# Customer experience in the pharmaceutical sector: Getting closer to the patient

Health Research Institute November 2013

# Customer experience series

This report is the third in a series of publications that focus on the customer experience in healthcare.

As patients exert greater control over their healthcare, drug makers need to master the complexities of consumer behavior.





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### **Executive summary**

Consumers have a habit of reshaping industries at inconvenient and unexpected times. Their expectations and demands may initially appear irrational, faddish, or impossible. But over time, a dance begins to evolve from a series of uncoordinated movements as industry responds to consumer demands. Today, the retail, banking, and travel industries are in step with their customers, making their moves based on a real-time understanding of consumer behavior. Rapid feedback and a focus on the customer becomes the lifeblood of the company.

Hospitals and insurers have been slower to follow suit, nudged along by competition and payment systems that now factor in patient experience. For the pharmaceutical sector, the economic implications of consumer behavior are more complex. Prescription drugs remain a highly regulated business with physicians prescribing the product. At the same time, insurance companies and employers bear much of the cost.

While consumers have limited veto power over the choice and price of prescriptions, they nevertheless have strong views on the industry, its products, and expectations for a positive customer experience.

Just as change is sweeping across the rest of the healthcare landscape, the pharmaceutical sector is shifting as well. Drug makers today must increasingly prove that the "value" of their products goes beyond established measures of safety and efficacy. To do that, they need help from patients—the individuals best positioned to provide real-time insights into how a product works.

The rise of high-deductible insurance plans places more financial burden on individuals and families. In the past five years, patient out-of-pocket costs for prescriptions have climbed by 250%.<sup>2</sup> As they increasingly spend their own money, consumers are no longer passive players in treatment selection and usage. They're customers with unique priorities, expectations, and demands.

Customers are reacting with increasingly high expectations of the industry shaped by experiences in other sectors. For example, TripCase, a mobile travel app, provides real time travel updates and nearby deals for American Express business travellers. The app knows precisely where travellers are and pushes pertinent information throughout their journey.<sup>3</sup> The pharmaceutical industry's challenge is to create similarly meaningful experiences across the patient journey.

Today, many drug makers still have a clouded vision of a patient's healthcare journey. The same old customer segmentation studies on which they typically rely aren't enough. Consumers are willing to offer feedback that informs who they are, how they behave, and how existing biases impact their behavior. Drug makers that tap into this feedback will reach a new level of success.

PwC's Health Research Institute (HRI) identified four defining elements of the next generation patient:

- 1. Appetite for personalized information and real-time feedback
- 2. Active participation in care and treatment
- 3. Focus on convenience and on-demand services for busy lives
- 4. Value-hunting through comparison shopping

In spring 2013, PwC's Experience Radar team surveyed more than 700 US consumers to understand their preferences and behavior in drug treatment selection and use, segmenting respondents into distinct groups. Key findings include:

- Consumers are seeking the same convenience they experience in other settings. In general, they are willing to pay 19% more for a "no wait time" prescription. Affluent baby boomers and Gen Xers with chronic conditions are willing to pay 52% more. Baby boomers with multiple chronic conditions are willing to pay 21% more for homedelivered medications.
- Treatment costs are the top reason people stop taking medications. An estimated \$213 billion is lost each year in the US due to wasteful or unnecessary treatment resulting from lack of adherence and medication mismanagement.<sup>4</sup>
- Baby boomers with multiple chronic conditions demonstrate less medication adherence than average, but they're willing to do something about it. Some 41% want do-it-yourself pharmacy health screening stations and 37% want a mobile app to monitor their vitals with contextual understanding of their prescriptions.

• Almost all Experience
Radar respondents said that
pharmaceutical companies did not
play a role in their diagnosis and
treatment decisions, suggesting
that current pharma education
and communication has had
limited impact. Higher-income
Gen Xers spending more than \$100
of their own money per month
on medications were 20% more
likely to seek advice from a doctor
than other sources and prefer the
interaction to be in-person.

Some of these findings initially appear to be outside a drug company's traditional scope. However, to meet the needs of the next-generation consumer, manufacturers must consider where in the patient experience they can deliver greater value. To start, pharmaceutical companies can identify the partnerships and resources needed to deliver value.

Drug companies have a rich history of attempting to speak directly to patients. In 2012 alone, the industry spent over \$3 billion on direct-to-consumer marketing out of \$27 billion in total promotional spending. But as new drugs aim for more targeted populations, companies must go beyond focus groups and mass market advertisements to better exploit the complex and highly relevant real-world experiences of individual patients.

Understanding customer behavior isn't a one-time event. Rather, it should cover the full life cycle of a drug. Some next-generation consumer approaches are coming from outside pharma. Device makers, technology, and wellness companies are all in the mix. They are devising ways to continuously engage consumers through education, self-motivation, and progress trackers for treatments and disease management.

For their part, more consumers want to be actively engaged in their treatment decisions. Quality of life, side effects, and cost can influence those decisions to varying degrees across therapeutic areas. Drug makers have a ripe opportunity to embrace the many facets of the emerging consumer who is increasingly at the core of our health system's success.

### An in-depth discussion

# A more sophisticated customer segmentation model

Many pharmaceutical and life sciences companies have relied on traditional techniques of using demographics such as gender, insurance status, age, and health condition to parse out the types of patients best suited for their products. But too often that approach to customer segmentation misses individual attitudes and behaviors, resulting in an incomplete picture of the consumer.

