



How **Engineering Teams** are Overcoming **Tech Challenges** in Healthcare

Technological innovation is transforming the nature of healthcare for providers and consumers alike.

From virtual appointments to mobile-enabled medical devices, healthcare industry companies are using data science, artificial intelligence, and machine learning to create personalized, data-driven care.

\$51.3B invested

in global healthtech startups in 2021, according to London & Partners

Still, with this influx of investment, technical challenges need to be solved in order for innovation to take place.

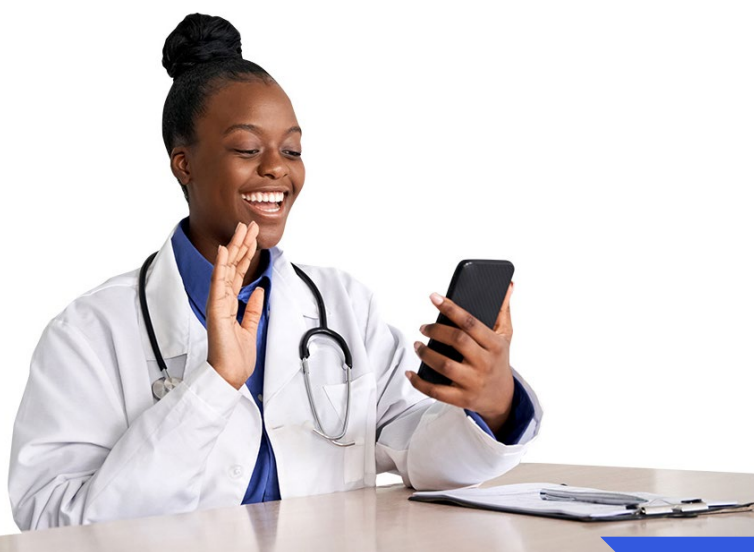
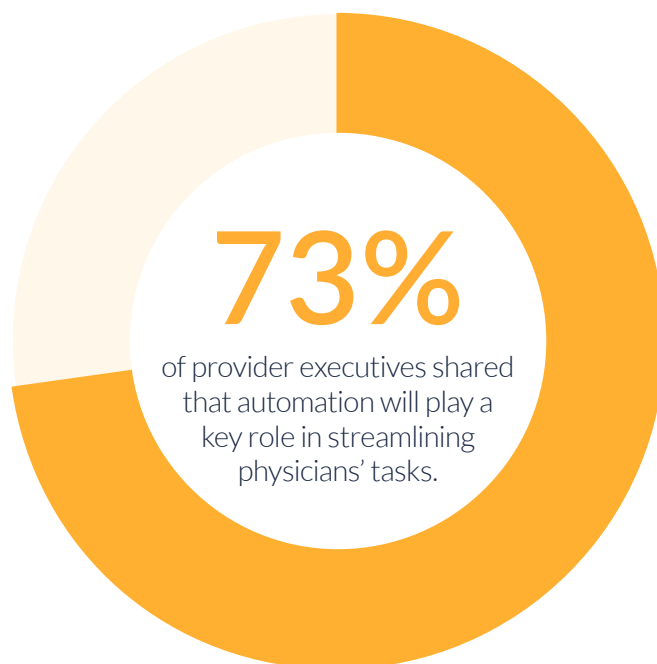
How can engineering teams in the healthcare industry meet these challenges and keep their company at the cutting edge? We've looked into four core tech challenges that arise in the healthcare sector to bring you insights from companies that are leveraging remote engineering teams towards accelerated growth.



Building a foundation that's poised for growth

According to PwC's Top Health Industry Issues of 2021 report, **73% of provider executives shared that automation will play a key role in streamlining physicians' tasks.**

However, it's difficult to innovate at speed and scale without investing in a solid foundation of technology, infrastructure, and software development processes.



By working with Andela engineers, Medici was able to focus on what it really cared about. **Making telehealth more reliable and accessible for everyone.**

Medici, a HIPAA-compliant telehealth app needed a tech roadmap before it could innovate.

As such, they needed to bring on high-performing engineers who would be able to take ownership of the entire process.

Medici started out with three Andela technologists before scaling up to nine in total. They helped shore up the foundations of Medici's tech estate, fully integrating into cross-functional teams and working on server-side code, mobile apps, web apps, and testing.

Andela also helped to bolster Medici's management issues by providing the necessary management and support infrastructure, resolving key issues and taking the pressure off of the Medici team.

By working with Andela engineers to build a foundation poised for future growth, Medici was able to focus on what it really cared about: Making telehealth more reliable and accessible for everyone.

Innovating in the face of **privacy, regulation, and compliance burdens**

PwC's Top Health Industry Issues of 2021 report also states that **"almost all pharmaceutical and life sciences executives (98%) surveyed said they expect digital investment in clinical trials to increase next year."** More specifically, 38% of executives expect more than a quarter of their clinical trials to be virtual by 2025.

As such, the industry faces a heavy burden of privacy, regulatory, and compliance requirements that must not only be implemented but clearly traceable and auditable.

In order to innovate at speed while meeting these requirements, it's critical that engineering teams in healthcare prioritize regulation and compliance considerations in the software development lifecycle: translating the policy requirements into code and embedding these in infrastructure and applications early on in the development process.

By doing so, these requirements become an opportunity to automate complex aspects of the software lifecycle, free up more time for innovation, and even to jump ahead of the competition.



In the case of Crossover Health, the right talent helped overcome privacy law limitations.

