[9] Other studies specifically analyze the impact of health care market concentration on Part D premiums and show Part D premiums increase when firms merge. A recent paper by Anna Chorniy and colleagues estimates that Part D plan sponsors mergers lead to higher premiums.[10] An earlier study by Claudio Lucarelli and coauthors also estimates that average premiums increase for merged firms.[11]

Based on the HHI increases shown in Table 4, a number of Part D regions (including California) warrant scrutiny based on DOJ/FTC Guidelines. In my professional opinion, these concentration increases are likely to lead to premium increases.

---

[9] See e.g. Dafny, Leemore, Mark Duggan, and Subramaniam Ramanarayanan. "Paying a premium on your premium? Consolidation in the US health insurance industry." *American Economic Review* 102, no. 2 (2012): 1161-85; Dafny, Leemore S. "Are health insurance markets competitive?." *American Economic Review* 100, no. 4 (2010): 1399-1431; Dafny, Leemore, Jonathan Gruber, and Christopher Ody. "More insurers lower premiums: Evidence from initial pricing in the health insurance marketplaces." *American Journal of Health Economics* 1, no. 1 (2015): 53-81; Scheffler, Richard M., Daniel R. Arnold, Brent D. Fulton, and Sherry A. Glied. "Differing impacts of market concentration on Affordable Care Act Marketplace premiums." *Health Affairs* 35, no. 5 (2016): 880-888; and Trish, Erin E., and Bradley J. Herring. "How do health insurer market concentration and bargaining power with hospitals affect health insurance premiums?." *Journal of health economics* 42 (2015): 104-114;

[10] Chorniy, Anna, Daniel P. Miller, and Tilan Tang. "The impact of horizontal mergers on plan premiums and drug formularies in Medicare Part D." April 2018.

[11] Lucarelli, Claudio, Jeffrey Prince, and Kosali Simon. "The welfare impact of reducing choice in Medicare Part D: A comparison of two regulation strategies." *International Economic Review* 53, no. 4 (2012): 1155-1177.

Potential effects of the proposed CVS acquisition of Aetna on competition and consumer welfare

Neeraj Sood, PhD

June 14, 2018

I thank the American Medical Association for supporting my work in preparing this report. This report reflects my views and opinions, not necessarily the views of the American Medical Association or of my employer, the University of Southern California.

A. About the author

I am a Professor of Health Policy and Vice Dean for Research at the Sol Price School of Public Policy, University of Southern California (USC). Sol Price School of Public Policy is ranked 3rd in health policy and management in the nation by the US News and World Report. I am a faculty member and past Director of Research of the USC Leonard D. Schaeffer Center for Health Policy and Economics. I am also a research associate at the National Bureau of Economic Research -- the nation's premier economics research organization.

I have published more than 100 papers and reports on health policy and economics. My past research has focused on health insurance markets, pharmaceutical markets and global health. This research has been published in leading journals in economics, health policy and medicine including publications in the *Quarterly Journal of Economics, Journal of Economic Perspectives, Journal of Health Economics, JAMA* and *Health Affairs.* My work on health care costs and the pharmaceutical supply chain has been cited by the Council of Economic Advisors of President Obama and President Trump. I have been invited to participate in expert consensus committees of the National Academies of Science, Engineering and Medicine. I have received more than $10 million in extramural research funding and have been a scientific advisor and consultant for several organizations in the health care industry. My work has also been featured in media outlets including the *New York Times*, *Washington Post*, *U.S. News and World Report*, and *Scientific American*. I was the finalist for the 16th and 21st Annual NIHCM Health Care Research Award, recognizing outstanding research in health policy. I was also the 2009 recipient of the Eugene Garfield Economic Impact Prize, recognizing outstanding research demonstrating how medical research impacts the economy.

I am an associate editor for leading journals in my field including the J*ournal of Health Economics* and *Health Services Research*. I am also a board member of the *American Society of Health Economists*. Prior to joining USC, I was a senior economist at RAND. I obtained my PhD in Public Policy from the Pardee RAND

Graduate School and Masters in Economics from Indiana University and Delhi University.

B. Scope of this report

This report reflects my opinions and views on the potential effects of the proposed merger of CVS and Aetna on competition in the insurance, pharmacy, and pharmacy benefit management market. Evaluation of the detrimental or beneficial effects of the merger through other potential pathways was beyond the scope of this report. These views are based on my assessment of economic theory, past research, and data on the structure, conduct and performance of firms in relevant industries. Some of the statements in this report are forward-looking statements or predictions and thus inherently involve uncertainties. I use underline font to highlight key points.

C. Market overview

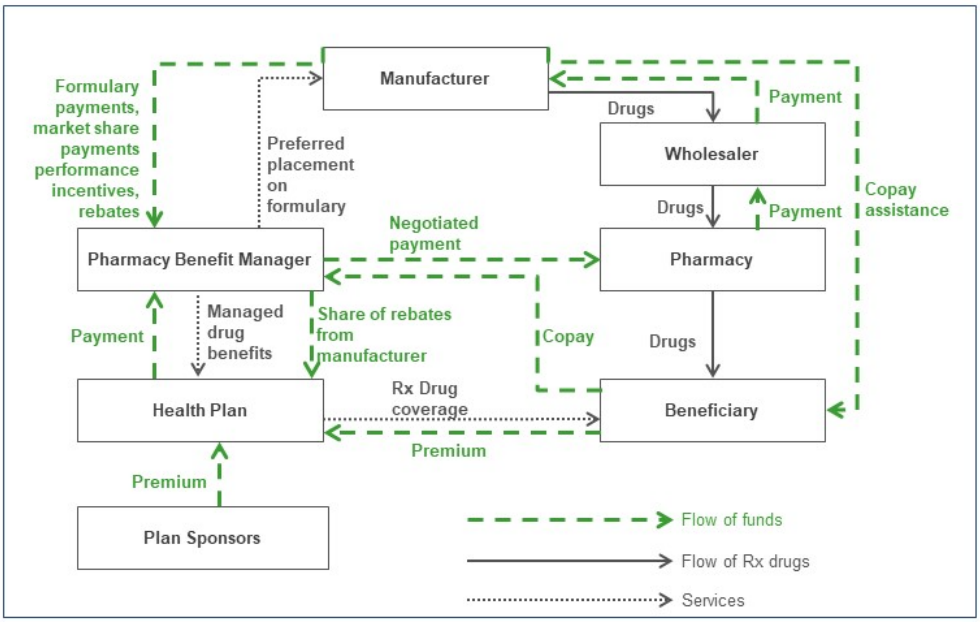
CVS and Aetna are major players in the pharmaceutical supply chain. Therefore, to understand the potential consequences of CVS's acquisition of Aetna we need to first understand the flow of funds and services in the pharmaceutical supply chain. Below, I give a primer on this complex supply chain based on my recent publication on this market.[1] Figure 1 provides a graphical representation of the supply chain.

a. The flow of drugs

Consider an insured consumer who purchases a drug from a retail pharmacy. The pharmacy dispenses the drug to the consumer. The pharmacy acquires the drug from a wholesaler and the wholesaler in turn acquires the drug from a manufacturer. So, the drug supply chain is manufacturer to wholesaler to pharmacy to consumer.

[1] http://healthpolicy.usc.edu/documents/USC%20Schaeffer_Flow%20of%20Money_2017.pdf, accessed May 18, 2018.

Figure 1: The flow of drugs, funds and services in the pharmaceutical supply chain



b. The flow of funds

The flow of funds is more complex than the flow of drugs. The insured consumer pays a copay or coinsurance to the pharmacy at the point of purchase. The pharmacy passes the copay or coinsurance to the pharmacy benefit manager (PBM). The pharmacy also invoices the PBM for providing the drug to the insured consumer. The PBM pays the pharmacy the negotiated rate for the drug. The PBM in turn invoices the health plan for reimbursing the pharmacy. The health plan pays the PBM. The health plan generates revenue by charging premiums to consumers or their employers. The pharmacy restocks the drug by paying a wholesaler for the drug. The wholesaler in turn pays a manufacturer for the drug. The manufacturer pays a rebate to the PBM. The PBM passes some of the rebate back to the health plan. The manufacturer might also pay the consumer in the form of a copay coupon.

c. The flow of services

Pharmacies provide retail service or the storefront for consumers to purchase drugs. Wholesalers purchase drugs from manufacturers and sell drugs to pharmacies. Thus, they provide drug distribution and storage services. Manufacturers conduct research and development to discover new drugs. They obtain approval from the Food and Drug Administration to sell the drug to consumers. Once a drug is approved, manufacturers produce and market the drug to doctors, health plans and consumers. Health plans provide insurance to consumers and thus take on the risk of high prescription drug costs and health care costs. PBMs are agents of health plans. They provide two core services to a health plan. First, they negotiate rebates with manufacturers in exchange for preferred formulary placement (lower copays or coinsurance) for the manufacturers' drugs relative to drugs from competing manufacturers. Second, they negotiate contracts with pharmacies and thus decide whether a pharmacy will be in the network and the reimbursement the pharmacy will receive for dispensing drugs to the insured consumer.

d. Market structure and conduct

I estimate that for every $100 in spending by an insured consumer on a drug sold in a retail pharmacy only $58 reaches the manufacturer and the remaining $42 is kept by intermediaries or "middlemen".[2] Insurers keep $19, PBMs keep $5, pharmacies keep $15 and wholesalers keep $2. The analysis does not directly address the question of whether these returns are "excessive". However, market concentration or lack of competition is an important indicator of companies' ability to earn excess returns, and several segments of the pharmaceutical supply chain are highly concentrated. The top three PBMs account for 70% of the market, the top three pharmacies account for 50% of the market, and the top three wholesalers account for 90% of the market.[3,4,5] Similarly, the large group health insurance market is also

[2] http://healthpolicy.usc.edu/documents/USC%20Schaeffer_Flow%20of%20Money_2017.pdf, accessed May 18, 2018.
[3] http://www.drugchannels.net/2017/12/the-cvs-aetna-deal-five-industry-and.html, accessed May 22, 2018.
[4] http://www.drugchannels.net/2018/02/the-top-15-us-pharmacies-of-2017-market.html, accessed May 22, 2018

highly concentrated with the top three insurers accounting for more than 50% of the market in 33 states.[6]

Market power in the pharmaceutical supply chain can hurt consumers by increasing drug spending and out of pocket costs. Prior research documents that market power manifests itself in several practices of intermediaries in the supply chain that potentially harm consumers. For example, my prior work suggests that pharmacies within a local market charge widely varying prices for exactly the same product. The research also suggests that drug prices found at independent pharmacies or at online discount websites were lower on average than prices at chain drug stores.[7] Similarly, insurers often charge consumers more in out of pocket costs than the drug acquisition costs for the insurer. According to a recent study by my colleagues, almost a quarter of pharmacy prescriptions involved a patient copayment that exceeded the average reimbursement by the insurer or PBM to the pharmacy.[8] Furthermore, insurer and PBMs often have "gag clauses" which prohibit the pharmacy from disclosing to consumers that they could save money by paying cash for their prescription drugs rather than using their insurance.[9] Finally, PBMs might not be good agents of health plans and consumers. PBMs often do not disclose the amount of rebates they receive from manufacturers raising questions about the extent to which they pass on rebate dollars to health plans. For example, Anthem, the second largest health plan in the US, recently sued its PBM, Express Scripts, saying it withheld billions in cost savings owed to Anthem. Similarly, PBMs sometimes create incentives to increase drug prices in return for higher rebates. The increase in drug prices might offset the savings from rebates, so that health plans

---

[5] https://www.mdm.com/2017-top-pharmaceuticals-distributors, accessed May 22, 2018.

[6] https://www.kff.org/other/state-indicator/market-share-and-enrollment-of-largest-three-insurers-large-group-market/?currentTimeframe=0&print=true&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D, accessed May 22, 2018.

[7] Arora, Sanjay, Neeraj Sood, Sophie Terp, and Geoffrey Joyce. "The price may not be right: the value of comparison shopping for prescription drugs." *The American journal of managed care*23, no. 7 (2017): 410-415.

[8] http://healthpolicy.usc.edu/documents/2018.03_Overpaying%20for%20Prescription%20Drugs_White%20Paper_v.1.pdf, accessed May 22, 2018.

[9] https://www.nytimes.com/2018/02/24/us/politics/pharmacy-benefit-managers-gag-clauses.html, accessed May 22, 2018.

end up paying more for drugs despite getting bigger rebates. In addition, the high drug prices hurt consumers in high deductible health plans who pay the list price of the drug rather than the price after rebates and other discounts. [10]

D. Key findings

In this section, I discuss the potential effects of the acquisition of Aetna by CVS on competition in insurance, pharmacy and PBM markets.

a. The merging firms

The merger of CVS and Aetna would merge firms with significant market power in their respective markets. Aetna is the third largest insurer in the US with more than 23 million persons receiving insurance through Aetna. Aetna's net revenues in 2016 were $63 billion and its revenues have increased at about 10% per year.[11] CVS is the largest pharmacy company in the US and accounts for 24% of prescription drug revenues in the US. CVS is also one of the largest PBMs in the US and has a market share of about 24%.[12] CVS and Aetna both also sell Medicare Part D prescription drug plans. The combined revenues of CVS-Aetna would be $221 billion making it the fourth largest company in the US.[13] Thus, the merged entity CVS-Aetna would wield considerable market power in the health insurance, pharmacy, and PBM markets.

b. Potential effects on competition in insurance markets

Health insurance markets in the US are already characterized by a lack of competition. The federal trade commission considers markets to be highly concentrated if the HHI (a measure of market competition) for a market is greater than 2,500. According to recent data from an American Medical Association study,

[10] https://www.bloomberg.com/news/articles/2016-10-05/patients-lose-out-on-big-pharma-s-secret-rebate-merry-go-round, accessed May 22, 2018.
[11] https://healthpayerintelligence.com/news/top-5-largest-health-insurance-payers-in-the-united-states, accessed May 22, 2018.
[12] http://www.drugchannels.net/2017/12/the-cvs-aetna-deal-five-industry-and.html, accessed May 22, 2018.
[13] http://investors.cvshealth.com/~/media/Files/C/CVS-IR-v3/AET%20transaction/CVS-Aetna%20Investor%20Presentation.pdf, accessed May 22, 2018.

the vast majority of US health insurance markets had an HHI greater than 2,500.[14] For example, 94% of HMO markets are highly concentrated and 86% of PPO markets are highly concentrated. Data from the Kaiser Family Foundation for the individual, small group and large group market paint a similar picture of highly concentrated markets.[15] Aetna is a dominant firm in the health insurance market. According to recent data, Aetna is the number 1 or number 2 insurer in over 70 HMO markets and over 100 PPO markets.[16]

The merged entity CVS-Aetna will be a formidable competitor in the health insurance market. The merger will further strengthen the already dominant position of Aetna and will exacerbate the lack of competition in health insurance markets. The competitive edge would come from CVS-Aetna's ownership and control of two segments of the pharmaceutical supply chain – PBMs and retail pharmacies.

PBMs are agents of health insurance plans. They help health plans negotiate with pharmacies and pharmaceutical firms. If CVS were to merge with Aetna, CVS would be a better agent for Aetna. Post-merger CVS would have a stronger incentive to control prescription drug costs (net of rebates) and overall health care costs for Aetna. CVS would have reduced incentives to engage in practices that increase rebates at the cost of increasing spending on prescription drugs for Aetna. Some of the savings to Aetna will be passed on to Aetna subscribers as lower premiums.

However, the extent of savings from CVS being a better PBM for Aetna depend on what PBM services CVS is providing to Aetna. Savings only arise if CVS is making strategic decisions for Aetna such as decisions on formulary design and price negotiations with pharmaceutical companies. Savings would be minimal or non-

---

[14] Competition in health insurance: A comprehensive study of U.S. markets, 2017 Update. American Medical Association.

[15] https://www.kff.org/other/state-indicator/large-group-insurance-market-competition/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D, accessed May 22, 2018.

[16] Competition in health insurance: A comprehensive study of U.S. markets, 2017 Update. American Medical Association.

existent if CVS is only providing administrative or claims processing services and Aetna is making its own decisions on formulary design and negotiations with pharmaceutical companies. Aetna's financial statements to the SEC state that "We also perform various pharmacy benefit management services for Aetna pharmacy customers consisting of: product development, Commercial formulary management, pharmacy rebate contracting and administration, sales and account management and precertification programs. Caremark PCS Health, L.L.C. (a wholly-owned subsidiary of CVS Health) performs the administration of selected functions for our retail pharmacy network contracting and claims administration; home delivery and specialty pharmacy order fulfillment and inventory purchasing and management; and certain administrative services. Other suppliers also provide certain pharmacy benefit management services."[17] Therefore, Aetna's own financial statements to the SEC indicate that Aetna already performs its core PBM functions and thus the potential efficiencies from merging with the PBM arm of CVS would be minimal.

Post-merger, CVS would be a worse agent for other health plans. Post-merger, CVS would have weaker incentives to control prescription drug costs and overall health care costs for health plans competing with Aetna. As explained earlier, PBMs earn rebates from pharmaceutical firms. They make profits by keeping some of these rebates and passing the remaining back to health plans. Although passing rebates back to health plans lowers the profit margin of PBMs, they do so because it helps health plans lower costs and thus helps the PBM retain the business from health plans. The PBM arm of CVS-Aetna would have less of an incentive after the merger to pass rebate dollars back to health plans competing with the insurance arm of CVS-Aetna. The rationale is that passing rebate dollars to health plans competing with the insurance arm of CVS-Aetna will lower their costs and thus will hurt the insurance arm of CVS-Aetna. In other words, the PBM arm of CVS-Aetna has an incentive to disadvantage health plans competing with the insurance arm of CVS-

[17] Aetna 10-K report available online at http://investor.aetna.com/phoenix.zhtml?c=110617&p=irol-sec , accessed May 22, 2018.

Aetna in passing rebates from pharmaceutical firms. This will likely result in less competition in the insurance market.

PBMs also negotiate prices with pharmacies on behalf of health plans. In these negotiations the PBM arm of CVS-Aetna has two potential conflicts. First, helping health plans competing with CVS-Aetna lower their pharmacy costs hurts the insurance arm of CVS-Aetna. Second, helping health plans competing with CVS-Aetna lower their CVS pharmacy costs hurts both the insurance arm of CVS-Aetna and the retail arm of CVS-Aetna. Therefore, the PBM arm of CVS-Aetna has an incentive to disadvantage health plans competing with the insurance arm of CVS-Aetna in negotiations with pharmacies. This will result in less competition in the insurance market.

Therefore, the merger simultaneously creates incentives for CVS to be a better agent for Aetna (which potentially helps consumers with insurance from Aetna) and be a worse agent for health plans competing with Aetna (which potentially hurts consumers with insurance from other health plans). CVS currently provides PBM services to 94 million plan beneficiaries of which about 22 million are Aetna subscribers.[18]

The adverse effects of the incentives for CVS-Aetna to disadvantage competing health plans are exacerbated by two facts. First, the PBM market is highly concentrated. So, health plans competing with CVS-Aetna do not have many options to switch PBMs. In addition, several of the largest PBM competitors for CVS-Aetna, such as OptumRx, Humana Pharmacy Solutions, and Prime Therapeutics are also owned by health plans. Second, CVS recently entered into an agreement to provide PBM services to Anthem. Anthem is the second largest health plan in the US and actively competes with Aetna in several insurance markets. For example, in Thousand Oaks, California, Aetna is the second largest insurer and faces stiff competition from Anthem which is the largest insurer. The story is the same in many

[18] https://cvshealth.com/about/facts-and-company-information, accessed May 22, 2018.

other markets ranging from New Haven-Milford, Connecticut to Albany, Georgia to Evansville, Kentucky. The PBM arm of CVS-Aetna has a strong incentive to help the insurance arm of CVS-Aetna be the number one insurer in these markets.

CVS-Aetna will also own one of the largest retail pharmacy networks in the US. CVS Health financial statement filed with the SEC states: "We currently operate in 98 of the top 100 United States drugstore markets and hold the number one or number two market share in 93 of these markets."[19] CVS-Aetna could leverage this pharmacy network to disadvantage competing health plans. Health plans that do not have CVS in their pharmacy network will be less attractive to consumers, especially in markets where CVS has a dominant market share. CVS-Aetna could exploit this fact to charge higher prices to health plans competing with CVS-Aetna. If health plans refuse to accept the high prices and don't include CVS-Aetna pharmacies in their network they risk losing customers. If they accept the high prices then they face higher health care costs which might result in higher premiums and lower market shares for these health plans.

One might question the size of the incentives for CVS-Aetna to disadvantage health plans competing with the insurance arm of CVS-Aetna. After all, if it does not provide competitive PBM and pharmacy services then health plans might drop CVS-Aetna and seek the same services from elsewhere. Consider a consumer who spends $10,000 a year on average (this is roughly equal to US per capita health spending) on health care and $1,000 or roughly 10% of her total spending (this is roughly equal to the fraction of health spending on prescription drugs) is on prescription drugs. Data from SEC on the profitability of PBM and health insurance sectors suggests a net profit margin of PBM services of 2.3% and a net profit margin of health insurers of 3.0%.[20] Therefore, if CVS-Aetna were to lose this consumer as a PBM customer then CVS-Aetna would lose about $23 (2.3% x 1,000) in profits. However, if CVS-

[19] https://www.sec.gov/Archives/edgar/data/64803/000000648031600007 4/cvs-20151231x10k.htm, accessed May 22, 2018.
[20] http://healthpolicy.usc.edu/documents/USC%20Schaeffer_Flow%20of%20Money_2017.pdf, accessed May 22, 2018

Aetna were to gain the same consumer as a health insurance customer then CVS-Aetna would gain about $323 in profits stemming from $300 (3% x 10,000) in profits from providing insurance and $23 in profits from providing PBM services. Therefore, 1 insurance customer is as valuable as 14 PBM customers; providing strong incentives for CVS-Aetna to disadvantage competing health plans to gain insurance customers even if it risks losing some PBM customers.

The numbers are similar when we look at incentives on the pharmacy market. Net profit margins in the pharmacy sector are 4%.[21] Therefore, if CVS-Aetna were to lose an average pharmacy customer they would lose roughly $40 in profits per year. However, if CVS-Aetna were to gain this customer as a health insurance subscriber who also bought his or her prescriptions from CVS-Aetna they would stand to gain $363 in profits. Therefore, 1 insurance customer is as valuable as roughly 9 pharmacy customers; providing strong incentives for CVS-Aetna to disadvantage competing health plans to gain insurance customers even if it risks losing some PBM customers.

Some might argue that lack of competition or greater market concentration in insurance markets might be a good for consumers. It might help health plans negotiate lower prices with hospitals and other health care providers and some of these savings might be passed to consumers as lower health insurance premiums. However, this view is not supported by past empirical research. An amicus brief filed by me and other leading health economists related to the merger of Anthem and Cigna summarizes the past empirical research as follows: "This body of work finds that *consolidation in health insurance markets does not, on average, benefit consumers*. Although, greater insurance market concentration tends to lower provider prices, there is no evidence the cost savings are passed through to

[21] http://healthpolicy.usc.edu/documents/USC%20Schaeffer_Flow%20of%20Money_2017.pdf, accessed May 22, 2018

consumers in the form of lower premiums. To the contrary, premiums tend to rise with increased insurer concentration."[22]

In summary, the potential benefits of merging the PBM arm of CVS with Aetna are likely to be minimal. In contrast, the merger creates strong incentives for CVS-Aetna to disadvantage health plans competing with CVS-Aetna. In my opinion, the potential costs of reduced competition due to foreclosure in the insurance market outweigh the potential efficiencies of the merger for CVS-Aetna in the insurance market.

c. Potential effects on competition in pharmacy markets

Pharmacy markets in the US are uncompetitive or highly concentrated. According to a 2015 study CVS and Walgreens together control between 50 and 75 percent of the drugstore market in each of the country's 14 largest metro-areas. They also control the majority of the market share in 70 of the top 100 metro-areas in the country.[23] The merger of CVS with Aetna will further strengthen the already dominant position of CVS in the pharmacy market and will exacerbate the lack of competition in pharmacy markets. The health insurance arm or PBM arm of CVS-Aetna could disadvantage pharmacies competing with CVS by excluding them from their pharmacy network or through other business practices. A recent news story in the Columbus Dispatch alleges that CVS already engages in some questionable practices in Ohio.[24] First, the story alleges that the PBM arm of CVS set up a website for consumers to compare drug prices. But the site disadvantaged pharmacies competing with CVS pharmacies by automatically putting CVS pharmacies at the top of the comparison list. Second, the PBM arm of CVS lowered Medicaid payment to independent pharmacies putting them under financial duress. Then the pharmacy arm of CVS sent letters to many of the same pharmacies, asking whether they would be interested in selling their pharmacies to CVS. Third, the

[22] https://www.hbs.edu/faculty/Profile%20Files/Amicus%20Brief%20in%20re%20Anthem-Cigna%20Proposed%20Merger%202017_7df8927a-b54b-4ea2-a49c-55c98d6ef15c.pdf, accessed May 22, 2018.
[23] http://www.businessinsider.com/cvs-and-walgreens-us-drugstore-market-share-2015-7, accessed May 22, 2018.
[24] http://www.dispatch.com/news/20180415/three-cvs-actions-raise-concerns-for-some-pharmacies-consumers, accessed May 22, 2018.

insurance arm of CVS encouraged Medicare beneficiaries to transfer their prescriptions to CVS pharmacies to save money. These communications favored CVS pharmacies over other low-cost pharmacies. Such practices are not isolated to CVS. In September 2017, an independent pharmacy filed a lawsuit against Walgreens and a PBM called Prime Therapeutics.[25,26] The lawsuit alleges that Walgreens and Prime Therapeutics entered into a business agreement in August 2016 which made Walgreens the primary retail pharmacy for Prime Therapeutics. The lawsuit alleges that Prime Therapeutics wrongfully terminated its contract with the plaintiff pharmacy because it wanted to advantage Walgreens.

In addition to the above practices, CVS-Aetna could also advantage CVS-Aetna pharmacies by creating a preferred network and giving preference to CVS-Aetna pharmacies in the network. The incentive to engage in practices that increase the fraction of Aetna subscriber prescriptions filled at CVS pharmacies increases post-merger as currently Aetna does not have an incentive to favor CVS pharmacies even though Aetna's PBM CVS-Caremark has an incentive to engage in practices that favor CVS. Post-merger this check on the incentives for CVS-Caremark to favor CVS will be reduced as Aetna will be part of CVS. Therefore, the merger likely cements CVS pharmacies already dominant position with Aetna and creates additional incentives to further increase the share of Aetna subscriber prescriptions filled by CVS pharmacies. This vertical foreclosure in the pharmacy market will lead to reduced competition in the pharmacy market by leading to exit of existing pharmacies or deterring entry of new pharmacies. Eventually reduced pharmacy competition will lead to higher pharmacy costs for health plans and consumers.

The effects of this vertical foreclosure on competition in the pharmacy market will be most severe in markets where Aetna has a dominant market share. Hovenkamp, a

[25] https://www.duanemorris.com/alerts/small_pharmacy_hits_walgreens_prime_therapeutics_billion_dollar_antitrust_suit_0917.html?utm_source=Mondaq&utm_medium=syndication&utm_campaign=View-Original, accessed May 22, 2018.
[26] https://cookcountyrecord.com/stories/511114389-pharmacy-accuses-insurance-claims-processor-prime-therapeutics-of-squeezing-it-out-of-business, accessed May 22, 2018.

leading antitrust scholar states that "Both tying arrangements and vertical mergers are condemned under the same Clayton Act standard when they "may substantially lessen competition," and the fundamental concerns are the same. However, there are important factual differences. The vertical merger is more permanent than either tying or exclusive dealing contracts, and this serves to eliminate the considerable competition that occurs when vertical contracts must be renewed. Secondly, when tying or exclusive dealing is used to facilitate collusion, downstream firms upon whom these arrangements are imposed can be expected to resist. When the integration occurs by merger, however, the downstream business becomes part of the colluding firm itself. As a result, condemnation on market shares of 25% or perhaps 20% seems appropriate, provided that entry barriers are high and other market factors indicate that collusion or oligopoly is likely."[27] Given that Aetna has greater than 20% market share in several MSA health insurance markets condemnation of the merger on the grounds of foreclosure in the pharmacy market is justified.

The potential anticompetitive effects in pharmacy markets should be compared to potential efficiencies. CVS argues that the merger will lead to lower health care costs through integration of pharmacy and medical data[28]. One view is that providing medical data to pharmacists will allow them to better counsel patients. However, CVS-Aetna will likely not have access to electronic health record data for the vast majority of its subscribers. True integration of pharmacy and medical data to guide medical management of patients either in doctors' offices or pharmacies will prove difficult without access to such data. I believe that just medical claims data is not sufficient to enhance the services provided by pharmacists.

Another view is that juxtaposing pharmacy data with medical data the health plan will be able to identify which types of drugs reduce medical spending. Using this insight, the health plan can design a better drug benefit to lower overall health spending. I

[27] Herbert Hovenkamp, Federal Antitrust Policy §9.4, at p. 346 (1994)

[28] https://judiciary.house.gov/wp-content/uploads/2018/02/Moriarty-REVISED-Testimony.pdf, accessed May 22, 2018.

certainly agree that integration of pharmacy and medical data has the potential to lower health care costs. Prior research clearly shows that more generous coverage of certain drugs or so-called value-based benefit designs lower medical spending.[29] However, it is unclear if Aetna already has access to its pharmacy data from CVS and if so, the extent to which the merger will lead to better integration of data.

In my opinion, the potential anticompetitive effects of the merger on pharmacy markets outweigh potential efficiencies from integration of pharmacy and medical claims data. Even if efficiencies exist, they can be achieved through contractual arrangements for sharing data across organizations.

d. Potential effects on competition in PBM markets

PBM markets in the US are uncompetitive or highly concentrated. The top 3 PBMs account for about 70% of the market share. Currently Aetna contracts with CVS for some PBM services, but Aetna has the option to drop CVS and choose another PBM if it is not satisfied with the service. A CVS-Aetna merger would mean that Aetna will not contract with a PBM since it will have its own in house PBM. Given that Aetna is the third largest insurer the merger reduces the size of the PBM market and thus reduces incentives for new PBMs to enter the market. In addition, several of the largest PBMs in the US such as OptumRx, Humana Pharmacy Solutions, and Prime Therapeutics are also owned by health plans. So new stand-alone PBM entry is unlikely given that several health plans already have their own PBMs. It seems likely that the only PBMs vertically integrated with a health plan might be able to effectively compete in this market place.

Some argue that greater market concentration in the PBM market is good for consumers because it helps PBMs negotiate lower prices for drugs. However, there is no empirical evidence that larger PBMs actually reduce drug costs for health plans. On the contrary, recent news stories suggests that several health plans and

[29] https://www.cbo.gov/publication/43741, accessed May 22, 2018.

large employers are unhappy with large PBMs and are seeking alternate models.[30] Prior research on insurance markets suggest that when higher concentration leads to both high monopsony power and higher monopoly power, it can simultaneously lead to lower input prices and higher output prices.

E. Summary

In summary, several segments of the pharmaceutical supply chain are highly concentrated and several players engage in practices that hurt consumers. The acquisition of Aetna by CVS will increase incentives for CVS to be a better PBM for Aetna but it will simultaneously create incentives for CVS to be a worse PBM for health plans competing with Aetna. These incentives will likely reduce competition in health insurance markets. In my opinion, the potential costs of reduced competition in insurance markets outweigh potential benefits of CVS being a better PBM for Aetna. The acquisition of Aetna by CVS will also likely reduce competition in the pharmacy and PBM markets, increasing drug spending and out of pocket costs for consumers. The potential costs of reduced competition in pharmacy and PBM markets due to the merger outweigh potential benefits, if any, of integration of medical and pharmacy data due to the merger. Thus, within each of the specific markets- insurance, pharmacy and PBM- in which the merger is likely to have anticompetitive effects, there are no potential benefits of sufficient magnitude and certainty that would outweigh the anticompetitive effects of the merger. Evaluating whether there are other pathways through which the merger might benefit consumers is beyond the scope of this study.

Neeraj Sood

[30] http://prospect.org/article/hidden-monopolies-raise-drug-prices, accessed May 22, 2018.

COMMENTS ON SELECTED ISSUES RE: THE PROPOSED MERGERS OF AETNA AND CVS[1]

Amanda Starc

Associate Professor of Strategy

Kellogg School of Management

Northwestern University

May 15, 2018

[1] I thank the American Medical Association for supporting my work in preparing this document. These comments reflect my views, not necessarily the views of the American Medical Association or of Northwestern University.

I. Qualifications

I am an Associate Professor of Strategy at the Kellogg School of Management at Northwestern University. I am also a Faculty Research Fellow at the National Bureau of Economic Research (NBER). Much of my research has been focused on health economics and health insurance, particularly on issues involving pharmaceutical markets and regulation. I have published numerous articles on industrial organization, health economics and insurance in journals including the *Review of Economic Studies*, *Review of Economics and Statistics*, *RAND Journal of Economics*, and *Journal of Health Economics*.

II. Introduction and Background

CVS Health operates both a pharmacy benefit manager (PBM) and pharmacies. As a PBM, they design pharmacy benefits for employers and health plans, including their own Medicare Part D Plans through subsidiary SilverScript Insurance Company. They also operate over 9,000 retail pharmacies. Aetna is a large, national insurer. Approximately half of their revenues were from Medicare (Medicare Part D and Medicare Advantage) and Medicaid products, while the remainder comes from the commercial market. In the latter market, they may not actually bear risk for medical or pharmacy benefits.

Both firms operate in highly concentrated industries, and the merged entity will have substantial overlap in the Medicare Part D market in particular. The level of concentration in both the PBM market and health insurance markets, in particular, have been the subject of recent antitrust scrutiny. In addition to potential harms from horizontal consolidation, the welfare effects of the merger depend on the impact of vertical integration on consumers.

In these comments, I do not cover all the issues relevant to an evaluation of the proposed merger. Instead, I concentrate more narrowly on the economic theory and empirical evidence on:

1. the extent to which market power is likely to harm consumers.
2. the extent to which foreclosure in PBM and health insurance markets could harm consumers.
3. the potential merger specific efficiencies.
4. the likelihood of pass-through of any savings to consumers.

In addition to summarizing previous research, I will draw conclusions based on economic theory. When doing so, I will make any assumptions explicit and be clear about my predictions regarding post-merger behavior.

III. Summary of Conclusions

I first review the extent to which the merger is likely to increase concentration in existing markets. Critically, the proposed merger will lead to increased concentration in the Medicare Part D insurance market. In Section IV below, I focus on describing both the market and the potential harms to consumers due to increased consolidation. Currently, Aetna has a 9% market share among Part D plans, with CVS Health (branded as SilverScripts) has an 24% market share; overlap is even greater in a subset of geographic markets. An increase in concentration could increase firm market power, leading to higher premiums. Economic evidence – from the Part D market and others – suggest that premium increases are likely.

Furthermore, I review the level of concentration in various markets in which CVS Health and Aetna currently operate. I describe the PBM industry, noting that approximately 70% of all prescriptions are processed by one of three firms, including CVS/Caremark. I further discuss adjacent markets, focusing on the specialty pharmacy market, in which 60% of all revenues are collected by one of three firms, including CVS.

In addition to these concerns, the proposed merger could also lead to foreclosure in the PBM or retail pharmacy markets. In particular, the merged entity could increase the cost of PBM services to insurers other than Aetna, the cost of prescription drugs to other payers, or make it difficult for other PBMs to attract customers. In doing so, they may reduce the attractiveness or increase the price of rival insurance products or make entry less likely. While the lack of data on these contractual arrangements has prevented careful empirical examination of these issues, I describe the economic theory and potential merger effects below.

However, it is possible that the merger could increase contracting efficiency by aligning incentives within benefit packages to lead to more efficient investment in enrollee health. I discuss the theoretical scope and empirical evidence for benefit design effects. These efficiencies are at least partially specific to integration. However, a potentially large portion of the potential gain could be achieved via contract or the efficiencies could be achieved through the development of an in-house PBM. Given the mix of enrollees in Aetna plans, I also discuss limitations to the size of these efficiencies.

Finally, I explore the extent to which any cost-savings are likely to be passed on to the consumer in the form of lower out-of-pocket costs or premiums. Theoretically, the magnitude of any cost savings for consumers will depend on the nature of competition in the insurance market.

Given the degree of concentration and horizontal consolidation in the insurance industry, it is reasonable to believe that any cost-savings will increase insurer profits, rather than reducing consumer costs. Empirically, there are reasons to be skeptical that the savings will be realized and ultimately captured by the consumer. Therefore, the potential for harm to consumers from this merger is likely to outweigh any gains.

IV. Pharmacy Benefits in the United States

Health insurance plans typically consist of a “medical benefit” and a “pharmacy benefit,” which need not be administered by the same insurer. In particular, health insurers often contract out pharmacy benefits to PBMs, who design formularies, run utilization management programs, establish networks of retail pharmacies, and negotiate rebates from the list prices for pharmaceuticals. Americans obtain pharmacy benefits in a variety of ways. For many, pharmacy benefits are part of the insurance package offered by employers. The insurers who service these contracts with employers may use a PBM to provide drug benefits. There are three large PBMs: Express Scripts, CVS Health, and OptumRx, which is itself owned by UnitedHealth Group. The high level of concentration in the PBM market has attracted attention by antitrust regulators (Brill 2012).

