HOW TO BUILD A MORE POWERFUL MOBILE EXPERIENCE

New research reveals how health plans can optimize their mobile strategies and create more engaged, satisfied members.

EXECUTIVE SUMMARY

More than 259,000 mobile health (mHealth) apps are now available to consumers, nearly double the number from just two years ago.[1] Many experts predict that the growth of this market will continue at a rapid pace, at least for the next several years. Yet there are some distinct barriers emerging with regard to adoption and continued usage for health plan apps.

In order to provide insight into these challenges, HealthSparq, a leading provider of health care navigation and engagement solutions designed for health plan members, commissioned a research study to identify the optimal consumer experience within mHealth.

The study, conducted by national research firm Hanover Research, revealed the following insights, among others:

- Convenience was the number one reason for downloading a health plan's app.
- Just 13 percent of those surveyed had downloaded and used the app provided by their health plan at least once.
- The most common tasks performed on mobile devices include paying premiums (59 percent) followed by looking up covered services (45 percent).
- For respondents who use both desktop and mobile, most use their mobile devices to accomplish quicker tasks and use their desktops to accomplish more time-consuming and/or complex tasks.
- The top thing consumers would like to do on their mobile device, but currently cannot, is finding the cost of a service or procedure. This was followed by finding a doctor, reviewing claims, looking up covered services and paying bills (premiums).

The report's findings sparked an analysis around how to apply best practices from within mobile health to enhance the user experience and deliver on these expectations. For example, health plans should:

- Leverage features of the operating system to drive innovation.
- Differentiate the member experience for mobile and desktop, given the unique consumer journeys associated with each.
- Focus on providing convenience in the experience—with apps focused on different objectives.
- Incorporate the most commonly-sought features and functionality based on consumer expectations, such as those detailed in the study.

The following report analyzes these findings along with many others to provide a strategic roadmap that empowers health plans to increase app downloads and more importantly, encourage ongoing app usage by all types of members.

INTRODUCTION

Consumers rely on online resources as they look for information and guidance related to health and wellness topics. Over the past several years, mobile health (mHealth) care apps have emerged as another useful means to fill this need while also providing valuable functionality that may not be available from traditional websites. Although most of these apps are not integrated into health care delivery, they do play a role in improving quality of care and reducing health care costs. That's because mHealth apps can help consumers identify the right care at the right place and at the right price. These apps can also be used by consumers looking to learn more about their medical issues and better manage their health. Most recently, apps have also emerged to help consumers compare health care costs and provider quality through consumer reviews.

THE GROWTH AND POTENTIAL OF mHEALTH

More than 259,000 mHealth apps are currently available on the iOS and Android platforms, which is double the number available just two years ago, according to a recent report.[1]

Experts believe that the market will continue to grow rapidly, predicting that the mHealth industry will reach $49.12 billion in global revenue by 2020.[2]

Although, as one might expect with any emerging market, there has been a great deal of "hype" around the topic, and not enough research and data around the barriers and opportunities that accompany app usage. For example, many apps don't offer the types of features and benefits that are most in demand by consumers and would promote long-term adoption and use. These include unique features not available within the desktop experience, especially those that make complex tasks easier and more intuitive. It's likely that these poorly-designed apps may be a driving factor in the recent slowdown of mHealth app downloads. A peer reviewed study also shows that approximately half of mobile health users ceased using apps, primarily due to high data entry burden, loss of interest and hidden costs.[3]

APPS DESIGNED TO MEET A VARIETY OF HEALTH, FITNESS AND WELLNESS NEEDS

To better understand how to create an optimal user experience in mHealth, it helps to first examine the purpose of these apps and the objectives of consumers looking to use them. mHealth apps can typically be categorized into two distinct groups—either Health and Fitness (56 percent of apps available today) or Medical (44 percent of current apps).[4] Recent data shows that 34 percent of all U.S. adults have downloaded at least one app that is meant to support healthy living and 19 percent of U.S. adults have downloaded and regularly use a medically-focused mHealth app.[5]

Traditional health care players are generally under-represented as mobile app developers. Just 12 percent of mHealth apps published today are offered by health plans and 14 percent by hospitals and pharmaceutical companies, respectively.[1] Instead, most apps are primarily designed by mHealth specialists or boutique technology companies. Unfortunately, this means they may use best practices in app development, but lack the kind of clinical and industry expertise needed to provide evidence-based guidance to consumers. Combining both aspects—health care knowledge with app development best practices—would bring mHealth to the next level.

