

IF AMAZON CREATED A HEALTH SYSTEM

By Debbie Hoffman and Maureen Hydok

If Amazon ran a health system, it could reinvent healthcare delivery. Amazon isn't bound by payment models, provider expectations and the confines of brick and mortar buildings. At the same time, Amazon's capital for investments, technology infrastructure, access to a consumers' purchasing history and acquisitions of [Whole Foods](#) and [PillPack](#) are assets unmatched by incumbent organizations. As a result, Amazon could leverage its business model, which has proven to be successful in numerous industries, to change the industry by creating a health system that can be built without constraints.

Amazon's Healthcare System

Hospitals began as places to treat the sick and injured. Today, this model of care delivery is not driving results as the cost of care continues to rise. However, for Amazon, not having a hospital can enable them to create the infrastructure needed to truly support healthcare outside the four walls of the hospital. If Amazon follows their blueprint for success in other industries (based on a business model that's attracted consumers not for lower

prices, but for an experience that's easy), they can find success in healthcare.

Membership model. Amazon's Prime members pay an annual fee for perks like free two-day shipping and discounts on its annual Prime Day. Prime members are a loyal customer base, [spending more annually and purchasing more frequently](#). In healthcare, this could look like an annual fee that provides access to shorter wait times for appointments, a discount if they wait a few days longer for care (like the shipping model used for Prime members today) or even an annual discount day for screening services (like Prime Day). With this fee, Amazon could keep consumers within their network of care as they'll be more loyal.

Anticipating needs of consumers. Amazon can leverage consumer purchasing data with health information to create a holistic picture of health. It's already using big data and analytics to predict consumer buying habits and recommend products for future purchases. Amazon's cloud platform, Amazon Web Services (AWS), along with their artificial intelligence capabilities could provide physicians with recommendations based on information in the electronic health record (EHR) as well as the consumer's lifestyle based on purchasing patterns and information captured by smart home technologies. These data-based recommendations could identify a condition and recommend a treatment based on a more holistic look at the consumer's lifestyle, not just their ailment.

Connecting consumers to the right care at the right time in the right place. Amazon doesn't

create most of the products they sell; they're a platform for other sellers. As a health system, it's foreseeable for Amazon to leverage that same model. Rather than employing physicians, Amazon could curate a host of independent physicians who sell their services on that platform. Their artificial intelligence capabilities could aggregate information such as the patient's health history, expertise of a physician, patient reviews and cost of care to recommend a physician and place of care for each individual. Services like imaging and labs could follow suit.

Care where they want it. With a [primary care clinic](#) set to open in its Seattle office in 2019, Amazon is making it easy for its employees to access primary care. Clinics within Whole Foods or Amazon pickup locations would give even more consumers easy access to health care. At the same time, a HIPAA-compliant Alexa could become a telehealth interface for video visits, photos taken on devices connected to Alexa could be integrated, data from wearables and information from home sensors could all be aggregated by this one device and stored within the EHR. In addition, Alexa coupled with artificial intelligence capabilities could serve as a triage point by asking patients a few simple questions, accessing their medical history and then determining the level of care (i.e., telehealth, clinic or hospital) that is necessary at a given time.

Keeping consumers at home. Virtual monitoring via digital technology synced to Alexa along with artificial intelligence capabilities could monitor a patient ensuring that they're okay. For instance, Alexa could [detect voice patterns](#) that measure a consumer's health status and alert the consumer or their primary care provider when medical attention is needed. At the same time, pill cases with sensors and step counters could signal to a physician that an individual isn't complying with their care instructions. Similarly, as consumers adapt to new skills or work through various exercises, Alexa could serve as a virtual health coach, explaining what they need to do in a day, reminding them when it's time to take medications and helping to coach the patient through new activities especially those that may be unfamiliar.

Wellness delivered. Automated prescription refills are nothing new within the healthcare industry, but keeping people well requires more than that. PillPack makes the lives of those taking multiple medications easier and, in the future, it could also monitor medication adherence. Amazon could extend their model so that not only pills, but also healthy meals, are delivered to simplify the act of making healthy choices or following a physician's dietary orders. To do so, items like fresh fruits and vegetables could be shipped weekly at a discounted rate for those who opt in to use [Subscribe and Save](#). Other items like medical supplies which some may forget to order until they're out could also be part of this program. At the same time, [Dash Buttons](#) which submit an Amazon order for a given product by hitting the button could make it easier for consumers to reorder supplies that have variability in when they're running out. In the near future, [Prime Air](#) a service that will deliver packages that weigh less than five pounds in 30 minutes or less using drones, could foreseeably drop off medication or other health-related items so consumers can stay at home.

Amazon's Hospital Within Their Health System

While Amazon will push care into the community and keep consumers out of the hospital as much as possible, inevitably they may end up needing acute care. In these cases, the efficiencies that Amazon has leveraged in other industries will create an experience where technology doesn't just create a better patient and provider experience, but also a more efficient workplace.

More efficient experience. Robots can power factories carrying [3,000 pounds](#) of merchandise at a given time. In a hospital, the delivery of supplies to each room could be powered by robots. Robots could also be leveraged for environmental services, patient sitters and to deliver medications and food to a patient's room at prescheduled times. At the same time, Amazon's approach to [product](#)

[shelving in a warehouse](#), which puts products that consumers are likely to buy together near each other, could be applied in the hospital so that time isn't wasted collecting items.

Care coordination. Connecting physicians, social workers, nurses, physical therapists, and labs and imaging services is not an easy feat. Leveraging AWS, Amazon could connect the various platforms so providers could feasibly ask Alexa for the next time that the radiology has availability for a given patient and schedule appropriately based on the radiology order in the EHR, the patient's needs and the radiology department availability. Similarly, rather taking patients out of their room for hours as they waited for the appointment, Alexa could alert the nursing technician when to take a patient to their appointment based on how long it will take to get to the radiology department from their room and if they're on time. In the same way patients prepare to transition from the hospital to the home, Alexa could become the go-to source for status updates on where various pieces of medical equipment are that will be needed at home, how long until the patient's request for outpatient therapy will be reviewed by a company and trigger email updates to the care team so they're informed on progress. Family members could also receive similar emails, so they're continuously informed.

Metrics focused process improvement. Amazon measures and tracks practically everything to root out inefficiencies and shorten the time it takes to complete tasks. While Amazon has yet to use their [patented wristband](#) to track steps of factory workers, this device could ensure that hospital staff are working in the most effective manner possible.

As Amazon moves into healthcare, it's apparent that simply making improvements to what healthcare providers are doing today is not enough. Instead, they can take the success of their thriving business model and reimagine the entire care continuum. This means doing more than treating patients or managing their health, but instead making health less of a chore or a conscious choice by making it as simple as clicking the checkout button on Amazon.com.

Key Takeaways

Looking at the capabilities and tools Amazon can leverage to create healthcare without traditional constraints can enable healthcare systems to approach care delivery in a new way. This will require healthcare organizations to:

Think differently.

Continually look for opportunities to make the healthcare experience easier and more convenient for consumers.

Plan differently.

As you look to the future, consider what you would do if your organization was not bound by existing ways of delivering care.

Act differently.

Identify opportunities where technology that's being used in other industries could benefit your organization.



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18-0980