However, not all Americans obtain coverage through an employer. Public financing of pharmacy coverage is also common. In both the Medicaid and Medicare programs, much of the provision of drug coverage is outsourced to private insurers. Duggan and Scott Morton (2006) and Dranove, Ody, and Starc (2018) show that private insurers reduce overall expenditure and prices in the Medicare and Medicaid programs, respectively. However, to understand the impact

of the proposed merger, one must understand prescription drug coverage in the Medicare program in particular.

The Medicare Part D program, enacted under the Medicare Modernization Act in 2003, was introduced in 2006. Medicare beneficiaries can enroll in a private insurance plan that provides prescription drug coverage. For most Medicare beneficiaries not offered a plan by a previous employer, there are two ways to obtain Part D coverage. They can enroll in a stand-alone prescription drug plan (PDP) that only covers prescription drugs or they can enroll in a Medicare Advantage (MA) plan. In MA plans, Medicare pays most or all of the premiums to a private insurer. Most MA plans are managed care plans: in return for reduced choice of providers and utilization review, the Medicare beneficiary obtains more complete coverage, typically including pharmacy coverage. The market share of MA plans have fluctuated over time, primarily because of changes in reimbursement generosity.

Typically, enrollees in PDPs receive their medical coverage from traditional Medicare. Part D is heavily subsidized; as a result, it is financially beneficial for most Medicare beneficiaries to enroll in some form of drug coverage. The program requires insurers to provide coverage at least as generous as the “standard benefit,” which has a nonlinear structure in which the beneficiary pays differing out-of-pocket costs depending on the phase of the benefit design. Despite the large number of plan offerings typically available, markets are typically concentrated. Over 50% of Part D beneficiaries enroll in plans offered by three carriers.

The private insurers participating in the Medicare Part D program are free to negotiate drug prices with drug manufacturers and distributors. Most famously, PBMs can obtain “rebates” from manufacturers in exchange for preferred placement on formularies. Essentially,

pharmaceutical manufacturers give plans a discount in exchange for PBMs steering consumers to their drugs. Less well appreciated is negotiation with pharmaceutical distributors and retail pharmacies in particular. While many studies of drug pricing have focused on manufacturers' market power, pharmacy companies are increasingly concentrated as well.

V. Market Concentration

Health insurers sell policies to consumers, often through groups, and purchase services from health care providers. Insurer market power enables an insurer to charge premiums above average costs. Higher premiums could lead to inefficiently low levels of insurance or degradation of insurance quality. In the case of the proposed merger, harm to consumers is likely.

Economists have established that imperfect competition is likely to exist in many insurance markets, with important implications for policy. Leemore Dafny (2010) tests for the presence of imperfect competition in commercial insurance markets and argues that insurer market power is an important feature of the market she studies. In a 2014 paper, I show that the need to establish a credible “brand” and market to consumers can create a barrier to additional entry. As a result, economists typically model insurers as exerting pricing power in markets ranging from Medicare Part D (of particular interest here, see Ho, Hogan, and Scott Morton 2017) to exchanges (Ericson and Starc 2015, Jaffe and Shepard 2018, Tebaldi 2018).

Economists have further shown that the extent of competition varies across local markets, and explore the implications of local variation for consumers. The weight of the research indicates that more competing firms or less concentrated local markets lead to lower premiums. Leemore Dafny, Mark Duggan and Subramaniam Ramanarayanan used a merger of two large

national health insurance carriers to measure the effect of changes in local market concentration on employer health insurance premiums (2012). The authors found an increase in local concentration to be statistically associated with a significant increase in employer insurance premiums. As summarized by Leemore Dafny in testimony before the Senate, "There are a number of studies documenting lower insurance premiums in areas with more insurers, including on the state health insurance marketplaces, the large group market (self- and fully insured combined), and Medicare Advantage. A recent study suggests premiums for employer-sponsored fully-insured plans are increasing more quickly in areas where insurance market concentration is rising, controlling for other area characteristics such as the hospital market concentration" (Dafny 2015).

In the Medicare Part D context, a number of studies point to insurer pricing power. Francesco Decarolis, Maria Polyakova, and Stephen Ryan (2017) estimate mark-ups over costs in the order of 9 percent on average. As documented by both Keith Ericson (2013) and Kate Ho, Joseph Hogan, and Fiona Scott Morton (2018), premiums have increased over time as switching costs and, correspondingly, pricing power, have risen. Ericson finds that firms engage in an "invest then harvest strategy," in which initially low premiums grew over time for plans with larger number of enrollees. Ho, Hogan, and Scott Morton explore the impact of alternative policies that reduce consumer switching costs and decrease premiums. Finally, Anna Chorniy, Daniel Miller, and Tilan Tang (2018) find that "premiums that rise by an average of 5.2% across all market and 7.3% in markets in which the merging parties overlap." They also find limited evidence of lower plan generosity.

The relationship between concentration and the split of consumer and producer surplus is found more broadly. Marika Cabral, Michael Geruso, and Neale Mahoney (2018) find that

higher concentration is associated with higher profitability in the MA market. Leemore Dafny, Jonathan Gruber, and Christopher Ody (2015) show that higher insurer concentration leads to higher premiums in the newly created health insurance marketplaces. David Dranove, Anne Gron and Michael Mazzeo (2003) find that an increase in the number of competing HMOs in a given local market are associated with lower insurer profits.

The PBM market is also highly concentrated. Approximately 70% of all prescriptions are processed by one of three firms: Express Scripts, Caremark (owned by CVS Health) and Optum Rx (owned by UnitedHealth, Fein 2017). Both policymakers and economists have raised serious concerns about the lack of competition in the PBM market and its implications for consumers (Brill 2012, Garthwaite and Scott Morton 2018). Furthermore, the market is characterized by price obfuscation: in the absence of a well-functioning, competitive market, byzantine arrangements may harm consumers. While the nature of contracting also makes it difficult for researchers to evaluate the impact of competition on prices, the simultaneous presence of concentration and high and opaque prices is certainly suggestive. The high level of concentration in the PBM market is likely to persist due, in part, to barriers to entry in the industry. The scale required to negotiate favorable discounts from manufacturers makes it difficult for fringe players to compete.

Similar issues may apply in adjacent markets as well. For example, the specialty pharmacy market represents a growing proportion of drug costs. These pharmacies tend to focus on providing medications for consumers with complex medical conditions, including cancer, autoimmune disorders, cystic fibrosis, and HIV/AIDS. While the number of specialty pharmacy locations has increased over time, the market remains extremely concentrated. Nearly 60% of all specialty pharmacies revenues are collected by three largest firms – owned by CVS Health,

Express Scripts, and Walgreens Boots Alliance (Fein, 2017). While the merger does not entail horizontal overlap in this market, the foreclosure arguments described below are likely to apply in this market as well. For example, Aetna may attempt to steer at least a portion of their consumers to CVS's specialty pharmacy in ways that may harm competition or overall consumer welfare. Anticompetitive behavior is especially concerning in this setting, as it may have important clinical, in addition to financial, consequences.

VI. Foreclosure

Vertical mergers may lead a newly integrated distributor to stop selling products to a downstream firm's rivals, a practice known as vertical foreclosure. Such arrangements raise antitrust concerns, since rivals may be excluded from a market altogether or, more commonly, forced to use higher cost means to bring their products to market. Empirical evidence on the extent and impact of foreclosure in the health care industry is limited. Therefore, in this section, I outline the likely effects of integration and highlight the potential for vertical foreclosure in the affected markets.

a. Insurance Markets

The main concern is that merged entity could raise its rival's costs along two dimensions. First, the merged entity could increase the cost of PBM services to insurers other than Aetna; price increases could be facilitated by the lack of competition and opaque nature of pricing in the PBM market. Although Aetna is the third largest insurer in the United States, foreclosure may be a risky strategy, as it involves not aggressively bidding for a large fraction of the market. Aggressive bidding is unlikely especially to the extent that it will strengthen the position of Aetna's rivals in the downstream insurance market. While high market concentration is often a

cause for concern, it is particularly worrisome in the PBM market. Opaque pricing and the rebate structure give both the pharmaceutical manufacturer and the PBM incentives to allow higher list prices and higher rebates.

Second, and perhaps more important, the merged entity could increase the cost of prescription drugs to other payers. This effect may be especially important in the market for generic drugs, which are generally competitive at the wholesale, but not the retail level and represent a large fraction of total fills. In recent years, prices for some generic molecules (even particularly old ones whose branded equivalents' patents expired decades ago) have increased substantially.

b. PBM Markets

The ability to raise rivals' costs has important implications beyond the firms currently participating in the industry. In particular, the potential for vertical foreclosure could reduce the attractiveness of entry in either the PBM or insurance markets. PBMs know that they will have few potential customers absent Aetna, and, perhaps more importantly, non-integrated insurers will face weakly worse terms. Even if the PBM and health insurance markets were competitive, the merged firm could reduce future competition in the insurance market. If the merged entity is successful, future entry may require capabilities to be a payer, PBM, and provider, which may be difficult and especially costly for potential new entrants to replicate. In addition, the merger could make it less likely that fringe PBMs or new entrants can compete effectively for Aetna's business; high concentration and existing vertical arrangements between insurers and PBMs exacerbate the extent to which this will harm the profitability of such players.

Furthermore, the proposed merger may lead to fewer competitors in the PBM space for several reasons. First, Aetna has stated publicly that one alternative to the merger would be to build an in-house PBM (Sabatino 2018). Such a PBM could potentially add a meaningful competitor in a concentrated space. Second, despite claims that larger firms such as Amazon are poised to enter this space, the merger may impede future entry. In addition to the proposed merger, additional consolidation, including Cigna's proposed acquisition of Express Scripts, is likely in this market (Thomas, Abelson, and Bray 2018). Therefore, the merger may have negative implications for consumers in both the health insurance and PBM markets.

VII. Potential Efficiencies

The welfare impacts of vertical mergers depend on both the potential for foreclosure and the potential for efficiencies. CVS and Aetna have cited a number of potential efficiencies that could result from the merger. The merging entities claim that the combined company "could provide integrated community-based health care that would improve patient health outcomes, increased integration of data and analytics that would lower costs, and improved coordination to treat chronic disease" (Garthwaite 2018). In this section, I explore the extent to which improved coordination through combined contracting is likely to arise and to what extent any such efficiencies may be merger-specific.

The merging parties could better align incentives within insurance contracts. Specifically, PBMs may not always design insurance benefits in order to minimize overall medical expenditure if they are not fully at risk. Insurers that offer combined medical and pharmacy benefits may do more to increase drug adherence and reduce hospitalizations: for example, they

may ensure that patients are taking blood pressure medication to prevent cardiac events and avoid the associated costs.

Empirical evidence supports this hypothesis. In work with Robert J. Town, we find Medicare Advantage Part D (MA-PD) plans that cover drug and medical expenditures tend to be designed to keep consumers out of the hospital, as compared to stand-alone PDPs that only cover drugs. MA insurers charge consumers lower copays for preventative medications—which effectively means sending consumers the right price signals. Outside of the direct impact on plan enrollment, the PDPs have little incentive to consider the influence of their benefit design decisions on enrollee medical care utilization.

A potentially large portion of the potential gain could be achieved via contract. An insurer could put the PBM at risk for at least part of medical spending. Under such a contract, there will be an implicit trade-off: as the PBM faces higher powered incentives, they must also be compensated for taking on additional risk. Because insurers will not fully internalize the benefits of optimal insurance design across treatment modalities, it is impossible to achieve the savings without fully internalizing the risk associated with total spending – without taking on all of the risk associated with medical expenditure. Furthermore, as the health care landscape changes and emphasizing paying for value more and more, contracting issues are likely to become more acute.

These efficiencies could be achieved via merger or, alternatively, by developing an in-house PBM. Other players have pursued the latter approach. The savings are also potentially limited to the set of contracts joint to Aetna and CVS in which Aetna does not already control the formulary: plans in which the merged entity is *at risk* for both medical and pharmacy benefits.

In the Part D market, efficiencies will be limited by the (lack of) consumer switching from stand-alone plans to MA-PD plans. In the commercial market, efficiencies will be limited to fully insured contracts; these efficiencies do not apply to administrative services only contracts, which compose a significant fraction of Aetna's business.

VIII. Pass-Through of Cost Savings

Any savings obtained as a result of the merger could increase insurer profits or reduce premiums and increase plan generosity. Insurers frequently claim that cost savings will be passed through nearly one-for-one to consumers; however, theoretically, incidence will depend on the degree of competition in the market and enrollee selection. Consider pass-through under monopoly. When the monopolist sets price such that marginal cost is equal to marginal revenue, the decrease in price due to a reduction in marginal costs is smaller than under perfect competition because the marginal revenue curve is steeper than the demand curve. Under linear demand and constant marginal costs, we expect a pass-through rate of one-half, as the marginal revenue curve is twice as steep as the demand curve.

In work with Mark Duggan and Boris Vabson, we found that while an increase in MA reimbursement was successful in attracting more providers, it provided lackluster benefit to consumers. Only about one fifth of the additional reimbursement was passed through in the form of lower premiums, co-pays, or deductibles. The remaining 80 percent went to insurers' profits and advertising. While other estimates (Cabral, Geruso, and Mahoney 2018) find greater pass-through of reimbursements to consumers, all estimates in the literature imply incomplete pass-through: at least some of the benefits accrue to the supply side of the market. Similarly, we

should be skeptical of claims that the merged entity will naturally craft more competitively priced insurance products for employers and individual consumers.

Furthermore, a separate set of issues arises in the PBM market, in which confidential rebates may or may not be passed along to the consumer. In a competitive market, we expect PBMs to try to attract consumers by promising them a greater share of rebates. However, given firm behavior and price opacity in the PBM market, it is likely that a substantial fraction of any rebates are retained by the PBM. To the extent that the merger increases concentration in the PBM industry, it is even less likely that savings will accrue to the consumer.

IX. Conclusions

My comments do not cover all the issues involved in evaluating the proposed merger. Instead, I focus on the research relevant to insurer market power, foreclosure, a subset of the most achievable efficiencies, and their impact on consumer costs.

I argue that the markets in which CVS Health and Aetna operate are typically highly concentrated. I describe concentration in the PBM industry, the specialty pharmacy market, and, critically, the Medicare Part D market, in which the merging firms have substantial overlap. Economic research has shown that concentration in insurance markets leads to higher premiums for consumers. Furthermore, the merged entity has the potential to foreclose future entry or raise the costs of current rivals. Both insurer market power and the potential for foreclosure are likely to have negative impacts on consumer welfare.

There may be potential efficiencies that are created by the merged entity. I focus on one – the alignment of medical and pharmacy benefits – that may only be fully achieved through

integration, but may be partially achieved via contract or achieved through the development of an in-house PBM. I argue that any cost efficiencies are not likely to translate into lower premiums or more attractive benefit packages for consumers. Therefore, I conclude that the potential harm to consumer welfare from the proposed merger is likely to outweigh the potential gains.

References

Bell, Allison. “CVS, Aetna Increase Medicare Drug Plan Enrollee Share: Mark Farrah.” *ThinkAdvisor*. April 12, 2018. Available at: https://www.thinkadvisor.com/2018/04/12/cvs-aetna-increase-medicare-drug-plan-enrollee-sha.

Brill, Julie. “Dissenting Statement of Commissioner Julie Brill Concerning the Proposed Acquisition of Medco Health Solutions Inc. by Express Scripts, Inc.” FTC File No. 111-0210. April 2, 2012.

Cabral, Marika, Michael Geruso, and Neale Mahoney. "Does privatized medicare benefit patients or producers? evidence from the benefits improvement and protection act." *NBER Working Paper* 20470 (2014).

Dafny, Leemore S. "Are health insurance markets competitive?." *American Economic Review* 100.4 (2010): 1399-1431.

Dafny, Leemore, Mark Duggan, and Subramaniam Ramanarayanan. "Paying a premium on your premium? Consolidation in the US health insurance industry." *American Economic Review* 102.2 (2012): 1161-85.

Dafny, Leemore S. “Health Insurance Industry Consolidation: What Do We Know From the Past, Is It Relevant in Light of the ACA, and What Should We Ask?” Testimony before the Senate Committee on the Judiciary: Subcommittee on Antitrust, Competition Policy, and Consumer Rights. September 22, 2015.

Decarolis, Francesco, Maria Polyakova, and Stephen P. Ryan. *The welfare effects of supply-side regulations in Medicare Part D*. No. w21298. National Bureau of Economic Research, 2015.

Dranove, David, Christopher Ody, and Amanda Starc. *A Dose of Managed Care: Controlling Drug Spending in Medicaid*. No. w23956. National Bureau of Economic Research, 2017.

Dranove, David, Anne Gron, and Michael J. Mazzeo. "Differentiation and competition in HMO markets." The Journal of Industrial Economics 51.4 (2003): 433-454.

Duggan, Mark, and Fiona Scott Morton. "The effect of Medicare Part D on pharmaceutical prices and utilization." *American Economic Review* 100.1 (2010): 590-607.

Duggan, Mark, Amanda Starc, and Boris Vabson. "Who benefits when the government pays more? Pass-through in the Medicare Advantage program." *Journal of Public Economics* 141 (2016): 50-67.

Ericson, Keith M. Marzilli, and Amanda Starc. "Pricing regulation and imperfect competition on the Massachusetts health insurance exchange." Review of Economics and Statistics 97.3 (2015): 667-682.

Fein, Adam. “The 2017 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers.” Pembroke Consulting, Inc. and Drug Channels Institute, 2017.

Garthwaite, Craig and Fiona Scott Morton. “Perverse Market Incentives Encourage High Prescription Drug Prices.” *Pro Market Blog*. November 1, 2017. Available at:

https://promarket.org/perverse-market-incentives-encourage-high-prescription-drug-prices/.

Garthwaite, Craig. “Competition in the Pharmaceutical Supply Chain: The Proposed Merge of CVS Health and Aetna.” Testimony before the House Judiciary Committee: Subcommittee on Regulatory Reform, Commercial and Antitrust Law. February 27, 2018.

Ho, Kate, Joseph Hogan, and Fiona Scott Morton. "The impact of consumer inattention on insurer pricing in the Medicare Part D program." *The RAND Journal of Economics* 48.4 (2017): 877-905.

Jaffe, Sonia P., and Mark Shepard. *Price-linked subsidies and health insurance markups*. No. w23104. National Bureau of Economic Research, 2017.

Mahoney, Neale, and E. Glen Weyl. "Imperfect competition in selection markets." Review of Economics and Statistics 99.4 (2017): 637-651.

Marzilli Ericson, Keith M. "Consumer inertia and firm pricing in the Medicare Part D prescription drug insurance exchange." *American Economic Journal: Economic Policy* 6.1 (2014): 38-64.

Sabatino, Thomas, General Counsel of Aetna, response to question from Rep. Jerry Nadler (D-NY) before U.S. House Judiciary Committee on “ Competition in the Pharmaceutical Supply Chain: the Proposed Merger of CVS Health and Aetna” (February 27, 2018),

https://judiciary.house.gov/hearing/competition-pharmaceutical-supply-chain-proposed-merger-cvs-health-aetna/

Starc, Amanda. "Insurer pricing and consumer welfare: Evidence from medigap." *The RAND Journal of Economics*45.1 (2014): 198-220.

Starc, Amanda, and Robert J. Town. *Internalizing Behavioral Externalities: Benefit Integration in Health Insurance*. No. w21783. National Bureau of Economic Research, 2015.

Thomas, Katie, Reed Abelson, and Chad Bray. “Cigna to Buy Express Scripts in $52 Billion Health Care Deal.” *The New York Times*. March 8, 2018. Available at: https://www.nytimes.com/2018/03/08/business/dealbook/cigna-express-scripts.html.

MSA-Level Markets Where Aetna is the First or Second Largest Health Insurer, 2016

We examined health insurance markets at the metropolitan statistical area (MSA) level and searched for markets where Aetna had a significant market share. We did this for two product markets: *i*) the combined HMO+PPO+POS+EXCH (i.e. commercial) market and *ii*) the Medicare Advantage market.

We found the following:

- In 15 percent (57) of the 389 MSAs studied, Aetna had the first or second largest market share in the *combined HMO+PPO+POS+EXCH* market.
- In 3 percent (11) of the 389 MSAs studied, Aetna had a *combined HMO+PPO+POS+EXCH* market share of 30 percent or greater.
- In 4 percent (15) of the 389 MSAs studied, Aetna had a *combined HMO+PPO+POS+EXCH* market share of 25 percent or greater.
- In 10 percent (39) of the 389 MSAs studied, Aetna had a *combined HMO+PPO+POS+EXCH* market share of 20 percent or greater.
- In 15 percent (57) of the 389 MSAs studied, Aetna had a *combined HMO+PPO+POS+EXCH* market share of 17 percent or greater.

- In 16 percent (60) of the 381 MSAs studied, Aetna had the first or second largest market share in the *Medicare Advantage* market.
- In 8 percent (32) of the 381 MSAs studied, Aetna had a *Medicare Advantage* market share of 30 percent or greater.
- In 11 percent (40) of the 381 MSAs studied, Aetna had a *Medicare Advantage* market share of 25 percent or greater.
- In 16 percent (62) of the 381 MSAs studied, Aetna had a *Medicare Advantage* market share of 20 percent or greater.
- In 21 percent (79) of the 381 MSAs studied, Aetna had a *Medicare Advantage* market share of 17 percent or greater.

The following two tables report the MSA-level markets where Aetna had the first or second largest market share in 2016. The first table (pp. 2-3) pertains to the combined HMO+PPO+POS+EXCH product market, and the second table (pp. 4-5) is for the Medicare Advantage market. Each table shows Aetna's rank in each MSA-level market—i.e. whether it had the first or second largest market share.

MSA-Level Markets Where Aetna is the First or Second Largest Health Insurer
Combined HMO+PPO+POS+EXCH Market

State	MSA	Aetna's share	rank
AK	Anchorage, AK	53	1
AK	Fairbanks, AK	59	1
AZ	Flagstaff, AZ	22	2
AZ	Phoenix-Mesa-Scottsdale, AZ	20	2
CT	New Haven-Milford, CT	17	2
CT	Waterbury, CT	16	2
DC	Washington-Arlington-Alexandria, DC-VA-MD-WV	16	2
DE	Dover, DE	11	2
DE	Wilmington, DE-MD-NJ	23	2
FL	Fort Lauderdale-Pompano Beach-Deerfield Beach, FL	35	1
FL	Jacksonville, FL	18	2
FL	Sarasota-Bradenton-Venice, FL	27	2
GA	Atlanta-Sandy Springs-Marietta, GA	16	2
GA	Gainesville, GA	13	2
GA	Hinesville-Fort Stewart, GA	12	2
GA	Macon, GA	18	2
GA	Valdosta, GA	13	2
GA	Warner Robins, GA	14	2
IA	Ames, IA	26	2
IL	Bloomington-Normal, IL	18	2
IL	Rockford, IL	12	2
IN	South Bend-Mishawaka, IN-MI	23	2
KS	Wichita, KS	37	2
ME	Bangor, ME	20	2
ME	Lewiston-Auburn, ME	22	2
ME	Portland-South Portland, ME	16	2
MI	Ann Arbor, MI	6	2
MO	Columbia, MO	40	2
MO	Joplin, MO	24	2
MO	Springfield, MO	37	1
NC	Durham, NC	25	2
ND	Bismarck, ND	53	1
NJ	Atlantic City, NJ	7	2
NJ	Camden, NJ	35	2
NJ	Edison, NJ	21	2
NJ	Newark-Union, NJ-PA	22	2
NJ	Ocean City, NJ	9	2
NJ	Trenton-Ewing, NJ	33	2
NJ	Vineland-Millville-Bridgeton, NJ	28	2
NY	Ithaca, NY	46	1
OH	Weirton-Steubenville, WV-OH	20	2

state	MSA	Aetna's share	rank
PA	Philadelphia, PA	25	2
SC	Sumter, SC	9	2
TX	Beaumont-Port Arthur, TX	22	2
TX	El Paso, TX	23	2
UT	Ogden-Clearfield, UT	21	2
UT	St. George, UT	18	2
VA	Blacksburg-Christiansburg-Radford, VA	18	2
VA	Charlottesville, VA	41	2
VA	Danville, VA	11	2
VA	Richmond, VA	19	2
VA	Roanoke, VA	23	2
WA	Wenatchee, WA	10	2
WI	Appleton, WI	14	2
WI	Oshkosh-Neenah, WI	20	2
WV	Charleston, WV	20	2
WV	Morgantown, WV	25	2

Notes:

1. Source: Competition in Health Insurance Markets: A Comprehensive Study of U.S. Markets, 2017 Update, which uses data from the Managed Market Surveyor, © 2016 DR/Decision Resources, LLC. All rights reserved. Managed Managed Market Surveyor data may not be reproduced, distributed, displayed or modified, in whole or in part, by any means, without the prior written consent of DR/Decision Resources, LLC.
2. "state" is the state in which the MSA is located; "rank" = 1 or 2 if Aetna's the largest or second largest insurer in the market, respectively.

MSA-Level Markets Where Aetna is the First or Second Largest Health Insurer
Medicare Advantage Market

state	MSA	Aetna's share	rank
AR	Fayetteville-Springdale-Rogers, AR-MO	19	2
AR	Hot Springs, AR	19	2
CT	Danbury, CT	27	2
CT	New Haven-Milford, CT	23	2
CT	Waterbury, CT	27	2
DE	Dover, DE	30	2
DE	Wilmington, DE-MD-NJ	50	1
FL	Sarasota-Bradenton-Venice, FL	21	2
IA	Ames, IA	39	1
IA	Cedar Rapids, IA	41	2
IA	Des Moines, IA	59	1
IA	Iowa City, IA	49	1
IA	Sioux City, IA-NE-SD	67	1
IL	Davenport-Moline-Rock Island, IA-IL	30	2
IL	Rockford, IL	37	1
IL	Springfield, IL	21	2
KS	Lawrence, KS	45	2
KS	Topeka, KS	39	1
KS	Wichita, KS	58	1
MD	Hagerstown-Martinsburg, MD-WV	23	2
ME	Bangor, ME	36	2
ME	Portland-South Portland, ME	26	2
MO	Jefferson City, MO	25	2
MO	Joplin, MO	36	2
MO	Kansas City, MO-KS	39	2
MO	Springfield, MO	38	1
NC	Durham, NC	24	2
NE	Lincoln, NE	62	1
NE	Omaha-Council Bluffs, NE-IA	35	2
NJ	Atlantic City, NJ	37	1
NJ	Camden, NJ	47	1
NJ	Edison, NJ	23	2
NJ	Newark-Union, NJ-PA	24	2
NJ	Ocean City, NJ	23	2
NJ	Trenton-Ewing, NJ	31	2
NJ	Vineland-Millville-Bridgeton, NJ	47	1
OH	Cincinnati-Middletown, OH-KY-IN	21	2
OH	Cleveland-Elyria-Mentor, OH	22	2
OH	Columbus, OH	26	2
OH	Dayton, OH	15	2
OH	Mansfield, OH	27	2

state	MSA	Aetna's share	rank
OH	Sandusky, OH	41	1
OH	Springfield, OH	46	1
OH	Toledo, OH	33	1
OH	Weirton-Steubenville, WV-OH	48	1
OH	Youngstown-Warren-Boardman, OH-PA	29	2
PA	Erie, PA	34	2
PA	Harrisburg-Carlisle, PA	40	1
PA	Lancaster, PA	47	1
PA	Lebanon, PA	39	2
PA	Scranton--Wilkes-Barre, PA	16	2
PA	Williamsport, PA	35	2
PA	York-Hanover, PA	45	1
TX	Abilene, TX	23	2
UT	Logan, UT-ID	21	2
WV	Charleston, WV	18	2
WV	Huntington-Ashland, WV-KY-OH	12	2
WV	Morgantown, WV	22	2
WV	Parkersburg-Marietta-Vienna, WV-OH	16	2
WV	Wheeling, WV-OH	31	2

Notes:

1. Source: Author's calculations of data from the Managed Market Surveyor, © 2016 DR/Decision Resources, LLC. All rights reserved. Managed Market Surveyor data may not be reproduced, distributed, displayed or modified, in whole or in part, by any means, without the prior written consent of DR/Decision Resources, LLC.
2. "state" is the state in which the MSA is located; "rank" = 1 or 2 if Aetna's the largest or second largest insurer in the market, respectively.

111 South Wacker Drive
Chicago, IL 60606
Telephone: 312-443-0700
Fax: 312-443-0336
www.lockelord.com

Steven T. Whitmer
Direct Telephone: 312-443-1869
Direct Fax: 312-896-6569
swhitmer@lockelord.com

July 3, 2018

VIA ELECTRONIC MAIL

The Honorable Commissioner Dave Jones
California Department of Insurance
300 Capitol Mall, Suite 1700
Sacramento, CA 95814

Re: The Proposed Acquisition of Aetna Inc. by CVS Health Corporation

Dear Commissioner Jones:

We are writing to provide the additional information requested by the California Department of Insurance ("CDI") during the June 19, 2018 hearing in the captioned matter. Attached as Exhibit A is a report that addresses the competition issues raised during the hearing. In addition, below are the collective responses of CVS Health Corporation ("CVS Health") and Aetna Inc. ("Aetna") to the three categories of information requested by CDI. Please note that CVS Health and Aetna are conducting integration planning and continuing to develop their post-merger plans.

Category 1: Identification Of Additional Savings Beyond The $750 Million In Annual Recurring Savings.

Response: The CVS Health combined company financial projections in the SEC Form S-4 reflect estimated synergies of $750 million by the second full year following completion of the merger (which is assumed to be completed in the second half of 2018 for purposes of calculating the estimated synergies), which increase by 5 percent per year thereafter. The shorter-term benefits will include substantial savings in the form of medical cost reductions from improved care management and optimizing the sites of care, as well as aligning the two companies' drug formularies.

Over the longer term (within three-five years), the transaction is expected to result in further reductions in medical costs through the integration of our assets and creation of new products, services, and innovations. One of the most significant opportunities for obtaining those savings is through the improved chronic care management that CVS Health will be able to provide as a

result of the proposed transaction. Patients with at least one chronic condition, such as diabetes, heart disease, or cancer, account for more than 80 percent of all hospital admissions and more than 90 percent of all prescriptions filled.[1] The combined company will be able to better manage medical costs for chronic patients by providing them: (1) greater access to care through convenient, lower-cost sites of care; (2) increased patient engagement (at the pharmacy, at a walk-in clinic, or at home) to supplement physician office visits; (3) better coordination of care across providers, including physicians and pharmacists; and (4) post-discharge support to increase medication adherence and reduce hospital readmissions.

The merger is also expected to create significant opportunities to increase the combined company's operating efficiency by simplifying processes and projected administrative and other cost synergies. Aetna estimated these could be $2.4 billion per year by the fifth full year following completion of the merger. These savings will further drive efficiencies and cost savings for consumers and customers.[2]

The combined company also will lower medical costs through optimizing the site of care, when appropriate, to lower-cost and more convenient sites, including by reducing emergency department visits through the use of retail walk-in clinics, such as MinuteClinics, and shifting infusion services from more expensive outpatient hospital settings to patients' homes through the use of home infusion providers, such as Coram. The expected improvement in health outcomes and reduction in spending will inure to the benefit of the combined company's members and the health care system overall.

Additional savings will also occur as a result from items discussed in response to Category 2 below.

<u>Category 2</u>: Identification Of The Portion Of The $750 Million In Annual Recurring Savings To Be Allocated To Reduction Of Premiums.

Response: CVS Health expects consumers in California and elsewhere to benefit substantially from the proposed transaction, including through lower costs. Consumers will benefit from the synergies that are expected to result from the transaction. As discussed above, CVS Health projects that it will achieve approximately $750 million in annual recurring savings shortly after closing the transaction. CVS Health further expects to reduce medical costs by improving chronic care management and shifting care to lower-cost and more convenient sites, which will inure to the benefit of consumers. In addition, the combined company's ability to reduce medical and pharmacy costs – through, for example, earlier and more effective medical

---

[1] *See* Testimony of Thomas M. Moriarty, EVP, Chief Policy and External Affairs Officer, and General Counsel, CVS Health, Hearing on "Competition in the Pharmaceutical Supply Chain: the Proposed Merger of CVS Health and Aetna," before Subcommittee on Regulatory Reform, Commercial and Antitrust Law of U.S. House of Rep. Committee on the Judiciary, Feb. 27, 2018, at 2, https://judiciary.house.gov/wp-content/uploads/2018/02/Moriarty-REVISED-Testimony.pdf.

[2] SEC Form S-4, Jan. 4, 2018, at 101-102, https://www.sec.gov/Archives/edgar/data/64803/000119312518002957/d482402ds4.htm.

interventions and increased medication adherence – will lead to lower health care costs and trend.

Together, the combined company's unique ability to manage patients' health will not only drive health care innovation and improve patient outcomes, but will also favorably impact health premiums and thereby reduce consumer costs. Prior to closing the transaction, CVS Health has not created a budget for how these savings will be allocated to premiums versus other line items, such as capital investments in innovations. CVS Health notes, however, the substantial premium reductions reported by UnitedHealth Group's OptumRx from integrating medical and pharmacy benefits. This integration reportedly generated overall savings of $11-16 per member per month.[3] Applying those results to the combined CVS Health-Aetna would yield hundreds of millions of dollars in medical cost savings, which could be passed on to consumers in the form of lower health premiums. CVS Health expects that its investments in creating new products and services through the integration of its pharmacies, clinics, and infusion services will generate additional savings and improve patients' health and wellness.

CVS Health expects patients to see numerous benefits from the new patient interactions the combined company will be able to offer. Among those consumer benefits are: (1) greater access to health care through more convenient, lower-cost sites of care, including walk-in clinics and home infusions; (2) better coordination of care across providers, including physicians and pharmacists, particularly for patients with chronic conditions; and (3) post-discharge support by pharmacists and other providers to increase medication adherence and reduce hospital readmissions. Together, these increased patient interactions will help eliminate gaps in health care, increase medication adherence, and more effectively treat members with chronic conditions, thereby lowering medical costs for consumers.

Category 3: Identification Of Value Of CVS Health Rebates.

Response: CVS Health passes along more than 90 percent of rebates overall to its clients, with many clients receiving 100 percent of these rebates. CVS Health makes a variety of PBM solutions available to help further drive down drug trend for its PBM clients and drug costs for the patients they support. The company's Point of Sale (POS) rebate offering allows the value of negotiated rebates on branded drugs to be passed on directly to patients when they fill their prescriptions and the savings from this program can be significant.

In 2017, despite manufacturer brand list price increases on drugs near 10 percent, CVS Health's PBM reduced the drug trend for its commercial clients to the lowest level in five years, keeping drug price growth at a minimal 0.2 percent. In fact, 42 percent of CVS Caremark commercial clients spent less on their pharmacy benefit plan in 2017 than they had in 2016. CVS Caremark helped members reduce monthly out-of-pocket costs and improve adherence to its highest level

[3] *See* OptumRx – Measuring the Financial Advantage, White Paper (2017), https://www.optum.com/resources/library/measuring_the_financial_advantage.html.

in seven years in key categories such as diabetes, hypertension, and hyperlipidemia.[4] Aetna and CVS Health believe that consumers should benefit from discounts and rebates negotiated with drug manufacturers.

Our core PBM strategies – creating competition between drug manufacturers, maximizing the use of low-cost generics and other formulary management, and effectively negotiating discounts and rebates – continue to be an important part of reducing drug trend (the measure of growth in prescription spending per member per month) for our payor clients and keeping drugs more affordable for PBM members. Our latest Drug Trend Report[5] shows that great progress is being made. For example:

- In 2017, our strategies helped protect clients from drug manufacturer price increases of almost 10 percent, keeping cost growth per unit nearly flat and trend to the lowest level in five years.

- For chronic conditions, such as diabetes, high blood pressure, and high cholesterol, our plan designs connected patients to lower-cost options that ultimately helped improve adherence to medications by as much as 1.8 percentage points.

- Forty-two percent of CVS Caremark clients had negative trend, meaning they spent less in 2017 on prescription drugs than in 2016.

- Nearly 90 percent of our PBM plan members spent less than $300 out-of-pocket for their prescription medicines last year.

CVS Health is taking a leadership role in developing programs and initiatives to help consumers save money on their overall prescription drug costs and stay adherent to the medicines they need. And while this initiative signals progress, the company remains committed to doing even more across the enterprise to help patients on their path to better health.

Please see the website cited below for additional information and illustrations regarding rebates.[6]

* * *

---

[4] Prescription drug trend is the measure of growth in prescription spending per member per month. Trend calculations take into account the effects of drug price, drug utilization, and the mix of branded versus generic drugs, as well as the positive effect of negotiated rebates on overall trend. The 2017 trend performance is based on a cohort of CVS Health PBM commercial clients, employers, and health plans.

