



MOBILE APP FOR CONTROLLING A NEW TYPE OF BREAST PUMP

Medela is a global leader in research-based breast milk feeding products, health-care solutions for hospitals, and clinical education — with the common goal of improving outcomes and nurturing health for generations.

ikonplan was commissioned to design and implement the associated mobile application as part of the development of Medela's first InBra breast pump. The app allows easy remote control of the pump and can be classified as medical device software.

Requirements – Development – Documentation

In close collaboration with Medela, ikonplan began developing the app. The agile development approach supported regular communications and feedback from the customer which allowed quick and easy changes to the development process. The technical conception provided the foundation for a scalable, future-proof, and medically safe architecture.

An integral part of the development process was the consistent implementation of security requirements for medical devices according to Risk Management (ISO 14971) and Cybersecurity (IEC 81001-5-1).

Hands-free app allows easy control

The app developed for iOS and Android offers mothers a truly hands-free experience, especially useful for double pumping. With the app, mothers can easily and intuitively control the pumps. The app displays essential information about the current pumping session, including milk volume, and saves it in the session history after completion. Comprehensive technical documentation, including risk analysis, paved the way for successful FDA approval in the US and CE certification in Europe, guaranteeing the highest quality and safety standards.

Result

- Truly «Hands-free» Experience
- In-app information for intuitive use
- DHF-Compliant Documentation
- Foundation for future expansion and scalability of the solution

Methodology & Technologies

- .NET / MAUI (Cross platform)
- Android/iOS, Bluetooth LE (BLE secure)
- IEC 62304, ISO 14971, IEC 81001-5-1g

Scope of Services

- Requirements Management
- Software Architecture & Implementation
- Risk Analysis & Verification



21 months



4 employees – ikonplan
5 employees – customer



Requirements, Architecture,
Implementation, Verification

Customer

medela 

