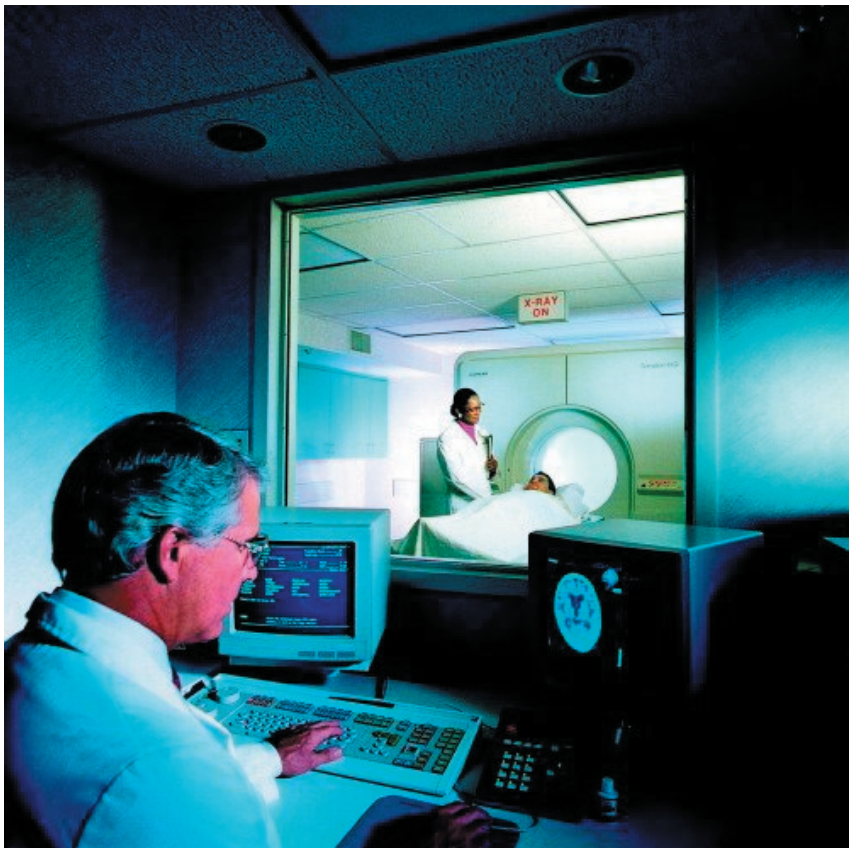
What's New: IBM Health Plan Data Models



Highlights

- **IBM Launches Health Plan Data Models.**
- **Compatible with IBM's Insurance Application Architecture (IAA).**
- **Defines the structures necessary to build an effective data warehouse.**
- **Contains hundreds of best-practice Key Performance Indicators.**
- **Designed to focus on business requirements.**

The Challenges

The health plan industry, along with the rest of the healthcare industry, is facing huge challenges in the United States, including the rise of consumerism, regulatory demands, cost of business, and competitive forces. The industry is moving from a traditional transaction-based model towards a more tailored one. In a crowded marketplace, health plans are increasingly trying to differentiate themselves by offering consumer-centric products and superior customer service. There is an intense focus on controlling costs, streamlining operations and negotiating the most advantageous contracts, while maintaining or improving the quality of care.

Health plans need to understand their business, differentiate their offerings from competitors, and develop closer relationships with their customers and partners. There is a need to lower the costs associated with claims and claims management through streamlined processes and improved fraud detection. Products need to be developed, bundled and sold in more innovative ways.

U.S. health plans have responded to these challenges in a number of ways including consolidating through mergers and acquisitions, raising premiums, and reducing benefits. However, there are limits to these measures, and additional, more innovative, ways of addressing the challenges need to be implemented. For example, using a plan's existing information to gain a comprehensive view of its ecosystem, gauge effectiveness of programs, improve claims handling and adjudication, and underwriting and profitability can bring huge benefits.

When a health plan can analyze, understand and act on the following parts of their operations, they are in a very strong position to meet these challenges and compete in the marketplace:

- Understand members and partners – analyze the service delivered to members to determine member and sponsor satisfaction; gauge the propensity of members or sponsors to remain with the health plan; analyze the use of Health Savings Accounts.

- Understand providers and network – evaluate performance and quality of contracted providers to support Pay for Performance programs; analyze nature and timing of payments in order to determine debt/credit position of the health plan; analyze contracted networks to ensure members have satisfactory access to high quality medical services and to help determine optimal network configurations.

- Improve Claims Handling and Adjudication – analyze information pertaining to the processing of claims by the health plan, benefits management partners, and claims processing vendors to identify areas of underperformance, overpayment, or fraud and abuse, and take corrective action.

- Improve Medical Management – understand utilization of medical care and identify areas for targeted programs; analyze outcome of programs, understand trends in medical costs; identify members for inclusion in disease management programs; analyze utilization and management of pharmacy benefits; evaluate and select episodes and members for case management.