Behavioral economics principles commonly used in the retail sector shed light on consumption by adding emotions and biases into the purchasing calculus. One consumer energy management startup, OPower, makes detailed consumption data available to its customers, revealing how neighbors use energy and sharing conservation tips. Influenced by this impromptu social network, consumers have lowered their energy consumption, creating a positive ripple effect.

Pharmaceutical companies can go beyond the one-way mirror in analyzing consumers, delving into their behavior and motivations. Consumers want their medication experience to be personalized and meaningful. If their expectations are met, they're more likely to follow the proper course of treatment for longer. Whether a consumer is starting a new therapy, managing a chronic condition, or juggling multiple treatments, evaluating their needs throughout the patient journey is critical to delivering experiences that resonate with the patient (Figure 1).

Figure 1: PwC's Experience Radar uncovered four customer segments based on their medication behavior and desired experience



**Basic Bob** 

Self-reliant and rarely ill, though he is older. When he gets sick, he doesn't want high-tech gadgets or advanced treatment. He just wants affordable options with no extras, to take care of his symptoms and get him back to normal.



**Motivated Monica** 

Well-off but dealing with several chronic conditions. She puts a lot of time and effort into managing her health. And while she likes convenience, she values face-to-face advice from experts even more. That's why she always picks up her medication from the pharmacist in person, so she cantalk about it



Invincible Izzie

Much younger and rarely ill, despite her unhealthy lifestyle. But when she does have a condition, she prefers to research it online and manage her own treatment. This is quick and convenient—two qualities she values.



Routine Ron

A little older, also suffering from several health problems, but managing them at home, as he always has. Like Monica, Ron relies on others for help and support—but he prefers friends and family to experts.

#### Who views experience as a differentiator



Source: PwC 2013 Customer Experience Radar Research

Note: Please see the companion Experience Radar study for additional details about each of these segments

Aside from demographics and health conditions, the Experience Radar team analyzed elements of behavior and lifestyle such as:

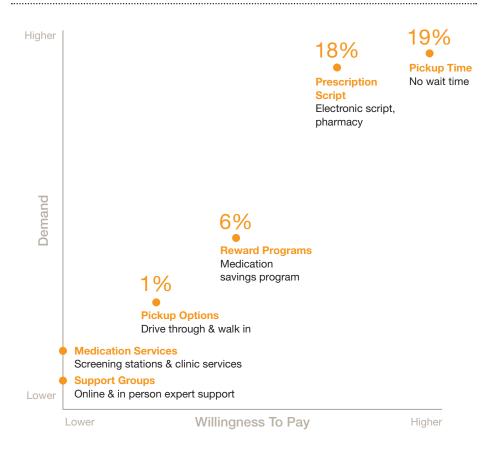
- Strength of social networks
- · Stress and healthy habits
- Extent of self-reliance or community reliance
- Willingness to share experiences with others
- Trust in information sources

To understand the value of experience, participants evaluated a variety of features ranging from information support, prescription pick-up options, reward and savings programs, and additional services such as health screenings. The results reflected a range of willingness to pay for these services (Figure 2).

Individual segments such as socially connected Gen Xers who are proactive about their care exhibited much higher willingness to pay for experiences such as time with medical experts and fast medication pick-ups.

Interpreting willingness to pay in the pharmaceutical landscape is a new frontier, as patients in the US rarely shoulder the full cost. It's not always clear who benefits from willingness to pay. Manufacturers can explore novel roles or partnerships to capture value from these desired features. In the new value-based health economy, pharmaceutical companies must tap into the unique characteristics of the next-generation consumer.

Figure 2: Consumers place varying value on a range of health-related services as measured by demand and willingness to pay



Source: PwC 2013 Customer Experience Radar Research

#### 1. Appetite for personalized information and real-time feedback

While parts of the health system struggle to integrate new data, consumers are charting their own digital course (see Sidebar on next page). The popularity of services such as 23andMe, a \$99 genetic test, and AliveCor, a smartphone-connected echocardiogram, fuels the quest for more knowledge. Online chat forums also serve up a constant flow of information.

Consumers are embracing their "quantified selves," using sensors, software, and devices to measure multiple aspects of their health and well-being. Few consumers today think pharmaceutical companies play a role in their diagnosis or treatment decisions, according to the Experience Radar results. This is a significant opportunity for manufacturers, which have so much to share about disease and treatment choices.

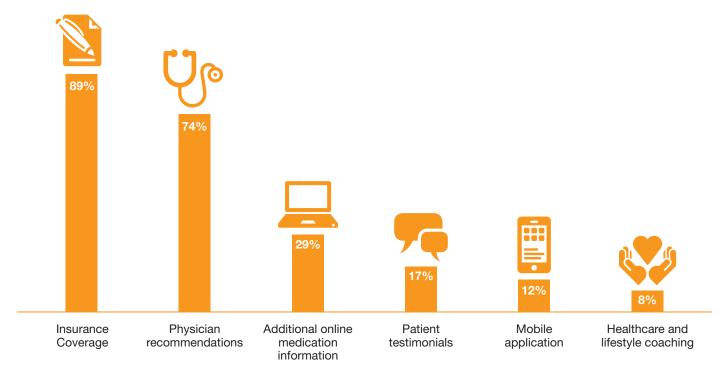
A majority of respondents (57%) preferred online medication support, such as disease and prescription education websites. Most millennials (ages 18-24) valued online medication support more when it included interaction with health experts. Onethird of seniors preferred in-person events in conjunction with online information. High-income Gen Xers spending more than \$100 per month on medications were 20% more likely to seek advice from a doctor than other segments and prefer in-person interactions.

