

ChartAccess Technical Brief

ChartAccess® EMR is a web based software application that provides clinicians with a complete view of patients and their data to support optimal and safe patient care. ChartAccess Enterprise EMR contains: Inpatient EMR, Emergency Department and Ambulatory support. ChartAccess' main components include: CPOE, eMAR, Physician/Nurse documentation, and full data set of the patient chart, order sets, workflow & Clinical Decision Support, and mobility support such as an iPhone App.

ChartAccess' software architecture contains three layers 1) Database layer, created in Microsoft SQL Server (version 2005, 2008) platform; 2) Business Logic layer, built with Adobe ColdFusion 8.0, Java and .NET objects; 3) UI layer, created with Web 2.0 Ajax framework and Flash/Flex UI.

The software is built upon multi-tiered, Object-Oriented design architecture fully compliant with Model View Controller (MVC) architecture pattern. ChartAccess' database is built upon a relationship schema compatible with Boyce-Codd Normal Form (BCNF) which ensures its scalability, reliability and data integrity. ChartAccess' code base contains 1.6 million lines of code, source codes include but not limited to: 1) ColdFusion codes; 2) SQL scripts & database schema; 3) Ajax/HTML codes; 4) Flex mxml & action scripts; 5) Java codes; 6) .NET codes; and 7) Images and other media objects.

ChartAccess has an HL7 integration engine that allows bi-directional seamless integration with billing, Pharmacy, Laboratory, Radiology/PACS and other information systems. ChartAccess' design and interface supports multiple healthcare industry standards: HL7, HITSP, and coding standards: CPT, ICD-9, ICD-10, SNOWMED, SNOWMED-CT, LOINC, NCPDP, DICOM, EDI & XML.

As a secure, scalable, interoperable hospital core clinical data repository, ChartAccess supports plug-and-play capability to HIE and National Health Information Network (NHIN), a nationwide health information exchange network.