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–

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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).
9 See Drug Channels, December 5, 2017 available at https://www.drugchannels.net/2017/12/the-cvs-aetna-deal-five-industry-and.html.
Hirschman Index (HHI) of roughly 1900 and that the merger would increase HHI by roughly 200 points. Therefore, the proposed merger raises significant competitive concerns under the DOJ and FTC Horizontal Merger Guidelines.

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. There is research and anecdotal evidence that the PBM market is not competitive. 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.” Both policymakers and economists have raised serious concerns about the lack of competition in the PBM market and its implications for consumers. 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.

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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=0ahUKEwjyZu2-_yZu2&bih=726&biw=1536&biw=1536&bih=726&tbm=isch&sa=1&ei=4AYXW8GhB8bijwSArGYDA&gq=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...1c.1.64.img._0.1.103...0i30k1.0...e9uhyaYAS8#imgrc=xO. 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.
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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{21} Not even large payers like Blue Cross or Walmart know the net prices of the drugs they are buying.\textsuperscript{22} One expert has concluded that most of the increase in drug pricing can be attributed to rebates pocketed by PBMs.\textsuperscript{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.”\textsuperscript{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\textsuperscript{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.\textsuperscript{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

\textsuperscript{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).
\textsuperscript{20} CEA Report at 10.
\textsuperscript{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).
\textsuperscript{24} CEA Report at 10.
\textsuperscript{25} See infra at 5
\textsuperscript{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. 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.

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.”

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.” The actual data on PBM market dynamics after 2012, however, paints a very different picture. 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. 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.”

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.

The Loss of Aetna as a Potential Disruptive Competitor in the PBM Market

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.
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.\textsuperscript{35}

\textit{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),\textsuperscript{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.

\textbf{Satisfying the Areeda & Hovenkamp test}

\textit{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.”\textsuperscript{37}

As Professor Sood, shows below, the proposed CVS-Aetna merger satisfies this first element of the Areeda & Hovenkamp test:

\begin{itemize}
  \item CEA Report at 10.
  \item See, V Philip E Areeda & Herbert Hovenkamp, Antitrust Law, ¶ 1121 (2016).
  \item Id.
\end{itemize}
### Figure 1: PBM Market Shares 2017

**PBM Market Share, by Total Equivalent Prescription Claims Managed, 2017**

<table>
<thead>
<tr>
<th>PBM Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS Health (Caremark)¹</td>
<td>25%</td>
</tr>
<tr>
<td>Express Scripts</td>
<td>24%</td>
</tr>
<tr>
<td>OptumRx (UnitedHealth)</td>
<td>22%</td>
</tr>
<tr>
<td>Humana Pharmacy Solutions</td>
<td>7%</td>
</tr>
<tr>
<td>Medimpact Healthcare Systems</td>
<td>6%</td>
</tr>
<tr>
<td>Prime Therapeutics</td>
<td>6%</td>
</tr>
<tr>
<td>Aetna</td>
<td>4%</td>
</tr>
<tr>
<td>All Other PBM + Cash Pay²</td>
<td>4%</td>
</tr>
</tbody>
</table>

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. 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.


### Figure 2: PBM Market Shares 2015

**PBM Market Share, by Total Prescription Claims, 2015**

<table>
<thead>
<tr>
<th>PBM Name</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express Scripts</td>
<td>26%</td>
</tr>
<tr>
<td>CVS Health (Caremark)</td>
<td>25%</td>
</tr>
<tr>
<td>OptumRx (UnitedHealth)</td>
<td>22%</td>
</tr>
<tr>
<td>Humana Pharmacy Solutions</td>
<td>10%</td>
</tr>
<tr>
<td>Prime Therapeutics</td>
<td>8%</td>
</tr>
<tr>
<td>Medimpact Healthcare Systems</td>
<td>6%</td>
</tr>
<tr>
<td>All Others</td>
<td>4%</td>
</tr>
</tbody>
</table>

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 Esigna prescription claims volume.  
Source: Pembroke Consulting estimates

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

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\(^{38}\) 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 \textit{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.\footnote{See Slide 4 of Professor Sood’s Sept 18, 2018 DOJ slide presentation.} 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.\footnote{Id.}

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.

\textbf{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.”\footnote{V Philip E Areeda & Herbert Hovenkamp, Antitrust Law, ¶ 1121 (2016).}

The proposed CVS-Aetna merger meets 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.\footnote{See discussion of barriers to entry at pages 4 to 5 supra.} 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: \footnote{https://www.managedcaremag.com/archives/2008/4/could-wal-mart-pbm-succeed, accessed July 15, 2018.}

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
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

Results of the application of the Areeda & Hovenkamp test

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.\textsuperscript{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\textsuperscript{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.\textsuperscript{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.

\textsuperscript{52} Slide 7 of Professor Sood’s Sept 18, 2018 DOJ slide presentation.

\textsuperscript{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=2ahUKEwJlJgPrbamdAhUK6YMKHVONDZzEQFjABegQICBAC&url=http%3A%2F%2Fscholarship.law.upenn.edu%2Fcgi%2Fviewcontent.cgi%3Farticle%3D2957%26context%3Dfaculty_scholarship&usg=AOvVaw0IffI29gz2nOiYzWDAsrAF3&httpsredir=1&article=2957&context=faculty_scholarship.

\textsuperscript{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.\textsuperscript{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….”\textsuperscript{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.

\underline{Is PBM Input Foreclosure in the Health Insurance Market a Significant Issue Given that Several Insurers have their own PBM?}

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:

\begin{itemize}
  \item In 46 (81\%) of the 57 MSA-level markets, non-vertically integrated insurers collectively held a commercial market share of 30\% or greater.
  \item In 39 (68\%) of the 57 MSA-level markets, non-vertically integrated insurers collectively held a commercial market share of 40\% or greater.
  \item In 31 (54\%) of the 57 MSA-level markets, non-vertically integrated insurers collectively held a commercial market share of 50\% or greater.
\end{itemize}

\textsuperscript{55} See Sood Report at 7-13, and Sood Response.
\textsuperscript{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. Professor Sood reasons that CVS-Aetna could leverage its must-have pharmacy network to disadvantage competing 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 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. 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.

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.”

**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. 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.

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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](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.  

**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.  

All of these conditions are satisfied here.

**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 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.

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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.

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66 1984 Merger Guidelines at Section 4.2.
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. Given the high barriers to entry in both the PBM and health insurance markets, 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