12.2.6 Caradigm

Caradigm is a population health company dedicated to helping organizations improve care, reduce costs and manage risk. Caradigm analytics solutions provide insight into patients, populations and performance, enabling healthcare organizations to understand their clinical and financial risk and identify the actions needed to address it. Caradigm population health solutions enable teams to deliver the appropriate care to patients through effective coordination and patient engagement, helping to improve outcomes and financial results.[1]

For more information please visit http://www.caradigm.com/.

Caradigm is a joint venture between Microsoft and GE Healthcare, which is dedicated to population health management. Caradigm's cornerstone product is the Intelligence Platform. This platform can connect over 295 types of source systems, including Allscripts, Athenahealth, Cerner, Epic, GE, McKesson and Meditech. Data from disparate systems within one or more healthcare organizations is collected, normalized and standardized to enable applications to leverage this data in a unified and consistent way.

Caradigm's solutions provide explorative, comparative, predictive and guided elements aimed at analyzing the disparate data and driving the insight that is gained into action. Caradigm's three main solution areas are:

- Healthcare analytics (including clinical, operational and financial analytics);
- Coordination management; and
- Wellness promotion and patient engagement.

Some of Caradigm's customers use SNOMED CT natively in their clinical systems, while others use natural language and other code systems. In order to aggregate data from disparate sources, it must first be standardized by mapping into a common code system. Code systems used to standardize the disparate data include SNOMED CT, ICD-9 and ICD-10. By standardizing the data, users are able to leverage the analytics tools - for example, to understand trends within different diagnoses, to look at a comprehensive list of everything that has happened to a patient in a longitudinal patient record, and to support care management by displaying the different diagnoses or problems of a patient in a consistent manner.

Caradigm currently implements an approach to SNOMED CT based analytics using clinical value sets. These value sets are developed manually by a team of clinical analysts for topics such as diabetes and heart disease. Clinical users are then able to create queries in a user friendly interface, which allows them to (for example) define cohorts built on criteria such as age, gender, specific diseases, conditions, medication or other treatments. These queries are then converted behind the scenes into SQL statements which are executed against a SQL Server database and return records containing data in the selected clinical value sets.

Caradigm also has Natural Language Processing (NLP) tools, which are able to extract and encode data, such as problems and medications, from natural language notes within documents such as discharge summaries and radiology reports.

As part of their strategic roadmap, Caradigm are exploring ways to enhance the capabilities of their tooling platforms by leveraging the architecture of the terminology sets that they are using for analytics. In particular, they are planning to start utilizing the hierarchical and non-hierarchical relationships of SNOMED CT to enable more powerful query capabilities and to extend NLP processing options.

Footnotes

RefNotes
1   http://www.caradigm.com/en-us/about/