Healthcare Solutions

Iqura Technologies

INTRODUCTION

Iqura is a leading IT services provider, with an excellent track record of over six years in delivering quality solutions to global customers. We provide technology services across major practices with extensive competency in Healthcare, media & publishing, financial services, energy & utilities and real estate domains.

Iqura's credentials in the Healthcare IT services segment are extensive and derived from a mix of management experience and company credentials. Our experience in the healthcare domain is well entrenched. Our core team has worked very closely, during their long years of experience, with clients in the healthcare sector to develop their IT strategies in clinical and non-clinical domains.

To learn more about how we can help your IT initiatives, mail us at info@Iqura.com.

PORTFOLIO EXPERIENCE

Iqura has developed a number of products in the healthcare sector and it has a strong team of personnel with in–depth experience and knowledge of the sector.

Home Healthcare

Iqura is providing full-lifecycle product engineering services for a home healthcare product to a leading home healthcare organization based the US.

The product is designed to improve clinical quality of care, improve clinical outcomes, increase operational efficiency while reducing costs and medical errors, and provide operational control for large, integrated home care organizations and small home care companies.

The product provides healthcare professionals with clinical records at their fingertips. Whether they are in their office, home or in the field, clinicians can remotely access patient information, electronic medical records and clinical documentation.

A one-time data entry of the Comprehensive Assessment generates multiple regulatory forms, including 485, 486, 487, Safety Assessment, Home Health Aide Assessment, OASIS transmittal, and UB92 transmittals.

The product provides true integration of a business' critical aspects, including admission, monitoring and documentation of patient care, billing and discharge.

Designed to follow an agency's logical workflow, you can end fragmented documentation, enhance communication, and improve audit results.

We have seamlessly integrated each component of the product so that it tracks clinical, administrative, and financial information into a system that consistently keeps the business in compliance with homecare requirements and regulations.

- Streamline business processes
- Handle complex scheduling requirements
- Electronic Medical Records
- Automated checks for drug and allergy interactions and Medical Drug Reference
- Reduce Drug allergy incidents
- Reduce variance of clinical care
- Improve clinical decisions
- Improve resource allocation and usage
- Patient Teachings
- Facilitating synchronization of clinical care and operations across multiple medical professionals
- Accurate and complete claims processing by insurance companies
- HIPAA compliance solutions
- Strengthening data security and privacy protection
- Document verification with digital signatures

What If?

The **'What If?'** utility was intended for usage as a helper aid for complex processes in automated environments. It was to break down a larger more complex task into a smaller sequence of questions which when followed would aid in arriving at the result that is expected for the larger task, thereby reducing the required skill level of the person performing the task.

For example when a nurse is performing a medical assessment and has to enter a grade for verbal communication, it requires the person to summarize more than one individual event to arrive at a grade for the item. This means a person with the skill to make that kind of assessment. If a 'What if?' kind of utility were used a relatively less skilled (thereby more economical in terms of labor) person can be used.

That person would on initiating the 'What If?' for the item, be asked a question such as "Is the patient conscious", if not the user is given a pre-defined grade of something like, 'The patient is unconscious / comatose and thereby no mode of verbal communication is possible'. If the answer had been yes to the first question, then the user may be prompted with a question asking "Is the patient able to speak?" If yes to that, the user may be asked if the patient is able to form sentences and get across what he / she wants to convey, if yes on that, if he is able to speak without too much effort or strain put into it, so on and so on. At the end of this questionnaire, the value / grade appropriate to the actual status of the patient vis-à-vis verbal communication can be arrived at based on the answers to the questions put forward.

The application was created in two parts, the What If Definition Engine and What If Questionnaire. The definition should allow for the user / administrator to define the sequence of questions and to specify the answer at each perceived logical end point. The questionnaire would, when called from any place, present the questionnaire to the end-user in the form of a web compatible interface thereby allowing lower skilled persons to perform a higher grade of tasks.

Jupiter Pharmacy

A full-service online pharmacy with e-commerce transaction capabilities, Jupiter has been built around the concept of a completely maintenance-free webstore. Everything on the site is customizable through the use of an extensive back-office management system. This customization can range from the products highlighted on the home page, special prices and offers, time-based promotions and campaigns to pricing strategies, order management and shipping options.

The features of the web-store include a complete user home page where all orders can be tracked and managed from, multiple payment options, detailed search features, etc.

HIPAA

Recently, Iqura has launched the HIPAA initiative to address the immediate needs of the US healthcare sector to meet the HIPAA challenge. Iqura has developed its skill set to addressing HIPAA needs and works to produce HIPAA compliant IT solutions.

The Health Insurance Portability and Accountability Act of 1996 (Public Law 104-191), also known as HIPAA, was enacted as part of a broad Congressional attempt at incremental healthcare reform. This complex mix of federal and state law and regulation creates a maze through which healthcare organizations must navigate. Compliance will be not only complex, but also extremely costly as healthcare moves to electronic data interchange and the Internet.

