

# Integration with a Oncology EMR product and an External Billing System

## Client

A US based Oncology Healthcare Practice

## Requirements

The solution was expected to provide integration with a large FDA approved oncology EMR product that managed the chemotherapy and patient demographics modules quite efficiently, but depended on an external billing system for submitting claims.

Both the above mentioned systems managed scheduling, while the practice management supported billing as well, and the Oncology EMR supported the treatment, the requirement was quite complex as this had to integrate the business workflow beyond just a data exchange integration.

For example, the doctor schedules had to be mapped to chemo schedules and at the same time conflicts between these schedules had to be avoided. The recursive appoints had to be reflected between both the schedulers. Furthermore, the implementation of the interface had to integrate 7 different facilities and locations and also manage centralized billing.

There was also a requirement of HIPAA complaint security capability with a very comprehensive audit train and log requirements.

## Duration of the Implementation

Duration of the implementation spanned well over 7 months.

## Binary Architecture and Solution

Although the requirements specified were of complex nature due to the fact that we were working with systems that were highly proprietary and restricted, our solutions involved the following:

Integration with the UI scrubbing capability through which data exchange was validated by the application for integrity reasons.

Centralized web based audit trail logging system to manage messages back and forth.

Seamless location independent agent to replicate information exchanged across 7 databases

Alerting the capability to notify users on any potential failures in the workflow.

The solution was developed with Microsoft .Net Remoting to encapsulate the TCP/IP layer.