

Hospitalist Practice and Billing Management Software

Client

Our client is a medical revenue cycle company, provides coding and billing services for emergency medicine providers (Physicians, Physician Assistants and Nurse Practitioners) and hospitalist medicine providers all across the United States

Objective

Our client intends to develop a Hospitalist Practice and Billing Management Software. The product will primarily perform census management and log reconciliation for physician groups that provide medical care in a hospital or skilled nursing facility.

Congruent needed to provide software services to develop the software application.

The main objectives of the intended functionality were:

- To facilitate accurate encounter tracking
- To enable generation of reports to monitor practice performance metrics
- To improve communication among physician, referring physicians and primary care physicians
- To provide an integrated platform to minimize and resolve billing exceptions faster

Challenges

Post implementation, the performance and load requirement on the system turned out to be higher than what was anticipated during the requirement analysis phase. To cater to the additional stress on the system and retain an average response time per page load of 2 seconds, Congruent took up performance tuning work on the system to ensure users weren't affected during peak load times.

The team also faced challenges on integration with external feeds and handled a few gaps in design requirements through coordination with the client's design and tech team.

Solution

Congruent took up the project on an iterative waterfall development model and implemented the solution on MVC based architecture. The architecture, high level design and database designs were reviewed and signed off by client's technical leadership before commencement of work. The client was kept updated on progress of development through weekly customer reviews and emails.

Benefits

The new system enabled the client to significantly improve efficiency on key processes like access from any device & location, importing and exporting data, managing patients, reconciling and eliminating inconsistencies between hospital and billing data, communication and scheduling data exports.

Technology Used

- HTML5, CSS3, jQuery, Bootstrap etc. - UI
- C# - Coding Language
- SQL Server 2008 – Database
- Visual Studio 2010 (framework 4.0) - IDE
- Windows Server 2008 R2 – OS
- IIS 7 – Web server/ Application server
- Hi Charts – Graphs
- ABC PDF – for PDF generation
- MVC 4.0
- Android, IOS, Sencha - Mobile for future considerations