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# DATA SHARING IN THE HEALTHCARE INDUSTRY

by Sofia Jordan



# DATA SHARING IN THE HEALTHCARE INDUSTRY

## TOWARDS A REGULATORY MODEL THAT SAFEGUARDS FUNDAMENTAL PATIENT RIGHTS

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*The digital age poses challenges that require governments to think more proactively and broadly about regulation, especially about the power data grants corporations and how this is changing different industries. In particular, as it pertains to healthcare in the United States, mergers and acquisitions have increased since the passage of the Affordable Care Act. Consequently, antitrust authorities have become an ever-more important decision-making actor. To protect patients' fundamental rights, policymakers, regulators, and elected officials need to expand traditional definitions of consumer welfare and explore new tools to hold corporations accountable. A new inter-agency regulatory model would unlock broad expertise, thus better mitigating the threats of gigantic industry players and placing special emphasis on equitable data governance.*

### INTRODUCTION

In any industry, mergers and acquisitions have always been a source of worry for antitrust authorities; with less competition, there's always the risk of monopoly power leading to higher prices and fewer or poorer services. Health, however, is not like most markets. Consolidation in the healthcare industry can lead to better services and thus better patient outcomes. Considering the substantial differences<sup>1</sup> between providing health care in comparison to say, a taxi ride, we face a crucial tension in regards to "how much market" we should allow for in this industry.<sup>2</sup> On one hand, there are benefits to more integration; for instance, access to swaths of data can result in more comprehensive, more personalized and, ul-

timately, better treatments while also containing costs. On the other hand, however, are the questions of how much power data grants corporations and how government agencies should be thinking of regulating insurers and providers in order to preserve fundamental rights like patient privacy.

Striking an equitable balance between outcomes and power is especially important given how much data is involved throughout the entire healthcare system: information is created, analyzed, stored and disseminated every single time a patient receives care; whether it be a CT scan, a prescription for drugs, or a referral to a specialist.

While access to more data has tremendous potential to advance care, we should be

vigilant about how it will be used and by whom. It is a well-known fact that data regarding consumer behavior has been extensively mined, analyzed, and scrutinized for profit-making; casinos in Vegas will target certain clients and offer them discounts at their hotels in order to encourage bouts of gambling<sup>3</sup> and menstrual tracking-apps have integrated with social media so that a woman who misses her period receives diaper-related marketing on Instagram. How could these dynamics play out in health care?

In this article, I state that in the health-care industry, there are positive aspects of consolidation — namely, more coordinated care, better patient outcomes and contained costs — but that overlooking the crucial aspect of access to data — and the sheer power it affords companies — is a tremendous blind spot when trying to regulate them. In the digital age, where data privacy and ownership are a vital cornerstone of how consumers interact with corporations, I pose that regulatory models need to be adjusted if we are to preserve certain fundamentals rights like patient privacy.<sup>4</sup> In particular, I describe why the current antitrust framework may be insufficient and compare it with a proposed, inter-agency regulatory model. The two criteria under which I evaluate these two policies are efficiency and equity, the latter analyzed under the lens of patient-privacy protection. With this, my goal is to discuss the regulatory challenges that the era of big-tech and data “as the new oil” pose and recommend a set

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of contextualized norms and institutional infrastructure that can protect people’s fundamental rights while expanding how we think about consumer welfare.

## WHY INTEGRATION MAKES SENSE

The Affordable Care Act of 2010 (ACA), aimed to transform various aspects of the health care system in the United States. One major goal was to shift financial risk from the federal government to insurers and providers in order to promote better health outcomes and a more efficient delivery of services. Arguably, this has led to a shift in the system towards more contained and managed care, with increased power of governments as payers, and away from the free-market paradigm.

In order to achieve this, Medicare and Medicaid increased the amount of care that was reimbursed on an episode basis<sup>5</sup> rather than on fee-for-service models. In an episode-based payment structure, the federal government pays insurers a one time, all-inclusive payment for patients to receive care in a specific network, rather than per each line item of treatment in an open network plan.<sup>6</sup> As a result, providers face increased monetary pressure to deliver value-based treatment — a delivery model in which providers, including hospitals and physicians, are paid based on patient health outcomes — in order to contain costs and comply with new regulations or risk federal reimbursements. This change led to consolidations across the continuum of care — a phenomena I further explain

in the following section — as health networks, insurers and physicians sought to reduce expenditure in administrative costs, decrease in-hospital treatment and promote the delivery of services through primary and community-based care.