"The biggest unmet need for patients is still education, information, and active selfmanagement support," said Jeremy Shepler, director of patient-centric strategy and solutions at Novo Nordisk.

When making a drug purchase decision, insurance coverage (89%) and physician recommendations (74%) were primary factors influencing consumers (Figure 3). However,

Figure 3: Although insurance coverage and physician recommendations are the most important purchasing factors, consumers are also using online information and testimonials to guide decisions

Choose and rank the five things that are most important to you when purchasing prescription or over the counter medication.



Source: PwC 2013 Customer Experience Radar Research

almost one-third of respondents reported that they sought additional information about their medications online—and in many instances they said the online information influenced their choice of treatment.

Empowered consumers seek information beyond insurance coverage and physician recommendations. They're looking at drug reviews and rating systems, which evaluate value for money and often recommend alternatives to branded medications.<sup>5</sup>

WebMD, a ubiquitous site for health information, hosts thousands of user-submitted reviews of prescription drugs. Each drug is rated on three dimensions—effectiveness, ease of use, and satisfaction, with additional user comments. Like online retail sites, consumers can read the most helpful reviews, as determined by other consumers, first.

Consumer Reports, a popular information source, recently ranked three generic diabetes medications as "Best Buy" drugs. The report advised that newer branded drugs are not safer or more effective, and side effects tend to be less well-known. As these trusted sources continue to host consumer opinions and influence patients, drug makers should pay closer attention to the information these sites make available.

#### Informed patients form social networks online and off

Today almost every drug manufacturer has a presence in social media, but few successfully engage with patients and establish their sites as a destination for disease- and treatment-focused conversations. A majority of Experience Radar respondents (57%) say they want online medication support, and 21% want online interaction with experts along with that support. But consumers consistently report scepticism about information supplied by insurers and drug companies. Rather, they place greater value on the experience of their peers.

"Consumers are forming networks of micro-experts about their own treatment experience," said Dr. Roni Zeiger, CEO of Smart Patients, an online community of cancer patients. "It's almost a new form of peer review." They're also paying attention to online patient testimonials regarding costs and side-effects prior to purchase. As patients build their peer networks, they equip themselves with better tools and information, and their voices gain traction within their networks.

These rapidly evolving peer networks in which consumers share health information are not just confined to the dominant social networking sites such as Facebook and Twitter. In HRI's analysis of treatment conversations, Topix.com and Reddit.com, neither of which is health-specific, were top online discussion sites for health issues. Disease-focused sites such as PatientsLikeMe and Smart Patients go even further, merging user input on symptoms, treatments, and experience to create valuable information for patients, clinicians, and researchers.

Since discussion forums constitute a large volume of internet chatter, companies may want to pay closer attention to the dialogue and sentiment expressed on these sites. HRI evaluated the cyberspace discussions regarding ten frequently prescribed drugs and found that the volume of that chatter can vary widely. Consumers' online sentiment about treatment options, medications, and side effects is largely negative, regardless of the drug being discussed. While companies may have a patient communication strategy for top social networks, they can also learn from discussions in other broader consumer forums. Such forums are easy to dismiss due to the volume of the informal chatter that takes place there. But when enough people participate in a discussion, consumers tend to give more authority and weight to the conclusions participants make.

Companies are beginning to tap into these grassroots networks. To better understand how bloggers are discussing patient and caregiver needs, AstraZeneca recently convened a summit of breast cancer bloggers at its headquarters in Wilmington, DE, gaining insight into online advocacy for care and treatment options. Sanofi maintains a diabetes Facebook page with about 8,000 likes. Patients, caregivers, providers, and the public can comment on the frequently updated postings. But pharma companies still trail significantly behind technology companies in online consumer engagement. FitBit, a healthy lifestyle device and application, has 126,000 likes.

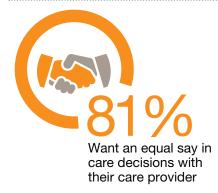
# 2. Active participation in care and treatment

Today's patient is moving from a passive recipient to an independent decision-maker (Figure 4). During the past two decades, industries such as banking have recognized the increasing power of the consumer, and as a result banks have evolved from 9-5 brick-and-mortar locations to always-available mobile and online presences.

Customers expect the same focus on their personal preferences from pharmaceutical companies. Some pharma companies have taken into account patients' desire to participate in their care and treatment decisions, leading them to create predictive measures and behavioral interventions that can improve outcomes.

