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Digital Patient Engagement

Insights for the Pharmaceutical Industry

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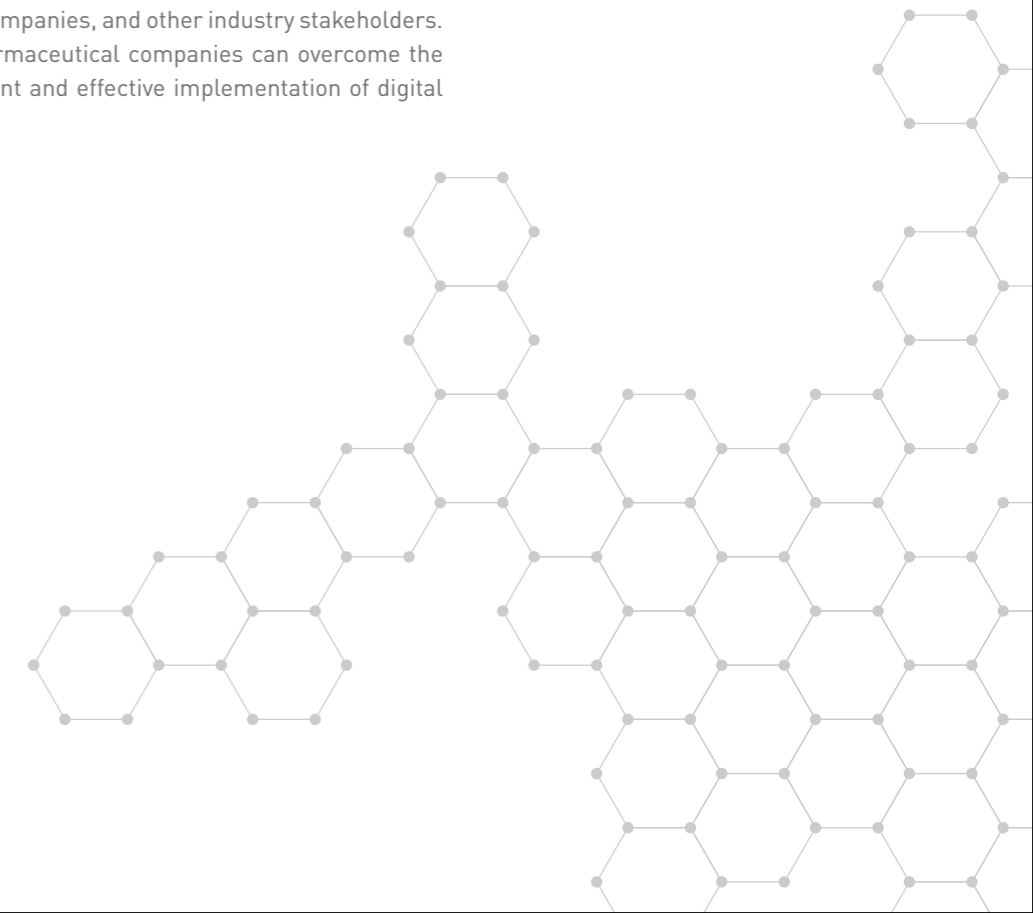
Executive Summary

The pharmaceutical industry is being reshaped by a set of economic, behavioral, and technological megatrends. Digital technologies are a major contributor to transformation in the industry, yet our research suggests that many pharmaceutical executives don't see digital disruption as a significant threat.

New modes of communication have primed patients to be receptive to digital forms of engagement. We define digital patient engagement as an information flow between a patient and a pharmaceutical company mediated directly or indirectly by digital technologies. Digital patient engagement is a growing trend within the wider healthcare industry, and pharmaceutical companies have been generally slow to adopt ways to get closer to patients via digital tools and technologies. By contrast, non-traditional players like Google, Microsoft, and IBM have become active participants in digital patient engagement.

Based on interviews with 30 executives, this report identifies the primary challenges and opportunities for pharmaceutical companies in the process of developing digital patient engagement initiatives. The benefits of effective engagement with patients are numerous, and include enhanced quality of patient care, improved health outcomes and faster and more effective research and development. However, significant challenges remain, including restrictive regulations, a deficiency of digital capabilities, and lack of buy-in from top leadership.

This report provides examples of digital patient engagement initiatives launched by pharmaceutical companies, technology companies, and other industry stakeholders. It also provides suggestions on how pharmaceutical companies can overcome the most common barriers to the development and effective implementation of digital patient engagement initiatives.



Setting the scene

Change is on the Horizon

Business models are shifting. The prevailing business model of ‘one product, one customer, one price’ is shifting to a model where patients, payers, and other stakeholders are gaining power at the expense of pharmaceutical companies¹. Ultimately, like many other industries before it, the pharmaceutical industry will have to transform itself to survive.

Digital disruption is here to stay. The pharmaceutical industry is being pressured to change. Yet, according to data from the IMD Business School, only 20% of pharmaceutical executives consider digital disruption to be a threat today. A further 40% expect to feel the impact of digital disruption within the next 3 years. Both these figures are significantly lower than comparable data from executives from other industries, such as retail, financial services, professional services, and manufacturing. Pharmaceutical executives nevertheless predicted that 30% of today’s largest companies in the industry will be in danger of disappearing due to digital disruption within 5 years.

Many pharmaceutical companies are unprepared for the coming changes. IMD research suggests that the level of preparedness among pharmaceutical executives was relatively low compared to other industries. Only 20% of pharmaceutical executives acknowledged that their organizations were actively responding to digital opportunities and threats (see Figure 2). A further 31% were following others in the industry, while just under 50% were either not responding at all, or were doing so inappropriately.

Costs are rising. The World Economic Forum estimated that non-communicable diseases will cost US\$30 trillion globally between 2010 and 2030². In the US alone, “the 13.3 million new cases of cancer in 2010 were estimated to cost US\$ 290 billion [...] The total costs were expected to rise to US\$ 458 billion in the year 2030”³. A large percentage of these costs will be borne by governments and insurance companies, who are demanding more from the pharmaceutical industry—better treatments, faster drug development, targeted education and training.

