Digital Business

Helping People Heal

To improve outcomes, healthcare organizations must ensure their digital efforts to engage patients warm the industry's cold system of care with empathy, personalization and autonomy, our latest primary research reveals.

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Executive Summary

As healthcare organizations work to heal patients, they also hope patients are the cure for solving what ails the industry. Providers, payers and pharmaceuticals companies all hope building stronger relationships with patients will lead to better health outcomes and ultimately reduce the cost of care. The industry is investing heavily in digital initiatives designed to engage patients, connect them with physicians and help them follow doctors' orders.

But how well will these investments pay off?

We know what a good health outcome is from the perspectives of payers, clinicians and hospitals. Yet in all the focus on patient-centricity, it's not clear how patients define a good outcome. The industry can't truly engage patients without understanding their view of the healthcare system and their perceptions of how they heal. Without that understanding, digital patient engagement investments are likely to yield disappointing results.

So we studied the phenomenon of healing to truly understand what happens when people face a health issue or risk and need to manage or overcome it. We took an outside-in perspective, delving deeply into the lives of Americans across the country to gain insight into how a person goes through a successful healing process. When the system doesn't help people heal, what do they do instead?

Our researchers immersed themselves in people's everyday lives, visiting people in their homes, shadowing them at the physician's office, taking part in their daily routines. We intentionally chose to look across diseases to find patterns in healing strategies and recruited for the most prevalent and chronic conditions. Further, we gained insight not just into the lives of our initial patients but into their "respondent ecologies": the friends, families, colleagues and physicians that surround them. Finally, we validated the qualitative research with a large quantitative study.

Healthcare's temperature divergence





GOAL	Measurable outcomes	Healing is a means to achieve life goals
PROCESS	One-size-fits-all patient journeys	Healing journey happens through personalized nudges
APPROACH	Reduce the risk of patients deviating from treatment	Discover how to heal
Figure 1		

Our findings indicate the healthcare industry's efforts to engage patients are based on an array of faulty assumptions that calls for patient engagement to prioritize measurable outcomes; reinforces one-size-fits-all patient journeys; and tries to reduce the risk of patients deviating from treatment plans. We call this a cold system of patient engagement.

These industry misconceptions, contrasted with patient realities, include:

- The current system measures healing by numbers; patients measure healing by their ability to function.
- The industry tries to optimize medical health measures; patients care about their quality of life.
- Expert health prescriptions are the norm; patients instead rely on their peers' experiences for individualized guidance.
- The industry has invested in mapping linear patient journeys; patients, however, take steps forward and back as they heal.

- The prevailing wisdom is that it's better to ask patients to do less; our research shows patients and caregivers will go to great effort to minimize illness.
- The industry has put a premium on using electronic medical/health records (EMRs/ EHRs) to capture full medical histories; patients want assistance in telling the human story behind their medical information.
- The industry focuses on telling patients exactly what to do; patients instead need to go through a process of trial and error to find what works for them.
- The industry treats conditions instead of individuals; patients can follow treatment plans exactly and yet not feel like they are healing.
- The current system focuses on patients as the sole agents of medical adherence; however, healing does not occur in isolation and is an evolving process that involves many relationships.

The cold system of healthcare makes it harder for patients to heal, in part by pushing them away from the practices that help them manage their care. Much investment in digital tools and techniques to date has unfortunately been aligned with the misconceptions uncovered by our research.

We propose a new model for patient engagement. Our core idea is that we should use digital to *warm* patient engagement by bringing a more human touch, empathy and greater warmth, and by empowering patients.

Our study demonstrates that when patients get warm care, they are more likely to engage in successful behavior change, and more likely to be adherent. This points to a huge opportunity for digital patient engagement. Digital can be applied to warm up patient engagement by enabling people's life goals, personalization and discovery.

When most people think about digital, warmth isn't likely the first association that jumps to mind. Today, popular narratives about digital's promise often frame it as something mechanical and somewhat dehumanizing. By this logic, digital is cold and efficient, while humans are warm, if less than perfect.

But digital can, and should, be warm. Digital is uniquely positioned to enable warm care with individualized, adaptive, empathetic and scalable support. That's why we think that the road to improved outcomes runs through digital.



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Part 1: Our cold system leaves patients frustrated and overwhelmed

It's table stakes to talk about patient-centricity and patient empowerment. By empowering patients with more information, more choice and shared decision-making in the healthcare provider (HCP)patient relationship, the goal is to enable patients to take ownership of their health.

