

# Knowledge Management and Semantic Technology in the Health Care

## Revolution: Health 3.0 Model

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### Abstract

Currently, the exploration, improvement, and application of knowledge management and semantic technologies to health care are in a revolution from Health 2.0 to Health 3.0. However, what accurately are knowledge management and semantic technologies and how can they improve a healthcare system? The study aims to review what constitute a Health 3.0 system, and identify key factors in the health care system. First, the study analyzes semantic web, definition of Health 2.0 and Health 3.0, new models for linked data: (1) semantic web and linked data graphs (2) semantic web and healthcare information challenges, OWL and linked knowledge, from linked data to linked knowledge, consistent knowledge representation, and Health 3.0 system. Secondly, the research analyzes two case studies of Health 3.0, and summarizes six key factors that constitute a Health 3.0 system. Finally, the study recommends the application of knowledge management and semantic technologies to Health 3.0 health care model requires the cooperation among emergency care, insurance companies, hospitals, pharmacies, government, specialists, academic researchers, and customer (patients).

Keyword : Knowledge management, Semantic Technology, Health 3.0, Healthcare, IT