The Google Fitbit Deal: Hazardous to Competition, Privacy, and the Future of Our Health

Google understands that there are tremendous revenues to be made gathering data—from patients, hospitals, medical professionals and consumers interested in "wellness"—through the various services that the company offers. It sees a lucrative future as a powerful presence in our health system able to bill Medicare and other government programs. Google's (i.e., Alphabet, Inc.) proposed acquisition of Fitbit, a leading health wearable device company, is just one more piece illustrating how the company is actively engaged in shaping the future of public health. It has assembled a sweeping array of assets in the health field, positioning its advertising system to better take advantage of health information, and is playing a proactive role lobbying to promote significant public policy changes for medical data at the federal level that will have major implications for Americans and their health.¹

In reviewing the proposed takeover, regulators should recognize that given today's "connected" economy, and with Google's capability and intention to generate monetizeable insights from individuals across product categories (health, shopping, financial services, etc.), the deal should not be examined solely within a narrow framework. While the acquisition directly bolsters Google's growing clout in what is called the "connected-health" marketplace, the company understands that the move is also designed to maintain its dominance in search, video and other digital marketing applications. It's also a deal that raises privacy concerns, questions about the future direction of the U.S. health system, and what kinds of safeguards—if any at all—will be in place to protect health consumers and patients.

As health venture capital fund Rock Health explained in a recent report, "Google acquired Fitbit in a deal that gives the tech giant access to troves of personal health data and healthcare partnerships, in addition to health tracking software." Fitbit reports that "28 million active users" worldwide use its wearable device products. For Google, Fitbit brings a rich layer of personal data, expertise in fitness tracking software, heart-rate sensors, as well as relationships with health-service and employee-benefit providers. Wearable devices can provide a stream of ongoing data on our activities, physical condition, geolocation and more.²

In a presentation to investors made in 2018, Fitbit claimed to be the "number one health and fitness" app in the U.S. for both the Android and Apple app store, and considered itself the "number one "wearable brand globally," available in 47,000 stores, and had "direct applications for health and wellness categories such as diabetes, heart health, and sleep apnea." "Driving behavior change" is cited as one of the company's fundamental capabilities, such as its "use of data...to provide insights and guidance." Fitbit developed a "platform for innovative data collection" for clinical researchers, designed to help advance "the use of wearable devices in research and clinical applications.³ Fitbit also has relationships with pharmacies, including those that serves people with "complex health conditions."

Fitbit has also "made a number of moves to expand its Health Services division," such as its 2018 acquisition of Twine Health, a "chronic disease management platform." In 2018, it also unveiled a "connected health platform that enables payers and health systems to deliver personalized coaching" to individuals. The company's Fitbit Health Solutions division is

working with more than 100 insurance companies in the U.S., and "both government sponsored and private plans" work with the company. Fitbit Premium was launched last year, which "mines consumer data to provide personalized health insights" for health care delivery. According to Business Insider Intelligence, "Fitbit plans to use the Premium service to get into the management of costly chronic conditions like diabetes, sleep apnea, and hypertension." The company has dozens of leading "enterprises" and "Fortune 500" companies as customers. It also works with thousands of app developers and other third parties (think Google's dominance in the app marketplace, such as its Play store). Fitbit has conducted research to understand "the relationship between activity and mood" of people, which offers an array of insights that has applications for health and numerous other "vertical" markets.

Even prior to the formal takeover of Fitbit by Google, it had developed strong ties to the digital data marketing giant. It has been a Google Cloud client since 2018, using its machine learning prowess to insert Fitbit data into a person's electronic health record (EHR). In 2018, Fitbit said that it was going to transfer its "data infrastructure" to the Google Cloud platform. It planned to "leverage Google's healthcare API" to generate "more meaningful insights" on consumers, and "collaborate on the future of wearables." Fitbit's data might also assist Google in forging additional "ties with researchers who want to unlock the constant stream of data" its devices collect.

When considering how regulators and others should view this—yet again—significant expansion by Google in the digital marketplace—the following issues must be addressed:

Google Cloud and its use of artificial intelligence and machine learning in a new data pipeline for health services, including marketing

Google's Cloud service offers "solutions" for the healthcare and life sciences industry, by helping to "personalize patient experiences," "drive data interoperability," and improve commercialization and operations"—including for "pharma insights and analytics." Google Cloud has developed a specific "API" (application programming interface) that enables health-related companies to process and analyze their data, by using machine learning technologies, for example. The Health Care Cloud API also provides a range of other data functionalities for clinical and other uses. Google is now working to help create a "new data infrastructure layer via 3 key efforts," according to a recent report on the market. It is creating "new data pipes for health giants," pushing the Google Cloud and building "Google's own healthcare datasets for third parties." (See, for example, "G Suite for Healthcare Businesses" products as well as its "Apigee API Platform," which works with the Cleveland Clinic, Walgreens, and others).

Illustrating the direct connection between the Google Cloud and Google's digital marketing apparatus is their case study of the leading global ad conglomerate, WPP. "Our strong partnership with Google Cloud is key," said WPP's CEO, who explained that "their vast experience in advertising and marketing combined with their strength in analytics and AI helps us to deliver powerful and innovative solutions for our clients" (which include "369 of the Fortune Global 500, all 30 of the Dow Jones 30 and 71 of the NASDAQ 100"). WPP links the insights and other resources it generates from the Google Cloud to Google's "Marketing Platform" so its clients can "deliver better experiences for their audiences across media and marketing." Google has made a significant push to incorporate the role that machine learning

plays with marketing across product categories, including search and YouTube. It is using machine learning to "anticipate needs" of individuals to further its advertising business.⁸

Fitbit will bring in a significant amount of additional data for Google to leverage in its Cloud services, which impact a number of consumer and commercial markets beyond health care. The Fitbit deal also involves Google's ambitions to become an important force providing healthcare providers access to patient, diagnostic and other information. Currently the market is dominated by others, but Google has plans for this market. For example, it has developed a "potential EHR tool that would empower doctors with the same kind of intuitive and snappy search functionality they've come to expect from Google." According to Business Insider Intelligence, Google could bundle such applications along with Google Cloud and data analytics support that would help hospitals more easily navigate the move to data heavy, value-based care (VBC) reimbursement models."

Google Health already incorporates a wide range of health-related services and investments

"Google is already a health company," according to Dr. David Feinberg, the company's vice president at Google Health. Feinberg explains that they are

making strides in organizing and making health data more useful thanks to work being done by <u>Cloud</u> and <u>AI</u> teams. And looking across the rest of Google's portfolio of helpful products, we're already addressing aspects of people's health. Search helps people answer everyday health <u>questions</u>, Maps helps get people to the nearest hospital, and other tools and products are addressing issues tangential to health—for instance, <u>literacy</u>, <u>safer driving</u>, and <u>air pollution</u>.... and in response, Google and Alphabet have invested in efforts that complement their strengths and put users, patients, and care providers first. Look no further than the promising AI research and mobile applications coming from Google and <u>DeepMind Health</u>, or Verily's <u>Project Baseline</u> that is pushing the boundaries of what we think we know about human health.¹¹

Among Google Health's initiatives are "studying the use of artificial intelligence to assist in diagnosing cancer, predicting patient outcomes, preventing blindness..., exploring ways to improve patient care, including tools that are already being used by clinicians..., [and] partnering with doctors, nurses, and other healthcare professionals to help improve the care patients receive." Through its AI work, Google is developing "deep learning" applications for electronic health records. Google Health is expanding its team, including specifically to take advantage of the wearables market (and has also hired a former FDA commissioner to "lead health strategy"). Health strategy.

Google is the leading source of search information on health issues, and health-related ad applications are integrated into its core marketing apparatus

A billion health-related questions are asked every day on Google's search engine, some 70,000 every minute ("around 7 percent of Google's daily searches"). "Dr. Google," as the company has been called, is asked about conditions, medication, symptoms, insurance questions and more, say company leaders. Google's ad teams in the U.S. promote how health marketers can effectively use its ad products, including YouTube, as well as understand how to take advantage of what

Google has called "the path to purchase." In a presentation on "The Role of Digital Marketing in the Healthcare Industry," Google representatives reported that

After conducting various studies and surveys, Google has concluded that consumers consult 12.4 resources prior to a hospital visit. When consumers are battling a specific disease or condition, they want to know everything about it: whether it is contagious, how it started, the side-effects, experiences of others who have had the same condition, etc. When doing this research, they will consult YouTube videos, read patient reviews of specific doctors, read blog articles on healthcare websites, read reviews, side-effects, and uses of particular medicines. They want to know everything! When consuming this information, they will choose the business that has established their online presence, has positive reviews, and provides a great customer experience, both online and offline.

Among the data shared with marketers was information that "88% of patients use search to find a treatment center," "60% of patients use a mobile device," "60% of patients like to compare and validate information from doctors with their own online research," "56% of patients search for health-related concerns on YouTube," "5+ videos are watched when researching hospitals or treatment centers," and that "2 billion health-related videos are on YouTube." The "Internet is a Patient/Caregiver's #1 confidant," they noted.