- Offer New Products/ Services – analyze and compare the effectiveness of customer and product promotions and sales, understand the image of the health plan's brands and products in the marketplace, and analyze and compare product features to determine optimal product designs can help streamline and differentiate the health plan's offerings.

- Improve Underwriting and Profitability – analyze products, features and return on investment and risk factors to better inform decisions on underwriting a product or group; perform actuarial financial analysis to determine rates and premiums for products.

The Role of Technology

Typically, the data necessary to address these issues is stored in numerous data warehouses and data marts, or, perhaps, even in personal spreadsheets or non-digital media. While the mergers and acquisitions have created efficiencies, they've also created additional silos of information in an already crowded enterprise information infrastructure. Many health plans are hobbled by incompatible systems and manual processes, and have outgrown the functionality and effectiveness of their current data models. The information that is critical to understanding their operations is not easily accessible. What is needed is a flexible, consolidated information structure that can be a foundation for the critical analytics that will be necessary for them to compete as the market changes.

"Designed to be compatible with the IBM Insurance Application Architecture (IAA)"

IBM Health Plan Data Models Release 7.0

IBM is proud to announce the introduction of the new IBM Health Plan Data Models Release 7.0, which is compatible with IBM's market-leading Insurance Application Architecture, but has been designed specifically for the Health Plan industry. The IBM Health Plan Data Models define the structures necessary to build an effective data warehouse and provide health plan managers with critical pre-built reporting templates that offer a wide and deep view of their business through key performance indicators and other measures. The models provide a

glossary of terms and concepts that can be clearly understood and communicated by both business and IT, thereby helping to accelerate project scoping, appropriate reporting, data quality and data requirements, and identifying sources of data. The result is a form-fitting data warehouse and data marts. The IBM Health Plan Industry Models Release 7.0 consists of three parts:

Business dictionary:
over 1000 healthcare payer business terms that supports requirements gathering and provides common semantic definitions.

Health Plan Data Warehouse Model:
offers an entity-relationship logical model consisting of the data structures typically needed by a health plan for a comprehensive enterprise data warehouse. Once the logical model has been tailored to meet the exact requirements of the health plan company, the physical data warehouse database definition can be automatically generated through the use of a modeling CASE tool. It is both generic and flexible in design and facilitates a health plan's understanding of the true meaning of its data.

Health Plan Business Solution Templates:
consist of numerous best practice key performance indicators that enable business managers to quickly and easily specify analytical reporting requirements that form the basis of reports and executive dashboards. Based on real-world industry experience, the solution templates feature data mart designs for the full range of business focus areas.

IBM Health Plan Data Models Release 7.0 Features

The IBM Health Plan Data Models, Release 7.0 includes 5 Focus Area that define approximately 30 *Business Solution Templates* that enable quick and easy specification of analytical reporting requirements. Each Focus Area contains several analytical reporting templates, each of which collectively contains dozens of typical measures and dimensions. These templates have been custom-designed for the health plan industry and provide the framework to rapidly define and deliver high value business intelligence applications. Business users can easily work with the templates to specify their own analytic reporting requirements. Prototype OLAP applications can then be generated automatically based on the customized templates.

The Business Solution Templates are grouped into Focus Areas as follows:

- Claims Handling: analysis of claims efficiency through the entire claims life-cycle

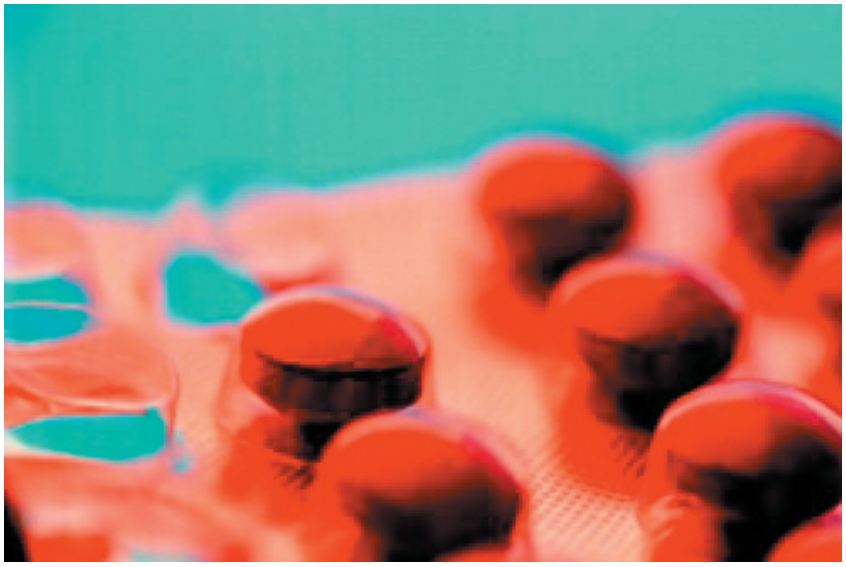
- Claims adjudication: analysis of claims received and paid in order to better predict expected claim payments and identify potential improvements in process, technology, organization, training and product design.

