

Cloud Based EHR System for Dental Practices



“The Client was looking for a reliable technology partner that understood the Healthcare IT space and the quick and nimble responses needed to react to the rapidly evolving landscape....”

The Client

The Client is a vendor of an Electronic Healthcare Records (EHR) management product whose cloud based dental specific EHR system facilitates and integrates the commercial and clinical areas of practice management. These areas include administrative tasks such as scheduling, eligibility checks, documentation, claim submission, payment posting and custom reporting as well as patient related functions such as tracking medical history, diagnosis recording, and charting and procedure completion. The Client acquired an existing EHR software product with the strategy of developing a dental practice specific EHR product from it. The Client’s key driver for this project was the unavailability of cloud based dental EHR systems which met the ONC-ACB certification for Meaningful Use (MU).

The Business Challenge

The Client engaged Telliant to provide the complete software expertise for the design of the User Interfaces, databases and integrated functionalities. The client required the product to be cloud based and have an architecture scalable to thousands of practices both large and small and their patient databases. For the product to be successful in the marketplace, the MU certification is an absolute requirement. Speed to market was an imperative as well.

The EHR was designed and developed in a regularly active collaboration between the Client and Telliant teams. The EHR is now 2014 Edition ONC-ACB EHR Modular certified patient records system in addition to being a complete practice management system enhanced for the modern dental practice.

Telliant was chosen by the client for the following reasons:

- Comprehensive experience developing Healthcare IT solutions
- Ability to ramp up the development team quickly
- Onshore/offshore development and project management teams
- Capability to learn and maintain the existing code base quickly

The Engagement

The Scope of Work provided by Telliant included:

- **Creation of a certified EHR system specific to Dentistry**
 - Tooth & Gum Charts with graphical interface for tracking conditions & procedures
 - CDT/SNODENT procedure code integration
- **Integration of the requirements for general practice management**
 - Appointment scheduling, Front desk check-in and patient follow-up
 - Billing module with Claims submission for patients and insurance companies
 - Handling ERA Payments & EOB, Payment Dashboard
 - HIPAA compliant safety enhanced design
- **Certification for Meaningful Use Stage 2 Requirements through 2014**
 - Clinical Quality Measures (CQM) reporting using QRDA
 - ICD9/ICD10 to SNOMED code mapping
 - Secure Mail via encryption, Transition of care (CCDA) & Data Portability



“ Creating a secure and very function-rich cloud based EHR application was a challenge that we were very prepared and excited to address.”

“ We quickly assembled a talented team consisting of software engineers, quality analysts and business analysts to address the challenge.”



TECHNOLOGY ENVIRONMENT

The Major Technology Components:

- MVC Architecture
- Microsoft ASP.NET and C#
- Microsoft SQL Server 2008 R2
- .Net 4.0 and Nhibernate ORM framework
- JavaScript and jQuery
- IIS 7.0

Solution Highlights

The collaboratively designed EHR system is now a powerful, easy-to-use software solution, enhancing clinician workflow and improving the quality of care provided to patients by integrating the administrative and medical sides of the practice.

This cloud based healthcare software solution is easily supported, providing a low Total Cost of Ownership and an attractive Return on Investment. **The features included:**

Charting: Dental software relies heavily on the ability to display anatomically correct tooth charts. The charting module was developed using sophisticated graphics to capture all conditions and treatments and using color coded image overlays. The innovative treatment chart is customizable for any clinician and allows for all information to be displayed on one screen for easy viewing.

Scheduling: Efficient appointment scheduling can go a long way towards improving revenue, increasing patient satisfaction and maximizing physician efficiency. The features developed include, color-coded easy-to-use scheduling, email notifications, check in/out indicators, waiting rooms, cancellation, missed appointment handling, chart pull-up among several others.

ePrescribing: Telliant designed and built the EHR's using certified Electronic Health Record technology from Dose Spot and the product was certified by Surescripts. The application can track patient medication history, Allergies, Drug/Drug and Drug/Disease interactions, Rx Education, Eligibility/Formularies among other features.

Billing: Revenue management is a critical component of any medical or dental practice. The EHR application includes a robust insurance eligibility verification, claims submission, payment processing through ERA/EOB's, adjustments, account history with a patient ledger and a complete payment dashboard.

Patient Portal: The EHR solution includes a comprehensive patient portal, where patients can sign in and access their medication list and history, request refills, send and receive secure messages to their doctors, view lab results and request, confirm or cancel appointments.

Meaningful Use: Telliant ensured that the client's EHR remained an ONC-ACB 2011 & 2014 certified product for both for Stage 1 and Stage 2 measures. The system is also certified as a base EHR which demonstrates the features of an EHR product, allowing its code to be adapted and expanded into other medical practice specialties. For MU certification, Telliant staff presented a significant portion of the software to the ONC-ACB proctor during certification testing and supported the client staff during their portions.

Results Achieved

The Client achieved the following major benefits from their partnership with Telliant:

- The Meaningful Use certification was completed per the client's schedule, allowing an on-time roll-out to its sales team and timely entry into the market.
- The EHR application provides a highly reliable and functional solution meeting all the EHR application goals required by the ONC-ACB certifier.
- The product is full featured EHR solution for the practice management related functions including scheduling, encounter management and patient engagement, charting and billing and payment functions spanning the entire Revenue Management Cycle.
- Provides intuitive maneuverability and user-friendly functionality.
- A powerful administration module provides custom utilities to manage the master data for provider set up and the configuration of various functionalities based on the user profile.
- Delivered a highly scalable and robust solution which can accommodate growing user volume.
- This solution package has been built to support future federal requirements.

To learn more about how we can help achieve your goals in the ever-evolving world of IT and innovation, please visit www.telliant.com

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