They also discussed how mobile technologies have triggered "non-linear paths to purchase," and that mobile devices are "now the main device used for health searches." "Search and video are vital to the patient journey," and "healthcare videos represent one of the largest, fastest growing content segments on YouTube today." Their presentation demonstrated how health marketers can take advantage of Google's ability to know a person's location, as well as how other information related to their behaviors and interests can help them "target the right users in the right context." ¹⁶

To understand the impact of all of Google's marketing capabilities, one also should review the company's restructured (and ever-evolving) "Marketing Platform." ¹⁷

Google's Map Product will be able to leverage Fitbit data

Google is using data related to health that are gathered by Google Maps, such as when we do searches for needed care services (think ERs, hospitals, pharmacies, etc.). "The most popular mapping app in the U.S.... presents a massive opportunity to connect its huge user base with healthcare services," explained Business Insider Intelligence. Google has laid the groundwork with its project addressing the country's opioid epidemic, linking "Google Maps users with recovery treatment centers," as well as identifying where Naloxone (the reversal drug for opioid overdoes) is available. Last year, Google Maps launched a partnership with CVS "to help consumers more easily find places to drop off expired drugs." Through its Waze subsidiary, which provides navigation information for drivers, Google sells ads to urgent care centers, which find new patients as a result of map-based, locally tailored advertisements. 18

Google's impact on the wearable marketplace, including health, wellness and other apps The acquisition of Fitbit will bolster Google's position in the wearables market, as well as its direct and indirect role providing access to its own and third-party apps. Google Fit, which "enables Android users to pair health-tracking devices with their phone to monitor activity," already has partnerships with a number of wearable device companies, such as Nike, Adidas and Noom. Business Insider Intelligence noted in January 2020 that Google Fit was "created to ensure Android devices have a platform to house user-generated health data (making it more competitive with Apple products). In 2019, Google acquired the smartwatch technology from Fossil. Fitbit will play a role in Google's plans for its Fit service, such as providing additional data that can be accessed via third parties and made available to medical providers through patients' electronic health records.

The transaction, said one analyst, "is partly a data play," and also one intended to keep customers from migrating from its Android platform to Apple's. It is designed, they suggest, to ensure that Google can benefit from the sales of health-related services during the peak earning years of consumers.²¹ The Google Play app store offers access to an array of health and wellness apps that will be impacted by this deal. Antitrust authorities in the EU have already sanctioned Google for the way it has leveraged its Android platform for anti-competitive behavior. ²²

Google's health related investments, including its use of artificial intelligence, and the role of Fitbit data

Verily is "where Alphabet is doing the bulk of its healthcare work," according to a recent report on the role AI plays in Google's plans to "reinvent the \$3 Trillion U.S. healthcare industry." Verily is "focused on using data to improve healthcare via analytics tools, interventions, research" and other activities, partnering with "existing healthcare institutions to find areas to apply AI." One of these projects is the "Study Watch, a wearable device that captures biometric data." Verily has also made significant investments globally as it seeks to expand.

DeepMind works on AI research, including how it is applicable to healthcare. Notably, DeepMind is working with the UK's National Health Service.

Another subsidiary, Calico, uses AI as part of its focus to address aging and age-related illnesses. Additionally, "GV" (Google Ventures) makes health-related investments.

According to the CB Insights report, "Google's strategy involves an end-to-end approach to healthcare, including: Data generation — This includes digitizing and ingesting data produced by wearables, imaging, and MRIs among other methods. This data stream is critical to AI-driven anomaly detection; Disease detection — Using AI to detect anomalies in a given dataset that might signal the presence of some disease; and Disease/lifestyle management — These tools help people who have been diagnosed with a disease or are at risk of developing one go about their day-to-day lives and/or make positive lifestyle modifications.

Google has also acquired companies that directly further its health business capabilities, such as Apigee, Senosis Health and others.²³

Google's continuous quest to gather more health data, such as "Project Nightingale," has already raised concerns.²⁴ There are now also investigations of Google by the Department of Justice and State Attorney's-General.²⁵

The Department of Justice, which is currently reviewing the Google/Fitbit deal, should not approve it without first conducting a thorough review of the company's health-related business operations, including the impact (including for privacy) that Fitbit data will have on the marketplace. This should be made a part of the current ongoing antitrust investigation into Google by both federal and state regulators. Congress should also call on the DoJ, as well as the FTC, to review this proposed acquisition in light of the changes that digital applications are bringing to health services in the U.S.

This deal accompanies lobbying from Google and others that is poised to open the floodgates of health data that can be accessed by patients and an array of commercial and other entities. The Department of Health and Human Services has proposed a rule on data "interoperability" that, while ostensibly designed to help empower health services users to have access to their own data, is also a "Trojan Horse" designed to enable app developers and other commercial entities to harvest that data as an important new profit center. "The Trump Administration has made the unfettered sharing of health data a health IT priority," explained one recent news report.²⁶

Are regulators really ready to stop further digital consolidation? The diagnosis is still out!

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¹⁶ https://www.proceedinnovative.com/blog/digital-marketing-healthcare/

¹⁷ https://www.blog.google/products/marketingplatform/360/introducing-google-marketing-platform/; https://www.thinkwithgoogle.com/marketing-resources/

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