[5] https://cvshealth.com/newsroom/press-releases/cvs-health-kept-drug-price-growth-nearly-flat-and-improved-medication.

[6] https://payorsolutions.cvshealth.com/insights/consumer-transparency.

We trust that this letter is responsive to the information requested during the June 19, 2018 hearing. But please let us know if any additional information is needed. We thank you for your consideration of this matter.

Sincerely,

LOCKE LORD LLP

Steven T. Whitmer

Exhibit A

Response to Competition Issues by CVS Health Corporation and Aetna Inc.

On behalf of CVS Health Corporation (CVS) and Aetna Inc. (Aetna), thank you for providing us the opportunity to respond to the information presented by the academic witnesses at the June 19, 2018 hearing held by the California Department of Insurance (CDI). As discussed during the hearing, this merger presents great opportunities—not just for CVS and Aetna, but also for consumers throughout California and across the country.

CDI convened its hearing to review the following topics, among others:

1. The effect of the proposed merger on competition in the California health coverage market;
2. The effect of the proposed merger on consumer premiums and out-of-pocket health care costs;
3. The effect of the proposed merger on provider and facility network contracting and on consumer choice of, and access to, providers;
4. The effect of the proposed merger on network design, including the ability of consumers to continue to receive care from their current providers on an in-network basis;
5. The efficiencies, if any, expected from the proposed merger, and their implications for the cost and quality of care delivered to consumers; and
6. The competitive effects of a vertical merger in the health insurance, retail pharmacy, and Pharmacy Benefit Manager (PBM) markets, including barriers to entry by competitors, elimination of Aetna as a potential PBM competitor, and effects on network and PBM service contracting by competitors, on competitor PBM data utilization, and on pharmaceutical costs borne by insurance consumers?

This letter corrects some of the inconsistencies or inaccuracies raised by other parties on these topics.

The Merger Will Benefit Consumers Substantially By Lowering Costs, Improving Quality of Care, and Making Care More Convenient.

Consumers in California and elsewhere will benefit substantially from the proposed combination, including through lower medical costs, more convenient care, and enhanced products and services. Combining CVS and Aetna will create a new, open health care model that will help consumers improve their health and simplify their health care experience. First, the new model will put consumers at the center of their care, providing them the information and resources they need to better manage their own health and access care in more convenient community settings at an affordable price. Second, the new model will focus on prevention, chronic conditions, and primary care; it will engage patients at the pharmacy and elsewhere in their communities, earlier and more often, to help prevent and manage illness more effectively. Third, the combined CVS-Aetna will be better able to address the rising costs and fragmentation of care that plague the current health care system.

A key driver of consumer benefits from the merger is the ability to combine CVS's pharmacy data and expertise with Aetna's medical data and expertise. By enhancing access to data and improving the use of predictive analytics, the combined company will create targeted interactions with patients that will provide:

(1) greater access to health care through convenient, lower-cost sites of care, including walk-in clinics and home infusions;
(2) better coordination of care across providers, including physicians and pharmacists, particularly for patients with chronic conditions; and

(3) post-discharge support by pharmacists and other providers to increase medication adherence and reduce hospital readmissions.

Together, these increased patient interactions will help eliminate gaps in health care, increase medication adherence, and more effectively treat members with chronic conditions, thereby lowering medical costs for consumers.

Consumers will also benefit from the synergies that the parties expect to result from the merger. CVS projects that it will achieve about $750 million in annual recurring savings. These savings will include lower costs resulting from combining the two companies' operations in the PBM and Medicare areas, aligning the companies' drug formularies, and streamlining redundant corporate functions. Over the longer-term – three to five years post-closing – CVS expects to achieve substantial additional savings in the form of medical cost reductions from improved care management and optimizing the site of care to make better use of lower-cost, more convenient sites when appropriate.

The Vertical Integration from the Combination Will Not Lessen Competition in Any Market.

Opposing witnesses raised concerns about the vertical integration of the CVS and Aetna businesses, businesses that do not compete with each other in any market today. The AMA-sponsored witnesses' concerns are premised on assertions about market dominance that were unsupported by any evidence and are contradicted by commercial realities and actual market data. In fact, neither CVS nor Aetna is dominant in any area of its business, and the combined company will continue to have strong commercial incentives to win and maintain the business of competing health plans and consumers alike.

These unsupported allegations about harm in the PBM, pharmacy, and insurance areas should be discounted. CDI's focus should instead be on the facts. As discussed below, the facts show that CVS is not a "dominant" PBM or pharmacy, that Aetna is not "dominant" in health insurance, and that the combined firm will have every need and incentive to compete vigorously to the benefit of consumers in all markets.

Despite the witnesses' stated beliefs that the PBM industry is not competitive, a look at the PBMs serving the top 10 health plans in California shows just how competitive the PBM area is, with 8 different PBMs serving the following 10 accounts:

PBMs for Top Health Plans in California[1]

Rank	Health Plan	Enrollment	PBM
1	Anthem	8,632,657	ESI
2	Kaiser Foundation	8,603,597	Kaiser
3	Blue Shield of California	3,833,307	Caremark
4	UnitedHealth (including CalPERS)	3,154,183	OptumRx
5	Centene/Health Net	2,465,445	Caremark
6	Aetna	2,239,431	Caremark
7	Local Initiative Health for LA County	2,135,218	Navitus
8	Inland Empire Health Plan	1,418,554	Argus
9	Cigna	1,408,853	Cigna
10	Orange County Health Authority	791,241	MedImpact

Although an AMA-sponsored witness asserted that "smaller PBMs . . . are not good options,"[2] the data plainly contradict that claim. In California alone, PBMs such as Navitus, Argus, and MedImpact currently serve and presumably are good options for even the largest of customers. The commercial reality faced by CVS is as the FTC has described it: "a competitive market for PBM services characterized by numerous, vigorous competitors who are expanding and winning business from traditional market leaders."[3] To that point, over just the past year, CVS has lost business to more than ten different PBM competitors.

With respect to pharmacy competition, the opposing witness testimony is not accurate. One witness argued that the combination "will further strengthen the already dominant position of CVS in the pharmacy market."[4] However, CVS's share of retail pharmacy stores in California is 21.3% and nationally is 16.2%. Health plans have many viable pharmacy options, as demonstrated by the fact that those plans can, and do, assemble retail pharmacy networks that exclude CVS. For example, in 2017, CVS was made a non-preferred pharmacy in the majority of the largest Part D plans.[5] Even Caremark largely relies on other retail pharmacies, which accounted for a majority of its retail commercial prescription claims last year. The assertion that "once a health insurer has contracted with a particular PBM, subscribers are limited to the affiliated pharmacy services"[6] is contrary to fact.

---

[1] Enrollment data from Mark Farrah Associates (as of third quarter 2017); identity of PBMs from CVS internal information.

[2] Diana Moss, Hearing Tr. at 147.

[3] Statement of the Federal Trade Commission Concerning the Proposed Acquisition of Medco Health Solutions by Express Scripts, Inc., at 2 (Apr. 2, 2012), https://www ftc.gov/public-statements/2012/04/statement-federal-trade-commission-concerning-proposed-acquisition-medco.

[4] Written Testimony of Neeraj Sood, at 13, CDIx091.

[5] Drug Channels Institute, Walgreen's Plays to Win: Our Exclusive Analysis of 2017's Part D Preferred Pharmacy Networks (Oct. 25, 2016) (CVS preferred in only one SilverScript and one Magellan plan among 17 major Part D plans), https://www.drugchannels net/2016/10/walgreens-plays-to-win-our-exclusive html.

[6] Written Testimony of American Antitrust Institute, at 5, CDIx100.

Another witness expressed concern that the CVS-Aetna combination "might . . . [r]educe reimbursement to competing pharmacies,"[7] including independent pharmacies. There is no data presented to support that concern. The actual data show Caremark reimburses independent pharmacies at higher levels than CVS retail pharmacies. A recent study published by the State of Ohio found just that: "In the aggregate, CVS paid independent pharmacies more than they paid CVS pharmacies."[8] The difference was 3.6% for branded drugs and 3.4% for generics[9] – not trivial numbers, given the low margins for retail pharmacies. The same witness raised concerns about CVS's alleged market power and threatened harm to independent pharmacies in Anchorage, Alaska, where the witness claimed that Aetna has 50% of some health insurance market that the witness did not define.[10] Here, too, the facts show why there is no basis for concern about the combined company being able to foreclose independent pharmacies – assuming it even had an interest in doing so. CVS operates only three pharmacies in the entire state of Alaska.[11] CVS's share of stores in Anchorage is only 6%.[12]

The reality in the pharmacy area is far closer to the description offered by another AMA-sponsored witness: "[r]etail pharmacies face mounting competition from mass merchandisers (e.g. discount stores, supercenters and warehouse clubs), mail-order prescription providers, online pharmacies, convenience stores, wholesalers (e.g. Costco) and other health clinics (e.g., urgent care centers)."[13] There are more than 60,000 retail pharmacies in the United States to choose from, in a highly competitive industry with many options.[14] And this does not even count the potential disruption by online pharmacies in the wake of Amazon's June 28 announcement that it is buying online pharmacy PillPack.

On the insurance side, Aetna's health insurance share nationally is 8%, while its share in California is less than 6%.[15] Anthem and Kaiser, with 22% shares each, are almost four times larger than Aetna in California.[16] Kaiser has its own internal PBM and Anthem is developing one, casting further doubt on the vertical foreclosure concerns raised. Aetna's relatively small share – both nationally and in California – presumably underlies one of the witness's observation about the likelihood of CVS successfully increasing the cost of PBM services to insurers other than Aetna: "Although Aetna is the third largest insurer in the United States, foreclosure may be a risky strategy, as it involves not aggressively bidding for a large fraction of the market."[17]

The commercial realities undermine the vertical theories of harm presented by the opposition witnesses at the hearing. An increase in the prices to health plans for PBM or pharmacy services would fail. As the

---

[7] Presentation of Neeraj Sood, at CDIx039.

[8] Ohio Department of Medicaid, Report on MCP Pharmacy Benefit Manager Performance, at 5 (June 15, 2018), http://www.healthtransformation.ohio.gov/Portals/0/Press%20Releases/PBM%20HDS%20Final%20Report%20Executive%20Summary.pdf?ver=2018-06-21-114617-170.

[9] *Id.*

[10] Neeraj Sood, Hearing Tr. at 134.

[11] https://www.cvs.com/store-locator/cvs-pharmacy-locations/Alaska.

[12] Store counts and shares for Anchorage metropolitan area based on internal CVS competitor tracking database.

[13] Written Testimony of Lawton R. Burns, at 13, CDIx138.

[14] https://www.humana.com/individual-and-family-support/tools/network-providers/pharmacies.

[15] Shares are based on Mark Farrah Associates data on commercial, Medicare, and Medicaid enrollment (as of fourth quarter 2017).

[16] *Id.*

[17] Written Testimony of Amanda Starc, at 10, CDIx115.

data show, health plans that compete against Aetna have a number of very good alternatives to CVS for those services. And, given Aetna's small health insurance share, Aetna would likely capture only a small portion of any members switching away from rival health plans, in the unlikely event CVS were able to increase another health plan's costs.

Post-merger, CVS Will Continue to Have Strong Commercial Incentives to Win Health Plan Business.

Following its combination with Aetna, CVS will continue its long-standing efforts to win and maintain the PBM business of health plans and other insurers, including those that may compete with Aetna. CVS has strong commercial incentives post-merger to maintain and grow its health plan business, which accounts for a substantial portion of its revenue that it cannot afford to lose. After acquiring Aetna, CVS will continue to serve its Part D and other health plan clients as it does today – with the objective of providing competitive pricing, exceptional service, and innovative solutions.[18]

CVS/Aetna will not be the first combination of a health plan and a PBM. As the Commissioner noted during the hearing, "We have an example in United and Optum of a vertically integrated health insurer and health plan with a PBM."[19] Per an AMA-sponsored witness, the UnitedHealth/OptumRx combination has been a success: "United Healthcare and Optum have kept the doors open. They will deal with all comers. They have not gone to a[n] … exclusivity model."[20] CVS will do the same. Although one witness attempted to distinguish OptumRx on the basis that it is a "small" PBM unlike Express Scripts and CVS, the data show OptumRx is in fact nearly the same size as Express Scripts and CVS Caremark.[21]

CVS expects health plans in California and elsewhere to benefit from the proposed merger. The merger will combine the convenience, community presence, and pharmacy expertise of CVS with Aetna's health plans, analytics capabilities, and extensive network of health care providers, allowing the combined company to bring enhanced and innovative products and services to its health plan clients. CVS has testified to Congress about its intention to make its offerings "available, in an 'open source' environment, to all our business, labor, and public and private health plan clients" just as it does today.[22]

CVS's existing vertical relationships in the Part D area provide a preview of how health plans can and will benefit from the proposed merger. Caremark currently provides PBM services to various health

---

[18] *See* CVS Health, CVS Health Corporation to Acquire Aetna Inc., Transcript of Joint Conference Call, at 4 (Dec. 4, 2017) (comments of Larry J. Merlo, President & CEO, CVS Health Corp.) ("[T]his transaction will not, in any way, diminish the strong relationships CVS and Aetna have with our clients and their health care partners, nor will it reduce the value that we both create for them every day. CVS has a long history of developing solutions that deliver on the cost quality access goals of our partners, and we see no reason for that not to continue into the future."), http://otp.investis.com/clients/us/cvs_caremark1/SEC/sec-show.aspx?Type=html&FilingId=12415274&CIK=0000064803&Index=10000.

[19] Commissioner Jones, Hearing Tr. at 170.

[20] Diana Moss, Hearing Tr. at 170-71.

[21] *Id.*; *see* Adam Fein, Drug Channels Institute, The 2018 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers (Feb. 2018).

[22] Testimony of Thomas M. Moriarty, EVP, Chief Policy and External Affairs Officer, and General Counsel, CVS Health, Hearing on "Competition in the Pharmaceutical Supply Chain: the Proposed Merger of CVS Health and Aetna," before Subcommittee on Regulatory Reform, Commercial and Antitrust Law of U.S. House of Rep. Committee on the Judiciary, at 6-7 (Feb. 27, 2018), https://judiciary.house.gov/wp-content/uploads/2018/02/Moriarty-REVISED-Testimony.pdf.

plans providing Part D plans. Those health plans compete with CVS's Part D business, SilverScript. Yet, those health plans chose, and continue to use, Caremark as their PBM because of Caremark's competitive product and service offerings. Far from "harming" these customers, Caremark's health plan clients have outperformed the overall marketplace in terms of Part D enrollment growth.[23] In terms of service quality, more than 80% of Medicare lives served by Caremark's PBM are in four-star or five-star plans – the highest of any PBM serving Medicare Part D.[24] In short, Caremark is helping its health plan clients (including competitors to SilverScript) to be more competitive in the marketplace today, and this will continue – the addition of Aetna's Part D plans will not change this dynamic.

The Combination Will Not Lessen Competition in Medicare Part D.

We are equally concerned with the data presented at the hearing related to the Part D area. Concerns about anticompetitive effects cited to two sets of evidence that, when properly viewed, in fact contradict the AMA-sponsored witnesses' conclusions. The first was the concentration levels for Part D nationally and in California, both of which confirmed that the marketplace is not highly concentrated using the Herfindahl-Hirschman Index (HHI) calculations.[25] Regardless, market shares and concentration levels are only the beginning point for any meaningful antitrust analysis. Yet at the hearing the AMA and its sponsored witnesses presented market share calculations as virtually the entire analysis, ignoring significant evidence that Part D markets are and will remain highly competitive. The second set of evidence on average monthly Part D premiums showed that, since 2010, those premiums have been largely flat – an impressive feat given the repeated and significant price increases by drug manufacturers, the introduction of many new and more expensive drugs, and increased drug utilization.[26] In fact, the Centers for Medicare & Medicaid Services (CMS) data show that Part D premiums in a region are not correlated with the shares of Part D plans in that region.[27]

In addition, when one looks deeper into the evidence, it becomes clear that CVS's proposed acquisition of Aetna will not lessen the substantial competition that exists in Medicare Part D. The combined company will continue to face competition from six national firms (assuming both the CVS/Aetna and Cigna/Express Scripts transactions are completed) competing in every Part D region established by CMS (including California), several Part D firms with regional strengths, and sponsors of Medicare Advantage Part D (MAPD) plans. In California, there are currently 10 competitors offering 25 plans for seniors to choose among. A marketplace with so many competitors and options for seniors does not lack competition.

---

[23] *See* Jon Roberts, Meeting the Health Care Challenges of Tomorrow, CVS Health 2016 Analyst Day, at 13 (Dec. 15, 2016), http://investors.cvshealth.com/~/media/Files/C/CVS-IR-v3/documents/12-15-2016/2016-analyst-day-jon-roberts-presentation.pdf.

[24] *See* Testimony of Thomas M. Moriarty, EVP, Chief Policy and External Affairs Officer, and General Counsel, CVS Health, Hearing on "Competition in the Pharmaceutical Supply Chain: the Proposed Merger of CVS Health and Aetna," before Subcommittee on Regulatory Reform, Commercial and Antitrust Law of U.S. House of Rep. Committee on the Judiciary, at 7 (Feb. 27, 2018), https://judiciary house.gov/wp-content/uploads/2018/02/Moriarty-REVISED-Testimony.pdf.

[25] Written Testimony of Richard M. Scheffler, at 5-9, CDIx073-CDIx077.

[26] *Id.* at 2, CDIx070.

[27] Analysis of CMS Part D premium and enrollment data.

1. Eight National Part D Firms Compete in Every CMS Region.

What was not discussed in the testimony presented by the opposition witnesses is that there are eight national, Fortune 200 firms marketing Part D plans in every CMS region, covering all fifty states and the District of Columbia. In addition to CVS and Aetna, national Part D firms include Cigna, Express Scripts, Humana, Rite Aid, UnitedHealth, and WellCare. These participants are large, well-funded, sophisticated firms that compete vigorously to serve the rapidly growing senior population. These national players create a highly competitive and commoditized environment for Part D plans. It is hard to find a marketplace in the health care sector (or almost any sector) with so many significant companies in every geographic market.

2. Several Strong Regional Players Compete in Part D.

Post-merger, the combined company will face significant, additional competition from several Part D players with regional strengths. Those competitors include Anthem, Health Care Service Corporation (HCSC), other Blue Cross Blue Shield (BCBS) plans such as Blue Shield of California, and Magellan. Magellan offers Part D plans in 20 regions, while Anthem is present in 11 CMS regions, including California.

3. Medicare Plan Finder Facilitates Part D Competition.

The vigorous competition in Part D is facilitated by Medicare's Plan Finder website, which allows beneficiaries to compare premiums, deductibles, and other attributes of competing Part D and MAPD plans.[28] With Plan Finder, pricing, quality (measured by Medicare star ratings), and benefit design are fully transparent to Medicare beneficiaries. During each year's annual open enrollment period, seniors can use the site to compare plans and switch to another plan with more favorable attributes. In California, seniors seeking standalone Part D coverage can use Plan Finder to choose among 10 providers and 25 plans available to them in the state (listed in the table below).

[28] Medicare Plan Finder, https://www.medicare.gov/find-a-plan/questions/home.aspx.

Company	# of Plans	Plan Name
Aetna	3	• Aetna Medicare Rx Select • Aetna Medicare Rx Saver • First Health Part D Value Plus
Anthem	3	• Anthem Blue Cross MedicareRx Standard • Anthem Blue Cross MedicareRx Plus • Anthem Blue Cross MedicareRx Gold
Blue Shield of California	2	• Blue Shield Rx Plus • Blue Shield Rx Enhanced
CIGNA	2	• Cigna-HealthSpring Rx Secure • Cigna-HealthSpring Rx Secure-Extra
CVS Health	2	• SilverScript Choice • SilverScript Plus
Express Scripts	3	• Express Scripts Medicare - Saver • Express Scripts Medicare - Value • Express Scripts Medicare – Choice
Humana	3	• Humana Walmart Rx Plan • Humana Preferred Rx Plan • Humana Enhanced
Rite Aid	1	• EnvisionRxPlus
United	4	• AARP MedicareRx Walgreens • AARP MedicareRx Saver Plus • AARP MedicareRx Preferred • Symphonix Value Rx
WellCare	2	• WellCare Classic • WellCare Extra

4. MAPD Provides Even More Competition.

There is ample competition among Part D firms. But in addition to the many national and regional Part D firms, not raised at the hearing was the fact that CVS and Aetna face competition from sponsors of MAPD plans. One witness asserted that "the [Part D] and the Medicare Advantage markets are separate markets due to the lack of plan switching across the markets."[29] However, CMS data recording switches between Part D and MAPD plans confirm that this assertion is incorrect. Over the last three years, MAPD plans account for large amounts of business won and lost by CVS's Part D plans. More than half of CVS's Part D enrollment losses were to MAPD plans during this time period. In addition, CVS's new enrollment from MAPD also exceeded the amount of new enrollment from Aetna and all other Part D competitors, except United and Humana.

When accounting for all Part D competition (including MAPD), the combined firm's share is 21.8% nationally and only 16.6% in California. We are unaware of any merger being found to harm competition in a market with more than 10 competitors and a combined share under 20%.

[29] Amanda Starc, Hearing Tr. at 102-03.

California (Region 32) Part D Shares[30]

Competitor	Part D Share	Part D+MAPD Share
United	27.7%	21.8%
CVS	25.2%	12.0%
Humana	21.4%	11.7%
Aetna	8.7%	4.6%
Anthem	5.5%	5.0%
WellCare	4.2%	2.6%
Express Scripts	3.6%	1.7%
Blue Shield of California	2.1%	4.1%
Rite Aid	0.8%	0.4%
Cigna	0.5%	0.2%
Other	0.3%	35.9%

Conclusion

In light of the above, we are deeply troubled by the conclusory testimony presented regarding the likely competitive effects of the proposed combination. The testimony is not only unsupported by rigorous analysis or evidence, but it is directly contradicted by the facts. Publicly-available data and actual market experience show that the combination of CVS and Aetna will not lessen competition in any market. Instead, it will result in substantial benefits to consumers in California and across the country, and is a step toward creating a new business model that can help fix the broken status quo of today's health care system.

Thank you again for this opportunity to correct CDI's record.

[30] Based on April 2018 CMS plan enrollment data.

July 20, 2018

The Honorable Commissioner David Jones
California Department of Insurance
300 Capitol Mall, Suite 1700
Sacramento, CA 95814

Re: Letter from Locke Lord LLP on "The Proposed Acquisition of Aetna Inc. By CVS Health Corporation"

Dear Commissioner Jones:

I am writing regarding the letter from Locke Lord LLP on the June 19th hearing on "The proposed acquisition of Aetna Inc. by CVS Health Corporation" held at the California Department of Insurance. The letter and Exhibit A of the letter challenge some of the competition concerns related to the acquisition of Aetna by CVS raised by me and other academic experts. I would like to take this opportunity to briefly respond to the issues raised in this letter.

1. **The letter claims that a key driver of consumer benefits from the merger is the ability to combine CVS's pharmacy data and expertise with Aetna's medical data and expertise.**

I find this claim perplexing because as I explained in my report, Aetna claims in its SEC filings that it already performs its own core PBM functions and thus already integrates pharmacy and medical data to lower health care costs. The fact that Aetna performs its own PBM services is corroborated by a press release that announced a strategic agreement between Aetna and CVS about 8 years ago. In that press release, Aetna chairman and CEO Ronald Williams says[1]:

> "Through this strategic agreement, we retain our PBM and our ability to integrate medical care with clinical and pharmacy programs and actionable data. We will add CVS Caremark's best-in-class clinical capabilities and broad market reach, enabling us to deliver better drug discounts and improved pricing and service to our customers."

2. **The letter claims that the PBM market is competitive and CVS Caremark is not a dominant PBM.**

Several facts show that the claim in the letter that the PBM market is competitive or that CVS Caremark is not a dominant PBM is just false. First, the PBM market is highly concentrated. The

[1] https://news.aetna.com/news-releases/aetna-awards-long-term-contract-to-cvs-caremark-to-provide-pbm-services/, accessed July 18, 2018.

top 3 PBMs accounted for 73% of covered lives, nationally.[2] Second, the letter uses data from California alone. This is misleading as the state is not the relevant geographic market. The PBM market is national as major PBMs operate on a national scale and compete for clients such as large employers or health plans who have a national presence.

Quoting from an April 2, 2012 FTC decision, the letter describes the PBM market as "a competitive market for PBM services characterized by numerous, vigorous competitors, who are expanding and winning business from traditional market leaders". However, the data on PBM market dynamics after 2012 paint a different picture. The data show that not only is the national market for PBMs highly concentrated, the degree of concentration has only increased overtime. In 2013, the top 3 PBMs accounted for 67% of covered lives and in 2017 the market has become more concentrated with the top 3 PBMs accounting for 73% of covered lives.[3] CVS Caremark has been a top 3 PBM since 2013, if not longer, and its market share of covered lives has increased from 22% in 2013 to 26% in 2017. A market with such durable market shares for the top 3 firms cannot be considered competitive.

One of the reasons for the lack of competition in the PBM market are the significant barriers to entry. The magnitude of discounts that a PBM can negotiate with pharmaceutical firms depends on the number of covered lives represented by the PBM, with the size of the discount rising with the size of the PBM. Therefore, a new PBM has a distinct disadvantage compared to incumbents who represent millions of covered lives. In addition, a PBM needs to form a national pharmacy network with the ability to contract and process claims from pharmacies within the network. This is no small feat for a new entrant. Finally, a new PBM entrant might need to enter both the health insurance and PBM markets given that most of the major incumbents are vertically integrated insurers and PBMs.

The significant barriers to entry in the PBM market were acknowledged by the CEO of one of the largest PBMs even when a formidable competitor such as Walmart tried to enter the PBM market in 2008: [4]

> "Many people shake in their boots when they hear the name Wal-Mart in any industry," Medco CEO David Snow told the Newark Star-Ledger. "This is a very complicated business with serious barriers to entry. I just don't think they're going to pull it off. You just don't snap your fingers and say you're going to be a pharmacy-benefits manager."

[2] https://www.healthstrategies.com/blog/select-emerging-pbms-gain-market-share, accessed July 18, 2018.
[3] https://www.healthstrategies.com/blog/five-pbms-lead-industry-2013, accessed July 18, 2018.
[4] https://www.managedcaremag.com/archives/2008/4/could-wal-mart-pbm-succeed, accessed July 15, 2018

3. The letter claims that CVS is not dominant in the pharmacy market.

Page 3 of Exhibit A of the letter states that:

> With respect to pharmacy competition, the opposing witness testimony is not accurate. One witness argued that the combination "will further strengthen the already dominant position of CVS in the pharmacy market. However, CVS's share of retail pharmacy stores in California is 21.3% and nationally is 16.2%."

This market share observation fails to recognize that the pharmacy or drugstore market is not a national or state market. Consumers from California do not drive to Massachusetts to get their prescriptions drugs. Even mail order pharmacies are not a good substitute for a local drug store because of the time it takes to ship prescription drugs to consumers and the lack of ability to consult with a pharmacist in person. This is likely why regulations in both Medicare Part D and ACA markets mandate that health plans provide access to retail pharmacies.[5] Therefore, the relevant markets are more local, perhaps MSAs or smaller localities within MSAs. In fact, CVS acknowledges that markets are local in its own financial statements to the securities and exchange commission and also provide data to corroborate my assertion that CVS is a dominant firm. CVS's financial statement with the SEC states[6]:

> We currently operate in 98 of the top 100 United States drugstore markets and hold the number one or number two market share in 93 of these markets.

Moreover, as noted on page 13 of the AMA statement to California Department of Insurance:

> CVS's high local market shares understate the likelihood of market power. CVS pharmacy chains may be considered "must have" pharmacies. They are "must have" because health plan sponsors prefer geographically comprehensive networks – pharmacies located in close proximity to their patient population. Reportedly, 76 percent of the population of the U.S. lives within five miles of a CVS pharmacy.

One of the reasons for the dominant position of CVS is pharmacy markets is the high barriers to entry in the drugstore business. The CEO of CVS himself acknowledged the high barriers to entry. In an interview responding to speculation about Amazon entering the pharmacy business he stated[7]:

---

[5] See 45 CFR 156.122 available online at https://www.law.cornell.edu/cfr/text/45/156.122, accessed July 18, 2018

[6] https://www.sec.gov/Archives/edgar/data/64803/000006480316000074/cvs-20151231x10k.htm, accessed May 22, 2018.

[7] https://www.forbes.com/sites/brucejapsen/2017/08/09/cvs-health-ceo-doubts-amazon-entry-into-pharmacy/#6748b3333acb, accessed July 18, 2018.

> There are many barriers to entry when you're looking at pharmacy. Most people are thinking about pharmacy as another distribution point, but pharmacy is also about the clinical outcomes that are provided. In an environment where there's a migration to more value-based care, those clinical capabilities are going to continue to grow in importance. It's highly regulated, so the barriers to entry are high

4. The letter claims that CVS Caremark does not disadvantage independent pharmacies

The letter highlights data from the executive summary of a report on Medicaid managed care plans from Ohio which shows that CVS Caremark pays independent pharmacies roughly 3% more than its own CVS pharmacies. Interestingly, these same data show that CVS Caremark has a pretty hefty margin of about 9% based on spread between what it pays to pharmacies and what it charges health plans for drugs used by health plan subscribers. Perhaps it does not discriminate against independent pharmacies in Ohio Medicaid managed care market because it has a high profit margin in this market. The situation might be different in other markets. Therefore, to truly establish that CVS Caremark does not disadvantage independent pharmacies CVS Caremark should present data from its entire book of business to show that plan and beneficiary reimbursement to CVS pharmacies is the same as plan and beneficiary reimbursement to independent pharmacies and other competing chain drug stores. Without such disclosure it is difficult to verify the veracity of their claim that they do not disadvantage independent pharmacies.

Different reimbursement to CVS versus competing pharmacies is only one way for CVS Caremark to advantage CVS. CVS Caremark might be using other business practices (see page 13 and 14 of my written report) to steer patients towards CVS pharmacies. In the letter, they claim that "Even Caremark largely relies on other retail pharmacies, which accounted for a majority of its retail commercial prescription claims last year." However, this statement does not establish that CVS Caremark is not steering patients towards CVS drugstores. In fact, analysis of data from CVS's financial statements by an industry expert (Adam Fein) show that CVS Caremark is indeed steering patients to its own pharmacies.[8] The data show that in 2014 Caremark accounted for 35% of CVS retail pharmacies revenue even though Caremark's national market share was 24%.

5. The letter claims that post-merger CVS and Aetna will not use its PBM and Pharmacy network to disadvantage competing health plans

To support this claim they note that Aetna has a small market share nationally of about 8%. Then they cite the expert report of Prof Starc to note: "Although Aetna is the third largest insurer in the United States, foreclosure may be a risky strategy, as it involves not aggressively bidding for a large fraction of the market." There are three problems with this reasoning.

[8] https://www.drugchannels.net/2015/03/cvs-health-newest-data-on-retail-pbm.html, accessed July 11, 2018

First, consumers shop locally for health plans that have negotiated significant discounts with desirable local provider networks. In certain MSAs, Aetna is the number 1 or number 2 insurer in the commercial market with significant market share (See Exhibit E of AMA report). In these markets, CVS-Aetna have a significant incentive to foreclose.

Second, I agree that foreclosure is a risky strategy in that CVS-Aetna might lose a PBM or pharmacy customer, but it still might be a profitable strategy. In my earlier report, I use data on profit margins in the health insurance, pharmacy and PBM market to show that gaining one health insurance customer is far more valuable than losing one PBM or pharmacy customer. In particular I note:

> One might question the size of the incentives for CVS-Aetna to disadvantage health plans competing with the insurance arm of CVS-Aetna. After all, if it does not provide competitive PBM and pharmacy services then health plans might drop CVS-Aetna and seek the same services from elsewhere. Consider a consumer who spends $10,000 a year on average (this is roughly equal to US per capita health spending) on health care and $1,000 or roughly 10% of her total spending (this is roughly equal to the fraction of health spending on prescription drugs) is on prescription drugs. Data from SEC on the profitability of PBM and health insurance sectors suggests a net profit margin of PBM services of 2.3% and a net profit margin of health insurers of 3.0%.9 Therefore, if CVS-Aetna were to lose this consumer as a PBM customer then CVS-Aetna would lose about $23 (2.3% x 1,000) in profits. However, if CVS-Aetna were to gain the same consumer as a health insurance customer then CVS-Aetna would gain about $323 in profits stemming from $300 (3% x 10,000) in profits from providing insurance and $23 in profits from providing PBM services. Therefore, 1 insurance customer is as valuable as 14 PBM customers; providing strong incentives for CVS-Aetna to disadvantage competing health plans to gain insurance customers even if it risks losing some PBM customers.

It is noteworthy that the letter does not challenge the above calculation.

Third, the letter omits a key part of Prof Strac's testimony on this issue. On page 10 of her report she notes: "Although Aetna is the third largest insurer in the United States, foreclosure may be a risky strategy, as it involves not aggressively bidding for a large fraction of the market. *Aggressive bidding is unlikely especially to the extent that it will strengthen the position of Aetna's rivals in the downstream insurance market*" (emphasis added). Therefore, her testimony points to the risk of not aggressively bidding but still concludes that aggressive bidding is unlikely.

Overall, I maintain my position that the likely costs of reduced competition in the insurance, PBM and pharmacy market due to the vertical merger of CVS and Aetna outweigh the potential benefits. My assessment is based on but not limited to the following:

---

[9] http://healthpolicy.usc.edu/documents/USC%20Schaeffer_Flow%20of%20Money_2017.pdf, accessed May 22, 2018

- The claimed benefits of $750 million represent less than 0.5% of the combined revenues of CVS and Aetna. Therefore, the magnitude of claimed benefits is very small relative to the size of operations of the two companies
- It is doubtful whether these benefits will materialize as Aetna already self supplies essential PBM services and has integrated insurer and PBM functions.
- Even if the claimed benefits materialize, it is unclear the extent to which they will be shared with consumers
- Several of the claimed benefits can be achieved via contracting
- The likelihood for anticompetitive effects is high as: (a) CVS and Aetna have large market shares in extensively vertically integrated markets of PBM, pharmacy and insurance markets, (b) asymmetric information and complex contracts make foreclosure difficult to detect, (c) the PBM, insurance and pharmacy markets are concentrated or highly concentrated
- There are significant barriers to entry in the PBM, insurance and pharmacy markets

I hope you find these remarks to be helpful as you deliberate on the potential consequences of the merger for consumers.

Sincerely,

Neeraj Sood, PhD

Professor of Health Policy
Sol Price School of Public Policy and Schaeffer Center
University of Southern California
Verna and Peter Dauterive Hall 210
Los Angeles, California 90089-3333
Tel: 213 821 7949
Email: nsood@healthpolicy.usc.edu

Health Care Management Department
The Wharton School
University of Pennsylvania
203 Colonial Penn Center
3641 Locust Walk
Philadelphia, PA 19104.6218
215.898.3711 phone
215.573.2157 fax
burnsL@wharton.upenn.edu
<hcmg.wharton.upenn.edu/BurnsL>
Lawton R. Burns, PhD
James Joo-Jin Kim Professor
Chair, Health Care Management Department
Director, Center for Health Management and Economics

July 9, 2018

The Honorable Commissioner David Jones
California Department of Insurance
300 Capitol Mall, Suite 1700
Sacramento, CA 95814

Re: Proposed Merger of Aetna, Inc. into CVS Health Corporation

Dear Commissioner Jones:

I am writing in response to the July 3rd letter to your office from Locke Lord LLP regarding the merger of Aetna into CVS Health. As you recall, I testified before you on June 19th in San Francisco about the rationales and potential benefits for this merger. My remarks that day focused on whether there are consumer benefits that might compensate for welfare losses from the merger. In particular, I critically evaluated the two parties' contention that retail clinics hosted in CVS pharmacies can effectively serve as a healthcare hub for patients and consumers, as the two companies contend.

On June 19th, I catalogued the presumed benefits from this merger as stated in the testimony of both parties. These included:

- Put the consumer at the center of the healthcare delivery system
- Remake the consumer healthcare experience
- Engage and empower consumers
- Help consumers achieve their best health
- Increase the coordination of care
- Address chronic illness
- Increase primary care and preventive care
- Improve medication adherence
- Solve the problems of healthcare cost, quality, and access

During my introductory comments, I stated that if Aetna and CVS can deliver on *any* of the promises they mentioned, they deserve the Nobel Prize. That is because each of these problems has plagued our healthcare system for decades, with little sign of success. My remarks were designed to challenge the two parties to spell out how their merger of two

companies would achieve goals that have eluded the entire healthcare industry for decades.

In their July 3rd letter, the two parties (via Locke Lord) repeat the same promises stated (both orally and written) during their June testimony. These include:

- Lower medical costs (p. 2)
- Increased patient engagement
- Better coordination of care
- Post-discharge support to increase medication adherence
- More effective medical interventions (p. 3)
- Manage patients' health
- Eliminate gaps in healthcare
- More effectively treat patients with chronic disease
- Put consumers at the center of their care (Appendix)
- Focus on prevention, chronic conditions, and primary care

Nowhere in their letter or its Appendix do the two parties specify how any of this is to be achieved or why the merger is necessary and sufficient to accomplish these goals. These are very difficult goals to achieve. By virtue of repeating so often that they will accomplish them, the two parties have apparently convinced themselves the task is quite do-able. Unfortunately, the repetition is not convincing to any outside reader. Instead, the July 3 letter merely reiterates the same hollow promises stated in their June testimony.

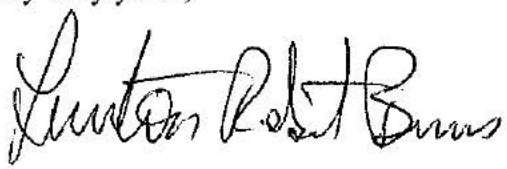
Moreover, the July 3 letter could have served to rebut my report that questioned the ability of retail clinics in CVS pharmacies to deliver on all of these desirable goals. Instead, the two parties have opted not to respond to any of my arguments (both written and oral) regarding the limited ability of retail clinics to accomplish much of anything. To me, the silence is telling. I believe they have failed to respond to my testimony because there is no plausible way to rebut it. Instead of the platitudes that pervade their testimony, the testimony I offered was based on peer-reviewed, research evidence.

The only time that Locke Lord cited me in their July 3 letter concerned my comment that retail pharmacies face mounting competition. The context for this comment concerned the total sales and revenues of retail outlets selling drugs and "health and beauty aids" (HABA), and the stagnant growth in this overall market. By contrast, Locke Lord take my comment out of context to argue that the pharmacy market is quite competitive. They also state that the 10,000 CVS pharmacies constitute only 16.2% of the U.S. market. This statement is very misleading. While CVS pharmacies are only 16.2% of the pharmacy establishments (10,000 out of 60,000), they controlled 28.9% of market revenues, according to a December 2017 IBISWorld Industry Report (#44611).

I made a LOT of arguments in my written testimony regarding why the retail clinics hosted in CVS pharmacies are unlikely to deliver on any of the merger benefits enumerated above. In light of the two parties' failure to address them, let alone try to rebut them, these arguments stand.

Thank you for considering my remarks. I trust you find them helpful.

Very truly yours,



Lawton Robert Burns, Ph.D., MBA
The James Joo-Jin Kim Professor

Statement of Professor Thomas L. Greaney
University of California Hastings College of Law

Before the

Investigatory Hearing on Merger of Aetna Inc. into CVS Health Corporation
State California Department of Insurance

June 19, 2018

Statement of Professor Thomas L. Greaney
University of California Hastings College of Law

Investigatory Hearing on Merger of Aetna Inc. into CVS Health Corporation
State California Department of Insurance

Thank you Commissioner Jones for the opportunity to participate in this important investigative hearing. In my remarks today, I'd like to first offer a brief summary of the role of antitrust enforcement in health care and the current state of the law and economic analyses of vertical mergers, and then move on to specifically address some issues presented by the CVS/Aetna merger. My bottom line is this:

- Market concentration is a leading cause of high costs in health care;
- Antitrust enforcers have neglected the risks associated with vertical combinations;
- The CVS/Aetna merger is likely to lessen competition in the standalone prescription drug plan market;
- The CVS /Aetna combination, along with Express Scripts/Cigna merger will likely enhance incentives to stifle competition by foreclosing competition or raising rivals costs

Background

By way of introduction, I am currently Visiting Professor of Law at the University of California Hastings College of Law and Distinguished Senior Fellow with the UCSF/UC Hastings Consortium on Law, Science and Health Policy. I am also the Chester A. Myers Professor Emeritus at Saint Louis University School of Law where I served for 29 years and directed that school's Center for Health Law Studies. I have devoted most of my 30-year academic career to studying issues related to competition and regulation in the health care sector, writing numerous articles on the subject and co-authoring the leading casebook in health law. I have recently co-authored with Professor Barak Richman of Duke a two-part white paper for the American Antirust Institute analyzing consolidation in the delivery and payment of health care services.[1] Before joining academia, I served as Assistant Chief in the Antitrust Division of the United States Department of Justice, litigating and supervising cases involving health care. My professional affiliations include membership in the American Health Lawyers Associations and I serve on the Advisory Board of the American Antitrust Institute.

The Role of Antitrust Law in Health Care

American antitrust enforcement agencies (the Federal Trade Commission, Department of Justice and State Attorneys General) have long devoted an extraordinary proportion of their resources to the health care sector. For example, challenges to hospital mergers, physician cartels, and "reverse payments" by pharmaceutical companies, insurance company mergers, and anticompetitive practices have featured prominently in government litigation, advisories, and

policy statements. In recent years, the Agencies have won a series of important cases challenging horizontal mergers in the hospital,[2] physician,[3] and insurance[4] sectors that have clarified the law and sent a clear message that combinations of competitors in concentrated local markets will face close scrutiny. Reversing a series of losses in litigated hospital merger cases, these decisions established what are likely to be enduring precedents. Among other things, they clarified that provider and health insurance markets are highly localized; rejected arguments that provider market power will be checked by the countervailing power of large or sophisticated buyers; declined to accept arguments that uncertainties arising from rapidly-changing market conditions undermine inferences of market power; and rejected claims that consolidation is essential to achieve integrative efficiencies. [5]

That said, there is considerable evidence that past consolidation—including many acquisitions that have gone unchallenged--is responsible for the high cost of health care that American consumers and government programs endure today. An extensive economic literature documents the enormous consolidation that has occurred in hospital, physician, health insurance and PBM markets.[6] In each sector there is evidence that entry barriers are high, as market shares have grown or stabilized at high levels of concentration and entry has been limited or non-existent.[7] In addition, numerous studies demonstrate that concentration in health care is associated with high prices,[8] and in some cases reduced quality.[9] Moreover, a variety of health market characteristics including inelasticity of demand, imperfect information, and imperfect agency relationships make health care markets vulnerable to the exercise of market power.

It is noteworthy that the markets involved in the CVS/Aetna merger exhibit the problematic characteristics associated with high concentration. Studies show that commercial insurance markets and Medicare Part D markets with few competitors are associated with higher premiums for consumers.[10] Pricing in the PBM market is particularly troubling, as the payment structure actually encourages higher drug prices and PBM customers have scant information about the rebates supposedly negotiated on their behalf.[11] The reason such peculiar, upside-down arrangements persist is the durable market power of entities offering PBM services.

In sum, the underlying conditions of the markets affected by the CVS/Aetna merger exacerbate risks of competitive harm associated with both horizontal consolidation and vertical stacking of one dominant firm on another.

The Importance of Stopping Anticompetitive Vertical Mergers in Health Care

Let me turn to the issue of how the law deals with vertical mergers. I've submitted a draft article soon to be published in the American Journal of Law, Medicine and Ethics that summaries my views.[12] I begin this article with a quote from George Orwell's novel Animal Farm in which one of the animals, Snowball, describes his world view: "Four legs good, two legs bad". And I compare that to the Chicago School's view of mergers which is "Vertical Good, Horizontal (sometimes) bad". That pretty much describes how the government enforcers, and to a degree, the courts have treated vertical mergers. It also explains why case law is sparse and out-of-date in this area.[13]

However, contemporary economic analyses have sharply questioned the basis for a laissez-faire approach to vertical combinations. The modern account demonstrates that preconditions underlying Chicago School's analysis "rarely hold" and "can obscure how a particular merger may raise real competitive concerns."[14] While vertical mergers do not increase concentration they may enable conduct that limits rivalry at the horizontal level. By combining inputs with distribution, for example, a vertical merger can enhance incentives for the merged firm to exclude its downstream or upstream rivals, either by raising their costs or cutting off their access to critical resources. For example, Professor Steven Salop's extensive body of work provides a sound economic model of foreclosure risks and maps the potential legal framework for applying the so-called "raising rivals' cost" principles to vertical mergers.[15]

Another faulty premises underlying the "vertical, good" view, is the assumption that cost savings and quality improvements inevitably flow from hierarchical structures. Economic evidence for this proposition is lacking. As Professor Burns analysis indicates, economic integration has often failed to generate clinical integration that results in either cost savings or improved efficiency.[16] Not unlike horizontal mergers, vertical mergers are subject to problems associated with culture clashes, inadequate pre-merger information, and challenges inherent in management integration. As Martin Gaynor, a leading health care economist, has reminded, "consolidation is not coordination."[17] It is noteworthy that antitrust case precedent appropriately places a high bar on "efficiency" justifications.[18] To assuage competitive concerns, the claimed benefits must be achievable *only* through merger, must offset potential competitive harms, and, very importantly, must be passed on to consumers. Moreover, claimed benefits in markets outside the markets causing competitive harm are not considered.[19]

A further reason for increased vigilance over vertical consolidation is experience demonstrating that market dominance achieved by mergers can give rise to anticompetitive conduct. The history of antitrust law in the health care sector is littered with examples of hospitals, physician organizations, and insurers that have taken advantage of their dominant market positions, barriers to entry, and the absence of effective regulatory oversight to undertake actions that disadvantage rivals and impair competition. As an example, some insurers with market power have insisted that they be given "most favored nation" treatment by providers in order to lessen competitive challenges from rival insurers.[20] At the same time it must be remembered that antitrust law has been relatively lenient on exclusionary conduct and does little to deal with extant market power. Therefore, the prophylactic remedy inherent in enjoining anticompetitive mergers is especially important. As Professor Herbert Hovenkamp has argued, it is appropriate to apply the more demanding "incipiency" standard in cases such as vertical mergers "where a merger is likely to lead to conduct that is both anticompetitive but also is difficult or impossible for antitrust law to reach once the merger has occurred."[21]

Assessing the Risks to Competition Associated with the CVS/Aetna Merger

In health care, we've seen that provider consolidation is not the only source of high costs. The legion of "middlemen," many with market power, also extract excess profits. The overall risks from excessive vertical combinations was well summarized recently by FDA Commissioner Scott Gottlieb:

> The top three PBMs control more than two-thirds of the market; the top three wholesalers more than 80%; and the top five pharmacies more than 50%. Market concentration may prevent optimal competition. And so the saving may not always be passed along to employers or consumers.
>
> Too often, we see situations where consolidated firms -- the PBMs, the distributors, and the drug stores -- team up with payors. They use their individual market power to effectively split some of the monopoly rents with large manufacturers and other intermediaries rather than passing on the saving garnered from competition to patients and employers.[22]

This observation finds support in Professor's Sood's empirical study which finds that out of every $100 in spending by insured customers on pharmaceuticals, $42 goes to middlemen: PBMs, pharmacies, wholesalers, and insurance companies.[23]

Antitrust merger analyses are notoriously fact-intensive. Courts are asked to perform a predictive analysis as to the merging parties' future conduct and its effect on competition. That task necessarily involves a close examination of the markets affected and the incentives facing the firms involved. The Antitrust Division of the U.S. Department of Justice is hard at work sorting through documentary and potential testimonial evidence to make those assessments. However, the discussion today can shed light on some of the core facts that need to be explored in evaluating incentives, conduct and effects.

Horizontal Effects of the Merger

The years of experience dealing with horizontal mergers teach us several things. The case law appropriately places a presumption of competitive harm where market shares and concentration is high and new entry is not likely, timely or sufficient. There are good reasons for this, not the least of which is that mergers are permanent.[24] The CVS/Aetna merger raises serious concerns about horizontal effects. First, the two firms compete head to head in a number of standalone PDF markets. There are good reasons to regard the standalone PDF market as a distinct market from Medicare Advantage markets in view of the nature of services provided, consumer preferences and regulation. Professor Richard Scheffler's analysis points to 10 of the nation's 34 bidding regions in which the presumption of illegality may attach and another 20 which potentially raise competitive concerns under government merger guideline standards.[25] Given the economic studies cited in that report there are strong reasons to believe that increased concentration will lead to higher prices and reduced quality competition.

There are other horizontal aspects to the merger that merit close scrutiny. One is the loss of potential competition. Aetna has acknowledged that it was contemplating entering the PBM market de novo, a move that would add to the limited number of firms competing. The elimination of a likely entrant into a concentrated market lacking other potential entrants has been recognized to eliminate actual or perceived potential competition under Section 7 of the Clayton Act. In addition, CVS has contracted with the nation's second largest health insurer, Anthem, to assist in the latter's provision of PBM services. The inherent conflict of interest in having CVS serve its new health insurance division, Aetna and its rival, Anthem presents serious

concerns about anticompetitive coordination (e.g. price fixing or market allocation) between the firms either through direct agreement or information sharing.

Finally, if the CVS/Aetna merger and the Express Scripts/Cigna merger are allowed to proceed, consumers will be faced with three entities (including UnitedHealthcare/OptumRx) that control an enormous share of the management of health services and pharmaceutical payment. The incentives of the three behemoths will be aligned. As discussed below, none will have incentives to offer favorable competitive terms to small insurers that are rivals of their insurance divisions. Their market power will be protected by the widely recognized and sizeable barriers to entry into both health insurance and PBM markets. Moreover those barriers will be greater because a new firm contemplating entry will likely have to enter two markets, and the largest potential "customers" in those markets will not be available due to their integrated structure. The emergence of a tight oligopoly of this magnitude may be the most significant risk associated with this merger.

Vertical Effects of the Merger

As mentioned earlier, antitrust law on vertical mergers is sparse and largely out of date. However, a few things are clear about the harm that section 7 is designed to address. First, concerns are raised when a merger creates or strengthens the incentives of firms to foreclose or raise rivals' costs for inputs necessary for them to compete. As described in the letter from Diana Moss of the American Antitrust Institute, the merger changes the incentives that CVS as a standalone PBM firm previously had and increases its leverage in bargaining.[26] Post-merger it will take into account the benefit its insurance subsidiary may achieve by providing less favorable terms to insurance rivals. As discussed by Professor Sood, the relative margins of insurance versus PBM services suggests this is a very possible scenario. [27] Likewise, the CVS/Aetna combination may create incentives to disadvantage retail pharmacies that are rivals of CVS. The risk here is what economists call "customer foreclosure": CVS will have strong incentives to deprive rival pharmacies of competitive access to Aetna's insureds. Where Aetna has a sizeable market presence, a variety of raising rivals cost tactics can be destructive of price and service competition in retail pharmacy markets.[28]

Overlooking Market Concentration: A Cautionary Tale

The nation has learned the hard way that overlooking consolidation in health care is costly. A seven-year period during which no hospital mergers were challenged in the 1990s produced extensive concentration that in turn has resulted in higher prices for consumers ever since. Likewise, the benign neglect of vertical mergers between hospitals and physicians has resulted in excessive pricing of physician services. With most health care sectors already highly concentrated and competition anemic at best, vertical consolidation should be closely monitored.

---

[1] See Thomas L. Greaney and Barak D. Richman, CONSOLIDATION IN PROVIDER AND INSURER MARKETS: ENFORCEMENT ISSUES AND PRIORITIES, Part I of the American Antitrust Institute White Paper Series on Competition in Payment and Delivery of Health Care Services (June, 2018), available at

http://www.antitrustinstitute.org/content/aai-issues-part-i-new-white-paper-series-competition-delivery-and-payment-healthcare.

[2] FTC v. Advocate Health Care Network, 841 F.3d 460 (7th Cir. 2016); FTC v. Penn State Hershey Med. Ctr., 838 F.3d 327 (3d Cir. 2016); ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559, 571 (6th Cir. 2014).

[3] Saint Alphonsus Medical Center-Nampa & FTC v. St. Luke's Health System, 778 F.3d 775, 793 (9th Cir. 2015); FTC and North Dakota v. Sanford Health, Case No. 1;17-cv-00133 (D.N.D. Dec. 15 2017).

[4] U. S. v. Anthem, Inc., 855 F. 3d 345 (D.C. Cir. 2017); United States v. Aetna, Inc., 240 F. Supp. 3d 1 (D.D.C. 2017).

[5] See Greaney and Richman supra note 1.

[6] See Martin Gaynor, "Examining the Impact of Health Care Consolidation," Statement Before Committee on Energy and Commerce Oversight and Insurance Subcommittee, U.S. House of Representatives (Feb. 14, 2018). Leemore Dafny, "Health Insurance Industry Consolidation: What Do We Know From the Past, Is It Relevant in Light of the ACA, and What Should We Ask?" Testimony Before the Subcommittee on Antitrust, Competition Policy, and Consumer Rights of the Senate Committee on the Judiciary (2015).

[7] Id.

[8] See generally id. See also Martin Gaynor and Robert Town, "The Impact of Hospital Consolidation," The Synthesis Project, Policy Brief No. 9, Robert Wood Johnson Foundation (2012).

[9] See Gaynor supra note 6.

[10] See Dafny supra note 6 (commercial insurance); Kate Ho et al, *The Impact of Consumer Inattention on Insurer Pricing in the Medicare Part D Program*, 48 Rand J. Econ. 877 (2017) (Medicare Part D).

[11] See Robin Feldman, *Perverse Incentives: Why Everyone Prefers High Drug Prices—Except for Those Who Pay the Bills*, forthcoming Harv. J. on Legis., available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3162432) (PBM payment structure "minimizes the competitive pressure to reduce prices" and creates incentives "operating to drive prices higher"); Fiona Scott Morton & Lysle T. Boller, Enabling Competition in the Parmacuetical Market, Hutchins Ctr. On Fiscal and Monetary Pol'y at Brookings (2017).

[12] Thomas L. Greaney, *The New Health Care Merger Wave: Does the "Vertical, Good" Maxim Apply?"* J. Law, Medicine & Ethics (forthcoming 2018).

[13] In its challenge the AT&T/Time Warner merger, the Department of Justice litigated its first vertical merger case in forty years; the badly out-of-date Non-Horizontal Merger Guidelines were issued in 1984; and the most recent Supreme Court decision dates back to 1972. See id.

[14] Steven C. Salop & D. P. Culley, *Potential Competitive Effects of Vertical Mergers: A How-To Guide for Practitioners* (Dec. 8, 2014).

[15] See Steven C. Salop, *Invigorating Vertical Merger Enforcement*, 127 Yale. L. J. 1962 (2018).

[16] Lawton R. Burns, CVS & Aetna: Analysis of the Proposed Mergers; See also, Jeffrey Goldsmith, et al., INTEGRATED DELIVERY NETWORKS: IN SEARCH OF BENEFITS AND MARKET EFFECTS (National Academy of Social Insurance) 1 (2015)(summarizing literature and analyzing performance of 15 of the largest integrated delivery systems).

[17] Martin Gaynor, "Examining the Impact of Health Care Consolidation," Statement Before the Energy and Commerce Oversight Committee, U.S. House of Representatives, February 14, 2018 at 11.

[18] See U. S. v. Anthem, Inc., 855 F. 3d 345 (D.C. Cir. 2017); U.S. Dep't of Justice & FTC, Horizontal Merger Guidelines §10.

[19] U.S. v. Philadelphia National Bank, 374 U.S. 321, 370 (1963).

[20] U.S. v. Blue Cross and Blue Shield of Michigan, 809 F. Supp. 2d 665 (E.D. Mich. 2011).

[21] Herbert Hovenkamp, *Prophylactic Merger Policy*, University of California Hastings Law Journal (forthcoming 2018)

[22] Scott Gottlieb, Commissioner of Food and Drugs, "Capturing the Benefits of Competition for Patients," Speech before America's Health Insurance Plans National Health Policy Conference (March 7, 2018).

[23] Neeraj Sood, *Potential Effects of the Proposed DVS Acquisition of Aetna on Competition and Consumer Welfare* (June 19, 2018).
[24] Herbert Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure and Burdens of Proof,* 127 Yale L. J. 1996 (2018).
[25] Richard M. Scheffler, Testimony Regarding CVS Health Corporation's Proposed Acquisitionof Aetna, Inc. (June 19, 2018).
[26] Letter from Diana Moss, President of the American Antitrust Institute, to Makam Delrahim, Assistant Attorney General, Antitrust Division, U.S. Department of Justice (March 26, 2018).
[27] See Sood Statement, supra note 23.
[28] See AAI Letter supra note 26 (describing tactics including lowering dispensing fees, cherry picking profitable prescriptions, and insisting on "take-it-or-leave-it" terms for independent pharmacies).

July 10, 2018

The Honorable Commissioner Dave Jones
California Department of Insurance
300 Capitol Mall, Suite 1700
Sacramento, CA 95814

Re: American Antitrust Institute Responses to the Parties' July 3, 2018 Letter in re: the Proposed Acquisition of Aetna Inc. by CVS Health Corporation

Dear Commissioner Jones:

On June 19, 2018, the American Antitrust Institute's (AAI's) President, Dr. Diana Moss, provided telephonic testimony at the California Department of Insurance (CID) hearing regarding the potential anticompetitive and anti-consumer effects of the proposed acquisition of Aetna Inc. by CVS Health Corporation. AAI has reviewed the letter filed by CVS and Aetna dated July 3, 2018. Exhibit A to the letter addresses competition issues raised during the hearing. The AAI respectfully offers the following analysis in response to the parties' letter and requests that our response be placed in the CID record in this proceeding.

As an initial matter, the parties' characterization of AAI's testimony as being "sponsored" by the American Medical Association (AMA) is incorrect. AAI is a non-profit 503(c) research, education, and advocacy organization. AAI does not perform consulting services or take particular positions on behalf of any organization, other than the AAI. Our policies on funding and transparency are fully disclosed on the AAI website (antitrustinstitute.org). We do not receive funding from the AMA. Moreover, as noted by Dr. Moss in her testimony at the CID hearing, AAI's testimony is based on an analysis of the proposed merger contained in a March 26, 2018 letter from AAI to the U.S. Department of Justice Antitrust Division.[1]

I. The Parties Have Failed to Rebut AAI's Statement that Smaller Pharmacy Benefit Managers are Not Good Options

On page 3 of Exhibit A, the parties state (footnotes omitted):

Although an AMA-sponsored witness asserted that "smaller PBMs . . . are not good options," the data plainly contradict that claim. In California alone, PBMs such as Navitus, Argus, and MedImpact currently serve and presumably are good options for even the largest of customers. The commercial reality faced by CVS is as the FTC has described it: "a competitive market for PBM services characterized by numerous, vigorous

[1] https://www.antitrustinstitute.org/sites/default/files/CVS-Aetna_AAI%20Letter_3.26.18.pdf ("AAI DOJ Letter").

competitors who are expanding and winning business from traditional market leaders." To that point, over just the past year, CVS has lost business to more than ten different PBM competitors.

The parties' critique of AAI's testimony fails on a number of counts. First, the data the parties provide to support their assertion that there are good PBM options cuts against their case. Consider, for example, the table labeled "PBMs for Top Health Plans in California" on page 7 of Exhibit A. The table contains data on enrollments, by health plan. It also shows the PBM associated with each health plan.

Based on enrollments by PBM, Caremark and Express Scripts each have about a 25% share. Kaiser has a 25% share, and the remainder is made up by smaller PBMs. While the parties' own data show that smaller PBMs do serve some of the smaller-ranked health plans, they confirm that PBM services in California are dominated by Caremark and Express Scripts, which together control 50%. AAI's testimony, which is based on the AAI DOJ letter, makes this case using PBM data on a national level.

Moreover, in assessing competition in PBM services, it would be a mistake to include enrollment data on Kaiser, which is an integrated Health Maintenance Organization (HMO). Insurers would not look to Kaiser, as an HMO, as an alternative to other PBMs. Without considering Kaiser enrollments, Caremark and Express Scripts each have a share of 33%. Together, they control 66% of PBM services in California.

A scenario in which two firms control more than half of the "market" is hardly competitive. Indeed, as noted by Dr. Moss in her testimony, the next largest PBMs on a national level are a fraction of the size of Caremark and Express Scripts. The parties' own data reinforce this fact. Such market shares highlight the limited options in PBMs available to health insurers in California and the fact that smaller PBMs are a fraction of the size of Caremark and Express Scripts. Optum Rx falls into this category.

Second, the FTC's statement in connection with the acquisition of Medco Health Solutions by Express Scripts, Inc. does not to support the parties' claims that the PBM market is competitive. The Commission's statement is over six years old.[2] Much has changed in the markets for PBM services since 2012 in terms of integration, which has undoubtedly affected the competitive abilities and incentives of market participants. The parties do not provide any information that would assist the CID is ascertaining whether the FTC's conclusion in 2012 still holds today.

Third, the parties' unsupported statement that CVS has lost business to numerous competitors in the last year is of little moment. That CVS does not win every account is not even probative of Caremark's market share, let alone does it undercut the highly concentrated nature of the PBM market.

In short, the parties' response, by focusing on the existence of some competitors, does not undercut (and the data offered tend to support) the proposition that the PBM market is

[2] *See* https://www.ftc.gov/sites/default/files/documents/public_statements/statement-commission-concerning-proposed-acquisition-medco-health-solutions-express-scripts-inc./120402expressmedcostatement.pdf.

dominated by Caremark and Express Scripts and a few much smaller players. As noted in Dr. Moss's testimony, this exacerbates significant concerns that the proposed merger will adversely affect competition.

II. The Parties Claim That CVS Will "Keep Their Doors Open" Essentially Asks the CID to Believe That Their Merger Changes Nothing

On page 5 of Exhibit A, the parties state (footnotes omitted):

*CVS/Aetna will not be the first combination of a health plan and a PBM. As the Commissioner noted during the hearing, "We have an example in United and Optum of a vertically integrated health insurer and health plan with a PBM." Per an AMA-sponsored witness, the UnitedHealth/Optum*Rx *combination has been a success: "United Healthcare and Optum have kept the doors open. They will deal with all comers. They have not gone to a[n] ... exclusivity model." CVS will do the same. Although one witness attempted to distinguish Optum*Rx *on the basis that it is a "small" PBM unlike Express Scripts and CVS, the data show Optum*Rx *is in fact nearly the same size as Express Scripts and CVS Caremark.*

The parties ask the CID to accept the claim that CVS will keep their doors open and deal with all comers after their merger with Aetna. This reasoning is faulty and should be dismissed. Indeed, it highlights why the CID should be skeptical of the parties' claims since it would require ignoring the significantly changed incentives and abilities of the vertically integrated company in a post-merger world.

As explained in Dr. Moss's testimony and AAI DOJ letter, the merged company will have significant incentives to exclude rival PBMs, retail pharmacies, and health insurers. It will also have stronger incentives to coordinate (versus compete) with other vertically integrated PBM-insurers, particularly if the Express Scripts-Cigna merger also moves forward. Under any of these scenarios, the merged company's, and other integrated PBM-insurers such as United Healthcare/Optum Rx, incentives to deal with rivals could change quickly and significantly. This could lead to a market dominated by a few integrated PBM-insurers with few incentives to deal with rivals, to the detriment of competition and consumers.

AMA
AMERICAN MEDICAL ASSOCIATION

JAMES L. MADARA, MD
EXECUTIVE VICE PRESIDENT, CEO

ama-assn.org
t (312) 464-5000

August 7, 2018

The Honorable Makan Delrahim
Assistant Attorney General
United States Department of Justice Antitrust Division
950 Pennsylvania Avenue, NW
Washington, DC 20530

RE: The Acquisition of Aetna, Inc. by CVS Health Corporation

Dear Assistant Attorney General Delrahim:

The American Medical Association (AMA) has long had the concern that market concentration is a leading cause of high costs in health care. We thank the U.S. Department of Justice (DOJ) for devoting resources to the health care sector.

We are writing to provide our views regarding the proposed merger of CVS Health Corporation (CVS), the largest retail pharmacy chain and specialty pharmacy in the U.S. and one of the two largest pharmacy benefit managers (PBM), and Aetna, Inc. (Aetna), the third largest U.S. health insurer. The AMA has studied this merger, an analysis that started almost as soon as the merger was officially announced. The AMA has sought the views of prominent health economists, health policy and antitrust experts—some of whom testified in a California Department of Insurance hearing on this merger. After very carefully considering this merger over the past months, the AMA has come to the conclusion that this merger would likely substantially lessen competition in many health care markets, to the detriment of patients. Accordingly, based on the mutually confirming analyses and conclusions presented by the nationally recognized experts and other experts, as well as extensive research, the AMA is now convinced that the proposed CVS-Aetna merger should be blocked.

INTRODUCTION AND SUMMARY OF CONCLUSIONS

This merger is popularly described as vertical when, in fact, horizontal concerns are also substantial. Aetna and CVS compete in the Stand-Alone Medicare Part D Prescription Drug Plan (PDP) market that covers 25 million people nationally. Whether this merger of rivals in the PDP market runs an appreciable risk of substantially lessening competition is easily determined by a straightforward application of the DOJ and Federal Trade Commission (FTC) 2010 Horizontal Merger Guidelines (Merger Guidelines).[1] University of California, Berkeley, health economics professor Richard Scheffler, PhD, has done that analysis.[2] He finds that under the Merger Guidelines, in all but four of the 34 PDP regional markets, this merger would either be "presumed to be likely to enhance market power" or would "potentially raise significant competitive

[1] United States Department of Justice and Federal Trade Commission, 2010 Horizontal Merger Guidelines, §1 (August 19, 2010).
[2] Richard Scheffler, PhD, is the distinguished Professor of Health Economics and Public Policy at the School of Public Health and the Goldman School of Public Policy at University of California, Berkeley. He holds the Chair in Health Care Markets and Consumer Welfare endowed by the Office of the Attorney General for the State of California and is the founding director of the Nicholas C. Petris Center on Healthcare Markets and Consumer Welfare.

concerns and often warrant scrutiny." Professor Scheffler concludes that this merger would raise PDP premiums in markets across the country, including California.[3]

In the PBM market also, the merger is fundamentally horizontal. Aetna has a PBM with an ability to integrate medical care with clinical and pharmacy programs and actionable data. While the firm outsources part of its PBM needs to CVS, it retains PBM services that constitute a significant share of the PBM marketplace. Consequently, as a horizontal merger of PBM market participants, the merger again runs afoul of the Merger Guidelines.

The market share and concentration data do not overstate the merger's competitive significance in the PBM market. Aetna has the capacity to be a disruptive competitor in the PBM market and perhaps could compete on quality (e.g., transparency and customer service) in an environment that is currently plagued by the black-box nature of PBM activities. Moreover, the lost competition from this merger is likely to be permanent because barriers to entry in the PBM market prevent new entry, which might restore competitive pricing.

The merger's elimination of Aetna as a potential disruptive competitor and the formation of a vertically integrated PBM tight oligopoly of CVS-Aetna, Express Scripts/CIGNA and United Health/OptumRx further create an appreciable danger of parallel accommodating conduct that is likely to include *not* strengthening the position of downstream insurance market competitors and thus not aggressively bidding for those insurer rivals' contracts. As a result, those rivals would face higher prices for PBM services.

The CVS acquisition of Aetna is also "vertical" because Aetna is a buyer of inputs (such as pharmacy and certain PBM services) that CVS sells. By acquiring Aetna, the country's third largest insurer, CVS would significantly reduce the size of the health insurer market available for competing PBMs and pharmacies (including entrants such as Amazon) to serve. This customer foreclosure would be even more severe in the PBM market, if as a result of this merger, all of the Big Five health insurers (Aetna, CIGNA, Anthem, UnitedHealthcare, and Humana) were vertically integrated with PBMs or in the process of becoming so.[4]

Turning to the health insurer side of the market, there is also an appreciable risk that the created vertical firm, together with the other Big Five health insurers that are integrated with the largest sources of PBM services offered in the highly concentrated PBM market,[5] would raise the costs of insurer rivals. This predictably would occur by the merged firm advantaging its Aetna business by reducing or eliminating the availability of PBM or retail and specialty pharmacy services, or by raising the price of these services to competing health insurers. Any such "input foreclosure"—meaning a refusal to deal with competing health insurers on terms as favorable as those offered a merged Aetna—would substantially harm competition in the highly concentrated health insurance market already dominated by a few firms, including Aetna.

The above anticompetitive developments will have the additional effect of raising barriers to entry into both the PBM and the health insurance markets. Post CVS-Aetna and CIGNA-Express Scripts mergers, the vertical integration between the PBM market and the market for health insurance would become so extensive that entrants into either market would have to enter the other market simultaneously. Given the high barriers to entry into both health insurance and PBM markets, such two-level entry would be a significant deterrent to new entry. The result would likely adversely affect the performance of PBM and health insurance markets

[3] Richard Scheffler, PhD, "The Impact of CVS's Acquisition of Aetna on Medicare Part D Stand-Alone Prescription Drug Plan (PDP) Market Concentration" Exhibit B (Scheffler Report).
[4] Anthem is also in the process of developing its own PBM under a contract with CVS.
[5] CIGNA announced its agreement to acquire Express Scripts on March 8, 2018.

that are concentrated, not performing competitively, and in need of policies that *decrease* market concentration.

Finally, there are customer foreclosure effects in the specialty pharmacy market where severely ill Aetna patients are likely to be steered to CVS's specialty pharmacy rather than to pharmacies located in hospitals or physician practices staffed by the patients' treating specialist whose clinical supervision and judgments are needed.

Unless blocked, this merger would likely injure consumers by raising prices, lowering quality, reducing choice and stifling innovation in five poorly performing markets across the country: Medicare Part D Standalone Prescription Drug Plan, PBM services, health insurance, retail pharmacy, and specialty pharmacy.

AETNA-CVS AS A HORIZONTAL MERGER WITH ANTICOMPETITIVE EFFECTS

The Merger Is Anticompetitive in Markets for the Medicare Part D Prescription Drug Plan

The Relevant Product Market Is the Medicare Part D Stand-Alone Prescription Drug Plan Market

Medicare beneficiaries can enroll in a Part D private insurance plan that provides prescription drug coverage. For most Medicare beneficiaries not offered a plan by a previous employer, there are two ways to obtain Part D coverage. They can remain in Original Medicare[6] and enroll in a Stand-Alone PDP that only covers prescription drugs and pays monthly premiums for the drug coverage or they can enroll in a Medicare Advantage (MA plan) that offers Medicare prescription drug coverage (MA-PD). In MA plans, Medicare pays most or all of the premiums to a private insurer. Most MA plans are managed care plans; in return for reduced choice of providers and utilization review, the Medicare beneficiary obtains more complete coverage, typically including pharmacy coverage.[7]

At a June 19, 2018, hearing before the California Department of Insurance (DOI) and Insurance Commissioner David Jones (June 19 hearing), Professor Scheffler explained how this merger will injure consumers in the PDP market. Aetna and CVS responded that PDP is not a relevant product market but is instead part of a larger market that includes MA-PD because, the merging parties apparently allege, consumers will readily turn to MA in the event of a small PDP price increase. This is highly unlikely: as consumers are not likely to switch between MA-PD plans and Original Medicare with PDP in response to small price increases. Although the focus was on health (i.e., medical) insurance markets, *United States v Aetna*, 240 F. Supp.3d 1 (D.D.C 2017), is illustrative and highly suggestive. There the *Aetna* court observed that under Supreme Court precedent,[8] markets "must be drawn narrowly to exclude any other product to which, within reasonable variations in price, only a limited number of buyers will turn."[9] The *Aetna* court found little consumer switching between MA and Original Medicare in response to price increases.[10] Instead, senior consumers have distinct and substantial preferences shaped by their comfort with managed care plans and desire to receive all of their benefits from one source (i.e., MA) weighed against their ability to shop and

[6] By statute, Congress has provided that seniors can obtain Medicare benefits either "through the original Medicare fee-for-service program," or "through enrollment in a [Medicare Advantage] plan." 42 U.S.C. § 1395w–21(a)(1).
[7] Starc, Amanda, "Comments on Selected Issues re: The Proposed Mergers of Aetna and CVS", Exhibit C (Starc Report) at 6.
[8] *Times Picayne Publishing Company v. United States*, 345 U.S. 594, 612 (1953).
[9] *United States v Aetna*, 240 F. Supp.3d 1, 20 (D.D.C 2017).
[10] Id. at 42.

choose among providers, as is provided by Original Medicare. Consistent with this determination in *United States v. Aetna*, the evidence to date from Part D suggests that most beneficiaries, once enrolled, tend to stick with the plans they have chosen, even when they are faced *with relatively large* premium increases.[11]

The Relevant Geographic Markets

Part D plan sponsors compete on premiums to attract enrollees.[12] This bidding process determines the maximum premium amount Medicare will pay on behalf of low income subsidy (LIS) enrollees. The amount is calculated separately for 34 Part D geographic regions. Twenty-five of the 34 nationwide Part D geographic regions are single state. The remaining nine regions are comprised of multiple states. The importance of the 34 Part D regions in the determination of the maximum premium amount Medicare will pay on behalf of LIS enrollees, plus the fact that plan sponsors must offer a plan in at least one entire region (and cannot pick and choose which geographies within a region they offer plans) makes Part D regions the relevant geographic market.[13]

The Relationship between Market Concentration and Consumer Injury in PDP Markets

Northwestern University professor Amanda Starc, PhD, whose research focuses on health economics and health insurance, particularly on issues involving pharmaceutical markets and regulation, points to a number of studies showing insurer pricing power in the PDP context.[14] Insurer market power in PDP enables an insurer to charge premiums above competitive levels and/or to degrade insurance quality.[15] More generally, the weight of the research on insurance markets indicates that more competing firms or less concentrated local markets lead to lower premiums.[16]

As will be shown below, this merger will vastly increase the concentration in PDP markets. These markets are already lacking in competition and are poorly performing. Nationally, monthly PDP consumer premiums have increased by 58% since the start of the Part D program in 2006. During the same period, the consumer price index increased by only 24%.[17] According to Professor Starc, this merger is likely to lead to further consumer harm.[18]

The Likely Anticompetitive Effect of the Horizontal Merger in PDP Markets

There are at least two ways of measuring market concentration and the degree of danger to competition that a horizontal merger poses. One test, adopted by the 2015 National Association of Insurance Commissioners (NAIC) in its "Model Insurance Holding Company System Regulatory Act," looks to the four firm concentration ratio (NAIC CR4). This concentration ratio is calculated by summing the market shares of the four largest insurers in the market.

---

[11] Kaiser Family Foundation, "To Switch or Not to Switch: Are Medicare Beneficiaries Switching Drug Plans To Save Money?" (October 10, 2013), available at: https://urldefense.proofpoint.com/v2/url?u=https-3A__www.kff.org_medicare_issue-2Dbrief_to-2Dswitch-2Dor-2Dnot-2Dto-2Dswitch-2Dare-2Dmedicare-2Dbeneficiaries-2Dswitching-2Ddrug-2Dplans-2Dto-2Dsave-2Dmoney_&d=DwIFAg&c=iqeSLYkBTKTEV8nJYtdW_A&r=YXZfhuF5LazfglWur9aEAPmfrPHSGcBoFhGKGQuxCJY&m=mOKiygMKlsziuEiutaB3n4vnDLgvm4sxSeJJYAItUhY&s=CINaEiUZNCFYU5QGaEf6lKViBTaFi8nQ2y5bEJIMsEc&e.
[12] Scheffler Report at 2.
[13] Scheffler Report at 4.
[14] Starc Report at 7-8.
[15] Id.
[16] Starc Report at 7.
[17] Scheffler Report at 2.
[18] Starc Report at 3-5 and 15-16.

Under the NAIC CR4 test, a highly concentrated market is one in which the sum of the market shares of the four largest insurers—the four-firm concentration ratio—is 75% or more of the market.[19] In such a highly concentrated health insurance market, there is a prima facie violation of the NAIC CR4 test (its Competitive Standard) when a firm with a 10% market share merges with a firm with a 2% or more market share. In the instant case, a prima facie violation of the Competitive Standard is easily established: CVS's market share is 25.1% and Aetna's market share is 8.6%.

A different market concentration test is adopted by the FTC and DOJ in their Merger Guidelines. The Merger Guidelines use the Herfindahl-Hirschman Index (HHI) to measure market concentration, increases in concentration caused by the merger and the competitive significance of these resulting measurements.[20]

Applying this test to the merger easily reveals its anticompetitive effects. Professor Scheffler finds that 30 PDP regions would experience an HHI increase of over 200 points as a result CVS's acquisition of Aetna.[21] Of these 30 regions, 10 would have a post-merger HHI of greater than 2500. Mergers that increase the HHI by over 200 points and result in a post-merger HHI of over 2500 are "presumed to be likely to enhance market power," according to the Merger Guidelines. The post-merger HHIs of the other 20 regions that would experience increases of 200 HHI would all be in the 1500 to 2500 range, and thus they are deemed to "potentially raise significant competitive concerns and often warrant scrutiny."

Professor Scheffler unequivocally concludes that the merger would raise PDP premiums in California and in other markets across the country:

> I have reviewed a large number of studies that provide evidence that increases in market power raise Medicare Part D premiums [citations omitted]. Based on these studies and my own analysis, the proposed merger of CVS and Aetna will have important and significant impacts on the concentration of the Medicare Part D stand-alone prescription drug plan (PDP) market. In 10 of the 34 PDP regional markets, the merger should be "presumed to be likely to enhance market power" according to the Guidelines. In an additional 20 of the 34 PDP regional markets, the merger will "potentially raise significant competitive concerns and often warranty scrutiny" according to the Guidelines. This latter competitive concern was found for California and it is my opinion that this merger would raise PDP premiums in markets across the country, including California.[22]

---

[19] Scheffler Report at 7 and Table 3.

[20] The HHI is the sum of the squares of the market shares of every firm in the relevant market. The Merger Guidelines divide the spectrum of market concentration into a continuum that ranges from unconcentrated (HHI less than 1500), to moderately concentrated (HHI between 1500 and 500) and highly concentrated (HHI more than 2500). Markets with HHIs less than 1500 are characterized as unconcentrated. Mergers resulting in post-acquisition HHIs of between 1500 and 2500 and experience a change in HHI of more than 100 are deemed to potentially raise significant competitive concerns and often warrant scrutiny. A merger that increases an HHI by over 200 points and results in a post-merger HHI of over 2500 are presumed likely to enhance market power.

[21] Scheffler Report at 8.

[22] Scheffler Report at 10.

The Merger May Substantially Lessen Competition in the Market for PBM Services

The PBM Market Is Highly Concentrated and Poorly Performing, Reflecting a Lack of Competition

PBMs are agents of health insurers and employers. They provide two key services to them.[23] First, they negotiate rebates with drug manufacturers in exchange for preferred formulary placement (lower co-pays or coinsurance) for the manufacturer's drugs as compared to drugs from competing manufacturers.[24] Second, they negotiate contracts with pharmacies and thus decide whether a pharmacy will be in the network and the reimbursement the pharmacy will receive for dispensing drugs to the insured consumer.[25]

The national market for PBM services is highly concentrated. CVS, Express Scripts and UnitedHealth Group's OptumRx, which collectively dominate the PBM market (the Dominant Three), account for at least 70% of the market.[26] There is research and anecdotal evidence that the PBM market is not competitive.[27] A February 2018 report from the President's Council of Economic Advisers (CEA Report) states that the existing market structure allows PBMs "to exercise undue market power."[28, 29] Both policymakers and economists have raised serious concerns about the lack of competition in the PBM market and its implications for consumers.[30] Some of these concerns were recently expressed by U.S. Food and Drug Administration (FDA) Commissioner Scott Gottlieb, MD:

> The top three PBMs control more than two thirds of the market: the top three wholesalers more than 80%; and the top five pharmacies more than 50%. Market concentration may prevent optimal competition. And so, the saving may not always be passed along to employers or consumers.
>
> Too often, we see situations where consolidated firms-the PBMs, the distributors, and the drugstores-team up with payors. They use their individual market power to effectively split

[23] Neeraj Sood, PhD, "Potential Effects of the Proposed CVS and Aetna Merger on Competition and Consumer Welfare", (May 23, 2018), Exhibit D (Sood Report).
[24] Id.
[25] Id.
[26] CVS and Aetna have the first and seventh largest PBM market shares respectively. *See*, "PBM Market Share, by Totally Equivalent Prescription Claims Managed, 2017", Drug Channels Institute, available at https://www.google.com/search?q=pbm+market+shares&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj-yZu2-. See, http://www.drugchannels.net/2017/12/the-cvs-aetna-deal-five-industry-and.html, accessed May 22, 2018. See also https://www.google.com/search?biw=1536&bih=726&tbm=isch&sa=1&ei=4AYXW8GhB8b-jwSAraGYDA&q=pbm+market+shares+2018&oq=pbm+market+shares+2018&gs_l=img.3...6596.8649.0.9312.5.5.0.0.0.0.104.321.4j1.5.0....0...1c.1.64.img..0.1.103...0i30k1.0._e9ubyaYAS8#imgrc=xO
[27] See e.g. Garthwaite, Craig and Fiona Scott Morton. "Perverse market incentives encourage high prescription drug Prices." Pro-Market Blog., November 1, 2017.
[28] Council of Economic Advisers, Reforming Bio Pharmaceutical Pricing at Home and Abroad (February, 2018) at 10. *See also*, Sood, N., Shih,T., Van Nuys, K., and Goldman, D. 2017. "The Flow of Money through the Pharmaceutical Distribution System." Leonard Schaeffer Center for Health Policy and Economics, University of Southern California.
[29] Starc Report at 9 ("The high level of concentration in the PBM market is likely to persist due, in part, to barriers to entry in the industry. The scale required to negotiate favorable discounts from manufacturers make it difficult for fringe players to compete"). *See also*, American Antitrust Institute correspondence to the Hon. Makan Delrahim, Assistant Attorney General (March 26, 2018) at 5.
[30] See e.g. Brill, Julie. "Dissenting Statement of Commissioner Julie Brill concerning the proposed acquisition of Medco Health Solutions Inc. by Express Scripts Inc." FTC file No. 111-0210, April 2, 2012; Garthwaite, Craig and Fiona Scott Morton. "Perverse market incentives encourage high prescription drug prices." Pro-Market Blog. November 1, 2017.

> some of the monopoly rents with large manufacturers and other intermediaries rather than passing on the savings garnered from competition to patients and employers.[31]

The CEA Report observes that drug pricing suffers both from high market concentration in the pharmaceutical distribution system and from a lack of transparency characterized by price obfuscation.[32]

PBM customers have scant information about the rebates supposedly negotiated on their behalf because contracts between PBMs and drug manufacturers are claimed as trade secrets.[33] Not even large payers like Blue Cross or Walmart know the net prices of the drugs they are buying.[34] One expert has concluded that most of the increase in drug pricing can be attributed to rebates pocketed by PBMs.[35]

As recommended by the CEA Report, "policies to decrease concentration in the PBM market…can increase competition and further reduce the price of drugs paid by consumers."[36] Allowing a CVS-Aetna merger would be at war with those policies.

Aetna Has a Significant Market Share as a Supplier of PBM Services[37]

Aetna serves as a PBM for Aetna pharmacy customers.[38] University of Southern California professor Neeraj Sood, PhD, an economist who is an expert on pharmaceutical markets, reported that based on Aetna's own financial statements, the company "performs its core PBM functions."[39] Notably, CVS-Aetna in their reply to the expert reports submitted in the June 19 hearing chose not to deny Aetna's role as a PBM.[40]

While CVS does presently perform certain PBM functions for Aetna under a 2010 agreement that expires in 2022, Aetna has said, "we retain our PBM and our ability to integrate medical care with clinical and

---

[31] Scott Gottlieb, MD, Commissioner of Food and Drugs, "Capturing the Benefits of Competition for Patients," speech before America's Health Insurance Plans National Health Policy Conference (March 7, 2018).

[32] CEA Report at 10.

[33] Statement of Prof. Thomas L. Greaney, University of California Hastings College of Law, "Investigatory Hearing on Merger of Aetna Inc. into CVS Health Corporation, State California Department of Insurance (June 19, 2018) Exhibit I (Greaney Statement).

[34] Robin Feldman, "Perverse Incentives: Why Everyone Prefers High Drug Prices-Except For Those Who Pay the Bills," forthcoming Harv. J. on Legis., available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3162432) (PBM payment structure "minimizes the competitive pressure to reduce prices" and creates incentives "operating to drive prices higher"). See also, Fiona Scott Morton & Lysle T. Boller, "Enabling Competition in the Pharmaceutical Market," Hutchins Ctr. on Fiscal and Monetary Pol'y at Brookings (2017).

[35] "Robert Goldberg, "Drug Costs Driven by Rebates," Center for Medicine in the Public Interest, http://bionj.org/wp-content/uploads/2015/11/drug-costs-driven-by-rebates.pdf.

[36] CEA Report at 10.

[37] While Aetna self-supplies substantial PBM services, it also acquires from CVS/Caremark certain other PBM functions such as purchasing, inventory management, and prescription fulfillment of Aetna's mail-order and specialty pharmacies. These purchases are so substantial that Aetna is CVS/Caremark's largest customer. See https://www.drugchannels net/2017/12/the-cvs-aetna-deal-five-industry-and html. Thus there are substantial vertical ramifications of this merger, in addition to the horizontal ones.

[38] See Aetna 2017 10K report at page 7, available online at http://investor.aetna.com/phoenix.zhtml?c=110617&p=irol-reportsAnnual,

[39] Neeraj Sood, PhD, is Professor of Health Policy and Vice Dean for Research at USC's Sol Price School of Public Policy. He is also a faculty member and past Director of Research of the USC Leonard Schaeffer Center for Health Policy and Economics and a Research Associate at the National Bureau of Economic Research. He has published more than 100 papers and reports on health policy and economics. His research focuses on health insurance and pharmaceutical markets and he is an associate editor for leading journals in his field.

[40] See, 2018-07-03 CVS-Aetna Supplemental Submission to CDI (CVS-Aetna Supplemental Submission) Exhibit F.

pharmacy programs and actionable data."[41] Thus, two years into the CVS agreement, then FTC Commissioner Julie Brill found that Aetna was the PBM Dominant Three's "nearest competitor."[42]

According to Adam Fein's Drug Channel Institutes report, "Aetna controls medical and pharmacy policy, formulary design, pharmacy/medical benefit integration, rebate contracting and many other core PBM functions."[43] Drug Channels also reports Aetna's share of the PBM market as 4%.[44]

Self-Supply Is in the Relevant Market

It is unlikely that CVS-Aetna will contest that Aetna's PBM is part of the relevant PBM market for evaluating this merger. Notably, the merging entities themselves list the Kaiser Permanente PBM as part of the competitive landscape for PBM services when Kaiser's PBM only operates inside its integrated health care system and thus, like Aetna, self- supplies PBM services.[45] Nevertheless, we explain below why Aetna's internally-supplied PBM services must be deemed to be in the relevant market for this merger and be included when calculating PBM market shares.

Courts have concluded that, when defining the relevant product market for antitrust purposes, the market must include services that firms provide internally for themselves and similar services that the firm could purchase from an external supplier. For example, in *United States v. ALCOA*, 148 F.2d 416 (2d Cir. 1945), the court considered whether or not iron ingots that ALCOA self-produced were to be included in the ingot market.[46] Although the court recognized that ingots that ALCOA self-fabricated never reached the market as ingot, ALCOA's self-supplied ingots nevertheless "had a direct effect upon the ingot market." Accordingly, the court concluded that computing ALCOA's control over the ingot market should include ingots that ALCOA self-fabricated.[47]

Subsequent decisions have followed *ALCOA*. (See e.g., *United States v. Sungard Data Systems, Inc.*, 172 F. Supp. 2d 172, 186 (D.D.C. 2001), ("As a matter of law, 'courts have generally recognized that when a customer can replace the services of [an external product] with an internally-created system, this 'captive output' (i.e., the self-production of all or part of the relevant product) should be included in the same market.'") *quoting Federal Trade Commission v. Cardinal Health, Inc*., 12 F. Supp. 2d 34, 48 (D.D.C. 1998); *Spectrofuge Corp. v. Beckman Instruments, Inc.*, 575 F.2d 256, 278 (5th Cir. 1978).

Antitrust scholars likewise recognize the *ALCOA* court's principle. In concluding that self-supplied or internal computer "hotsites" were in the same product as external alternatives, the *Sungard Data Systems* court quoted Areeda in the context of iron ore:

---

[41] https://news.aetna.com/news-releases/aetna-awards-long-term-contract-to-cvs-caremark-to-provide-pbm-services/
[42] Dissenting statement of Commissioner Julie Brill concerning the proposed acquisition of Medco Health Solutions by Express Scripts (April 2, 2012), https://www.ftc.gov/sites/default/files/documents/public_statements/dissenting-statement-commissioner-julie-brill/120402medcobrillstatement.pdf.
[43] See Drug Channels, December 5, 2017 available at https://www.drugchannels net/2017/12/the-cvs-aetna-deal-five-industry- and html.
[44] See "PBM Market Share, by Totally Equivalent Prescription Claims Managed, 2017," Drug Channels Institute, available at https://www.google.com/search?q=pbm+market+shares&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj-yZu2-
[45] See "CVS-Aetna Supplemental Submission", Exhibit D, at page 3.
[46] *United States v. ALCOA*, 148 F.2d 416 (2d Cir. 1945).
[47] Id.

> If iron ore is the relevant market and if shares are best measured there by sales, then internally used ore—so-called captive output—is part of the ore market even though it is not sold as such.
>
> In measuring the market power of a defendant selling iron ore, the ore used internally by other firms constrains the defendant's ability to profit by raising ore prices to monopoly levels. The higher ore price may induce an integrated firm to expand its ore production—to supply others in direct competition with the alleged monopolist or to expand its own steel production and thereby reduce the demand of other steel makers for ore, or both. Hence, captive output constrains the defendant regardless of whether integrated firms sell their ore to other steel makers previously purchasing from the defendant. In sum, the integrated firm's ore output belongs in the market.[48]

Current PBM market developments involving national health insurers and PBMs show conclusively that PBM services that health insurers self-supply and external PBM services that health insurers purchase from a PBM are part of the same product market. PBM services for health insurers have readily moved from external to self-supply and vice versa. In recent years, nearly all of the large PBMs either have been acquired by national insurers, or national insurers have internalized PBM services. For example, through OptumRX2, United Healthcare self-supplies PBM services. United Healthcare had previously used Medco (which merged with Express Scripts) to provide some of its PBM services. Humana self-supplies PBM services through Humana Pharmacy Solutions. And starting in 2020, Anthem will begin bringing its PBM services in-house with the help of CVS. Previously, Anthem acquired PBM services externally through Express Scripts, which purchased Anthem's in-house PBM services in 2009. Also, notwithstanding the proposed CIGNA-Express Scripts merger, CIGNA already self-supplies PBM services via CIGNA Pharmacy Management, and CIGNA Pharmacy Management also serves numerous Blues plans, including Anthem. This fluctuation between national health insurers self-supplying PBM services and purchasing PBM services from external vendors provides compelling evidence that self-supplied and externally purchased PBM services are included in the same product market under the above-referenced case law and antitrust expert commentary.

Finally, the fact that Aetna may not make its internal PBM services available to other health insurers or other external third parties has no bearing on whether or not those self-supplied PBM services are included in the PBM market. The question is not whether Aetna makes its PBM services available to others, but whether it has the capacity to switch to self-supply. *See Sungard Data Systems* at 187 ("what is significant is not whether the companies that currently use internal solutions have the capacity to enter the market as vendors for others, but whether the customers that currently use shared hotsites would switch to an internal hotsite in response to a small but significant and non-transitory increase in price (SSNIP).") And Aetna, as noted above, already self-supplies PBM services.

[48] IIA Areeda et al., Antitrust Law P 535e (1995).

Applications of the Four Firm Concentration Ratio and Herfindahl-Hirschman Index Merger Tests Show the High Degree of Competitive Danger Posed by the Merger

Under the NAIC CR4 horizontal merger test discussed above,[49] the PBM market is highly concentrated–the combined market share of the four largest firms is 75% or higher.[50] And since the merger is of firms with greater than 10% and 2% market shares,[51] the merger is presumptively illegal under the NAIC CR4.

AMA has also applied the HHI test used by the DOJ and FTC. Utilizing the 2017 data on PBM market share by total equivalent prescription claims managed published by the Drugs Channel Institute, AMA has calculated the PBM market HHI as ranging from roughly 1823 points (most conservative) to roughly 1830 points. Assuming CVS and Aetna's shares are exactly 25% and 4% respectively, we estimate that the merger would cause the HHI to increase by 200 points. Therefore, without even considering the obvious competitive problems with this merger discussed below, the proposed merger raises significant competitive concerns under the Merger Guidelines.[52]

The High Barriers to Entry

The lost competition from this merger is likely to be permanent because barriers to entry prevent new entrants from restoring competitive pricing. One barrier is the scale required to negotiate favorable discounts from pharmaceutical manufacturers. PBM entrants need to attract customers with competitive discounts from pharmaceutical firms. However, the magnitude of discounts that a PBM can negotiate with these firms depends on the number of covered lives represented by the PBM, with the size of the discount rising with the size of the PBM. Hence, the three largest incumbent PBMs comprising 70% of the market have a durable price advantage.[53] In addition, the PBM needs to form a national pharmacy network with the ability to contract and process claims from pharmacies within the network. According to Professor Sood, forming such a network "is no small feat for a new entrant."[54]

CVS-Aetna have argued against health economist expert testimony introduced in the June 19 hearing on the high barriers to entry and lack of competition in the PBM market. Quoting from an April 2, 2012, FTC decision, they contend that vigorous competitors "are winning business from traditional market leaders."[55] However, the actual data on PBM market dynamics after 2012 paints a very different picture.[56] According to Professor Sood, data show that not only is the national market for PBMs highly concentrated, the degree of concentration has only increased over time. In 2013, the top three PBMs accounted for 67% of covered lives and in 2017 the market has become more concentrated with the top three PBMs accounting for 73% of covered lives.[57] CVS/Caremark has been a top three PBM since 2013, if not longer, and its market share of covered lives has increased from 22% in 2013 to 26% in 2017. Professor Sood concludes that, "a market with such durable market shares for the top three firms cannot be considered competitive."[58]

---

[49] See discussion at page 3 supra.
[50] See footnote 28 for Drug Channels data used in calculating the CR4.
[51] Actually 25% and 4%.
[52] See discussion of HHI test at page 4 supra.
[53] Starc Report at 9; Sood, Neeraj, Ph.D., Response to "CVS-Aetna Supplemental Submission", Exhibit H (Sood Response) at 2.
[54] Sood Response at 2.
[55] See CVS-Aetna Supplemental Submission.
[56] Sood Response at 12.
[57] Id.
[58] Sood Response at 2.

The Loss of Potential Disruptive Competition

The market share and concentration data do not overstate the proposed merger's future competitive significance in the PBM market. The PBM market would lose Aetna, a national company with an established brand, significant customer base (Aetna health insurance), expertise, capital, and years of experience as a major player in the PBM market. Post-merger (and assuming a CIGNA-Express Scripts merger), there would be no PBMs that could defeat the coordinated conduct of the three largest PBMs (i.e., CVS/Caremark, Express Scripts, and OptumRX) that today comprise 71% of the PBM market and that post-merger would comprise 75%.

And even if the Aetna PBM arm lacked the bargaining power to drive deep drug discounts, it would likely be forced to compete on non-price dimensions that are critically important to consumers. For example, it could compete on quality (transparency and customer service) in an environment that is currently plagued by the black-box nature of PBM activities, as evidenced by the numerous state bills on PBM transparency and at least one ongoing lawsuit alleging PBM overcharging. Without new entry and competition, PBMs can continue to keep secret the size of manufacturer rebates and the percentage of the rebate passed on to health plans and employers.[59]

Coordinated Effects for PBM Services Are Likely

The merger's elimination of Aetna as a potential disruptive competitor and the formation of a behemoth, vertically integrated PBM tight oligopoly will likely, as a practical matter, enable or encourage post-merger coordinated interaction. The Merger Guidelines describe different types of coordinated anticompetitive effects that may result from the elimination of competition. They include, for example, parallel accommodating conduct not pursuant to a prior understanding but instead arising out of aligned incentives and not otherwise condemned by the antitrust laws. One area of aligned Dominant Three interests is associated with *not* strengthening the position of downstream insurance market competitors and therefore not aggressively bidding for their contracts. Both Professors Sood and Starc have concluded that a merged CVS-Aetna is unlikely to compete aggressively for PBM contracts serving Aetna competitors.[60] Professor Sood, a national expert on pharmaceutical and health insurance markets, has concluded that avoidance of such aggressive bids is predictable given data on profit margins in the health insurance and PBM markets.

This data shows that one health insurance customer is many times more profitable than one PBM customer.[61] Moreover, in a number of Metropolitan Statistical Areas (MSAs), the Aetna market shares, for example, dwarf the size of its competitors. Behavior that protects those large shares at the possible expense of lost PBM business is predictable.[62]

CVS-Aetna have responded to this prediction of not bidding aggressively for the business of Aetna insurer rivals by claiming that the PBM arm of the combined company would not want to risk sacrificing a large portion of its business to competitors. However, those PBM "competitors" chiefly would consist of CIGNA-Express Scripts and United Healthcare-OptumRx, the two other behemoths in the tight oligopoly facing the same incentives of not bidding aggressively for contracts that would strengthen their health insurer rivals. Under these circumstances, tacit coordinated behavior of not competing aggressively for PBM customers

[59] CEA Report at 10.
[60] See Starc Report at 10-11; Sood Report at 9-10 and Sood Response at 4-5.
[61] Sood at 11-12.
[62] See Sood Report at 7-13, and Sood Response.

competing with the insurance arms of the merged companies is likely. Such coordinated conduct would also be difficult to detect given the fact that PBM "customers may not always be well placed to provide evidence regarding what is in essence opaque activity…."[63]

Although this coordinated behavior has not yet occurred, merger law does not require evidence of actual effects. In fact, in *Hospital Corp. of America v. FTC*, 807 F.2d. 1381 (7th Cir. 1986), the court concluded that "all that is necessary is that the merger create an appreciable danger of collusive practices in the future. A predictive judgment, necessarily probabilistic and judgmental rather than demonstrable is called for."[64] This predictive approach is taken in Clayton Act Section 7 merger cases because the law is prophylactic, intended to arrest coordinated interaction before it may occur in a post-merger setting when the conduct usually cannot be detected and remedied rapidly (if at all) given the proof of agreement requirement contained in Section 1 of the Sherman Act.[65]

The need to block this merger in order to prevent oligopolistic coordinated effects is suggested by healthcare antitrust scholar and University of California Hastings law professor Thomas Greaney, who observes:

> [I]f the CVS-Aetna merger and the Express Scripts-CIGNA merger are allowed to proceed, consumers will be faced with three entities (including UnitedHealthcare/OptumRx) that control an enormous share of the management of health services and pharmaceutical payment. The incentives of the three behemoths will be aligned….[N]one will have incentives to offer favorable competitive terms to small insurers that are rivals of their insurance divisions. Their market power will be protected by the widely recognized and sizable barriers to entry….The emergence of a tight oligopoly of this magnitude may be the most significant risk associated with this merger.[66]

<u>The Horizontal Merger Is Likely to Increase Entry Barriers and Thereby Facilitate or Prolong Noncompetitive Performance</u>

If this merger is approved, the door to new PBM entry will be closed. According to Professor Sood, "standalone PBM entry is unlikely" and entry would instead require that the firm be vertically integrated with a health plan.[67] Given the high barriers to entry characterizing both the markets for PBM services and health insurance, it is highly improbable that a new PBM entrant could successfully enter both the PBM and health insurance markets simultaneously.[68]

An Additional Horizontal Restraint on Competition Arises Because the Merger Would Allow a Merged CVS-Aetna to Control the PBM Services of Anthem

CVS recently entered into a contract effective January 1, 2020, with Anthem to supply it with PBM services as Anthem transitions to supplying PBM services in-house. For CVS to operate a PBM with Anthem, the second largest health insurer nationally while owning Aetna, the third largest health insurer, is highly

---

[63] Dissenting statement of Commissioner Julie Brill concerning the proposed acquisition of Medco Health Solutions Inc. by Express Scripts Inc. (April 2, 2012) at 5.
[64] *Hospital Corp. of America v. FTC*, 807 F2d. 1381, 1389 (7th Cir 1986). (Posner, J.)
[65] Herbert Hovenkamp, *Prophylactic Merger Policy*, University of California Hastings Law Journal (forthcoming 2018)
[66] Statement of Prof. Thomas L Greaney, University of California Hastings College of Law, before the Investigatory Hearing on the Merger of Aetna Inc. into CVS health Corporation, State Department of Insurance (June 19, 2018) (Greaney Statement) Exhibit I
[67] Sood Report at 16.
[68] See Starc report at 11, and discussion supra at 8-9, and discussion infra at 13.

problematic.[69] Clearly, a CVS merger with Aetna while managing Anthem's PBM services could facilitate already highly concentrated health insurance and PBM markets, price fixing and the anticompetitive sharing of competitive information—the kinds of horizontal market issues that have appropriately attracted close scrutiny by the FTC and the DOJ and condemnation by the courts.

THE VERTICAL RAMIFICATIONS OF THIS MERGER VIOLATE MERGER LAW

As the third largest health insurer in the country, Aetna is CVS's largest customer and a substantial buyer of inputs (such as pharmacy and certain PBM services) that CVS sells.[70]

Vertical Mergers and Antitrust Law

Whether this vertical merger threatens competitive harm requires predictions about the post-merger conduct of the merged firm.[71] The DOJ's 1984 Non-Horizontal Merger Guidelines (1984 Merger Guidelines) provide that a vertical merger may be challenged if the merger may increase barriers to entry, foreclose competitors or facilitate collusion.[72] As discussed below, this merger will likely produce all of these effects in one or more markets. If the resulting combination of CVS-Aetna harms competition in a single market, that would be sufficient under the antitrust laws to enjoin the entire transaction to protect consumers.[73]

One recurring issue in evaluating the vertical restraint ramifications of this merger is what to make of various market foreclosure percentages when there is a dearth of vertical merger case law. Should we condemn this vertical merger where, depending on the market, the foreclosure is in the range of 20 to 30 percent? The temptation is to apply the high foreclosure percentages tests found in vertical restraint exclusive dealing cases. Some of the concerns there are similar to those arising in vertical mergers. Exclusive dealing is an antitrust violation when a significant fraction of buyers or sellers are frozen out of the market by the exclusive deal.[74] Since the Supreme Court's decision in *Jefferson Parish Hospital District No2 v. Hyde,* 466 U.S. 2, 45 (1984), courts have tended to approve exclusive dealing arrangements when the foreclosure is less than 30%.[75] However, there are important differences requiring antitrust condemnation at lower foreclosure percentages in vertical merger cases.[76] The vertical merger is more permanent than exclusive dealing contracts.[77] A merger eliminates the considerable competition that can occur when contracts must be renewed.[78] For example, AMA President, Barbara McAneny, MD,—testifying on behalf of the AMA and herself as a practicing oncologist—observed at the June 19 hearing that when quality of care issues arise between her and a PBM concerning one of her cancer patients, she takes the problem to the insurer. As

[69] The market share rankings have been determined by the AMA Health Policy group that produces *Competition in Health Insurance: A Comprehensive Study of US Markets* (2017). *See also, United States v Aetna, supra and United States v. Anthem, supra*.
[70] See https://www.drugchannels.net/2017/12/the-cvs-aetna-deal-five-industry-and html.
[71] Remarks of D. Bruce Hoffman, Acting Director, Bureau of Competition, Federal Trade Commission before the Credit Suisse Washington Perspectives Conference (January 10, 2018).
[72] 1984 Merger Guidelines at 4.13-3.134.
[73] See *Brown Shoe v. United States*, 370 US at 337 (Section 7 violated "if the anticompetitive effects of the merger are probable in any significant market"); Philip E Arreeda & Herbert Hovenkamp, Antitrust Law: An Analysis of Antitrust Principles and Their Application ¶ 972a (4th ed. 2014).
[74] *Jefferson Parish Hospital District No2 v. Hyde*, 466 U.S. 2, 45 (1984) (O'Connor concurring opinion).
[75] Herbert Hovenkamp, *Federal Antitrust Policy* §9.4, at p. 346 (1994).
[76] Id.
[77] Id.
[78] Id.

Dr. McAneny explained, at contract renewal time, Aetna is free to weigh her consumer quality demands against financial concerns. However, once Aetna has a permanent ownership interest in CVS, Aetna will have a financial interest in CVS's specialty pharmacy continuing to gain market share and be less responsive to her consumer demands.

Aetna and CVS, of course, do not acknowledge the substantial competitive consequences of moving from exclusive dealing to vertical merger. For example, in defending the transaction at a congressional hearing on this merger, Aetna's counsel suggested that the merger would not diminish competition in the PBM market given the status quo: "We already rely on CVS to perform pharmacy benefit management functions for the bulk of our members."[79] This statement obscures the significant change in the competitive structure of the market that the merger would cause. The fact that CVS now supplies Aetna with a PBM service is the result of ongoing competition that would be lost in the merger. Even long-term service contracts maintain competition in the marketplace. This is called "competition for the contract," that, in the words of acclaimed antitrust jurist Richard Posner, is a "form of competition the antitrust laws protect."[80] Once the parties merge, that competition for the contract is forever lost.

University of Pennsylvania professor Herbert Hovenkamp, who perhaps is the nation's most pre-eminent antitrust scholar, observes that "[w]hen the integration occurs by merger…the downstream business becomes part of the colluding firm itself. As a result, condemnation on market shares of 25% or perhaps even 20% seems appropriate, provided that entry barriers are high and other market factors indicate that collusion or oligopoly is likely."[81]

The CVS-Aetna vertical merger should be condemned under Professor Hovenkamp's criteria. The companies operate in concentrated or highly concentrated markets. As a result of the merger, pharmacies competing with CVS in localized markets will likely be deprived of a significant portion of those markets represented by Aetna's health insurance market shares that are frequently in excess of 20%. For example, in MA, Aetna's market share is greater than 20% in 62 MSAs, greater than 25% in 40 MSAs and greater than 30% in 32 MSAs.[82] Moreover, publicly available data suggest that CVS/Caremark steers patients to CVS pharmacies.[83] Similarly, health insurers competing with Aetna and seeking a competitive supply of PBM services will likely experience "input foreclosure" measured by CVS's market share of PBM services of at least 25% in a highly concentrated market.

Vertical Merger Causes Anticompetitive Effects in the PBM Market: Increasing Barriers to Entry and Foreclosing Competitors

The 1984 Merger Guidelines recognize that a vertical merger might increase entry barriers and identify three conditions that are generally necessary for vertical mergers to raise anticompetitive entry barrier problems:

---

[79] Statement of Thomas Sabatino, Aetna Executive Vice President and General Counsel, before the House Judiciary Committee at a hearing entitled "Competition in the Pharmaceutical Supply Chain: The Proposed Merger of CVS Health and Aetna" (February 27, 2018) at page 6.

[80] *Methodist Health Services Corp. v. OSF Healthcare System*, 859 F.3d 408 (2017) (Posner J) ("competition-for-the-contract is a form of competition that antitrust laws protect"). *See also* Harold Demsetz, "Why Regulate Utilities?" 11 J. Law & Econ. 55 (1968).

[81] Id.

[82] Aetna, the third largest health insurer nationally, has slightly lower market shares in commercial health insurance markets. See AMA health insurance market share analysis. Exhibit E.

[83] Drug Channels Report (March 2015) based on CVS 10-K SEC Filing available at: https://www.drugchannels net/2015/03/cvs-health-newest-data-on-retail-pbm.html.

First, the degree of vertical integration between the two markets (here, the markets for PBM services and health insurance) must be so extensive that entrants to one market (the primary market for PBM services) also would have to enter the other market (the secondary market for health insurance) simultaneously. Second, entry into the secondary level must make entry at the primary level significantly more difficult and less likely to occur. Third, the structure and other characteristics of the primary market must be otherwise so conducive to non-competitive performance that the increased difficulty of entry is likely to affect its performance.[84]

Vertical Integration is Extensive and Two-Level Entry Is Likely to be Required Post-Merger

This merger is likely to have significant adverse entry barrier effects because the merger is part of an existing trend toward vertical integration between the PBM and health insurance markets that has become so extensive that post-merger entrants to the PBM market also would have to enter the health insurance market simultaneously.

Assuming a CIGNA-Express Scripts merger, a much needed new PBM market entrant today finds that Aetna is the sole Big Five insurer that neither has all its long-term PBM supply needs served in-house nor is transitioning to in-house as in the case of Anthem. Given that Aetna is the third-largest insurer in a highly concentrated health insurance market, its merger with CVS would drastically reduce the health insurer customer market available to PBMs as sellers. This "customer foreclosure" would further raise market entry barriers associated with the need to gain the covered lives necessary for negotiating discounts.

Consistent with the extensive PBM and health insurer vertical integration, foreclosure of competitors, and the anticompetitive increase in barriers to entry created by the merger are reports in the Wall Street Journal that CVS is acquiring Aetna to tie-up that business before Amazon can enter the market.[85]

Lacking an outlet for PBM services, any new PBM entrant would need to engage in two stage entry by also entering the highly concentrated health insurance market that has significant entry barriers independent of integration.

The Need for Two-Level Entry Is a Significant Deterrent to New Entry into the PBM Market

As discussed earlier, there are high barriers to entry into the PBM market and a would-be PBM market entrant would face the daunting task of also entering health insurance markets.[86] Health insurance markets are similarly highly concentrated and have high barriers to entry.[87] Barriers to entry include state regulatory requirements; the need for sufficient business to permit the spreading of risk; and contending with established insurance companies that have built long-term relationships with employers and other consumers.[88] Perhaps the greatest obstacle is akin to the one facing PBMs—the so-called "chicken and egg problem." Here, health insurer entrants need to attract customers with competitive premiums that can only be

[84] 1984 Merger Guidelines section 4.212.
[85] See e.g. "A Force behind the Aetna Bid: Amazon," the *Wall Street Journal*, (October 27, 2017).
[86] See discussion of barriers to entry at pages 8-9 supra.
[87] See *United States v. Aetna*, 240 F. Supp. 3d 1 (D.D.C. 2017); *United States v. Anthem*, 855 F.3d 345 (D.C. Cir. 2017)
[88] See Robert W. McCann, *Field of Dreams: Dominant Health Plans and the Search for a "Level Playing Field,"* Health Law Handbook (Thomson West 2007); Mark V. Pauly, *Competition in Health Insurance Markets*, 51 Law & Contemp. Probs. 237 (1988); Federal Trade Commission and U.S. Department of Justice, Improving Health Care: A Dose of Competition (July, 2004); *Vertical Restraints and Powerful Health Insurers: Exclusionary Conduct Masquerading as Managed Care?*, 51 Law & Contemp. Probs. 195 (1988).

achieved by obtaining discounts from providers. However, providers usually offer the best discounts to incumbent insurers with a significant business—volume discounting that reflects a reduction in transaction costs and greater budget certainty. Hence, incumbent insurers have a durable cost advantage.[89]

Therefore, the requirement of entry into the health insurance market would make entry into the PBM market "significantly more difficult and less likely to occur."[90]

<u>The PBM Market Is So Conducive to Noncompetitive Performance That the Increased Difficulty of Entry Is Likely to Affect Its Performance</u>

Given that the PBM market is concentrated, not performing competitively, subject to the likely coordinated interaction of three firms controlling over 70% of the PBM market and in need of policies that decrease market concentration, the third enforcement requirement of the 1984 Merger Guidelines—essentially, that the market can benefit from decreasing entry barriers—is met. [91] If the merger were to occur, the Dominant Three firms would have less reason to moderate noncompetitive behavior in order to discourage new entry.