Iqura understands the implications of HIPAA to an IT organization and the client's need for a dependable partner in the task of getting the data ready for HIPAA. Iqura's strengths in providing HIPAA services include:

1. Proven track record for success in the healthcare industry

2. Unique methodology and utilities proven to cut cost

3. Unique data centric approach which enables us to perform a gap analysis expeditiously

4. Extensive knowledge and experience in the major healthcare applications

5. Long standing specialty teams in skills now required for HIPAA:

    a. Healthcare data analysis

    b. EDI – all services from architecture to translator expertise

    c. System interface development

    d. System integration

    e. Project Management

MANAGEMENT EXPERIENCE

In a prior capacity, an Iqura principal headed the design and development of an extensive and sophisticated web-based hospital management system. Titled "**Outcome-based Management System",** the solution addressed a requirement for the implementation of a full hospital management system. The system was specifically aimed for the area of Rehab Medicine and handled the different unique processes that apply from admission to discharge to post discharge care.

It provides complete management of a hospital's information systems including multi-location health care groups. It provides for management of patients including admission, assessment, diagnosis, evaluation, discharge, consent forms and post-discharge services. It also has comprehensive features for staff management including recruitment, personal details, assignment, appointments and visits. Exceptional reporting is available, both fixed-format and user-definable. The system also supports asset management for hospitals wherein equipment recording, accounting and costing can be handled. Full function image support for patients, staff, x-rays, etc. is available. Security is comprehensive and follows a group/user profile mechanism in line with Windows NT. Access permissions can be set for most functions.

The larger healthcare automation system mentioned above, was meant to provide a comprehensive outcome monitoring mechanism to manage the complex process of interrelated medicine and was envisaged to plug the requirement for an automated hospital and patient management utility that could be used by organizations spread over vast geographical areas. This system can be used to efficiently manage the clinical processes and optimize resource utilization using integrated outcome and cost data.

In order to address the demand for value from healthcare services in the US, health care providers need to have a mechanism to quantify outcome, identify the process leading to the outcome and also be able to quantify the actual cost. This system addressed that need as a tool that allows them to evaluate these issues in an integrated fashion, redesign the processes, implement them and measure outcome.

This system provides the hospital personnel the ability to maintain the patient database as well as other relevant information. It captures demographics data as well as social history, insurance details, visit information, physician information, Medical History, Clinical résumé and case history about the patient. It also records the initial assessment of a patient, the patients diagnosis and provides information to the clinicians regarding the treatment plan and allow them to set treatment goals. It includes provisions to cater to ad hoc queries from the database for customized reporting and to save the report settings for future use. It provides the ability to import / export data from Clinipac-based systems and other medical systems across the national network.

There are also provisions for a designated system administrator to create users and user groups and control the access of information. The system is primarily meant to cater the requirements for In-Patient Center / Skilled Nursing facilities / Home health services / Managed care organizations - administrators, social workers and clinical department personnel (Physiatrists, Therapists and Nurses) and University research fellows.

This project was undertaken for a large healthcare group in California and was developed over a period of 24 months.

ARCHITECTURE

Completely Intranet-based, the Health Care Management System uses VC++, SQL Server & ASPs extensively. It is built on the WIN DNA architecture. It uses a SQL Server database linked through a data wrapper for ActiveX Data Objects (ADO). ActiveX servers built using VC++ contain the business logic. Server-side scripting is through Active Server Pages (ASP) sitting on Internet Information Server (IIS). A completely Web-based client has been built using HTML, VBScript and ActiveX controls. E-mail support from most modules is using MAPI. Provides for an easy-to-use key-word search mechanism (auto-fill) in line with Microsoft product standards to aid in entry processes such as diagnosis, scheduling, etc. Since it is multi-location software, on-line data replication across data servers spread geographically is possible to ensure faster access.

WolfTC

Another significant example of Iqura's expertise is the instrumental role in the analysis, design, development and deployment of the "WolfTC" software system for a Detroit based hospital group. This package was aimed primarily at the management of young cancer patients and to support cancer research using the data collected. Facilities for patient management, examination, assignment, lab tests, disease diagnosis, chemotherapy and tumor records are available. Disease management was through disease trees, symptoms recording and drug prescription including dosages was possible. Appointments and visits scheduling can be done. The system included extensive reporting and querying tools ensuring information availability for analysis.

The project was developed over a period of 12 months with a team of 5 people. Iqura principal was responsible for the analysis and architectural design of the solution, client interaction, onsite deployment, and training.

ARCHITECTURE

The system follows the 3-tiered client/server architecture. The database used is Microsoft SQL Server. The business logic is encapsulated in a Remote Automation Server written in Visual Basic. User Interfaces have also been developed in Visual Basic.

SUMMARY

In this introduction, we have outlined our Healthcare solution to you. It is our belief that these services would provide significant value towards meeting your requirements.

Iqura will undertake to assess your requirements, evaluate possible options, and recommend potential solutions and implement the entire development process with you, our credentials for this assignment have been outlined in the document.

Please do feel free to contact us for further information on these and/or any of our other services.

We look forward to the opportunity of working with you for your development and consulting requirements.

NOTICES