In this context, there is one key piece that improves quality of care for patients: access to data. This is, of course, not novel in the day and age we live in, where technology is not only used to better streamline processes but also to understand how people behave and tailor services to be ever more personalized. This is particularly true in health care, where the benefits of aggregating data and consolidating across the value chain are well documented,<sup>7</sup> and have already been incentivized and pursued. The correct use of data allows for more advanced and personalized treatments, improved operational efficiency due to fewer medical errors and readmissions, and scientific breakthroughs because diseases can be studied more profoundly.

However, this situation confronts us with a new regulatory puzzle to solve: how to maintain and promote the incentives that allow for greater coordination and better delivery of care, while constricting practices and infrastructures that may lead to market power abuse, specifically those that come from increased access to data.

The healthcare industry has become more vertically integrated: insurers, pharmacies, hospital systems and drug manufacturers have all tried to achieve synergy to provide a wider array of services more efficiently.

## WHY INTEGRATION CAUSES DATA-RELATED ISSUES THAT ARE CURRENTLY NOT BEING DISCUSSED

Companies can grow and increase their profits in a variety of ways; one of the most straightforward being mergers and acquisitions.<sup>8</sup> Buying a competitor — known as horizontal integration — quickly raises regulatory eyebrows as it is a direct method of decreasing competition in a market.

However, businesses can also pursue vertical integration, that is, consolidating across the value chain by acquiring different stages of production. Over the past several years, the healthcare industry has become more vertically integrated: insurers, pharmacies, hospital systems and drug manufacturers alike have tried to achieve some sort of synergy by integrating in order to provide a wider array of services in a more efficient manner.

One of the most notable — and controversial — examples of this is the CVS-Aetna case.<sup>9</sup> In this example of vertical integration, the pharmacy chain CVS announced in 2017 that they would take over the insurance company Aetna in a US \$70 billion operation. However, the Tunney Act of 1974 requires that these types of operations be approved by a judge, examining whether the agreement between the regulator and the companies is actually meeting the public interest.<sup>10</sup> The American Medical Association, the AIDS Healthcare Foundation, and consumer interest groups<sup>11</sup> all expressed concern about how this might affect the prices that patients faced. After

holding a hearing to ponder both sides of the argument, U.S. district judge Richard Leon approved the deal. With this, the newly rebranded CVS Health — the country’s biggest pharmacy chain<sup>12</sup> — now held control of three layers of services: the insurance plan segment through Aetna,<sup>13</sup> the pharmacy benefit manager (PBM)<sup>14</sup> — the company that delivers prescription benefits — and the actual pharmacy selling directly to patients.

Critics of this deal maintained that the mechanisms through which this new giant of the industry would reduce competition were varied,<sup>15</sup> but most importantly, that almost any gain in potential cost savings would rarely benefit consumers and instead be easily captured by shareholders as higher profits, given the market concentration and lack of transparency present.

When considering their impact on patient privacy, I maintain that to fully grasp the extent to which mega mergers influence market structures we need to understand the power that access to overwhelming amounts of data affords companies, and, consequently, determine the risks that traditional antitrust governance may overlook.

In this case, CVS Health has complete oversight of patient behavior from the moment they request treatment until they purchase the needed prescription drugs. This facilitates the selection of different people into money-making channels much

more easily: the pharmacy now knows a person’s spending structure and can target those who are more likely to avoid generics and offer the insurance-covered drug even though it may have a higher co-pay. With this information, the company can also discriminate against patients who are not insured by them and exclude them from price discounts or special offers. In the long run, by accessing data from services reimbursements, CVS Health can model who the healthier patients are, and steer them towards buying insurance from them, effectively excluding those who are

less healthy from their risk pool. As a PBM, it is easy for CVS Health to foreclose competition from competing pharmacies since they know the others’ prices, usages, and methods of delivery. Geographically, this can easily evolve into

Shortcomings of current antitrust policymaking include the narrow definition of consumer welfare and limited tools of analysis for evaluating deals that change market structure.

a fiercely inequitable scenario in which certain communities end up with a single walk-in pharmacy, which controls prices, supply and can also obtain patient data through walk-in services.

I propose that one of the shortcomings of current policymaking is the narrow definition of consumer welfare and the limited tools of analysis for evaluating deals that change market structure. As shown in the CVS/Aetna hearings, certain scholars, economists and lawyers have shared their concerns about antitrust governance. Lina Khan, an academic fellow at Columbia Law School and the author of “Amazon’s Antitrust Paradox”, has exposed that simply “*pegging competition to consumer welfare defined as short-term price effects is [a*

framework that is] *unequipped to capture the architecture of market power in the modern economy.*"<sup>16</sup> In this context, the two areas I focus on are data concentration and patient privacy.

## CURRENT ANTITRUST REGULATION AND THE PARTICULAR CASE OF HEALTHCARE

Antitrust regulation<sup>17</sup> seeks to advance free and open markets in which competition can flourish.<sup>18</sup> This mission is contained in the Sherman Act, a law that Congress passed in 1890 to contain the power of large "trusts" like the U.S. Steel and Standard Oil<sup>19</sup> company and whose main goal was to restrict agreements that would lead to monopolization or detriment trade. There are two federal institutions in charge of enforcing these regulations: the Department of Justice (DoJ) and the Federal Trade Commission (FTC).

In the case of health care, there has long been a delicate balance between strict enforcement of antitrust regulation and flexibility to encourage efficient care delivery.<sup>20</sup> For instance, in 1993, both the Federal Trade Commission and the Department of Justice established enforcement guidelines that described "safety zones"<sup>21</sup>: certain joint-ventures and mergers that would not trigger antitrust enforcement since they were deemed as "pro-competitive and efficiency-driving,"<sup>22</sup> which, although not health-specific might be a useful framework for this industry. For instance, when thinking about whether a merger would avoid duplication and standardize processes for the better even though it may reduce the number of competitors in the industry. Additionally, the FTC has the explicit goal of fostering innovation in this particular

industry,<sup>23</sup> an objective that is especially important in the post-ACA era where actors have been incentivized to deliver care in new ways.

In this context, antitrust regulation determines that both the FTC and DoJ have jurisdiction over merger review; even though this is rarely a "one-size-fits-all" model and evaluations are done on a rigorous, case-by-case analysis by the agency with the most industry expertise, the lens under which these operations are evaluated is almost exclusively a technical one.<sup>24</sup> Any transaction that is above a certain threshold of market power is analyzed and will be barred if an effect of the deal "may be substantially to lessen competition or to tend to create a monopoly."<sup>25-26</sup>

In the case of health care, in general, special attention is placed on this latter aspect since purchasing power that comes from market concentration may afford certain actors the ability to negotiate prices and artificially raise them. This is true for instance if a network of hospitals, or a physician's association, becomes large enough that they can arbitrarily set prices and demand increased reimbursements from payers since, for payers, it would be costly to exclude them from the network because it would mean offering less attractive plans for patients. In recent years these types of mergers have received more scrutiny as they are seen as a threat to competitive prices and lack a demonstrated increase in quality of patient care.<sup>27</sup>

## CHALLENGES IN THE DIGITAL AGE

More recently, the FTC has acknowledged that the digital age poses new challenges as to how we think about merger revision<sup>28</sup>

stating that digital platforms have significantly altered our economy, especially in relation to how goods and services are marketed, targeted and delivered.<sup>29</sup> Probably the most striking transformation — and one that should raise concerns even beyond antitrust enforcement — is the power that access to data can grant. Scholars have argued that the gain for Google is not just knowing the behavior of a particular individual but the sheer amount of critical, networked data that allows the company to exploit revenue by comparing one person to similar users, drawing conclusions from this, and then predicting (and even influencing) future behavior. This control undoubtedly allowed Google to lock-in its dominant position.<sup>30</sup>

This is no different in the healthcare industry: with federal policy promoting value-based purchasing, there is an increased desire — on both the payer and provider's side — to purchase, generate, process and assess data in order to drive innovation and provide evidence of positive results in treatment.<sup>31</sup> This can result both in more transparency around quality and pricing structures and creating an ecosystem that has some level of information comparison and collaboration.<sup>32</sup> While antitrust law is usually concerned with information-sharing among competitors, as long as this data is not used to alter prices or other competitively determined terms it is perfectly legal.