Facilitating Collusion among Three Largest PBM Suppliers as Additional Ramification of Vertical Merger

Finally, the broader circumstances associated with the CVS-Aetna merger—the concurrent CIGNA-Express Scripts merger and United Healthcare's operating its own PBM (OptumRX)—raises the potential for horizontal coordination among the Dominant Three, all vertically integrated into health insurance. Facing little threat from Aetna, a disruptive buyer as well as a major self-supplier, competing PBMs would have strong incentives and capacity to coordinate their PBM strategies to disadvantage rival health insurers.[92]

THE VERTICAL MERGER IS ANTICOMPETITIVE IN THE GENERALLY HIGHLY CONCENTRATED MARKETS FOR HEALTH INSURANCE

Health Insurance Markets Are Highly Concentrated and Have High Barriers to Entry

It is now well-established that markets for health insurance are highly concentrated, often dominated by one or two insurers. The AMA's 2017 Update to *Competition in Health Insurance: A Comprehensive Study of U.S. Markets*, finds that nearly 70 percent of the combined HMO + PPO + POS + EXCH (commercial) markets are highly concentrated. Moreover, Aetna's market share is either the first or second largest in 57 of the 389 MSAs studied. In a separate analysis of MA insurer markets, the AMA found that 85 percent of MA markets are highly concentrated. Aetna had the first or second largest MA market share in 60 of the 381 MSAs studied. In a total of 94 MSAs, Aetna had the first or second largest share in the commercial market, MA market, or in both of those markets. In addition, health insurance markets have high barriers to entry.[93]

---

[89] Id. at 7.
[90] 1984 Merger Guidelines at Section 4.2.
[91] See supra at 8 showing that the PBM market HHI is above the 1800 threshold found in the 1984 Merger Guidelines and that also provide for antitrust enforcement at a "somewhat lower concentration level", if other factors "indicate that affective collusion is particularly likely." See 1984 Merger Guidelines at section 4.213.
[92] See statement of University of California at Hastings Law Professor and prominent antitrust in healthcare scholar, Thomas Greaney, at page 6. ("The incentives of the three behemoths will be aligned…None will have incentives to offer favorable competitive terms to small health insurers that are rivals of their insurance divisions.")
[93] See barriers to entry discussion supra at 13-14 and more generally, *United States v. Aetna*, 240 F. Supp. 3d 1 (D.D.C. 2017); *United States v. Anthem*, 855 F.3d 345 (D.C. Cir. 2017).

Vertical Merger Ramifications in the Health Insurance Market

According to Professor Sood, the merger will further strengthen the already dominant position of Aetna in local health insurance markets "and will exacerbate the lack of competition."[94] This will come from CVS-Aetna's ownership and control of two segments of the pharmaceutical supply chain—PBMs and retail pharmacies.[95]

Foreclosure of Aetna's Health Insurer Competitors Requiring PBM Services and Increasing Barriers to Entry in Health Insurance

PBM services are an important input into the production and selling of health insurance, an area of the economy that requires more, not less, entry and competition.[96]

In the event the CVS-Aetna merger were approved, Aetna rivals that decide to rely on drug rebates from CVS are likely to be hurt by the merger, ultimately to the detriment of competition and consumers in the health insurance market. As explained earlier, the PBM arm of CVS-Aetna would have weaker incentives to control prescription drug costs and overall health care costs for health plans competing with Aetna.[97] Indeed, in Professor Sood's opinion, "the PBM arm of CVS-Aetna has an incentive to disadvantage health plans competing with the insurance arm of CVS-Aetna in passing on rebates from pharmaceutical firms. This will likely result in less competition in the insurance market."[98]

Professor Sood observes that the adverse effects of the incentives for CVS-Aetna to disadvantage competing health plans are exacerbated by the fact that the PBM market is highly concentrated. Health plans competing with CVS-Aetna face PBM "input foreclosure." Most desirable sources of PBM services are firms like CVS and Express Scripts that are large enough to drive the biggest discounts in drug prices. Given the announcement of CIGNA's agreement to acquire Express Scripts, if Aetna were to merge with CVS, all of the large PBMs would either have been acquired by the Big Five insurers or have otherwise become an in-house service of these insurers.[99]

Aetna rivals or new health insurer market entrants could easily fall victim to a strategy known as "raising rivals costs." The PBMs owned by (or that own) a health insurer could refuse to deal with other health insurers except on discriminatory terms that lessen competition in the health insurance market.

Therefore, Professor Starc foresees an increased barrier to entry that may require two-level entry post a CVS-Aetna merger.[100] Given the high barriers to entry in both the PBM and health insurance markets,[101] the need for two-level entry is a significant deterrent to entry into health insurance markets.

---

[94] Sood Report at 8 and Sood Response at 4-6.
[95] Id.
[96] Given the present structure of the health insurance market, health insurers have the ability unilaterally or through coordinated interaction to exercise market power by raising premiums, reducing service or stifling innovation. *See United States v. Aetna*, 240 F. Supp. 3d 1 (D.D.C. 2017); *United States v. Anthem*, 855 F.3d 345 (D.C. Cir. 2017).
[97] See discussion supra at 9-10.
[98] Sood Report at 10.
[99] UnitedHealthcare now operates OptumRX2; Humana has Humana Pharmacy Solutions; Anthem is developing its own PBM service with the help of CVS; and CIGNA operates CIGNA Pharmacy Management, in addition to proposing to acquire Express Scripts. See also Sood Report at 10.
[100] Starc Report at 11.
[101] See discussions at 8-9 and 13-14 supra.

The Need for Two-Level Entry is Likely to Adversely Affect Health Insurance Market Performance

The end result of this input foreclosure for health insurers seeking PBM services will be less competition in an already highly concentrated health insurance market. In the opinion of Professor Sood, the merger will further strengthen the already dominant position of Aetna and will exacerbate the lack of competition in health insurance markets.[102]

Foreclosure of Aetna Health Insurer Competitors Requiring Local Retail Pharmacy Networks

Just as a merged CVS-Aetna is likely to disadvantage and to increase barriers to entry for insurer competitors needing PBM services, the merged firm may also foreclose competing insurers from access to CVS "must have" retail pharmacies, either entirely or by offering terms that are not competitive with those offered Aetna. Professor Sood reasons that CVS-Aetna could leverage its must-have pharmacy network to disadvantage competing plans.[103] Health plans that do not have CVS in their pharmacy network will be less attractive to consumers, especially in markets where CVS has a dominant pharmacy market share. CVS-Aetna could exploit this fact to charge higher prices to health plans competing with CVS-Aetna. This effect, says Professor Starc, may be especially important in the market for generic drugs, which are generally competitive at the wholesale, but not the retail, level and represent a large fraction of total bills.[104] In recent years, prices for some generic molecules (even particularly old ones whose branded equivalents' patents expired decades ago) have increased substantially. According to Professor Sood, if health plans refused to accept the high prices and do not include CVS-Aetna pharmacies in their network, they risk losing customers. If they accept the high prices, then they face higher health care costs, which might result in higher premiums and lower market share for these health plans. This will result in less competition in the insurance market.[105]

The likelihood of the merged firm's pharmacy customers falling victim to the merged company's favoring the Aetna side of its business is enhanced by "the numbers." Professor Sood has found that "one insurance customer is as valuable as roughly nine pharmacy customers; providing strong incentives for CVS-Aetna to disadvantage competing health plans to gain insurance customers even if it risks losing some pharmacy customers."[106]

Facilitating Collusion among Health Insurers as Additional Ramification of Vertical Merger

If CVS were to merge with Aetna, then health plan entrants and Aetna rivals seeking PBM partners would essentially be forced to share sensitive information with insurer competitors—something they may be loath to do even with the promise of information firewalls.

For example, Aetna could potentially have access to the prescription drug experience of Aetna's competitors, which might help it engage in cream-skimming. Aetna could determine the illness profile of its competitors' covered populations. If Aetna determines that those populations consist of desirable insureds, it can design formulary profiles and other health insurance benefit design features to attract them. But if they have high drug expenditures, Aetna could steer them away.

[102] Sood Report at 8.
[103] Sood Report at 11.
[104] Starc Report at 11.
[105] Sood Report at 10 and Starc Report at 11.
[106] Sood Report at 12.

Aetna's potential post-merger access to competing health insurer confidential business information could also create opportunities for monitoring competitors' costs and for health insurer collusion that are additional reasons for opposing the merger.

THE MERGER IS ANTICOMPETITIVE IN LOCAL PHARMACY MARKETS

Local Pharmacy Markets Appear Highly Concentrated and CVS Likely Has Market Power in Some of Those Local Markets

Retail Pharmacy

Local pharmacy markets in the U.S. are uncompetitive or highly concentrated.[107] A 2015 Business Insider article entitled, "CVS and Walgreens Are Completely Dominating the US Drugstore Industry," reports that even before CVS acquired 1660 Target Corporation pharmacies, CVS and Walgreens together controlled between 50% and 75% of the retail pharmacy markets in numerous large cities.[108]

CVS essentially acknowledges in its 2015 Securities and Exchange Commission form 10-K filing that retail pharmacy markets are local and that in those localized markets CVS has shares that are consistent with Professor Sood's opinion that CVS is a dominant firm. CVS states, "[w]e currently operate in 98 of the top 100 United States drugstore markets and hold the number one or number two market share in 93 of these markets."[109]

Moreover, CVS's high local market shares understate the likelihood of market power. CVS pharmacy chains may be considered "must have" pharmacies. They are "must have" because health plan sponsors prefer geographically comprehensive networks—pharmacies located in close proximity to their patient population. Reportedly, 76 percent of the population of the U.S. lives within five miles of a CVS pharmacy.

CVS's large retail pharmacy market shares are also durable because of high barriers to entry into the drugstore business.[110] Even the CEO of CVS, Larry Merlo, acknowledged the high barriers to entry in an interview responding to speculation about Amazon entering the pharmacy business. In this interview, Merlo stated, "[t]here are many barriers to entry when you're looking at pharmacy…It's highly regulated, so the barriers to entry are high."[111]

CVS declined the opportunity to directly contest the notion of localized retail pharmacy markets posited by Professor Sood in the June 19 hearing. Instead, CVS simply recited the firm's national and statewide shares as measured by number of stores (that would include pharmacies located in grocery stores) rather than by the more meaningful measure of total prescriptions.[112] CVS also attacked the notion that retail pharmacy is a relevant product market that is separate and distinct from mail-order or online pharmacies. California

[107] See expert report of Neeraj Sood, PhD, Professor of Health Policy and Vice Dean for Research at The Sole Price School of Public Policy, University of Southern California ("Pharmacy markets in the U.S. are uncompetitive or highly concentrated").
[108] "CVS and Walgreens Are Completely Dominating the US Drugstore Industry", Business Insider (July 29, 2015), http://www.businessinsider.com/cvs-and-walgreens-us-drugstore-market-share-2015-7.
[109] CVS Health Corporation, "United States Securities and Exchange Commission, Form 10-K Filing" https://www.sec.gov/Archives/edgar/data/64803/000000648031600074/cvs-20151231x10k htm at page 6.
[110] Sood Response at 3.
[111] August 9, 2017. Forbes interview available at https://www forbes.com/sites/brucejapsen/2017/08/09/cvs-health-ceo-doubts-amazon-entry-into-pharmacy/#7e1d07df3acb on
[112] See CVS-Aetna Supplemental Submission.

consumers however do not drive to Massachusetts to get their prescription drugs. Nor are mail-order and online pharmacies good substitutes for a local drugstore because of the time it takes to ship prescription drugs to consumers and the lack of ability to consult with a pharmacist in person.[113] This is likely why federal regulations in both Medicare Part D and Affordable Care Act (ACA) markets mandate that health plans provide enrollees with adequate local access to in-network retail pharmacies with respect to their prescription drug benefits.[114]

In sum, retail pharmacy markets are local, perhaps MSAs or smaller localities within MSAs.[115] They are also uncompetitive or highly concentrated, and CVS's shares and status as a "must have pharmacy" likely enables it to exercise market power either unilaterally or through coordinated interaction.

Specialty Pharmacy

CVS is the largest specialty pharmaceutical firm in the U.S.[116] Specialty pharmacy is driving the pharmacy industry's revenue growth[117] and represents a growing proportion of drug costs.[118] According to Pembroke Consulting, "the growth of specialty drugs is reshaping the pharmacy and pharmacy benefit management industries."[119]

Specialty pharmacies tend to focus on providing medications for patients with complex medical conditions.[120] Specialty pharmacy drugs are typically high cost and have special development, handling, administrative and medical monitoring requirements.

Data indicate that specialty pharmacies operate in a concentrated and oligopolistic market.[121] Nearly 60% of all prescription revenues from specialty pharmaceuticals are collected by the three largest firms—owned by CVS Health, Express Scripts and Walgreens Boots Alliance.[122] In 2017, CVS reportedly had a 25% specialty pharmacy market share, measured by specialty pharmaceutical revenues.[123] CVS's specialty pharmacy market share appears to be growing, as described in the CVS Health 2017 Annual Report:

> We remain the largest specialty pharmacy by a considerable margin, resulting in greater scale and stronger purchasing economics … Looking at 2018, we expect to continue outpacing the marketplace by adding another $4 billion in specialty revenue.

CVS Acknowledges That CVS Pharmacy and CVS Specialty Pharmacy Appear to Possess Market Power

In its form 10-K filed with the SEC for the fiscal year ended December 31, 2016, CVS informed investors of the antitrust risks intrinsic to its appearance of market power. CVS stated:

---

[113] See Sood Response at page 3.
[114] 45 CFR §156.122 and 45 CFR §423.120.
[115] Sood Response at page 3.
[116] https://www.drugchannels net/2018/03/the-top-15-specialty-pharmacies-of-2017 html.
[117] Outlook for Specialty Pharmacy Prescription Revenues, Drug Channels (subsidiary of Pembroke Consulting), April 11, 2017, *http://www.drugchannels.net/2017/04/our-exclusive-2021-outlook-for.html.*
[118] Starc Report at 9.
[119] Id.
[120] Id.
[121] Starc Report at 9 (Specialty market "remains extremely concentrated").
[122] Id at 10.
[123] https://www.drugchannels net/2018/03/the-top-15-specialty-pharmacies-of-2017 html.

> To the extent that we appear to have actual or potential market power in a relevant market or CVS pharmacy or CVS specialty pharmacy plays a unique or expanded role in a PBM product offering, our business arrangements and uses of confidential information may be subject to heightened scrutiny from an anti-competitive perspective and possible challenge by state or federal regulators or private parties.[124]

Merger Ramifications in the Markets for Retail and Specialty Pharmacy

Foreclosing Competitors in Retail Pharmacy

Professor Sood has opined that "the merger of CVS and Aetna will further strengthen the already dominant position of CVS in the pharmacy market and will exacerbate the lack of competition in pharmacy markets."[125]

In addition to owning pharmacies, CVS through its PBM, also contracts with independent pharmacies to be in its pharmacy network, promising access to plan subscribers in return for the pharmacies discounting their fees for filling prescriptions. Thus, CVS is both a competitor and a critical customer of independent pharmacies.

If CVS were to acquire Aetna and the latter were to require that patients use CVS-owned pharmacies, independent pharmacies may be foreclosed from the market and point-of-sale drug prices may rise. Indeed, there is some evidence that CVS has already used its market power in the PBM market to disadvantage independent pharmacies that compete with CVS-owned pharmacies. A January 23, 2018, *American Prospect* article entitled, "Abusing Drugs: How CVS Uses Its Market Power to Destroy Competing Independent Pharmacies," authored by David Dayen, reports that:

> CVS's existing combination of a pharmacy (which dispenses drugs) and a pharmacy benefits manager (which reimburses other pharmacists for dispensing drugs) is a disaster for competition and access, particularly in underserved communities. Adding a health insurer like Aetna would further concentrate market power and narrow the networks people depend upon for medical care.[126]

The *American Prospect* article says that beginning around the time the CVS-Aetna merger was announced in the press, independent pharmacists began to notice significant cuts to reimbursement rates for prescription drugs on plans managed by CVS. The cuts reportedly were to levels below the independent pharmacies costs of acquiring the drugs and were concentrated in Medicaid managed care plans that constitute a disproportionate share of independent pharmacy income. At the same time of the cuts, says the article, CVS's acquisitions department sent letters to the independent pharmacists inquiring about buying their stores.[127]

---

[124] CVS Health 2017 Annual Report at 20.
[125] Sood Report at 13.
[126] David Dayen, "Abusing Drugs: How CVS Uses Its Market Power to Destroy Competing Independent Pharmacies," *American Prospect* (Jan 23,2018) at https://urldefense.proofpoint.com/v2/url?u=http-3A__prospect.org_article_abusing-2Ddrugs&d=DwIFAg&c=iqeSLYkBTKTEV8nJYtdW_A&r=YXZfhuF5LazfglWur9aEAPmfrPHSGcBoFhGKGQuxCJY&m=FDJ9rI1hwFVMepr1zb2N4aRTip5sKlsAHo7J4GPO4zU&s=y9khpj6sXs3L6fNCKrAjuMTWgN80081bnBGd6PvwZrw&e=
[127] Additional reports of anticompetitive conduct can be found in the Sood Report at 13-14 and Sood Response at 4.

The AMA encourages the DOJ to investigate whether CVS has engaged in predatory behavior, as reported in the American Prospect article. If accurately reported, the DOJ should weigh this prior conduct and the large market shares that CVS now possesses in PBM and retail pharmacy markets and consider whether, by locking up all of Aetna's prescription volume, CVS would have a dangerous probability of acquiring and exercising market power in retail pharmacy markets.

Foreclosing Competition in Specialty Pharmacy

The merger has worrisome ramifications in the specialty pharmacy market.[128] Post-merger, Aetna would have a direct and permanent financial interest in incentivizing or forcing Aetna patients wanting insurance coverage, without crushing coinsurance requirements on extraordinarily expensive drugs, to utilize CVS's specialty pharmacy for the dispensing and administration of specialty drugs rather than obtain the drugs in treatment settings such as physician practices, hospitals and health systems.[129] The latter treatment settings dispense and administer drugs where patient compliance with dosing amounts and intervals can be monitored, side effects evaluated and, if necessary, critical drug dosages adjusted. These are clinical services that patients receiving specialty drugs often need to stay alive.

While CVS's specialty pharmacy might for some patients be a lower cost setting for obtaining and/or administering drugs,[130] there can be adverse clinical consequences in addition to financial ones.[131] Professor Starc warns:

> Aetna may attempt to steer at least a portion of their consumers to CVS' specialty pharmacy in ways that may harm competition or overall consumer welfare. Anticompetitive behavior is especially concerning in this setting, as it may have important clinical, in addition to financial, consequences.[132]

Today Aetna is free to weigh the quality demands of patients against financial concerns at, for example, contract renewal time, as compared to a merged Aetna with a permanent ownership interest in CVS's specialty pharmacy.[133] CVS's status as one of the two largest PBMs has allowed it to steer patients and third-party payers to utilize CVS as their specialty pharmacy.

Tying CVS specialty pharmacy to adequate health insurance is among the allegations against CVS in a class action filed in the United States District Court for the Northern District of California.[134] While not couched as an antitrust tying claim, the suit alleges, in part, that many enrollees in health plans where CVS controls and administers the pharmacy benefits are told they are required to obtain their HIV/AIDS medications from CVS's California specialty pharmacy, a wholly-owned subsidiary of CVS. Patients allegedly are "told that they must either pay more out of pocket or pay full price with no insurance benefits whatsoever-thousands of dollars or more each month-to purchase their medications at an in-network community pharmacy where they

---

[128] See Starc Report at 10.
[129] Id.
[130] See Dafny in the NEJM: https://www.nejm.org/doi/full/10.1056/NEJMp1717137?query=TOC
[131] See Complaint in *John Doe One et al v. CVS Health Corporation*, case 2:18-CV-01280-RS WL-J PR (filed February 16, 2018).
[132] Starc Report at page 10.
[133] See discussion of physicians on behalf of patients advocating with health insurers and how that advocacy is adversely affected when the insurer has an ownership interest in furnishing the specialty drugs. Supra, page 6.
[134] *John Doe et al v. CVS Pharmacy, Inc., Caremark LLC et al*, Case No. 3:18 – CV – 1031-EMC (D. N.D. Cal) (filed June 18, 2018).

can receive counseling from a pharmacist and other services they may need to stay alive."[135] While these claims are yet unproven allegations in litigation,[136] similar allegations of CVS's tying its specialty pharmacy services to its PBM services appear in a second lawsuit, this one pending in the Southern District of Florida.[137] There the plaintiff alleges that CVS forces "patients and third-party payers to utilize CVS as their specialty pharmacy."[138]

The augmentation of market power in the already concentrated and oligopolistic specialty pharmacy market created by the Aetna health insurance acquisition exacerbates these concerns.[139] If past is prologue, a significant fraction of local health insurance markets represented by Aetna's market shares will be foreclosed to specialty pharmacies administering specialty drugs. In addition, a significant fraction of patients will be deprived of the clinical settings they prefer for legitimate quality reasons.

CLAIMED EFFICIENCIES DO NOT JUSTIFY THIS MERGER

CVS-Aetna argue that any anticompetitive effects under Section 7 of the Clayton Act resulting from the proposed merger will be outweighed by efficiencies. However, the U.S. Supreme Court has never approved an efficiencies defense to a section 7 claim.[140] For example, in *FTC v. Procter & Gamble Co*., 386 U.S. 568 (1967), the U.S. Supreme Court stated that, "[p]ossible economies cannot be used as a defense to illegality. Congress was aware that some mergers which lessen competition may also result in economies but it struck the balance in favor of protecting competition."[141]

Although the U.S. Supreme Court has never recognized this efficiency defense, the Sixth, District of Columbia, Eighth and Eleventh U.S. Courts of Appeals "have suggested that proof of post-merger efficiencies could rebut a Clayton Act § 7 prima facie case."[142]

Nevertheless, as the Ninth Circuit recently noted, even in those circuits, no federal appellate court had ever found any such efficiencies sufficient to rebut a prima facie case:

> However, none of the reported appellate decisions have actually held that a § 7 defendant has rebutted a prima facie case with an efficiencies defense; thus, even in those circuits that recognize it, the parameters of the defense remain imprecise.[143]

---

[135] Id.

[136] The alleged CVS behavior exhibits some of the features of an antitrust tying claim-- two products (or services) "tied" together in the sense that if the patient wants the tying product or service, she will be forced to take the other (or "tied") product that she either does not want or would prefer to purchase from someone else under different terms. *See Jefferson Parish Hospital Dist. No 2 v Hyde*, 466 U.S. 2 (1984). However, for there to be antitrust liability for tying, the forcing must result from the defendant exercising market power, typically shown by a large market share. *Id.* In the absence of a tying violation, the conduct may still be of antitrust concern in the context of a merger case because merger law prophylactically protects the public from future antitrust violations that might be difficult to detect and prove. See Hovenkamp, *Prophylactic Merger Policy*, University of California Hastings Law Journal (forthcoming 2018).

[137] *Sentry Data Systems v. CVS Health et al*, Case 0:18-cv-60257, filed February 5, 2018.

[138] Id.

[139] The potential for abuse is largest in the commercial market. However, Aetna's Medicare Advantage enrollees-for whom Aetna is responsible for drug utilization regardless of the site of administration-could be affected as well.

[140] *Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd.*, 778 F.3d 775, 789-780 (9th Cir. 2015).

[141] Id. at 789, citing *FTC v. Proctor & Gamble*, 386 U.S. 568, 580 (1967). See also 4A Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 950f, at 42; id. 970c, at 31.

[142] Id.

[143] Id.

But even in those circuits that entertain the possibility that sufficient evidence of efficiencies might rebut a section 7 prima facie case successfully established by a plaintiff, courts place a significant restriction on the kinds of evidence that a plaintiff can use to support an efficiency rebuttal. Merely "claimed" efficiencies do not suffice—only verifiable efficiencies count.[144] Further,

> Efficiency claims will not be considered if they are vague, speculative, or otherwise cannot be verified by reasonable means. Projections of efficiencies may be viewed with skepticism, particularly when generated outside of the usual business planning process. By contrast, efficiency claims substantiated by analogous past experience are those most likely to be credited.[145]

Under the Merger Guidelines,[146] only efficiencies that are "cognizable" may be considered. Cognizable efficiencies are those that are likely to be accomplished with the proposed merger and unlikely to be achieved in the absence of the merger."[147] To escape federal antitrust merger enforcement, cognizable efficiencies must be of a character and magnitude such that the merger is not likely to be anticompetitive in *any* relevant market.

Aetna Already Performs Core PBM Functions and Presently Integrates Pharmacy and Medical Data to Lower Costs

In the June 19 hearing, CVS-Aetna claimed that "a key driver of consumer benefits from the merger would be the ability to combine CVS's pharmacy data and expertise with Aetna's medical data and expertise." However, Professor Sood pointed out both in his report and in the hearing that based on Aetna's SEC filings, Aetna *already performs its own core PBM functions and thus already integrates pharmacy and medical data to lower healthcare costs*.[148]

Most telling has been CVS-Aetna's nonresponse to professor Sood's findings to the effect that the alleged principal efficiency justification for this merger is nonexistent. Instead, in their reply letter, CVS-Aetna reference an OptumRx white paper—a non-peer-reviewed marketing piece—touting the benefits of integrating medical and pharmacy benefits that CVS says lead to substantial premium reductions.[149] However, the white paper actually claims only cost savings and makes no mention of substantial premium reductions. In any event, even assuming a potential efficiency of integrating PBM and health insurance functions, if the experience with past horizontal insurance mergers is prelude in this vertical integration, the benefits are not likely to be passed along to consumers by the merging health insurance company; and in any event, the benefits are neither merger specific nor of a sufficient magnitude to justify the anticompetitive effects of this merger.

---

[144] Id. at 790 citing *FTC v. CCC Holdings Inc*., 605 F. Supp. 2d 26, 74-75 (D.D.C. 2009).
[145] Merger Guidelines, §11.
[146] We reference the Horizontal Guidelines and not the 1984 Non-Horizontal Merger Guidelines because the efficiency discussion in the latter has not been updated in 34 years.
[147] Merger Guidelines, Section 10.
[148] See also page 6 supra discussing generally Aetna's self-supplying PPM services in the company's press release announcing its" strategic" arrangement with CVS whereby Aetna retains "our PBM and our ability to integrate medical care with clinical and pharmacy programs and actionable data."
[149] CVS-Aetna Supplemental Submission at 3.

Potential Efficiency in PBM/Health Insurance Market Does Not Justify This Merger

Assuming *arguendo* that at some recent time Aetna abandoned its in-house PBM, we will consider here whether the merger would be justified on the claimed basis that it would combine CVS pharmacy data and expertise with Aetna's medical data and expertise as argued by CVS-Aetna.

Some economists, including Craig Garthwaite, PhD, in earlier congressional testimony favoring this merger, are citing economic research (Starc and Town 2015) that suggests a benefit of insurer-PBM integration in the MA and Part D markets.[150] Starc and Town's research suggests that MA-PD plans, which cover both drug and medical expenditures, tend to be designed to offset medical expenditures, as compared to stand-alone PDP plans which only cover drugs. They find MA-PD insurers charge consumers low co-pays for preventive medications-which effectively means sending consumers the right price signals. The findings are consistent with the idea that firms that only cover drugs and are at no risk for higher medical costs would have little incentive to consider the influence of their benefit design decisions on enrollee medical care utilization, whereas firms that cover both would have an incentive to lower medical costs.

To better understand the Starc and Town research cited in the congressional testimony and the extent to which the so-called "alignment of medical and pharmacy benefits" efficiency might favor this merger, the AMA has consulted Professor Starc, the lead co-author of the cited economic research. In her expert report on the CVS-Aetna proposed merger, she concludes that a merged CVS-Aetna entity has the potential to foreclose future entry or raise the cost of current rivals in the PBM industry, the specialty pharmacy market, and critically the Part D market. She further concludes that the potential for foreclosure is likely to have negative impacts on consumer welfare.[151] Ultimately, it is her opinion that "the potential harm to consumer welfare from the proposed merger is likely to outweigh the potential gains."[152]

Professor Starc reached her opinion condemning this merger while at the same time concluding that the alignment of medical and pharmacy benefits is an efficiency that can only be *fully* achieved through *integration* within a firm. However, the efficiency does not meet the Merger Guidelines' "cognizable" standard. According to Professor Starc, the integration efficiency could be fully achieved "by developing an in-house PBM," an approach pursued by other players.[153] Indeed, as described by Professor Sood, "Aetna's own financial statements to the SEC indicate it that already performs its core PBM functions."[154] Alternatively, a potentially large portion of the potential gain could instead be achieved via contract between the insurer and the PBM. An insurer could put the PBM at risk for at least part of medical spending.[155] Even assuming the efficiency were merger specific it would not be of a magnitude that would justify the merger. CVS andAetna claim that the merger will "achieve about $750 million in annual recurring savings."[156] Professor Sood calculates that this represents less than 0.5% of the combined revenues of CVS and Aetna. Thus, the magnitude of claimed benefits is very small relative to the size of operations of the two

[150] See Garthwaite, testimony before the House Judiciary Committee at a hearing entitled "Competition in the Pharmaceutical Supply Chain: the Proposed Merger of CVS Health and Aetna", February 27, 2018, available at https://judiciary house.gov/wp-content/uploads/2018/02/Garthwaite-REVISED-Testimony and citing Starc A. and Town B. *Internalizing Behavioral Externalities: Benefit Integration in Health Insurance*, 2017, NBER Working Paper No. 21783.
[151] Starc Report at 15.
[152] Starc Report at 16.
[153] Starc Report 13-14.
[154] Sood Report at 9.
[155] Starc Report at 13.
[156] See CVS-Aetna Supplemental Submission at 2.

companies.[157] Moreover, he observes that it is unclear if Aetna already has access to CVS's pharmacy data and if so, the extent to which the merger would lead to better integration of data.[158]

Finally, the magnitude of any alignment of medical and pharmacy benefits is, according to Professor Starc, further limited to the set of contracts joint to Aetna and CVS's PBM plans in which the merged entity is at risk for both medical and pharmacy benefits. In the Part D market, this will be limited by the (lack of) consumer switching from stand–alone plans to MA plans. In the commercial market, this will be limited to fully insured contracts, primarily in the small-group market.[159] Importantly, the potential efficiencies do not apply to self-insured contracts, which compose a significant fraction of Aetna's business and thus substantially diminish the potential for efficiencies.

Unlikely Pass—Through of Cost Savings

Professor Starc further concludes that any cost efficiency created by the merger would not likely translate into lower premiums or more attractive benefit packages for consumers.[160] Even Dr. Garthwaite concedes that consumers will only benefit from the Starc and Town identified efficiency, or any other that might result from the merger, if there is a competitive market in health insurance.[161] This is rarely present, and thus health insurers generally have very little incentive to pass savings along to consumers rather than pocket the total reduction in health care costs.[162] This has been shown in the history of horizontal health insurer mergers. For example, as Harvard professor Leemore Dafny, PhD notes:

> If past is prologue, insurance consolidation will tend to lead to lower payments to healthcare providers, but those lower payments will not be passed on to consumers. On the contrary, consumers can expect higher insurance premiums.[163]

Therefore, the adverse ramifications in the health insurance market of a combined CVS-Aetna, discussed earlier, are likely to swamp any merger-associated cost efficiency.

Summary of the Efficiency Defense in the Relevant Health Insurance, PBM Markets and Pharmacy Markets Where Competitive Harm Caused by the Merger is Likely

Perhaps Professor Sood most succinctly summarizes the verdict on this merger in the health insurance, PBM and pharmacy markets:

> Within each of the specific markets—insurance, pharmacy and PBM—in which the merger is likely to have anticompetitive effects, there are no potential benefits of sufficient magnitude and certainty that would outweigh the anticompetitive effects of the merger.[164]

---

[157] Sood Response.
[158] Sood Report at 16.
[159] Starc Report at 14.
[160] Starc Report at 14.
[161] Craig Garthwaite and Fiona M. Scott-Morton, "Perverse market incentives encourage high prescription drug prices." Pro-Market Blog. November 1, 2017.
[162] As explained earlier, competition in health insurance would be made even less likely post a CVS-Aetna merger.
[163] See Dafny, "Health Insurance Industry Consolidation: What Do We Know from the Past, Is It Relevant in Light of the ACA, and What Should We Ask?" Testimony before the Senate Committee on the Judiciary, September 22, 2015, at 10.
[164] Sood Report at 17.

Claimed Healthcare Provider Efficiencies

CVS and Aetna however urged the California DOI to consider their efficiency claims in providing medical services. Post-merger the merged entity would route patients needing basic urgent care to walk-in clinics. This, the merging parties say, would keep patients out of expensive hospital emergency departments. CVS has 1100 MinuteClinics in its pharmacies. The clinics are staffed by nurse practitioners and physician assistants who provide routine care such as flu shots. "Think of these stores as a hub of a new way of accessing healthcare services across America," says CVS CEO Larry Merlo. "We're bringing healthcare to where people live and work."[165]

Claimed Health Care Provider Efficiencies Would Not Occur in Markets in which the Effects of the Merger May Be Substantially to Lessen Competition and Thus Cannot Justify the Merger

The CVS-Aetna claimed health care hub-provider efficiencies are irrelevant to whether this merger may substantially lessen competition in the relevant Medicare Part D PDP, health insurance, PBM, retail pharmacy and specialty pharmacy markets. As a matter of law, likely efficiencies must occur *in the specific markets in which the merger is likely to have its anticompetitive effects*. The U.S. Supreme Court made this point clear in *United States v. Philadelphia National Bank*, 374 U.S. 321 (1963), in which the U.S. Supreme Court ruled against a proposed bank merger because it would likely have "the effect of substantially lessening competition in the relevant market."[166] In that case, after concluding the effect of the proposed merger would be substantially to lessen competition, merger proponents argued that the bank merger was justified because it would give the merged bank countervailing market power, which would enable it to compete with large out-of-state banks for very large loans.[167] The Court rejected this "out-of-market efficiencies" justification, stating that:

> If anticompetitive effects in one market could be justified by procompetitive consequences in another, the logical upshot would be that every firm in an industry could, without violating § 7, embark on a series of mergers that would make it in the end as large as the industry leader.[168]

Courts have followed the *Philadelphia National Bank* Court's rejection of out-of-market efficiencies as a cognizable merger justification. As the court in *Law v. NCAA*, 902 F. Supp. 1394 (D. Kan. 1995) stated:

> Procompetitive justifications for price-fixing must apply to the same market in which the restraint is found, not to some other market. See *United States v. Topco Assoc., Inc.*, 405 U.S. 596, 610, 31 L. Ed. 2d 515, 92 S. Ct. 1126 (1972) (competition "cannot be foreclosed with respect to one sector of the economy because certain private citizens or groups believe that such foreclosure might promote greater competition in a more important sector of the economy"); *United States v. Philadelphia National Bank*, 374 U.S. 321, 370, 10 L. Ed. 2d 915, 83 S. Ct. 1715 (1963) (anticompetitive effects in one market cannot be justified by procompetitive consequences in another); *Sullivan v. National Football League*, 34 F.3d

[165] "CVS to Buy Aetna for 67.5 Billion, Remaking Health Sector," *Bloomberg Markets* (December 3, 2017), available at https://www.bloomberg.com/news/articles/2017-12-03/cvs-is-said-to-buy-aetna-for-67-5-billion-remaking-industry.
[166] *United States v. Philadelphia Nat'l Bank*, 374 U.S. 321, 323-324 (1963).
[167] Id. at 370.
[168] Id.

> 1091, 1112 (1st Cir. 1994) (it seems "improper to validate a practice that is decidedly in restraint of trade simply because the practice produces some unrelated benefits to competition in another market"), [**32] cert. denied, 131 L. Ed. 2d 133, 115 S. Ct. 1252 (1995).[169]

Even if CVS and Aetna could demonstrate that health care hubs will be established as claimed and result in efficiencies, such efficiencies would occur in the market for the provision of primary care services. But such primary care efficiencies are out-of-market in relation to those markets in which the effect of the proposed CVS-Aetna merger may be to substantially lessen competition i.e. the markets for Part D PDP, health insurance, PBM, retail pharmacy and specialty pharmacy. Consequently, under existing case law, any primary care efficiencies that the merged CVS-Aetna might create are neither relevant to, nor justification for, the proposed merger.

