Better utilization of health information – semantic interoperability as an enabler in the future healthcare system

The amount of information related to people's health is increasing heavily and so do the general medical knowledge. There are therefore many expectations that better management and utilization of information and knowledge in the healthcare system in itself can improve people's health. However, even if the information and knowledge exist, they are often unavailable in a useful format when they are needed.

The presentation will describe methods for semantic interoperability that make it possible to automatically find, compile, aggregate and combine health information and knowledge. The methods can be used to create a coherent information chain in the health care system. In that way applications automatically can reuse and share information and knowledge between each other to generate better decision support to facilitate better and more informed decisions.

One of the methods that will be described in the presentation is representing information using ontologies, classifications and terminologies to unambiguously interpret the information by both humans and computers. Another method is how formally defined information models are used to put the different parts of the information in context and to define what is appropriate to document in different situations.