



WynTec Healthcare Consortium Model *(Pt. 2)*

WynTec is establishing a unique healthcare consortium model, that allows models, analytics, population and measure, key performance indicators, data discovery and data mining algorithms and quality rules to be shared across multiple customer bases. At all times the unique customer data will never be shared or lifted from the security of their firewalls. But the knowledge established in WynTec's heavy bag of healthcare data services will be made available to participating consortium partners.

The consortium partners will be direct customers in the health care, health delivery, health plans, managed care, back-office partnerships and value-added vendors that offer specialized products and services in our domain. WynTec does not believe that the smorgasbord of data products can be effectively built or managed by one organization but a teaming approach among peers and experts alike creates the most synergetic offering.

WynTec Addresses the issues Healthcare Organizations Face



WynTec has been delivering data assets for healthcare and managed care organizations for over two decades; our services are specialized, expedient and affordable. Our goal is to help breakdown the technology barriers and assist business owners in exploring the wealth of healthcare data, manage the measures of interest and mine data patterns to improve healthcare informatics. The following write-up identifies some of the underlying issues why enterprise data frameworks, for healthcare organizations, fall short and recommend some approaches to achieve success.

WynTec has established proven products and services tailored for healthcare and managed care data initiatives. WynTec adopts a pragmatic and vendor agnostic approach in architecting and designing analytical frameworks. Our goal is to offer true value by architecting and designing models to suit the unique customer needs. Often this design includes a hybrid integration of best-practice designs, tools and services.

WynTec has helped many customers by extrapolating insight into their enterprise web of information. Information is extracted, collected, organized and made available for reporting. The framework includes data organized to facilitate business intelligence, dashboards, and self-



service reporting. Suitable for clinical, operational, quality, financial, and payer needs. These models and services are offered through subscription and delivery based pricing models.

The following are some of the flexible data frameworks:

- For each customer and in their facility, we will build custom Data Integration platform that streamlines and automates the data acquisition responsibility for landing and staging analytical data into a central environment.
- The Data Collection Services offered by A2B Data™ will automate this design as it securely extracts any source data irrespective of database architecture or data type.
- The Data Integration architecture is extensible and reusable to feed source data to Enterprise Data Warehouse, Data Migrations, Data Marts and Reporting Structures. The Data Collection Services sets up and moves massive amount of data extracted from disparate source systems in minimum time.
- WynTec Services includes the designs to automate the extraction of data from disparate source systems, found on remote and local servers, that consistently loads a central framework.
- A2B Data™ manages this component of extracting, migrating and loading real-time, event triggered or scheduled data. The latency of data movement can be near real-time (HL7 or X12) or triggered by time or event. The analytics objects are fed by agile transformation utilities that move latent and near real-time data. This offers a unique edge over static reporting engines, where decision makers obtain enterprise insight early in the process. In fact within minutes of the episode or triggered segment.
- The design of the central framework includes a staging area or Data Lake that sources and lands all the source data, history is preserved, data is time variant and of quality. A2B Data™ is codeless and utilizes metadata driven design patterns to perform flexible change data capture (CDC) methods from any flat file or source database.
- Industry specific models are available that collects and “masters” the business data into common dimensions and facts. This is an important factor to be able to collect multiple EMR data, across multiple source systems, into a common integrated platform. Common “mastered” dimensions of data are organized in meaningful classes (e.g. Appointment, Encounter, Orders, Labs, Meds, Procedures, Charges, Budgets, Membership, Claims, etc.). These data classes are connected through subject specific relationship or late binding agile queries.
- The framework includes knowledge based and user driven rules engine to identify data quality, population segments and flexible measures. Event driven analytics is a critical component to trigger dynamic workflows. Based on the knowledge extracted in the data near real-time. The event may be triggered by a HL7 segment or data validation checks built as rules. These triggers will create reporting objects for population and meaningful measures.
- The final layer is the end user analytics layer that deploys iterative objects suitable for reporting structures. The presentation layer is driven by flexible models to allow multiple reporting tools to connect to the data. The device driven reporting tools can now access the analytical environment and offer care givers near real-time information.



WynTec offers its data services as a consortium partnership that allows multiple regional clinics, hospitals, payers or managed care organizations to participate in the shared development and pay-as-use business model. The consortium model allows advanced nursing, provider and operation analytics at an affordable pay-as-use lease model.

The delivered product will include the following key components:

- Architect the enterprise hardware and software, enterprise data layers and governance processes for product definitions, metadata, data quality and business glossary
- Extending the A2B Data™ Services to feed the central staged data repository
- Extract data remotely from external systems or the cloud
- Subscribe to the electronic message brokers to extract HL7 messages
- Leverage the latent data extracted from the EMRs and auxiliary systems.
- Customize WynTec's healthcare logical models to load the necessary subject areas, conformed dimensions and facts. All these objects will be mastered to allow for cross-data integration.
- Develop useful populations and measures for the use case needs, driven by the rules engine.
- Establish the reporting, summary and aggregated data marts.
- Integrate the presentation and reporting plug-ins.
- Deliver the data to the customer to develop dashboards and self-service analytics.

Wyntec Analytics Service stretches past the typical data warehouse and reporting engines and delivers true business insight by applying knowledge edits developed by industry experts. A key component in the technology stack, and as a result of the consortium partnership, is extending the rules engine to control the management of regular time-sensitive pattern searches.

The rules engines will mine for patterns in data that fall in the following categories:

- Include design and recommendations for data quality checks
- Define and identify population and measures of interest
- Monitor Work flow efficiency based on data patterns
- Cost containment, performance and outcomes management.

This data is then made available to the customer, latent or near real-time, for further statistical and regression analysis, business intelligence and data mining. This consortium partnership creates a knowledgeable community to monitor and grow the rules for population management, key performance indicators (KPIs), meaningful measures and recommended actions. Keeping In mind the healthcare data is never shared across consortium, hence keeping the unique business value of each consortium intact within their firewalls.

In summary, WynTec's Healthcare Data Framework permits the participation of a diverse range of small regional hospitals to very large multi-facility hospital and clinics to participate in the enterprise programs. Furthermore, the analytics services will leverage real-time data feeds, with insightful information presented via multi-device tablets.



WynTec's vision is to deliver mobile analytics with near real-time feeds, interacting with latent enterprise data. Information can now be made available when the care giver desires it, how it should be delivered and where it should be presented.