



## Introduction

Health monitoring is repeatedly mentioned as one of the main application areas in today's healthcare ecosystem. Mobile Health Care is the integration of mobile computing and health monitoring. It is the application of mobile computing technologies for improving communication among patients, healthcare providers, and other health care staff. As mobile devices have become an inseparable part of our life it can seamlessly blend in personalized health care more to our everyday life.

Focusing on personalized care in today's healthcare continuum, MedDiary.com, a mobile health management system was developed for individual patients and healthcare providers, which could readily be integrated into any certified electronic health record (EHR) system for simplified management by healthcare providers.

### MedDiary.com Mobile Application



### Project Title

MedDiary.com

### Client

US based health management system provider

### Technologies

- Framework - MVC (Model View Controller)  
Framework using Struts 2.0
- Java JDK 1.7, JSP, Ajax, JQuery, JavaScript, Objective C
- Restful web services, SOA
- Database - MySQL

## Project Overview

A leading US based health management system provider partnered with KMG to develop a healthcare management system consisting of a smartphone app for patients and a SaaS web portal for healthcare providers. KMG was approached to find a solution to automate the system of updating and monitoring patient records which was previously being carried out through paper work.



The proposed system was also required to allow patients to use the application through their smartphones to record their health information, track medications, set medication reminders, generate reports and communicate with their health providers. Their healthcare providers would then access a web enabled portal where they could prescribe treatment regimens and health monitoring plans for their patients. Thus, providing real-time two-way communication channel between providers and patients and enabling point-of-care delivery.

The new system would provide improved care for patients and enhanced operational efficiency for providers while keeping costs low.

## MedDiary.com – On Screen Displays

The image displays three overlapping screenshots of the MedDiary.com web application interface. The top-left screenshot shows the 'My ScriptAlerts' section with a list of alerts on the left and a detailed view of a 'Health Alert' on the right. The top-right screenshot shows the 'My Messages' section with a list of messages and a 'Send Message' dialog box. The bottom screenshot shows the main dashboard with a search patient form, a 'My Alerts' table, and 'My Reports' options.

| Date/Time             | First Name | Last Name  | Alert                    | Status | View Alert | Patient Details | Send Message |
|-----------------------|------------|------------|--------------------------|--------|------------|-----------------|--------------|
| 09/20/2012 - 10:05 AM | David      | Hunter     | Patient missed noon dose | NEW    |            |                 |              |
| 09/18/2012 - 03:25 PM | Wilma      | Flintstone | Patient missed noon dose |        |            |                 |              |
| 09/16/2012 - 10:00 AM | David      | Hunter     | Patient missed noon dose | NEW    |            |                 |              |
| 09/15/2012 - 11:20 AM | Wilma      | Flintstone | Patient missed noon dose |        |            |                 |              |
| 09/13/2012 - 10:00 PM | David      | Hunter     | Patient missed noon dose |        |            |                 |              |
| 09/11/2012 - 12:05 PM | Wilma      | Flintstone | Patient missed noon dose |        |            |                 |              |

## Outcome Achieved

KMG successfully built and deployed MedDiary.com with seamless real-time integration with any certified electronic health record (EHR) system and with accurate data exchanges. KMG also achieved the following key focus areas of the project:

- Enabled health providers to access patient records and inputs in real-time.
- Operational efficiency in healthcare service delivery.
- Significant time and cost savings for health providers and patients.
- Minimal errors associated with clinical procedures or inadequate or incomplete information.
- Improved communication, patient safety and quality care.
- Streamlined care transitions and boosted patient satisfaction.



## KMG Role

The requirement of having an in-depth insight into the industry's core issues inspired KMG to deep-dive into working with GI Track LLC (client) 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's 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

MedDiary's partnership with KMG brought forth a positive transformation in the healthcare culture through MedDiary.com. KMG through its deep healthcare expertise 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 MedDiary 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



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*Fostering Partnerships*

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