

Software development and real-time data integration services for a HealthTech company



edvantis



Intro

Edvantis has helped SEMDATEX GmbH launch a new remote patient monitoring solution which uses real-time clinical data. In the process, we have integrated the service with an innovative e-healthcare software platform.

The Challenge

SEMDATEX is a new entrant in the German HealthTech market. Launched in 2016, the company positions itself as a technology service partner and IT solutions provider for healthcare companies. The company's mission is to help healthcare organizations streamline patient data exchanges, digital clinical processes, and improve collaboration among participating organizations. The team already works with [Doc Cirrus](#), Livetec, BIOTRONIK, and is actively onboarding new partners.

The staunch levels of growth prompted SEMDATEX to expand its product ecosystem and provide new integrations. Thus, they were seeking an experienced software development team, capable of solving non-trivial tech challenges and experienced in the healthcare domain. Edvantis was selected among other IT vendors to co-create a new software solution and integrate it with the Doc Cirrus environment.

The project involved many software modules that required secure real-time data exchanges with medical devices. The goal was to create a streamlined data collection process to obtain data from medical devices such as Biotronik pacemakers and integrate such clinical data into the system for analysis purposes.

Additionally, all software components and data integrations had to be created in line with the German healthcare regulations pertaining to digital patient data collection, storage, and privacy. The client needed a compliant solution, ensuring high security standards.





Solution Delivered by Edvantis

Since November 2020, a [managed team](#) of Edvantis engineers has been supporting SEMDATEX on its product journey.

Our team has helped develop a specialized solution for monitoring and responding to changes in patient conditions. Using aggregated real-time data, the module can rapidly notify staff about changes in the patient's vitals and issue critical alerts if their condition rapidly deteriorates, thus enabling medical professionals to take action fast.

We researched and integrated some of the best-in-class tools for enabling rapid data exchanges in different formats. Users can now import and export stored patient records in different formats among others. We also created a system for remote processing of patient monitoring data (HL7-IDCO). In addition, we helped develop a data extraction tool for obtaining medical data from patient records.

Lastly, Edvantis engineers have helped build an adapter for collecting and transforming data obtained from connected medical devices. The system enables healthcare workers to measure such parameters as heart rate, blood pressure, oxygen saturation, and ECG among other vitals. This saves a tremendous amount of time for staff, plus reduces the risk of false inputs.



Heart rate



Blood pressure



Oxygen saturation



ECG



We Achieved **Great Results Together!**

SEMDATEX had previously struggled to achieve the necessary results with another vendor. Edvantis was called in on a rescue mission to replace the prior vendor. Despite a challenging deadline, our team managed to deliver on all the set tasks. By opting for a managed team model, SEMDATEX benefited from a shorter team ramp-up time and proactive support from our end in terms of team performance management.

The project remains ongoing and we are now collaborating on new add-ons to their software. During the course of our collaboration, SEMDATEX also signed on a new client and we believe that many more are soon to follow!

“Edvantis succeeds where others fail. We were getting nowhere with our previous vendor, and Edvantis turned things around in no time flat.”

Henrik Schmidt, Geschäftsführer Technologie (CTO)

Technologies Used:

