Proactive Healthcare

The client is a USA based health care provider who is specialized in internal medicine, primary care and preventive medicine for well over a decade.

A proposed application is a virtual, health and wellness practice designed to empower patients and subscribers to be proactive in their healthcare with the guidance of a medical doctor.

The application is to improve the doctor / patient relationship through an advanced communication system which enables doctors to speak generally but in a personalized way to their patients based on biometric data. This overcomes challenges with HIPPA and ensures that patients' personal health record data is maintained in a data storage area which they own.

Key Business Features:

The application of such process involves both designing the application and integrating it with Microsoft HealthVault to store and maintain the health and fitness information.

The HealthVault integration offers a Microsoft platform for health information and innovation .It has Built-in functionality for privacy, security, and data provenance along with Cross-platform commitment.

HealthVault allows application to interact with their Server in two ways I.e Online Connection, Offline Connection.

Hence, practice doctors have an easy way to help their patients take control of their personal health records in a way which maintains effective communication and improves the doctor / patient relationship.

Through the application, patients will have the ability to manage their own personal health records which will enable them to capture and automatically upload biometric data to their secure personal health record storage while providing each patient with the ability to share their health data with their health care physicians of their choice. Here, Doctors will have the ability to personalize and post blog articles for each patient by associating each blog article with biometric ranges which relate to a patients current biometric data.

Key Business Challenges:

- Microsoft HealthVault Integration with DotNetNuke was the biggest challenge because for the .Net page we can inherit the page from HealthVault but integration of HealthVault in DNN Module was the first challenge.

- Saving the Custom records in HealthVault was the another challenges. For this We used Health Vault Extension Class where we can define our custom fields withing the predefined Data Types.

- Showing records history of the users, which needed to show all the records from different Data Types to be shown row wise. We made it work by keeping a day records together from different data types.

The Net808Source Blend:

Doctors have a need for patients to track biometric data but do not have a packaged offering which includes a PHR system for patients to capture biometrics, and a communication system which enables doctors to share their generalized but personalized medical advice for living a healthy life and complying with their doctor's recommendations.

The Net808Source process aims at a electronic medical record's facility which will help the client to address his specific needs. The program will help to access the biometric pages where you can track key health indicators over time including blood pressure, BMI, cholesterol, blood sugar, and weight along with Graphing that allows tracking over time.

The program focuses establishing the connection with the HealthVault ,graphical view of biometric details and blogs posting for patient health track in effective way.

Finally integrating all this information in standard EDI format adhering HIPPA/CCHIT norms, for security process.

The Net808Source Delivery:

Net808Source implemented following important components in the process:

Patient Biometric details, Patient History details, View Blogs, View Graphs facilities, connect with external third party tool ' HealthVault' in standard EDI format.
Team Net808Source also successfully integrated inter-connectivity of these processes.
All required data security norms in the data flow process, were also successfully implemented.

Technical Platforms: DotNetNuke ,SQL2008R2, Healthvault
API's JQuery graph ,Telerik

Functional Design of Mechanism: