

HOW AMAZON COULD REVOLUTIONIZE HEALTHCARE

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Imagine if personal health data could be combined with shopping patterns to identify an individual as at-risk for an illness and preventive measures could be sent via text message. If the condition worsened and the individual needed to see a doctor, an appointment could be scheduled via a virtual personal assistant. During the virtual appointment, the doctor could order a prescription using voice commands, and two hours later the medication could be delivered to the patient's door. Based on recent indications that Amazon is considering entering the healthcare industry, this scenario could quickly become a reality.

Amazon's breadth of resources — including 450 Whole Foods Market stores, online data platforms, an e-commerce site, virtual personal assistants, an extensive supply chain and 80 million Amazon Prime members — position the retailer to disrupt the healthcare industry. By applying its mission statement, to be earth's most customer-centric company, Amazon can transform the patient experience and the way care is delivered.

Innovating with New Technologies

Amazon has already transformed daily activities allowing consumers to order and receive almost anything in two days or less with Amazon Prime — and in some areas delivery can occur in under two hours with Amazon Prime Now. Amazon's virtual personal assistant, Alexa; smart speaker, Echo; and ordering button, Dash allow customers to order from Amazon without a computer, access the news, listen to music, set alarms, control smart home devices, make phone calls and send text messages. By incorporating these technologies into healthcare, the way consumers access care will also be changed.

In rural areas, seniors or consumers wanting convenience could use these tools to order healthcare services. Consumers could schedule appointments, write reviews and see prices of services for physicians on the Amazon website using a concept similar to the partnerships for handyman services that [Amazon Home Services has developed with TaskRabbit](#). In addition, on-demand autonomous vehicles could transport patients to services, communication with Echo audio/video could remove the need for traditional phone, text and email communications, and consumers could receive medicine deliveries in a more convenient manner. The devices could also send medication reminders and allow patients to be monitored virtually rather than through a hospital stay. Ultimately, Amazon could offer healthcare at a lower cost and at a time and place that patients prefer.

Amazon could also innovate in other ways. It recently established a stealth lab, called 1492, that focuses on healthcare technology. While little is known about the products being created, speculation is that the retailer is developing tools to mine data from electronic health records, new telemedicine technologies and healthcare applications for its existing products.

Without knowing what the technology platforms of the future will look like, the most important thing healthcare organizations can do now is to start preparing for a fundamental shift in how consumers will demand services. Leaders need to consider how the tools and technologies being created by outside organizations, like Amazon, could address consumers' demands, connect with patients and make care more convenient as well as what tools will be required to link the technologies together. Forming partnerships with organizations that are creating these tools will be important in staying ahead.

To identify what capabilities their organization will need, leaders should develop a picture of how their healthcare system will need to look in the future. A few questions to consider are:

- Is home healthcare going to be more prevalent than it is today?
- Will virtual care decrease the inpatient centric model?
- Will a hospital have a need for ancillary services i.e. pharmacies, imaging, etc.?

In doing so, they will position themselves to offer not just a more streamlined and efficient environment, but increase growth from customer loyalty by improving the patient experience.

Using Data as a Driver

Amazon's vast amount of customer data has enabled the organization to develop a robust recommender system that suggests products to customers based on past purchases. This is especially true for Amazon Prime customers, who spend an average of \$1,300 on products compared

to non-Prime members who spend just \$700 according to [Business Insider](#).

With the acquisition of Whole Foods, Amazon could use data from in-store purchases to create an even more robust picture of its customers. Once Amazon is in the healthcare space, health information — including prescriptions, medical reminders set up on Alexa or Echo and even medical records — could add consumer insights. Using this data, Amazon could suggest food, vitamins, over-the-counter medication and other related products that could help consumers manage their health. In some cases, these recommendations could be for products the customers don't know they need. Ultimately, this will be a more cost-effective method of care that will avoid preventable health problems and unnecessary visits to the doctor.

Algorithms could also identify purchase patterns and health information of chronically ill or high-risk patients. With a shift toward value-driven growth, Amazon may give healthcare systems the tools to use data to prevent sicknesses and help patients get and stay well.

Disrupting Pharmacy

For the past few years, pharmacy has been a topic at Amazon's annual meeting. This year, Amazon began selling prescriptions in Japan and distributing medical supplies in the U.S. If Amazon can comply with U.S. pharmaceutical regulations, including specialized supply chain rules for controlled substances, and navigate healthcare's complex payment model, it can change the industry. Amazon could make it easier for physicians to order prescriptions and allow patients to fill prescriptions at a convenient time and place.

Alexa or Echo could save physicians' time in ordering prescriptions by allowing them to simply speak orders rather than typing them up. Amazon's extensive supply chain network could allow patients to access their prescription in various ways including traditional mail order,

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two-day mail order delivery for Prime members, PrimeNow two-hour delivery in select cities, instant pick-up points at Amazon Lockers or at

Whole Foods stores — if pharmacies are installed. In addition, Amazon's existing Subscribe and Save feature could be used to automate refills. Prescription data can be aggregated into Amazon profiles, giving the retailer more customer data as they look to identify trends between purchases and health conditions.

Amazon's 80 million Prime members have proved to be loyal customers, spending nearly twice as much as non-Prime members and making an [average of three purchases a month on the site](#). These members provide a strong customer base that Amazon could use in negotiating drug prices with manufacturers, ultimately leading to lower drug prices for Amazon customers. In addition, in an increasingly consumer-driven healthcare market, Amazon's potential ability to improve customer experience could give the retail behemoth a considerable competitive advantage.

Amazon's technology, supply chain and customer base are unrivaled in retail, positioning it to threaten incumbent pharmacies like CVS and Walgreens and pharmaceutical distribution companies like McKesson, Cardinal Health and AmerisourceBergen, which will struggle to compete with Amazon's low prices and delivery options.

Is Amazon likely to take the pharmacy sector head on in the immediate future? The answer is no. What is more likely is that Amazon will partner with or acquire a company that has more experience in navigating drug regulations as Amazon seeks to build that capability in-house.

But, as we have seen before, Amazon plays the long game. With a history of taking on risk, and a large volume of cash on hand to do so, building in-house capabilities to navigate regulatory barriers is not far off in the horizon, nor is Amazon's ability to become a major player in the pharmacy landscape. It may happen sooner than predicted.

Key Takeaways

If Amazon can respond to customers' needs and improve the quality of care, its entrance into the healthcare space will create an entirely different healthcare experience. Incumbents can't afford to ignore the implications of Amazon's entry into their marketplace. They must:

Think differently.

Identify the role your organization will play in the healthcare world of the future.

Plan differently.

Partner with organizations, like Amazon, that are creating tools and technologies that will allow your organization to succeed in that future state.

Act differently.

Develop innovative delivery models that offer healthcare services when, where and how customers want to receive them.



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