

CTG's MEDICAL MANAGEMENT PORTAL (MEDMAP) TECHNOLOGY

TO BE DEMONSTRATED AT AMIA (BOOTH 509)

Ontologies are becoming more prevalent in the areas of biomedicine and bioinformatics due to the fact that large, complex taxonomies can be logically interrelated to produce sophisticated models for a host of applications. Using automated reasoners, ontologies are proving effective in providing useful insights into medical data, for providers, patients and payers alike.

Yet, though the use of ontologies is now much more commonplace in medical domains, challenges arise regarding their ease of use. Ontologies can be difficult to utilize and manage, since specialized skill sets are required to be able to traverse hierarchies, write rules, configure reasoning engines, design and execute queries, devise classification schemas (logics), and develop visualized results. Medical professionals and researchers need easy-to-use, ontology-based software systems that can effectively capture domain knowledge, while at the same time, provide a mechanism to project that knowledge across large user communities.

CTG's Medical Management Portal (MedMaP) Technology leverages both open source and commercial ontologies to drive a knowledge management system whose front end allows for rapid and straightforward analysis of biomedical data. MedMaP is a BFO-driven Rich Internet Application (RIA), where medical information pertaining to disease risks, patient registries, blood chemistries, patient education/compliance and value-based outcomes can be ontologically classified and presented in a variety of rich visual formats, specific to particular user preferences (medical specialties, areas of research, disease states, etc.). This allows experts from different medical and research domains to more easily traverse large sets of data to find pertinent information and gain new insights.

