

# *Delivering the Right Content at the Right Time*

## Enriching Medical Education Content with Synaptica<sup>®</sup>

### Increase Search Precision

Index content with topics, MeSH and SNOMED terms

### The Challenge

Our client, one of the world's largest providers of publications and information resources for medical and allied health professionals, sought to augment and improve upon the user's experience with their learning and assessment content. Improving navigation, ensuring direct access to the most relevant content, and providing additional guidance were the three core objectives.

### Improve Navigation

Develop a hierarchical topic list

### The Approach

The client provided a library of online textbooks and an extensive question bank (~32,000 questions). Scope analyzed this corpus and developed 36 hierarchical topic lists (taxonomies) with the help of Synaptica<sup>®</sup> KMS. The topic list will facilitate an intuitive, structured navigation experience.

### Provide Guidance

Compose rationales that help students better understand the answer

To improve search precision, the content was indexed with the topic lists, as well as SNOMED and MeSH concept terms.

Lastly, Scope's Subject Matter Experts (SMEs) composed more than 10,000 rationales explaining the correct answer to each question in the question bank. These rationales were tagged accordingly, connecting users with the appropriate sections of the textbooks providing further context and detail for their learning experience.

### Source Material

32,000 questions  
Extensive library of online textbooks

### Scope of Work

Analyze corpus  
Create topic lists  
Index with SNOMED & MeSH  
Compose and index rationales

### Delivered

36 topic lists (taxonomies)  
32,000 questions tagged  
10,000 rationales written  
All linked and tagged appropriately

## Synaptica KMS application



## Certified Taxonomists & Qualified Medical Specialists



## Artificial Intelligence tools



## Medical Content Services from Scope e-Knowledge

For this and similar projects, Scope leverages the expertise of its resident team of medical SMEs, as well as its panel of medical specialists. Working with certified taxonomists, technology analysts and developers, the medical content team defines and customizes proprietary tools and processes for each engagement. Key highlights for this engagement included:

- Synaptica KMS to comply with industry standard business rules governing controlled vocabularies
- Workflow tools with built-in validation rules and framework for tagging and linking
- Artificial intelligence based concept extraction and tagging algorithm
- Certified taxonomists to guide the SMEs

## Granularity enhances content findability

The questions in the self-assessment modules were primarily of multiple choice format. While these questions were tagged to a specific title and chapter in the client library, the user still had to wade through a topic or an entire chapter to find the correct answer. Therefore, to:

- Guide the students to the correct answer with the least number of steps or missteps, topic lists were created and the questions were tagged to it. Great care was taken to align the topics with the curriculum the students use to quiz and build custom quizzes
- Bring the granularity and added precision / recall in search methodologies, MeSH and SNOMED vocabularies were used to additionally tag the questions
- Better understand the context of the question and the relevant answers, rationales were created and linked to the sections of the text books for easy reference

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