Client – Server Based EMR – a case study

Client

A Healthcare center situated in the United States of America.

The Task

To develop a truly integrated Electronic medical records system with Practice Management and PDA / Tablet PC functionality. The scope of the proposed system included

- Manage daily schedule and view patients waiting
- Pull forward relevant data from previous visit
- Capture chief complaint, history of present illness for physician's access
- Instantly share chart information throughout the practice
- Receive medication interaction and allergy alerts
- Track charts and organize charts to review
- Prescription Management

The Advantage

- The information is stored electronically so paper work is completely made obsolete.
- The entire healthcare system within a practice is automatized.
- A single server running on a system can serve remote client/clients.
- Huge paper work is reduced /eliminated.
- The manual errors is reduced /eliminated.
- Minimum effort and time required with ease of usage.

Binary Solution

The Binary Solution was to develop a single server system that was capable of serving a number of remote clients. Some of the major features incorporated are:

Appointment Scheduler

The appointment scheduler which takes charge of your appointment tracking, fixing and blocking.

Binary Spectrum
World-Class Software Solutions

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Insurance Eligibility Check

to take care of the vital process of checking patient's insurance eligibility often results in billing errors, insurance coverage concerns and delays.

Specialty EMR

The Electronic Medical Record software (EMR) aimed at automating and simplifying the patient record documentation, storage and retrieval process.

Chief Complain (CC) Reason for Consultation (RFC)

for recording a patient's decease symptoms.

History of Present Illness (HPI)

The HPI is the history of the patient's chief complaint.

Medication Reviewer

is a complete list of all medications that the patient is on or had been taking at some point

Allergy List

This is a list of all the patient's allergies.

Past Medical History, Past Surgical History, Screening (PMSS)

This is a list of all the past surgery and medical issues that the patient has been treated for.

Social History

This is a list of all social or habits the patient has.

Family History

The complete family history is captured.

Immunization

A complete list of all immunizations that the patient has had.

Review of System (ROS)

The ROS is a complete review of body systems with the patient, usually done by the nurse.

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Document Management

The Document Manager allows the medical institution to store vital patient documents such as X-Ray's, Paper Reports, and Lab Reports etc.

Prescription Writer

to streamline the entire prescription writing process making it simple, fast and effective.

Lab Order Integration

the Lab Order Entry Interface synchronizes lab results with patient records.

Medical Transcription

A PDA-compliant medical transcription system that manages the transcription cycle from the beginning to end by integrating voice recording, digital scripting, delivery of voice files to the medical transcriptionist and final transcript receipt.

Patient Reminder

works for the benefit of the doctor as well as the patient as an interactive voice technology system, which automatically calls and gives the patient appointment specific information.

Medical Calculators

A diverse range of Medical Calculators that allows the medical practitioner to make rapid, accurate calculations within seconds, with the focus on "evidence based medicine".

Technologies and Standards

The proposed system was developed using:

- Dot net framework version 2.0 for development

- SQL Server 2005 for database

- Web services for integrations