Patient knowledge is increasing. Patients are becoming more knowledgeable and empowered about their own health options⁴. They are demanding more control over their healthcare and increasingly call for personalized health solutions, home-based care, and less invasive treatments⁵.

New players are entering the industry. At the same time that pharmaceutical companies are faced with rising patient expectations, increasing regulation, mounting costs, and tighter R&D budgets, technology companies and other players are targeting the industry as the next untapped, lucrative market.

As these significant shifts occur in the pharmaceutical industry, the importance of patient engagement will rise⁶. Yet, many pharmaceutical companies struggle to consistently and effectively engage with patients, particularly across digital channels.

Key takeaways

- Digital disruption is not seen as a threat by the majority of pharmaceutical executives today
- Patients are increasingly knowledgeable and empowered about their wellbeing
- Patients expect more engagement than they currently receive from pharmaceutical companies

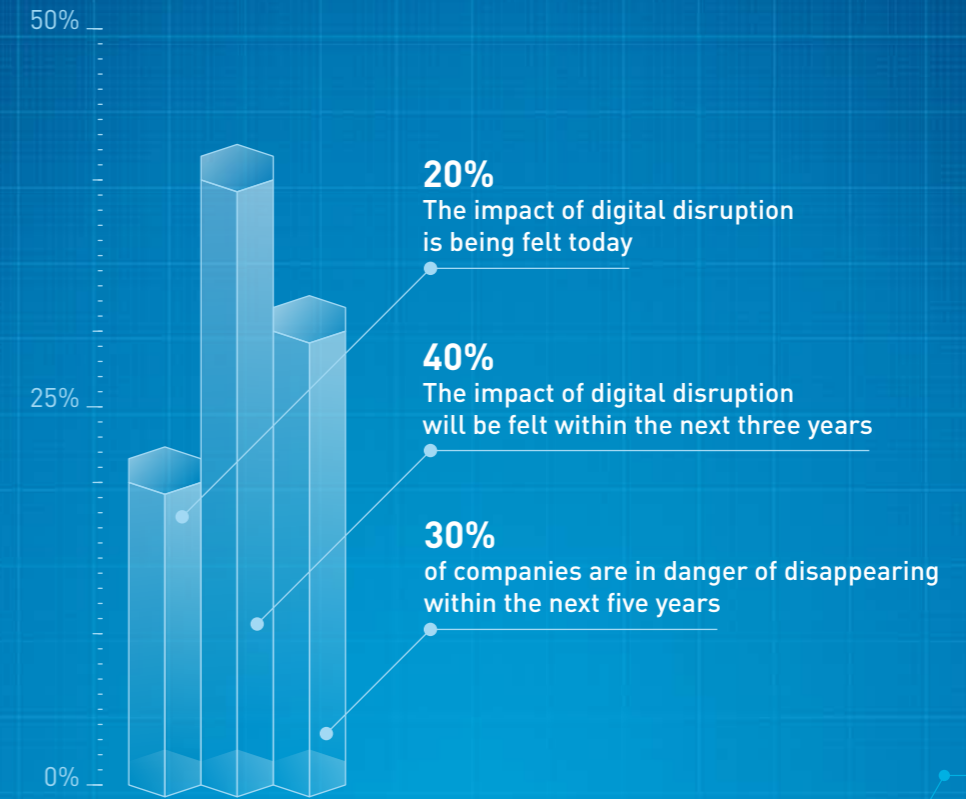


Figure 1: Impact of digital disruption on the pharmaceutical industry
Source: Global Center for Digital Business Transformation, 2017

