



# Digital Health Platform Case Studies

GlobalLogic Partnerships That Transform Patient  
Care Services



Partnerships That Create World-Class Digital Patient Experiences

The world's leading MedTech, Med Devices, CROs, and In Vitro Diagnostics organizations are continuously seeking new ways to improve the quality and increase the value of the care they bring to their patients.

# They are tapping into the power of digital technologies to drive down costs, increase access to care delivery, and improve medical care.

Creating a user-friendly mobile app that communicates with a patient's medical therapy device can increase patient engagement, enabling much better patient performance, improving patient satisfaction, and helping the patient complete their therapy faster.

And embedding data management software and enabling connectivity for medical devices can make data more readily and rapidly available to be analyzed, creating opportunities for product innovation.

If your organization is embarking on any new digital engineering initiative or looking to adopt cutting-edge modern technologies in a strictly regulated environment, GlobalLogic can help.

GlobalLogic is a pioneer in developing solutions ranging from embedded medical device software to Software as Medical Devices (SaMD) and other patient therapy devices, as well as connected health systems and digital healthcare platforms.

Here are some success stories of organizations that partnered with GlobalLogic to create enhanced patient value that drives business outcomes.

## Let's Work Together

Searching for a new engineering partner? Let's see how we can help. [Click here to reach out to us.](#)



# Clinical Trials Study Platform Design and Development

See how 1-2 forms per month increased to 45+ forms per month.

# Client Scenario

A leading CNS trial systems provider with expertise in data analysis originally focused on analyzing data related to treatments for central nervous system disorders.

The company analyzed existing data provided by clinicians, who gathered the data using paper forms. Because different trials gather different sets of data, each trial required a different assessment form for the clinicians. The challenge was that using paper forms for gathering data introduced room for human error and was not a scalable model.

The company needed a solution that could scale, but with an internal engineering team of only two people, it did not have the resources to create such a solution.

# Our Approach

GlobalLogic partnered with this client on three key products.

First, GlobalLogic designed and developed **a pioneering electronic source data collection (EDC) system based on tablets**, assuming exclusive responsibility for the solution, piloting the application and bringing it through the production stage.

The solution was designed to transform the old-fashioned paper forms into digital, logical content that does automatic calculations and automates data collection to reduce the potential for human error in data entry.

Second, GlobalLogic developed **a proprietary form creation application** that enabled non-technical people such as business analysts to create new forms out of modular components.

The solutions were highly successful, and a larger conglomerate purchased GlobalLogic's original client to access GlobalLogic's solution.

The conglomerate then tapped GlobalLogic to create a third product, **a web portal for clinical study sites** to collect, store, analyze, and share data.

All of these products developed by GlobalLogic worked together. The platform included the clinician tablet-based application, the form development and management application for non-programmers, and the web portal for gathering and analyzing data from clinical trials.

GlobalLogic has continued to work with the client for more than a decade.

## Benefits

Clinical trial professionals quickly adopted the platform because of its ease of use and adaptive workflow. Implementing a platform approach enabled the client to significantly improve data accuracy, security, and reliability.

**As a result, the client's performance improved by at least 100 times.**

The platform also reduced site burden, where the central review of site-based assessments is part of the study process. Sites no longer have to manually upload visit components for review, as they are immediately available once a site submits the assessment via tablet.

The client increased its service offerings to include eSource data capture for sites, and also improved its capacity to deliver high-quality central review services.

# Development and Testing of Cardiac Patient Management Solution for Cardiology Clinic

2+ million patients managed with  
specialized cardiovascular  
patient management system.



# Client Scenario

A medical technology manufacturer that designed and engineered innovative products for cardiac therapy treatment planned to bring a cardiology EMR system to market. The solution would monitor various vital functions such as oxygenation status, ECG, pulse rate, and noninvasive blood pressure.

It would also gather data from ICDs, pacemakers, and monitors, enabling clinicians to manage the data on the device itself and therapies provided by it, and to monitor patient data captured from the onset of symptoms.

The new solution would require significant effort, but the company did not have sufficient internal resources. Moreover, the partners with whom the company was already working did not have the complete set of skills to meet the company's requirements.

## Our Approach

The company turned to GlobalLogic, who assumed responsibility for full cycle development of the new device, working directly with the product marketing group on feature definition.

This continued with requirements definition, software architecture, and UI/ UX design and then through the integration of the developed application into the system.

GlobalLogic developed various adapters to support integration, such as a data bridge source adapter, HL7 sender destination adapter, and file system destination adapter, supporting the process through automated testing and continuous integration.

GlobalLogic developed and implemented procedures to ensure data privacy in compliance with HIPAA regulations and for dealing with ePHI.

GlobalLogic supports the client's ability to meet IEC 62304 requirements.





# Benefits

The client successfully brought to market a new product that enabled connection to a wide range of external sensors from different vendors with maintenance supported by over-the-air updates.

It provides **one system for managing all clinic functions** and saves time by automating data acquisition and management, patient scheduling, correspondence, reporting, and documentation.

A central hub for patient arrhythmias, cardiac devices, and patient data, the product also features a **user-friendly human interface** for simple, intuitive control based on human factors studies. The solution has gained an installed base of **over 1,300 clinics managing more than two million patients**, and:

- includes over 3,000 predefined devices,
- integrates with 50 EHRs in over 223 clinics and hospitals,
- and integrates with any HL7-compatible system.

In addition, the platform concept developed by the GlobalLogic team serves as the basis for different product variations.

# About GlobalLogic

With more than 20 years of experience in regulated software product development and engineering services, GlobalLogic helps some of the world's leading Medical Technology, Medical Devices, Pharma, and Life Sciences organizations create world-class digital patient experiences, accelerate new product development, and capture new revenue streams.

**GlobalLogic**<sup>®</sup>  
A Hitachi Group Company

**20+** years industry experience

**2300+** industry-dedicated engineers

**300+** new products

**90+** clients

To learn more or speak with one of our experts, please reach out to [info@globallogic.com](mailto:info@globallogic.com).



We are on a two-decade-young journey and we're proud of our growth and the milestones we have achieved. A startup to a Hitachi group company, our product engineering story is unique. Thanks to our people who have been our companions and growth drivers in this amazing journey.

'We are GlobalLogic' is a spectacular showcase of what we do, what we represent, and our capabilities as a global leader in product engineering services.

[Learn More: Visit Our Website](#)