One such measure, patient activation, determines an individual's skill level, knowledge of their health, and confidence in managing their health. Patients who score higher on the activation scale and feel that their healthcare professionals include them in decisions exhibit better health behaviors, including medication adherence. 10

Figure 4: Patients become partners in care and treatment when information is provided



Source: "Partnering with patients to drive shared decisions, better value, and care improvement," Institute of Medicine, 2013

Table 1: Prescription drug consumer behavior slang			
Drug holiday	oliday Omission of medications on three or more sequential days		
White-coat adherence	Improving medication adherence within a period around a doctor's appointment		
Trail mix	Casual and inappropriate mixing of prescription drugs		
Doctor shopping	Visiting multiple doctors until a preferred prescription is filled		
Pill splitting	Splitting medication in half in order to double the length of prescription, share with family and friends, or save money		

#### Adherence challenges remain

Physicians, health systems, insurers, and drug makers have grappled with medication adherence issues for a long time. One-third to one-half of patients frequently miss doses or even completely ignore taking their prescriptions.11 "Drug holidays" (taking a break from medication) and pill-splitting are also common (Table 1). Adherence is complex and multi-faceted, requiring approaches that can change a patient's behavior. But companies still lack an intimate understanding of patient actions in the "mystery zone" between doctor visits, perpetuating this age-old problem.

Consumers have behavioral biases that affect their medication usage. Many tend to brush aside future repercussions if they're feeling good today. Others get over-confident in their ability to master their health condition. They also struggle to manage complex routines and dosage regimens. But strategies for overcoming these difficulties need not be overly complex.

Recent research points to a range of techniques for overcoming behavioral biases, from blister packs that make pills easier to track, to reminder calls, to waiving co-payments. <sup>12,13</sup> Technological solutions can be simple too. A large majority (75%) of survey respondents preferred text message reminders compared to advanced monitoring apps or other devices.

Boehringer Ingelheim and Eli Lilly took on the challenge of medication adherence by teaming up to engage patients with My Well Planner, a program launched in 2012 that targets Type 2 diabetes patients. Based on a behavioral change approach, it offers personalized information that adjusts to patient use. The program allows patients with type 2 diabetes to partner with clinicians to set modest lifestyle goals at their own pace, building toward bigger goals. A scoring mechanism gives the patient a sense of accomplishment and momentum rather than just indicating compliance.

In another example, McKesson, a health technology service and drug distributor, uses call centers to keep in touch with patients and nudge them to take medications. Trained personnel take personal information provided by patients to encourage them to stick to their medication schedules. For example, they may urge elderly patients to adhere to their medications to be healthy enough to attend a grandchild's birthday. This helps patients focus on achieving their own "real-world" goals.

"Research shows adherence to therapy increases when patients are more engaged, and that patients want personal one-on-one support," said Amanda Rhodes, director of client strategy and solutions at McKesson. "It's a two-way relationship, so if we can develop trust over the phone or

across the pharmacy counter, there's a better chance of uncovering real barriers and helping that patient be more adherent."

Some consumers will be more receptive to interventions and support than others. Baby boomers with multiple chronic conditions are less adherent, but they're willing to do something about it. Some 41% want do-it-yourself (DIY) health screening stations, and 37% want a mobile app to monitor vitals.

"DIY doesn't mean consumers don't need you anymore," advises Dr. Josh Riff, medical director at Target. "They want the right partners helping them make their health decisions." Pfizer embraced DIY with its haemophilia population. Its mobile app, HemMobile, helps patients find local treatment centers and allows them to share their medication injections.

However, patients still feel like much of their medication is trial-and-error. Companion diagnostics that identify which patients are likely to be the most responsive to a given treatment option can overcome these attitudes and improve the prospects for success. Nineteen drug-diagnostic partnerships have been approved by the FDA. Genetic and other biomarker testing are other tools that can indicate that a certain drug may have a higher chance of success in specific individuals, boosting patient engagement.

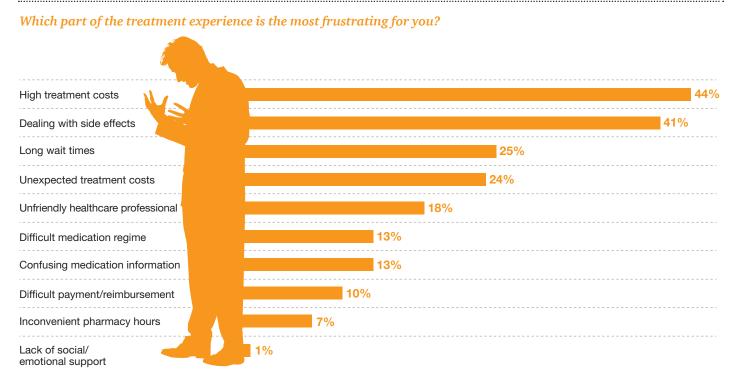
Frustration is a slippery slope that can eventually lead a patient to give up—on medications, care, and treatment. Although some sources of frustration are out of a drug maker's control, opportunities exist to improve patient engagement. For example, being transparent about total expected treatment costs, setting expectations

about time commitment to manage medications, and encouraging compassion from front-line professionals can help a lot.

The Experience Radar results underscore challenges for drug manufacturers and consumers alike. Experience Radar respondents reported long wait times, unexpected costs, unfriendly professionals, and difficult medication regimens as common frustrations with their treatment experience (Figure 5).

Expectations of meaningful information, outcomes or support evolve over time especially as an illness progresses. Patients understand a cure is often not available, but they want their quality-of-life improved in the course of treatment. This includes mobility, ability to continue working, participate in key life milestones, and physical appearance.