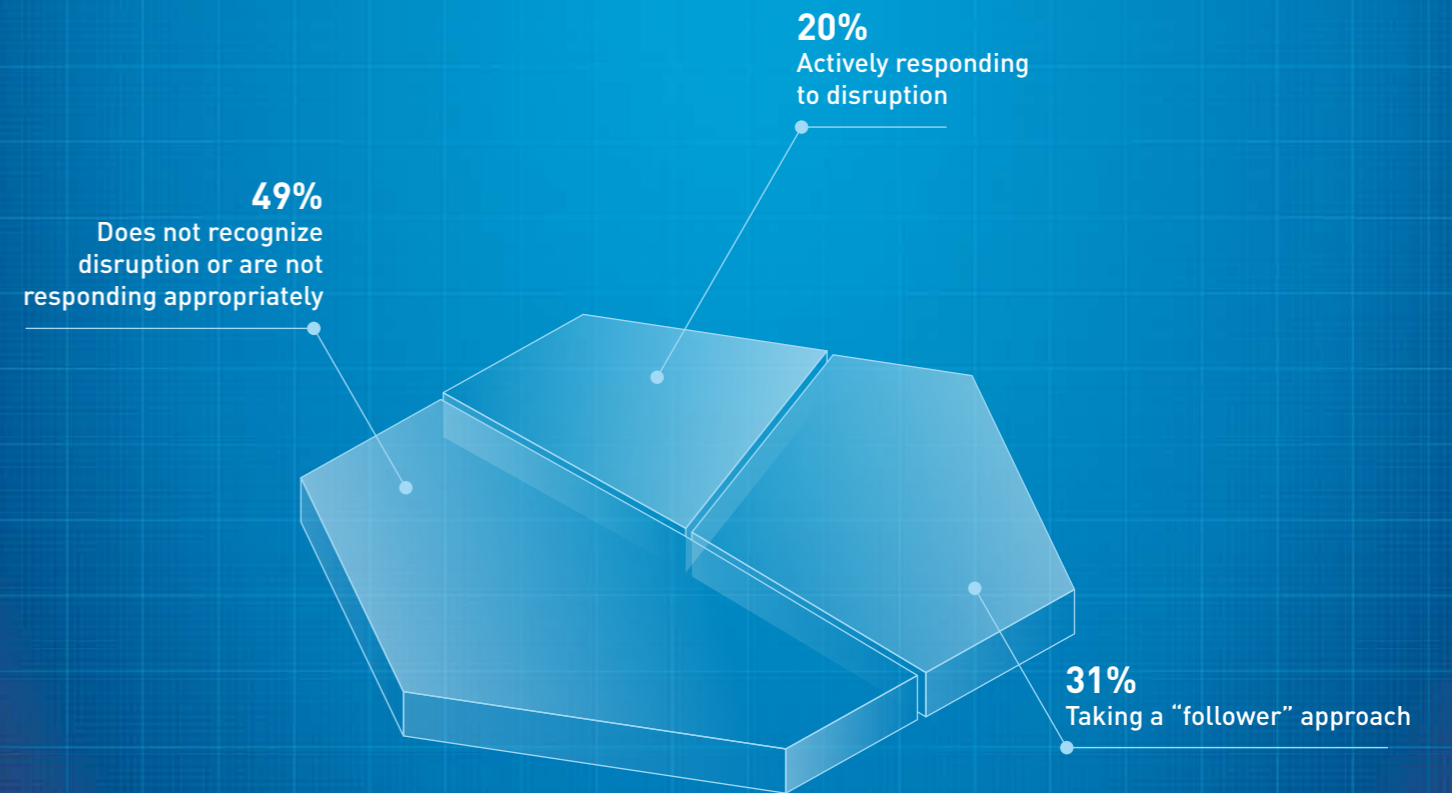


Figure 2: Leadership attitudes towards digital disruption
Source: Global Center for Digital Business Transformation, 2017

Digital patient engagement

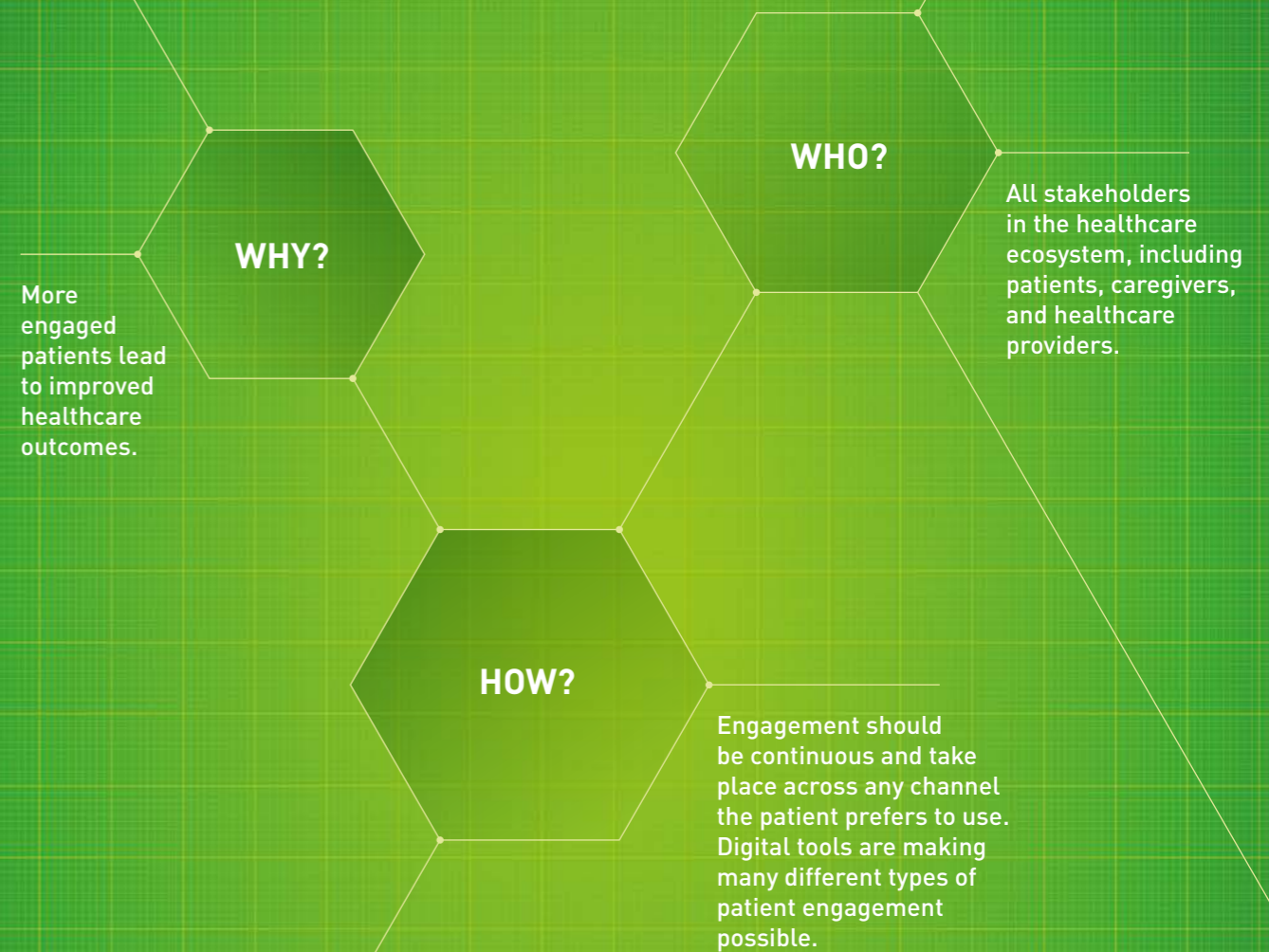
Digital Patient Engagement: A Definition

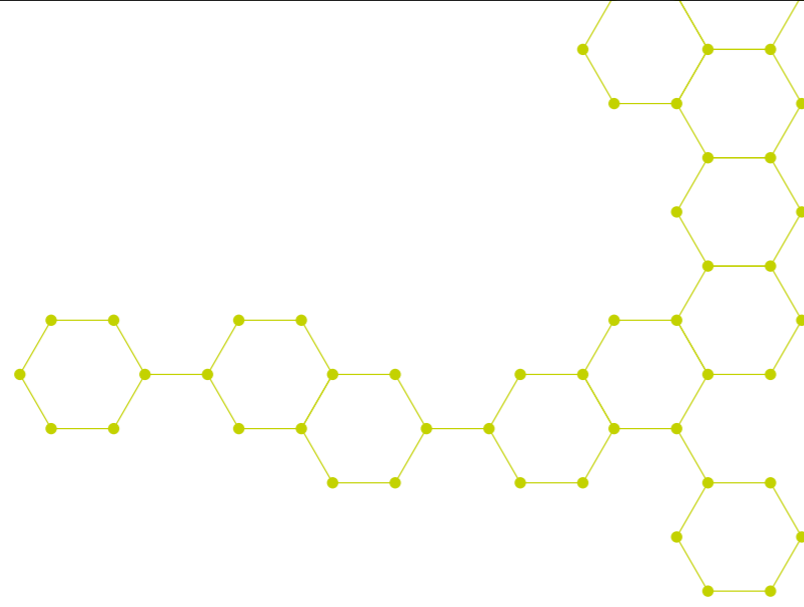
Digital patient engagement is defined as **an information flow between a patient and a pharmaceutical company mediated directly or indirectly by digital technologies.**

Engagement with patients should occur according to the preferences of the patient in terms of type, frequency, and mode of communication. The engagement process should be continuous and multidirectional.

Digital patient engagement can take many forms. Some examples include biosensor data from an ICU hospital room to the R&D department of a pharmaceutical company; treatment adherence data from an app; social media posts to or about a pharmaceutical company; and information about side effects or behavioral changes.

The potential responses to receiving this information can also take many forms, including improved treatment for the patient who communicated the information; improved treatment for other patients; improved decision-making by patients, caregivers and health care providers; positive public perceptions of the pharmaceutical company; as well as additional services and support requested by patients, or built from data collected from patients.





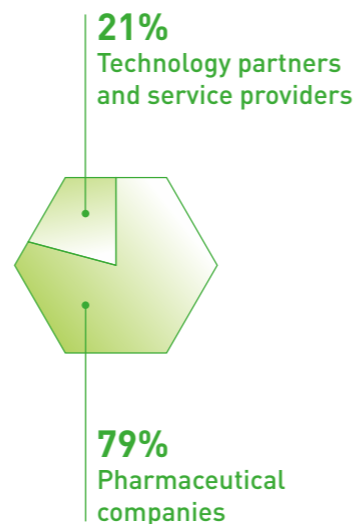
Types of Digital Patient Engagement

Based on interviews with executives, we identified six types of digital patient engagement initiatives. Four of these initiatives use digital tools to do what is already being done by other means. These are the most common initiatives employed by pharmaceutical companies. These initiatives add value, but do not take full advantage of the capabilities that digital technologies can provide.

Two of the six initiatives illustrate how digital capabilities can be leveraged to create new opportunities and new business models. These initiatives were often mentioned when subjects were asked about the future of patient engagement. Our research shows that only a few pharmaceutical companies have focused on these types of initiatives. By contrast, they have become the focus of technology companies and other external players.

Research Methodology

➤ **30 interviews were conducted between September and January 2018. 79% of the respondents came from the pharmaceutical industry and 21% were technology partners and services providers in the healthcare industry. Interviewees represented companies in Belgium, Denmark, Germany, France, Switzerland, the U.K. and the U.S.**



➤ **Secondary research was drawn from IMD Business School and Capgemini Consulting whitepapers, professional pharmaceutical publications, academic journals, and specialized websites.**

Table 1: Digital patient engagement initiatives

	Initiative Purposes (Why)	Megatrends associated with initiatives
DIGITAL VERSIONS OF EXISTING INITIATIVES	1 Marketing and communication to raise brand awareness	Economic drivers: informing patients and healthcare providers of new products on the market
	2 Patient education and training	Behavioral drivers: patient empowerment Economic drivers: reimbursement based on effectiveness of treatment
	3 Patient treatment adherence and monitoring	Economic drivers: reimbursement based on effectiveness of treatment
	4 Clinical studies / real-world evidence	Behavioral drivers: patient empowerment and patient advocacy demands Technology drivers: patient generated health data
NEW DIGITAL INITIATIVES	5 Better informed decision-making by healthcare ecosystem players and patients	Behavioral drivers: patient empowerment; informed patient; health as a consumer good; decentralized healthcare Economic drivers: reimbursement based on effectiveness Technology drivers: Patient generated health data; data driven precision medicine; decentralized healthcare; real world evidence
	6 New opportunities (holistic digital patient engagement; personalized & precision medicine; pharma as a service)	Behavioral drivers: patient as consumer; patient advocacy; patient wants to be part of the decision process Economic drivers: reimbursement based on effectiveness; improved R&D spending Technology drivers: artificial intelligence & machine learning; wearables, apps, devices; big data; cross platform compatibility

Digital Patient Engagement: Pharma Style

A. Digital Versions of Existing Initiatives

What do typical Digital patient engagement initiatives look like in practice? Drawn from our interviews and secondary research, we have compiled examples of the 6 types of initiatives presented in Table 1. These examples blend different types of engagement and target different points along the patient journey and product life cycle. They illustrate the variety of approaches digital patient engagement can take.

Type 1 and 2: Community building on social media

Example: A pharmaceutical company has sponsored a professional cycling team with over 100 members from around the world. All members have type 1 diabetes. The team has a dedicated website, and is present on social media. The purpose of the team is to raise awareness about type 1 diabetes and empower those affected by the disease (Team Novo Nordisk).

This initiative combines traditional engagement (marketing, education) with communication via digital channels (social media). It humanizes pharmaceutical companies by building community through indirect use of social media. In this example, the members of the sponsored cycling team are the company's ambassadors and they communicate directly with patients and caregivers.

Type 3 and 4: Patient monitoring and real world evidence

Example: A heart failure patient has been released from the hospital, and has been implanted with a device in her pulmonary artery that senses pulmonary pressure. The data is sent wirelessly via a home electronic device to the healthcare provider. The doctor can make changes to the patient's medication, or treatment plan before adverse effects are felt and the patient needs to be admitted to the hospital (St. Jude Medical CardioMEMSTM HF system).

This initiative combines traditional engagement (monitoring) with new forms of engagement using digital capabilities (data enhanced decision-making) and technological innovations (implants, biosensors). By tracking treatment outcome and using insights from data this digital patient engagement initiative contributes to improving the company's R&D, enhancing healthcare professionals' decision-making, increasing patient life expectancy and improving treatment. There are clear benefits for patients, as well. Patients receive personalized treatment, are able to go home (decentralized healthcare) and consequently, have a greater sense of emotional wellbeing.



