

# Enabling Transformation in Life Sciences Through Digital Health Solutions

*Biopharma and medical device manufacturers are now exploring solutions and platforms that can provide the stability, regulatory compliance, and end-to-end connectivity needed to design, deliver, and scale digital solutions that deliver clinical and economic benefits to patients, providers, and payers.*

**PHARMACEUTICAL EXECUTIVE:** Over the last 18 months, how have you seen the life-sciences industry evolve in the face of the global pandemic?

**WILLIAMS:** Cognizant has been working closely with the majority of the biopharmaceutical industry for the past 18 months—30 of the top 30, and 13 of the top 15 medical device firms—to help them advance their science as well as improve patient outcomes. What we've seen across the board, however, is that the pandemic has accelerated everyone's digital efforts. It's served as an incubator and a commercialization driver for digital tools and solutions—how biopharma and medical device companies can more effectively connect with clinicians and patients and continue to deliver healthcare. In response to the pandemic, some companies have responded strategically and others tactically.

**PHARMACEUTICAL EXECUTIVE:** Are companies continuing that path of digital acceleration?

**WILLIAMS:** Yes, they are. We've seen several pilots, and we as consumers have experienced this as well. When the pandemic first unfolded here in the United States, we had doctors using Facebook as a means to communicate or schedule appointments; we had consumers using devices such as an Apple watch to track vital signs and share information with their clinicians. We had a rapid evolution in terms of the clinical trial environment.

Many clinical trials initially shut down, and then biopharma and medical device manufacturers began questioning how they could continue to deliver a clinical trial, particularly for lifesaving therapies, during a pandemic. This market transformation, as I said before, served as an incubator and an accelerator.

In its recent market analysis, Rock Health said more than \$20 billion was invested in new digital health tools and platforms in 2021 as well as additional investment in existing platforms, all of which have scaled rapidly in response to the market as biopharma manufacturers, medical device manufacturers, and consumers struggled to adapt.

Now, our customers are saying that the innovation in technologies and therapeutic categories has led to an overwhelming environment of technology platforms, technology solutions, and technology tools. And so, biopharma and medical device companies are now confronted with this mismatched collection of tools and applications that may not always connect easily or cleanly into the treatment pathways that a doctor or patient is trying to follow. They may not even link effectively within their enterprise, between their clinical and commercial domains, as they capture more information and try to understand how to effectively target and tailor their therapies and devices. Ultimately, while the pandemic has served as an accelerator and an incubator, it's also significantly increased the volume, velocity, and variability of data that are available to clinicians, consumers, and biopharma and medical device companies. It's more difficult to analyze that information to derive clinical and care insights.



**Brian Williams**  
Chief Digital Officer  
Life Sciences  
Cognizant

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**PHARMACEUTICAL EXECUTIVE: What are companies doing to regain control and capture value from this wide range of digital health tools?**

**WILLIAMS:** The leaders are trying to define and understand some of the processes and standards they want to put in place to sustain a digital-health advantage into the future. Experts project that we will see more events like the pandemic. Consumers are becoming more comfortable engaging with digital tools and accessing the healthcare systems through those tools, so we fully expect the need for these applications and the demand for digital advantage to continue for biopharma and medical device companies. And while there's a discrete need for applications or tools for specific activities—for example, how do I find an investigator for a clinical trial, or how do I engage the right patient—companies are wondering how to approach it from a platform standpoint? How do we look at the data holistically? Can we simplify, for example, device connectivity or compliance with an ever-expanding and evolving regulatory landscape? Can we evolve how our tools and solutions help clinicians access reimbursement for the digital tools and services they're supplying to drive and manage a course of treatment?

One example of this in the marketplace is Novartis' decision to select Philips' digital HealthSuite Platform as an enterprise solution to solve some of its digital health challenges. HealthSuite is built on an AWS (Amazon Web Services) cloud environment, and it brings the scale, capacity, and tools that Philips has built on top of it to deliver a secure, compliant platform that biopharma and medical device companies need to drive their digital health advantage.

**PHARMACEUTICAL EXECUTIVE: What more can you tell us about this alliance with Philips?**

**WILLIAMS:** We announced this alliance in collaboration with Philips in July 2021. We did it in response to what we were hearing from our customers and their desire for a partner that could deliver an end-to-end digital health solution that provides demonstrable health and economic benefits in clinical or commercial settings. This alliance brings together the strengths of both of our organizations: With Philips—who has decades of experience in the medical device and healthcare industry—and its HealthSuite Platform, an orchestration layer that sets standards and tools and provides compliance and security, and Cognizant's digital-engineering expertise, we can envision, deliver, and maintain leading-edge digital health solutions at scale.

The platform securely stores healthcare data and provides machine learning (ML) and artificial intelligence (AI) tools and solutions that deliver insights in a timely fashion while offering industry-leading interoperability, connectivity, and regulatory compliance. The device connectivity piece in the HealthSuite Platform has over 100 devices available through an application programming interface (API)—it's a point-and-click or dropdown menu, very simple to use—that accelerates time to market. There are already billions of images stored, as well as genomic testing data and more. So, this collaboration allows us, again, to build, deploy, implement, and operate client-specific applications on HealthSuite to deliver an end-to-end solution. Biopharma and medical device companies can deliver digital health solutions by therapeutic category in a commercial or clinical setting (hybrid, decentralized trial) that needs to be designed and run.

**PHARMACEUTICAL EXECUTIVE: How is the market responding to this collaboration?**

**WILLIAMS:** We believe the future of digital health is linking people to their care in more personalized ways and through a connected ecosystem of care. And this perspective is shared by the majority of the biopharma and medical device companies, their partners, healthcare providers, clinicians, and care support teams. They now understand what a platform like HealthSuite built on top of AWS can provide them; how it provides the standardization, the flexibility to build tools and applications to deliver specific and personalized digital-health solutions to patients, and to do that in a faster, more repeatable way. We're even more convinced that the digital-health transition we've seen in the last 18 months will be the way we operate going forward, so platform solutions like HealthSuite will allow leaders to maintain their advantage and competitive edge in that new digital environment.

**Cognizant's** life sciences business leaders are committed to advancing science to improve patient outcomes by partnering with clients to drive continuous improvement in the way they do business. Cognizant helps its clients set the pace in clinical development, strengthen their regulatory infrastructure, modernize manufacturing, and increase market competitiveness. The Cognizant life sciences team provides domain-aligned consulting, technology, and business process solutions globally, serving the world's top 30 pharmaceutical companies, top 10 biotech companies, and 13 of the top 15 medical device companies.