- Disbursement Analysis: analysis of claims payments in order to negotiate preferential fees from providers based on volume, to report on medical expenditures for fully insured and self-funded employers, and to identify overpayments and underpayments.

- Medical Utilization: analysis of utilization of medical care in order to identify areas for targeted utilization programs, and to understand trends in medical costs. This enables the company to project medical costs for underwriting, to report to customers, and to predict the impact on costs of trends in the mix of disease incidence, medical services, providers and member demographics.

IBM Health Plan Data Models Release 7.1

Release 7.1, to be released shortly after Release 7.0 will be a no-cost upgrade for customers purchasing Release 7.0 and will add 14 additional Focus Areas with Business Solution Templates (over 100 Business Solution Templates) that address the analytical requirements across sales and marketing, membership, provider and network management, medical management, and claims. The additional Business Solution Template Focus Areas include:



- Disease Management: identification of members for inclusion in disease management programs and analysis of program performance and effectiveness

- Pharmacy Benefits: analysis of utilization and management of pharmacy benefits

- Provider Performance and Quality: analysis of conformance of provider practice to evidence-based protocols, care guidelines, and drug formularies

- Campaign: analysis and comparison of the effectiveness of customer and product promotions, marketing drives and advertising

- Brand/Product Marketing: analysis of the image of the plan's brands and products

- Profitability: evaluation of the various contributions to profit of the health plan organization, based on net directly attributable income and expense.

- Underwriting: analysis of products, features, return on investment and risk factors to inform underwriting decision

- Membership Retention: analysis of the determination of the subscriber to remain a member in order to improve increase retention rates

- Product Management: analysis and comparison of product features to determine optimal product designs

- Retail Sales: analysis of sales of policies to determine the effectiveness of sales campaigns and to profile buyers versus non-buyers

- Coordination of Benefits: analysis of the coordination of payments due to redundant Health Plan coverages to ensure that primary/secondary liability is correctly assigned

- Claims Recovery: analysis of the position and results of the Health Plan in the recovery of previously paid claim disbursements

- Case Management: analysis of the profile of managed cases and the financial and clinical effectiveness of case management

- Prevention and Wellness: identification of members for inclusion in disease management programs and analysis of the performance and effectiveness of the programs

Health plans that purchase release 7.0 will receive the incremental content of release 7.1 as a free upgrade.

IBM Industry Models Background

The Industry Models are used for the development of internal company standards, and provide an overall integration layer across an organization's existing and future IT investments. With their strong business and IT orientation, the Industry Data Models are designed to be customized to reflect the precise needs of every company using them. Hence, every company will have its own customized industry-specific version of the IBM Data Models, allowing them to represent areas that are unique to their business and constitute competitive advantage. In addition, the models can be readily augmented to embrace industry extensions, jurisdiction, and company-specific extensions.

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The Industry Data Models are often used in the following business areas:

- Data Governance and Standardization – Customers are using the IBM Industry Models to help define a corporate set of standard definitions and best practices around their data. The models provide business descriptive classifications (terminology and functions) and attribute-level definitions for any given data element. On behalf of the business, a data stewardship program can outline data quality guidelines. In turn, IT can use data integration, business integration, and master data management infrastructure to enforce standards and use data profiling techniques for compliance monitoring or exception alerting.

- Operational Insight, Risk and Compliance – Customers are using the IBM Data Warehouse Models to provide a comprehensive analytical reporting framework encompassing assessment of key performance indicators in areas of relationship marketing, profitability, risk and compliance, and asset and liability management. The data warehouse models support the reporting needs of a series of regulatory requirements such as Basel II, Sarbanes Oxley.

Key Capabilities

- Enables business users to easily scope and customize their own requirements.
- Facilitates step-by-step business-focused development and roll-out.
- Creates open technology platforms for any application or integration solution.
- Manages definitions and standards in complex IT environments.
- Ensures usage of business definitions across an enterprise's data layers.

Differentiation

- Proven – With over 400 customers worldwide, the IBM Industry Models have been used successfully to accelerate the deployment of strategic business initiatives, such as core system and process renewal, data warehousing and business intelligence, risk and compliance, new product introduction, customer experience, and financial management.
- Business-ready – The models are proven to foster collaboration and approval between business and IT, as necessary, to turn business requirements into actionable solutions.
- Regulation Aware – Subject matter experts have distilled compliance regulations into statutory reporting and business process requirements without the need for external development.
- Comprehensive – Content garnered from multiple client engagements is turned into a suite of interrelated data, process and service models, with a proven methodology and models that require minimal customization.

Benefits

- Support most data requirements out of the box
- Drastically reduces process, use Case analysis and design
- Compresses project time significantly, compared to custom, in-house development projects
- Accelerates time taken to secure stakeholder approval

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