APP DEVELOPMENT BEST PRACTICES

CLINICAL & INDUSTRY EXPERTISE

Evidence of this gap between clinical and technical best practices can be seen in some current mHealth offerings. Many of these apps replicate the desktop functionality of existing websites—making it difficult for consumers to navigate and accomplish more complex user objectives. In fact, these apps often lag far behind those of mHealth specialists or boutique technology companies in terms of the user experience. Functionality within these apps may also be highly limited. For example, a health plan's app may allow the consumer to pay premiums but won't feature robust cost and quality comparison tools or benefit information.

To address these issues, leading health plans must look to the best practices of other sectors and those implemented by successful mHealth specialists. They must also benchmark the current user experience with health insurance apps today and identify consumer expectations that may be currently unmet.

HOW AND WHERE CONSUMERS ACCESS DATA RELATED TO THEIR COVERAGE AND CARE

Based on a recent survey of consumers by Hanover Research, there are insights on both the actual user experience on mobile, as well as a general picture of how consumers access health guidance and how they interact with information about their health care coverage. For example, the survey revealed that 42 percent of respondents receive health information through internet resources like WebMD and similar websites and fewer (38 percent) consult their health plan's own website for this purpose. Consumers who do use these online portals do so to accomplish a wide variety of tasks, with looking up covered services, finding a doctor and reviewing claims being the most common.

> In terms of mobile app usage, just 13 percent of those surveyed currently use their smartphone to manage health insurance.

When compared with rates for downloads and utilization of general health and fitness apps, this data reveals a distinct opportunity to both raise consumer awareness of these apps and optimize the value they provide.

Health plans should keep demographics in mind as they target their approach, given that younger consumers and those with insurance from private exchanges are most likely to use an app from their health insurance company. (In fact, approximately half of consumers under age 45 indicate they already use an app from their health insurance company). That leaves the important but under-utilizing segment of older

consumers who also tend to have more costly health issues. This means that plans have much to gain in terms of providing benefit, cost and quality guidance via mHealth to this group.

36%

HAVE DOWNLOADED AN APP FROM THEIR HEALTH INSURANCE COMPANY

54% FOR CONVENIENCE
42% TO ACCESS EXCLUSIVE CONTENT
40% FOR EASE OF USE
38% ON A RECOMMENDATION
32% FOR SECURITY

Of those who did use their plan's app, the top reason for downloading the app was convenience, with 54 percent of respondents citing this advantage. It was followed by access to exclusive app-only content (42 percent) and ease of use at 40 percent. In terms of where consumers use these apps, three-quarters of respondents use their mobile device to interact with their health plans at home, although the workplace is also a common touchpoint.
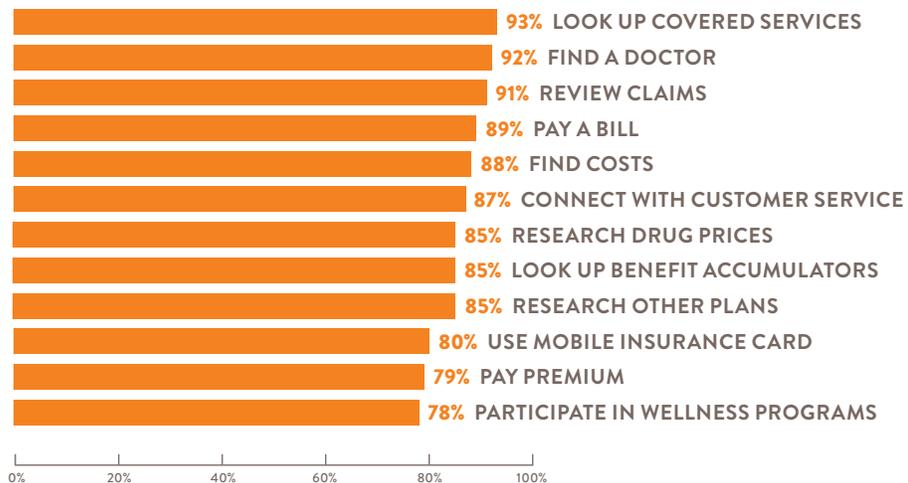
Interestingly, a significant percentage of users actually accessed a health plan's app on their way to a doctor's appointment (27 percent) or at the pharmacy (28 percent). Consumers ages 35 to 44 may also be likely to look up benefit accumulators to determine their out-of-pocket costs on the way to the doctor's office. This shows that many members are looking to access information closer to the point of care for decision support, an important differentiator for mobile.

