

Haven Health is About to Disrupt the U.S. Healthcare System

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ABSTRACT

Background: Healthcare costs are increasing in the U.S. Healthcare market is fragmented and opaque. The Amazon, JP Morgan Chase, and Berkshire Hathaway partnered to form an independent healthcare company ‘Haven’, designed to support cost-containment in health care and to forge a better patient experience. Limited information is available in the public domain about Haven’s strategy to deliver cost-effective healthcare for their employees.

Objective: To describe the impact of Haven Health of modern healthcare.

Methods: We reviewed literature in Pubmed (MEDLINE database of references and abstracts on life sciences and biomedical topics from the USA National Library of Medicine at the National Institutes of Health) and the public domain.

Results: Amazon’s expertise and abilities in e-commerce such as logistics, supply, and big data management will support Haven’s quest to resolve inefficiencies in health care. Haven may attempt to directly negotiate with providers, bypassing insurance companies, to establish themselves as an independent payor. Additionally, Haven to establish themselves as a provider by building new low-cost primary care clinics, focusing on chronic disease prevention. The new healthcare system may leverage machine learning, artificial intelligence and big data analysis to support its initiatives and other ‘big data’ analytics to drive it all.

Conclusions: Haven Health may use its expertise to disrupt everything from the pharmaceutical supply chain to primary care and telehealth. More research is needed to evaluate the impact of Haven Healthcare on disease outcomes and healthcare costs.

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1. Introduction

The United States leads the world in health care spending [1]. In 2018, Amazon, JPMorgan Chase, and Berkshire Hathaway announced the creation of a new joint venture ‘Haven’ [2,3] to support cost-containment in healthcare and to forge a better patient experience [4]. Haven Health, initially conceived for the combined 1.2 million employees, will serve as a crop and ‘experimental center’ for future expansion [5]. Amazon’s combination of powerhouse logistics, artificial intelligence expertise, and robust data analytics may have a profound impact on healthcare [2]. The e-commerce behemoth has planned for years to bring together its logistics and computer and customer love expertise to create a more efficient and cost-effective health ecosystem with a superior patient and provider satisfaction [5]. It is still unknown if the initiative would succeed [6].

2. Materials and methods

We reviewed literature in Pubmed (MEDLINE database of references and abstracts on life sciences and biomedical topics from the USA National Library of Medicine at the National Institutes of Health) and the

public domain. Articles, reports, press-releases published in the past 2 years were selected and summarized below. Additional important web-pages were identified from Google Scholar and included below.

3. Results

3.1. Why is haven health trying to organize its own healthcare system?

Leaders of Amazon, JPMorgan Chase, and Berkshire Hathaway may have noted that ever-increasing healthcare costs motivated them to enter the market to ‘fix the problem’. More specifically, Warren Buffett has previously stated ‘The health care problem is the No. 1 problem of America and American business. It’s the tapeworm, essentially, of the American economy.’ [2] An average annual employee insurance premiums increased from 2,500 USD (single) & 6,400 USD (family) in 2000 to 7,470 USD for single coverage and 21,342 USD for family coverage in 2020 [7,8]. Employers typically pay between 70% and 80% of these costs, although employee cost-sharing totals have significantly increased in the last decade. Employee deductibles and max out-of-pocket costs have also skyrocketed during this same period. The

amount of healthcare services accessed by employees either remained the same or decreased, indicating the rise in healthcare costs was not the result of a change in employee health. Multiply these costs by ~1.2 million employees across the three companies, and a more efficient and lower-cost healthcare system may significantly benefit employers and employees.

3.2. How will Haven health disrupt the U.S. healthcare system?

How exactly newly launched Haven plans to disrupt healthcare delivery in the United States remains unclear. Most experts agree Haven will leverage machine learning and artificial intelligence to conduct extensive data analysis in hopes of improving healthcare efficiency. Amazon is a world leader in both and the collective financial resources available to Haven are more than ample to cover additional research and development. Besides, Amazon has already developed the Health Insurance Portability and Accountability Act of 1996 (HIPPA) compliant “Alexa” healthcare functionality that individuals can use to research healthcare questions, share medical treatment data, make doctor’s appointments and manage their prescription medications. Applying sophisticated data analytics software to this information combined with medical claims data would likely result in significant advantageous results. Haven could also leverage this technology to deploy effective telehealth services directly into any home with an Alexa device. However, if Haven is to truly disrupt the US healthcare system and deliver on their goal of reducing costs across the board, they will have to do more than simply analyze data.

Haven could attempt to directly negotiate with providers, bypassing insurance companies, to establish themselves as an independent payor. The most likely approach, at least initially, could come in negotiating directly with pharmaceutical companies. Amazon already owns an online pharmacy provider ‘PillPack’ and is licensed to deliver prescriptions by mail across the country [2,9,10]. As a result, Haven could bypass pharmacy benefit managers to negotiate lower drug prices [2]. The key challenge here is negotiating with different providers across multiple geographical areas. Haven is made up of three separate companies with large and diverse workforces, spread across the US.

