



Medical Record Repository



Introduction

With the explosive growth of data, there is an increase in demand for higher level of accessibility to patient information by Healthcare providers. Also healthcare providers are readily investing technology to improve patient outcome. Today, providing access to relevant patient data is key to better clinical decision making.

A Medical Record Repository System enables healthcare professionals to avail data and facilitate real-time healthcare delivery. It provides an online repository that enables standardization of data, protection, search and retrieval across all healthcare data content and delivers quality care and scalability.



Project Title

Medical Record Repository

Client

ZyDoc – A U.S. based Medical Knowledge Management Solutions provider

Technologies

- .NET# Framework 3.5
- ASP.Net – N Tier
- JavaScript Jquery
- CodeSmith Generator
- Window Services
- SQL Server 2008

Project Overview

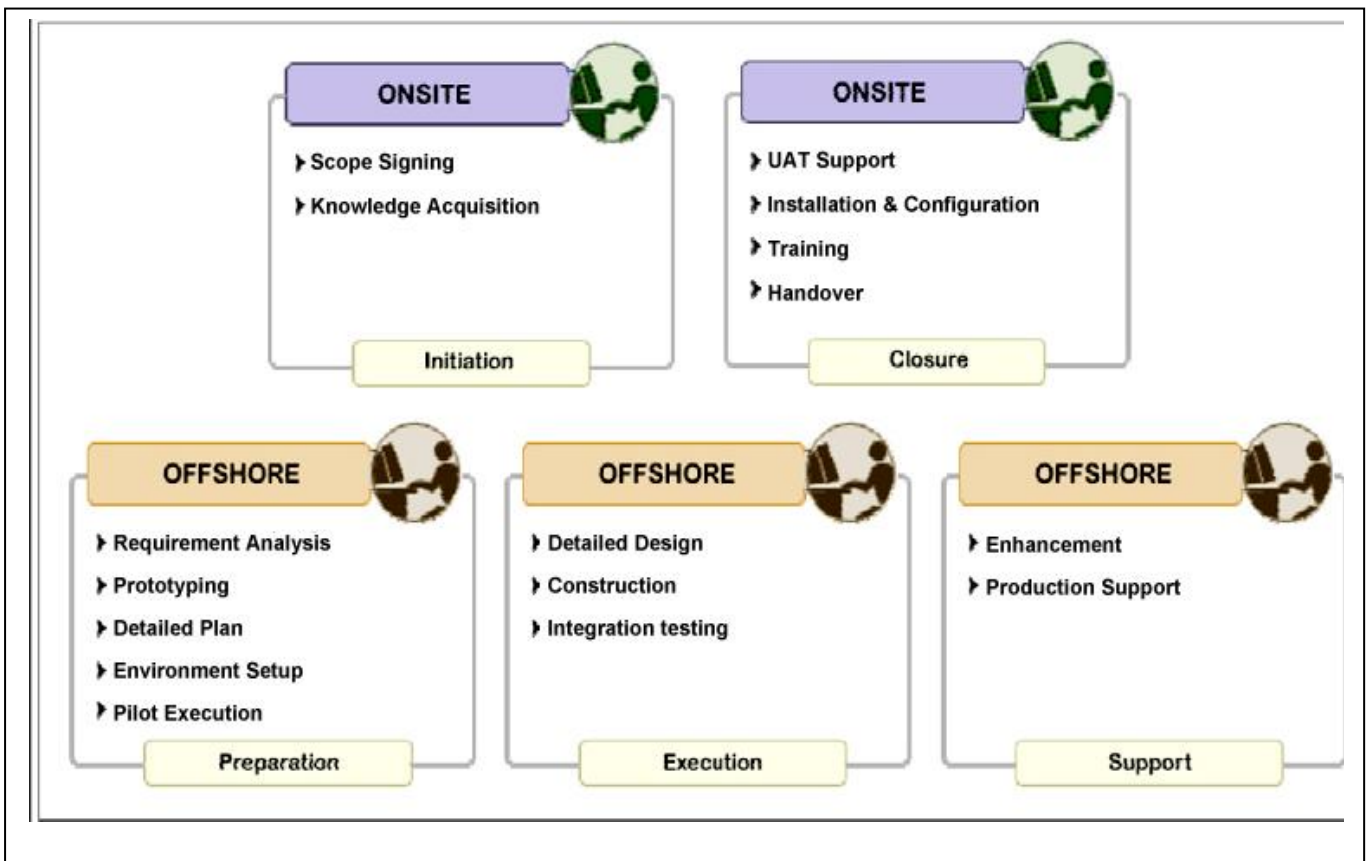
ZyDoc needed a medical repository that would collect unstructured data from healthcare providers, convert them into structured data and then send the data back to healthcare providers in a standardized format. The software was required to be capable of supporting various unstructured formats as inputs and then convert it into standard HIPAA compliant formats. The software runs the data through a Natural Language Processing (NLP) engine that converts unstructured data such as text from dictation, legacy scanned documents, and semi-structured EHR data and convert them into structured, coded text. The structured data would then be consumed by an interoperable health record system (EHR) for use by health providers for clinical purposes.