If they can take ownership, patients will be more "responsible" in following their treatment plans, going for annual wellness visits and taking their prescribed medications. But when you spend time with Americans, you see and hear a vastly different story. Far from being empowering, today's health system is disempowering, because patients are asked to play by the system's logic.

We spent a few days over the course of a month with Lauren, a 58-year-old mother who works two jobs in suburban New Jersey. She showed us a prescription her doctor had recently written for her thyroid medication. When she went to fill it, rather than costing the usual \$11, it had jumped to \$300 – and she had no idea why. "I used to know my health benefits to a tee, but now they're so complicated," she explained. She ended up having to call her pharmacist, doctor and insurance provider to find out, triangulating between the three. Lauren's story is not unique; the industry is aware that people struggle to navigate complex healthcare bureaucracies. But the result of these struggles is underplayed: Lauren decided not to fill her prescription. The outcome? No refills, and a new risk to a patient's health.

Across the country, people are constantly asked — and are struggling — to play by the system's logic. Take Daryl, a 50-year-old living in Dallas, who is diabetic, has diabetes-related neuropathy and has difficulty managing his weight. He talked to us at length about his doctors' visits. "I try to use the technical terms, and throw in numbers," he explained. He's worried that if he doesn't, the doctor won't be able to follow him, but the result is that he ends up feeling overwhelmed by the challenge of making himself fully understood by his doctor. Frustrated by a recent experience, he skipped a scheduled appointment, and when we met him he was considering skipping more.

We went to soccer practice with Maria, 29, and her young son, in Texas. From the sidelines, Maria told us that "We're supposed to avoid triggers for my son's asthma, but we want him to play soccer. He needs to lean in, otherwise he's not going to get better." Because Maria was asked to follow a generic treatment plan that didn't account for her aspirations for her son's life, she ended up not following the plan.

Meanwhile, we met with Candy, 76, in a town outside Boston. After we went to a doctor's appointment with her, she explained, "My doctor considers my heart serious medical stuff, so I feel like I should talk about that. But really my leg bothers me more." Patients are being asked to treat the health system's goals as their own. But the result is two-fold: their other needs can take a backseat, and, in Candy's case, she doesn't always take her heart medication as prescribed.

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We call this a *cold* system, because it is set up to optimize efficiencies and reduce the risk that patients make mistakes in treatment. This plays out in three ways:

- I Goal: Measurable health outcomes: The shift toward value-based care has resulted in an increased emphasis on healing by numbers.
- I Process: One-size-fits-all patient journeys: The industry has invested heavily in personas, and understanding the typical patient at each stage of the journey.
- I Approach: Reduce the risk of patients deviating from treatment: To address noncompliance, the industry demands perfection from patients from day one in treatment regimens.

While healthcare and life sciences have placed increasing emphasis on understanding and engaging patients, the disconnect between patients and the system remains pervasive. This isn't because patients don't want, or are not able, to take control of their health. Instead, it is because empowerment often means that the patient needs to adapt to the system, and not the other way around.

For example, when patients are asked to recount their last visit to the doctor, the impact of their condition on their quality of life was rarely discussed (see Figure 2). Because the health system doesn't adapt to the needs of patients, it makes it more difficult for them to be adherent and take care of their health.

System Disconnect

Question: The last time you saw an HCP, which of the following did you talk about?

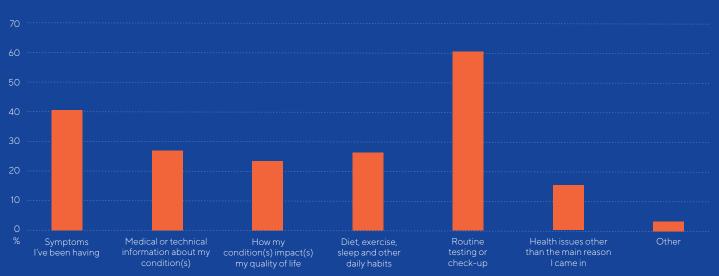


Figure 2

Part 2: Digital investments have followed a cold logic, but patients need warm care

Digital disruption is gaining momentum across the healthcare and life sciences spaces. Whether it's digital wrappers to products in services, taking pharma "beyond the pill" or payers building stronger digital customer relationships, players across the ecosystem see digital's potential to change the way patients are engaged. But investments in digital largely follow the same cold logic as the health system overall.

While we say we're giving patients more choice, it's the illusion of choice.