<u>The Claimed Health Care Provider Efficiencies are also Wildly Speculative</u>

Notwithstanding their antitrust irrelevance, the CVS-Aetna claim that retail clinics hosted in CVS pharmacies can effectively serve the healthcare hub for patients and consumers were examined by Wharton professor Lawton R. Burns, PhD.[170] In a detailed, richly annotated report, Professor Burns reaches the following conclusions:

> The proposed merger between CVS Health and Aetna is unlikely to yield a long list of benefits advanced by executives from both companies. The documentation on how these benefits are to be achieved is lacking; their evidence base in the scientific literature is questionable; and the implementation challenges are enormous….Any effort to achieve such benefits through the use of retail clinics and analytics is unlikely to succeed. More generally, the strategies of vertical integration and diversification that underlie the merger lack a firm evidence base for any consumer benefits.[171]

David Blumenthal, MD, President of the Commonwealth Fund has similarly found the CVS-Aetna claim that the merger would create strong efficiencies with respect to primary care services to be wildly speculative. He observes in the December 14, 2017, Harvard Business Review:

> To become a Geisinger or an Intermountain equivalent, Aetna-CVS would have to acquire-or develop-seamless relationships with legions of primary care and specialty physicians and hospitals. It would have to turn its stores into medical clinics, with exam rooms, diagnostic laboratories, and x-ray suites. And it would have to install and link electronic health records and other providers in its communities. Having done all this, CVS would have to excel at the very challenging task of managing physicians and other health professionals-something that daily confounds even the most experienced, long time, care-delivery systems. The challenge would be unprecedented, the expense considerable, and the outcome uncertain.

---

[169] *Law v. NCAA*, 902 F. Supp. 1394, 1406 (D. Kan. 1995).

[170] Professor Burns is the James Joo –Jin Kim professor at the Wharton School of the University of Pennsylvania. He is a professor in the Management and Department of Healthcare Management. He teaches courses on the U.S. healthcare system in the industrial organization of healthcare. These courses cover the entire value chain of healthcare including hospitals, managed care organizations, insurers, pharmacies, retail clinics, pharmacy benefit managers and pharmaceutical and medical products.

[171] Burns, Lawton R., "Limits on Consumer Benefits from Proposed Merger of Aetna Inc. into CVS Health Corporation" (Burns Report) Exhibit A at 26. See also Burns, Lawton R., Response to Aetna Supplemental Submission, July 9, 2018 (Burns Response) Exhibit G.

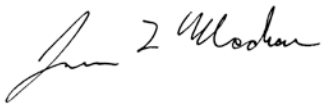
A recent study of 1.3 million Aetna enrollees found that retail clinics result in higher health care spending.[172] A Bloomberg News article entitled, "CVS's Megadeal to Change U.S. Healthcare Faces Stiff Challenges," cautions that, "[t]here are serious challenges to CVS's proposal. Revamping the stores could cost several billion dollars."[173] Also noteworthy is that reputable financial analysts covering the health care industry have dismissed claims of efficiencies in this merger and see the merger as "defensive." For example, Leerink analyst Anna Gupta writes that the "Aetna/CVS deal is still viewed as primarily a defensive play."[174] Bloomberg reports that "Jeff Goldsmith, who runs the healthcare consulting firm Health Futures Inc. is skeptical of the strategy behind the deal, calling it 'flat out baffling,' and says that the MinuteClinics 'lack the clinical acumen or trusting relationships with patients to effectively manage care' and does not 'see it generating new customers for the acquirer or the acquiree, or leverage to lower health costs.'"[175] MorningStar points out that "CVS has significantly overpaid for Aetna," roughly double its standalone fair value.

The DOJ should consider whether the price paid for Aetna reflects an anticompetitive defense of CVS's market power and increases the likelihood that the merger will have anticompetitive effects.

CONCLUSION

For all the reasons expressed by the health economists and other experts both at the June 19 hearing and in their reports accompanying this statement, it is the AMA's opinion that this merger would likely substantially lessen competition in many markets. The nation has learned the hard way that overlooking consolidation in health insurance and PBM markets is costly. The AMA therefore respectfully requests that the DOJ block the proposed CVS-Aetna merger.

Sincerely,



James L. Madara, MD

Enclosures

[172] See, Ashwood, Gainer et al. "Retail Clinic Visits for Low-Acuity Conditions Increase Utilization and Spending," *Health Affairs* (Millwood) 2016; 35:449-455.
[173] "CVS's Megadeal to Change US Healthcare Faces Stiff Challenges," *Bloomberg News* (December 22, 2017). See also, "A Force behind the Aetna Bid: Amazon," the *Wall Street Journal* (October 27, 2017).
[174] "Aetna-CVS Deal a Defensive Play As Amazon Threat Looms" *Bloomberg First Word* (Dec 15, 2017).
[175] See, note 173.

AMA
AMERICAN MEDICAL ASSOCIATION

ama-assn.org
t (312) 464-5000

October 5, 2018

Peter J. Mucchetti
Chief, Healthcare and Consumer Products Section
United States Department of Justice Antitrust Division
450 Fifth Street, NW
Washington, DC 20530

Re: The Acquisition of Aetna, Inc. by CVS Health Corporation

Dear Mr. Mucchetti:

On behalf of the American Medical Association (AMA) and our physician and medical student members, thank you for meeting with the AMA and the national experts who participated in the June 19, 2018 California Department of Insurance (DOI) hearing. We hope that you and the professionals on your staff found the substantive discussions helpful. We sincerely appreciate the involvement of all those attending the meeting.

During the meeting, Neeraj Sood, PhD, referenced a paper that he has authored on excess returns or profits in the pharmaceutical supply chain and that provides details on the methods for estimating excess returns.[1] We are attaching that paper for your use.[2] The paper is currently under review for publication and Professor Sood would appreciate your restricting the distribution of the paper to the U.S. Department of Justice (DOJ) team.

Also during the meeting, Professor Sood was asked for his thoughts on defining the pharmacy benefit manager (PBM) product market. Professor Sood's response is attached.[3]

Below—in a nutshell—we present the matters raised at our meeting. However, we do not readdress why the CVS-Aetna claimed efficiencies do not justify the merger.[4] Nor do we discuss the Stand-Alone Prescription Drug Plan (PDP) as a relevant product market. Reportedly, Aetna has agreed to sell its PDP business to WellCare, if, and when, a CVS acquisition of Aetna closes. Thus, we assume you have successfully persuaded CVS-Aetna that PDP is a relevant product market.

---

[1] Neeraj Sood, PhD, is Professor of Health Policy and Vice Dean for Research at USC's Sol Price School of Public Policy. He is also a faculty member and past Director of Research of the USC Leonard Schaeffer Center for Health Policy and Economics and a Research Associate at the National Bureau of Economic Research. He has published more than 100 papers and reports on health policy and economics. His research focuses on health insurance and pharmaceutical markets and he is an associate editor for leading journals in his field.

[2] Do Companies in the Pharmaceutical Supply Chain Earn Excess Returns? By Neeraj Sood, PhD, Karen Mulligan, PhD; Kimberly Zhong, BS.

[3] Sood response.

[4] See AMA Executive Vice President James Madera, MD August 7, 2018, letter to the Honorable Makan Delrahim at pp. 23-29.

WHAT IS THE IMPORTANCE OF AETNA AS A SUPPLIER OF PBM SERVICES AND POTENTIAL COMPETITOR IN THE PBM MARKET?

This Is a Horizontal Merger of PBM Market Suppliers and Therefore of Actual Competitors

Aetna Has a Significant Market Share as a Supplier of PBM Services

Aetna serves as a PBM for Aetna pharmacy customers.[5] Professor Sood reports that based on Aetna's own financial statements, the company "performs its core PBM functions." Notably, CVS-Aetna chose not to deny Aetna's present role as a PBM in their reply to the expert reports submitted in the June California DOI hearing.[6]

While CVS performs certain PBM functions for Aetna under a 2010 agreement that expires in 2022, Aetna has said, "we retain our PBM and our ability to integrate medical care with clinical and pharmacy programs and actionable data."[7] Thus, two years into the CVS agreement, then Federal Trade Commission (FTC) Commissioner Julie Brill found that Aetna was the PBM "Dominant Three's" (CVS/Caremark, Express Scripts and UnitedHealth Group's OptumRx) "nearest competitor."[8]

According to Adam Fein's Drug Channel Institutes report, "Aetna controls medical and pharmacy policy, formulary design, pharmacy/medical benefit integration, rebate contracting and many other core PBM functions."[9] Drug Channels also reports Aetna's share of the PBM market as four percent.[10]

Self-Supply is in the Relevant Market

In our previous letter to DOJ, we explained why Aetna's PBM services—that it provides internally for itself—must be deemed to be in the relevant market for this merger and therefore should be included when calculating PBM market shares.[11]

The Proposed Merger Raises Significant Competitive Concerns under the Horizontal Merger Guidelines

Utilizing the 2017 data on PBM market share by total equivalent prescription claims managed (published by the Drugs Channel Institute), Professor Sood has concluded that the PBM market has an Herfindahl–

[5] See Aetna 2017 10K report at page 7, available online at http://investor.aetna.com/phoenix.zhtml?c=110617&p=irol-reportsAnnual.

[6] See, 2018-07-03 CVS-Aetna Supplemental Submission to CDI (CVS-Aetna Supplemental Submission) Exhibit F **(All exhibit references are to the exhibits submitted with AMA Executive Vice President James Madera MD August 7, 2018, letter to the Honorable Makan Delrahim (August 7, 2018, AMA letter).**

[7] https://news.aetna.com/news-releases/aetna-awards-long-term-contract-to-cvs-caremark-to-provide-pbm-services/.

[8] Dissenting statement of Commissioner Julie Brill concerning the proposed acquisition of Medco Health Solutions by Express Scripts (April 2, 2012), https://www ftc.gov/sites/default/files/documents/public_statements/dissenting-statement-commissioner-julie-brill/120402medcobrillstatement.pdf.

[9] See Drug Channels, December 5, 2017 available at https://www.drugchannels net/2017/12/the-cvs-aetna-deal-five-industry-and html.

[10] See "PBM Market Share, by Totally Equivalent Prescription Claims Managed, 2017," Drug Channels Institute, available at https://www.google.com/search?q=pbm+market+shares&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj-yZu2-

[11] August 7, 2018, AMA letter at 8-9.

Hirschman Index (HHI) of roughly 1900 and that the merger would increase HHI by roughly 200 points.[12] Thus, the proposed merger raises significant competitive concerns under the DOJ and FTC Horizontal Merger Guidelines.[13]

Other Competitive Factors Confirm and Reinforce the Potentially Harmful Effects of the Increased Concentration

The PBM Market is Poorly Performing, Reflecting a Lack of Competition

The national market for PBM services is highly concentrated. CVS/Caremark, Express Scripts and UnitedHealth Group's OptumRx account for at least 70 percent of the market.[14] There is research and anecdotal evidence that the PBM market is not competitive.[15] A February 2018 report from the President's Council of Economic Advisers (CEA Report) states that the existing market structure allows PBMs "to exercise undue market power."[16,17] Both policymakers and economists have raised serious concerns about the lack of competition in the PBM market and its implications for consumers.[18] Some of these concerns were recently expressed by U.S. Food and Drug Administration Commissioner Scott Gottlieb, MD:

> The top three PBMs control more than two thirds of the market: the top three wholesalers more than 80 percent; and the top five pharmacies more than 50 percent. Market concentration may prevent optimal competition. And so, the saving may not always be passed along to employers or consumers.

---

[12] Slide 3 of Professor Neeraj Sood's September 18, 2018, DOJ slide presentation.

[13] See, United States Department of Justice and Federal Trade Commission Horizontal Merger Guidelines (August 19, 2010) at section 5.3.

[14] CVS and Aetna have the first and seventh largest PBM market shares respectively. *See*, "PBM Market Share, by Totally Equivalent Prescription Claims Managed, 2017", Drug Channels Institute, available at https://www.google.com/search?q=pbm+market+shares&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwj-yZu2- . See, http://www.drugchannels net/2017/12/the-cvs-aetna-deal-five-industry-and.html, accessed May 22, 2018. See also https://www.google.com/search?biw=1536&bih=726&tbm=isch&sa=1&ei=4AYXW8GhB8b-jwSAraGYDA&q=pbm+market+shares+2018&oq=pbm+market+shares+2018&gs_l=img.3...6596.8649.0.9312.5.5.0.0.0.0.104.321.4j1.5.0....0...1c.1.64.img..0.1.103...0i30k1.0._e9ubyaYAS8#imgrc=xO .

[15] See e.g. Garthwaite, Craig and Fiona Scott Morton. "Perverse market incentives encourage high prescription drug Prices." Pro-Market Blog., November 1, 2017.

[16] Council of Economic Advisers, Reforming Bio Pharmaceutical Pricing at Home and Abroad (February 2018) at 10. *See also*, Sood, N., Shih,T., Van Nuys, K., and Goldman, D. 2017. "The Flow of Money through the Pharmaceutical Distribution System." Leonard Schaeffer Center for Health Policy and Economics, University of Southern California.

[17] Starc Report at 9 ("The high level of concentration in the PBM market is likely to persist due, in part, to barriers to entry in the industry. The scale required to negotiate favorable discounts from manufacturers make it difficult for fringe players to compete"). *See also*, American Antitrust Institute correspondence to the Hon. Makan Delrahim, Assistant Attorney General (March 26, 2018) at 5.

[18] See e.g. Brill, Julie. "Dissenting Statement of Commissioner Julie Brill concerning the proposed acquisition of Medco Health Solutions Inc. by Express Scripts Inc." FTC file No. 111-0210, April 2, 2012; Garthwaite, Craig and Fiona Scott Morton. "Perverse market incentives encourage high prescription drug prices." Pro-Market Blog. November 1, 2017.

> Too often, we see situations where consolidated firms-the PBMs, the distributors, and the drugstores-team up with payors. They use their individual market power to effectively split some of the monopoly rents with large manufacturers and other intermediaries rather than passing on the savings garnered from competition to patients and employers.[19]

The CEA Report observes that drug pricing suffers both from high market concentration in the pharmaceutical distribution system and from a lack of transparency characterized by price obfuscation.[20]

PBM customers have scant information about the rebates supposedly negotiated on their behalf because contracts between PBMs and drug manufacturers are claimed as trade secrets.[21] Not even large payers like Blue Cross or Walmart know the net prices of the drugs they are buying.[22] One expert has concluded that most of the increase in drug pricing can be attributed to rebates pocketed by PBMs.[23]

As recommended by the CEA Report, "policies to decrease concentration in the PBM market…can increase competition and further reduce the price of drugs paid by consumers."[24] Allowing a CVS-Aetna merger would be at war with those policies.

Coordinated Effects for PBM Services are Likely

The merger would eliminate Aetna as a potentially disruptive competitor[25] and would result in the formation of a behemoth, durable, vertically integrated PBM tight oligopoly that will likely, as a practical matter, enable or encourage post-merger coordinated interaction.[26] This would likely include parallel accommodating conduct arising out of aligned incentives such as not strengthening the position of downstream insurance market competitors and therefore not aggressively bidding for their contracts.

The High Barriers to Entry

The lost competition from this merger is likely to be permanent because barriers to entry prevent new entrants from restoring competitive pricing. One barrier is the scale required to negotiate favorable

---

[19] Scott Gottlieb, MD, Commissioner of Food and Drugs, "Capturing the Benefits of Competition for Patients," speech before America's Health Insurance Plans National Health Policy Conference (March 7, 2018).
[20] CEA Report at 10.
[21] Statement of Prof. Thomas L. Greaney, University of California Hastings College of Law, "Investigatory Hearing on Merger of Aetna Inc. into CVS Health Corporation, State California Department of Insurance (June 19, 2018) Exhibit I (Greaney Statement).
[22] Robin Feldman, "Perverse Incentives: Why Everyone Prefers High Drug Prices-Except For Those Who Pay the Bills," forthcoming Harv. J. on Legis., available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3162432) (PBM payment structure "minimizes the competitive pressure to reduce prices" and creates incentives "operating to drive prices higher"). See also, Fiona Scott Morton & Lysle T. Boller, "Enabling Competition in the Pharmaceutical Market," Hutchins Ctr. on Fiscal and Monetary Pol'y at Brookings (2017).
[23] "Robert Goldberg, "Drug Costs Driven by Rebates," Center for Medicine in the Public Interest, http://bionj.org/wp-content/uploads/2015/11/drug-costs-driven-by-rebates.pdf.
[24] CEA Report at 10.
[25] See infra at 5
[26] See, Statement of Prof. Thomas L. Greaney, University of California Hastings College of Law, "Investigatory Hearing on Merger of Aetna Inc. into CVS Health Corporation, State California Department of Insurance (June 19, 2018) Exhibit I (Greaney Statement).

discounts from pharmaceutical manufacturers. PBM entrants need to attract insurer-customers with competitive discounts from pharmaceutical firms. The magnitude of discounts that a PBM can negotiate with these firms, however, depends on the number of covered lives represented by the PBM, with the size of the discount rising with the size of the PBM. If Aetna, the country's third largest insurer, exits the customer market by merging with a PBM, then a new PBM market entrant's chances of gaining the covered lives necessary for negotiating discounts is diminished.[27] Hence, the three largest incumbent PBMs—comprising 70 percent of the market—will have a durable advantage, which in turn makes it less likely that a new entrant can attract health insurers.[28]

In addition, the PBM entrant needs to form a national pharmacy network with the ability to contract and process claims from pharmacies within the network. According to Professor Sood, forming such a network "is no small feat for a new entrant."[29]

CVS-Aetna have disputed health economist expert testimony introduced in the June California DOI hearing on the high barriers to entry and lack of competition in the PBM market. Quoting from an April 2, 2012, FTC decision, they contend that vigorous competitors "are winning business from traditional market leaders."[30] The actual data on PBM market dynamics after 2012, however, paints a very different picture.[31] According to Professor Sood, data show that not only is the national market for PBMs highly concentrated; the degree of concentration has only increased over time. In 2013, the top three PBMs accounted for 67 percent of covered lives and in 2017 the market has become more concentrated with the top three PBMs accounting for 73 percent of covered lives.[32] CVS/Caremark has been a top three PBM since 2013, if not longer, and its market share of covered lives has increased from 22 percent in 2013 to 26 percent in 2017. Professor Sood concludes that, "a market with such durable market shares for the top three firms cannot be considered competitive."[33]

Additional documentation of the high barriers to entry into the PBM marketplace is provided below within our discussion of the loss of potential competition that would occur in the event of the merger.[34]

<u>The Loss of Aetna as a Potential Disruptive Competitor in the PBM Market</u>

The market share, concentration data, poor PBM market performance and high barriers to entry do not overstate the proposed merger's future competitive significance in the PBM market. The PBM market would lose Aetna, a national company with an established brand, significant customer base (Aetna Health Insurance), expertise, capital and years of experience as a major player in the PBM market. Given that the DOJ has approved the Cigna-Express Scripts merger, post-merger there would be no PBMs that could defeat the coordinated conduct of The Dominant Three that today comprise 71 percent of the PBM market and that post-merger would comprise 75 percent.

---

[27] See also pp 13-14 *infra* for a discussion of customer foreclosure in the PBM market caused by the merger.
[28] Starc Report at 9; Sood, Neeraj, Ph.D., Response to "CVS-Aetna Supplemental Submission", Exhibit H ("Sood Response") at 2.
[29] Sood Response at 2.
[30] See CVS-Aetna Supplemental Submission.
[31] Sood Response, at 12.
[32] Id.
[33] Sood Response at 2.
[34] See infra 9-10.

And even if the Aetna PBM arm lacked the bargaining power to drive deep drug discounts, it would likely be forced to compete on non-price dimensions that are critically important to consumers. For example, it could compete on quality (transparency and customer service) in an environment that is currently plagued by the black-box nature of PBM activities, as evidenced by the numerous state bills on PBM transparency and at least one ongoing lawsuit alleging PBM overcharging. Without new entry and competition, PBMs can continue to keep secret the size of manufacturer rebates and the percentage of the rebate passed on to health plans and employers.[35]

This Is Also a Horizontal Merger of Potential Competitors

In the absence of the merger, Aetna would remain an important potential competitor in the PBM market. This potential competition, lost in the merger, is significant.

The current edition of Areeda & Hovenkamp, Antitrust Law (2016),[36] provides a multi-part test (Areeda & Hovenkamp test) for evaluating whether the merger would result in the significant loss of potential competition—a test that Dr. Sood employs to prove that the CVS-Aetna merger would result in the loss of potential competition in the PBM market.

Satisfying the Areeda & Hovenkamp test

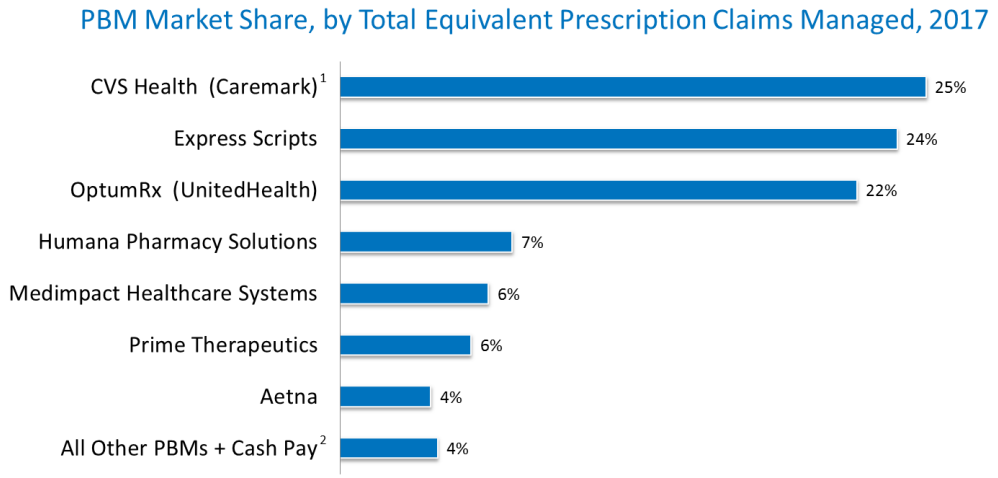
First, one must prove that the market in question, e.g., the PBM market, is significantly anticompetitive; otherwise the possible future addition of a firm to the market would be unimportant.

A market may be presumed to be noncompetitive, and thus satisfying this first part of the Areeda & Hovenkamp test, "where the same four firms have accounted for at least 75 percent of the market for at least five years preceding the merger and the HHI of the market is at least 1800, unless there is proof that competition has been declining and will probably decline below the specified ratios."[37]

As Professor Sood, shows below, the proposed CVS-Aetna merger satisfies this first element of the Areeda & Hovenkamp test:

[35] CEA Report at 10.
[36] *See*, V Philip E Areeda & Herbert Hovenkamp, Antitrust Law, ¶ 1121 (2016).
[37] Id.

Figure 1: PBM Market Shares 2017

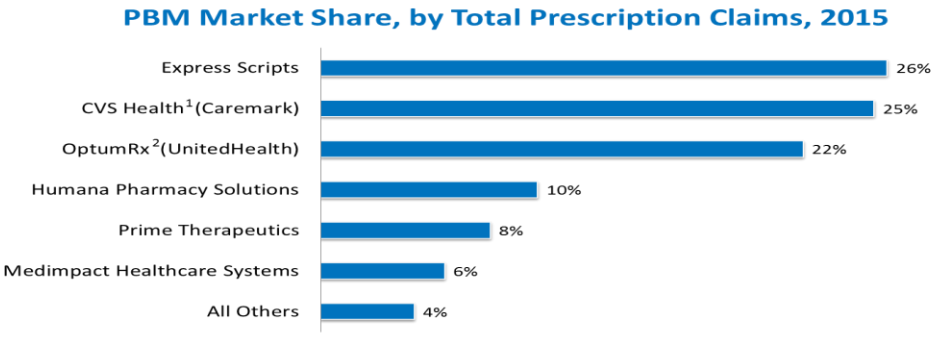


1. Excludes claims processed by Aetna. For 2017, CVS Health changed its publicly reported computation of equivalent prescription claims filled in network pharmacies.
2. Figure excludes cash pay prescriptions that use a discount card processed by one of the 7 PBMs shown on the chart.
Source: Drug Channels Institute research and estimates. Total equivalent prescription claims includes claims at a PBM's network pharmacies plus prescriptions filled by a PBM's mail and specialty pharmacies. Includes discount card claims. Note that figures may not be comparable with those of previous reports due to changes in publicly reported figures of equivalent prescription claims. Total may not sum due to rounding.

This table appears as Exhibit 75 in *The 2018 Economic Report on U.S. Pharmacies and Pharmacy Benefit Managers, Drug Channels Institute*. Available at http://drugch.nl/pharmacy

DRUG CHANNELS INSTITUTE

Figure 2: PBM Market Shares 2015

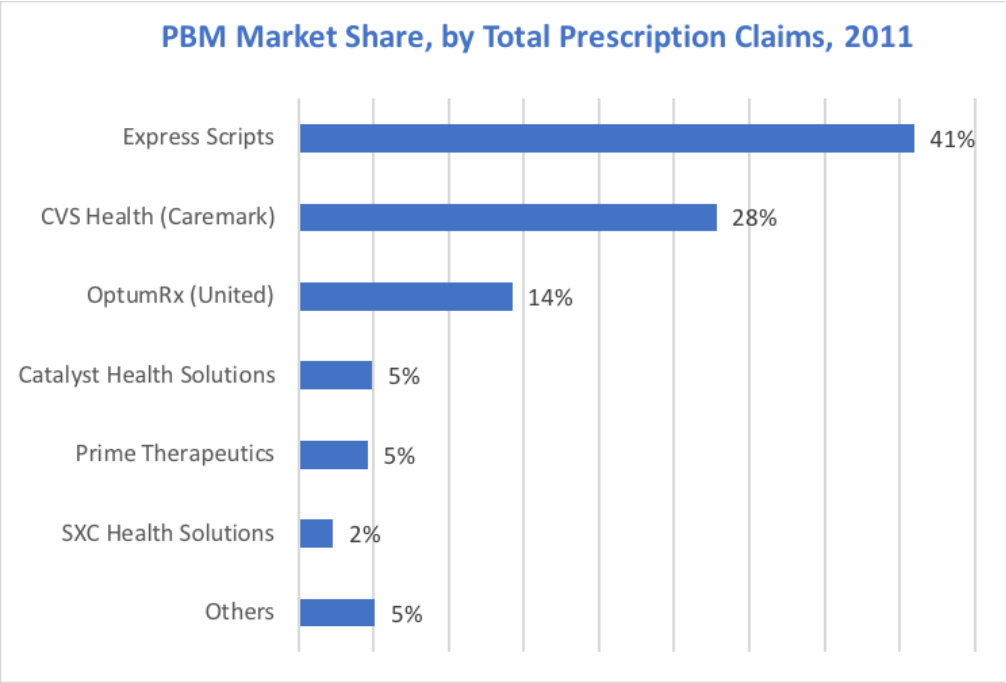


Total prescription claims includes claims at a PBM's network pharmacies plus prescriptions filled by a PBM's mail and specialty pharmacies. Excludes cash-pay prescriptions. Total may not sum due to rounding.
1. Includes Aetna prescription claims volume.
2. Includes pro forma combination of OptumRx with Catamaran. Includes Cigna prescription claims volume.
Source: Pembroke Consulting estimates

This chart appears as Exhibit 59 in Fein, Adam J., *The 2016 Economic Report on Retail, Mail, and Specialty Pharmacies*, Drug Channels Institute, January 2016. Available at http://drugchannelsinstitute.com/products/industry_report/pharmacy/

DRUG CHANNELS INSTITUTE

Figure 3: PBM Market Shares 2011



Source: https://www.drugchannels.net/2011/07/esrx-mhs-strategic-and-market-analysis.html

Figures 1 to 3 show that the same 4 firms—Express Scripts, CVS, OptumRx, and Prime—accounted for more than 75 percent of the market share in 2017, 2015 and 2011. And the HHI of the market in 2017 was roughly 1900 based on the market shares provided in Figure 1.[38]

Second, one must prove that the outside merging firm would have entered the market, within a reasonable period of time. Otherwise, its merger would not affect the likelihood of future entry.

One can satisfy this second part of the Areeda & Hovenkamp test by showing that "(1) the outside firm has requisite economic capabilities for substantial de novo entry and (2) such entry is economically attractive to it. Subjective evidence, though often infected with bias, may be probative on either issue."[39]

The proposed CVS-Aetna merger meets (1) and (2) above. Figure 1 above shows the market shares of PBMs in 2017. The figure shows that Aetna is the seventh largest PBM in the market. According to its U.S. Securities and Exchange Commission filings, Aetna already provides PBM services to its insurance consumers. Therefore, it has the capabilities to provide the same services to consumers with other insurance. Furthermore, entry into the PBM market would be economically attractive to Aetna as the

[38] See Slide 3 of Professor Sood's Sept 18, 2018, DOJ slide presentation.
[39] V Philip E Areeda & Herbert Hovenkamp, Antitrust Law, ¶ 1121 (2016).

pharmaceutical supply chain industry is highly profitable. According to Professor Sood, a *Wall Street Journal* article and his own research show that PBMs are better able to convert gross margins into profits because they do not need to make huge investments such as retail stores or warehouses to run their business.[40] Also, in unpublished analysis using data from 2013 to 2017 financial statements of companies in the S&P 500, Professor Sood finds that middlemen in the pharmaceutical supply chain make "excess returns" (profits on investments less cost of capital for investments) compared to other companies in the supply chain. For example, excess returns for middlemen are 5.9 percent compared to only 3.5 percent for the S&P 500.[41]

Finally, in her dissenting statement on the Medco-Express Scripts merger, then FTC Commissioner Julie Brill noted that Aetna was the nearest competitor for The Dominant Three.

Third, one must show that the number of equally likely entrants, including the outside firm, does not exceed three (or, at most four). If the universe of equally likely entrants is not so limited, the elimination through merger of a particular potential entrant would not affect the likelihood of entry.

Under this third part of the Areeda & Hovenkamp test, "proponents of the merger should have the burden of introducing evidence showing the existence of other potential entrants, but those attacking the merger should bear the burden of persuasion that such other firms are substantially less likely to enter than the outside merging firm. To the extent that other firms have the same entry-related characteristics as the merging firm, they must be deemed to be equally likely entrants."[42]

The proposed CVS-Aetna merger meets this this third element of the Areeda & Hovenkamp test. In Professor Sood's opinion, the number of future entrants is limited because there are significant barriers to entry in the PBM market.[43] These barriers were acknowledged by the CEO of one of the largest PBMs even when a formidable competitor such as Walmart tried to enter the PBM market in 2008: [44]

> Many people shake in their boots when they hear the name Wal-Mart in any industry," Medco CEO David Snow told the Newark Star-Ledger. "This is a very complicated business with serious barriers to entry. I just don't think they're going to pull it off. You just don't snap your fingers and say you're going to be a pharmacy-benefits manager.

Additionally, Walmart entered the pharmacy business but stayed out of the PBM business.

Furthermore, and despite speculation for more than a year, we have not seen any concrete plans by the joint health venture of Amazon, JP Morgan Chase, and Berkshire Hathaway to enter the PBM business. Notably, the newly appointed CEO of this venture—a Harvard surgeon—has experience in health delivery reform rather than in the PBM or prescription drug business. The newly appointed COO was the

[40] See Slide 4 of Professor Sood's Sept 18, 2018 DOJ slide presentation.
[41] *Id.*
[42] V Philip E Areeda & Herbert Hovenkamp, Antitrust Law, ¶ 1121 (2016).
[43] See discussion of barriers to entry at pages 4 to 5 *supra*.
[44] https://www managedcaremag.com/archives/2008/4/could-wal-mart-pbm-succeed, accessed July 15, 2018.

general manager of digital health at Comcast prior to joining the venture. Both these hires suggest that the initial focus of the venture will be using technology to improve health care delivery rather than enter the PBM market.[45]

Finally, other potential entrants do not have the same capabilities as Aetna. Aetna already has 4 percent of the PBM market and has the knowledge and systems to perform core PBM functions. In fact, it is bigger than most standalone PBMs with the exception of MedImpact (see Figure 1 above). The larger size of Aetna matters because it will help Aetna negotiate larger discounts for manufacturers and pharmacies compared to other potential entrants who might have to start from a much smaller scale. Aetna is also an established brand.[46]

Fourth, **the alternate route of entry would have a significant procompetitive effect as compared with entry by the acquisition in question. Otherwise, preventing the merger would contribute no more to competition than allowing it.**

This fourth element is satisfied when, "absent clear evidence to the contrary, a significant procompetitive effect from alternate methods of entry may be presumed on the basis of the preceding showings where the inside merging firm is a significant competitive factor in the market—with a 10 percent or more of sales or a substantial and steadily expanding share."[47]

The proposed CVS-Aetna merger satisfies this fourth element. First, CVS has more than a 10 percent market share.[48] Second, the market for PBM services is concentrated with an HHI of roughly 1900. The merger would eliminate Aetna from the PBM market and transfer the market share of Aetna to CVS. This would increase the HHI by roughly 200 points.[49] Third, Aetna currently only provides PBM services to its own insurance customers. Were it to compete with the larger PBMs and provide PBM services to customers with non-Aetna insurance, the market would become significantly less concentrated. For example, even if Aetna captured merely a two percentage point market share from the top three PBMs, the HHI would decrease by roughly 200 points.[50] Finally, juxtaposing the above points suggests that allowing the merger could increase the HHI of a concentrated market by roughly 400 points.[51]

<u>Results of the application of the Areeda & Hovenkamp test</u>

In summary, the elimination of Aetna as a potential entrant in the PBM market can have significant future and present anticompetitive effects for the following reasons. First, the PBM market is noncompetitive with the same four firms controlling more than 75 percent of the market. Second, CVS is a dominant firm in the PBM market and the merger will increase the market share of CVS and eliminate Aetna, increasing

[45] Slide 5 of Professor Sood's Sept 18, 2018 DOJ slide presentation.
[46] *Id.*
[47] V Philip E Areeda & Herbert Hovenkamp, Antitrust Law, ¶ 1121 (2016).
[48] Slide 6 of Professor Sood's Sept 18, 2018 DOJ slide presentation.
[49] *Id.*
[50] *Id.*
[51] *Id.*

HHI by 200 points. Third, Aetna has the size, skills and economic incentives to enter the PBM market. Finally, there are few other potential entrants due to significant barriers to entry.[52]

WHAT IS THE LIKELIHOOD THAT CVS-AETNA WILL ENGAGE IN VERTICAL FORECLOSURE?

Input Foreclosure in the Health Insurance Market

There is a Significant Risk that CVS/Aetna Would Raise the Costs of PBM Inputs Needed by Aetna Competitors[53]

Both Professor Sood and Amanda Starc, PhD, have opined that a merged CVS-Aetna would have weaker incentives to control prescription drug costs and overall healthcare costs for health plans competing with Aetna. Accordingly, they would be unlikely to compete aggressively for PBM contracts serving Aetna competitors.[54] CVS-Aetna have challenged these expert predictions of input foreclosure by claiming that the PBM arm of the combined company would not want to risk sacrificing a large portion of its business to competitors.

There are strong incentives to foreclose competition in the insurance market by raising the costs of Aetna's rivals. In his testimony before the California Department of Insurance, Professor Sood offers the following example:

> Consider a consumer who spends $10,000 a year on average on healthcare (roughly equal to U.S. per capita health spending) and $1000 or roughly 10 percent of her total spending on prescription drugs (roughly equal to the fraction of health spending on prescription drugs). Data from the Securities and Exchange Commission on the profitability of PBM and health insurance sectors suggest a net profit margin of PBM services to be 2.3 percent and a net profit margin of health insurers of 3.0 percent. Therefore, if CVS/Aetna were to lose this consumer as a PBM customer, then CVS/Aetna would lose about $23 in profits (2.3 percent times $1000). However, if CVS/Aetna were to gain the same consumer as a health insurance customer, then CVS/Aetna would gain about $323 stemming from $300 (3 percent x $10,000) in profits from providing insurance and $23 in profits from providing PBM services. Therefore, one insurance customer is as valuable as 14 PBM customers; providing strong incentives for CVS/Aetna to disadvantage competing health plans to gain insurance customers even if it risks losing some PBM customers.

[52] Slide 7 of Professor Sood's Sept 18, 2018 DOJ slide presentation.

