Explore about the 5 Key Challenges in Healthcare Tech (and How to Address Them)

AN UNOSQUARE GUIDE

Executive Summary

Developing in healthcare technology isn't just about building better products; it's about solving the real challenges that slow growth. Compliance, system integration and workforce constraints aren't afterthoughts; they're the make-or-break factors that separate successful companies from those that struggle.

The reality? Most healthcare organizations hit the same roadblocks. According to the "2025 Global Health Care Outlook" report by Deloitte, which surveyed 121 C-suite executives from healthcare organizations across Australia, Canada, Germany, the Netherlands, the United Kingdom, and the United States in August and September 2024, about 90% of surveyed C-suite executives expect the use of digital technologies to accelerate in 2025, with half anticipating a significant impact.

Also, about 70% of survey respondents said that investing in technology platforms for digital tools and services will be important for their organizations.

The majority face obstacles that delay innovation, drain resources and introduce risk. Compliance missteps lead to hefty fines, hiring delays stall progress and legacy systems hold teams back.

The reality is tech moves fast. Regulations change. Talent has become harder to find. Tech investments can become outdated overnight. Without a proactive strategy, developing tech solutions turns into a slow, expensive process.

This guide breaks down five of the biggest pitfalls healthcare tech companies face and how to avoid them. From compliance-first development to leveraging nearshore talent, investing in scalable infrastructure and ensuring interoperability, we'll walk you through the smartest ways to develop efficiently, cut risk and drive impact.

The 5 Pitfalls & Solutions

The healthcare technology landscape is evolving rapidly, and staying ahead requires a strategic approach. Companies that embrace innovative development practices, effective scalable solutions, and continuous innovation position themselves for long-term success.

1. Ignoring Compliance Early

The Problem

Compliance isn't optional; it's foundational, but too many companies treat it as an afterthought. tackling it late in development. The result? Delays, security risks and significant financial penalties that could have been avoided.

The Risk

Healthcare tech is subject to strict regulations like HIPAA, GDPR and FHIR or compliance standards like SOC 2. Skipping compliance early means scrambling later. That means expensive retrofits, potential legal action and a loss of trust.

The Fix

Build compliance into your development process from day one. Engage legal and regulatory experts early, set up automated compliance checks and monitor regulatory updates constantly. Additionally, strategic partners should extend your compliance framework into their organization, ensuring continuous vigilance and control.

Operate with a compliance-first mindset to save time, money and reputation.

2. Slow or Unscalable Hiring Processes

The Problem

Moving forward requires the right people at the right time, but long hiring cycles and limited talent pools create bottlenecks, slowing everything down.

The Risk

Understaffed teams burn out, deadlines get missed and innovation slows. The longer hiring takes, the harder it is to keep up with market demands.

The Fix

A smart talent outsourcing strategy changes the game with faster hiring, skilled vetted professionals and a seamless integration with in-house teams capable of collaborating in real-time. A robust strategy that blends onshore, nearshore and offshore talent provides the flexibility to match project complexity, budget and expertise.

Combining in-house talent with external teams keeps projects moving without long recruitment delays.

3. Tech Debt Piling Up

The Problem

Quick fixes today create big problems tomorrow. As companies grow, they accumulate "tech debt," workarounds, temporary patches and outdated code that slow everything down.

The Risk

Tech debt makes development painful. It drags down performance, increases maintenance costs and limits flexibility. Eventually, it becomes a major innovation blocker.

The Fix

Invest in scalable, cloud-based solutions, prioritize regular code refactoring, automate testing and deployments and adopt DevOps best practices. Managing tech debt doesn't mean pulling your best team away from innovation.

Strategically combine internal and external resources. Focusing specialized talent on projects or maintenance can help tackle tech debt effectively.

4. Siloed Systems

The Problem

Many healthcare organizations operate despite disconnected systems that don't talk to each other. That means data gaps, inefficiencies and poor decision-making.

The Risk

Siloed systems create friction. Teams struggle to share critical information, care gets fragmented and patients and providers feel the impact.

The Fix

Use APIs and cloud integrations, standardizing on data formats like FHIR to enable seamless communication between systems. Addressing interoperability early not only streamlines operations but also allows organizations to capitalize on emerging innovations in big data and AI, maximizing the value extracted from these new technologies.

Design for interoperability as a core feature to future-proof the investment.

5. No Scalable Tech Plan

The Problem

Without a clear roadmap, growth only creates chaos. Teams end up with outdated systems, resource shortages and infrastructure that can't keep up.

The Risk

A weak tech plan creates bottlenecks, increases costs and makes it hard to adapt. Companies without a scaling strategy risk falling behind.

The Fix

Build a structured roadmap, use cloud-based architectures, design modular solutions that grow with you and implement FinOps strategies to keep cloud costs under control. Regular strategic reviews ensure investments remain future-proof and aligned with evolving technology and business needs.

Leverage industry experts to validate best practices and the latest insights that may be overlooked within an internal echo chamber.

Key Takeaways

Building and scaling healthcare tech isn't easy, but the right strategy makes all the difference. Avoid the common pitfalls: compliance missteps, slow hiring, tech debt, siloed systems and poor planning and you set yourself up for success.

By taking a compliance-first approach, leveraging a robust talent strategy, investing in scalable infrastructure, ensuring interoperability and building a structured tech roadmap, healthcare companies can invest in technology and innovate smarter and faster.

Want to scale faster and smarter?

Software development for healthcare comes with challenges, but you don't have to tackle them alone. For 15 years, unosquare has been a trusted partner to Fortune 500 companies and innovative healthcare disruptors. Our flexible engagement and service models ensure that our clients can deliver on their roadmap and stick to their budget, all while working with a strategic partner that provides expert teams in their time zones.

Whether you're dealing with compliance hurdles, slow hiring, tech debt, or integration issues, we have the expertise to help. Our tailored approach leverages scalable cloud-based infrastructure, ensures seamless interoperability and builds a structured roadmap for your growth.

You Aren't Alone

Reach out today and find out how **unosquare** has helped others like you scale.

Let's Talk.