We met with Rayna, 29, a teacher in New Jersey who gets her health insurance through her job. She's a new mom, whose daughter was three months old when we met her. When she was newly pregnant, she used her insurance portal to look for an in-network obstetrics practice. She explained that it "Listed in-network doctors, but it was impossible to choose between them. I had no way of knowing who to go to. I couldn't easily tell what their hours were, if some of them were part of the same practice or what hospital they delivered at." Rayna asked friends for recommendations, but those doctors proved to be out-of-network, leaving her to do the research legwork herself.

Despite talk of "consumerizing" healthcare, efforts to provide people with more options to choose from – whether it's for their HCPs, or their prescriptions, or their treatment options – are falling short. This is because many of the digital tools that are intended to help people navigate choice aren't serving up the right information. The result is frustrated patients like Rayna, who aren't able to make proper choices because the tools provided offer contextually incomplete information.

To truly give people more choice, and thus more control over their health, the information they receive to make choices needs to be actionable. But we found in our survey that people don't often think they receive

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actionable information today. For example, 64% don't read the information given by their HCP thoroughly, suggesting they don't find it useful. And only 5% feel like the system is really set up to help them find a solution when they have an issue with a medical bill or co-pay.

So what is actionable information? For information to be actionable, it has to take people's life context into account. This enables people to use the information to make trade-offs based on their personal situation, figuring out what they can make work with their daily life. Providing information that takes patients' life context into account supports better outcomes. For example, people with multiple morbidities in our survey who said their HCP's instructions and explanations were fully realistic were 3.5 times more likely to adhere to treatment.



Our atomized system leaves people struggling to work with HCPs to manage their care.

Mary, 46, a charismatic, thoughtful woman living in a Dallas suburb, is juggling multiple conditions: she is in remission from cancer, is prediabetic, struggles with obesity, and has hypertension, fatty liver, uterine fibroids, sleep apnea and chronic depression. Mary explained that she had been severely depressed for over a year, but it never came up when she went to different specialists. "We always discussed my other conditions. There never seemed to be an opportunity to bring it up, even though it was a huge problem for me," she said.

It's well documented that patients often struggle to share information with HCPs. One study found that 12 seconds is the average length of time patients spoke for, before the resident physician jumped in.¹ Another concluded that new doctors spent on average eight minutes with patients.²

In our study, we witnessed Americans across the country like Mary, who struggle with their providers to manage multiple conditions. Today, one in four Americans have multiple chronic conditions.³ Despite major investments in EHRs that are shared among providers, this data doesn't include the patient's perspective, which they don't have time to share during the visit to the provider, either. This leaves providers with an incomplete picture, making it harder for them to treat patients effectively. The result is that depression like Mary's goes unaddressed.

But we found that when people can bring in their perspective, and share their full health and life history with their HCPs, they're more likely to be adherent. For example, our study found that people with multiple morbidities are three times more likely to adhere to treatment when they felt like their HCP took their concerns seriously at their last medical visit.

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Instead of feeling confident following their treatment plans, patients feel uncertain.

Learning to manage diabetes is a challenge, one that Tom, 25, who has had Type 1 diabetes since his teen years, has successfully conquered. How did he learn to become adherent to his medication, and how does he manage day to day? He explained very clearly what didn't work for him: "Doctors recommended the pump and glucose monitor. But it makes you dependent. It's a false sense of security. It's important to figure this stuff out, so you know what works for you."

Tom reflects a trend we noticed among the people we met with, which runs counter to the conventional wisdom that people want treatment to be easier. The digital solutions that are intended to take guesswork out of treatment end up leaving patients feeling disempowered because the current system devalues their health management skills and solutions.

Why is this the case? What we can see from our survey is that people don't rely on external confirmation to know that they are getting better. For example, only 14% know they're getting better because clinical measures related to their condition have improved.

Instead, people need to be able to learn to feel what works for them. When they do, they're more likely to make a successful behavior change. For example, our survey found that people are three times more likely to make a successful behavior change when they rely on how their bodies feel to tell them they are getting better. In Tom's case, he has experimented with his diet, by trying out different foods and drinks, seeing how he felt, and testing his blood sugar to figure out what worked best.

Many of today's digital tools for patient engagement follow a cold logic, by failing to account for people's life context, missing opportunities to help them bring their perspective into conversations with providers and leaving them feeling incompetent rather than empowered to manage their treatment. This explains why patients aren't embracing the existing digital tools they get from the health system. We can design digital differently, using it to warm up patient engagement by supporting patients' own preferences and augmenting their capabilities.

We used to rely on providers to be the "warm hands" that translated the cold system for patients, but it's become harder and harder for them to play that role.

