

Data and Metadata Models in Electrophysiology Domain



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Increasing requirements on data sharing in the domain of electrophysiology lead to proposing new terminologies and data models. A current trend is to describe data by ontologies and semantic web resources. However, classic technologies and models cannot be replaced in a short time. Due to this, dependencies between various data models should be explicitly described and properties, which the models have in common, should be unified. This work summarizes the current state in data modeling. It describes various ways to model and store data and transformation mechanisms between data models. It deals with well-known concepts (relational and object oriented model) as well as with emerging concepts (ontologies). Finally, the hierarchical metadata model consisting of levels with different expressive power is introduced.

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