Marketing and communication to raise brand awareness



Patient education and training



Patient treatment adherence and monitoring



Clinical studies / real-world evidence

Type 1, 3 and 5: Brand awareness, improved adherence and informed decision making

Example: Adherence is critical to effective treatment. Many patients, however, have a hard time remembering to take their medication, when to refill their medication and adhering to healthy lifestyle goals⁷. A number of pharmaceutical company branded apps have been developed to help patients adhere to their treatment plans. Most of these apps are compatible with medical devices and drugs that have been developed by other companies. These apps provide proactive reminders about when to take medication, when to ask for a refill, and medical appointments. The apps can also help patients stick to lifestyle goals. Information is typically sent directly to the healthcare provider. Some apps are disease specific, while others are more flexible, allowing patients to enter information about different treatments over time. If treatment changes, the app will provide educational information. The pharmaceutical company is able to collect patient generated health data that can help to improve treatment options. An added bonus is that patients who don't already use the company's products will become aware of this branded option through using the app (examples include care4Today®, MySugr, Glooko, Medisafe and others).

This initiative combines traditional engagement (brand awareness, adherence and education) with new forms of engagement using digital capabilities (data enhanced decision-making) and technological innovations (apps). By helping patients improve their adherence, they are more engaged in their treatment. When peer support is integrated into the app, patients are even more engaged. Adherence is linked with the effectiveness of a treatment and in a world where reimbursement will be based on effectiveness, these types of apps will prove a useful complement to a traditional treatment plan. Patient generated health data improves both patient and healthcare provider decision making.

There are challenges to overcome with this type of initiative. In order for the app to be successful, it requires patient buy in. This can be achieved by making sure the app is easy to use and compatible across devices. The educational material also needs to be useful and targeted.

As these examples illustrate, most digital patient engagement initiatives combine more than one goal. These examples also show that patients can now choose from numerous apps and websites. At the moment, the success of an application is linked to the patient's commitment to use it.



Marketing and communication to raise brand awareness



Patient treatment adherence and monitoring



Better informed decision-making by healthcare ecosystem players and patients

B. Thinking out of the box: using digital tools to create new value and opportunities

Some innovative and farsighted pharmaceutical companies have begun leveraging digital capabilities to develop new opportunities. Two examples are the LEO Innovation Lab, a LEO Pharma initiative, and WeHealth by Servier.

Type 4, 5 and 6: The LEO Innovation Lab

LEO Pharma launched the LEO Innovation Lab as an independent business unit focused on providing e-health solutions and add-on devices. Using a design thinking approach to prototype new solutions quickly with a patient-centric perspective, the LEO Innovation Lab has launched several mobile applications for people living with various skin conditions. One example is Imagine, a mobile app that tracks and analyses skin condition over time using advanced image analysis. The aim of the apps is to support patients and healthcare professionals in more easily identifying triggers and providing the right treatment more quickly.

LEO Innovation Lab in partnership with the The Happiness Research Institute has launched PsoHappy, a study exploring how psoriasis impacts the happiness of people living with the disease. The aim here is to make subjective well-being a more prominent part of healthcare systems and policy making.



Clinical studies/
real-world evidence



Better informed
decision-making by
healthcare ecosystem
players and patients



New opportunities
(holistic digital patient
engagement; personalized
and precision medicine;
pharma as a service)

Type 3, 5 and 6: WeHealth by Servier

WeHealth is Servier's e-health business unit. In partnership with start-ups, WeHealth seeks to provide e-health solutions for patients in Servier's areas of expertise. WeHealth is dedicated to developing innovative, patient-centric solutions that combine medical expertise and digital technology. One recent example is the partnership between WeHealth and Bioserenti to create Cardioskin, a connected t-shirt for cardiac patients. WeHealth seeks to be disruptive and takes a co-creation/open innovation approach. The company has a 3 year go-to-market strategy and \$4 million to invest in R&D. Each product launched must become a source of revenue within 5 years. Since its launch in 2016, WeHealth has received 98 pitches and forged 20 partnerships.

Both of these examples illustrate how to overcome the often-encountered problems of highly siloed and non-digital organizational cultures within established pharmaceutical companies. Both Leo Pharma and Servier have opted to create a separate entity or unit to focus on innovative e-health solutions.



Patient treatment
adherence
and monitoring



Better informed
decision-making by
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New opportunities
(holistic digital patient
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Digital Patient Engagement: Disruptor Style

A. Technology giants

Technology companies and born-digital businesses are seeing healthcare as an attractive market with high margins, complementary resource requirements, and relatively low barriers to entry. The risk for the pharmaceutical industry is that these companies will set the standards for digital patient engagement. Pharmaceutical companies will need to move quickly to ensure that they can participate in and influence digital patient engagement activity. What follows is a snapshot of some digital patient engagement initiatives.

Type 5 and 6: Verily

Targeted stakeholders: patients, R&D

In April 2017, Verily - Google parent Alphabet Inc.'s life sciences division - launched Project Baseline⁸, with the aim to collect health data from 10,000 people over 4 years to study health and disease in more depth than ever before. The data collected will be used to map trajectories from health to disease and find the way to disease prevention. The research project, launched in partnership with Google, Duke and Stanford Universities, uses various methods to collect data, including wearables like sleeping sensors or watches, mobile phone applications, and yearly health tests. Project Baseline is just one of many life science projects that Verily has launched at the intersection of technology and healthcare.



