



## DESIGNING A WIRELESS GATEWAY FOR AN IN-HOME PATIENT MONITORING APPLICATION

### Abstract

An early stage medical technology company partnered with Infosys to design and develop a wireless gateway for an in-home patient monitoring application. Infosys developed the product in just 4 months, substantially reducing the time-to-market, while achieving the product's competitive BOM target.

## The Client

An early-stage, venture-backed medical technology company, the client is focused on improving the care of cardiovascular

patients. The client aims to revolutionize the treatment of cardiovascular disease by developing truly innovative and clinically

meaningful devices and solutions for health care professionals.

## Business Need

The wireless patient monitoring device provides immediate benefits to patients by utilizing advanced wireless and internet technologies. The client sought Infosys'

help in designing and developing an innovative disposable wireless transmitter which would transmit vital signals to a central server for doctors to monitor

patient health. The wireless gateway serves as a remote communication link between the patient and the healthcare facility/physician.

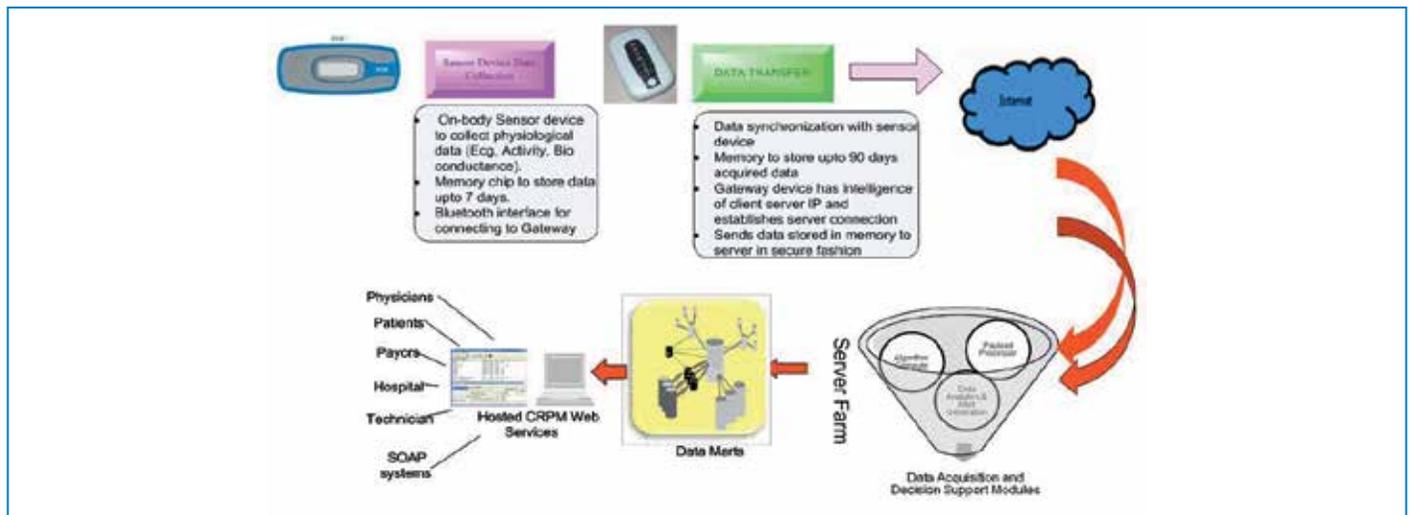
## Infosys's Solution and Approach

Infosys designed and developed the wireless communication device or the "gateway" which would receive data asynchronously from a disposable monitoring transmitter or "patch" using a Bluetooth™ connection and transmit

data to a central patient monitoring server over a GSM/GPRS wireless network. From the beginning of the solution, Infosys ensured the product fully complied with stringent medical device and regulatory requirements. The solution was engineered

using commercial Off-the-shelf (COTS) components which minimized the overall system developmental costs and developmental time.

The solution is depicted in the diagram below:



## Business Value

The product has obtained FDA and CE certification and is now undergoing advanced clinical trials. A derivative version for the hospital market is already in development.

Benefits to the client were:

- Accelerated time-to-market: the complete product design and deployment in just 4 months timeframe
- Highly optimized product architecture using COTS components saved the client more than 30% on the overall product costs
- Cost-effectiveness and flawless execution leveraging Infosys' Global Delivery Model

For more information, contact [askus@infosys.com](mailto:askus@infosys.com)

**Infosys**<sup>®</sup>  
Navigate your next

© 2018 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.