[53] According to Professor Hovenkamp, the government need not establish with certainty that because of a merger the anticompetitive conduct will occur. Instead the merger must merely "raise a significant risk that the conduct will occur See Hovenkamp, Herbert J., "Prophylactic Merger Policy" (2018). *Faculty Scholarship*. 1955. http://scholarship.law.upenn.edu/faculty_scholarship/1955 at 4-8, citing *Hospital Corp. of America v. FTC*, 807 F2d. 1381, 1389 (7th Cir 1986). (Posner, J.), available at https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?referer=http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=2ahUKEwiJgPrbtandAhUK6YMKHVONDzEQFjABegQICBAC&url=http%3A%2F%2Fscholarship.law.upenn.edu%2Fcgi%2Fviewcontent.cgi%3Farticle%3D2957%26context%3Dfaculty_scholarship&usg=AOvVaw0IFI29gz2nOjYzwDasrAF3&httpsredir=1&article=2957&context=faculty_scholarship.

[54] See Starc Report at 10-11; Sood Report at 9-10 and Sood Response at 4-5.

Moreover, in a number of Metropolitan Statistical Areas (MSAs), the Aetna market shares are the largest or second largest and dwarf the size of its competitors. In these markets especially, the behavior that protects Aetna's large shares at the possible expense of lost PBM business is predictable.[55]

Professor Sood observes that the incentives for CVS-Aetna to disadvantage competing health plans are exacerbated by the fact that the PBM market is highly concentrated. Most desirable sources of PBM services are firms like CVS and Express Scripts that are large enough to drive the biggest discounts in drug prices. If Aetna were to merge with CVS, the PBM "competitors" allegedly vying for the CVS-Aetna business chiefly would consist of CIGNA-Express Scripts and United Healthcare Group OptumRx. These two behemoths and CVS-Aetna would form a tight oligopoly of vertically integrated health insurer/PBMs facing the same incentives of not bidding aggressively for contracts that would strengthen their health insurer rivals. Under these circumstances, tacit coordinated behavior of not competing aggressively for PBM customers competing with the insurance arms of the merged companies is likely. Such coordinated conduct would also be difficult to detect given the fact that PBM "customers may not always be well placed to provide evidence regarding what is essentially opaque activity…."[56]

Reinforcing the attractiveness of raising rivals' costs is that the strategy is likely to work. Asymmetrical information and complex contracts make foreclosure difficult to detect. Also, there are simply no standalone PBM alternatives to CVS-Aetna that would possess the bargaining power necessary to drive deep drug discounts.

<u>Is PBM Input Foreclosure in the Health Insurance Market a Significant Issue Given that Several Insurers have their own PBM?</u>

One view is that even if CVS wants to use its PBM to disadvantage insurers competing with Aetna, it does not have much opportunity to do so given that several of Aetna's rivals such as United Healthcare have their own in-house PBMs. To examine this claim, we analyzed data to assess whether and the extent to which non-vertically integrated insurers (insurers that to the best of AMA's knowledge do not have their own in-house PBMs) could be foreclosed from PBM services. Specifically, we calculated the sum of the market shares of all non-vertically integrated insurers in the 57 MSAs where Aetna had the first or second largest market share in the combined HMO+PPO+POS+EXCH (commercial) MSA-level markets. We found that in several markets non-vertically integrated insurers (not including Aetna) accounted for a significant fraction of the market. For example, we found that:

- In 46 (81%) of the 57 MSA-level markets, non-vertically integrated insurers collectively held a commercial market share of 30% or greater.

- In 39 (68%) of the 57 MSA-level markets, non-vertically integrated insurers collectively held a commercial market share of 40% or greater.

- In 31 (54%) of the 57 MSA-level markets, non-vertically integrated insurers collectively held a commercial market share of 50% or greater.

[55] See Sood Report at 7-13, and Sood Response.
[56] Dissenting statement of Commissioner Julie Brill concerning the proposed acquisition of Medco Health Solutions Inc. by Express Scripts Inc. (April 2, 2012) at 5.

Thus, the above analysis suggests that CVS has both the opportunity and the incentive to use its PBM to disadvantage insurers competing with Aetna.

There is a Significant Risk That CVS-Aetna Would Raise the Costs of Retail Pharmacy Inputs Available to Aetna Competitors

The merged firm may also foreclose insurers competing with Aetna from access to CVS "must have" retail pharmacies, either entirely or by offering terms that are not competitive with those offered Aetna.[57] Professor Sood reasons that CVS-Aetna could leverage its must-have pharmacy network to disadvantage competing plans.[58] Health plans that do not have CVS in their pharmacy network will be less attractive to consumers, especially in markets where CVS has a dominant pharmacy market share. CVS-Aetna could exploit this fact by charging higher prices to health plans competing with CVS-Aetna. This effect, says Professor Starc, may be especially important in the market for generic drugs, which are generally competitive at the wholesale, but not the retail, level and represent a large fraction of total bills.[59] In recent years, prices for some generic molecules (even particularly old ones whose branded equivalents' patents expired decades ago) have increased substantially.

According to Professor Sood, if health plans refused to accept the high prices and do not include CVS-Aetna pharmacies in their network, they risk losing customers. If they accept the higher prices, then they face higher health care costs, which might result in higher premiums and lower market share for these health plans. This will result in less competition in the insurance market.[60]

The likelihood of the merged firm's pharmacy customers falling victim to the merged company's favoring the Aetna side of its business is enhanced by "the numbers." Professor Sood has found that "one insurance customer is as valuable as roughly nine pharmacy customers; providing strong incentives for CVS-Aetna to disadvantage competing health plans to gain insurance customers even if it risks losing some pharmacy customers."[61]

Customer Foreclosure in the PBM Market

Aetna currently has a contract with CVS to provide certain but not all PBM services to Aetna. This is a major contract for CVS. In fact, Aetna is CVS's largest customer.[62] A much needed new PBM entrant could compete with CVS for this contract. However, the merger of CVS with Aetna would foreclose the opportunity for a would-be PBM entrant to compete for Aetna's business and achieve sufficient scale to effectively serve the health insurance market.

[57] See discussion of Aetna's market power in retail pharmacy at pp19-20 of AMA August 7 letter.
[58] Sood Report at 11.
[59] Starc Report at 11.
[60] Sood Report at 10 and Starc Report at 11.
[61] Sood Report at 12.
[62] https://www.drugchannels net/2017/12/the-cvs-aetna-deal-five-industry-and html

Figure 1 above shows that post-mergers (CVS-Aetna and CIGNA-Express Scripts) 90 percent of the PBM market will be vertically integrated. The remaining standalone market has one dominant firm (MedImpact) that accounts for 60 percent of the standalone PBM market. This creates formidable barriers to entry-90 percent of the market is vertically integrated and there is a dominant firm in the remaining market. This "customer foreclosure" would further raise market entry barriers associated with the need to gain the covered lives necessary for negotiating discounts. Consistent with this customer foreclosure observation are reports in the Wall Street Journal that CVS is acquiring Aetna to tie-up that business before Amazon can enter the market.[63]

IS THE VERTICAL INTEGRATION OF HEALTH INSURANCE AND PBM SERVICES SO EXTENSIVE THAT AN ENTRANT INTO EITHER MARKET WOULD HAVE TO ENGAGE IN TWO-TIERED ENTRY?

Vertical Merger Causes Anticompetitive Effects in the PBM Market: Increasing Barriers to Entry and Foreclosing Competitors

The 1984 Merger Guidelines recognize that a vertical merger might increase entry barriers and identify three conditions that are generally necessary for vertical mergers to raise anticompetitive entry barrier problems. First, the degree of vertical integration between the two markets (here, the markets for PBM services and health insurance) must be so extensive that entrants to one market (the primary market for PBM services) also would have to enter the other market (the secondary market for health insurance) simultaneously. Second, entry into the secondary level must make entry at the primary level significantly more difficult and less likely to occur. Third, the structure and other characteristics of the primary market must be otherwise so conducive to non-competitive performance that the increased difficulty of entry is likely to affect its performance.[64] All of these conditions are satisfied here.[65]

<u>Vertical Integration is Extensive and Two-Level Entry is Likely to be Required Post-Merger</u>

This merger is likely to have significant adverse entry barrier effects because the merger is part of an existing trend toward vertical integration between the PBM and health insurance markets that has become so extensive that a would-be post-merger entrant to the PBM market also would have to enter the health insurance market simultaneously.

As the discussion above on customer foreclosure reveals, 90 percent of the market is vertically integrated and there is a firm (MedImpact) with a very large share of the remaining (non-vertically integrated) market.

Lacking an outlet for PBM services, any new PBM entrant would need to engage in two-stage entry by also entering the highly concentrated health insurance market that has significant entry barriers independent of integration.

---

[63] See e.g. "A Force behind the Aetna Bid: Amazon," the *Wall Street Journal*, (October 27, 2017).
[64] 1984 Merger Guidelines section 4.212.
[65] The following discussion is structured in accordance with the analytical framework contained in IVA Philip E Areeda & Herbert Hovenkamp, Antitrust Law, ¶ 1011g (2016).

The Need for Two-Level Entry is a Significant Deterrent to New Entry into the PBM Market

The requirement of entry into the health insurance market would make entry into the PBM market "significantly more difficult and less likely to occur."[66] Health insurance markets have high barriers to entry.[67] These include state regulatory requirements; the need for sufficient business to permit the spreading of risk; and contending with established insurance companies that have brand names and have built long-term relationships with employers and other consumers.[68] Perhaps the greatest obstacle is akin to the one facing PBMs—the so-called "chicken and egg problem." Health insurer entrants need to attract customers with competitive premiums that can only be achieved by obtaining discounts from providers. However, providers usually offer the best discounts to incumbent insurers with a significant business—volume discounting that reflects a reduction in transaction costs and greater budget certainty. Hence, incumbent insurers have a durable cost advantage.[69]

The PBM Market is so Conducive to Noncompetitive Performance that the Increased Difficulty of Entry is Likely to Affect its Performance

Given that the PBM market is concentrated, not performing competitively, subject to the likely coordinated interaction of three firms controlling over 70 percent of the PBM market and in need of policies that decrease market concentration, the third enforcement requirement of the 1984 Merger Guidelines—essentially, that the market can benefit from decreasing entry barriers—is met. [70]

The Vertical Merger is Anticompetitive in the Generally Highly Concentrated Markets for Health Insurance

Health Insurance Markets are Highly Concentrated and Have High Barriers to Entry

It is now well-established that markets for health insurance are highly concentrated, often dominated by one or two insurers. The AMA's 2017 *Update to Competition in Health Insurance: A Comprehensive Study of U.S. Markets*, finds that nearly 70 percent of the combined HMO + PPO + POS + EXCH (commercial) markets are highly concentrated. Moreover, Aetna's market share is either the first or second largest in 57 of the 389 MSAs studied. In a separate analysis of Medicare Advantage (MA) insurer markets, the AMA found that 85 percent of MA markets are highly concentrated. Aetna had the first or second largest MA market share in 60 of the 381 MSAs studied. In a total of 94 MSAs, Aetna had the first or second largest share in the commercial market, MA market, or in both of those markets. In addition, health insurance markets have high barriers to entry.

---

[66] 1984 Merger Guidelines at Section 4.2.

[67] See *United States v. Aetna*, 240 F. Supp. 3d 1 (D.D.C. 2017); *United States v. Anthem*, 855 F.3d 345 (D.C. Cir. 2017).

[68] See Robert W. McCann, *Field of Dreams: Dominant Health Plans and the Search for a "Level Playing Field,"* Health Law Handbook (Thomson West 2007); Mark V. Pauly, *Competition in Health Insurance Markets*, 51 Law & Contemp. Probs. 237 (1988); Federal Trade Commission and U.S. Department of Justice, Improving Health Care: A Dose of Competition (July 2004); *Vertical Restraints and Powerful Health Insurers: Exclusionary Conduct Masquerading as Managed Care?*, 51 Law & Contemp. Probs. 195 (1988).

[69] Id.

[70] See supra at pp 2-4 showing that the PBM market HHI is above the 1800 threshold found in the 1984 Merger Guidelines. Note also that the 1984 Merger Guidelines provide for antitrust enforcement at a "somewhat lower concentration level", if other factors "indicate that affective collusion is particularly likely." See 1984 Merger Guidelines at section 4.213.

The Foreclosure of Aetna's Health Insurer Competitors Requiring PBM Services and the Increasing Barriers to Entry in Health Insurance

Aetna rivals or new health insurer market entrants could easily fall victim to a strategy known as "raising rivals' costs." As discussed above, there is a significant risk that the PBMs owned by (or that own) a health insurer could refuse to deal with other health insurers except on discriminatory terms that lessen competition in the health insurance market. Faced with such higher PBM input costs, successful entry into the health insurance market may require simultaneous entry into the PBM market.[71] Given the high barriers to entry in both the PBM and health insurance markets,[72] the need for such two-level entry is a significant deterrent to entry into health insurance markets.

The Need for Two-Level Entry is Likely to Adversely Affect Health Insurance Market Performance

The end result of this input foreclosure for health insurers seeking PBM services will be less competition in an already highly concentrated health insurance market. In the opinion of Professor Sood, the merger will further strengthen the already dominant position of Aetna and will exacerbate the lack of competition in health insurance markets.

The Merger is Likely to Lead to Anticompetitive Behavior Due to Information Sharing Among Competing Health Insurers

If CVS were to merge with Aetna, then health plan entrants and Aetna rivals seeking PBM partners would essentially be forced to share sensitive information with insurer competitors—something they may be loath to do even with the promise of information firewalls.

For example, if the merger were approved, Aetna could potentially have access to the prescription drug experience of Aetna's competitors, which might help it engage in cream-skimming. Aetna could determine the illness profile of its competitors' covered populations. If Aetna determines that those populations consist of desirable insureds, it can design formulary profiles and other health insurance benefit design features to attract them. But if they have high drug expenditures, Aetna could steer them away.

CONCLUSION

For all of the reasons expressed above and supported by the prominent health economists and other national experts at the September 18 meeting in your offices, the AMA believes that, on balance, the proposed CVS-Aetna merger is anticompetitive, as its effect may be substantially to lessen competition. The merger would injure consumers by raising prices, lowering quality, reducing choice, and stifling innovation in the poorly performing markets of PBM services and health insurance. Nothing short of blocking the merger will effectively protect consumers from the long-term anticompetitive impact of this merger.

[71] Starc Report at 11.
[72] See discussions at 8-9 and 13-14 supra.

The AMA was honored to meet with the DOJ to discuss the vital competition concerns that the proposed CVS-Aetna merger raises. The AMA greatly appreciates the DOJ's continuing commitment to protecting competition in health care.

Sincerely,

Henry S. Allen

Henry S. Allen, MPA, JD
Senior Attorney
Advocacy Resource Center
(312) 464-4271
henry.allen@ama-assn.org

Enclosures

Does the divestiture of Aetna's PDP business to WellCare remedy the anticompetitive effects of the proposed CVS acquisition of Aetna?

Neeraj Sood, PhD

December 12, 2018

I thank the American Medical Association for supporting my work in preparing this report. This report reflects my views and opinions, not necessarily the views of the American Medical Association or of my employer, the University of Southern California.

A. About the author

I am a Professor of Health Policy and Vice Dean for Research at the Sol Price School of Public Policy, University of Southern California (USC). Sol Price School of Public Policy is ranked 3rd in health policy and management in the nation by the US News and World Report. I am a founding member and past Director of Research of the USC Leonard D. Schaeffer Center for Health Policy and Economics. I am also a research associate at the National Bureau of Economic Research -- the nation's premier economics research organization.

I have published more than 100 papers and reports on health policy and economics. My past research has focused on health insurance markets, pharmaceutical markets and global health. This research has been published in leading journals in economics, health policy and medicine including publications in the *Quarterly Journal of Economics, Journal of Economic Perspectives, Journal of Health Economics, JAMA* and *Health Affairs.* My work on health care costs and the pharmaceutical supply chain has been cited by the Council of Economic Advisors of President Obama and President Trump. I have been invited to participate in expert consensus committees of the National Academies of Science, Engineering and Medicine. I have received more than $10 million in extramural research funding and have been a scientific advisor and consultant for several organizations in the health care industry. My work has also been featured in media outlets including the *New York Times*, *Washington Post*, *U.S. News and World Report*, and *Scientific American*. I was the finalist for the 16th and 21st Annual NIHCM Health Care Research Award, recognizing outstanding research in health policy. I was also the 2009 recipient of the Eugene Garfield Economic Impact Prize, recognizing outstanding research demonstrating how medical research impacts the economy.

I am an associate editor for leading journals in my field including the *Journal of Policy Analysis and Management*, J*ournal of Health Economics* and *Health Services Research*. I am also a board member of the *American Society of Health Economists*. Prior to joining USC, I was a senior economist at RAND. I obtained my PhD in Public Policy from the

Pardee RAND Graduate School and Masters in Economics from Indiana University and Delhi University.

B. Scope of this report

This report reflects my opinions and views on whether the divestiture of Aetna's PDP business to WellCare is an effective remedy for the anticompetitive effect of the proposed CVS acquisition of Aetna. I use underline font to highlight key points.

The complaint and the competitive impact statement focus on anti-competitive effects of the proposed CVS-Aetna merger in the Medicare individual prescription drug plans or PDP market. They ignore significant anticompetitive concerns in several other markets where CVS and Aetna are major players. I have noted these anti-competitive concerns in the insurance, PBM and pharmacy markets in my prior reports. I will not elaborate on them here.

C. Key Findings

The proposed judgment seeks divestiture of Aetna's PDP business to WellCare as a remedy for the anticompetitive effects of the proposed CVS-Aetna merger in the PDP market. I don't think this is an effective remedy for the anticompetitive effects of the CVS-Aetna merger in the PDP market for the following reasons.

- **Divestiture of Aetna's PDP business will not increase the number of firms competing in Part D markets and therefore not address the anticompetitive effects of CVS-Aetna merger**: Aetna, CVS and WellCare participate in all 34 PDP regions/markets. If the CVS-Aetna merger were approved then there would be one less firm or plan sponsor in the market. This reduction in the number of firms competing in the market or the exit of Aetna from the market would likely change plan bids consequently increasing premiums for the elderly and costs of subsidizing these premiums for the government. The divestiture of Aetna PDP business to WellCare does not change the number of competitors. Regardless of divestiture, there is one less plan sponsor after the merger and therefore the divestiture does

not remedy the anticompetitive effects of the merger. A Congressional Budget Office working paper finds that a reduction in number of firms or plan sponsors is associated with higher premiums for Medicare beneficiaries and higher costs for the government.[1] Finally, the loss of competition as a result of this merger will likely not be rectified by entry of new insurers due to substantial barriers to entry in the PDP market. Point 37 of the DOJ complaint notes: "Entry of new insurers or expansion of existing insurers into the sale of individual PDPs in any Part D region is unlikely to prevent or remedy the proposed merger's anticompetitive effects. Effective entry into the sale of individual PDPs requires years of planning, millions of dollars, access to qualified personnel, and competitive contracts with pharmacies and pharmaceutical manufacturers. Because of these barriers to entry, entry or expansion into the sale of individual PDPs is unlikely to be timely or sufficient to remedy the anticompetitive effects from this merger."

- **Divestiture of Aetna's PDP business to WellCare is unlikely to make WellCare as formidable a competitor as Aetna and therefore unlikely to fully remedy the anticompetitive effects of the merger:** Aetna is a formidable competitor for CVS in the Part D market. Its ability to compete with CVS stems from the size and scale of its operations. As noted in point 16 of the complaint, Aetna is the nation's third-largest health insurance company and fourth largest PDP insurer. Its national presence and size make it a well-known brand. Second, Aetna's size both the Part D market and in other health insurance markets likely allows it to obtain more competitive contracts with pharmacies and pharmaceutical manufacturers and thus allowing it to compete more aggressively with CVS. Since, Aetna will leave the PDP market post-merger, for the divestiture to completely remedy the anticompetitive effects of the merger the divestiture should make WellCare at least as formidable a competitor as Aetna. This is unlikely to happen as WellCare is not as well known a brand as Aetna and the divestiture allows WellCare to use the Aetna brand till only

[1] Stocking, Andrew, James Baumgardner, Melinda Buntin, and Anna Cook. *Examining the number of competitors and the cost of Medicare Part D*. CBO Working Paper Series. 2014-04, 2014.

December 2019. In addition, the divestiture does not make WellCare a company of the same size and scale as Aetna. It merely temporarily increases the size of Part D operations for WellCare. Aetna is a major player in the non-Part D insurance market and this gives it much greater negotiating power with pharmacies and manufacturers. Therefore, the divestiture will not give WellCare the same negotiating or bargaining power with pharmacies and manufacturers as Aetna enjoys because of its size in both the Part D and non-Part D markets. Finally, for plan year 2019 all key decisions regarding management of the Aetna's divested business to WellCare will be made by Aetna under an administrative services agreement. This will not enhance the ability of WellCare to compete with CVS.

- **The divested assets are unlikely to stay viable and therefore unlikely to remedy the harm alleged in the complaint:** Pages 5 and 6 of the proposed judgment note "Defendants will divest the Divestiture Assets in a manner that demonstrates, to the sole satisfaction of the United States after consultation with the Plaintiff States, that the Divestiture Assets will remain viable and that the divestiture of such assets will remedy the competitive harm alleged in the Complaint." I believe that Aetna's divested assets are unlikely to stay viable and this is reflected in the purchase price of the assets. As noted in the complaint, Aetna has about 2.2 million customers in the PDP market. The average yearly premium paid by a Medicare beneficiary for a PDP plan is estimated to be about $500.[2] The federal government subsidizes premiums for Medicare beneficiaries and on average pays about 75% of the total premium paid to a plan sponsor. Therefore, I estimate that Aetna receives approximately $2,000 ($500 paid by beneficiaries and $1500 paid by the government) in premiums per year from its 2.2 million customers. This translates to annual revenues of its PDP business of about $4.4 billion ($2,000 times 2.2 million). According to Aetna's Q3 2018 financial statement its profits or earnings were about 8.6% of premiums[3]. Therefore, I expect Aetna's PDP business to generate about

[2] See https://www.kff.org/medicare/issue-brief/medicare-part-d-a-first-look-at-prescription-drug-plans-in-2019/, accessed December 9, 2018.
[3] See http://investor.aetna.com/phoenix.zhtml?c=110617&p=irol-reportsother, accessed December 9, 2018.

$378 million in profits per year. If this business were to remain viable for multiple years the fair price of this asset would be multiple times the yearly profits or well over a billion dollars. However, it seems that the purchase price of Aetna's PDP business is well below this fair price estimate. In its Q3 2018 financial statement Aetna notes "The purchase price is not material to us". In response to a question from Honorable Judge Richard J. Leon, DOJ attorney Jay D. Owens noted that the purchase price was in the $50 to $100 million range. Why is an asset that generates approximately $4.4 billion in revenues and $378 million in profits per year being sold for $50 to $100 million? One logical conclusion is that the parties do not expect the asset to be viable in medium to long term. In contrast, for the nine months ending Q3 2018, Aetna's earnings were $3.4 billion and CVS is buying Aetna for $69 billion or over 20 times this earning. A potential reason for the long-term non-viability of the divested assets is that CVS-Aetna would be a formidable competitor for WellCare and would regain market share lost in the divested assets. As noted earlier, the divested assets do not significantly enhance the ability of WellCare to compete with CVS-Aetna.

- **CVS has the incentive and ability to disadvantage WellCare in the PDP market thus making WellCare a weak competitor for CVS:** Page 6 of the proposed judgment notes an important stipulation for the divestiture: "(divestiture) ..must be accomplished so as to satisfy the United States, in its sole discretion, after consultation with the Plaintiff States, that none of the terms of any agreement between an Acquirer and Defendants give Defendants the ability unreasonably to raise the Acquirer's costs, to lower the Acquirer's efficiency, or otherwise to interfere in the ability of the Acquirer to compete effectively". Therefore, the government recognizes the incentive for the Defendants (CVS-Aetna) to interfere in the ability of acquirer (WellCare) to compete with CVS. This concern is heightened given that CVS is the PBM for WellCare. As WellCare's PBM and a major pharmacy chain CVS provides critical services to WellCare such as negotiating with manufacturers and pharmacies and therefore has the ability to increase costs and reduce efficiency for WellCare. In addition, WellCare does not have many options to contract with PBMs of the same size and scale as CVS that are not owned by rival health plans.

The other two large PBMs, Express Scripts and OptumRx, are both owned by health plans that compete with WellCare in the PDP market. Thus, CVS not only has the incentive but also has the ability to disadvantage WellCare. It is unclear how and if the government can ensure that this does not happen. In fact, a whistleblower lawsuit filed by the Department of Justice alleges that CVS as the provider of some PBM services for Aetna was increasing generic drug prices and as a result Aetna was paying 25% to 40% more than their competitors. CVS was also reporting incorrect prices to Medicare resulting in higher costs for the government in the form of larger subsidies for CVS and Aetna.[4]

D. Summary

In summary, I conclude that the proposed judgment is unlikely to remedy the anticompetitive effects of the CVS-Aetna merger as:

1) Divestiture of Aetna's PDP business will not increase the number of firms competing in Part D markets
2) Divestiture of Aetna's PDP business to WellCare is unlikely to make WellCare as formidable a competitor as Aetna
3) The divested assets are unlikely to stay viable and therefore unlikely to remedy the harm alleged in the complaint
4) CVS has the incentive and ability to disadvantage WellCare in the PDP market

Neeraj Sood, PhD
December 12, 2018

[4] See https://www.acsh.org/news/2018/05/24/department-justice-cvs-caremark-fraud-and-whistleblowers-13008, accessed December 9, 2018.

Effect of Aetna Divesting its Standalone Medicare Part D Prescription Drug Plans (PDPs) to WellCare on PDP Market Concentration

December 6, 2018

Richard M. Scheffler

Professor of the Graduate School

Director, Nicholas C. Petris Center on Health Care Markets and Consumer Welfare

School of Public Health and Goldman School of Public Policy

University of California, Berkeley

rscheff@berkeley.edu

Daniel R. Arnold

Research Director, Nicholas C. Petris Center on Health Care Markets and Consumer Welfare

School of Public Health

University of California, Berkeley

danielarnold@berkeley.edu

The purpose of this short memo is to analyze the effect of Aetna divesting its standalone Medicare Part D prescription drug plans (PDPs) to WellCare on PDP market concentration. We measure PDP market concentration using the Herfindahl-Hirschman Index (HHI). HHI has been used frequently as a measure of market concentration in merger cases brought by the Antitrust Division of the US Department of Justice (DOJ) and Federal Trade Commission (FTC) and is used in *Horizontal Merger Guidelines* (hereafter Guidelines), authored by these agencies.[1] HHI is calculated by taking the market share of each firm, squaring it, and summing the results.[2] HHI values range from zero to 10,000. The Guidelines consider markets in which the HHI is between 1,500 and 2,500 points to be moderately concentrated, and markets with an HHI in excess of 2,500 points to be highly concentrated.

The Center for Medicare & Medicaid Services (CMS) created 34 PDP geographic regions (excluding U.S. territories). 25 of the 34 PDP regions are a single state. The importance of the 34 PDP regions in the determination of the maximum premium amount Medicare will pay on behalf of low-income subsidy (LIS) enrollees, plus the fact that plan sponsors must offer a plan in at least one entire region (and cannot pick and choose which geographies within a region it offers plans), makes PDP regions the geographic level at which antitrust authorities are likely to examine mergers in the PDP market. Hence, PDP region-level market concentration is analyzed in what follows.

To address the impact of a Aetna divesting its PDP plans to WellCare on PDP market concentration, we calculated 2018 PDP market concentration two ways: (1) assuming Aetna and WellCare have separate market shares (pre-divestiture HHI) and (2) assuming Aetna and WellCare have one combined market share (post-divestiture HHI).

Table 1 shows pre-divestiture and post-divestiture HHIs in 2018 for each of the 34 Part D regions. According to the Guidelines, mergers that would increase HHI by more than 100 points and result in post-merger HHIs between 1,500 and 2,500 "potentially raise significant competitive concerns and often warrant scrutiny."[3] 7 PDP regions would satisfy these conditions in the context of an Aetna divesting its standalone Medicare Part D prescription drug plans to WellCare. These 7 PDP regions are (ranked from largest to smallest HHI change):

- Mississippi (Region 20) +230 HHI
- Arkansas (Region 19) +206 HHI
- Maine, New Hampshire (Region 1) +148 HHI
- Alabama, Tennessee (Region 12) +124 HHI
- Virginia (Region 7) +109 HHI
- Texas (Region 22) +109 HHI
- Louisiana (Region 21) +108 HHI

---

[1] U.S. Department of Justice and Federal Trade Commission. "Horizontal Merger Guidelines." Washington, DC: DOJ/FTC. August 19, 2010. Available from: https://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf

[2] For example, if three firms in a market have market shares of 30%, 30%, and 40%, then the HHI of the market is 3,400 ($30^2 + 30^2 + 40^2$).

[3] See Section 5.3 (pg. 19) of U.S. Department of Justice and Federal Trade Commission. "Horizontal Merger Guidelines." Washington, DC: DOJ/FTC. August 19, 2010. Available from: https://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf

Table 1. Standalone Medicare Part D Prescription Drug Plan (PDP) Market HHIs, 2018

PDP Region	Pre-Divestiture HHI	Post-Divestiture HHI	HHI Change
20 - Mississippi	2,006	2,236	230
19 - Arkansas	1,984	2,190	206
1 - Maine, New Hampshire	1,546	1,693	148
12 - Alabama, Tennessee	1,602	1,726	124
7 - Virginia	1,606	1,716	109
22 - Texas	1,769	1,878	109
21 - Louisiana	1,717	1,825	108
24 - Kansas	2,045	2,140	95
8 - North Carolina	1,700	1,790	90
2 - Connecticut, Massachusetts, Rhode Island, Vermont	1,610	1,700	89
15 - Kentucky, Indiana	1,647	1,734	88
28 - Arizona	1,866	1,943	76
32 - California	2,007	2,079	72
30 - Oregon, Washington	1,614	1,686	72
14 - Ohio	1,755	1,824	69
6 - Pennsylvania, West Virginia	1,702	1,771	69
26 - New Mexico	1,717	1,782	66
10 - Georgia	1,977	2,042	65
13 - Michigan	1,795	1,858	63
18 - Missouri	2,015	2,078	63
23 - Oklahoma	1,996	2,054	58
5 - District of Columbia, Delaware, Maryland	1,797	1,854	57
29 - Nevada	2,383	2,440	57
17 - Illinois	1,547	1,596	49
31 - Idaho, Utah	1,836	1,884	48
3 - New York	1,844	1,891	47
4 - New Jersey	2,320	2,366	46
25 - Iowa, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Wyoming	2,145	2,187	42
16 - Wisconsin	1,588	1,629	40
9 - South Carolina	1,687	1,726	39
27 - Colorado	2,256	2,290	33
34 - Alaska	2,715	2,738	24
11 - Florida	2,292	2,312	20
33 - Hawaii	4,898	4,911	13

Source: Author's analysis of April 2018 enrollment data published by CMS (https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MCRAdvPartDEnrolData/Monthly-Enrollment-by-Contract-Plan-State-County html)

Notes: PDP=stand-alone prescription drug plan. HHI=Herfindahl-Hirschman Index. Pre-divestiture HHI assumes Aetna and WellCare have separate market shares in 2018 HHI calculations. Post-divestiture HHI assumes Aetna and WellCare have one combined market share in 2018 HHI calculations.

Department of Justice Questions on CVS-Aetna Merger

Neeraj Sood, PhD

September 18, 2018

Aetna as a potential competitor in PBM market

- **DOJ question:**
  - **Discuss the importance of Aetna as a potential competitor in the PBM market.**
  - **Doesn't the marketplace already have smaller PBM's such as MedImpact? Don't such smaller PBM's have the same in-house capabilities that Aetna possesses such that the loss of Aetna as a PBM supplier would not make much of a difference in the marketplace?**
- *"It is easy to comprehend the theoretical significance of potential competition and how its loss might be detrimental to present or future competition. Less readily perceived, however, is the existence or significance of any such detriment in fact." Hovemkamp*

Hovenkamp Checklist (1): Is the market noncompetitive

- ***The market is significantly noncompetitive. Otherwise, the possible future addition of a firm to the market would be unimportant.***
  - ***a) A market may be presumed to be noncompetitive where the same 4 firms have accounted for at least 75% of the market for at least 5 years preceding the merger and***
  - ***b) the HHI of the market is at least 1800***
- The same 4 firms – Express Scripts, CVS, OptumRx, and Prime – accounted for more than 75% of the market share in 2017, 2015 and 2011
- The HHI of the market in 2017 was roughly 1900

Hovenkamp Checklist (2): Likelihood of potential entry

- ***The outside merging firm would have entered the market within a reasonable period of time. Otherwise, its merger would not affect the likelihood of future entry.***
  - ***a) the firm has requisite economic capabilities for substantial de novo entry and***
  - ***b) such entry is economically attractive to it.***
- Aetna already provides PBM services to its insurance consumers thus it has the requisite capability to provide the same services to other insurers
  - ✓ In her dissenting statement on the Medco Express Scripts then FTC commissioner Julie Brill noted that Aetna was the nearest competitor for the big 3 PBMs
- PBM and pharmaceutical supply chain market is profitable
  - ✓ I find that middlemen in the pharmaceutical supply chain make "excess returns" compared to other companies in the S&P 500. For example, excess returns for middlemen are 5.9% compared to only 3.5% for the S&P 500.

Hovenkamp Checklist (3): The number of equally likely entrants is not large

- ***The number of equally likely entrants, including the outside firm, does not exceed three (or, at most four).***
- The number of potential entrants are limited due to significant barriers to entry in the PBM market
  - ✓ Quote from Medco CEO when Walmart tried to enter the PBM market in 2008:

    "Many people shake in their boots when they hear the name Wal-Mart in any industry. This is a very complicated business with serious barriers to entry. I just don't think they're going to pull it off. You just don't snap your fingers and say you're going to be a pharmacy-benefits manager."
- Despite speculation for more than a year we haven't seen any concrete plans by the joint health venture of --Amazon, JP Morgan Chase, and Berkshire Hathaway to enter the PBM business.
  - ✓ The newly appointed CEO – a Harvard surgeon – has experience in health delivery reform rather than in the PBM business.
  - ✓ The newly appointed COO was the general manager of digital health at Comcast prior to joining the venture.
- Other potential entrants do not have the same capabilities as Aetna.
  - ✓ Aetna already has 4% of the PBM market and is bigger than most standalone PBMs with the exception of Medimpact.
  - ✓ The larger size of Aetna matters because it will help Aetna negotiate larger discounts for manufacturers and pharmacies compared to other potential entrants who might have to start from a much smaller scale.
  - ✓ Aetna is also an established brand.

Hovenkamp Checklist (4): Potential entry would have a significant procompetitive effect

- ***The alternate route of entry would have a significant procompetitive effect as compared with entry by the acquisition in question. Otherwise, preventing the merger would contribute no more to competition than allowing it.***
  - ***The inside merging firm is a significant competitive factor in the market – with a 10 percent or more of sales or a substantial and steadily expanding share.***
- CVS has a more than 10% market share
- The market is concentrated with HHI of roughly 1900. The merger would eliminate Aetna as a competitor in the PBM market and transfer its market share to CVS increasing HHI by roughly 200.
- Absent the merger, were Aetna to compete with larger PBMs market then the market would become less concentrated
  - ✓Aetna taking 2 percentage point market share from big 3 could reduce HHI by 200

Summary: Significance of Aetna as potential competitor

- ***The elimination of Aetna as a potential entrant can have significant future and present effects because:***
  - ✓The PBM market is noncompetitive with the same 4 firms controlling more than 75% of the market
  - ✓CVS is a dominant firm in the PBM market and the merger will increase the market share of CVS and eliminate Aetna increasing HHI by 200 points
  - ✓Aetna has the size, skills and economic incentives to enter the PBM market
  - ✓There are few other potential entrants due to significant barriers to entry

Two-tiered entry

- **DoJ Question:**
  - **Is the vertical integration of health insurance and PBM services so extensive that an entrant into either market would have to engage in two-tiered entry?**
  - **Are not MedImpact and other smaller PBMs available and good options for even the largest insurers?**
  - ✓ Post Aetna-CVS and Cigna-Express Scripts mergers 90% of the market will be vertically integrated
  - ✓ Small PBMs do not have the scale to negotiate large discounts from manufacturers or pharmacies. So, they are imperfect substitutes for large PBMs.
  - ✓ There are significant barriers to entry in both the PBM and health insurance market and both markets are already concentrated

Vertical foreclosure

- **DoJ Question:**
  - **What is the likelihood that CVS/Aetna will engage in vertical foreclosure?**
- **Foreclosure is likely because:**
  - ✓ CVS controls two key inputs PBM and pharmacies and can use them to foreclose
  - ✓ Strong incentives to foreclose: An insurance consumer is 14 times more valuable than a PBM consumer and 9 times more valuable than a pharmacy consumer
  - ✓ An insurer facing foreclosure does not have many viable standalone PBM options as roughly 90% of the PBM market will be vertically integrated post mergers
  - ✓ CVS is the #1 or #2 pharmacy in 93 of the top 100 pharmacy markets
  - ✓ Aetna is the #1 or #2 insurer in several MSA markets
  - ✓ Asymmetric information and complex contracts make foreclosure difficult to detect
  - ✓ CVS PBM might already foreclose in pharmacy markets - CVS PBM has a national market share of 24% but accounts for 35% of CVS pharmacy revenue