Case Study

End-to-End Healthcare Revenue Cycle Solution

The Client

The client is a growing dental software company that offers comprehensive dental practice management systems to both large, established Dental Service Organizations (DSOs) and smaller dental practices.

The client has shifted from a web-based platform to a cloud-based solution, enabling greater accessibility and scalability. Their software suite offers a range of functionalities, including scheduling, charting, billing, patient portal, and reporting.

The new platform seamlessly integrates with leading Electronic Health Record (EHR) systems. Additionally, the platform incorporates user-friendly dashboards and an intuitive interface to support comprehensive dental practice management.

The Challenge

The client plans to enhance their dental practice suite by improving their Revenue Cycle Management system. This includes adding a dental-specific billing module and treasury reconciliation processes that seamlessly integrate with their existing practice management module.

The new software will offer a highly flexible plug-and-play application, enabling easy integration with other applications and platforms.

The application aims to achieve the following specific functions:

- ⊘ Improve capture, integration, and automation.

- ⊘ Add Paper EOB conversion to ANSI 835 output file and Check21 file creation.

- ⊘ Streamline reconciliation functions for all payment sources and enhance cash processing with audit controls.

- ⊘ Develop workflows for better exception processing and human-readable ERA.

- ⊘ Introduce advanced analytics and reporting.

- ⊘ Enhance UX/UI with improved dashboards for quick access and analysis of key data.

- ⊘ Update platform architecture with an enhanced remittance repository for concurrent users.

Solution Highlights

Telliant collaborated closely with the client, resulting in an easy-to-use software solution that integrates with existing dental practice management software and major EHRs.
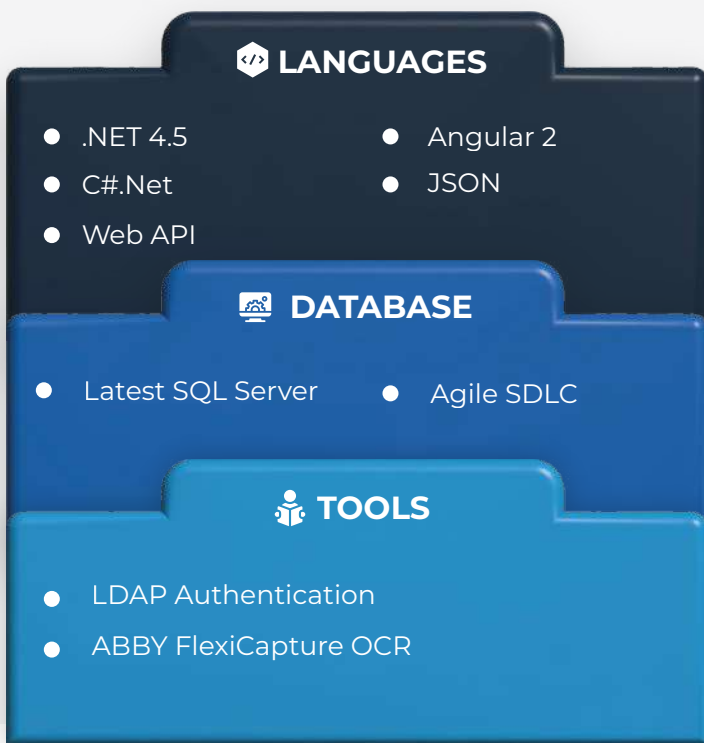
The team improved data capture, automated the revenue cycle, and enhanced treasury reconciliation. The UX/UI on dashboards was also upgraded to improve user workflow.

The application built by Telliant has several key functionalities:

- Converts paper Explanation of Benefits (EOB) to ANSI 835 format using ABBY FlexiCapture with OCR technology.
- Enables users to search, view, and print scanned EOB images and matches them with corresponding 837 files for reconciliation.
- Converts data into a Check 21 File
- Provides features to create, view, and search checks (ICL) with stored/archived check images.
- Converts 835/ERA into a user-friendly format for importing into the Practice Management System (PMS) and utilizes a Human Readable ERA API.
- Includes a dashboard with advanced charts for comparative analysis of data from 820, ICL and 837 files.
- Analyzes payment and Accounts Receivable (AR) information at various levels, including carrier/plan and procedure.
- Enhances dashboard charting and exporting capabilities.
- Generates advanced reports for CARC/RARC codes in SSRS or PDF format.
- Implements a workflow module with improved scheduling and automated features, enhancing audit control throughout the revenue cycle.

Technology Environment

Telliant worked with the client to identify/create the most suitable tech-stack for the revenue cycle application in order to meet the performance, cost, and usability objectives.

</> LANGUAGES

- .NET 4.5
- C#.Net
- Web API
- Angular 2
- JSON

DATABASE

- Latest SQL Server
- Agile SDLC

TOOLS

- LDAP Authentication
- ABBY FlexiCapture OCR

About Us

Telliant Systems, offers a diverse selection of custom software product development services, such as product strategy, software design, application development, QA/Testing, and application management services. Expert teams are available to develop web, enterprise, and mobile applications, including iOS and Android development.

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