

Informatica B2B Data Exchange for Healthcare: Improving Patient Care

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“The deployment time savings and efficiency of application integration engendered by Informatica have provided Clalit with much faster implementation and significantly lower costs: 2-3 years work of four programmers was saved, and we are now able to rapidly incorporate new formats into our environment.”

BUSINESS CHALLENGE

- Control the cost of providing healthcare
- Increase patient service and quality
- Adjust to standards and mandates by regulatory agencies

Technology Challenge

- Manage an exploding volume of information issues
- Manage an exploding variety of patient data in varying formats, protocols, and standards
- Integrate high volumes of fragmented, non-standard data passing through multiple healthcare networks
- Comply with mandates for transparency, privacy, disclosure, and documentation.

Technology Strategy

A centralized hub that provides visibility, integration, management, and orchestration of all data within the walls of the healthcare network and beyond to patients, providers, and healthcare community partners.

The healthcare industry faces growing scrutiny and pressure. On the one hand, healthcare organizations are expected to improve the quality of patient care, while on the other, they face demands to decrease the escalation of health care costs. Add to the mix increasing regulatory mandates for patient data security and escalating volumes of electronic information.

Due to the evolution to electronic formats of patient data, the amount of information that is being exchanged is exploding. Virtually every encounter between patient and healthcare provider creates data on health, treatment protocols, insurance eligibility and claims, billing and payment, etc. This in turn triggers a wide range of healthcare community members beyond the patient and doctor: benefits administrators, insurance claims reviewers, payment processors, etc.

A significant advantage can be gained in meeting these challenges by automating the management of information and transactions. Informatica B2B Exchange offers this advantage.

Informatica B2B Data Exchange for Healthcare Solution

Informatica B2B Exchange for Healthcare is a family of software products that enables healthcare enterprises to optimize and automate their relationships with their partners. It addresses global, multi-enterprise healthcare data transaction needs such as healthcare claims, claim payment and remittance advice, healthcare claim status, coordination of benefits, and enrollment. The Informatica B2B Data Exchange family includes two products:

- Informatica B2B Data Transformation transforms unstructured and semi-structured formats into any structured format.
- Informatica B2B Data Exchange connects the enterprise with business partners and customers. It provides partner management and on-boarding, event monitoring, and a full range of security and control features. It includes Informatica B2B Data Transformation.

Universal Healthcare Data Transformations

Healthcare networks must support many types of business processes, data formats, and communication protocols to address the specific needs of each of their providers, insurers, and patients in a scalable and cost effective manner. By supporting any-to-any data format transformations for structured, semi-structured, and unstructured data, Informatica B2B Data Transformation reduces the IT costs of custom development, validation, and error identification by automating access to all forms of data and thus streamlining intra- and inter-healthcare network collaboration and integration.

Dynamic Healthcare Partner Network Management

Informatica B2B Data Exchange for Healthcare manages all aspects of communications between parties in a healthcare network – Including the patients, healthcare and insurance network partners, third party administrators, Pharmacy Benefit Management (PBM), Centers for Medicare and Medicaid (CMS), and government agencies. It allows the capability to create, edit, and manage all partner profiles and define the specific data flows particular to a partner to accommodate the diverse and dynamic nature of all the providers and payers within a healthcare network to promote operational efficiencies and collaboration.

Healthcare Industry and Technology Standards Library

Informatica B2B Data Transformation supports transformations and mappings, via XML, of most healthcare industry standards including HIPAA 275, HL7, ASTM, ASC X12, EDIFACT, UB92 claim forms, and NCPDP transactions. Informatica monitors and updates these standards as necessary to ensure the latest changes are always incorporated. This allows networks to utilize immediately the latest standards and specifications and lowers the cost to maintain changes or updates. Additionally, Informatica B2B Data Transformation provides pre-built frameworks for HL7, EDI (e.g., ASC X12, EDIFACT) that enable mappings between multiple versions of standards (e.g., HL7 versions 2.1, 2.2, 2.3, 2.4, 2.5, 3.0, MLLP, ASTM and site-specific variations). An easy-to-use interface assists non-IT business users in making customizations to the standards and transformations.

System Interoperability and Integration with Informatica Data Integration Platform

Infrastructure design of Informatica B2B Data Exchange for Healthcare is based on a service component architecture for interoperability with any major connectivity, business process management, and messaging system. The product is also integrated with the entire Informatica Data Integration Platform. Providers and payers can access their unstructured or structured data in batch or real time, search and profile all their data sources via Informatica Data Explorer®, ensure the data is clean with Informatica Data Quality™, and with Informatica PowerCenter®, integrate and deliver the right data at the right time. In conjunction with PowerCenter, capabilities such as importing mappings from PowerCenter and extracting data flow parameters from the mapping ensures the data is transformed, reconciled, and exchanged across any platform.

In this way, Informatica offers a common platform for data integration and B2B interchange initiatives. The advantage of this approach is a common repository with shared metadata, common tools and services, and near universal connectivity for structured, semi-structured, and unstructured data formats. This enables a single, trusted patient record across multiple channels, provider networks, and diverse internal systems that manage patient and service information. It allows a consolidated view of member benefits across multiple member products – such as medical, dental, behavioral health, pharmacy, flexible spending accounts, health savings accounts, and benefit spending cards – and multiple healthcare applications.