Better informed decision-making by healthcare ecosystem players and patients



New opportunities (holistic digital patient engagement; personalized and precision medicine; pharma as a service)

Type 3, 5 and 6: Microsoft in Health Digital Transformation

Targeted stakeholders: hospitals, healthcare providers, patients, homecare providers, R&D, operations

Microsoft provides solutions to a variety of healthcare players, from optimizing clinical operations, to medical analytics, to empowering care providers, and to engaging patients. By using a patient-centric model, all the company's solutions seek to make the patient's healthcare journey easier, more efficient and more tailored to the patient's needs. For example, Microsoft has developed a digital assistant that gives patients access to their health information and care plans; allows patients to find healthcare providers and schedule appointments; and provides personalized notifications and recommends preventive measures. Microsoft has also developed solutions for providing remote patient monitoring using analytics that automatically trigger care team alerts, virtual nurse assistant visits that allow patients to stay home and intelligent tools that recommend the next actions for care plans. Most of the technology solutions offered by Microsoft leverage data to increase efficiency, coordinate efforts, and personalize care.



Patient treatment adherence and monitoring



Better informed decision-making by healthcare ecosystem players and patients



New opportunities (holistic digital patient engagement; personalized and precision medicine; pharma as a service)

Type 3, 4, 5 and 6: SAP Healthcare

Targeted stakeholders: Hospitals, healthcare providers, payers, administrators, marketing, patients, R&D

Healthcare is a priority for SAP. The company provides solutions that can link the different data silos in a hospital. Applications are available through the web and mobile apps and everything resides in the cloud. SAP Healthcare provides three targeted solutions: patient care (patient timeline, patient administration and billing), care collaboration (remote monitoring of patient health, patient relationship management system), healthcare analytics and research (healthcare analytics, medical research insights, realtime analytics of clinical and biomedical data).



Patient treatment adherence and monitoring



Clinical studies/real-world evidence



Better informed decision-making by healthcare ecosystem players and patients



New opportunities (holistic digital patient engagement; personalized and precision medicine; pharma as a service)

Type 2, 3, 5 and 6: Philips Healthcare

Targeted stakeholders: patients, healthcare providers

Philips Healthcare provides a number of services and devices that engage with patients during illness and afterwards to promote wellness. Philips provides a Home Care App for patients and healthcare providers that accompanies the patient during her treatment and sends information to the healthcare provider. The company has also developed the HealthSuite platform (connected wearables and an app) that enables people at risk for developing chronic illnesses to become more engaged in their wellbeing. The company has also partnered with Weight Watchers and Amazon's Alexa to provide either platforms for reaching customers, or in the case of Amazon, technology that Philips does not want to develop internally. In addition to their customer facing digital offerings, the company has also transformed its internal culture, attempting to infuse digital throughout the organization⁹.

It is clear from the above examples that technology companies are using their expertise in data analytics and technology solutions to provide new insights into the patient journey. They collect data along the way that could help pharmaceutical companies improve the quality of their service delivery and product development. Technology companies are responding to more sophisticated patient demands with innovative products and services.



Patient education and training



Patient treatment adherence and monitoring



Better informed decision-making by healthcare ecosystem players and patients



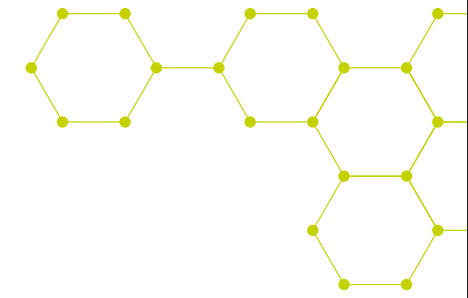
New opportunities (holistic digital patient engagement; personalized and precision medicine; pharma as a service)

B. New style patient advocacy is gaining traction

Technology companies are not alone in seeing the potential in digital patient engagement. Patient advocacy has reinvented itself thanks to the power of digital communication channels. Below are two of the most prominent examples of emerging models in patient advocacy.

Type 2, 3 and 4: Patients Like Me

Patients Like Me is a US based online social network for patients and caregivers. The platform's primary goal is to build supportive communities for patients. It also provides educational information about different treatments. Patients can compare side effects, effectiveness of treatments, and record their symptoms and treatment results. Patients Like Me was launched in 2004 and currently has over 600,000 members. More than 2,800 conditions are covered. The platform is a vast resource of patient reported data that is being used by the FDA, researchers, and pharmaceutical companies to create new forms of clinical trials, evaluate drugs, and develop a clearer picture of human health.



Patient education and training



Patient treatment adherence and monitoring



Clinical studies / real-world evidence

Type 2, 3 and 4: Carenity

Carenity was founded in 2011 as an online social network for patients and caregivers, providing information about diseases and treatments written by medical doctors and recorded by members. Carenity finances itself by doing market research for private and public health organizations using the anonymized data collected from its members. The company currently has 151,000 members and there are 455,000 posts. Carenity is available in 4 countries in Europe (France, Germany, Italy and the U.K.). To date, 42,900 treatments for chronic illnesses have been evaluated by its members.