In the US alone, health systems and hospitals in the US must comply with **629 requirements from four federal agencies**. Crossover Health, which offers digital-first, integrated healthcare to anyone, anywhere in the US, needed to effectively scale their engineering team so they could maintain their existing products while moving on to new areas of business development.

They wanted to find engaged hires that were a good cultural fit but were struggling with the privacy laws that govern companies in the healthtech sector and the significant cost of local hires. Leadership at Crossover brought on four Andela engineers to embed with the team and work on their legacy product. They were given a "risky, complicated" project, reporting to the Director of Software Development, while also cross-collaborating with other in-house engineers.

Crossover has since brought on more Andela engineers, moving the original engineers into new product development teams working alongside in-house engineers. Because the Andela technologists integrated completely into the Crossover team, they were able to resolve HIPAA and contractual compliance issues using a set of controls that kept sensitive data secure while engineers were doing their work. This freed up the Crossover Health team to focus on innovation instead of having to put precious time towards cutting through red tape.

Andela technologists **integrated completely** into the team. This frees up your team to **focus on innovation** instead of having to put precious time towards cutting through red tape.

Moving past firefighting to build impactful solutions

When the foundation for innovation is not quite in place and a lot of time and effort goes into maintaining compliance with regulations, engineering teams in healthcare can have very limited opportunities to focus on larger business goals. Teams find themselves putting out security fires, keeping legacy products online, responding to changes in regulation, and more.

Yet, engineering teams are the beating heart of digital innovation within the health industry. Healthcare companies must ensure that they invest in the proper talent and technology to be able to simplify and automate non-value-add work so that their top talent is free to work on projects that will deliver real, long-term business value.

Engineering teams are the **beating heart digital innovation** within the health industry.



Since 2018, Headspace has **doubled** the amount of **corporate clients**.

For Headspace, focusing on a better user experience necessitated developing more mature processes.

Headspace is a personal meditation guide that helps users achieve healthier, happier, more well-rested lives. As their user base grew the brand struggled to maintain their high-quality user experience. The company knew that they needed to build out processes and tools to enable their agents to complete more inbound tickets, but they lacked the engineer headcount to meet their ambitious goals.

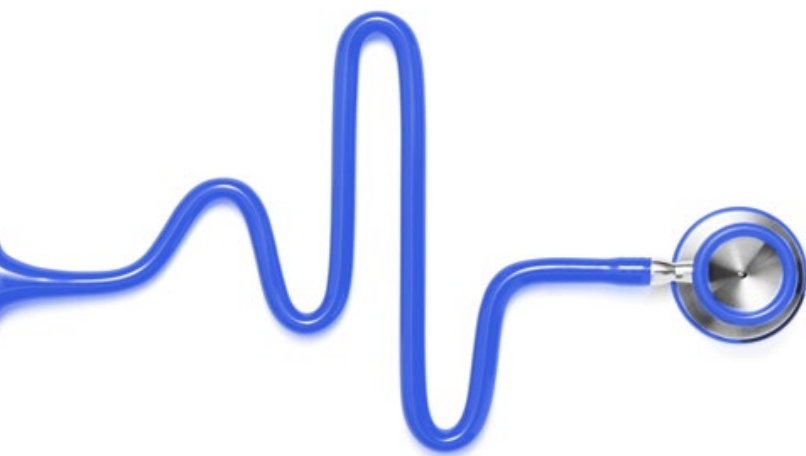
Since 2018, Headspace has doubled the amount of corporate clients. While other companies might struggle with a decline in quality of services as a user base grows, headspace has continued to deliver excellent customer experience by partnering with Andela talent.



Finding **quality talent** quickly and cost-effectively in response to changing requirements

As the need for digital innovation in the healthcare industry continues to skyrocket, demand for the top tech talent rises with it. Smaller companies can find themselves priced out of local markets when the biggest enterprises swoop in to make a move for talent.

Recruiting locally can be pricey and time-consuming, as fees could run as high as 40% of a candidate's first-year salary, according to Indeed.



KindHealth, which helps people save money on health insurance and bills, needed to scale quickly and cost-effectively in response to changing requirements.

Annual changes in health plans and regulations mean that KindHealth must update their software in response to market conditions every year.

The company suddenly found itself needing specific engineering skills within a limited timeframe and budget as larger companies had been coming into the local market and driving up the cost of top engineers. Working with a total of four Andela technologists, they were able to build a standalone SSO authentication system, create an automated data entry solution, and add new features to the core KindHealth product offering.

Micah Parker, VP of Engineering at KindHealth, found that “they come in and say, ‘let’s go—what am I working on?’ We have a culture that values ‘thoughtfulness over rightness,’ and once the Andelans understand that their voices are welcome, their contributions snowball way beyond writing code.”

Their **contributions** snowball way **beyond** writing code

At the end of the day, **tech** will continue to **transform healthcare**

As technology and software innovation plays an ever-more central role in the healthcare industry, the importance of high-quality engineering talent will only rise. Automation, data management, distributed services, and more, will continue to shape the way companies in the healthcare industry operate. With this comes the need for talent that's trained and knowledgeable, armed with the expertise to innovate while meeting regulations. All of this offers healthcare industry leaders the opportunity to expand their horizons with global talent and distributed collaboration.

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Andela is the first long-term global talent network that connects companies with vetted, remote engineers in emerging markets. Hundreds of leading companies like Cloudflare, InVision, and ViacomCBS leverage Andela to scale their engineering teams quickly and cost-effectively.

A distributed organization spanning four continents, Andela is backed by investors including Generation Investment Management, SoftBank, Chan Zuckerberg Initiative, Spark Capital, and Google Ventures.