A **Patient Tracking** System

CLIENT

ipc
The Hospitalist Company

INDUSTRY
Healthcare

BACKGROUND
The client is a national physician's group providing healthcare services to hospitals and nursing facilities. They serve over a million patients in 28 states throughout the United States. Their core activities support their providers through billing, collection, marketing, training and education.

CHALLENGE
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WHY TELERIK
Telerik's easy to use feature rich controls including RAD Scheduler was the main reason to use Telerik. Our developers are already familiar and very productive with Telerik controls. And Telerik has one of the best development support.

CHALLENGES AND OBJECTIVES

Our client, a large corporation in the healthcare industry, is a major service provider for specialized care including geriatrics, acute, and post-acute healthcare. Their patients are primarily elderly patients who periodically move between different facilities like nursing homes and hospitals. The client's case managers needed a way to track patients and keep up-to-date patient information in a single repository.

The web portal was required to be HIPAA compliant and needed to store patient demographics, factsheets received from doctors, various other health related documents, contacts, and notes/tracking information. Doctors, nurses, therapists, and case managers need to review latest patient information to accurately maintain their schedules. The portal needed to implement an appointment scheduling module similar to Outlook's calendar system. Additionally, administration required the reporting capabilities to generate reports in various formats including Excel and PDF.

THE SOLUTION

AI Software proposed to build an AJAX based ASP.NET solution using Telerik's ASP.Net RAD controls. The Appointment scheduling feature was a core requirement of the solution and Telerik has very rich set of controls including RAD Scheduler.

MS SQL Server was used as the database of choice. We developed custom templates to generate data access layer, data transfer objects and stored procedures. We adopted modular approach and created a business facade pattern to abstract the business layer.
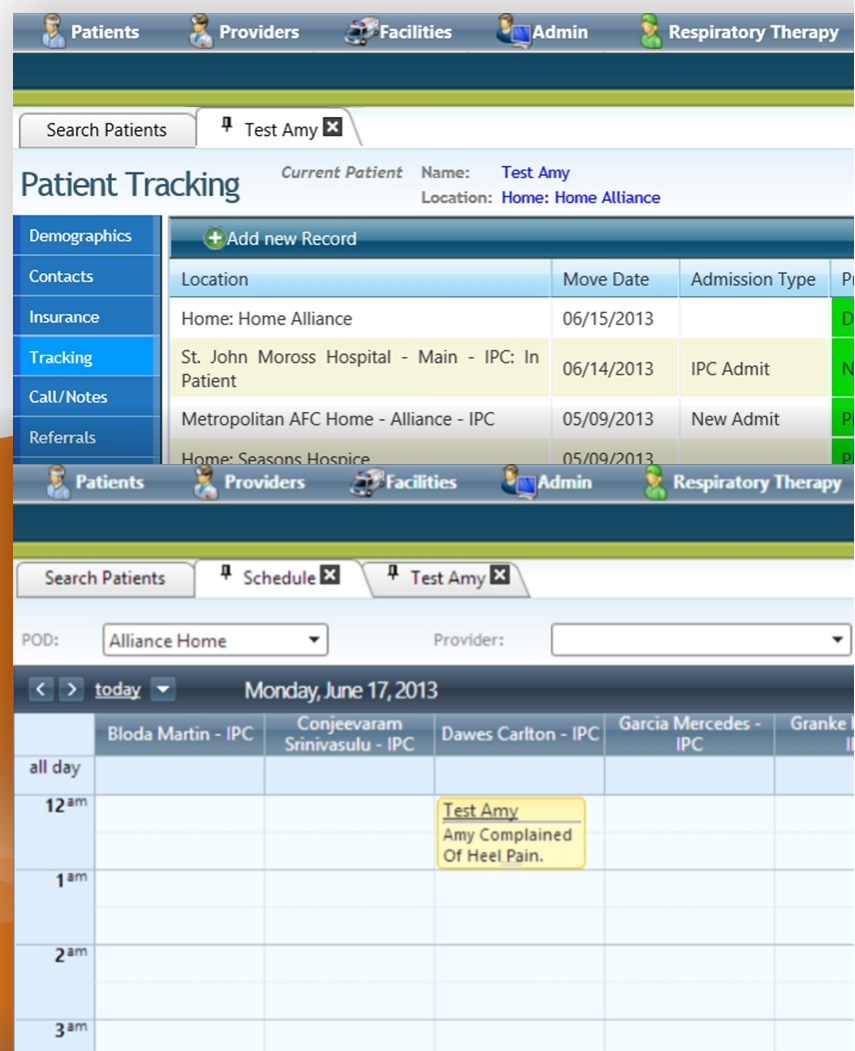
For improved UI performance, we used on demand data loading for a variety of controls such as the dropdown control. The AjaxManager, AjaxPanel and AjaxLoadingPanel controls were used to achieve performance and partial rendering. RadGrid is the mostly used control among all Telerik control, as it allows us the ability to filter, sort, and provide inline editing capabilities, which reduced development time without compromising performance.

THE RESULTS

The web portal was built in record time. According to users, the interface was easy to use. The Telerik interface styles were well received and the users were excited to use the new system. The portal allowed users to:

- Track their patients movement from one facility to another
- Store patient demographics, contacts, insurance and health related information
- Store all notes and phone call details
- Provide timely referrals to doctors, nursing facilities and hospitals
- Schedule patient appointments
- Generate reports for patients, providers, and administrators

We had two developers working six months to complete the first phase of the project. The client was then acquired by a large corporation, who promptly noted that *"This web portal does not seem to take any shortcuts."* After the acquisition was complete, the new company used the portal (which originally serviced one region) to service six additional regions across the nation.

TECHNICAL DETAILS

Please include information about the following, where applicable:

- Operating System
  Windows 2008 Server
- Database Platform
  MS SQL Server 2008
- Number of Developers
  2
- Development Time
  6 Months for Phase 1 and additional time for enhancements as needed

RESULTS

We developed a large scale user-friendly web application within the estimated time and budget of the client, and even managed to impress when the original client was acquired. We knew we could exceed the client's expectation for the appointment scheduler with the multi-resource view.

QUOTE

" Eagle is extremely user friendly. New users are able to learn the system quickly through in house training classes. With several users in our office using Eagle to a multitude of purposes, it's been important for us to keep the system simplified while still incorporating all the tools we need. I believe we have been successful in maintaining this balance.

Amy Hillock