

CONTINUOUS GLUCOSE MONITORING APPLICATION FOR MOBILE DEVICES

Client Profile:

A medical device company focused in diabetes who markets personal healthcare devices to measure glucose levels. The company was seeking to update a mobile phone application that can interface to a CGM sensor and track/trend glucose data.

Technologies Used:

Use Case Analysis, Wireframes, Human Factors Engineering, Requirements Engineering, Android Studio, Kotlin, Xcode, NFC, BLE, knowledge of Medical Device functionality and interfaces, FDA Application Development / V & V Guidelines, JIRA for development / backlog and bug tracking. ALM for formal test protocols, bug tracking.

Project Summary:

The project consisted of the development of a new generation of a CGM mobile Application that runs on Android and iOS mobile phone platforms and interfaces wirelessly (NFC & Bluetooth) to glucose skin patches (sensors). The Application allows users to download real-time glucose data from a 14-day sensor to their phone, view logs, charts and trends (with graphical display) on a number of reports. Created with real-time glucose alarms, the result is a user-friendly, interface that allows interaction with the system through data synchronization. The system includes automatic, continuous upload of glucose data from the glucose sensor. Users are able to set glucose target ranges for medical parameters, share reports with their Healthcare Providers. The application is available in over 16 languages.