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Part 3: We need to design digital for warm care

The people that heal manage to warm up their care. Warm care happens when healing becomes a means to achieve life goals, patients' healing journey happens through personalized nudges and patients discover how to heal. For digital to be valuable in patient engagement, it can, and should, be warm. We found in our study that this requires digital to enable three things for patients to heal: people's life goals; personalization; and discovery (see Figure 3, next page).

Cold system: Healing has an end: health outcomes. Warm care: For patients, healing is a means to achieve life goals.

Sid, 63, struggled for a long time to take his diabetes medication as prescribed, despite being well informed by his doctor about its importance. Then, Sid unexpectedly won a motorcycle at a charity auction. Sid started experimenting. He developed new relationships riding his motorcycle. These "bromances," as his wife calls them, gave him a new purpose. He changed his diet, discovered he liked oatmeal and started taking daily walks. He also became adherent to his medication, because he wants to ensure he can be on his bike five or 10 years down the road.

Sid's story illustrates a broader trend we noticed across the Americans we spent time with, one that is intuitive when we think about our own health. Measurable health outcomes aren't particularly relevant to people. Sid didn't care, for example, what his A1C level (glucose) was. But what a good health outcome enables is very relevant to people. If Sid's A1C level is above target, he knows that in the long run, that's going to worsen his health, and his chances of being able to ride his Harley with his friends. Maintaining his health is a key means for Sid to achieve concrete goals in his life. This insight was reflected in our survey results as well, where rather than relying on measurable outcomes, people preferred to focus on what they were able to do to know they were healing (see Figure 4, next page). We need to support patients like Sid in identifying life goals, connecting measurable health goals to the achievement of life goals and tracking their success toward meeting them. Again, it is possible to design experiences that align with patient measures of success while also mapping these to accepted clinical metrics.

Cold system: One-size-fits-all patient journeys.

Warm care: For patients, the healing journey happens through personalized nudges.

We met with Candy, a spry, "mischievous" 78-year-old, at her home in the Boston area, and accompanied her to a regular doctor's appointment. Her daughter, Dolly, who sees the same GP, came with us. Both have chronic health problems, but find that their doctor really helps them manage them.



Turning up the heat on healthcare

A push for efficiency has put providers' investigative and coaching roles under pressure.

Providers forced to spend less time with patients. More visits to urgent care clinics means patients don't go to their PCP. Medicine is short-changing the "incremental care" GPs used to provide.

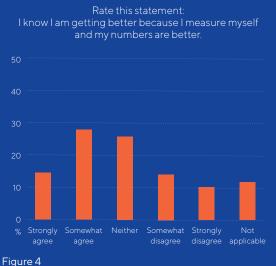
Figure 3

Why outcomes matter

People don't rely on measurable outcomes...



Rate this statement:



l know I am getting better because I am able to do more of the things I normally do. 50 40 30 20 10

Measurable health outcomes aren't particularly relevant to people. But what a good health outcome enables is very relevant to people. People don't go through linear healing journeys, where they go from sick to well, or from diagnosis to successful management. Progress happens in fits and starts, with steps forward and backward, and changes in life circumstances that demand adjustments to treatments.

Their doctor reaches out between appointments to check in, and problem-solves everything from side effects to vacation planning. He also updates each of them on the other's problems and progress, helping them to make use of their most valuable healing resource: each other. Their enthusiasm for these check-ins may seem counterintuitive to people who expect that patients would value privacy. But what we saw across people we met was that care doesn't flow one way, from the caregiver to the care receiver. Instead, people want reciprocity in their relationships, whether they are sick or well.

What really stands out in Candy and Dolly's story, however, is the personalized care they received. The fact of the matter is that people don't go through linear healing journeys, where they go from sick to well, or from diagnosis to successful management. Progress happens in fits and starts, with steps forward and backward, and changes in life circumstances that demand adjustments to treatments.

Yet personalized care that helps patients problem-solve is rare, at least from providers, given their constraints on time and resources. For 69% of the people we surveyed, their providers did not check in to see how they were doing outside of a scheduled appointment in the last two years. This represents an opportunity for digital to provide personalized support that follows patients' ups and downs day-to-day, helps them problem-solve when problems arise and is customizable based on patients' progress.

What Candy and Dolly's GP did is scalable with digital, and is all the more important at a time when primary care physicians who engage in this type of valuable relationship-based problem-solving with patients – what American surgeon, writer and public health researcher Atul Gawande has termed "incremental care" – are being squeezed out by our health system.⁴

Cold system: Demands perfection: no room for error.

Warm care: For patients, healing happens through discovery.