Access to more (and better) data has tremendous potential and could advance care in profound ways. More specifically, it is almost impossible to imagine a health system that would be able to deliver value-based and community-based care effectively without accessing information about patient history, behavior and family or social

context. Social determinants of health have proven to be a crucial aspect of successful treatment. It is unsurprising then that both Amazon and Google<sup>33</sup> are looking to integrate into this space by leveraging the enormous amount of data they hold.

In the following section I explore the potential risks of using the framework described above to regulate this industry, especially in terms of what's overlooked or "unseen".

## **AFFORDANCES OF DATA CONCENTRATION**

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On the one hand, authorities should be concerned with the incentives behind mergers and acquisitions. While being acquired is an enticing way to capitalize investment on the startup side,<sup>34</sup> this might establish a precedent in which incumbent firms acquire nascent firms simply to eliminate competition thus stifling innovation in the mid-term. More importantly, vertical integration poses the harm of leverage and foreclosure<sup>35</sup>: the idea that when a firm has a dominant position in one market, it has an advantage over its competitors to become a dominant actor in adjacent markets or lines of business by using the existing knowledge of its users. How data contributes to locking in this economic power is rarely explored by antitrust authorities.

## **PATIENT PRIVACY: A FUNDAMENTAL RIGHT**

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In addition to this, data privacy has arisen as a concern in recent years. Federal regulation has been in place since 1996 to safeguard this aspect in the healthcare industry in particular. The Health Insurance Portability and Accountability Act (HIPAA)

established patient — and thus, personal — rights over health data. Additionally, it stated provisions for security and privacy of medical information and set standard mechanisms for interchangeability and protection in electronic form.<sup>36</sup> In 2009, the Technology for Economic and Clinical Health Act (HITECH Act) strengthened civil and criminal enforcement of HIPAA and mandated widespread adoption of electronic health records (EHR).<sup>37</sup>

As health becomes a tech- and data-intensive industry, concerns about privacy being a patient right rather than a purchasable commodity should be taken into account by government entities. While the above regulations are a correct step in this direction it is important to question the assumptions that drive them. Neoclassical economic theory would establish that privacy can be understood as a consumer preference and — as such — online platforms would work as any other market in which people choose the optimal amount of information they are willing to share.<sup>38</sup> Of course, such rigorous standards of privacy rarely emerge, especially in digital services where there is an inherent asymmetry of information that can disfavor users who don't really have the choice to consent to — or refuse — “terms of services.”<sup>39</sup>

To the extent that privacy law and antitrust law can recognize the sheer power — both economic and political — of data-owners, regulation should play a crucial role in balancing this out to ensure that patients' data is stored securely, and its governance

is equitable and just. Crucial privacy goals should be: to establish clear penalties for security breaches (and guidelines to avoid them), thoroughly analyze when mergers and acquisitions can lead to one company holding too much of a single person's information, and heavily restricting information flows (i.e. when it should or should not be sold to third parties).

As health becomes a tech- and data-intensive industry, government entities should consider concerns of privacy as a patient right rather than as a purchasable commodity.

In the following section I explore what regulatory model would better serve the challenges described above and be more appropriate in addressing the areas that current antitrust doctrine might overlook or ignore.

## AN ASSESSMENT OF THE STATUS QUO AND A NEW REGULATORY MODEL

Under the lens of **efficiency** and **equity** I describe the pros and cons of the status quo vs. the alternative regulatory model, and offer a recommendation. I define **efficiency** as the net value of updating regulation, detecting breaches, and enforcing the norm. To the extent that these costs are less than the dollar value of the harm consumers may face in the form of increased prices or worst services, the regulatory model can be said to be meeting its goal. I explore **equity** under the lens of data ownership and fair and inclusive governance. In particular, I analyze power structures that may be detrimental to patients, especially those of lower socioeconomic status and levels of educational attainment.

