

# Case Study

Health Care Management | Digital Solutions



## Enterprise App Development for US Based Healthcare Company

US based Health Care start-up, founded by a diverse group of professionals with expertise in a variety of areas, including medicine, technology and regulatory affairs aims at increasing access to quality health care. The founders shares a passion for innovation and a genuine desire to innovate and work as a Social Change Agent in Health care through technology.

Their target is to create a product that would not only be convenient and easy to use, but wouldn't require the user to invest in expensive new equipment. Rather than reinventing the wheel, they approached aqb solutions to devise a way to combine existing technology with AI/ML and sensor based Wearables to simple medical devices to produce an affordable system that one can use for remote medical supervision and Telemedicine.

### Business Challenge:

The main challenge was to develop a system that could easily use simple medical devices to collect data and integrate with the apps.

- A mobile application for the patient was needed to be developed which could help in recording patient consent, medical history, vital stats & even provided platform for video conferencing with the doctors.
- Like patients, doctors too needed an app where they can see the registered patients, manage patient enrollment and can remotely conduct diagnosis.
- A cloud support was also essential to store and analyze all the data provided by the medical devices via apps.

### Solution Provided:

They approached aQb solutions to pour life into their concept.

aQb Solutions developed the following :-

- **Patient App-** To keep Patient Consent, Record and Share Vitals, Provider Directory and secure messaging with Providers.
- **Provider App-** This contained patient registration, patient enrollment management, device out of range alert settings, vitals review, CMS reimbursement work flow and tracker, secured messaging within provider and patient and ad-hoc video conference.

## aQb Solutions

### WHY CHOOSE AWS?

Amazon Web Services is a subsidiary of Amazon that provides on-demand cloud computing platforms to individuals, companies, and governments. aQb Solutions chose AWS as it was easy to use due to the AWS Management Console or well-documented web services. AWS has no capacity limits and provides services at a minimal cost. AWS provides clients with tools which helps to reduce the time they spend on tasks. The use of AWS has been proven to be very time efficient as well as agile for aQb Solutions.

### About aQb Solutions Pvt.Ltd.

aQb Solutions is one of the leading data analytics company in the country and has a team of extremely talented group of developers and data analysts to cater to the need of enterprise application in development market.

It has a very friendly atmosphere for employees which boosts up their confidence and motive them to achieve heights.

It has also been registered under ISO 27001 and ensures data security within the company.

- **Fully Integrated & Configured Medical devices for Patient use-** Platform supported many vitals Wireless devices . These devices were fully configured with App, no pairing was required. **The App automatically detects and connects with these devices when in use. It retrieves and transmits readings seamlessly.**
- **Amazon Web Services-** It was used to develop the cloud service platform, to store the vital information of the patients and track progression.

The following services offered by AWS were used to create the functions mentioned below:

- Authentication Process – Cognito, API Gateway, Lambda
- Secure & Scalable storage of details,Vital Data -Pubnub
- Files and Document storage – S3
- Report Generation – RDS, Datapipeline
- Local Storage-Realm

## The Outcome

- The technology helped monitoring of patients outside of conventional clinical settings, which in-turn increased access to care and decrease healthcare delivery costs.
- Chronic disease management significantly improved an individual's quality of life. It allowed patients to maintain independence, prevent complications, and minimize personal
- Trend analysis of physiological parameters, enabled early detection of deterioration; thereby reducing number of emergency department visits, hospitalizations, and duration of hospital stays.

## Customer feedback

The goal of delivering care right to the home was fulfilled. A significant increase in the revenue was recorded. The management was extremely satisfied with the time they were saving in processes like automated reporting for cms billing.

aQb Solutions has a proven methodology of project management for outsourced software development projects.

### Contact aQb Solutions

324, Campus 03, 4th Floor  
Arcadia Center  
31, Dr Ambedkar Sarani  
Kolkata – 700046  
West Bengal  
India

### DEVELOPMENT CENTER:

Bengal Eco Intelligent Park  
Module A, 10th Floor,Plot No 3,  
EM Block, Tower 1, Sector 5  
Salt Lake City  
Kolkata – 700091  
West Bengal  
India  
Phone: +919830028189,  
+919874591370,  
+919831934645,  
Int no: +13235453959  
Email: info@aqbsolutions.com  
Skype: aqbsolutions