COMPARING DESKTOP AND MOBILE TASKS

Of the consumers surveyed in this study, the most common functionality used within their health plan's portal was the ability to look up covered services, with nearly all respondents having experience using this feature (93 percent). This was followed closely by the ability to find a doctor, review claims, pay a medical bill, find the cost of a service or procedure and connect with customer service.

HEALTH INSURANCE PORTAL ACTIVITIES

93%	LOOK UP COVERED SERVICES
92%	FIND A DOCTOR
91%	REVIEW CLAIMS
89%	PAY A BILL
88%	FIND COSTS
87%	CONNECT WITH CUSTOMER SERVICE
85%	RESEARCH DRUG PRICES
85%	LOOK UP BENEFIT ACCUMULATORS
85%	RESEARCH OTHER PLANS
80%	USE MOBILE INSURANCE CARD
79%	PAY PREMIUM
78%	PARTICIPATE IN WELLNESS PROGRAMS

However, how the member is accessing the plan's portal can greatly influence the type of activities undertaken. For example:

- The most common tasks performed on mobile devices include paying premiums (59 percent) followed by looking up covered services (45 percent).
- Common desktop activities include reviewing claims (51 percent), finding the cost of a procedure or service (48 percent), and researching other plans (46 percent).
- Consumers were more widely split as far as common tasks performed on tablets.

Overall, the survey revealed that most members use their mobile devices to accomplish quicker tasks and use their desktops to do more time-consuming or complex tasks. For example, 37 percent of respondents were using their plan's mobile app to review claims while 51 percent did so via desktop. This is a complicated process for most consumers, who may be unfamiliar with the claims process and documentation.

IDENTIFYING THE GAPS BETWEEN CONSUMER EXPECTATIONS AND REALITY

The data about current mobile and desktop usage is important to set the stage for benchmarking the member experience today. However, there are also tasks not currently performed on smartphones that could become more standardized given the right mobile experience. To identify these gaps, respondents were asked what they would want to see from a health plan-sponsored mobile app.

> Overall, most consumers desired a better understanding of their health coverage, as well as learning how and where to obtain care, and identifying and comparing the cost of health care services.
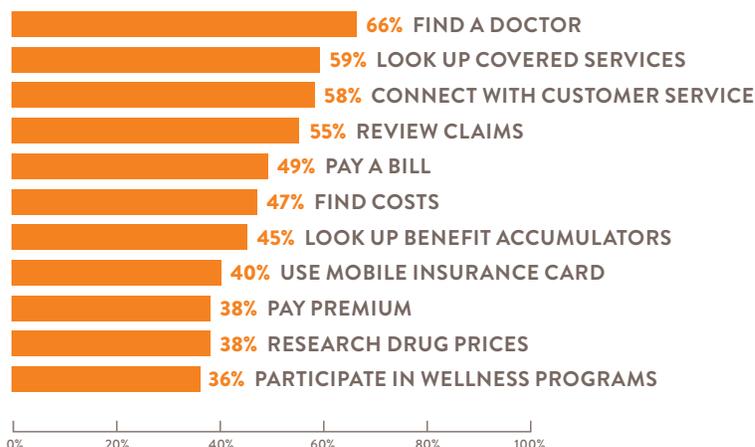
The last of these is not an easy task considering that the determination of health care value and actual costs can be incredibly complex given the interplay between each individual's benefit design, deductible and out-of-pocket costs. In addition, health care costs vary greatly by site of care, provider and geography. All of these elements must be factored in (not considered in isolation) so that consumers can make informed health care decisions. Given all these factors, only the most

advanced features and functionality would make a mobile app valuable in this area.

Consumers with no experience using a health plan-sponsored app were also asked about their expectations for features and functionality. Among those not currently using these mobile apps (the majority of consumers according to the study data), the most common expectations include the ability to find a doctor (66 percent), looking up covered services (59 percent) and contacting customer service (58 percent). When considering a mobile app to manage health care, the most important features include seeing which medications are covered and searching for specialists, followed by finding contact information for a doctor and researching the cost of office visits.

Consumer expectations also varied somewhat by age and source of insurance. Those with insurance through their employer or through a spouse, partner or parent are more likely to expect to find a doctor, review a claim and look up covered services. Those with insurance through a public exchange are more likely to expect the ability to pay premiums. This makes sense given that employer coverage is often auto-deducted from an employee's paycheck, and consumers purchasing through an exchange often pay for coverage directly.

