

## CLIENT CASE STUDY

# Increasing the performance of a connected syringe infusion pump

Expleo piloted a development project on the customer site, to improve the quality of a new product – a WiFi-connected syringe infusion pump.



**20 consultants**  
since 2013



**Manufacturing of**  
**ISO13485 medical**  
**devices**



**Master agreement**  
renewed in 2020

## Project background & challenge

Syringe infusion pumps are devices that have been used for decades in hospitals around the world to improve the delivery of intravenous fluids to patients.

One of the world leaders in medical devices, with 37 industrial sites around the world, has launched a project to develop Wi-Fi connectivity on one of its flagship products, the syringe infusion pump.

In order to improve the product's performance, and to align it with the customer range of products and competition, Expleo piloted a project that consisted in developing a WiFi-based data exchange link to the pumps' systems – while meeting the time to market deadlines.

## Solution

Expleo, whose 5-year master agreement with the customer was renewed in 2020, provided technical assistance and project management services to production site teams near Grenoble, France.

Our team of consultants has been involved in the system development phases by designing new versions and improving the WiFi communication systems of syringe infusion pumps. During the project, we remained in continuous contact with several systems and product development, testing and validation teams in France and China. We also collaborated with the client's teams in charge of marketing, quality, certification, regulatory and cyber security.

To improve product performance following the initial validation tests, we quickly launched new development releases. Expleo worked on the completeness of the specifications and managed the development loops not foreseen in the initial schedule.

## Outcome

Expleo's key challenge was to secure time to market without compromising security. We managed to stick to the deadlines with an improved solution, ensuring WiFi connectivity and a secure connexion to the hospital system. We provided a complete solution that includes data consistency, patient security, alarm management, system monitoring and hospital system connectivity.

In addition, the project was carried out in an international environment, with teams in Asia and Europe, which demonstrates Expleo's global reach and agility.



**“Throughout the project, and despite the sanitary circumstances, we managed to keep the momentum going, in particular with the Chinese software development teams, and we provided real planning management.”**

**Christian Huyghe**  
Senior Project Manager, Expleo

For further information, or if you have any other questions, please write an email to [info@expleogroup.com](mailto:info@expleogroup.com)

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