Another speculated option would be for Haven to establish themselves as a provider by building new low-cost healthcare clinics, similar to those seen in CVS and Walgreens. Both Amazon and JPMorgan currently run on-site healthcare clinics in some of their larger offices, where they employ their medical staff to provide routine medical services. Haven could leverage this model to expand similar services into

other offices between the three parent companies and/or expand even further to create community clinics accessible to the general public. The key challenge with expanding office-based clinics is the geographically diverse employee population of the three companies. This has likely increased due to the expansion of remote work secondary to the COVID-19 pandemic. Community-based clinic models would face more general challenges, related to negotiating contracts with multiple insurance providers across the national market.

Haven will have to contend with challenges of patient data privacy and provider resistance to full information disclosure and rate standardization (drug prices, home care package services costs, hospital costs). Amazon is a world leader in data protection, however, they will have to enhance their protection systems to account for increased regulations related to healthcare privacy. It is unclear how Haven will resolve industry resistance.

3.3. Haven health insurance plan

It appears that Haven’s first incursion into the healthcare system is a new Haven health insurance plan [11]. The exact model of the Haven health plan is not known yet and limited information is available in the public domain. Amazon has a large distribution scale (>300 million active customers and 126 million Prime members) and access to big data. This would help Amazon to build a healthcare economy of scale, network impact, and leverage for negotiating with other parties (e.g., suppliers, pharmaceuticals, government) [5].

Haven health may feature wellness ‘incentives’ and zero deductibles, which is currently being piloted at Amazon and JPMorgan. We speculate Haven health would have to be contracted through other insurance companies, such as Cigna and CVS/Aetna [11]. In a press release from 2019, Haven spokesperson, Joe Evangelisti described the plan as a, ‘Simplified medical plan ... (that) is designed to provide clear costs so employees and their families know exactly what they’ll pay before receiving health care’ [12]. The plan would also include free or preventative care, 15 USD copays for visits to in-network primary care doctors, fixed copays for medical services and procedures. Enrollees would also set fixed annual out-of-pocket maximums.

Additionally, Amazon has already agreed to fly its employees across the nation to receive high-quality cancer care and authors speculate this would be one of the features of the plan [13].

Amazon’s current scale and reach are larger than ever before. The company has a direct distribution advantage to over 300 million of active customers and approximately 5 million sellers on the site, which

could prove useful should it ever develop health solutions for small businesses [5].

3.4. How does this differ from other insurance models and why?

Among the reasons for the increasing healthcare costs in the U.S is the fragmented and opaque healthcare market, in which separate, middlemen companies, individually, manage operations-logistics, supply, data, billing, claims, drugs, affecting, etc. Consequently, medical care disintegration results in unsatisfactory patient care (Net Promoter Score < 50), poor treatment adherence, and rising costs from operational inefficiencies [5].

Amazon's expertise and abilities in e-commerce such as logistics, supply, and big data management will support this quest of increasing efficiencies in health care. Pharmaceuticals logistics, claims, billing, and health benefits management, chronic disease control, are among the scope [5].

The core business for the companies forming this joint venture is not healthcare delivery. Their profit is derived from other, more valuable undertakings. Therefore, they can afford to pursue low-profit initiatives, such as health care, while supporting their core businesses' growth [5].

3.5. Recommendations for heaven healthcare

After thorough research and careful consideration of possible healthcare disruption options, authors recommend Haven deploy the following strategies:

- Focus on primary care and provide employees with immediate and free access to physicians or advanced practice practitioners [14].
- Develop and incentivize chronic disease prevention, especially diabetes [15], obesity, and hypertension and cardiovascular disease.
- Invest in patient's health education and literacy.
- Leverage enhanced analytics, artificial intelligence and cloud computing and make connections between electronic health systems and other data sources to identify optimal treatments.
- Use existing Alexa healthcare technology to further develop and deploy a reliable telehealth platform that would be easily accessible across all devices.
- Contract directly with the pharmaceutical industry to deduce the cost of prescription drugs and then leverage the stake in the PillPack, a full-service online pharmacy that delivers prescriptions in pre-sorted bags.
- Utilize Whole Foods and meal-delivery systems to deliver nutritious and healthy meals to members.

- Advise all employees to receive the COVID-19 vaccine in 2021 and verify the effect of this vaccination by testing for Anti-SARS-CoV-2 Antibodies.

4. Conclusion

Heaven Health may use its expertise to disrupt everything from the pharmaceutical supply chain to primary care and telehealth. Authors recommend the new healthcare system focus on primary care, chronic disease prevention, and deployment of artificial technology and telehealth. More research is needed to evaluate the impact of Haven Healthcare on disease outcomes and healthcare costs.

5. Author's note

In early January 2021, while this manuscript was under review, Haven spokesperson Brooke Thurston made a statement: 'The Haven team made good progress exploring a wide range of healthcare solutions, as well as piloting new ways to make primary care easier to access, insurance benefits simpler to understand and easier to use, and prescription drugs more affordable' and confirmed that Haven would 'cease operations at the end of February 2021' [16]. Authors speculate that COVID-19 pandemic and inflexibility of the modern insurance market may have played a role in the collapse of this ambitious venture.

Disclosure statement

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