Treatment plans are binary: either a patient follows the directions, or she does not. But the reality is most people experiment with their treatment. We need to understand and channel this behavior in order to help patients become adherent. For example, we found in our survey that 47% of people who take prescription drugs have explored different ways of taking them (see Figure 5, next page).

Lauren, 58, needed to take her osteoporosis medication on an empty stomach, so she experimented with different times of day to take her medication to see what worked best for her. She found that if she kept it by her toothbrush, anchoring it to the habit of brushing her teeth, she was more likely to remember to take it, and by discovering what worked best for her become adherent to her medication.

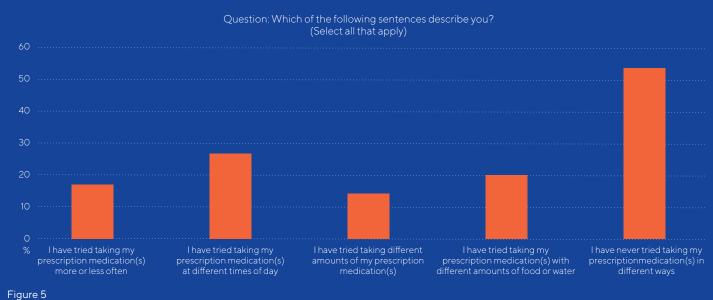
But then she ran into a problem: when she took the medication, she didn't feel any better. She had no way to assess for herself whether the medication was working. Because she didn't feel like she was healing, she stopped taking her medication.

Lauren's story is common. For discovery to be successful, it can't be experimentation for the sake of experimentation. Patients need to use discovery to connect cause and effect, in order to solidify habits into a lasting routine. With osteoporosis medication, for example, patients will never feel the effect; they will not feel better after having taken the medication. But they can establish their own cause and effect. Lauren could borrow from Rayna, who in an effort to shed her post-pregnancy pounds has become a regular at the gym. As a post-exercise treat, she grabs a fruit smoothie. Lauren just needs help identifying and tracking her own post-medication reward.

We have a cold system that asks patients to play by its rules, learn its language and share its goals in order to heal when they're sick. This makes it harder for patients to heal, contributing to poor outcomes. We need to dramatically rethink patient engagement, and account for patients' lived context to provide the support they need to manage their health. This means providing warm care that:

- I Helps patients establish and track meaningful goals, not just measure healing by medical numbers.
- **I** Enables patients to engage in a process of reciprocity, targeting care relationships rather than individuals.
- **Provides contextual follow-up care** that helps patients problem-solve and fit treatment into their daily lives.
- I Guides patients through an active process of trial and error, so they can discover how to be adherent, rather than just telling them exactly what to do.

By adapting these principles, healthcare and life sciences companies can minimize the effects of a cold system that can leave patients overwhelmed and disempowered through warm care that drives meaningful improvements in outcomes.



How patients experiment with medicine-taking

Part 4: Getting started

We find that warm care points to a range of opportunities for healthcare and life sciences to rethink current patient engagement.

To provide warm care, payers and providers can get started by doing the following:

I Embrace the transparent marketplace. Providers and payers already recognize the need to establish price and quality transparency in healthcare. To be useful for consumers, this trend needs to go beyond giving patients convenient access to accurate information — for example, about out-of-pocket costs. Healthcare providers should provide consumers with self-service tools that translate accurate information into language that customers can understand and, critically, that helps patients navigate the implications of medical billing and benefits for their personal situation. This includes considering health costs in the context of their overall financial management.

Examples of such tools are digital offerings introduced by several pharmacy benefit managers that help their customers understand their prescription costs.⁵

I Personalize follow-up care with data analytics. Healthcare providers are well aware of the challenges of providing an integrated care experience. One area where providers can strengthen consumer experience is with follow-up care.

Providers should use data analytics to identify patients most in need of post-HCP or post-discharge follow-up support. They should provide these patients with immediate, personalized advice that helps them fit treatment into their daily life, problem-solves any issues that arise, adapts support based on patients' behaviors and alerts care providers if issues arise.

Proteus Digital Health combines ingestible and external sensors, an app and analytics to produce insights into how effectively a treatment is working for a specific patient so both patient and physician have the data to make better care decisions.⁶

I Scale individualized care programs. Individualized care programs once required significant investments to reach large patient populations. But by combining high-tech and high-touch methods, providers can now design and deploy individualized care programs to engage patients in chronic care

By combining high-tech and high-touch methods, providers can now design and deploy individualized care programs to engage patients in chronic care and wellness management. and wellness management. To drive patient uptake and usage, these programs can't just tell consumers what to do; they need to enable discovery. They can do this by helping patients engage in a process of trial and error, connect cause and effect, and tap into reciprocal relationships. New companies like Forward start with patient life and health goals, then build wellness and treatment plans around them.⁷

I Contextualize consumer choice. Most healthcare companies talk about the implications for healthcare of consumerization, including an informed customer who expects choice and quality service. But in healthcare, while the industry strives to give patients more choice, it's often the illusion of choice, because consumers don't find the information they receive actionable for making choices, whether it's about their providers, their treatment options or their prescriptions.

