



Regi's 'Innovating in Health Care' Case Corner

This issue's case features an opportunity to use Amazon's Alexa for consumerfocused healthcare in a capitated payment environment.

Case: Amazon Alexa and Patient Engagement

Authors: Kevin Schulman, Stanford University, and Stacy Wood, North Carolina State University

Overview: The Palo Alto Health System had three hospitals, 1,600 physicians, and over 1 million patients each year – and a new risk-based model that incentivized the prevention of illness, as well as early intervention in patients with chronic illness. Engaging with patient populations involved clinical interventions, but also involved a marketing approach to encourage patients to adopt health behaviors and keep following those practices. This case study investigates this marketing aspect of healthcare, and looks at ways in which Amazon's Alexa, an interactive speaker that connected people to the Internet and the cloud-based Alexa voice service, could enhance health care efforts. With patient permission, Alexa could collect specific health-related information, and could help schedule patients for medical screenings and then report back important laboratory results. One early adopter was the U.K. National Health Service, which contracted to use Alexa to provide health-related content to patients – the same information that was available on the public website. The case study considers healthcare privacy issues, and asks students to consider whether a marketing approach to healthcare, in this case using Alexa or another Internet personal assistant, would be a successful strategy for the Palo Alto Health System.

Abstract

Learning objective

The case study asks students to think critically about the concepts of marketing and consumer behavior, and apply them in the discussion of healthcare. Would a marketing-focused approach to health care enhance the experience and outcome for consumers – the





1 million patients of Palo Alto Health System? Specific aspects discussed include market segmentation, and whether an interactive personal assistant like Amazon's Alexa can address segment-specific messaging.

Introduction

Becca Eskridge was excited. She had just been told she was promoted to vice-president of patient engagement at Palo Alto Health System ("Palo Alto"), a three-hospital system with 1,600 practicing physicians and over 1 million patients each year. This appointment was in response to Palo Alto's new risk contract with the largest commercial health plan in the region. Under this agreement, Palo Alto would be financially at-risk for the care of 100,000 patients. This was a full-risk contract, so that the system was essentially capitated for the care of these patients. Under the historical fee-for-service contracts, the system made additional revenue for each additional service provided to patients. Now, under the new risk contract, each additional service provided was a cost with no associated revenue. This agreement was an enormous financial and cultural change for the organization.

Very quickly, the leadership of Palo Alto realized that they needed a new strategy to help care for this population of patients. If patients did not get access to primary care physicians, they would show up in the emergency room and cost the system even more for the clinical episode. As they looked at the situation, they realized that their fee-for-service world had essentially been turned upside down in this new risk-based world. Rather than a financial model built on the care of patients with illness, the new model would incentivize the prevention of illness and early intervention in patients with chronic illness. More broadly, the system leaders realized that individual health behaviors and choices of how and where to use the health caresystem would now be key factors in their future financial success. It is with this realization that they created the new position and recruited Eskridge. It would be up to her to map out a strategy for the future success of the organization.

As Eskridge went home, excited about the new position but also daunted by the challenges in front of her, she decided to celebrate with a glass of wine from the local Santa Cruz Mountains. To lighten the mood, she wanted to listen to some music. She saw her Amazon Alexa speaker, and said "Alexa," to wake it up. But then the next words that came out of





her mouth surprised her. Rather than request her favorite music, she said, "Alexa, can you help me?"

Case Questions

- 1. What data would be required to fuel a marketing-based population health strategy? How would you acquire the data for this effort?
- 2. For a given intervention, such as receipt of a flu shot, what is the maximum addressable population for Eskridge to consider (out of 100,000)? Why? How would you set up metrics to understand the success of her approach?
- 3. Using these data, what services could you develop using the Primary Care model? The third-party strategy? The AVS strategy?
- 4. Which strategy would you recommend for Palo Alto (and why):
 - a. the Primary Care model,
 - b. the third-party model, or
 - c. the AVS model?

Stanford case: SM-328, November 4, 2019

HBS link: https://store.hbr.org/product/amazon-alexa-and-patient-engagement/SM328