KMG's Medical Repository software is an interoperability framework and storage solution that automates data management operations. The conversion capability of the software aids in critical health related decision-making at the point-of-care for multiple purposes across various settings and disciplines. In addition to data management and conversion operations, the software drives clinical transformation and improved patient outcomes through data interoperability and enables EHR adoption.

KMG Methodology

KMG uses a combination of offshore/ onsite resources to deliver a project.



Outcome Achieved

Efficient management of health information is imperative for informed decision making. The successful development and implementation of Medical Report Repository database solution boosted ZyDoc's health information management solution capabilities. From a healthcare perspective, it enabled ZyDoc to deliver care facilities in order to increase delivery speed and customer satisfaction while lowering operating costs. Capable of being linked with an interoperable EMR system, Medical Record Repository enabled ZyDoc to increase efficiency through the use of software technology in the following ways:

- Improve availability of patient information to authorized clinical and administrative staff.
- Boost productivity and security through on-site and remote access to patients' medical records.
- Automated workflow and readily sharable information with physicians, clinical and administrative staff.
- Safeguard confidential patient data in a secure electronic repository.
- Save time and cost by reducing the manual data entry efforts previously required for EHR's.



KMG Role

The requirement of having an in-depth insight into the industry's core issues inspired KMG to deep-dive into working with ZyDoc as well as subject experts to document flowchart processes and to design, build and test, a comprehensive healthcare solution that promotes patient care effectiveness and efficiency. KMG role can be summarized as follows:

- **Project Management:** The project is managed by a KMG Project Manager with experience in handling projects based on Microsoft technologies or any other technologies being used during the project.
- **Coding Standards & Conventions:** KMG has developed a set of detailed coding standards based on its experience and the best-practices advised for Microsoft n-tier object oriented applications. All development & support work is based on these. This ensures that any changes in the development team do not hamper the continuity or affect the quality of work.
- **Coordination:** Proven communication processes ensure that both the onsite (Client's own) as well as the offshore (KMG) teams work in tandem to meet the deadlines.
- **Offshore Development:** The offshore development & support team consists of experienced programmers led by a senior team leader. Each member is an expert professional adept in the appropriate development tools.
- **Quality Audit:** Regular audits and code reviews are done by the Offshore Quality Analyst to ensure the quality and standards of the project. Peer & project manager reviews are also undertaken to ensure adherence to coding standards. The focus of the quality audit is to deliver code that is elegant as well as efficient.

Change Management Process:

An in-house issue-cum-change management tool is used for communicating the changes to the off-shore team. The change requests are analyzed by the KMG business analysts and an effort estimate sent to the client. Once the effort has been approved, the changes are assigned to the team.

Status Reporting and Communication:

KMG Project Management ensures that accurate weekly status reports reach the client's Project Management team. This helps keep both the teams updated on the current status of the project.

KMG Value Addition

ZyDoc's partnership with KMG brought forth a positive transformation in the healthcare culture. KMG through its vast experience of over 20 years re-engineered the business and healthcare workflow to leverage new systems' capabilities and provide enhanced care.

KMG's IT expertise in providing healthcare solutions helped ZyDoc in achieving its objectives by leveraging technology and best practices to improve performance, service and access, while upgrading security and minimizing costs.

KMG Domain Expertise

Healthcare IT



P&C Insurance IT



KMG is a partner of choice for organizations looking for opportunities to transform their business through IT solutions. With an extensive experience of over 20 years in providing enterprise solutions, KMG always aims to deliver business value and achieve maximum ROI on IT investment to its partners.



Software & App.
Development

KMG provides its clients with the full spectrum of application development services.

- ▶ Application Development
- ▶ Systems Interfaces & Integration
- ▶ Portals & Intranets



Mobile Application
Development

We provide mobile application development solutions that empower businesses to capitalize from mobile applications.



Android iOS Windows BlackBerry



Legacy Support &
Modernization

Our expertise in legacy platform, especially the IBM System facilitates smooth business workflow round the clock, across the globe.

- ▶ Support & Maintenance
- ▶ Migration & Web enabling
- ▶ Reverse Engineering



QA & Testing

KMG focuses on enhanced defect reporting and improving user satisfaction by adopting agile methodologies throughout the project development lifecycle.

- ▶ Test Life Cycle & Reporting
- ▶ QTP, UTP, Segue, Selenium
- ▶ Domain specific testing for P&C Insurance and Healthcare

HEALTH IT

P&C INSURANCE

MOBILE APPS

PORTALS & INTRANETS



Key Management Group
Fostering Partnerships

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