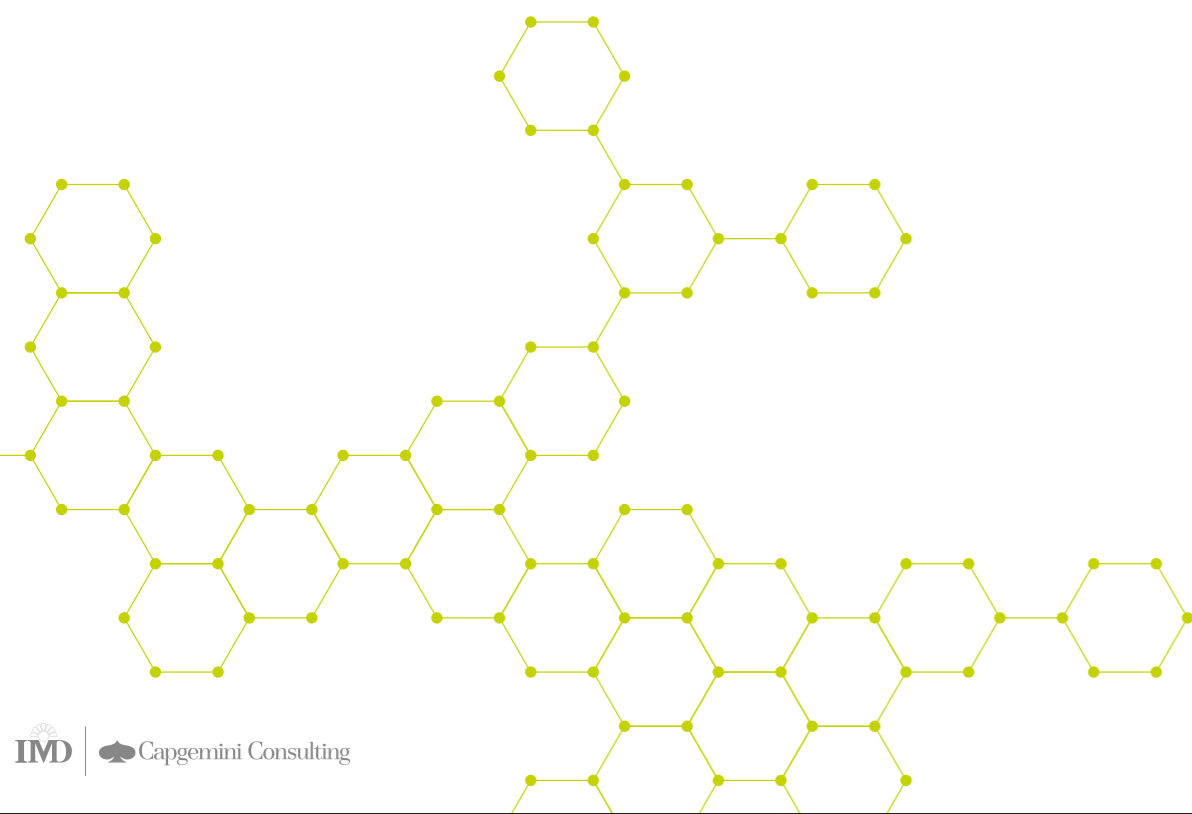
Patient education and training



Patient treatment adherence and monitoring



Clinical studies / real-world evidence



Opportunities and challenges

Opportunities of Digital Patient Engagement

We have come to expect immediate and sophisticated forms of communication with companies we engage with. Research shows that half of all customers posting a complaint on a company's Facebook page expect a response within an hour, and 86% within a day¹⁰. Many companies in consumer-facing industries, including retail, media, and hospitality, have redesigned their customer engagement practices with a focus on the customer journey.

Patients expect the same level of engagement from the healthcare ecosystem as they do from their favorite online shopping site. Research has shown that disease management programs increase demand for products and increase adherence¹¹. **Thus, developing a patient engagement strategy can strengthen current offerings and open up new opportunities by capturing patients from the beginning to the end of their healthcare journey.** There are opportunities in patient platforms developed by pharmaceutical companies that combine products and services.

Digital will continue to be the preferred channel for delivering patient engagement services. The number of digital initiatives launched by pharmaceutical companies is growing. According to the Capgemini Consulting Digital Life Science Market Web Watch, there was a 300% increase in digital initiatives from 2016 to 2017. 60% of these initiatives focused on patient experiences and 35% on digital R&D.

There is an opportunity for pharmaceutical companies to dominate the digital patient engagement arena. By moving from product provider to product and service provider, pharmaceutical companies can provide platforms, brand agnostic apps, devices and wearables that would become enablers for the patient journey. Specialized digital tools developed by pharmaceutical companies would support pharmaceutical companies and patients so as to provide optimal treatment. Tools could be sold, or leased to players in the healthcare ecosystem.

Developing tools that would supplement and support patient treatment plans at different points in the healthcare journey by engaging with the patient in an indirect but omnipresent manner would open up new markets for an industry under pressure to change. Companies would be able to collect data at different points along the patient journey. This data would provide a continuous flow of information that could be used to gain insights into the patient experience using advanced analytics. Data collected would improve traditional R&D, clinical trial procedures, the digital tools used in patient engagement, as well as provide valuable information for sales and marketing. Data is also a commodity and could be sold to third parties. In fact, a new opportunity for pharmaceutical companies could be providing third parties with data analysis services.

What the pharmaceutical industry can learn from customer engagement

- **A satisfied customer is the gateway to more satisfied customers**
- **Put the customer first**
- **Two-way interaction is key**
- **Customer engagement involves all departments in different ways (coordinated, organization wide strategy)**

Key takeaways

- **Digital patient engagement provides an important opportunity for pharmaceutical companies to improve performance along a number of dimensions, including quality of patient care, improved health outcomes, faster and more effective research and development.**
- **New modes of communication have primed patients to be receptive to digital forms of engagement.**
- **Now is the time to develop a patient engagement strategy.**

