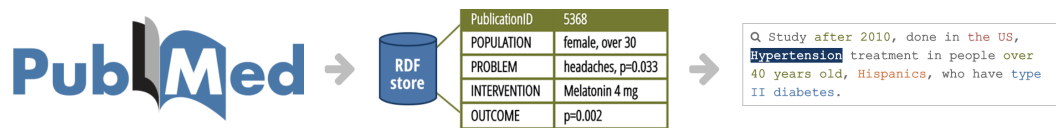Products

Use Cases

Solutions

Health & Life
Sciences

Resources

Company

Schedule a Demo

CHiPS™ for Health Care: Complex search queries made simple

Customer Scenario

Need

Find **healthcare** publications relevant to a particular case with complex biomedical & socio-demographic criteria. Populate treatment efficency templates from clinical trials across a varying array of **people** of specific demographics and medical **problems**, and the **treatments** that they underwent, as well as the **outcome** of those treatments.

In typical document retrieval, the more specific your search need, the more general your search results are. Traditional

search systems find the documents containing simple keywords. More specific queries contain more keywords, and thus more documents are retrieved. The actual meaning of the query gets lost.

Challenge

Lymba's Solution

Solution

Collaborative High Precision Search (CHiPS) - Lymba's intelligent search system - allows to formulate long complex queries in plain English and takes into account synonyms and inference to provide relevant results. CHiPS uses K-Extractor for deep semantic analysis of biomedical publications, extracting important medical and socio-demographic concepts as well as relations between them. The search query undergoes the same semantic analysis to recognize expressed criteria. The criteria are semantically matched to information in the publications to yield high precision results.

Input

Unstructured data: The last 10 years of **MEDLINE®/PubMed®**'s biomedical journal citation data, which comprises over 25 million articles from clinical trials, life science journals, and online books.

Query: Lymba provides an interactive user interface as well as an **Application Program Interface (API)** to allow the customer to perform detailed natural language queries, or to use an entire document as a query.

Sorted list of search results based on semantic similarity. Each result is paired with a result profile which allows you to, at a glance, determine the most relevant documents and why they are relevant before opening.

Output

Key Features

- **Ontologies:**

  K-Extractor recognizes concepts from existing medical lexical resources including **UMLS Metathesaurus, SNOMED-CT, Medline** (health signs, symptoms, diseases, medication, etc) as well as socio-demographic characteristics and relations (race, gender, age, nationality, insurance, financial status, education level) and semantic relations between these concepts.

- **Big Data:**

  Extracted information is efficiently stored to allow fast access. For this use case the system supports real-time querying across several multimillion document collections all on a single PC.

- **Document Comparison View:**

  CHiPS doesn't just surface sorted results, it can also explain the semantic matches it finds.

Check out CHiPS for more details on the product and its features.

Or request a demo with us:

Contact Us

Products

Knowledge Extraction

Jaguar: Ontology

NL2Query™

CHiPS: Semantic Search

PowerA

Use Cases

Text Analytics

Systematic Literature Review

Ontology Creation for Training and Search

Scientific Profile Generation

Patient Profile

Social Media

Solutions

Knowledge Base Creation

Company

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