Healthcare companies need digital engagement tools that serve up actionable information which helps consumers decide what option fits best with their daily life. One such tool today is Vida Health's one-to-one coaching app through which a coach suggests actions for the patient to take based on a patient's current and recorded behavior patterns.⁸ Other tools include Omada for diabetes and COPD CoPilot for chronic obstructive pulmonary disease which provide feedback and context to help patients incorporate health management skills and choices into their daily routines.⁹

I Increase the impact of virtual care and remote monitoring. Remote patient monitoring can go far beyond the collection and transmission of medical data from patients to providers. Healthcare providers need to embrace telehealth solutions that engage patients, rather than ones that leave it to professionals to monitor them. Healthcare providers should enable remote monitoring that provides actionable, immediate feedback to patients, and helps providers engage in reciprocal relationships with the people they care for to further support their health and wellbeing, while providing HCPs with patients' medical data to support timely interventions.

One example is a scale that sends an alert to a nurse practitioner whenever it records a rapid weight gain so that the practitioner may immediately follow up with the patient.

To provide warm care, life sciences companies can get started by doing the following:

I Maximize clinical trial retention. Retention in clinical trials is a well-known challenge for life sciences companies. Many have begun applying digital to enable new forms of engagement between investigators and patients. To make engagement impactful, companies need to understand and target why patients drop out of clinical trials in the first place. One reason is that they don't see the relevance of completing the trial for their daily life. Companies should adapt patient protocols and digital health solutions to help patients identify, set and track personal goals, and give investigators the ability to monitor patient progress and provide the support they need to stick with the trial.

- I Use digital to enable the HCP-patient relationship. Life sciences companies are struggling with declining ROI on sales rep detailing, and many are looking for strategies to enhance impact. Successful sales reps are both credible and helpful to HCPs. One area where they can be both is providing HCPs with digital solutions that make it easier for patients to share their full health and life story, and give patients access to a holistic view of their health records. This would, for example, give HCPs flexibility to select on parameters (medical, personal, social) the information patients submit before or after a visit, giving providers access to the information they need to treat patients effectively. Meanwhile, patients gain transparency and confidence in the relationship.
- I Design integrated patient support programs. There is increasing recognition that having the best medication or device is not sufficient for patients to reach desired outcomes. Patients and HCPs have also come to expect more from life sciences companies. But current patient support tends to be piecemeal, whether it's patient portals, websites, apps or digital health solutions. In order to provide the personalized support patients require to heal, life sciences companies need to knit together integrated, multichannel patient programs that target patients with adaptive support across all stages of the patient journey.

The first FDA-approved digital prescription therapy from Pear Therapeutic treats substance abuse in conjunction with in-person therapy by enabling patients to report cravings and record actions and receive advice and interventions. The app gathers data for the patients and for the supporting therapists and clinicians to create a circle of support.¹⁰

I Take a patient-centric approach to marketing. Life sciences companies often emphasize brand attributes in patient-facing marketing, to drive acquisition, retention and switching. Just as the cold system alienates patients, so does messaging that doesn't account for patients' needs and challenges, and the practical benefits of the product in their lives. Life sciences companies should assess how to integrate warm care into messaging, and organize around patients, rather than in branded siloes, so they can drive consistent messages about what matters most to patients (and providers) across their portfolios.

Digital is poised to upend the pharma industry's focus on drug development.

I Wrap products in services that transcend medicinal value. Digital is poised to upend the pharma industry's focus on drug development. Pharma is exploring how to wrap products in services, though large players have been slow to act. This digital disruption has taken a tech-first approach: focusing on capabilities like medical measurement, live support and remote monitoring to support improvements in medical outcomes. Life sciences companies need to pair this with a deep understanding of the consumer needs and behaviors to deliver value additions specific to their disease area, and tailor services to provide value beyond medical in patients' daily lives.

Adopting new models for patient engagement

The healthcare industry cannot afford to waste time, money and effort on patient engagement initiatives that are not designed to incorporate the realities of how people manage their health risks and conditions. Evidence that the cold system of care is not working is abundant, with the U.S. having worse outcomes, including shorter life expectancies and greater prevalence of chronic conditions, than other developed nations, even as the cost of care spirals.¹¹ To change these trends, the industry needs to ensure new digital capabilities truly warm the system in the ways that matter to patients.

