

Experience and engagement are inextricably linked. An overwhelmingly positive experience with healthcare organizations will encourage consumers to be more actively engaged in their health.

## Optimizing Healthcare Experience and Engagement to Improve Outcomes

March 2020

**Questions posed by:** Red Hat

**Answers by:** Lynne A. Dunbrack, Group Vice President, IDC Health Insights

**Q. Today's consumers find themselves navigating an increasingly complex healthcare ecosystem. What strategies are healthcare organizations pursuing to improve customer experience and engagement?**

**A.** IDC describes the customer experience as an infinite loop of four distinct phases — attract and preserve, sell and renew, service and expand, and build loyalty — underpinned by customer intelligence. In healthcare, there is no one-size-fits-all strategy when it comes to improving engagement and experience because of the inherent complexity of healthcare consumerism. When interacting with the healthcare ecosystem, a person can take on the following roles, often at the same time:

- » **Consumer** researching options for where and what types of care to receive or which health plan to select for insurance coverage
- » **Member** enrolling in a commercial (individual or group plan) or government-sponsored health program
- » **Patient** receiving care in a conventional healthcare setting, virtually via an online video or telephonic visit, or at home
- » **Family caregiver** managing a family member's care, helping the family member navigate the health systems, and advocating on the family member's behalf (This role is most often overlooked in healthcare engagement strategies.)

Furthermore, a person's healthcare journey is unique to the individual and will vary over time. A person moving to a new community wants to know where the best place is to get care. New members seek personalized plans that meet their needs, including health and wellness incentives, and want to understand what services are covered and how much out-of-pocket expenses will be. A patient recently diagnosed with a chronic condition needs a different level of support than someone who is managing his/her disease well.

The terms *engagement* and *experience* are often used interchangeably. Although highly interrelated and not mutually exclusive strategies, they are distinct strategies. Engagement is the process of actively building, nurturing, and managing ongoing relationships based on trust. Engagement should be measured against achievement of objectives set forth by the healthcare organization/clinician and patient, in addition to how often the patient engages or interacts at various touch points within the healthcare organization. In turn, experience is about how customers feel toward their

interactions with the healthcare organization. Experience should be measured against customer expectations across all touch points of interactions. A great experience will encourage more engagement; a poor experience will discourage further contact with the healthcare organization and may result in high-profile complaining on social media to discourage other consumers from using that healthcare organization's services, further limiting engagement with other consumers. To that end, healthcare organizations must pursue complementary strategies that not only delight the consumer but also engender more engagement.

## Q. What is driving healthcare organizations' digital patient engagement strategies?

**A.** Ever since the Institute for Healthcare Improvement (IHI) launched the Triple Aim initiative, healthcare organizations have intently focused on improving the patient care experience and the health of the population, which ultimately will result in reducing per capita health costs. (Over time, a fourth objective has been added to improve the physician experience in recognition of physician burnout from mounting administrative burdens.) Population health management requires that patients become more engaged in managing their own healthcare. According to provider respondents to IDC Health Insights' February 2019 *Connected Health and Value-Based IT Investment Plans Survey*, digital patient engagement is driven by the need to enable self-care management of patients following an acute event (51%) as well as patients with chronic conditions (51%) and behavioral health issues (49%). For payer respondents, the top 2 drivers were improving overall patient health and wellness (42%) and improving patient medication adherence (42%).

At the core of value-based health is increasing engagement by personalizing the services and care plans to meet individual patients where they are on their healthcare journey. The ability to make available contextual knowledge and insights to care teams about their patients (as appropriate under privacy and security regulations and policies) enables more tailored care plans that consider not only clinical health status but also social determinants of health (e.g., socioeconomic status, safe housing, food security [i.e., access to nutritious food choices], transportation).

Digital patient engagement also calls for improved access to care across multiple channels ranging from retail clinics and virtual care via video visits for convenience to self-help mobile health applications that can start with an artificial intelligence (AI)-generated "conversation" and then triage the consumer to a live conversation with the healthcare provider. Consumers used to omni-channel experiences in other parts of their lives (e.g., retail, banking, entertainment) are beginning to demand this level of service when they interact with the healthcare system. Healthcare organizations that successfully digitally transform themselves to execute their engagement and experience strategies will survive the transition to consumer-centric, value-based care. Those that do not will falter and risk a financially uncertain future.

## Q. How will healthcare organizations leverage artificial intelligence and machine learning in their patient experience and engagement strategies?

**A.** A holistic approach to healthcare that takes a 360-degree view of the individual has long been heralded as the critical path toward population health improvement. Progress was impeded because data was scattered across the enterprise and beyond in disparate systems. Today, increasing access to data through open APIs and cloud storage and the ability to create digital twins are changing everything. The thoughtful and appropriate application of artificial intelligence can be used to predict adverse events; identify patients in need of health, social, and human services; and personalize automated tasks, activities, and processes.

One such example is to use AI-based predictive analysis to establish a standardized, digital approach to sepsis detection. Sepsis — a condition where the body's immune system has an overwhelming response to infection — is responsible for 270,000 deaths per year, according to the Centers for Disease Control and Prevention. The ability to predict and detect sepsis quickly is crucial to saving lives. Healthcare providers need modern tools such as machine learning, predictive analytics, and cloud computing available from a platform that is flexible, scalable, and fast. In fact, slightly more than one-third of healthcare organizations already have AI-based risk identification and stratification in production and another 20.5% are investing in that technology in 2020, according to IDC Health Insights' *Connected Health and Value-Based IT Investment Plans Survey* (February 2019). Rates of compliance with care plans increase with personalization that takes into consideration the individual as a whole.

