Data Cleansing Case Study

Client: Leading Pharmaceutical Company

Business Challenge:

Data is important in any industry, but in Life Sciences, it can literally be a matter of life and death. For healthcare providers, health insurers, and pharmaceutical, medical device and biotechnology companies, even minor inconsistencies in data quality can have a major impact on a variety of crucial activities:

Implementing electronic medical records (EMR) that consolidate volumes of patient data from numerous sources, each with its own codes and patient identifiers.

Fulfilling HIPAA and other regulatory requirements for record portability, security and confidentiality.

Reducing drug and medication errors by storing and accessing accurate data in real time.

Reducing lost revenue linked to coding errors and data inconsistencies that lead to rejected claims.

Creating reliable physician databases that can track providers across multiples practices, networks, locations and more.

Mastering product records for the complex manufacturing processes involved in pharmaceuticals, medical devices and biotechnologies.

Client has implemented Siebel Clinical Trial Management System for managing all the Clinical Trials and Programs. Client's clinical database contains all Institutions, Sites and customer data for every clinical trial the company runs worldwide. The major business entities like Programs, Protocols and Investigations depend heavily on accuracy of Customer/Institution data. The significant challenges were to clean the whole customer data as entries could contain erroneous or incomplete data. Report generation was slow and cumbersome, as unmatched records had to be manually reviewed and matched. The rapid growth of the database was outstripping the ability to correct errors.

Solution:

A third-party data cleansing and reengineering technology was needed. The solution needed to be multi-platform, multitasking and provide international coverage in multiple languages.

Client uses the Trillium Software System to take customer address information from disparate legacy systems and real time information sources and cleans, standardizes and re-codes it according to business rules it defines. This customer information passes through the Parser, which analyses, standardizes, and enhances the name and address data. The process also

identifies whether records are for businesses or residences. The Geocoder verifies addresses against the Postcode Address File (PAF).Finally, the Matcher links records associated with each unique customer.

Trillium is integrated with Siebel CTMS application through Connector. The Real Time Connector lets seamlessly cleanse data at the point of entry. As you add or modify an entity, it is immediately cleansed and standardized. Any improvement in the entity is then written to Siebel. These improvements include street address correction, postal code assignment, upper and lowercase determination, and name parsing. The Real Time Connector is implemented as a Siebel business service.

Results:

The implementation enabled Client to establish the level of customer data quality needed as a foundation for effective customer management and business decision-making moving forward. Following are the achievements:

Consolidated Institutions, Subjects and Contact information through sophisticated, context-sensitive data tools that recognize common records, even when names are misspelled, values are misplaced, or important fields are incomplete.

Organized disparate coding schemes, such as ICD-9, CPT-4 and HCPCS, into one master data management system every application can access.

Reduced potential for errors and delays by automatically creating data profiles that alert you to potential trouble spots and areas of concern.

Improved system to system connectivity through data quality connectors that allow disparate networks and applications to share data and to monitor, clean and correct data in real time
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Increased operational efficiency through simple interfaces that allow ordinary users to reuse rule sets on multiple systems