Our research reveals how healthcare consumers manage their care, and digital plus a human touch can help patients be even more effective in these strategies. The evidence suggests healthcare organizations that engage patients with warmth and empower them by supporting their self-management techniques will build stronger patient relationships, improve outcomes and reduce costs. Helping patients heal according to their own measures will thus help the industry achieve success by its own metrics as well.

Methodology

In Spring 2017, we began an innovative research study on how people heal. We wanted to understand the successful strategies people employ when they face a health risk or issue, and need to manage or overcome it. At the core of the study's research approach is the practice of phenomenology: the study of how people experience life. Our researchers used ethnographic methods to immerse themselves in people's everyday lives, visiting people in their homes, shadowing them at the doctor, taking part in their daily routines and just hanging out.

While studies generally focus on one disease area, we intentionally chose to look across them to find patterns in healing strategies. Exploratory research requires open-ended participant observation. The research team spent multiple days doing fieldwork with 30-plus "respondent ecologies" – gaining insight into the lives not just of individuals, but also of those family, friends and colleagues around them – meeting over 100 people. We recruited for the most prevalent and costly conditions, and found many more in each family we spent time with. The qualitative research's insights were validated using a quantitative survey (N = 5,068). We also conducted interviews with clients across the life sciences and healthcare industries, outside experts and digital innovators in the space.

The study was conducted over five months and comprised:

- An ethnographic study with 33 families and their social networks in California, Massachusetts, New Jersey and Texas. We spent two full days with each core respondent, meeting their friends and families and participating in health-related activities, from cooking to meditation to medical appointments. All respondent names are pseudonyms.
- In-depth conversations with academic experts and leaders from across the healthcare industry.
- Conversations with leaders in the healthcare and life sciences industries about the role of patientcentricity in their business.
- A survey of 5,000 people in the U.S. to test the insights from the ethnographic study. A subset of approximately 1,800 people answered a more in-depth version of the survey. The survey was roughly representative of the U.S. population, with an overrepresentation of prescription drug-takers, and an underrepresentation of the very poor (household income under \$25,000) and the very old (ages 90 and over).

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Mikkel Brok-Kristensen is a co-founder of ReD Associates and Director of the firm's European Practice, where he has led over 100 projects for clients worldwide. He specializes in solving problems in the health care industry and has consulted with numerous pharmaceuticals companies and medical device manufacturers on setting a long-term patient-centric agenda and translating customer insights into clear innovation priorities and

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Charlotte Vangsgaard is a Partner with ReD Associates, where she helps global companies improve their strategic directions, primarily within sales and marketing. With a strong analytical background in social theory and business strategy, Charlotte helps companies set a commercial direction for the future based on a deep understanding of their core customers. Previously, she spent a decade directing projects on poverty alleviation and economic

development for the United Nations Development Programme in Cairo and Algiers, before moving on to work for the Danish government and the International Center for Corporate Accountability, a New York City-based consulting firm. Charlotte holds a master's degree in political science and an M.B.A. in international business and marketing. She can be reached at cva@redassociates.com.



Sashi Padarthy

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Sashi Padarthy is an AVP in Cognizant's Healthcare Business Consulting and co-leads Cognizant's digital healthcare office. In this dual capacity, he is responsible for helping clients transform their business and providing guidance on the development and commercialization of digital products and services. For more than 18 years, Sashi has helped healthcare organizations in the areas of innovation, technology-enabled strategy, new product

development, value-based care and operational improvement. He is a Sloan Fellow from London Business School. Sashi can be reached at Sashi.Padarthy@cognizant.com | www.linkedin.com/in/sashipadarthy/.



Cary Oshim

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Cary Oshima is an AVP and Chief Digital Officer within Cognizant's Healthcare business unit. He advises clients on their key initiatives and provides enablement through Cognizant's digital capabilities, solutions and assets. Cary works closely with the company's domain and technology teams to ensure Cognizant's healthcare digital offerings align with clients' ever-evolving needs. Previously, he

headed Cognizant's Software Industry Practice and led teams that delivered solutions for clients in the areas of data analytics, automation, next-generation customer care and machine learning. Cary has a BA in economics from the University of Washington. He can be reached at Cary.Oshima@cognizant.com.