## STATUS QUO

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Congress originally passed the Sherman Act to respond to a fear of concentrated power and enforce laws that would keep markets open and free from industrial monarchs.<sup>40</sup> It was a law “for diversity and access to markets”<sup>41</sup> concerned with limiting economic concentration in order to avoid the resulting unjust accumulation of political power.<sup>42</sup> Even though the original objectives of antitrust understood consumer welfare as a broad term that incorporated numerous factors, policy in this realm has shifted in the last 50 years towards considering lower prices as the sole objective to preserve.<sup>43</sup> As a result, both agencies and courts have become very lax in terms of approving mergers and acquisitions if they offer lower prices to consumers. I offer a brief analysis of how this framework can be assessed in terms of the two criteria described above.

**Efficiency:** The DOJ and FTC coordinate frequently and both offer concrete guidelines that reduce regulatory uncertainty. Years of consistent decision-making has arguably deterred unwanted behavior, thus making it easier to detect felonies which reduces the cost of enforcement. Additionally, by neoclassical standards, teams from both agencies boast indisputable expertise, and cases have been processed throughout decades of work so that enough critical knowledge can guide new generations of analysts and regulators. Over the course of the years, these agencies have accumulated experience that supports their goal of making optimal decisions at the lowest possible costs. Under the prism of what the regulator should do in a market-based economy — that is, maintaining a limited role circumscribed around offering certainty and providing the correct incentives to deter

felonies — the current institutional infrastructure is efficient.

**Equity:** By excluding analyses of market structure, size and conflicts of interest,<sup>44</sup> the current competition framework overlooks certain risks of consolidation in healthcare. For instance, more access to data can enable insurance companies to select their clients even better and offer targeted products that discriminate more effectively based not only health status, but also on socioeconomic characteristics and behavior. For those who cannot protect their privacy as effectively — or lack the knowledge to understand the extent to which we have a “digital self” or footprint — this is especially detrimental. The current regulatory model also compromises equity by allowing companies to grow far too large. Current doctrine simply evaluates whether a firm chooses to exert market power — for instance through predatory pricing — rather than recognizing the affordances and leverage that comes from becoming a massive owner of data. In this sense, the status quo clearly fails in safeguarding a wider range of interests such as patient privacy, non-discrimination and stopping corporate lobbying. Additionally, it does not provide antitrust agencies with jurisdiction over auditing the use and control over data nor around controlling the dynamics of bargaining power.

## ALTERNATIVE: SHARED REGULATORY SPACE AND STRATEGIC, TARGETED, ENFORCEMENT

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Assessing and regulating healthcare consolidation in the digital age, while tackling the blind spots current tools miss, may be too costly a process for a single agency to undertake.

One concern in Administrative law<sup>45</sup> with overlapping governance structures is redundancy. However, Jody Freeman, a professor at Harvard Law School, poses that shared jurisdiction of certain regulatory actions is actually beneficial<sup>46</sup> and already present in several aspects of economic and social regulation. Multiple agency delegation, if coordinated correctly, can empower organizations with relative expertise and provide opportunities to test conflicting information. Additionally, it creates an ecosystem of shared accountability in which “red flags” are easily raised across the decision-making process. Finally, spreading out regulatory action allows Congress to concentrate efforts on specific goals and support particular agencies that respond to constituencies.<sup>47</sup>

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**Joint rulemaking** at the federal level for the healthcare industry — defined by the legal scholar Jody Freeman as “an inter-agency regulatory negotiation”<sup>48</sup> — would allow for a broader set of goals to be protected in this space.<sup>49</sup> Models like this have been most notably adopted in financial regulation and in environmental protection since this type of governance structure allows for agencies in the same regulatory sphere to remedy inconsistencies and address conflicts that arise from newly adopted legislation. In order to achieve these efficiencies in healthcare, I propose that, in addition to antitrust governance and HIPAA-HITECH regulations, a new agency is created for regulation pertaining exclusively to data: its ownership, use, control and flow. This would allow for the new entity to develop key expertise and enforce

specific goals in relation to data abuses. Working jointly with all other relevant agencies would lead to a more comprehensive view of the risks associated with mergers and acquisitions, thus leading to better regulatory decisions.

**Efficiency:** Such a model requires agency coordination to minimize inconsistency and maximize the gains that come from diverse expertise and analyses. Initial trans-

action and communication costs between agencies can be contained by drawing on the experience of different federal agencies that have shifted towards this model. Since I am proposing the creation of a new agency, it is reasonable to assume that this would increase overall costs of regulation in comparison to the status quo. However, after an adaptation phase — and to the extent that effective administration and coordination exist — this model could lead to lower enforcement costs since it would reduce the probability of accepting mergers that should have been banned when considering risks that the status quo would have overlooked.