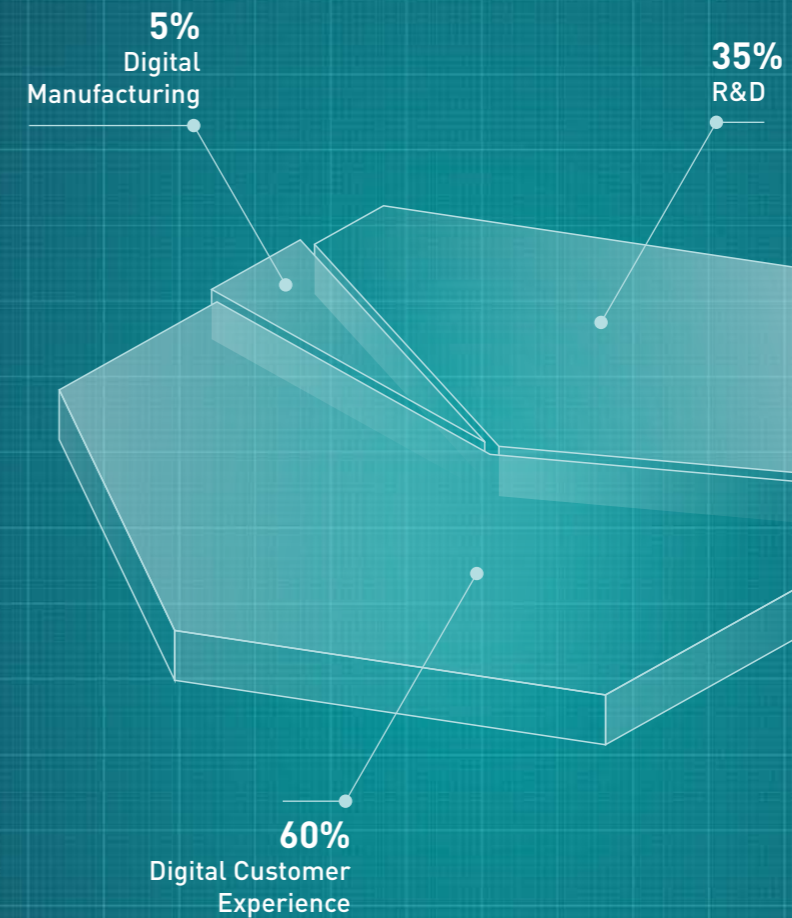


Figure 3: Focus areas of digital initiatives in the life sciences industry

Source: Capgemini Consulting Digital Life Science Market Web Watch, 2017

Challenges of Digital Patient Engagement

The executives we interviewed cited regulations as the top barrier preventing them from engaging with patients, especially through digital channels. Communication between pharmaceutical companies and patients can, and arguably should, be indirect.

Regulations were not the only barriers our respondents mentioned. They spoke frequently about the challenges around data management: "We are struggling to use and analyze data collected on social media;" "We have many sources of data, but they are scattered around the company and unstructured." Data governance and data management is a barrier that can be overcome by auditing current processes and hiring employees with the necessary skillsets. Pharmaceutical companies can also partner with companies that already have expertise in this area, instead of trying to do everything in-house.

Digital patient engagement can be part of a larger digital strategy leading to new business models and new opportunities, but a lack of digital culture will prevent a successful implementation of the strategy. Employees should be provided training and should be encouraged to test tools informally in order to encourage the adoption of digital tools. There should also be an internal push towards establishing a patient-centric culture company wide.

Another challenge mentioned frequently by our respondents was the upfront investment needed to launch digital patient engagement initiatives and the uncertain return on investment. However, patients are likely to associate increased wellbeing with the company that is providing, or co-branding, the services they are using.

Table 2 summarizes the first steps towards achieving a disruptive digital patient engagement strategy. It outlines the purposes, barriers and solutions for the most innovative digital patient engagement initiatives.



Table 2: Implementing the most innovative initiatives

	 Barriers	 Possible resolution
 IMPROVED DECISION MAKING	Regulations restricting pharmaceutical companies in their patient communication	Establish indirect communication by using third parties
	Lack of patient-centric culture	Develop a patient-focused strategy that involves all departments to greater or lesser extent Promote patient-centric culture by putting patient-centric KPIs in place
Purposes  NEW OPPORTUNITIES	Patient generated health data: a. Data collection regulations b. Data management processes and technology c. Data policies and governance d. Data analysis methodologies	Audit information infrastructure Collaborate with external experts to build data/digital strategy Create internal data policy and governance that adheres to external and internal regulations (in collaboration with employees) Create data management processes (in collaboration with employees) Hire data scientists with niche expertise (medical, chronic illness...)
	Impact of patient engagement on brand/image not yet qualified and quantified	When defining the success of patient engagement, take, reputation, patient satisfaction/wellbeing into account as well as the ROI Develop use cases & scenarios Monitor social media
	Highly siloed organizational structure prevents digital transformation Lack of internal digital culture (digital should be part of all departments)	Provide training to employees; provide opportunity to test tools and encourage adoption of digital tools Collaborate with external experts to build digital tools Develop cross department work groups focused on digital patient engagement Maintain a database on all digital initiatives companywide; coordinate efforts

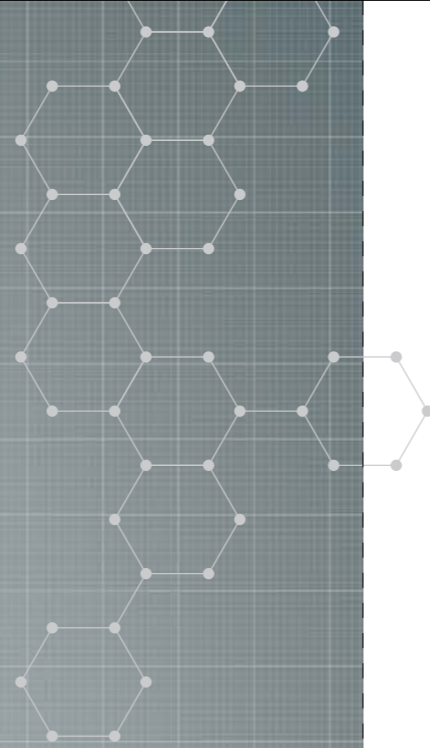
Conclusions

In this report, we define digital patient engagement as an information flow between a patient and a pharmaceutical company mediated directly or indirectly by digital technologies. Our research shows that there are many opportunities for pharmaceutical companies to create value in the healthcare ecosystem and leverage digital patient engagement to improve treatment outcome for patients.

Based on interviews with business executives and background research we identified six types of digital patient engagement initiatives. Four of these initiatives are digital versions of existing programs and they are the most common types of digital patient engagement initiatives. They focus on brand awareness, patient education, treatment adherence and patient monitoring, clinical studies and real-world evidence. Most initiatives that we found combine two or more of these elements. The two most innovative initiatives use digital tools to provide new capabilities and new benefits. These initiatives have a strong data focus. Data collected enables more informed decision making and new growth opportunities for pharmaceutical companies. Few pharmaceutical companies are launching these types of initiatives, but technology companies are. According to our interviewees, these innovative initiatives are where the future lies.

Our research also shows that there are challenges that pharmaceutical companies must overcome if they want to engage digitally with patients. It is essential for pharmaceutical companies to establish a digital and patient-centric culture. Collaborating with external experts, developing cross-functional, cross-departmental working groups and implementing a patient-centric strategy are some ways to overcome highly siloed organizational structures that inhibit a patient-focused approach.

Once the challenges are resolved, pharmaceutical companies can bring additional value to the healthcare ecosystem and help define the future. It is clear that digital patient engagement will be an integral part of the patient journey going forward, and has the potential to contribute to improved patient wellbeing and personalized treatment.



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