Pratik Maroo

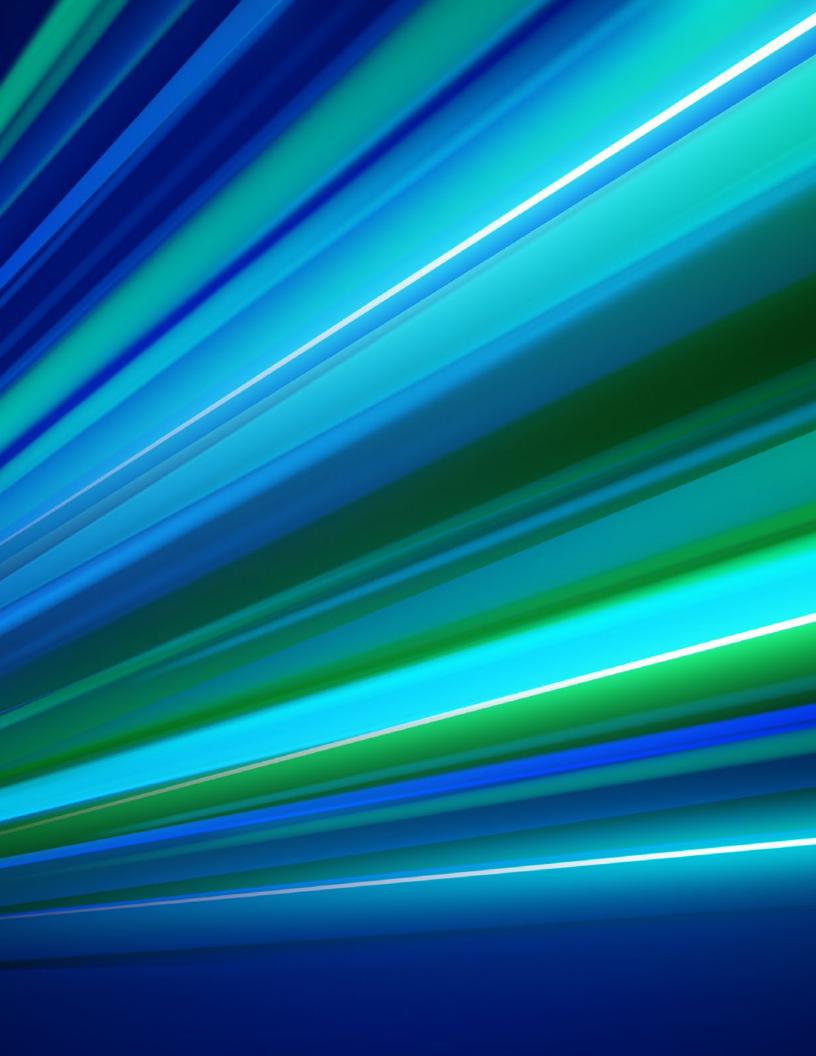
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Pratik Maroo is Chief Digital Officer within Cognizant's Life Sciences business unit. In this role, he leads the company's thinking in defining digital for life sciences' value chains by combining the creative and design experience of a marketing agency with deep domain knowledge, patient-centricity, commercial data analytics, data sciences capabilities and global delivery execution. Pratik

has 15-plus years of life sciences industry experience, covering start-ups and large pharma, M&As and divestitures, consulting and digital transformation, solution architecting and delivery. He holds an M.B.A. from IIM Bangalore and is passionate about leveraging innovative technology to deliver value. Pratik can be reached at Pratik.Maroo@cognizant.com | www.linkedin.com/in/pratikmaroo.

Endnotes

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About Cognizant Digital Business

Cognizant Digital Business helps our clients imagine and build the Digital Economy. We do this by bringing together human insight, digital strategy, industry knowledge, design, and new technologies to create new experiences and launch new business models. For more information, please visit www.cognizant.com/digital or join the conversation on LinkedIn.

About Cognizant Healthcare

Cognizant's Healthcare Business Unit works with healthcare organizations to provide collaborative, innovative solutions that address the industry's most pressing IT and business challenges – from rethinking new business models, to optimizing operations and enabling technology innovation. A global leader in healthcare, our industry-specific services and solutions support leading payers, providers and pharmacy benefit managers worldwide. For more information, visit www.cognizant.com/healthcare.

About ReD Associates

At ReD, we put a deep understanding of real people back at the center of business decision-making. Our teams solve some of today's hardest problems. Over the last 10 years, ReD has led a quiet revolution in thinking about business. All of our work begins with an exploration of the customer's worlds – using social science tools to understand how people experience their reality and, in turn, offering businesses a "reality check" on what is meaningful to people. More information can be found at www.redassociates.com.

About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 195 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.

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