Figure 5: Cost and side effects dominate consumers' top frustrations regarding their treatment experience



Source: PwC 2013 Customer Experience Radar Research

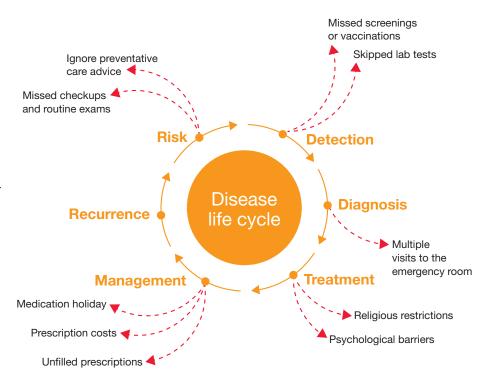
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# 3. Focus on convenience and on-demand services for busy lives

In 2013 Pfizer launched a website for consumers allowing them to purchase Viagra directly from the company. The move simultaneously addressed male reluctance to purchase the medication in public and a rampant online counterfeit marketplace for the drug. <sup>14</sup> At the same time, the company tapped into consumers' desire to manage their treatments as easily as they could order a book online. Fifteen years after the initial launch of Viagra, Pfizer created a distribution channel for consumers that offers a new sales path for other drug products.

Offering consumers convenience is important. They have the same low tolerance for inconvenience in acquiring medications as they do in other retail settings. Patients consider long wait times a serious problem across the health system, especially in emergency rooms. To One respondent described his problems waiting for medications this way: I purchased medication online. I had to fill out prescription forms and find a fax machine to fax that information in. Then I had to wait several weeks to get my prescription while I had run out."

Figure 6: Consumers find many opportunities to abandon their treatment at critical points during the disease life cycle



Source: HRI analysis; SJ Weiner, et al. Patient-Centered Decision Making and Health Care Outcomes: An Observational Study. Annals of Internal Medicine. 2013 Apr;158(8):573-579.

Poor service is one of the fastest ways to lose customers. Consumers will always find an exit from slow and inconvenient experiences. Patients desert their treatments because of psychological and logistical barriers, or they simply ignore the advice of physicians (Figure 6). Or they'll leave a pharmacy if they look at a line of customers and cannot tell how fast it is moving. Overall, consumers are willing to pay 19% more for a "no wait time"

prescription. Affluent baby boomers and Gen Xers with chronic conditions are willing to pay 52% more, according to the Experience Radar survey. Baby boomers with multiple chronic conditions are willing to pay 21% more for home delivery of medications.

Large drug retailers such as Walgreens have taken notice, creating 400 "Well experience" stores in urban areas that provide streamlined pharmacy services paired with cafes that serve sushi and other healthy options.

"Our guests have told us that one of the things they most value is time" –Dr. Josh Riff, medical director, Target

# 4. Value-hunting through comparison shopping

Pharmaceutical companies and pharmacies increasingly offer an array of rewards, perks, and other programs to entice and retain customers. But what do customers want? Today's consumers, whose pocketbooks are increasingly stretched thin after years of recession, predominantly associate value with lower cost.

HRI found that saving money is a top issue for a majority of consumers. Almost half of survey respondents (46%) preferred some sort of medication savings program over either no program, or a combined savings and well-being rewards programs, irrespective of income (Figure 7). Even senior citizens who have some prescription drug coverage through Medicare voiced similar cost concerns. Among survey respondents over age 65, 42% preferred medication savings over other programs.

Drug cost is so important because more people today juggle multiple health conditions that can last for decades. The Centers for Disease Control and Prevention (CDC) estimates that 26% of Americans have multiple chronic conditions, up from 21% a decade ago.

The survey results reflect fiscal realities. One in five consumers has trouble paying medical bills, according to the CDC. Consumers have weathered prescription drug price increases averaging about 3.2% per year since 2005, according to the Consumer Price Index. For diseases such as cancer, average US cost has doubled from \$5,000 to \$10,000 per month.

Today most drug makers offer discounts or financial assistance programs to increase access. One popular consumer website has hundreds of drug coupons available, organized by brand name.<sup>18</sup> While the practice is not viewed positively by insurers, consumers happily use the coupons. In

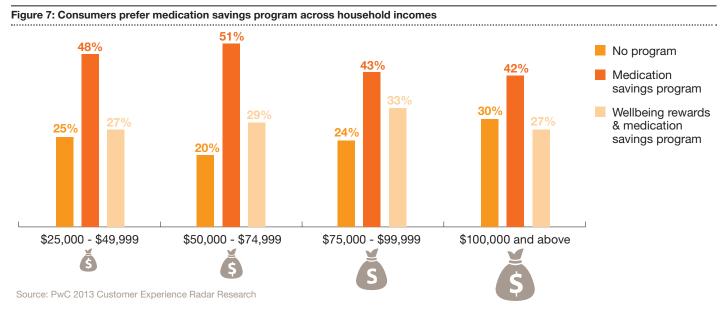
return, drug makers hope to remove out-of-pocket cost as a barrier and increase brand loyalty. One study of 2,800 patients found improved clinical outcomes and medication adherence rates 4-6 percentage points higher when copayments were completely eliminated for heart medications.<sup>19</sup>

"We recognize that cost isn't the only barrier to adherence; it's a piece of the puzzle," Rhodes told HRI. "When we provide patients with a co-pay card, we can help them to better afford their medicine, and when we partner the co-pay card with live support to assess additional barriers, we have the ability to address adherence barriers over time."

