CTIS | A HEALTH INFORMATICS COMPANY

INTEGRATED PLATFORM FOR AGENTS AND DISEASES (IPAD)

CHALLENGE/SITUATION

New agents and compounds are a part of the drug development lifecycle of studies, which includes discovery, pre-clinical, and clinical trials, before entering the market. The sponsors who oversee these studies need to be able to check the status of the agents: what stage of the lifecycle it is in, what progress has been made, who discovered it, what is the return on investment, etc. However, tracking the status of agents has become burdened by a lack of standard processes and capabilities. In order to track the status and coordinates of agents in the lifecycle to effectively make informed decisions, the need arose for a consolidated and intuitive search tool to query and analyze data across multiple information sources.

APPROACH

The solution needed to promote standardization, information exchange, and integration within the Cancer Therapy Evaluation Program - Enterprise System (CTEP-ESYS), which is designed to enhance the scientific and administrative aspects of cancer clinical trial development within the National Cancer Institute (NCI). It needed to ensure data and naming standards; provide direct links to outside data sources, such as Enterprise Vocabulary Services (EVS); and include a comprehensive Disease Profile Report. By using EVS, information exchange would become standardized and would integrate enterprise business processes within CTEP. The solution needed to demonstrate the possible features of an enterprise search tool; evaluate development technologies; elicit more targeted and specific requirements; and identify use cases for further development.

SOLUTION

IPAD lets sponsors, regulators, and principal investigators obtain information about agents and compounds instantly and accurately, placing them in a better position to make informed decisions. It is a platform that searches multiple data sources and provides the lifecycle status of an agent.

It includes customizable query parameters, information searches using key terms/words; faster indexed searches within the CTEP-ESYS data warehouse, network files, NCI EVS, PubMed Central (PMC) and Physician Data Query (PDQ); search results displayed as a list of documents, agents, diseases, network files, or PubMed references; auto display of relevant filters that can be easily selected; drill down to find the root cause; and graphical and chart display and map integration.

BENEFITS

IPAD leverages technology and architecture towards an enterprise search solution for all of CTEP and can be expanded to include additional data sources and filter settings with less development effort.

- Single, easy to use interface for searching across various biomedical data sources (both structured & unstructured)
- Flexibility in supporting the dynamic query and reporting needs of CTEP personnel. Ability for information mining related to diseases, agents, toxicity, protocols, etc
- User friendly, intuitive interface for data analysis and reporting from CTEP-ESYS as well as other relevant data sources
- Scalable Enterprise Search solution