EXPECTATIONS FOR A HEALTH INSURANCE MOBILE APP

- 66% FIND A DOCTOR
- 59% LOOK UP COVERED SERVICES
- 58% CONNECT WITH CUSTOMER SERVICE
- 55% REVIEW CLAIMS
- 49% PAY A BILL
- 47% FIND COSTS
- 45% LOOK UP BENEFIT ACCUMULATORS
- 40% USE MOBILE INSURANCE CARD
- 38% PAY PREMIUM
- 38% RESEARCH DRUG PRICES
- 36% PARTICIPATE IN WELLNESS PROGRAMS

0%   20%   40%   60%   80%   100%

PERCEPTIONS AND EXPECTATIONS OF AUTOMATED BOTS

Respondents were also asked about their opinions on automated bots, which allow for voice-activated inquiries (e.g., Siri, Alexa, etc.). This was helpful in determining whether bots could be useful in improving the mHealth experience.

In general, many consumers seemed open to the idea of accessing health care guidance and tools through these automated bots.

Specific survey results revealed the following:

- Opinion was somewhat divided on automated bots based on age and source of insurance. Two-thirds of consumers use automated personal assistants in general, and just over half say they have— to their knowledge—interacted with an automated bot online.
- Consumers with positive perceptions (34 percent) outnumber those with negative perceptions (21 percent).
- When asked what they use automated bots for in relation to their health care, the largest share of consumers reported looking up covered services and finding doctors.
- The reported likelihood of using such a tool was greater among younger people and those with insurance purchased on exchanges.

WHAT CAN I HELP YOU WITH?

CRITICAL BEST PRACTICES REVEALED BY THESE FINDINGS

Overall, the data collected as part of this study validated the notion that consumers care primarily about convenience and being able to perform tasks quickly and easily. This reinforces the idea that mHealth should be designed to address a specific use case or demographic, such as:

- A **'doing business app'** which could help consumers save valuable time and eliminate hassles associated with managing health insurance.
- A **'condition management app'** to help specific populations achieve better health outcomes and reduce costs, including pregnancy or diabetes management.
- A **'health care app'** focused on meeting health care needs through telehealth or education.

In addition, the desired functionality of health plan-sponsored apps may vary by age and type of insurance, but it is clear that some features are highly valued across the board. Health plans should include key transactional features in new apps or when updating existing apps. These features should be easy to get to so when consumers open the app, they can immediately access:

- App-based premium payments
- Quick search for providers, especially specialists
- Interactive benefit information (most health plan portals do not have searchable benefit coverage data currently), especially in the area of pharmacy
- Cost and quality data (specific to the individual's own coverage and deductible)
- Claims look-up

At the same time, developers should never forget that effective mHealth solutions are designed to solve a real problem while being task-oriented. This requires keeping things simple to account for the fact that the mHealth user has limitations not present in the desktop environment. In order to make unique features easier and more intuitive (while differentiating the mobile experience), plans must also take into account how to best leverage operating system capabilities. This is the best way to drive innovation in the mHealth space. Consider the following examples that align with this goal:

- Using a **touch log-in capability** in place of traditional user name and password entry
- Including **maps to the consumer's doctors** or other care providers within the app or link to the user's preferred map application for directions
- Allowing consumers to **schedule their next doctor's appointment within the app**—or one-touch ability to call or text their provider with questions
- Sending consumers **alerts for lower-cost care settings or procedures**
- Allowing health plan members to take a picture of a provider bill to submit it for **reimbursement**
- Offering **reminders for provider appointments**
- Enabling scanning of **credit cards for billing** (premium payment) purposes

Health plans must also consider the unique attributes and preferences by age group to ensure that the user experience meets those different expectations for transaction needs. For example, based on the findings detailed here, plans may want to consider incorporating a personal assistant/bot-based feature that will be valuable for younger consumers looking to manage their care. This is especially applicable for tasks that require only a few steps. For instance, a bot could be used in helping consumers look up

covered services or find doctors. At the other end of the spectrum, older members may be more interested in accessing benefit accumulator information to keep track of their ongoing out-of-pocket costs.