Other use cases for AI include digital assistants and conversational AI for care management and behavioral health. Patients can communicate via AI-driven chatbots to ask questions about their care or express how they are feeling. Depending upon how each conversation evolves, the chatbot can route an individual to a live health coach, therapist, or other licensed practitioner to recommend follow-up or immediate care. Behavioral health mobile apps are making extensive use of chatbots and conversation AI to provide mental health services when individuals need it most rather than having to wait to see a therapist in person. Another example is monitoring individuals' mobile phones (with consent) using AI to detect changes in usage patterns that might indicate people are isolating themselves, which would indicate that they are becoming depressed or anxious. These AI-based applications help address many of the barriers to accessing appropriate mental and behavioral health services by eliminating the need for patients to travel for in-person care, making services available 24 x 7, and providing access to health coaches and licensed therapists online at costs that are lower than the cost of conventional in-person care.

## Q. How does actionable communication shape event-driven experience and engagement strategies?

**A.** Experience and engagement are inextricably linked. At the core of experience and engagement strategies is actionable communication. In a world where communication with other industries, such as retail or hospitality, are high touch and very personalized, consumers are growing more accustomed to a consumer-centric engagement model. For example, a retailer site makes recommendations for other products that are like products either previously bought by the consumer or bought by customers similar to the consumer. In contrast, most communication between the healthcare organization

and the individual is unfocused and disjointed because communication is based on incomplete or outdated information and can be redundant at best or conflicting and wrong at worst. Poor communication leads to a poor experience and consumer frustration, which in turn limits consumers' willingness to remain engaged.

Similar to the five rights of medication administration — right patient, right route, right dose, right time, right medication — are the five rights of consumer engagement:

1. The right patient
2. With the right message
3. At the right time
4. For the right reason
5. On the right channel

Effective consumer engagement strategies require an understanding of the consumer to tailor the message appropriately. Engagement with the consumer should be timely, when the consumer is most apt to absorb the information provided (e.g., an alert reminder) and take action. Additional information should be readily available on demand. For example, in a preventive screening reminder, a link should be included to schedule the appointment along with information about the procedure (e.g., what to expect, how to prepare, why it's important). Further, the communication should be on the consumer's preferred channel, which will require healthcare organizations to adopt an omni-channel approach to engagement. Investing in analytic tools to segment and subsegment customers and prospective customers will enable highly targeted communication that creates a sense that the healthcare organization "knows and understands" the individual and more importantly "cares" about that person. This highly personalized communication improves the experience, and consequently, consumers want to stay engaged with the healthcare organization.

## **Q. What challenges do healthcare organizations face when undertaking patient engagement and experience initiatives, and what recommendations does IDC give to healthcare organizations to overcome them?**

**A.** Healthcare organizations face both technical and operational challenges. Access to 360-degree data is essential. However, much of that data is stored in siloed systems across departments and even externally when it comes to data related to social determinants of health. Despite interoperability requirements as part of the Meaningful Use of electronic health records mandate and progress in adoption of standards such as Fast Healthcare Interoperability Resources (FHIR), health information exchange across the healthcare ecosystem is still a struggle. Data must be aggregated, cleansed, normalized, and made available in real time regardless of geographic or organizational boundaries to be useful for direct patient care. Legacy systems that are brittle and unable to respond quickly to new technical and business requirements only compound the data access issue. Further, while IT budgets are increasing, financial and IT resources are constrained and often cited as an impediment to making progress on transformative initiatives.

To that end, healthcare organizations are recognizing that modernizing the underlying IT infrastructure is a business imperative to keep pace with the rapid pace of change. IT needs to be agile, scalable, reliable, and flexible to support new

business and clinical optimization opportunities. A more modern architecture ensures the highest level of data availability, reliability, and cost efficiency. Healthcare organizations are also turning to data-as-a-service solutions to address their data management needs and open source clinical decision support to enable outcomes-driven recommendations based on real-world evidence. These investments in modern infrastructure, data as a service, and open source clinical decision support provide the necessary foundation for building out engagement and experience strategies by improving secure access to a 360-degree perspective of the individual.

## About the Analyst



### ***Lynne A. Dunbrack, Group Vice President, IDC Health Insights***

Lynne Dunbrack is Group Vice President for Public Sector, which includes IDC Government Insights and IDC Health Insights. She manages a group of analysts who provide research-based advisory and consulting services for payers, providers, accountable care organizations, IT service providers, and the IT suppliers that serve those markets. Lynne also leads the IDC Health Insights Connected Health IT Strategies program.

## MESSAGE FROM THE SPONSOR

**Red Hat**

Red Hat's Customer Engagement Hub (CEH) allows businesses to build an innovation platform for their unique requirements and intellectual property. The Red Hat open source approach helps businesses adapt to changing market dynamics, shifting customer demands and expectations, and the need to constantly incorporate new technologies.

Red Hat's CEH solution gives businesses the power to optimize their offerings for enhanced customer experience and next best action. Selecting the right technology partner—especially one that embraces open source—can accelerate experience innovation and implementation, empowering businesses to make changes quickly, and enable continuous modernization.

Red Hat's solution goes beyond simply providing an architecture. Red Hat offers a repeatable framework based on real-world deployments using cloud-native technologies such as Kubernetes, microservices, and containers running on Red Hat OpenShift for hybrid, multicloud, and on-premise deployments.

 **IDC Custom Solutions****IDC Research, Inc.**

5 Speen Street  
Framingham, MA 01701, USA

T 508.872.8200

F 508.935.4015

Twitter @IDC

idc-insights-community.com

www.idc.com

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2020 IDC. Reproduction without written permission is completely forbidden.