Watson for XY and Z

Watson: Beyond Jeopardy!

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ABSTRACT

This paper presents a vision for applying the Watson technology to health care and describes the steps needed to adapt and improve performance in a new domain. Specifically, it elaborates upon a vision for an evidence-based clinical decision support system, based on the DeepQA technology, that affords exploration of a broad range of hypotheses and their associated evidence, as well as uncovers missing information that can be used in mixed-initiative dialog. It describes the research challenges, the adaptation approach, and finally reports results on the first steps we have taken toward this goal.

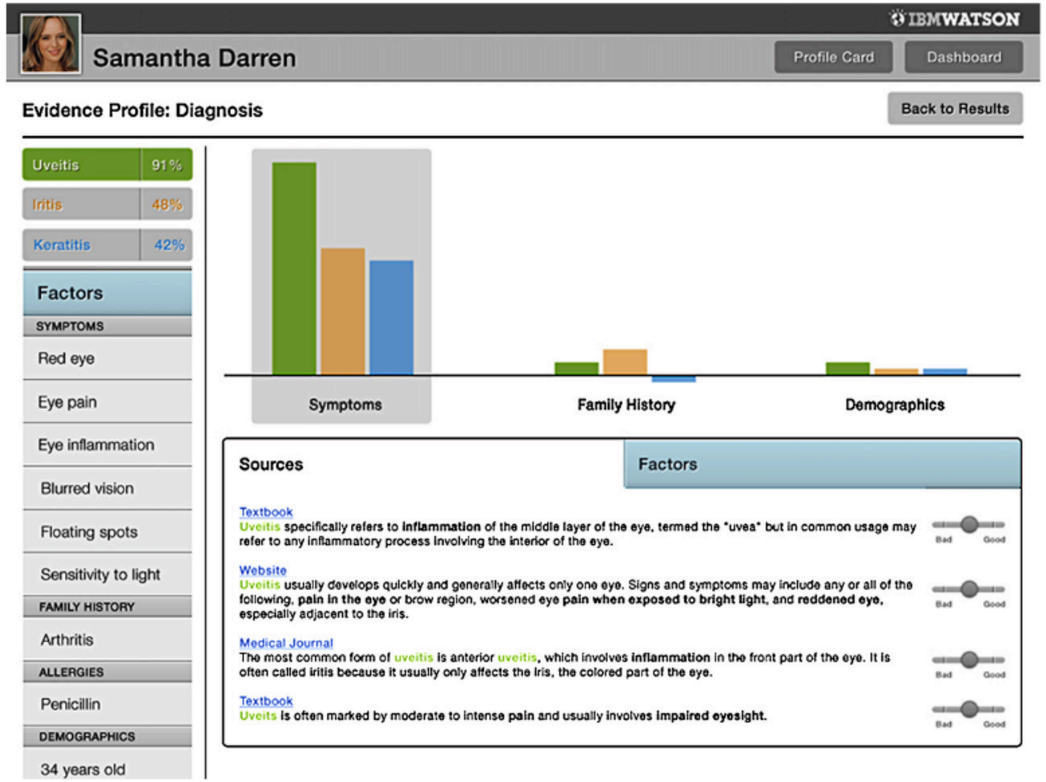

Fig. 4. Exploring differential diagnosis and evidence profiles.

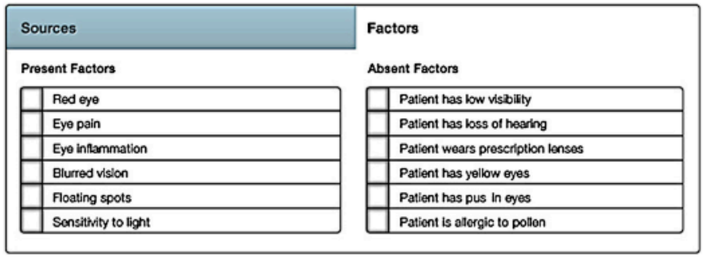

Fig. 5. Factors related to Uveitis diagnosis.

Figures taken from Ferrucci et al., 2012

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Task oriented dialogue