At the same time, health plans can help consumers based on their knowledge of demographics, health status and claims information in order to direct them to educational or care content. They should also consider notifications to consumers about care-specific content such as a pregnancy app or care for diabetes.

and resources. Creating a differentiated experience for mobile and desktop platforms is perhaps the most important driver of success in this space. However, plans willing to take even greater steps—like applying more advanced cost and quality tools, interactive benefit data and bot-assisted guidance—will be the clear winners in this race toward innovation. By supporting users where they are in their mHealth journey, these organizations will see more engaged, empowered members and the associated advantages such as greater quality, more optimal utilization and reduced costs.

TAKING mHEALTH INNOVATION TO THE NEXT LEVEL

It is clear that health plans need to act now in order to encourage greater adoption of mHealth apps, given the barriers identified and the gaps between member expectations and reality.

METHODOLOGY

Hanover Research, a leading research and consulting firm founded in 2003, was commissioned by HealthSparq to research consumer mobile application use. The study population consisted of 813 qualified individuals—those who owned a smartphone and were insured through a commercial health plan, excluding Medicaid and Medicare members. The survey took place over a two-week period and results were collected and analyzed.

MIND THE GAP

Consumers are looking to get greater convenience with their health plan apps. These organizations are well-positioned to do so if they are willing to apply the same level of careful consideration to the technical side of mHealth as they do for the clinical aspects of their tools

FROM MOBILE-OPTIMIZED TO MOBILE APPS: ONE PLAN'S JOURNEY

In late 2014, Regence, the largest health insurance company in the Pacific Northwest, recommitted itself to engaging the growing number of members ready to manage their health insurance using smartphones.

With a primary goal of getting into the Apple App Store, the Regence team first tackled the design and launch of mobile-optimized websites to establish a baseline of support for all web-enabled devices. The iOS mobile platform was chosen to lead with, based on analysis of website traffic and Android's ecosystem fragmentation.

A little over a year after the project kicked off, the Regence websites were optimized and the first insurance plan mobile app launched in the Apple App Store. The initial app was a hybrid of limited native functionality wrapped around a curated collection of mobile-optimized, web-based tools and information. This approach allowed Regence to leverage the investment in its newly-optimized website and focus on a few key native features (fingerprint identification, stored member ID cards and a map-based urgent care finder).

The Regence team then got to work on a second version, applying lessons learned and refining the experience based on user testing, performance monitoring and behavioral analytics. The second iOS app launched in mid-2016, supporting more complex benefit configurations, large employer group customizations and Medicare.

With Android on the roadmap, it was clear that the team needed to scale its efforts. This led them to adopt Facebook's React Native, an open source development framework that facilitates significant code-reuse between platforms, for its first Android app. The experiment proved successful and in early 2017, the first Regence Android app was released. One of the existing iOS apps was converted to React Native several months later, a timeline unthinkable just a year earlier.

According to David Elam, mobile product manager for Regence, "Using React Native allowed us to scale development and find efficiencies, which was key to helping us accelerate the launch of additional apps for our various plans."

Today, 30 percent of Regence's online traffic is mobile and Elam's team is focused on delivering real-time information and tools that help users at each step of their health care journey.

"We know that mobile app users tend to engage with the channel more frequently and represent the fastest growing traffic segment," he said. "And consumer expectations for mobile apps to offer novel solutions are growing. We are constantly analyzing the top behaviors of our users, such as looking for quality care and reducing costs, and making sure those actions are as intuitive as possible."

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[1]mHealth App Developer Economics 2016. October 2016. Research 2 Guidance.

[2]mhealth Factsheet. 2017. mhealthshare.

[3]Eysenbach, G. Health App Use Among US Mobile Phone Owners: A National Survey. October 2015. JMIR Mhealth Uhealth.

[4]mHealth App Developer Economics 2015. November 2015. Research 2 Guidance.

[5]Witters, D. and Agrawal, S. How mobile technology can improve employees' well-being. November 2014. Gallup.

ABOUT HEALTHSPARQ

At HealthSparq, we empower people to make smarter health care choices by partnering with health plans to provide members with cost and quality information about doctors, hospitals and medical services, based on their individual benefits. We put people at the core of everything we do by conducting continuous usability testing, eliciting consumer feedback to enhance product development, hosting industry panels featuring everyday people, and bringing human stories to the forefront through our #WhatTheHealthCare campaign. Using these insights, we create solutions to help people understand and navigate the health care system better than ever before.

Growing since our founding in 2008 from our home in Portland, Oregon, we now serve more than 70 health plans and their 72 million members nationwide. Contact us at HealthSparq.com *or tweet us @HealthSparq.*

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