Improving Clinical Trials through Digital Patient Engagement

Life Sciences Perspective
PHARMACEUTICAL COMPANIES NEED A PLATFORM THAT BUILDS A CONNECTION WITH PATIENTS AND ENABLES THEIR VOICES TO BE HEARD.
A staggering 85 percent of clinical trials fail to retain enough patients to confirm medical treatment efficacy. In seeking to understand this retention dilemma, many pharmaceutical leaders are taking a close look at the experiences they are providing trial participants. Despite what pharmaceutical companies may believe is “enough” in financial compensation and motivation for trial participation, high levels of attrition suggest there is an opportunity to focus more intentionally on a better overall patient experience—one that authentically and fully supports the common purpose that both pharmaceutical organizations and clinical participants believe to be possible through clinical trials.

In our customer experience and digital work with clients across all industries, we have found that organizations that share a common purpose with customers ultimately elevate and differentiate the experience they deliver. This leads to deeper relationships and increased loyalty. By keeping the shared purpose of improved treatments and quality of life at the center of the trial journey, pharmaceutical organizations can solidify meaningful interactions with patients, remedy the engagement and retention dilemma, and ultimately place better medications in the market faster.

**CLINICAL TRIALS: A COSTLY DILEMMA**

The average drug costs $2.6 billion to bring to market, with $1.4 billion going to clinical trials. High costs are largely attributable to fallout, which represents roughly one-third of clinical trial costs. Only seven of 100 patient candidates ever complete a given trial. Our calculations show that even a 1 percent decrease in attrition would translate to roughly $5 million in savings per approved drug. These realities make it clear that pharmaceutical companies must find a way to keep patients in trials.

While there are many reasons that clinical trial patients disengage, one cause is their feeling that pharmaceutical companies aren’t listening to them or invested in addressing their needs and well-being. At the same time, attrition means companies can’t collect the data they need to improve treatments and outcomes. This means that everyone loses.

Initiatives that attack the issue of “engagement” seem to suggest that patients and pharmaceutical companies have fundamentally different priorities. We believe that pharmaceutical companies ultimately share a common purpose with patients: improving health and advancing science. When organizations anchor patient interactions in these goals, engagement—and ultimately retention—will follow.
REFOCUSING ON SHARED PURPOSE

Our work across industries shows that consumers crave a connection with organizations around a common purpose—a purpose that creates “higher-level value” beyond commercial transactions. This new mandate demands an obsessive focus on human relationships, and organizations are increasingly organizing around purpose versus profit. However, profit often follows. A strong and well-communicated corporate purpose can affect financial performance by up to 17 percent, and purpose-driven organizations outperformed the S&P 500 by a ratio of 10-to-1 in a 15-year study. This evolution towards delivering a more Human Experience (HX) requires an organizational commitment to becoming:

• PURPOSEFUL: Organizations must have an established reason for being that gives employees and customers a reason to believe in their brand and belong to it.

• COGNITIVE: Differentiated experiences are elevated by an organization’s ability to understand human needs on levels that are intuitive, abstract, emotional, and existential and that identify patterns of behavior from the data that every human now creates.

• CONSCIOUS: Organizations must operate with awareness and integrity that consistently and authentically manifests their purpose and extends beyond commercial objectives. Their strategy must be guided by a conscious awareness of the potential impact their choices will have on stakeholders and society.

• ADAPTIVE: Companies must be structured and organized to rapidly respond to customers’ needs and evolve to meet changing market demands in a way that is apparent and valued by their employees, customers, and stakeholders.
HX transforms the relationship between organizations and people, driving meaning based on shared purpose and a reason for being. Many patients approach clinical trials with the higher-level purpose of advancing treatments and improving quality of life. In fact, research shows that nearly 80 percent of individuals “probably” or “definitely” would provide personal health information to researchers. In the study, a key determinant of participants’ likelihood to share this information was whether it would be applied toward the advancement of “public good.” In the words of one individual, “I’m happy to contribute [my data] if it could contribute to, say, a larger study where there could be some additional knowledge.”

