The integration of medical information from various sources is becoming critical as hospitals and medical groups attempt to gain new insights into existing patient data. The legal mandate to protect patients’ privacy remains a vexing challenge for those creating systems designed to share this information.

Of the many challenges facing healthcare executives, none is more troublesome than the widespread lack of high quality, highly integrated longitudinal patient information to enable medical decision support. The problem is that data is located across the organization in different incarnations: data (structured and unstructured) is dispersed far and wide, and in different formats within healthcare provider organizations. It can be found in desktop databases, data marts, legacy system practice management and ERM applications, and many of these sources are not HIPAA-compliant.

**What is an InfoSphere Clinical Analytics Fast Start?**

InfoSphere Clinical Analytics (ICA) Fast Start is an integrated data warehouse platform that provides a single source of trusted administrative, clinical and research information across the healthcare enterprise to help improve operational efficiency and outcomes. The Fast Start Includes:

- Design and planning session
- Installation and configuration of the ICA components
- Write transformation logic
- Client reference data load
- Client historical data load
- Knowledge transfer

**What’s Involved**

The ICA Fast Start is designed to be installed onsite at hospital or medical groups to load data from a wide variety of systems such as billing, lab, pharmacy and electronic medical record systems, to remove patient identifiers (patients may be re-identified when authorized), and to securely manage user and data within a centralized data repository. The solution also includes components to standardize and integrate the data from multiple facilities, and provides clinicians and analysts access to this data through a secure, web-based management system. Security features ensure the protection of the identities of
patients and physicians, while tracking all activity into and out of the patient record. IBM professionals work hand-in-hand with the business to deploy the ICA platform into their organization.

IBM will supply a project manager, a health care expert, and an implementation engineer. The business is expected to extract data from their systems and supply that data to IBM.

The primary activities undertaken in the Fast Start are:

**Design and planning session:**
- The entire data model covers many subject areas, such as patient demographics, providers, pharmacy, laboratory, diagnoses, procedures, inpatient stays, etc. Decisions to be made include which areas will be implemented, where the data will come from, what data extract formats can be provided, frequency of loading the data, etc. A project plan is put together and agreed to.

**Installation and Configuration of the ICA Components**
- Installation and configuration of the ICA components
- ICA is built on top of an IBM Balanced Warehouse. It includes many components, such as database objects (ex: tables, stored procedures), web applications, Java applications and Cognos reports. The Fast Start offering prepares the entire infrastructure for the client's use.

**Write transformation logic:**
- ICA comes with a ready to go data model. Getting the client's data into that data model requires data extraction from the source systems, transformation of data formats, loading, and data quality checks. The client is responsible for extracting data from their source systems. IBM is responsible for the transformations and loading. The client and IBM jointly verify the quality of the loaded data.

**Load client's reference data:**
- ICA has approximately 75 reference tables (such as gender, ICD diagnosis, place of service, specialty, etc). Based on which subject areas of the model are going to be utilized, the appropriate reference tables need to be initially loaded. Also, provisions will be made for ongoing updates.

**Load client's historical data:**
- During the development phase, samples of data are used. Once the data is mapped and transformation logic is written and validated, the historical data can be loaded. The next step is developing procedures for loading ongoing new data.

**Knowledge transfer:**
- IBM will provide training to the client's staff on the ICA application. That will include topics such as the data model, querying data, running reports, and running data loads.

The ICA solution provides several major benefits over other solutions (such as attempting to build your own warehouse) including:
- Ready-to-go data model
- Mechanism to ensure HIPAA compliance on patient confidentiality information
- 100 measures, which are accessible via the analytical dashboard's reports

**For More Information**
To learn more please contact your local IBM sales representative or send an e-mail to dmskills@us.ibm.com.

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