McKesson pairs its co-pay card with patient interventions that help patients with financial and disease management issues. "Affordability, complexity, and cost are the greatest challenges patients face when it comes to their medications," says John Helfrich of McKesson. "Patients with debilitating diseases like cancer often have difficulty navigating through drug options, costs, and the healthcare system. Care Advantage staff are available to assist the patient."



**Definition:** Well-being rewards are motivational incentives, financial and non-financial, awarded to consumers for pursuing healthy lifestyle choices. These choices include a wide array of activities, from eating healthy and exercising regularly to adhering to medication regimens and staying on top of medical checkups.



#### Getting closer to the patient

New payment models and rising patient demands are prompting existing healthcare players and new entrants to focus on the rich opportunity of improving individual patient outcomes. Drug makers can learn much from new players who are more adept at gaining customer mindshare. Opportunities for drug product and service partnerships also exist, with technology helping fuel greater consumer participation.

# Innovation floods in from outside pharma

Outside the pharma industry, companies are recognizing the opportunity to connect with patients managing their conditions and medications (see Case Study). Many non-pharmaceutical companies are making inroads catering to patient needs.

For example, technology company Glooko has devised an FDA-approved data cable and mobile app that records glucose measurements as well as self-reported moods and eating habits. The tool lets users discover cause-and-effect patterns in managing their diabetes—such as eating low glycemic foods. The results give patients clear, meaningful information to discuss and share with their physicians.

OMsignal, a developer of bio-sensing clothing, created a shirt with sewn-in sensors to measure heart rate, breathing, activity, and emotional state. While still in its early stages of development, OMsignal allows patients to monitor their vitals and post automatic health updates for friends and family. Being connected to this information daily heightens consumers' awareness of their health, which can lead to early intervention, prevention, and better health outcomes.

# Case Study: Propeller Health improves respiratory disease management

Asthma is taking a toll on the United States. More than 25 million suffer from the chronic condition, triggering 10 million physician office visits, two million ER visits, 500,000 hospitalizations, and 3,000 deaths each year. The disease costs the nation about \$56 billion a year in medical costs and lost productivity. Poor patient adherence is one contributing factor—up to 50% of patients do not take medication as prescribed.<sup>20</sup>

Patients can avoid attacks if they know how to manage the condition and avoid certain triggers. In the past, patients were asked to keep daily written logs of symptoms, frequency of attacks, and reaction to therapy. Patients had difficulty sticking with the system, leading doctors to question the reliability of the data. But patients using an electronic diary showed consistently higher adherence in one recent study, suggesting patients were eager for a more convenient tool.<sup>21</sup>

Propeller Health is hoping technology can fill the gaps. The company received FDA clearance in 2012 to market its device for respiratory diseases, including asthma and Chronic Obstructive Pulmonary Disease (COPD), to patients, doctors, and hospitals. Some insurers and public health agencies are smoothing the way by enabling access to the devices for patients with asthma.

Propeller is a small, portable device that fits on top of inhalers. It uses GPS, Bluetooth-enabled sensors, and a mobile app to help patients and doctors manage asthma through accurate trigger and symptom tracking. Text messages and popup alerts via smartphones remind patients to take their medication and log their symptoms.

Automating the chore of tracking medications, symptoms, and other data could be a game changer. Propeller keeps track of medication use by taking a digital snapshot of the time and location of inhaler use. The system shares this information with physicians. Propeller Health also offers ongoing educational outreach through email, text, mobile apps, and phone calls with certified asthma educators. <sup>22</sup> Physicians can remotely monitor asthma symptoms and how well their patients are sticking to their medication schedule. Physicians can also set up customized alerts if a patient's condition deteriorates.

"One of the biggest challenges for patients with asthma is the cost of their medications," said Dr. Alan Leff, professor emeritus at University of Chicago Medicine and a pulmonary specialist. The cost of asthma medication can easily exceed \$1,500 per year.<sup>23</sup> Costs climb higher for patients who fail to control their disease. Propeller Health estimates that its approach can reduce annual costs \$4,000 to \$6,000 per member, making it attractive to health plans.<sup>24</sup> Amerigroup Florida, a WellPoint plan, recently invited a targeted group of members to participate in a new asthma management program with the Propeller tools.<sup>25</sup>

New medical technologies always take time to diffuse into patient and provider acceptance. Propeller Health's approach improves patient awareness of triggers, is more convenient for the patient, and has the potential to lower other medical costs.

The HopeLab Foundation develops technology-based products to improve the quality of life of young cancer patients. The non-profit created two video games, Re-Mission and Re-Mission 2, in which players travel through the bodies of fictional cancer patients, destroying cancer cells and managing cancer-related side effects. Patients learn that sticking to their treatments helps fight cancer, resulting in a positive shift in attitude around chemotherapy.

