Developing a Practice Management System and Creating an Interface Engine

OVERVIEW & BUSINESS NEEDS

The Client operates as a health care information technology (IT) company, providing software solutions and services for the clinical and management information needs of ambulatory health care organizations.

The Client's core requirement was to develop a portal for establishing a secure and single-point access to multiple applications, information services and web content for end-users. The acquired data was intended to take the form of applications with shortcuts to Cognos Reports, RSS or Web favorites.

The objectives identified were as follows:

- Develop, enhance and maintain the Practice Management System (PMS) for private practice, hospitals, and community health centers
- Develop an efficient reporting model for generating ad-hoc reports
- Create an interface between Practice Management (PM) and third party Electronic Health Records (EHRs)
- Technology migration from old legacy versions to higher software versions (upgrades)

SOLUTION

R Systems deployed a team of experienced professionals with deep-domain knowledge who offered the following solution:

- Developed a portal with active directory integration to access different applications like PM, EHR, Cognos reports, RSS feeds, Outlook calendar, etc.
- Built a robust reporting model to generate ad-hoc reports by using Cognos software
- Built an interface engine between PM and EHRs with TCP/IP protocol and HL7 & CSV's as data exchange methods
- Developed, upgraded and deployed template-based data conversion tool to migrate the client's

data from old legacy system/versions to latest application versions
- Produced reusable model/code/design and defined development standards for covering the following modules:
  - o Accounts Receivable (AR) management and billing module
  - o Merged modules for patient and insurance information
  - o Appointment and scheduling
- Provided production support

TECHNOLOGIES USED

- .NET, C#
- Visual Studio 2005
- Team Foundation Server
- Citrix
- Cognos
- SQL Server with reporting services