**Equity:** This regulatory model would explicitly include concern about a firm’s capacity to cross-leverage data, hence avoiding incumbent firms from growing into “too big to fail” corporations. A powerful and effective regulatory governance structure is crucial to defend innovation, open markets, and, ultimately, democracy: it provides government with enough power to counteract the leverage that current owners of data have. More importantly, a multiple-agency delegation would better

safeguard patients' rights by protecting their medical history from hacks, breaches and misuse. Finally, it would also avoid targeted marketing from discriminating against those who are less healthy, older and more vulnerable.

## RECOMMENDATION

Create a new inter-agency model in which, through joint rulemaking, there is special emphasis placed on equitable data governance that protects patient privacy. Given the importance of expanding the way we think about government and its crucial role in defending our rights — especially when the digital age has allowed corporations to leverage enormous economic and political power — I believe that the status quo needs to shift. Healthcare is an area where equity has to govern policy, and the current regulatory framework used to address consolidation in this industry, is heavily lacking in this particular criterion. Additionally, a new regulatory model might increase costs initially, but such a model has the potential to unlock widespread expertise in the mid-term, and thus better mitigate the threats of gigantic industry players.

## CONCLUSION

The digital age poses challenges that require governments to think more proactively and broadly about regulation. In order to protect people's fundamental rights, policy makers, regulators, and elected officials need to expand traditional definitions of consumer welfare and explore new tools to hold corporations accountable.

## ENDNOTES

1. Other aspects to consider are substantial involvement from the government, the fact that payers are often different than the person receiving treatment, the asymmetry of information that governs most relationships (i.e. patient-doctor, payer-provider) and payment structures based on reimbursements from either public or private entities.
2. I use the word patient throughout this document instead of 'consumer' precisely to reinforce the idea that this market is different. However, if it is easier to draw parallels with other industries as to who the patient is, I acknowledge that the relevant actor is the consumer.
3. Complinks. "THE GAMING INDUSTRY'S BIG DATA REVOLUTION: HOW CASINOS BIG AND SMALL CAN DRIVE CUSTOMER ACQUISITION, RETENTION, AND LOYALTY," February 11, 2020. <https://complinks.co/2019/02/20/the-gaming-industrys-big-data-revolution-how-casinos-big-and-small-can-drive-customer-acquisition-retention-and-loyalty/>.
4. Khan, Lina M. "Amazon's antitrust paradox." *Yale LJ* 126 (2016): 710.
5. Also known as bundled payments are a form of reimbursements designed on the basis of expected costs for episodes of care. Essentially, it is a one-time, all-inclusive payment for all services delivered, no matter how many providers are involved.
6. More information on: [https://international.commonwealthfund.org/countries/united\\_states/](https://international.commonwealthfund.org/countries/united_states/)
7. Wang, Yichuan, LeeAnn Kung, and Terry Anthony Byrd. "Big data analytics: Understanding its capabilities and potential benefits for healthcare organizations." *Technological Forecasting and Social Change* 126 (2018): 3-13.
8. Sometimes abbreviated to M&A.
9. "United States and Plaintiff States v. CVS Health Corp., and Aetna, Inc." The United States Department of Justice, September 9, 2019. <https://www.justice.gov/atr/case/united-states-and-plaintiff-states-v-cvs-health-corp-and-aetna-inc>. <https://www.justice.gov/atr/case/united-states-and-plaintiff-states-v-cvs-health-corp-and-aetna-inc>
10. 15 U.S.C.A. § 16.

11. Harris, Andrew M, and David McLaughlin. "CVS Wins Court Approval for Antitrust Accord on Aetna Deal." Bloomberg, September 4, 2019. <https://www.bloomberg.com/news/articles/2019-09-04/cvs-wins-court-approval-for-antitrust-settlement-for-aetna-deal>.
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13. The third largest insurer in the country with 22.1 million members and a revenue of US\$ 60 billion in 2019. <https://www.valuepenguin.com/largest-health-insurance-companies>
14. PBMs are also the key intermediary between pharmaceutical companies and pharmacies, who also design the formulary for the health plan.
15. California, State of. "Aetna-CVS Merger Information." CA Department of Insurance, n.d. <http://www.insurance.ca.gov/01-consumers/110-health/60-resources/Aetna-CVS-Merger-Information.cfm>.
16. Khan, Lina M. "Amazon's antitrust paradox." Yale IJ 126 (2016): 710.
17. The Sherman Act, the Clayton Act and the Federal Trade Commission Act). 15 U.S.C §1, 15 U.S.C §12, 15 U.S.C §45.
18. Burke, Taylor, Lara Cartwright-Smith, Erica Pereira, and Sara J. Rosenbaum. "Antitrust aspects of health information sharing by public and private health insurers." BNA's Health Law Reporter (2009).
19. Congressional Research Service, "Antitrust Law: An Introduction". Available at: <https://fas.org/sgp/crs/misc/IF11234.pdf>
20. Burke, Taylor, Lara Cartwright-Smith, Erica Pereira, and Sara J. Rosenbaum. "Antitrust aspects of health information sharing by public and private health insurers." BNA's Health Law Reporter (2009).
21. Blumstein, James F. "Health care reform and competing visions of medical care: antitrust and state provider cooperation legislation." Cornell L. Rev. 79 (1993): 1459.
22. Ibid
23. Federal Trade Commission, Guide to Antitrust Laws. Available at: <https://www.ftc.gov/news-events/media-resources/mergers-and-competition/merger-review>
24. Federal Trade Commission, Guide to Antitrust Laws. Available at: <https://www.ftc.gov/news-events/media-resources/mergers-and-competition/merger-review>
25. Clayton Act. 15 U.S. Code § 18.
26. Constituting a "restraint of trade" or an "unfair method of competition" can also be considered enough to ban vertical integration. Sherman Act, Ch. 647. SS 1,3, 26 Stat. 209, 209 (1890). Federal Trade Commission Act, Ch. 311 S 5, 38 Stat 717, 719 (1914).
27. Koch, Thomas, and Shawn W. Ulrick. "Price effects of a merger: Evidence from a physicians' market." Federal Trade Commission, Working Paper 333 (2017).
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29. Ibid
30. Newman, Nathan. "Search, antitrust, and the economics of the control of user data." Yale J. on Reg. 31 (2014): 401.
31. Burke, Taylor, Lara Cartwright-Smith, Erica Pereira, and Sara J. Rosenbaum. "Antitrust aspects of health information sharing by public and private health insurers." BNA's Health Law Reporter (2009).
32. Ibid
33. More information available: <https://health.google/>
34. Yun, John M. "Testimony on 'Competition in Digital Technology Markets: Examining Acquisitions of Nascent or Potential Competitors by Digital Platform' before the Senate Judiciary Committee, Antitrust Subcommittee." George Mason Law & Economics Research Paper 19-30 (2019).
35. Khan, Lina M. "Amazon's antitrust paradox." Yale IJ 126 (2016): 710.
36. Probably the most relevant aspect of HIPAA is what is known as The Privacy Rule, which "requires appropriate safeguards to protect the privacy of personal health information and sets limits and conditions on the uses and disclosures that may be made of such information without patient authorization." <https://www.hhs.gov/hipaa/for-professionals/privacy/index.html>

37. Within the US Department of Health and Human Services, it is the Office of Civil Rights that is in charge of protecting patient privacy and enforcing the law. They process complaints, investigate, audit and impose fines for those who have breached the norm. Payers, providers and any operations or management entity – known as covered entities – are required to meet HIPAA Compliance. This also extends to business associates with access to patient information. Exceptions to this, arise when the Food and Drug Administration solicits protected information in order to determine the safety of a new product, report potential threats and conduct follow-up research of regulated dietary/food products. More information available: <https://www.hhs.gov/ocr/index.html>
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42. Khan, Lina M. "Amazon's antitrust paradox." *Yale IJ* 126 (2016): 710.
43. *Íbid* Pg. 720
44. *Íbid*. Pg. 718.
45. U.S. CONST. art. II, § 3.
46. Freeman, Jody, and Jim Rossi. "Improving interagency coordination in shared regulatory space." *Admin. & Reg. L. News* 38 (2012): 11.
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