What the Pharmaceutical Industry Can Learn from Peloton about Patient Retention and Engagement

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Today's mostly paper-dependent clinical trials pose fundamental challenges to the pharmaceutical industry.

Such trials can be prohibitively expensive, struggle to enroll and retain a sufficient number of participants, and have difficulty maintaining compliance and data reliability. But with the advent of virtual and partially virtual trials using digital tools and devices, we have the opportunity to substantially improve efficiency by deploying the same design principles that make consumer apps so successful.

Many consumer brands utilize the best practices of both user experience (UX) and user interface (UI) design to engage and motivate visitors to come back again and again. Big Pharma, which is experiencing patient dropout rates as high as 30 percent in clinical trials, and an estimated cost of nearly $36,000 per enrollee in any phase of a given trial, can adapt these strategies to reduce costs, maximize retention and improve data collection.

An app's user experience is built on a deep understanding of what delights—and what frustrates—users, and how they respond to certain design cues. A good example is Peloton, the at-home stationary-bicycle company. It has transformed the in-home exercise equipment market by retaining most users for years, as compared to its competitors who lose more than half of their customers after just the first month.

Peloton has achieved these impressive retention rates by creating an experience that engages users with a high-quality digital interface that is intuitive and easy to use and incorporates participation in a fitness community. Instructors provide personalized support and encouragement, while a leaderboard lets users share achievement levels and rankings. This approach uses accomplishment itself as an incentive to strive for even higher levels.

Virtual studies would benefit from the same user-friendly, intuitive and easy-to-engage interactions. As with Peloton, the UX in a virtual trial works best when it is personalized, with patients given access to their compliance and achievement levels. Notifications to take a pill or record a reaction to a medicine are also helpful, as well as links to support and patient advocacy groups that can make them feel part of a community.

Elements of game design—such as the positive feedback and achievements that Peloton uses—are also critical in virtual trials. Game designers can shape motivation, attention and learning in an enjoyable way while encouraging patients to stick with trial guidelines and routines, thereby helping to overcome poor compliance. Users can configure and personalize avatars. Rewards systems measure patients' progress toward specific goals—for example, reaching the halfway point or completion of a trial—and award prizes such as badges or points with which to buy digital swag or other merchandise.

Another important component of the user experience with mobile apps is the user interface. Apps with effortless interaction and a sophisticated, yet simple, look and feel get more downloads and clicks. The search-and-discovery social-networking app Foursquare Swarm, for example, lets users post information about places they visit, from restaurants to shops. Users repeatedly open the app—often two to three times a day—but only for a few minutes at a time because the interface design is so easy and fun to use.

A focus on usability can be critical for enhancing adherence in a clinical trial, as it makes compliance less burdensome. A well-designed mobile app can make it possible for participants to quickly access instructions and then take appropriate actions, such as filling out surveys about medical reactions and daily routines. For example, a single tap on a notification reminding a patient to complete a daily symptom diary can lead the patient directly to the digital form. Then, to reduce the number of repetitive daily tasks, the form might automatically include current time and date information, instead of requiring the patient to enter it by hand. Simple steps like these would increase compliance without sacrificing data density or accuracy, while optimizing the time spent with the app.

> The use of intuitive, engaging smartphone apps is a particularly attractive approach to improving clinical trials because it can be applied broadly across patient populations.

Mobile device usage and gameplay are no longer exclusive to young people: a recent AARP study of app usage found that gaming was among the top 10 activities of people 50 or older who use a mobile device, an age group that is heavily represented in the majority of clinical trials. In fact, people in this demographic are more likely to use their mobile device for gaming than for banking, shopping or reading the news.

As the industry becomes more and more familiar with virtual and partially virtual trials, integrating user-friendly design will only amplify many of the already widely known benefits they provide, including lower costs, increased adherence and more efficient real-time data collection.

By designing apps and websites with consumers in mind, having empathy for their concerns and making them feel more comfortable interacting with technology, virtual trials are in a strong position to gain wider industry acceptance—and as a result, accelerate the pace of drug development.