HopeLab manages to unlock the mystery of adherence—engaging patients, increasing motivation, and providing enjoyment. One study of Re-mission demonstrates that this type of video game intervention can significantly improve treatment adherence and subsequently reduce cost.<sup>26</sup>

# **Engaging the patient at every stage**

Pharmaceutical companies that begin to engage patients at every stage of the product lifecycle can create longer-lasting patient relationships and improve chances of product success. Clinical trials, the most expensive component of drug development, often get delayed for lack of qualified patients. Only 3% of cancer patients participate in clinical trials.<sup>27</sup>

In the Experience Radar study, onethird of high-income Gen X women with chronic conditions wanted more information about clinical trials, signalling an unmet demand. Phase III is the most costly and timeconsuming step of clinical trials, partly because finding eligible patients is difficult. Pfizer sought to overcome this challenge by employing online tools to recruit patients with overactive bladders for a trial that did not require proximity to trial sites. The company obtained patient consent online and shipped investigational drugs directly to trial participants' homes.

This approach promises lower costs, more access, and lower administrative burdens. But companies must still overcome trust deficits from consumers hesitant to share personal health data with companies online.

Other pharma companies are turning to the technology sector to get help recruiting trial participants. Genentech recently partnered with 23 andme to use voluntarily provided genetic information to identify eligible patients for metastatic breast cancer treatments. The consumer-oriented genetic testing platform allows patients to share their genetic data and take surveys to evaluate their eligibility for large-scale clinical studies.

In a sign that regulators see the value in patient participation, the FDA is encouraging the submission of patient reported outcomes such as self-reported symptoms and quality-of-life measures. As the amount of patient-reported information builds, industry and regulators will need to agree on acceptable ways to communicate results.

Drug makers are also tapping into patients' desire to "own" their condition. AstraZeneca created a new advertisement for its 10-year old product, Crestor, which illustrates a "super fan" patient with high cholesterol as passionate about his medication as his favorite sports team.<sup>28</sup>

Novartis launched an ad campaign focused on early diagnosis of MS in younger patients, relying largely on Internet play and social media. Their product, Gilenya, was the first oral therapy available and also one of the costliest. Based on overwhelmingly positive real patient stories, the ads are bolder than traditional pharma advertising and feature a mix of real patients and actors sticking their tongue out (with said pill on the tongue) taking a stance against the disease.<sup>29</sup> Several Gilenya patients have posted videos on YouTube describing their experience.

# Health professionals create new customer touchpoints

As healthcare continues to decentralize away from the hospital, retail pharmacies, minute clinics and telemedicine are playing bigger roles. The two largest pharmaceutical retailers are expected to have at least 1400 retail clinics nationwide in 2013. Drug makers should consider the shift away from a traditional doctor's office and its impact on marketing, education, and communication. What's clear is that large gaps still exist in a consumer's understanding and awareness of their treatments.

Front-line healthcare professionals are already positioned to create better medication experiences for the consumer. Survey respondents identified pharmacists as a key resource for treatment information other than their physicians. However, national patient experience surveys conclude that 37% of the time, providers do not tell patients what their medicine is for and the possible side effects.<sup>30</sup>

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## What this means for your business

# Pressure test customer models against the evolving healthcare consumer.

Pharmaceutical and life sciences companies have long tried to segment and target their customers. However traditional efforts may not be enough to help them understand the next-generation consumer. Whether stretching beyond the bounds of segmentation and demographics or increasing the focus on behavioral insights, the industry must find a way to tap into its customers' nuanced lives to offer an enhanced personalized experience.

Patients managing multiple chronic diseases don't take a single drug in isolation. Drug makers can get a better understanding of their consumers by collecting feedback on how patients' experiences measure against the specific outcomes they hope to achieve, and by understanding the influence of social networks along the way.

And while marketers are accustomed to analyzing by brand, companies can maximize a customer's "lifetime value" by pressure testing consumer profiles across multiple therapeutic areas and product lines to deliver a unified customer experience. While only a handful of companies have a portfolio extensive enough to cover several conditions, those who do not should consider partnering with others that offer complementary products.

# Align real-world patient expectations and corporate strategy.

For pharmaceutical companies, making treatment easier for the patient should be the new recipe for product success. Companies that have succeeded in the past with outdated strategies may be skeptical about new approaches. Leadership must proactively communicate the vital role that the consumer plays in determining a company's future.

A customer-centered business model requires collaboration that breaks down organizational walls. For example, encouraging R&D to work with product launch teams to engage the patient early on may spur fresh ideas for patient education and communication. Becton Dickinson's leadership team rallied behind an effort across the organization—from developers to sales—to incorporate its customers' perspectives into product development. As a result, the company forged stronger two-way relationships with its customers, creating new business opportunities.<sup>31</sup>

# Create a permanent seat at the table for patients.

If companies box patients in as clinical trial subjects or focus group participants, they don't have a true customer-centered model. For starters, companies can strengthen patient input in clinical trials—from study inclusion criteria all the way through to communicating trial results.

Patients are anxious for answers to the questions that most meaningful to them. When beginning a drug therapy, they want to know, "Will I have to take off work for this?" and "What side effects will impact me the most?"

Creating a community in which patients feel comfortable expressing ideas about the information they receive and the support they need over time is important, especially as disease states change. Frequent and robust conversations with patients and their caregivers throughout the patient journey helps companies generate the right evidence.