At every touch point along the trial journey, patients should feel that pharmaceutical organizations share in that purpose. When patients believe that pharmaceutical organizations have a different set of priorities, they disengage.

To reinforce a shared purpose with patients, companies must tune into patients’ voices and apply those insights to trial design. Pharmaceutical organizations collect huge volumes of clinical data during trials, but nonclinical information about the patient experience is limited to electronic patient-reported outcomes (ePROs), which have limited actionable information.

What’s missing is information related to quality of life, logistics, feasibility, and interactions with site personnel. These are all factors that correlate with patient retention.

Lack of visibility into the patient experience means companies can do little to:
- Prevent patients from dropping out
- Adjust trial design to retain future patients
- Pinpoint problems with individual trials, sites, or patients

In collecting patient feedback to solidify a shared purpose around improving treatment, pharmaceutical companies need a platform that nurtures a connection with patients and enables their voices to be heard.
As modern consumers, patients are accustomed to countless means of digital engagement, whether it’s rating a local restaurant on Yelp, reading product reviews on Amazon.com, or tracking calorie intake on the Fitbit App. This engagement serves as a powerful driver of loyalty. Digital applications are one way that pharmaceutical organizations can reinforce a shared purpose throughout the trial journey.

The use of digital applications in the healthcare environment overall is increasing. With over 97,000 mobile health applications on the market today, mobile health revenue is projected to grow to $26 billion by the end of 2017. Today, doctors say that patients are more informed than ever about their health; they come to appointments armed with research on their condition and treatment options, including clinical trials. At the Cleveland Clinic, for example, patients are empowered to use any one of a variety of digital applications to meet their care needs. Callers who want a same-day appointment are taken through a sophisticated triage process that includes a series of questions that allows the clinic to identify the most appropriate doctor and, in most cases, immediately schedule an appointment. More complex or chronic medical conditions typically trigger triage by a nurse. The clinic also offers multiple applications that allow patients to view their provider’s entire schedule and make their own appointments, get a diagnosis or prescription from a healthcare provider in 10 minutes, or learn about the clinic’s more than 130 active clinical trials for cancer patients.

Digital applications work particularly well in driving engagement because they break down traditional barriers between companies and patients and serve as a medium of direct communication. Specifically, digital applications enable pharmaceutical organizations to:

- Use data to help companies reallocate resources to other trials (With only 1 in 10 compounds approved, insights allow organizations to shift focus more quickly when data indicates that a treatment is unlikely to make it to market.)
- Collect baseline, mid-trial, and post-trial feedback, using the data to identify trends and develop predictive analytics
- Learn about patients, including their hopes and concerns, more quickly
- Capture patients’ motivation for joining a trial and continually monitor how well a clinical trial is meeting their expectations
- Uncover how patients are interacting (or want to interact) with your trial
- Identify patients who are struggling and need intervention to prevent them from dropping out
- Pinpoint sites with low patient retention to identify underlying causes
Successful digital applications – those which effectively establish shared purpose – must be supported by strong analytical capabilities. Data management is a critical skill set needed to bring the patient’s voice to life and solidify the common objective between companies and patients. It’s likely to become a significant bottleneck in coming years, with the demand for analytical expertise projected to outpace supply by up to 60 percent by 2018.16

A crucial area for success with clinical trial applications involves developing predictive analytics. This means first conducting data forensics to determine which data points can be attributed to each individual. These data points may be static, such as demographic data, or dynamic, such as self-reported experiences at different points in the trial. Sentiment analysis of free-form text can also provide rich and meaningful insight into a patient’s experience. Linking these data with information on which patients dropped out allows organizations to then embed predictive analytics in the platform. Predictive analytics serve as an early warning system that allows trial sponsors to notify sites of patients at risk of dropping out so they can provide added in-person support.

Ultimately, harnessing the power of these applications means deriving patient insights from data while the trial is in progress, which is when the data is most actionable. In this model, organizations will have a clear window into the patient’s engagement and risk profile and can use predictive analytics to address feedback.