INFORMATICA B2B EXCHANGE FOR HEALTHCARE FEATURES:

- Universal Healthcare Data Transformations
- Dynamic Healthcare Partner Network Management
- Healthcare Industry and Technology Standards Library
- Healthcare Data Flow Orchestration and Flow Library
- System Interoperability and Integration with Informatica Data Integration Platform
- Store-and-Forward
- Monitoring Event Management
- Security
- Connectivity
- System Management

Healthcare Data Flow Orchestration and Flow Library

Informatica B2B Data Exchange for Healthcare provides advanced visual data flow orchestration. The graphical modeling environment with Business Process Modeling Notation (BPMN) allows rapid representation and automation of provider and payer business processes; the visual nature of the model also ensures that the most efficient and streamlined processes are followed within and across the network. These can be customized as needed based upon the specific requirements of benefits providers, administrators, insurance claims reviewers, payment processors, and others.

Healthcare Event Monitoring

One of the ways to ensure that transactions comply with business needs is via event management. This involves deploying the necessary controls to view and monitor, notify, reconcile, analyze, and manage exceptions to enable business process flows within and across the healthcare network.

Informatica B2B Data Exchange for Healthcare provides the following business event monitoring capabilities:

- Event Viewer to see a list of events, search on a specific event of interest, and drill down to obtain information such as event type, status, history, and any errors associated with it.
- Event Monitoring to centrally manage transactions, reconcile issues, and define the filters and triggers used to send alerts.
- Web-based Business Dashboard and Analytics to provide diagnostics and analyses of business transactions.

Event monitoring ensures that all health-related transactions are conducted in an appropriate and timely manner. It streamlines claims processing and billing with real-time patient information by interconnecting patients, payers, and providers and it provides visibility and transparency into medical and healthcare processes, ensuring the early detection of potential problems, and establishes the highest possible control over all transactions, which is mandated for compliance with regulatory requirements. These capabilities also increase customer satisfaction by meeting or exceeding current Software License Agreements (SLA) contracts to resolve delayed or inaccurately paid claims to Health Net providers while decreasing costly penalties associated with failing to meet SLAs.

Security

Informatica B2B Data Exchange for Healthcare features integrated authentication, fine grained access control, dual authorization, and full audit trail capability with before and after data capture. Authentication can be integrated with any JAS-compliant enterprise authentication and identity management products such as Windows (NTLM) and Oracle Oblix to ensure consistent application of security policies. This ensures that the integrity of data remains intact and also provides assurance that patient data can be trusted.

Connectivity

Due to the many ways a healthcare network must communicate with its providers, payers, and patients, Informatica B2B Data Exchange for Healthcare provides inter- and intra-enterprise connectivity for many types of data inputs and outputs – flat files, messages, databases, Web Services – without any additional middleware skills or integration products. This supports interoperability within any environment through streamlined cross-network collaboration for any type of data transformations regardless of the data type, application, or infrastructure. The connectivity facilitates the collection of diverse patient and healthcare data from disparate systems and allows it to be shared electronically via a secure connection across multiple systems.

System Management

Multiple and distributed computer systems play into virtually all healthcare networks. To accommodate this fact, Informatica B2B Data Exchange for Healthcare allows management of items such as hardware inventories, server availability, software inventory and installations, storage management, network capacity, and any other monitoring of systems. File import, export, saving, loading, and logging can be highly customized to comply with format requirements of various system management monitoring agents and can also be specified in accordance to the defined security policy. Many common management activities, such as data archiving and restoring, are provided through a command-line interface. Scripts for clustering software such as Veritas are provided for start, stop, and quiescence, and determine node health.

Clalit Ensures Trusted Patient Data and Reduces Management Costs

Clalit, the largest public health network in Israel covering 1,300 clinics and 3.8 million patients, successfully tackled one of the greatest data management challenges facing the healthcare industry with Informatica. Clalit deployed Informatica B2B Data Exchange for Healthcare to access, transform, and consolidate - in real time - patient records dispersed across 189 applications in more than 300 disparate and complex formats, including the industry-specific Health Level 7 (HL7), Adobe PDF, Microsoft Word, and other unstructured data types. The Informatica solution for non-relational data enabled Clalit to improve patient care by generating standard sets of accurate, up-to-date, XML-based patient records that could be displayed in hundreds of legacy applications.

Informatica provided Clalit with both an easy-to-use development environment and a powerful transformation engine to automate and streamline the full data integration lifecycle. As a result, Clalit avoided what would have been an extremely costly, time-consuming, and error-prone manual development effort. With Informatica B2B Data Exchange for Healthcare, Clalit achieved:

- An immediate 140% ROI and ongoing low maintenance costs
- Reduced transformation development time from weeks to hours
- Saved 2-3 years work by four developers

ABOUT INFORMATICA

Informatica Corporation is a leading provider of enterprise data integration software. Using Informatica products, companies can access, discover, integrate, and deliver enterprise data across systems, processes, and people to reduce complexity, ensure consistency, and empower the business.

STRATEGIC BUSINESS VALUE

- Deliver higher quality patient care and improve patient health and safety
- Increase patient service and satisfaction
- Provide consistent patient channel delivery and communication
- Increase efficiency and transparency of customer interactions
- Reduce the risk of medical errors by increasing patient record accuracy and timeliness of information
- Increase coordination between healthcare providers and payer networks
- Streamline claims processing and billing with real-time patient information
- Reduce the cost of medical care by driving process efficiency
- Adhere to medical best practices
- Improve compliance with government and industry mandates by better visibility of data transactions
- Accelerate on-boarding of medical practices
- Optimize the value of existing systems



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