#### Make it personal, make it precise.

Consumers want to know that the treatments they're taking are right for them. In the absence of better information, they turn to friends, family, and wider social networks to compare experiences. It's common for millennials to text a photo of a sudden skin condition to a friend before a physician. These networks are increasingly powerful and are quickly becoming more common. Regulations make it difficult to host or participate in these networks, but pharma should find ways to work in tandem with regulators to educate and clarify the value they can bring to patients.

Besides physicians, pharmacists are the other health professionals who have direct, personal contact with consumers. In the past, the level of interaction between a pharmacist and patient was limited to brief discussions about the dispensed medication.

Because of this, drug manufacturers targeted pharmacists with product messaging and education, resulting in a lackluster business impact.

Changes in the marketplace are prompting an increased focus on coordination of care among patients, physicians, and pharmacists. As the pharmacist's role expands and more retail pharmacies become full-service health centers, pharmacists have greater opportunity to enhance the customer experience and influence behavior by integrating care. California, for example, now allows pharmacists to provide additional services such as preventive care, chronic disease management, medication therapy management, immunization delivery, and wellness screenings.32

As pharmacies offer more care and services, they are becoming a good place to alert patients of clinical trials, disease support networks, and technology tools that can help patients better manage their conditions. Drug makers should rethink the quality and robustness of their pharmacist relationships, especially where retail clinics and pharmacy consulting services are available.

Targeted biologic medicines and molecular diagnostic products are routing patients to treatments more tailored to their genetics or other specific biomarkers. Companies with these products can proactively communicate the role and purpose of a companion diagnostic to strengthen the personal connection to consumers.

# Embrace DIY consumers determined to control their conditions.

Consumers are looking for better ways to manage their medications and associated costs, and many prefer to do it themselves. Technology that gives consumers more control over their lives, suggests healthy decisions, and avoids unnecessary medical appointments can bolster patient empowerment and improve outcomes. Apps focused on retail shopping, investing, and personal finance management already do this particularly well. Building on these industries' successes, the healthcare industry must determine how to provide patients with tools that can achieve desired results.

### Conclusion

The next generation of consumers is reshaping the pharmaceutical industry much as they have transformed other industry sectors. Customers want their preferences and behaviors understood and acted upon. As consumers take on more risk and responsibility in their healthcare, they're migrating from a passive recipient to a joint participant in drug purchase and usage decisions.

Other players such as health technology companies are not standing idle. They offer products and services that engage the patient in disease management, influence healthy behaviors, improve convenience, and provide better health information.

Drug makers and their retail counterparts must find new ways to create meaningful experiences and relationships with the ultimate stakeholder. In essence, a customer experience for pharmaceuticals.

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#### About this research

The research for this report included 24 in-depth interviews with executives in the healthcare industry. PwC also conducted an Experience Radar online survey of more than 700 US consumers in spring 2013. These consumers were 57% female, at least 18 years old, insured, and they had filled at least one prescription or purchased an over-the-counter pharmaceutical within the past two years. Eighty percent of respondents reported having one or more health conditions.

#### **Acknowledgements**

Marissa Addalia Senior Vice President, Business Engagement Health Ed

Rajinder Arora, MD Director, Pediatric Pulmonology La Rabida Children's Hospital

Liz Austin Associate Director, Interactive Patient Marketing Genentech

Ed Banfe Director, Consumer Marketing Bristol-Myers Squibb

Bob Brooks Executive Vice President WEGO Health

Joshua Cohen, PhD Senior Research Fellow Tufts Center for the Study of Drug Development

Stuart Davis
Associate Director, Brand
Marketing Patient Centric Strategy
and Solutions
Novo Nordisk

Chris Delaney Chief Executive Officer Insignia Health Lina Eliasson, PhD Clinical Strategist Atlantis Healthcare

David Van Sickle, PhD Chief Executive Officer Propeller Health

John Helfrich Director, OncologyRx Care Advantage McKesson Specialty Health

Judy Hibbard, PhD Professor Emerita, Senior Researcher University of Oregon

Alan R. Leff, MD Professor Emeritus of Medicine University of Chicago Medicine

Heather Morel
Vice President & General Manager
Health Informatics
Reimbursement, Access &
Safety Services
McKesson

Peter Pitts President Center for Medicine in the Public Interest

Josh Riff, MD Medical Director Target Amanda Rhodes Director, Client Strategy and Solutions McKesson

Jeremy Shepler Director, Patient Centric Strategy and Solutions Novo Nordisk

Jennifer Sigaud Managing Director Atlantis Healthcare

Erica St. Angel Chief Marketing Officer Propeller Health

Ken Thorlton Senior Vice President, Creative Director Health Ed

Laura Wilson, MEd

Jessica Wong Group Product Manager, Patient Marketing BioOncology Genentech

Roni Zeiger, MD Co-founder & CEO Smart Patients

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Michael Swanick Global Leader Pharmaceuticals and Life Sciences michael.f.swanick@us.pwc.com (216) 363 5817

Douglas S. Strang Advisory Services Leader US Pharmaceuticals & Life Sciences douglas.s.strang@us.pwc.com (267) 330 3045

Paul D'Alessandro Principal, Customer Leader Health Industries paul.dalessandro@us.pwc.com (312) 298 6810

Karla Anderson Principal Pharmaceuticals & Life Sciences karla.s.anderson@us.pwc.com (703) 674 6020