As a vehicle for ongoing feedback and insight, digital applications build a connection around improving treatments, solidifying the engagement and retention needed to manage costs and generate valuable trial learnings.

Building a patient platform for clinical trials can pay dividends in engagement and retention, but it’s impossible to do this without dramatic digital improvements and strong analytical capabilities. The pharmaceutical industry is near the bottom of the pack in terms of digital maturity,17 so making the leap will require a different way of working. One effective approach to this challenge is to focus on hypothesis-driven application development.

In the world of digital applications, agility takes precedence over perfection. Deploying a minimum viable platform yields an optimized solution faster than pouring upfront resources into creating the ideal application. Continuous building and testing combined with effective data management lets you:

- Compare your hypotheses against user data to learn faster
- Incorporate key insights into the next release of the application
- Leverage data to pivot quickly when something isn’t working
- Involve patients in the process

This ongoing process of hypothesizing, building, testing, and learning delivers greater insight than any planning or user research ever could. Just as important, it delivers ongoing feedback to connect patients with organizations and improve the clinical trial experience.
THE RESULTS: BENEFITS OF SHARED PURPOSE

Using digital applications to reinforce shared purpose maximizes the value of clinical trials for all stakeholders.

- **Potential trial patient** reads reviews of other patients’ clinical trial experiences. These reviews are done in the same way as doctor’s ratings online. Relatable experiences reduce the fear that prevents many from participating in trials; now the patient can pursue the right trial and assess eligibility with the investigator.

- **Trial patient** knows the pharmaceutical company is listening, which motivates the patient to share feedback toward improving trial design.

- **Family members and caregivers** can offer input on patients’ needs, contributing an important viewpoint in the larger context of the customer experience.

- **Improved access to data** lets the clinical trial team monitor patients at risk of dropping out of the trial, gain insight into site performance, and connect with patients looking for trials. Adaptive trials incorporate immediate results into each phase of trial design.

- **Sites** have more visibility into their own performance and where to devote extra care to patients at risk of dropping out.

- **With better retention**, **pharmaceutical companies** can complete trials faster and at lower cost.

PUTTING IT ALL TOGETHER

Pharmaceutical companies must more effectively engage and retain patients. The proof is in attrition numbers and mounting trial costs. Winners in the future will be the organizations that place shared purpose with patients at the center of trial design and use digital platforms to reinforce their common purpose to improve medicine. In this scenario, everyone wins. Patients complete the trial, pharmaceutical companies keep costs down and get the data they need – and in the end, both groups connect as valued partners around the end goal of advancing medical treatments.
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3 Clinical Trial Recruitment and Retention, Cytespace Research, 2013.
6 Clinical Trial Recruitment and Retention, Cytespace Research, 2013.
8 The Purposeful Brand: The Path to Meaningful Experiences, Sparks Grove, a Division of North Highland, June 2017.
11 Personal Data for the Public Good, California Institute for Telecommunications and Information Technology, March 2014.
14 “Same-Day Appointments,” Cleveland Clinic.
17 The Purposeful Brand: The Path to Meaningful Experiences, Sparks Grove, a Division of North Highland, June 2017.

Paul Welty
Sr. Technology Director
Paul.Welty@sparksgrove.com

Paul has more than 20 years of experience in leading organizations and solutions in web, mobile, print, strategy, marketing, branding, and technology—from sales to strategy to execution. He ensures technology helps organizations connect to their audiences, whether internal or external.

Alan Susser
Master Practitioner
Alan.Susser@northhighland.com

Alan has over 20 years of experience in the pharmaceutical industry, with a focus on R&D. His expertise includes basic research, clinical trials, clinical trial operations, compliance issues, and change management.

Alison Broomall
Sparks Grove Life Sciences Lead
Alison.Broomall@sparksgrove.com

Alison has over 20 years of experience helping organizations identify, implement, and sustain the capabilities that drive purposeful customer engagement. In healthcare and life sciences, she has a deep understanding of patient engagement needs across the care continuum, developing customer-centric strategies that align with emerging healthcare delivery models and commercial frameworks.